ATTACHMENT 2

CEQA Final Mitigated Negative Declaration (SCH2023040126, GS-042022-19014-MND)

Final
Mitigated Negative Declaration

Probation Department Headquarters

SCH2023040126

GS-042022-19014-MND

March 2024

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ACRONYM LIST

AB	Assembly Bill
ADT	Average Daily Traffic
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
BMP	Best Management Practice
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CalFire	California Department of Forestry and Fire Prevention
CALGreen Code	California Green Building Standards Code
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CH_4	methane
City	City of Santa Barbara
CMU	Concrete Masonry Unit
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
Cortese List	Hazardous Waste and Substances Site List
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel scale
DIFs	Development Impact Fees
DOC	Department of Conservation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EAP	Energy Action Plan
EIR	Environmental Impact Report
EO	Executive Order
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
ft	feet
FTA	Federal Transportation Administration
GHG	greenhouse gas
GP	General Plan
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HFC	hydrofluorocarbons
HREC	historical recognized environmental conditions
HVAC	heating, ventilation, and air conditioning
HWCA	California Hazardous Waste Control Act
HWSA	hazardous waste storage area
Hz	Hertz
I	Interstate
ICU	Intersection Capacity Utilization
IRPs	integrated resources plans

IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration
ISSD	Investigative & Support Services Division
ITE	Institute of Transportation Engineers
km	kilometer
Leq	energy average
LID	low impact development
Lmax	maximum noise level
LOS	Level of Service
LST	localized significance threshold
mg/m^3	milligrams per cubic meter
MLD	most likely descendant
MPH	miles per hour
MND	Mitigated Negative Declaration
MRF	Materials Recovery Facility
$MTCO_2e$	metric tons of carbon dioxide equivalent
$MTCO_2e/yr$	metric tons of carbon dioxide equivalent per year
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
ND	Negative Declaration
NDS	National Data & Surveying Services
NHMP	Natural Hazard Mitigation Plan
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
N_2O	nitrous oxide
NO_2	nitrogen dioxide
NOI	Notice of Intent
NO_x	nitrogen oxide
NRHP	National Register of Historic Places
O_3	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Governor's Office of Planning and Research
OSHA	Federal Occupational Safety and Health Regulations
PCE	Tetrachloroethene
PFC	perfluorocarbons
PM2.5	fine particulate matter with a diameter of 2.5 microns or less
PM10	respirable particulate matter with a diameter of 10 microns or less
PPM	parts per million
PPV	peak particle velocity
RCNM	roadway construction model
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCGC	Southern California Gas Company
SCS	sustainable communities strategy
sf	square feet
SF_6	sulfur hexafluoride

SBCAG	Santa Barbara County Association of Governments
SIP	State Implementation Plan
SJCWRP	San Jose Creek Water Reclamation Plant
SLM	Sound Level Meter
SLs	Screening Levels
SO_2	sulfur dioxide
SoCAB	South Coast Air Basin
SP	Specific Plan
SPL	sound pressure level
SR	State Route
SUSMP	standard urban stormwater mitigation plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminates
TIS	Traffic Impact Study
TMC	turning movement counts
$\mu g/m^3$	micrograms per cubic meter
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
V/C	volume/capacity
VdB	vibration decibels
VHFHSZ	Very High Fire Hazard Severity
VMT	vehicle miles traveled
VOCs	volatile organic compounds

1.0 REQUEST/PROJECT DESCRIPTION

The subject parcel is owned by the County of Santa Barbara (County) and has been operated as an employee parking lot for over 40 years. The parking lot currently accommodates 160 parking spaces that are allocated by permit and managed by the General Services Department. A portion of the parking lot also serves the California Superior Court Jury Services as parking for jury members on a first come-first served basis and is managed by an employee of the court from a small kiosk at the lot entrance on Garden Street. While the parcel is within the incorporated boundary of the City of Santa Barbara (City), the County, as owner of the parcel, is not required to submit to the City for development review per California Government Code Section 53090, which provides for intergovernmental immunity. The project will be reviewed and permitted through the County General Services Department. The General Services Department is the property owner's agent and project representative for construction, operation, and maintenance.

The project includes construction of a new approximately 35,000 square foot building on a 1.1 -acre site in the Downtown area of the incorporated boundary of the City of Santa Barbara (refer to Section 2, *Project Location*). The proposed new building would serve as a headquarters office building for the Santa Barbara County Probation Department, currently located at 117 East Carrillo Street. The proposed new building would be three stories, raising to four-stories facing Garden Street, with a large central courtyard situated in the middle of the building. The proposed building height would be 54 feet 6 inches and would contain private offices, classrooms, interview rooms, and support spaces to these main functions.

The remaining area of the site would be configured into 49 at-grade County employee parking[1] spaces accessible from Garden Street, passing under the proposed building, and enclosed with automatic gates. 25 subterranean parking spaces would be provided below grade, for a total of 74 on-site spaces (a reduction of 86 parking spaces from the existing use). Approximately 7,831 square feet of photovoltaic solar panels would be installed, located above the at-grade parking spaces to provide canopy and on the rooftop of the proposed building. Vehicular access to the project site would be provided via left/right turn access on Garden Street.

The project would remove and replace four on-site non-native trees and would include approximately 6,521 square feet of unpaved/landscaped areas. To allow for stormwater retention and control, the project would include new stormwater treatment areas and installation of on-site stormwater catch/filtration basins. The project includes installation of new stormwater, sewer, water, fire water, and utility service connections.

The project requires demolition and removal of the existing surface parking lot and curbs, parking kiosk building and ticket station/bollards, and existing concrete support walls, medians, and curbs. In order to level the site for construction, 5,300 cubic yards of soil would be cut, and 550 cubic yards of soil would be placed as fill. Project activities are anticipated to occur from January 2024 to January 2026, for a total of 24 months.

The County of Santa Barbara General Services Department solicited public comments, via a Notice of Availability (NOA) posted from April 7th, 2023 to May 9th, 2023, on the adequacy and completeness of the analysis and proposed mitigation measures described in GS-0420222-19014-ISMND. No comments were received.

2.0 PROJECT LOCATION

The project site is approximately 1.1 acres in size, located in the Downtown area of the incorporated boundary of the City of Santa Barbara. The project site is identified as accessor parcel number (APN) 029-212-011. The site is generally flat with a vertical drop of 10-feet toward Garden Street to the north. The entire site is currently paved with several stanchion lights installed at the perimeter. The site is currently used as an employee parking lot.

Figure 1 illustrates the project site from a regional perspective and Figure 2 shows the project site in the neighborhood context. Further site characteristics are shown in Table 2.1. A site plan showing the proposed layout of the project is provided in Figure 3. All figures are provided in Attachment A.

[1] On-site parking would be provided for both probation facility staff and County employees. No public parking spaces would be provided.

Table 2.1: Site Information	
General Plan Designation	*City GP Designation: Office-Residential (exempt per GC 53090)*
Zoning District, Ordinance	*City Zoning Designation: Office-Residential (exempt per GC 53090)*
Site Size	*47,916 sf with a net area of 26,055sf used for the proposed project*
Present Use & Development	*Employee Parking Lot*
Surrounding Uses/Zoning	North: *Residential & Light Commercial* South: *Commercial & Retail* East: *Residential & Light Commercial* West: *Commercial*
Access	*Access is provided via Garden Street, an urbanized roadway with two way traffic.*
Public Services	Water Supply *City of Santa Barbara* Sewage: *City of Santa Barbara* Fire: *City of Santa Barbara—Fire Station One*

3.0 ENVIRONMENTAL SETTING

3.1 PHYSICAL SETTING

Slope/Topography: *The site steps up 10 feet approximately 75 feet from Garden Street frontage but is otherwise flat.*
Fauna: *There are no known protected animal species located on site.*
Flora: *There are no known protected plant species located on site.*
Archaeological Sites: *There are no known surface or subsurface cultural resources located on site.*
Soils: *The soils are sandy loam and generally stable.*
Surface Water Bodies: *There are no known mapped bodies of water or subsurface bodies of water on site.*
Surrounding Land Uses: *Surrounding land uses are Residential and Commercial.*
Existing Structures: *There are no existing structures as this is a government employee parking lot.*

The site is surrounded by light commercial/office space and medium density residential development. There are several historic resources within a two-block perimeter, including the National Historic Landmark Santa Barbara County Courthouse. The Charles Huse residence, constructed in 1877 and a Santa Barbara City Structure of Merit, is located immediately adjacent to the project site. The site is located in the El Pueblo Viejo (EPV) Historic District, which requires specific guidelines regarding the use of building materials typical to Spanish Colonial Revival architecture that include, white plaster walls, columns, corbels, stone, and two-piece terra cotta roof tiles. Elevation profiles of the proposed building are provided in Figure 4 and Figure 5 (Attachment A).

3.2 ENVIRONMENTAL BASELINE

The environmental baseline from which the project's impacts are measured consists of the physical environmental conditions in the vicinity of the project, as described above.

4.0 POTENTIALLY SIGNIFICANT EFFECTS CHECKLIST

The following checklist indicates the potential level of impact and is defined as follows:

Potentially Significant Impact: A fair argument can be made, based on the substantial evidence in the file, that an effect may be significant.

Less Than Significant Impact with Mitigation: Incorporation of mitigation measures has reduced an effect from a Potentially Significant Impact to a Less Than Significant Impact.

Less Than Significant Impact: An impact is considered adverse but does not trigger a significance threshold.

No Impact: There is adequate support that the referenced information sources show that the impact simply does not apply to the subject project.

Reviewed Under Previous Document: The analysis contained in a previously adopted/certified environmental document addresses this issue adequately for use in the current case and is summarized in the discussion below. The discussion should include reference to the previous documents, a citation of the page(s) where the information is found, and identification of mitigation measures incorporated from the previous documents.

4.1 AESTHETICS/VISUAL RESOURCES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. The obstruction of any scenic vista or view open to the public or the creation of an aesthetically offensive site open to public view?				√	
b. Change to the visual character of an area?			√		
c. Glare or night lighting which may affect adjoining areas?			√		
d. Visually incompatible structures?			√		

County Thresholds of Significance

County's Visual Aesthetics Impact Guidelines classify coastal and mountainous areas, the urban fringe, and travel corridors as "especially important" visual resources. A project may have the potential to create a significantly adverse aesthetic impact if (among other potential effects) it would impact important visual resources, obstruct public views, remove significant amounts of vegetation, substantially alter the natural character of the landscape, or involve extensive grading visible from public areas. The guidelines address public, not private views.

Impact Discussion

a. There are no designated scenic vistas in the City of Santa Barbara; however, the City has designated ridgelines and foothills; ocean, beach and harbor; and substantial open space areas as Important Visual Resources (City of Santa Barbara 2010). The project includes construction of a new building on an existing infill site, surrounded by existing residential and commercial developments in the City's Downtown area. The project would not introduce features that have the potential to obstruct any scenic vistas or identified Important Visual Resources in the City. There would be no impact.

b-d. The project site is currently used as an employee parking lot, surrounded existing two, three, and four-story buildings in the Downtown area. Although the proposed project would alter the visual character of the site, the change would enhance the compatibility of the project site with the existing visual character of the immediate project site vicinity. As shown in the exterior elevations in Figure 4 and Figure 5, the proposed building would be designed with California Adobe, Monterey Revival, and Spanish Colonial Revival architectural styles, compatible with existing developments in the area, and the building façade would provide massing relief from Garden Street, rising from 3 to 4 stories (elevation profiles of the proposed building are provided in Figure 4 and Figure 5, Attachment A). The entire project site is located within the historical El Pueblo Viejo Landmark District. The project would be designed consistent with surrounding uses and the El Pueblo Viejo Landmark District Guidelines, which provide guidelines regarding the use of building materials typical to Spanish Colonial Revival architecture, resulting in a project consistent with the architectural character of the surroundings.

The project would include 7,831 square feet of photovoltaic solar panels, located above the at-grade parking spaces to provide canopy and on the rooftop of the proposed building. There are multiple buildings within the El Pueblo Viejo (EPV) Historic District that include photovoltaic panels, such as the Chase Bank at 1302 State Street (0.3 mile northwest), City Fire Station No.1 at 925 Chapala (0.3 mile south), Green Resource Center at 207 East Canon Perdido (0.1 mile southeast), and a single family residence at 223 Equestrian Ave (0.2 mile northwest). The City's Historic Lands Commission guidance maintains that photovoltaic panels should be obscured/discrete from view. The project's photovoltaic panels are located on low slope roofs hidden by parapets and on carport canopies in the rear portion of the lot, directed away from public view. The project would not introduce visually incompatible structures or otherwise degrade the visual character of the area. These impacts would be less than significant.

c. The project is located in an urbanized area of the City's Downtown area, surrounded by existing residential and commercial development. The project would introduce new exterior lighting, which would contribute to existing sources of light and glare in the surrounding area including streetlights, light fixtures on existing buildings, and vehicles along Garden Street. The project' architectural features are designed

with consideration to the El Pueblo Viejo Landmark District Guidelines, which incorporate the City of Santa Barbara's Outdoor Lighting Ordinance and the Outdoor Lighting & Streetlight Design Guidelines, including light fixtures intended to complement the character, style, and intensity of the existing development in the project site vicinity. Although the project would introduce new vehicles to the area, on-site parking would occur in the internal portions of the site, reducing potential glare emanating from vehicle surfaces. The project's photovoltaic panels are located on low slope roofs hidden by parapets and on carport canopies in the rear portion of the lot, directed away from public view and reducing potential for glare. The project would not create a new source of substantial light or glare that are incompatible with adjacent uses or that would adversely affect day or nighttime views in the area. This impact would be less than significant.

Cumulative Impact: Cumulative development in the area would be subject to City of Santa Barbara Municipal Code requirements and El Pueblo Viejo Landmark District Guidelines, ensuring cumulative development and Downtown area historic resources are taken into consideration during the design of new development in the El Pueblo Viejo Landmark District. Implementation of the proposed project is not anticipated to result in any substantial change in the aesthetic character of the area since as the project is consistent with surrounding uses and the proposed architecture would be compatible with historic buildings in the Downtown area. Therefore, the project would not contribute considerably to any cumulatively significant effect on aesthetics.

Mitigation and Residual Impact: Implementation of the project would not result in potentially significant impacts related to aesthetics; therefore, no mitigation measures are required.

4.2 AGRICULTURAL RESOURCES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Convert prime agricultural land to non- agricultural use, impair agricultural land productivity (whether prime or non-prime) or conflict with agricultural preserve programs?				√	
b. An effect upon any unique or other farmland of State or Local Importance?				√	

Impact Discussion

a-b. The California Department of Conservation manages the Farmland Mapping and Monitoring Program to assess and record suitability of land for agricultural purposes. In each county, the land is analyzed for soil and irrigation quality and the highest quality land is designated as Prime Farmland. The entire project site is designated as Urban and Built-up land and contains no agricultural resources. The project would not convert prime agricultural land, impair agricultural lands of productivity, nor have an effect on any unique or other farmland of State or Local Importance. There would be no impact to agricultural resources.

Cumulative Impact: Similar to the proposed project, cumulative development within the City would be located in urbanized areas generally zoned for commercial and residential uses. Anticipated cumulative development in the City would not conflict with or support existing farming, agricultural or forest-related operations. Therefore, cumulative development in combination with the proposed project would not result in the conversion of State-designated agricultural land from an agricultural use to a non-agricultural use, or result in the loss of forest land or the conversion of forest land to non-forest use, and no cumulative impacts would occur.

Mitigation and Residual Impact: Implementation of the project would not result in potentially significant impacts related to agricultural resources; therefore, no mitigation measures are required.

4.3 AIR QUALITY – GREENHOUSE GAS EMISSIONS

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. The violation of any ambient air quality standard, a substantial contribution to an existing or projected air quality violation, or exposure of sensitive receptors to substantial pollutant concentrations (emissions from direct, indirect, mobile and stationary sources)?			√		
b. The creation of objectionable smoke, ash or odors?			√		
c. Extensive dust generation?			√		
Greenhouse Gas Emissions	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
d. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			√		
e. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			√		

Air Quality

Regulatory Setting

Federal, State, and Local Air Quality Regulation

The federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for "criteria pollutants" and other pollutants.

The project site is located in the South Central Coast Air Basin (SCCAB) and is under the jurisdiction of the Santa Barbara County Air Pollution Control District (SBCAPCD). As the local air quality management agency, the SBCAPCD is required to monitor air pollutant levels to ensure that the NAAQS and CAAQS are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the SCCAB is classified as being in "attainment" or "nonattainment." Santa Barbara County is currently designated nonattainment for the state standard for particulate matter with a diameter of 10 micrometers or less (PM_{10}), nonattainment for the state and federal standard for 1-hour and 8-hour ozone (O_3), and attainment or unclassifiable for all other federal and state ambient air quality standards (SBCAPCD 2021).

Because Santa Barbara County is designated nonattainment for the state O_3 and PM_{10} standards, the SBCAPCD is required to implement strategies to reduce pollutant levels to achieve attainment of the NAAQS and CAAQS. The 2019 Ozone Plan is the current SBCAPCD Board-adopted air quality management plan for the County. The 2019 Ozone Plan focuses on reducing O_3 precursor emissions through implementation of transportation control measures that serve to reduce mobile source emissions, which are the primary source of ROC and nitrogen oxides emissions in the county (SBCAPCD 2019).

Sensitive Receivers

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. CARB has identified the following typical groups who are most likely to be affected by air pollution: children under 14 years of age; elderly over 65 years of age; athletes; and people with cardiovascular and chronic respiratory diseases. Land uses typically associated with sensitive receivers include schools, parks, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and clinics (CARB 2005). The sensitive receivers nearest to the project site include single-family residences located adjacent to the northwestern boundary of the project site. Additionally, Santa Barbara High School is located approximately 0.4-mile northeast of the project site, and Alameda Park is located approximately 0.4-

mile northwest of the project site.

Methodology and Thresholds of Significance

Air pollutant emissions generated by project construction and operation were estimated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. The analysis reflects the construction and operation of the project as described under Section 1, *Request/Project Description*.

Construction emissions modeled include emissions generated by construction equipment used on-site and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. Construction would occur over approximately 12 months. Based on the preliminary grading plans for the project, the project would require 5,300 cubic yards of cut material and 550 cubic yards of fill material, for a balance of 4,750 cubic yards of soil export. This analysis assumes the project would comply with all applicable regulatory standards, including SBCAPCD Rules 345 (Control of Fugitive Dust from Construction and Demolition Activities) and 323.1 (Architectural Coatings).

Operational emissions modeled include mobile source emissions (i.e., vehicle emissions), energy emissions, area source emissions, and stationary sources emissions (i.e., generator). CalEEMod default trip generation rates were used to estimate mobile source emissions. Emissions attributed to energy use include natural gas consumption for space and water heating. Area source emissions are generated by landscape maintenance equipment, consumer products and architectural coatings.

The City of Santa Barbara and SBCAPCD have not adopted quantitative significance criteria for temporary construction emissions associated with conventional land development projects. However, SBCAPCD recommends quantification of construction-related emissions from construction activities and uses 25 tons per year for ROC and NO_X as a guideline for determining the significance of construction impacts. For other construction projects involving standard grading and building activities, SBCAPCD (2015) notes that consistency with the Air Quality Attainment Plan requires the implementation of mitigation measures to minimize dust generation. This analysis uses 25 tons per year as a significance threshold for construction-related emissions.

Long-term air quality impacts occur during project operation and include emissions from equipment or processes used in the project. These emissions must be summed to determine the significance of the project's long-term impact on air quality. Based on the criteria suggested by the SBCAPCD (2015) a project would not have a significant air quality effect on the environment if operation of the project would:

- Emit (from all project sources, mobile and stationary), less than the daily trigger (Currently 55 pounds per day for oxides of nitrogen [NO_X] and reactive organic compounds [ROC], 80 pounds per day for PM_{10}, and 240 pounds per day for attainment pollutants (except particulate matter of 2.5 micrometers or less [$PM_{2.5}$] and carbon monoxide) for offsets set in the APCD New Source Review Rule, for any pollutant; and
- Emit less than 25 pounds per day of NO_X or ROC from motor vehicle trips only; and
- Not cause or contribute to a violation of any California or National Ambient Air Quality Standard (except O_3); and
- Not exceed the APCD health risk public notification thresholds adopted by the APCD Board; and
- Be consistent with the adopted federal and state Air Quality Plans.

Impact Discussion

a. **Construction Emissions**: Ozone precursors NO_X and ROG, as well as CO, would be emitted by the operation of construction equipment. Fugitive dust (PM_{10}) would be emitted by activities that disturb the soil, such as grading and excavation, and roadway and project construction. Table 4.3-1 shows the estimates of maximum annual construction emissions associated with the development and compares the emissions with applicable thresholds of significance for evaluating construction emissions impacts. For full modeling results refer to Attachment B.

Table 4.3-1
Temporary Construction Emissions

Construction Year	Maximum Emissions (tons/year)			
	ROG	NO_X	CO	PM_{10}
2024	0.3	1.4	1.5	0.1
SBCAPCD Thresholds	*25*	*25*	*n/a*	*n/a*
Threshold Exceeded?	No	No	n/a	n/a

n/a = not available
Source: CalEEMod v. 2020.4.0, annual emissions reports. Modeling results contained in Attachment B.

As shown in Table 4.3-1, annual emissions of all criteria pollutants would not exceed SBCAPCD's 25 tons per year threshold for the project construction. However, because the Santa Barbara County portion of the SCCAB is a nonattainment area for the state PM_{10} standard and the project would involve earthmoving activities, SBCAPCD construction dust and equipment emissions control measures would be required during construction of the project, as described under Threshold c.

Operational Emissions: Operational emissions would include emissions associated with mobile sources (vehicle trips); area sources (landscape maintenance equipment, natural gas consumption, consumer products, and architectural coating associated with on-site operational activities); and off-road sources (forklifts). Table 4.3-2summarizes the operational emissions that would result from the project and compares the emissions with the SBCAPCD significance criteria for evaluating operational emissions impacts. As shown in Table 4.3-2, the project's emissions would not exceed applicable SBCAPCD significance criteria. This impact would be less than significant. For full modeling results refer to Attachment B.

Table 4.3-2
Operational Emissions

Source	Maximum Emissions (lbs/day)[1]					
	ROG	NO_X	PM_{10}	$PM_{2.5}$	CO	SO_2
Area Source	0.8	<0.1	<0.1	<0.1	<0.1	0.0
Energy	<0.1	0.1	<0.1	<0.1	0.1	<0.1
Mobile	1.5	1.4	2.0	0.6	10.0	<0.1
Total	**2.3**	**1.45**	**2.0**	**0.6**	**10.1**	**0.1**
Threshold (all sources)	*240*	*240*	*80*	*n/a*	*n/a*	*n/a*
Threshold Exceeded?	**No**	**No**	**No**	**n/a**	**n/a**	**n/a**
Threshold (mobile only)	*25*	*25*	*n/a*	*n/a*	*n/a*	*n/a*
Threshold Exceeded?	**No**	**No**	**n/a**	**n/a**	**n/a**	**n/a**

[1] *Note: All emissions are rounded up so totals may not match.*
Source: CalEEMod v.2020.4.0, summer emissions reports. Modeling results contained in Attachment B.

Exposure of Sensitive Receivers to Substantial Pollutant Concentrations: Project construction would be short-term and temporary in nature and would be subject to SBCAPCD construction emission control measures listed above. Therefore, construction of the project would not expose sensitive receivers to substantial pollutant concentration. The project would not include any stationary sources of air pollution. CARB has identified diesel particulate matter as the primary airborne carcinogen in the state (CARB 2005). A primary source of diesel particulate matter is exhaust from vehicle traffic on highways and CARB recommends against siting residential land uses within 500 feet of the outer edge of a freeway. The project would not involve the construction of residential uses within 500 feet of the outer edge of a freeway. This impact would be less than significant.

b. During construction activities, heavy equipment and vehicles would emit odors associated with vehicle and engine exhaust and during idling. However, these odors would be intermittent and temporary, generally disperse with distance, and would cease upon completion of the project. Project construction would not generate other emissions leading to odors that would affect a substantial number of people. construction-related impacts would be less than significant.

The project would not include any land uses with the potential to generate substantial odor complaints as identified in Section 5.3.4 of the SBCAPCD *Scope and Content of Air Quality Sections in Environmental Documents* guidance document. The project would also be required to comply with the requirements of SBCAPCD Rule 303 that prohibits the discharge of air contaminants or other material that would cause injury, detriment, nuisance or annoyance to any considerable number of persons. Compliance with SBCAPCD requirements for reducing and monitoring odors would ensure that operational impacts related to objectionable odors would be less than significant.

c. In accordance with SBCAPCD requirements for projects located in the SCCAB, the following standard SBCAPCD construction dust and equipment emissions control measures would be shown on grading and building plans and implemented with the project:

Dust Control Measures

During construction the applicant shall implement all of the applicable measures from the following list as standard dust control measures to avoid impacts associated with fugitive dust emissions:

a. Use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.

b. Minimize amount of disturbed area and reduce on site vehicle speeds to 15 mph or less.

c. If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.

d. Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.

e. After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.

f. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD prior to land use clearance for map recordation and land use clearance for finish grading of the structure.

Equipment Emissions Control Measures

During project grading and construction the applicant shall adhere to the following measures to reduce NO_X and $PM_{2.5}$ emissions from construction equipment:

a. All portable diesel-powered construction equipment shall be registered with the state's portable equipment registration program OR shall obtain an APCD permit.

b. Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, § 2449), the purpose of which is to reduce diesel PM and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles. For more information, please refer to the CARB website at www.arb.ca.gov/msprog/ordiesel/ordiesel.htm.

c. All commercial diesel vehicles are subject to Title 13, § 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.

d. Diesel construction equipment meeting the CARB Tier 1 emission standards for off-road heavy-duty diesel engines shall be used. Equipment meeting CARB Tier 2 or higher emission standards should be used to the maximum extent feasible.
e. Diesel powered equipment should be replaced by electric equipment whenever feasible.
f. If feasible, diesel construction equipment shall be equipped with selective catalytic reduction systems, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California.
g. Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
h. All construction equipment shall be maintained in tune per the manufacturer's specifications.
i. The engine size of construction equipment shall be the minimum practical size.
j. The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.

Fugitive Dust Control

The project applicant shall comply with SBCAPCD's Rule 345: Control of Fugitive Dust from Construction and Demolition Activities including all applicable standards and measures therein.

Diesel-fired Engine Permits

All portable diesel-fired construction engines rated at 50 brake horsepower (bhp) or greater must have either statewide Portable Equipment Registration Program (PERP) certificates or SBCAPCD permits prior to grading/building permit issuance. Construction engines with PERP certificates are exempt from SBCAPCD permit, provided they will be onsite for less than 12 months.

Permit to Operate

If contaminated soils are found at the project site, SBCAPCD must be contacted to determine if ATC and/or Permit to Operate permits shall be required. (SBCAPCD permits are required for all soil vapor extraction activities. SBCAPCD permits are also required for the excavation, or "dig-and-haul", of more than 1,000 cubic yards of contaminated soils.)

Equipment Idling Requirements

At all times, idling of heavy-duty diesel trucks should be minimized; auxiliary power units should be used whenever possible. State law requires that:

- Drivers of diesel-fueled commercial vehicles shall not idle the vehicle's primary diesel engine for greater than five minutes at any location.
- Drivers of diesel-fueled commercial vehicles shall not idle a diesel-fueled auxiliary power system (APS) for more than five minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle. Trucks with 2007 or newer model year engines must meet additional requirements (verified clean APS label required).
- See www.arb.ca.gov/noidle for more information.

Asphalt Paving Requirements

Asphalt paving activities shall comply with APCD Rule 329, Cutback and Emulsified Asphalt Paving Materials.

Compliance with applicable SBCAPCD construction dust and equipment emissions control measures would further reduce air pollutant and dust emissions during project construction. The project would not generate excessive dust because these measures would reduce fugitive dust impacts. Therefore, these impacts would be less than significant.

Cumulative Impact: A project may be inconsistent with the applicable air quality plan if it would result in population, housing, or employment growth that exceeds growth estimates included in the plan. Such growth would generate emissions not accounted for in the applicable air quality plan emissions budget. To be determined to be consistent with the current air quality attainment plan the project's direct and indirect emissions must be accounted for in the growth assumptions in the 2019 Ozone Plan and the project must be

consistent with the policies adopted in the 2019 Ozone Plan. The 2019 Ozone Plan relies primarily on the land use and population projections provided by the Santa Barbara County Association of Governments (SBCAG) and CARB on-road emissions forecast as a basis for vehicle emission forecasting (SBCAPCD 2019). Populations that remain within the 2019 Ozone Plan and SBCAG forecasts are accounted for with regard to SBCAPCD emissions inventories. When population growth exceeds these forecasts, emission inventories could be surpassed, affecting attainment status. The project would not increase population in the County or City of Santa Barbara. Therefore, the project would be accounted for in SBCAPCD and 2019 Ozone Plan projections. Redevelopment of the project site would be required to comply with all SBCAPCD rules and regulations for construction and operation. As a result, the project would not obstruct implementation of the SBCAPCD air quality attainment plan. Therefore, the project would not result in cumulatively significant air quality impacts.

Mitigation and Residual Impact: Implementation of the project would not result in potentially significant impacts related to air quality; therefore, no mitigation measures are required.

Greenhouse Gas Emissions

Regulatory Setting

In response to climate change, California implemented Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006." AB 32 required the reduction of statewide GHG emissions to 1990 emissions levels (essentially a 15% reduction below 2005 emission levels) by 2020 and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. On September 8, 2016, the Governor signed Senate Bill (SB) 32 into law, extending AB 32 by requiring the State to further reduce GHG emissions to 40% below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide goal of six metric tons (MT) of CO_2e per capita by 2030 and two MT of CO_2e per capita by 2050 (CARB 2017). Other relevant state laws and regulations include:

- SB 375: The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the state's ability to reach AB 32 goals by directing the CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. Metropolitan Planning Organizations are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the Metropolitan Planning Organization's Regional Transportation Plan (RTP). On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035.
- SB 100: Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard Program. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 % of total retail sales by 2020, 60% by 2030, and 100% by 2045.
- California Building Standards Code (California Code of Regulations Title 24): The California Building Standards Code (CBC) consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, and handicap accessibility for persons with physical and sensory disabilities. The current iteration of the CBC is the 2019 Title 24 standards. Part 6 of the CBC is the Building Energy Efficiency Standards, which establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. Part 12 of the CBC is the CALGreen, which includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures.

Methodology and Thresholds of Significance

Construction and operational GHG emissions associated with the project were quantified using CalEEMod. Complete CalEEMod results and assumptions are provided in Attachment B. Calculations of CO_2, CH_4, and N_2O emissions are provided to identify the magnitude of potential project effects. The analysis focuses on CO_2, CH_4, and N_2O because these make up 98.9 % of all GHG emissions by volume and are the GHG emissions that the project would emit in the largest quantities (Intergovernmental Panel on Climate Change [IPCC] 2014).

On January 26, 2021, Santa Barbara County adopted new Interim GHG Emissions Thresholds of Significance (County of Santa Barbara 2021) which are recommended for use until completion of the County's 2030 Climate Action Plan.[2] The Interim GHG Thresholds recommend that land use projects be first assessed against a screening threshold of 300 MT CO_2e. For projects that exceed the screening threshold, a service population threshold of 3.8 MT CO_2e is recommend. Therefore, this analysis uses the County's recommended service population threshold of 3.8 MT CO_2e to assess the potential significance of project GHG emissions. According to the United States Green Building Council (USGBC) "General office" land uses employ approximately one employee per 250 square feet (USGBC 2008). Therefore, the service population of the anticipated general office development would be approximately 140 persons[3].

Impact Discussion

d. Project construction would generate GHG emissions from the operation of heavy equipment, motor vehicles, and worker trips to and from the site. As shown in Table 4.3-3, project construction would emit approximately 268 MT of CO_2e, which would result in approximately 14 MT of CO_2e per year when amortized over 30 years, the recommended project lifespan per County guidelines.

Table4.3-3
Estimated Construction GHG Emissions

Metric	**Emissions (MT of CO_2e)**
Total	268
Total Amortized over 30 Years	9
MT of CO_2e = metric tons of carbon dioxide equivalent *See Attachment B for CalEEMod worksheets.*	

In addition to construction emissions, project operation would generate GHG emissions from new vehicle trips, electricity usage, area sources, and off-road equipment usage. The amortized emissions from construction were added to the operational emissions to determine the total combined annual emissions. Table 4.3-4summarizes combined annual GHG emissions generated by project construction and operation based on the CalEEMod output files in Attachment B.

Table 4.3-4
Combined Annual Emissions of Greenhouse Gases

Emission Source	**Annual Emissions (MT of CO_2e)**
Construction	9
Operational	
Area	<1
Energy	109
Mobile[1]	313
Solid Waste	14
Water	13
Total Emissions	**458**
Service Population	**131**
Emissions per Service Population (MT CO_2e/SP/year)	**3.5**
Service Population Threshold (MT CO_2e/SP/year)	**3.8**
Exceed Threshold?	**No**

[2] The Interim GHG Thresholds of Significance state that "staff expects to complete the 2030 Climate Action Plan in 2022."
[3] 35,000 square feet divided by 250 square feet per employee

MT of CO_2e = metric tons of carbon dioxide equivalent
[1]Mobile emissions calculated using default trip generation rates for "Government Office Building" land use type. Weekend trip rates were adjusted to reflect default weekday trip rates. See Attachment B for CalEEMod worksheets.

As shown in Table 4.3-4, the combined annual GHG emissions from the residential and commercial components of the project would be approximately 3.5 MT of CO_2e per service person, which would not exceed the locally-appropriate, project-specific threshold of 3.8 MT of CO_2e per service person per year.

e. The project operations include a number of features which reduce potential generation of GHG emissions consistent with the goals and policies contained in the County's Climate Action Plan, including bicycle parking spaces, solar canopies above the proposed surface parking, rooftop solar panels, and numerous energy and water efficiency measures, as required by CALGreen. Additionally, SBCAG has incorporated a sustainable community strategy into its 2050 Regional Transportation Plan/Sustainable Communities Strategy (Connected 2050 RTP/SCS), which is designed to help the region achieve its SB 375 GHG emissions reduction target. The Connected 2050 RTP/SCS includes strategies intended to reduce vehicle emissions. The project would also be required to comply with existing State regulations, including increased energy conservation measures and other actions adopted to achieve the overall GHG emissions reduction goals identified in SB 32. The project would not conflict with any State or local regulations intended to reduce GHG emissions statewide and would be generally consistent with local plans and programs designed to reduce GHG emissions. Therefore, this impact would be less than significant.

Cumulative Impacts: Impacts from GHG emissions are cumulative in nature, and the project would be consistent with any applicable laws, plans, or policies aimed at reducing GHG emissions. Therefore, the project would not contribute considerably to cumulatively significant GHG impacts.

Mitigation and Residual Impact: Implementation of the project would not result in potentially significant impacts related to greenhouse gas emissions; therefore, no mitigation measures are required.

4.4 BIOLOGICAL RESOURCES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
Flora					
a. A loss or disturbance to a unique, rare or threatened plant community?			√		
b. A reduction in the numbers or restriction in the range of any unique, rare or threatened species of plants?			√		
c. A reduction in the extent, diversity, or quality of native vegetation (including brush removal for fire prevention and flood control improvements)?			√		
d. An impact on non-native vegetation whether naturalized or horticultural if of habitat value?			√		
e. The loss of healthy native specimen trees?			√		
f. Introduction of herbicides, pesticides, animal life, human habitation, non-native plants or other factors that would change or hamper the existing habitat?			√		
Fauna					
g. A reduction in the numbers, a restriction in the range, or an impact to the critical habitat of any unique, rare, threatened or endangered species of animals?			√		
h. A reduction in the diversity or numbers of animals onsite (including mammals, birds, reptiles, amphibians, fish or invertebrates)?			√		
i. A deterioration of existing fish or wildlife habitat (for foraging, breeding, roosting, nesting, etc.)?		√			
j. Introduction of barriers to movement of any resident or migratory fish or wildlife species?			√		
k. Introduction of any factors (light, fencing, noise, human presence and/or domestic animals) which could hinder the normal activities of wildlife?			√		

Impact Discussion

a-h, j-k. The project site has been highly disturbed and developed, currently serving as a paved parking lot surrounded by residential and commercial development. The site does not contain critical habitat for unique, rare or threatened plant communities or species of animals and is not located within a known regional wildlife movement corridor or other sensitive biological areas as indicated by the United States Fish and Wildlife Service (USFWS). No natural plant communities or habitats exist on the site and no sensitive wildlife species are known to inhabit the premises or use the site for breeding or foraging. Additionally, no native or specimen trees are in the area of project disturbance.[4] The project would not result in the loss or disturbance of floral or faunal biological resources. As a result, impacts to biological resources would be less than significant.

i. Project construction has the potential to impact nesting birds on and adjacent to the site, which may be located in trees subject to removal. Bird nests with eggs or young of all migratory bird species are protected under the Migratory Bird Treaty Act and the California Fish and Game Code. The potential loss of an active nest resulting from project construction activities would be in conflict with these regulations and would be a potentially significant impact. To ensure there are no nesting birds are

[4] Specimen/historic trees are designated trees under the City of Santa Barbara Municipal Code and include the Moreton Bay Fig Tree (*Ficus macrophylla*), Arlington Silk Oak (*Grevillea robusta*), Olive Trees (*Olea europea*), S.B. Orchid Tree (*Bauhinia forficata*), Sailor's Sycamore (*Platanus racemosa*), Arroyo Burro Sycamore (*Platanus racemosa*), Indian Laurel Fig Tree, and the Moreton Bay Fig Tree.

located on the project site prior to construction occurring during the nesting season, Mitigation Measure BIO-1 requires a nesting bird survey and halting of construction work should a nest be discovered. This impact would be less than significant with mitigation incorporated.

Cumulative Impact: Neither the project site nor surrounding sites in the Downtown area are located on conservation land, wildlife habitat, or riparian or wetland areas. Related projects would comply with applicable regulatory requirements regarding biological resources and protected species, including the Migratory Bird Treaty Act and the City's regulations regarding protected trees and the removal of street trees. Implementation of the project is not anticipated to result in significant impacts to biological resources as there are none in the project area. Therefore, the project would not contribute considerably to any significant cumulative impact on biological resources.

Mitigation and Residual Impact:

MM.BIO-1: Nesting Bird Surveys. To avoid disturbance of nesting birds, including raptorial species, protected by the Federal Migratory Bird Treaty Act (MBTA) and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code (CFGC), the removal of trees, ground disturbance, and exterior construction activities shall occur outside of the bird nesting season (February 1 through August 31) whenever feasible. If these activities must occur during the bird nesting season, then a pre-construction nesting bird survey shall be performed by a County-qualified biologist.

If required, pre-construction surveys for nesting birds shall occur within the area to be disturbed and shall extend outward from the disturbance area by 100 feet. The distance surveyed from the disturbance may be reduced if property boundaries render a 100-foot survey radius infeasible, or if existing disturbance levels within the 100-foot radius (such as from a major street or highway) are such that the County-qualified biologist determines project-related activities would not disturb nesting birds in those outlying areas. If any occupied or active bird nests are found, a buffer shall be established and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. The buffer shall be 100 feet for non-raptors and 300 feet for raptors, unless otherwise determined by the County-qualified biologist and approved by P&D. Buffer reductions shall be based on the known natural history traits of the bird species, nest location, nest height, existing pre-construction level of disturbance in the vicinity of the nest, and proposed construction activities. All construction personnel shall be notified as to the location of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities or tree removal shall occur within this buffer until the County-qualified biologist has confirmed that nesting is completed, the young have fledged and are no longer dependent on the nest, or the nest fails, and there is no evidence of a second nesting attempt; thereby determining the nest unoccupied or inactive. If birds protected under MBTA or CFGC are found to be nesting in construction equipment, that equipment shall not be used until the young have fledged and are no longer dependent on the nest, and there is no evidence of a second nesting attempt.

PLAN REQUIREMENTS AND TIMING: If construction must begin within the nesting season, then the pre-construction nesting bird survey shall be conducted no more than one week (7 days) prior to commencement of tree removal, grading, or other construction activities. Active nests shall be monitored by the biologist at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults, and there is no evidence of a second nesting attempt. Bird survey results and buffer recommendations shall be submitted to County P&D for review and approval prior to commencement of grading or construction activities. The qualified biologist shall prepare weekly monitoring reports, which shall document nest locations, nest status, actions taken to avoid impacts, and any necessary corrective actions taken. Active nest locations shall be marked on an aerial map and provided to the construction crew on a weekly basis after each survey is conducted. Active nests shall not be removed without written authorization from USFWS and CDFW. **MONITORING:**P&D shall be given the name and contact information for the biologist prior to initiation of the pre-construction survey. Permit Compliance and P&D staff shall review the survey report(s) for compliance with this condition prior to the commencement of ground-disturbing activities and perform site inspections throughout the construction period to verify compliance in the field.

Implementation of Mitigation Measure BIO-1 would ensure no nesting birds are adversely affected during construction activities. Residual impacts would be less than significant.

4.5 CULTURAL RESOURCES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Cause a substantial adverse change in the significance of any object, building, structure, area, place, record, or manuscript that qualifies as a historical resource as defined in CEQA Section 15064.5?			√		
b. Cause a substantial adverse change in the significance of a prehistoric or historic archaeological resource pursuant to CEQA Section 15064.5?		√			
c. Disturb any human remains, including those located outside of formal cemeteries?		√			
d. Cause a substantial adverse change in the significance of a tribal cultural resources, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is: **1.** Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or **2.** A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a local California Native American tribe?		√			

Regulatory Setting

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

Impact Discussion

a. The project site does not contain known historic resources. However, the project site is located in close proximity to historic resources, such as the National Historic Landmark Santa Barbara County Courthouse on City block 123. Immediately to the west is the Charles Huse Residence constructed in 1877 at 224 East Figueroa Street. As discussed in Section 4.1, *AESTHETICS/VISUAL RESOURCES*, the entire project site is located within the historical El Pueblo Viejo Landmark District and would be designed consistent with surrounding uses and the El Pueblo Viejo Landmark District Guidelines, which provide guidelines regarding the use of building materials typical to Spanish Colonial Revival architecture intended to preserve and enhance the unique heritage and architectural character of the District. As discussed in Section 4.1, *AESTHETICS/VISUAL RESOURCES*, the proposed building would be designed with California Adobe, Monterey Revival, and Spanish Colonial Revival architectural styles, compatible with existing developments in the area (Figure 4 and Figure 5, Attachment A). The project would be visually compatible with the historic architecture in the El Pueblo Viejo Landmark district, and would not directly modify or impact any historic resources. This impact would be less than significant.

b. The County performed a cultural records search of the project site and vicinity at the Central Coast Information Center (CCIC) in December 2022. No documented cultural resources were identified on the project site. The CCIC indicated that due to the presence of known cultural resources in the surrounding area, the project site is considered to have a moderate sensitivity for archaeological resources. Although there are no documented archaeological resources on the site, there is the potential for archaeological resources to be discovered during ground disturbing construction activities. Since the project site is currently paved without easily obtainable access to subsurface soil, Mitigation Measure CR-1 requires the project proponent to conduct an Extended Phase I Archaeological Study (XPI) once pavement is removed from the site, in order to determine the presence or absence of intact, subsurface archaeological materials. Should a subsurface archaeological resource be found during the XPI, Mitigation Measure CR-1 describes avoidance and minimization measures appropriate for archaeological resources, including project redesign to avoid the resource; a Phase II significance evaluation if impacts to the resource cannot be avoided; and, if the Phase II significance evaluation determines the resource is eligible for the CRHR and/or the NRHP, a Phase III work plan/research design to address the archaeological excavation, analysis of recovered materials to answer specific research questions, and technical report preparation necessary to recover, analyze, and interpret the archaeological data associated with the portion(s) of the resources that could be impacted by the project. With implementation of Mitigation Measure CR-1, in addition to Mitigation Measure CR-2, which includes a "Stop Work at Encounter" condition, impacts pertaining to the potential discovery of unanticipated cultural resources would be reduced to a less than significant level.

c. The site has been heavily disturbed from previous grading and paving. During the grading phase, the project would result in ground disturbing activity. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site and make recommendations to the landowner within 48 hours of being granted access. To ensure adherence to these existing regulations regarding the treatment of human remains, and to provide more specificity regarding their implementation, Mitigation Measure CR-3 is required. Compliance with this mitigation measure would reduce this impact to a less than significant level.

d. The County of Santa Barbara sent outreach consultation letters to the Barbareño/Ventureño Band of Mission Indians and the Santa Ynez Band of Chumash Indians on October 4, 2022. A follow up

consultation letter was sent to the Barbareño/Ventureño Band of Mission Indians on October 5, 2022 after a response was received requesting the consultation letter be sent to a revised chairperson contact. No responses from the Barbareño/Ventureño Band of Mission Indians have been received to date. A response letter was received from the Santa Ynez Band of Chumash Indians on October 20, 2022, requesting a meeting with the County to discuss the project. Following a meeting on November 22, 2022, the Santa Ynez Band of Chumash Indians requested a workers environmental awareness training for construction workers who may encounter unanticipated tribal cultural resources on-site, and the hiring of a tribal monitor during ground disturbing activities. Pursuant to AB 52 requirements and in accordance with consultation with the Santa Ynez Band of Chumash Indian requests, these requests have been incorporated as Mitigation Measures CR-4 and CR-5. In addition to Mitigation Measures CR-2 and CR-3, which ensure construction work would be halted, and a P&D approved archaeologist and/or Native American representative and anthropologist would be retained to evaluate the significance of the find, Mitigation Measures CR-4 and CR-5 require a pre-construction workers environmental awareness training and hiring of a tribal monitor during ground disturbing activities. Implementation of Mitigation Measures CR-1 through CR-5 would ensure ground disturbing activities would not damage identified tribal cultural resources, should they become exposed, and impacts would be reduced to a less than significant level.

Cumulative Impacts: Although impacts to historic resources tend to be site-specific, cumulative impacts could occur if a project and related projects affect local resources with the same level or type of designation or evaluation, affect other structures located within the same historic district, or involve resources that are significant within the same context as the project. As discussed above, the project would not result in any direct or indirect impacts to historical resources. Furthermore, the project would not substantially change the existing historic character of the surrounding area to the extent that the significance of any nearby historical resource would be impaired. Therefore, the project's contribution to regional historic resources impacts would not be cumulatively considerable.

With regard to potential cumulative impacts related to archaeological resources and human remains, the project is located in an urbanized area that has been disturbed and developed over time. In the event that archaeological resources and/or human remains are uncovered during the development of new projects in the City of Santa Barbara, new development would be required to comply with applicable regulatory requirements. In addition, as part of the environmental review processes for new development, mitigation measures would be required as necessary to address the potential for uncovering previously undiscovered archaeological and tribal cultural resources. Therefore, cumulative impacts to archaeological resources and human remains would be less than significant and would not be cumulatively considerable.

Mitigation and Residual Impact:

MM CR-1: Extended Phase I Archaeological Study. Prior to issuance of a grading permit and/or excavation activities, but after demolition and removal activities are completed and subsurface soils are exposed, an Extended Phase I (XPI) archaeological testing program shall be performed to determine the presence or absence of archaeological deposits at the project site. The XPI may include mechanical backhoe trenching; use of a backhoe will allow for an efficient examination of the soil profile and an assessment of the potential for buried archaeological deposits to be present. This study shall be conducted under the direction of a qualified archaeologist on the County's "pre-approved consultants list" and in accordance with the County Archaeological Guidelines. XPI testing should be observed by a Native American monitor. An XPI conducted prior to project construction could reduce potential delays caused by unanticipated finds during construction by informing the applicant of the types of resources that may exist on the property. Should a subsurface archaeological resource be found during the XPI, impacts to the resource shall be avoided and preserved in place through project redesign. Avoidance and preservation in place may include capping the resources with fill soil. If project redesign is not feasible and impacts to the resource cannot be avoided, a Phase II significance evaluation shall be performed to determine if the resource is eligible for the CRHR and/or the NRHP. A qualified archaeologist shall prepare a Phase II work plan for review and approval by the County. The Phase II work plan shall address the archaeological excavation, analysis of recovered materials, and report preparation necessary to evaluate the significance of the resource. If the Phase II significance evaluation determines the resource is eligible for the CRHR and/or the NRHP and is considered a significant resource, and impacts to the resource cannot be avoided, then a Phase III data recovery excavation shall be conducted to mitigate impacts to the resource. A qualified archaeologist shall prepare a Phase III work plan/research design for review and approval by the County. The Phase III work plan/research design shall address the archaeological excavation, analysis of recovered materials

to answer specific research questions, and technical report preparation necessary to recover, analyze, and interpret the archaeological data associated with the portion(s) of the resources impacted by the project. **PLAN REQUIREMENTS:** This condition shall be printed on all building and grading plans. **MONITORING:** P&D permit processing planner shall verify an XPI is performed prior to issuance of a grading permit and/or excavation activities, but after demolition and removal activities are performed. P&D permit processing planner shall check plans prior to issuance of Land Use Permit to confirm the Stop Work at Encounter procedure is listed.

MM CR-2: Unanticipated Discovery of Cultural Resources. Subsequent to completion of the XPI, and assuming the XPI is negative (i.e., no resources are identified), if any unanticipated archaeological remains are encountered during grading, construction, landscaping or other construction-related activity, the County and/or their agents, representatives or contractors shall immediately stop or redirect work in the vicinity of the find. The County shall immediately contact P&D staff, and retain a P&D approved archaeologist and Native American representative, if the find is prehistoric in nature, to evaluate the significance of the find in compliance with the provisions of the County Archaeological Guidelines and conduct appropriate mitigation funded by the County. **PLAN REQUIREMENTS:** This condition shall be printed on all building and grading plans. **MONITORING:** P&D permit processing planner shall check plans prior to issuance of Land Use Permit and P&D compliance monitoring staff shall spot check in the field throughout grading and construction.

MM CR-3: Unanticipated Discovery of Human Remains. In the unlikely event that human remains are encountered, construction in the area of the finding will cease and the Santa Barbara County Coroner shall be contacted to determine the age and the origin of the remains. A P&D approved archaeologist or other specialist with experience identifying human remains may assist the coroner to make the determination whether human remains are prehistoric or not. In the event the remains are Native American in origin, the NAHC will be contacted to determine necessary procedures for protection and preservation of the remains, including reburial, as provided in the CEQA Guidelines, Section 15064.5(e), "CEQA and Archaeological Resources," CEQA Technical Advisory Series. Additionally, The County shall immediately contact P&D staff, and retain a P&D approved archaeologist and Native American representative to evaluate the significance of the find in compliance with the provisions of the County Archaeological Guidelines and conduct appropriate mitigation funded by the County. **PLAN REQUIREMENTS:** This condition shall be printed on all building and grading plans. **MONITORING:** P&D permit processing planner shall check plans prior to Issuance of Zoning Clearance for Grading, and P&D compliance monitoring staff shall spot check in the field throughout grading and construction.

MM CR-4: Workers Environmental Awareness Training. A qualified archaeologist shall be retained to conduct a workers environmental awareness training on archaeological sensitivity for all construction personnel prior to the commencement of any ground-disturbing activities. The training shall be conducted by an archaeologist who meets or exceeds the Secretary of Interior's Professional Qualification Standards for archaeology (National Park Service [NPS] 1983). Archaeological sensitivity training shall include a description of the types of cultural material that may be encountered, cultural sensitivity issues, the regulatory environment, and the proper protocol for treatment of the materials in the event of a find. **PLAN REQUIREMENTS:** This condition shall be printed on all grading plans. **MONITORING:** P&D permit processing planner shall check plans prior to issuance of Land Use Permit and P&D compliance monitoring staff shall spot check in the field throughout grading.

MM CR-5: Retainment of a Tribal Monitor. During all ground disturbing activities, the project applicant shall retain a tribal cultural monitor to monitor on-site construction activities. In the event cultural materials or human remains are identified, the tribal cultural monitor will notify the County and/or their agents, representatives or contractors of the find. Once all intact and disturbed deposits on-site are disturbed, no further monitoring shall be required. **PLAN REQUIREMENTS:** This condition shall be printed on all grading plans. **MONITORING:** P&D permit processing planner shall check plans prior to issuance of Land Use Permit and P&D compliance monitoring staff shall spot check in the field throughout grading.

Implementation of Mitigation Measures CR-1 through CR-5 would ensure proper procedures are followed should unanticipated discovery of cultural/tribal cultural resources and/or human remains occur during construction and ground disturbing activities. These measures would ensure ground disturbing activities would not damage identified resources, should they become exposed. Therefore, impacts from construction would be less than significant with mitigation incorporated.

4.6 ENERGY

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Substantial increase in demand, especially during peak periods, upon existing sources of energy??			√		
b. Requirement for the development or extension of new sources of energy?				√	

Regulatory Setting

Electricity for the project would be provided by Southern California Edison (SCE). Natural gas for the project would be provided by the Southern California Gas Company (SoCalGas).

The County of Santa Barbara Board of Supervisors adopted the Santa Barbara County Climate Change Guiding Principles (Resolution 09-059) in March 2009, which led to the development and Board adoption of the Energy and Climate Action Plan (ECAP) in May 2015. The ECAP established a goal of reducing GHG emissions and identified emissions reduction measures (ERMs), such as: installing bike lanes to encourage active GHG-free transportation; retrofitting buildings to be more energy-efficient; and keeping trash out of the landfill through reducing consumption, recycling, and composting. The City of Santa Barbara is planned to participate in the Santa Barbara Clean Energy, which will provide the City with 100 percent renewable energy content (Santa Barbara, 2022).

Energy Demand Methodology

Energy consumption is analyzed herein in terms of construction and operational energy. Construction energy demand accounts for anticipated energy consumption during project construction, such as fuel consumed by construction equipment and construction workers' vehicles traveling to and from the project site. Operational energy demand accounts for the anticipated energy consumption during project operation, such as fuel consumed by cars, trucks, and public transit; natural gas consumed for on-site power generation, heating building space, and electricity consumed for building power needs, including, but not limited to lighting, water conveyance, and air conditioning. The CalEEMod results (Attachment B) provide the estimated average travel distance, vehicle trip numbers, and vehicle fleet mix during project construction and operation. The CalEEMod results also provide the estimated electricity consumption during project operation.

Impact Discussion

a. *Construction Impacts.* During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. The project would require demolition of the existing paved parking areas, site preparation and grading, pavement and asphalt installation, building construction, architectural coating, and landscaping and hardscaping. As shown in Table 4.6-1, construction of the project is estimated to require approximately 1,824 gallons of gasoline and 26,988 gallons of diesel fuel.

Table 4.6-1
Estimated Project Construction Energy Demand

Source	Fuel Consumption (Gallons)	
	Gasoline	Diesel
Construction Equipment & Hauling Trips	–	26,988
Construction Worker Vehicle Trips	1,824	–
See Attachment B for CalEEMod default values for fleet mix and average distance of travel, and Appendix C for energy calculation sheets.		

Energy use during construction would be temporary, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and

2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the United States Environmental Protection Agency (USEPA) Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption.

In addition, pursuant to applicable regulatory requirements such as the California Green Building Standards Code (CALGreen), the project would comply with construction waste management practices to divert a minimum of 50% of construction and demolition debris and 100% of concrete, asphalt, and land-clearing debris. These practices would result in efficient use of energy necessary to construct the project. Furthermore, in the interest of cost-efficiency, construction contractors would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, project construction would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and impacts would be less than significant.

Operational Impacts. Operation of the project would require energy use in the form of electricity, natural gas, and gasoline and diesel fuel consumption. Natural gas and electricity would be used for heating and cooling systems, lighting, appliances, water use, off-road equipment operation, and the overall operation of the project. Gasoline consumption would be attributed to vehicular travel from residents and employees traveling to and from the project site. Diesel consumption would be attributed to trucks delivering goods to and from the project. Table **4.6-2**Table 4.6-2 shows the project's estimated total annual gasoline and diesel fuel consumption, as well as electricity and natural gas use. As shown therein, project operation would consume approximately .52 gigawatt hours (GWh) of electricity per year.

Table 4.6-2
Project Operational Energy Usage

Source	**Energy Consumption**
Vehicle Trips	
Gasoline	41,994 gallons
Diesel	7,422 gallons
Built Environment	
Electricity	.52 GWh
Natural Gas Usage	297,609 kBtu
GWh = gigawatt hour; kBtu = thousand British Thermal Unit; Source: Attachment C	

The project would comply with standards set in California Building Code (CBC)Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation**.** CALGreen (as codified in CCR Title 24, Part 11) requires implementation of energy-efficient light fixtures and building materials into the design of new construction projects. The Building Energy Efficiency Standards (CBC Title 24, Part 6) requires newly constructed buildings to meet energy performance standards set by the California Energy Commission (CEC). These standards are specifically crafted for new buildings to achieve energy efficient performance. The standards are updated every three years, and each iteration increases energy efficiency standards. In addition to these requirements, the use of nonrenewable energy resources would be further reduced as the percentage of electricity generated by renewable resources provided by SCE continues to increase to comply with state requirements through Senate Bill 100, which requires electricity providers to increase procurement from eligible renewable energy resources to 33% of total retail sales by 2020, 60% by 2030, and 100% by 2045. Therefore, project operation would not result in potentially substantial increase in energy demand upon existing energy sources and this impact would be less than significant.

b. Operation of the project would require consumption of electricity. New structures would be required to comply with Title 24 Building, Energy, and Green Buildings Standards (California Building Code, Title 24, Parts 4, 6 and 11) which address efficiency of buildings, appliances, insulation and roofing, lighting, and water and space heating and cooling equipment. Additionally, the project includes 7,831 square feet of photovoltaic solar panels. Therefore, the project would not require development or extension of new sources of energy.

Cumulative Impacts: The geographic context for the cumulative impacts analysis regarding electricity is the City's service area. Growth within the City is anticipated to increase the demand for energy, as well as the need

for energy infrastructure, such as new or expanded energy facilities. Future development projects, similar to the proposed project, would continue to utilize renewable sources of electricity, such as solar panels. Therefore, cumulative energy impacts in the City region would not be significant, and the project's contribution to cumulative energy demand would not be cumulatively considerable.

Mitigation and Residual Impact: Implementation of the project would not result in potentially significant impacts related to energy; therefore, no mitigation measures are required.

4.7 FIRE PROTECTION

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Introduction of development into an existing high fire hazard area?			√		
b. Project-caused high fire hazard?			√		
c. Introduction of development into an area without adequate water pressure, fire hydrants or adequate access for fire fighting?			√		
d. Introduction of development that will hamper fire prevention techniques such as controlled burns or backfiring in high fire hazard areas?			√		
e. Development of structures beyond safe Fire Dept. response time?			√		

Impact Discussion:

a-e. The project site is not located in a designated very high fire hazard severity zone (VHFHSZ) (CALFIRE 2022). The project site is located approximately 1.5 mile west of the nearest VHFHSZ in a Local Area of Responsibility and approximately two miles northwest of the nearest VHFHSZ in a State Responsibility Area. As described in Section 4.9, *HAZARDOUS MATERIALS/RISK OF UPSET*, the project would not introduce a high fire hazard, as construction activities and the proposed building would be built in conformance with the California Fire Code (CFC) standards. The project is located in a fully developed, urbanized setting, in an area served with adequate water pressure, fire hydrants and fire access. Because the project is not within a VHFHSZ, the project would not hamper fire prevention techniques such as controlled burns. In addition, the project is in an area with an adequate response time from fire protective services and is located within less than a mile of Santa Barbara Fire Station 2. Therefore, the project would not result in significant impacts related to fire protection.

Cumulative Impact: The project is located in an urbanized area in the City of Santa Barbara and is not within a VHFHSZ. Cumulative development in the City would be subject to established guidelines and building code regulations and construction procedures pertaining to fire protection. Cumulative development would be subject to review for compliance with Fire Code and City regulations related to emergency response, emergency access, and fire safety. As such, the project's contribution to cumulative fire protection impacts would not be cumulatively considerable.

Mitigation and Residual Impact: Implementation of the project would not result in potentially significant impacts related to fire protection; therefore, no mitigation measures are required.

4.8 GEOLOGIC PROCESSES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Exposure to or production of unstable earth conditions such as landslides, earthquakes, liquefaction, soil creep, mudslides, ground failure (including expansive, compressible, collapsible soils), or similar hazards?			√		
b. Disruption, displacement, compaction or overcovering of the soil by cuts, fills or extensive grading?			√		
c. Exposure to or production of permanent changes in topography, such as bluff retreat or sea level rise?				√	
d. The destruction, covering or modification of any unique geologic, paleontologic or physical features?				√	
e. Any increase in wind or water erosion of soils, either on or off the site?			√		
f. Changes in deposition or erosion of beach sands or dunes, or changes in siltation, deposition or erosion which may modify the channel of a river, or stream, or the bed of the ocean, or any bay, inlet or lake?			√		
g. The placement of septic disposal systems in impermeable soils with severe constraints to disposal of liquid effluent?				√	
h. Extraction of mineral or ore?				√	
i. Excessive grading on slopes of over 20%?				√	
j. Sand or gravel removal or loss of topsoil?				√	
k. Vibrations, from short-term construction or long-term operation, which may affect adjoining areas?			√		
l. Excessive spoils, tailings or over-burden?				√	

Impact Discussion

a-b. The project site is located in the urbanized core of the Downtown area, and is generally flat and not susceptible to landslides, soil, creep, or mudslides. The southern California region is generally susceptible to strong ground shaking from severe earthquakes. Consequently, development of the project could expose people and structures to the potential for strong seismic ground shaking. However, the project would be designed and constructed in accordance with state and local building codes, such as the seismic safety requirements in the International Building Code (IBC) and the California Building Code (CBC) to reduce the potential for exposure of people or structures to seismic risks to the maximum extent possible. The CBC includes common engineering practices that would require special design and construction methods that reduce potential expansive soil and settlement-related impacts. Adherence to the CBC would reduce potential adverse impacts associated with development on unstable soils. Compliance with these requirements would reduce seismic ground shaking impacts to the maximum extent practicable with current engineering practices. Furthermore, the project would not increase ground shaking hazards at adjacent properties or exacerbate existing geologically unstable/hazardous conditions. Therefore, impacts related to exposure to seismic related hazards would be less than significant.

c. The project site is located over one mile from the Pacific Ocean. The project would not result in the exposure to or production of permanent changes in topography, such as bluff retreat or sea level rise, and there would be no impact.

d, g-j, l. The project site does not contain any excessive slopes and the project does not propose or require any mining, sand/topsoil removal or ore extraction. There are no unique geological or paleontological features located on the project site as the site has been previously graded and paved. The project does not propose to use any alternative wastewater systems, such as septic. There would be no impact.

e-f. Construction of the project would result in ground surface disturbance during site clearance and grading, which could create the potential for soil erosion. The County's Code of Ordinances requires the project to comply with any conditions and requirements established by the National Pollutant Discharge Elimination System (NPDES) permit or other permits that are reasonably related to the reduction or elimination of pollutants in stormwater from the construction site, and any condition and/or requirements established by the County to protect specific watersheds or drainage basin (County Municipal Code Chapter 29). Compliance with standard conditions and best management practices (BMPs) would minimize any potential for substantial soil erosion. Impacts related to erosion would be less than significant.

k. Construction-related vibration is discussed in detail in Threshold C in Section 4.11, *NOISE*. As discussed, the potential use of vibratory rollers would not exceed the Federal Transit Administration's (FTA) recommended criterion for strongly perceptible vibration from transient sources. In addition, the vibration level would not exceed the FTA's recommended criterion of 0.4 PPV in/sec for potential damage on reinforced structures from transient vibration sources. The project would not generate significant sources of vibration during construction or operation of the project, based on the nature of the proposed use. Therefore, vibration impacts would be less than significant.

Cumulative Impact Cumulative development in the City of Santa Barbara would continue to be designed in accordance with the IBC and CBC. Geologic hazards are by their nature project-specific and impacts at one location do not add to impacts at other locations or create additive impacts. Therefore, the project's contribution to cumulative geologic process impacts would be individually limited and not cumulatively considerable.

Mitigation and Residual Impact: Implementation of the project would not result in potentially significant impacts related to geologic processes; therefore, no mitigation measures are required.

4.9 HAZARDOUS MATERIALS/RISK OF UPSET

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. In the known history of this property, have there been any past uses, storage or discharge of hazardous materials (e.g., fuel or oil stored in underground tanks, pesticides, solvents or other chemicals)?				√	
b. The use, storage or distribution of hazardous or toxic materials?			√		
c. A risk of an explosion or the release of hazardous substances (e.g., oil, gas, biocides, bacteria, pesticides, chemicals or radiation) in the event of an accident or upset conditions?			√		
d. Possible interference with an emergency response plan or an emergency evacuation plan?			√		
e. The creation of a potential public health hazard?			√		
f. Public safety hazards (e.g., due to development near chemical or industrial activity, producing oil wells, toxic disposal sites, etc.)?				√	
g. Exposure to hazards from oil or gas pipelines or oil well facilities?				√	
h. The contamination of a public water supply?				√	

Impact Discussion:

a. A review of the State Water Resources Board Geotracker and the Department of Toxic Substances Control database systems revealed no evidence that hazardous materials were used, stored, or spilled on site. According to the Geotracker database, a case-closed former Leaking Underground Storage Tank listing is identified less than a quarter mile southwest of the project site at 1026 Santa Barbara Street. This site was closed in September 2013 with no further action letters issued after September 2013 (SWRCB 2022). No other adjacent properties are listed in the aforementioned databases. In addition, there are no historical hazardous materials that constitute a Federal Superfund site located in the City of Santa Barbara (DTSC 2022). Therefore, there would be no impact associated with the past uses, storage or discharge of hazardous materials.

b-e. Construction activities typically require the use of a limited amount of hazardous and flammable substances/oils during heavy equipment operation for site preparation and building construction. However, the transport, use, and storage of hazardous materials during construction of the project would be conducted in accordance with all applicable State and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22. The proposed project is a commercial/office land use and proposed operational uses would not include or involve hazardous materials that would constitute a hazard to human health or the environment or otherwise disrupt existing emergency response/evacuation plans. These impacts would be less than significant.

f-h. The project site is located in an area surrounded by residential and commercial uses. Based on the California Department of Conservation Geologic Energy Management Division, there are no oil or gas wells located on or adjacent to the proposed project site that would expose oil or gas pipelines and well facilities. The project is subject to NPDES regulations which protect streams, creeks, and storm drains from known hazardous material pollution by controlling and regulating discharges to storm drains. The project would have no impact related to hazardous materials exposure or contaminating public water supply.

Cumulative Impacts: Impacts related to hazardous material exposure are by their nature project-specific and impacts at one location do not add to impacts at other locations or create additive impacts. Cumulative

development in the City of Santa Barbara would continue to be required to adhere to all local, state, and federal regulations governing the transport, use and disposal of hazardous materials. Therefore, the project's contribution to cumulative hazardous materials/risk of upset impacts would be individually limited and not cumulatively considerable.

Mitigation and Residual Impact: Implementation of the project would not result in potentially significant impacts related to hazardous materials; therefore, no mitigation measures are required.

4.10 LAND USE

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Structures and/or land use incompatible with existing land use?				√	
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				√	
c. The induction of substantial growth or concentration of population?				√	
d. The extension of sewer trunk lines or access roads with capacity to serve new development beyond this proposed project?				√	
e. Loss of existing affordable dwellings through demolition, conversion or removal?				√	
f. Displacement of substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				√	
g. Displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere?				√	
h. The loss of a substantial amount of open space?				√	
i. An economic or social effect that would result in a physical change? (i.e. Closure of a freeway ramp results in isolation of an area, businesses located in the vicinity close, neighborhood degenerates, and buildings deteriorate. Or, if construction of new freeway divides an existing community, the construction would be the physical change, but the economic/social effect on the community would be the basis for determining that the physical change would be significant.)				√	
j. Conflict with adopted airport safety zones?				√	

Impact Discussion

a-b, j. The proposed project is an office building for the Santa Barbara County Probation Department, located in the City's Downtown area, and would be constructed on a project site designated for Commercial/High Residential use. Based on the 2011 General Plan, the City promotes the highest residential densities being located near employment and governmental facilities, among other uses such as transit, shopping, cultural, and recreational uses. As described in Section 4.1 *AESTHETICS/VISUAL RESOURCES*, the project is within the El Pueblo Viejo Landmark District, and the proposed building height and architectural style would consistent with the policies in the El Pueblo Viejo Landmark District Guidelines. In addition, the project does not conflict with an adopted airport safety zone, as displayed in the Santa Barbara Airport Land Use Compatibility Plan. Therefore, the project would be compatible with surrounding uses, policies, and plans and there would be no impact.

c-i. The project would not require the need for an extension of sewer trunk lines or access roads. As a commercial/office land use and project, and due to the fact that the project would replace the existing probation headquarters building, the project would not directly cause a significant amount

of growth in population, and any growth related to employment would be nominal. The project would not remove any housing, nor impede any economic or social benefits to the community. Therefore, there would be no impact on population growth, displacement, or physical changes that would affect the social and economic environment.

Cumulative Impacts: Implementation of the project is not anticipated to result in any substantial change to the site's conformance with environmentally protective policies and standards or have significant growth inducing effects. Therefore, the project would not cause a cumulatively considerable effect on land use.

Mitigation and Residual Impact: Implementation of the project would not result in potentially significant impacts related to land use; therefore, no mitigation measures are required.

4.11 NOISE

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Long-term exposure of people to noise levels exceeding County thresholds (e.g. locating noise sensitive uses next to an airport)?			√		
b. Short-term exposure of people to noise levels exceeding County thresholds?		√			
c. Project-generated substantial increase in the ambient noise levels for adjoining areas (either day or night)?			√		

Noise Setting

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Sound pressure level is measured on a logarithmic scale with the 0 dBA level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dBA, and a sound that is 10 dBA less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dBA greater than the ambient noise level to be judged as twice as loud. In general, a 3 dBA change in the ambient noise level is noticeable, while 1 to 2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40 to 50 dBA, while areas adjacent to arterial streets are typically in the 50 to 60+ dBA range.

One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (L_{eq}). The L_{eq} is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, L_{eq} is summed over a one-hour period.

The time at which noise occurs is also important since nighttime noise tends to disturb people more than daytime noise. Community noise is typically measured using Day-Night Average Level (L_{dn}), which is the 24-hour average noise level with a 10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.), or Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a 5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a 10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. Noise levels described by L_{dn} and CNEL typically do not differ by more than 1 dBA. In practice, CNEL and L_{dn} are often used interchangeably.

Vibration refers to groundborne noise and perceptible motion. Some vibration effects can be caused by noise (e.g., the rattling of windows from passing trucks). Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Most perceptible indoor vibration is caused by sources in buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment and traffic on rough roads.

Methodology and Thresholds of Significance

Project construction noise would be generated by heavy-duty diesel construction equipment used for site preparation, grading, building construction, loading, unloading, and placing materials and paving. Typical heavy construction equipment during project grading and soil remediation efforts could include dozers, loaders, graders, and dump trucks. It is assumed that diesel engines would power all construction equipment. Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. During construction, equipment goes through varying load cycles and is operated intermittently to allow for non-equipment tasks such as measurement. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of

the activity to determine the L_{eq} of the operation (Federal Highway Administration [FHWA] 2018). Reference noise levels for heavy-duty construction equipment were estimated using the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006).

Per Chapter 40 of the County Code, noise generated by construction activities is not prohibited by Section 14-22 if it occurs between the hours of 7:00 a.m. to 7:00 p.m. In addition, to reduce construction impacts, the County of Santa Barbara Environmental Thresholds and Guidelines Manual (County of Santa Barbara 2021) indicates construction activity within 1,600 feet of sensitive receivers, including schools, residential development, commercial lodging facilities, hospitals, or care facilities, as a threshold. This is based upon an assumed average construction noise level of 95 dBA at a distance of 50 feet from the source, which would result in a noise level of approximately 65 dBA at a distance of 1,600 feet. The manual states that construction within 1,600 feet of sensitive receivers shall be limited to weekdays between the hours of 8:00 a.m. and 5:00 p.m. Additionally, noise levels in excess of 60 dBA at the edge of the property during the nighttime hours of 10:00 p.m. and 7:00 a.m. on Sunday through Thursday and 12:00 a.m. and 7:00 a.m. on Friday and Saturday are prohibited. The Santa Barbara County Environmental Thresholds Manual prohibits noise levels in excess of 65 CNEL at sensitive receivers. Impacts from on-site noise sources such as HVAC systems would be significant if noise levels exceed these standards.

The primary noise source associated with operation of the proposed project would consist of heating, ventilation, and air conditioning (HVAC) units. The unit used in this analysis is a 16.7-ton Carrier 38AUD25 split system condenser, which is a typical HVAC unit used in large enclosed structures of this size and has a sound power level of 85 dBA (see Attachment D for manufacturer's specifications). The project assumptions are based upon one ton of HVAC per 600 sf of building space. Based on the size of the project, it is assumed that four rooftop-mounted HVAC units distributed across the project site would be needed, producing a combined noise level at off-site receivers that is equivalent to all units being located at the center of the project site, which is measured at approximately 100 feet from the nearest off-site sensitive receivers north of the project boundary.

Impact Discussion

a, c. **Operation:** The primary on-site noise sources associated with operation of the project would include vehicle circulation noise (e.g. engine startups, alarms, parking) at the on-site parking lots and heating, ventilation, and air conditioning (HVAC) equipment at proposed the proposed office building. The combined operation of four HVAC units would generate an estimated noise level of 51 dBA L_{eq} at the nearest off-site sensitive receivers northwest of the project site (see Attachment D) as measured from the center of the proposed office building. This would not exceed the County's maximum noise level limit of 60 dBA between 10:00 p.m. - 7:00 a.m., and the project would have a less than significant impact from HVAC noise. Additionally, the project would result in a net decrease in on-site parking and associated parking lot noise because the entire project site is currently in use as a parking lot. Therefore, the project would have a less than significant impact from parking lot noise.

Off-Site Traffic Noise: The project would generate new vehicle trips that could increase noise levels on nearby roadways. A 2017 vehicle count conducted on Garden Street at the intersection of Carrillo Street estimated 6,536 daily trips on this roadway segment (Traffic Data Service 2017). Based on CalEEMod default trip generation rates, the project is anticipated to generate 743 daily vehicle trips (see Attachment B). The addition of 743 daily trips would result in an increase in noise level by up to 0.5 dBA, which would not exceed the FHWA allowable 3 dBA increase for off-site traffic noise impacts (see Attachment D). Therefore, to the project would have a less than significant impact on off-site traffic noise.

Airport Noise: The closest airport is the Santa Barbara Airport, which is approximately 7.6 miles west of the project site. According to the Santa Barbara Airport Land Use Compatibility Plan, the project would not be located within the noise contours of the airport. There are no private airstrips in the project vicinity. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with airports or a private airstrip. This impact would be less than significant.

b. **Construction:** Construction activity would result in temporary noise in the project site vicinity, exposing surrounding nearby receivers to increased noise levels. Construction activity would be limited to weekdays

between the hours of 7:00 a.m. and 7:00 p.m. pursuant to the County guidelines. The nearest sensitive receivers in the project vicinity are residences that directly abut the project site to the northwest (approximately 50 feet). Maximum noise levels of construction equipment are modeled at a distance of 50 feet. A likely construction scenario includes simultaneous operation of a dozer and a front-end loader working during grading to excavate and move soil. At a distance of 50 feet, a dozer and a front-end loader would generate an estimated noise level of approximately 80 dBA L_{eq} (RCNM calculations are included in Attachment D). The 65 dBA L_{eq} noise contour for this level of construction activity would be located approximately 281 feet from the center of the construction site. Since construction would occur within the County's distance threshold of 1,600 feet, construction noise impacts would be potentially significant. As such, mitigation would be required to reduce this impact to a less than significant level.

Project construction would also require approximately 600 soil hauling trips to accommodate 4,750 cubic yards of soil export during the site preparation and grading phases of project construction. A 2017 vehicle count conducted on Garden Street at the intersection of Carrillo Street estimated 6,536 daily trips on this roadway segment (Traffic Data Service 2017). Based on an estimate maximum daily throughput of up to 40 soil hauling trips to and from the project site, the addition of 40 daily hauling trips (for an estimated 12-15 working days needed to complete the soil export) would result in an increase in noise level by up to 0.5 dBA, which would not exceed the FHWA allowable 3 dBA increase for off-site traffic noise impacts. Therefore, to the project would have a less than significant impact on off-site traffic noise during the construction phase.

Vibration: Vibration-generating equipment, including dozers and loaded trucks would likely be used at 50 feet from the nearest structure to the east. Construction activity would generate vibration levels reaching an estimated 0.21 PPV in/sec at a distance of 25 feet, if vibratory rollers are used to pave asphalt. Vibration-generating equipment would be operated on a transient basis during construction. A maximum vibration level of 0.21 PPV in/sec during the potential use of vibratory rollers would not exceed 0.24 PPV in/sec, the Federal Transit Administration's (FTA) recommended criterion for strongly perceptible vibration from transient sources. In addition, the vibration level would not exceed the FTA's recommended criterion of 0.4 PPV in/sec for potential damage on reinforced structures from transient vibration sources. The project would not generate significant sources of vibration during construction or operation of the project, based on the nature of the proposed use. Therefore, vibration impacts would be less than significant.

Mitigation and Residual Impacts

MM N-1: Noise-Generating Construction Activity Timing. Per the County of Santa Barbara Environmental Thresholds and Guidelines Manual requirements, noise-generating construction activities within 1,600 feet of sensitive receivers shall be limited to the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday. No construction shall occur on State holidays (e.g., Thanksgiving, Labor Day). Construction equipment maintenance shall also be limited to these hours.

MM N-2: Construction Noise Control Best Management Practices. The applicant shall implement the following construction noise Best Management Practices (BMPs) during construction of the project:

- **Mufflers.** During project site excavation and grading, construction equipment, fixed or mobile, shall be operated with closed engine doors and shall be equipped with properly operating and maintained mufflers consistent with manufacturers' standards.
- **Stationary Equipment.** Stationary construction equipment shall be located and oriented so that emitted noise is directed away from the nearest noise sensitive receivers.
- **Equipment Staging Areas.** Equipment staging shall be located in areas that will create the greatest distance feasible between construction-related noise sources and noise sensitive receivers.
- **Electrically-Powered Tools and Facilities.** Where available, electrical power shall be used to run air compressors and similar power tools and to power any temporary structures, such as construction trailers or caretaker facilities.
- **Smart Back-up Alarms.** Mobile construction equipment shall have smart back-up alarms that automatically adjust the sound level of the alarm in response to ambient noise levels. Alternatively, back-up alarms shall

be disabled and replaced with human spotters to ensure safety when mobile construction equipment is moving in the reverse direction.

- **Sound barriers.** During the earth moving and grading phases of construction, temporary sound barriers shall be installed and maintained between the construction site and the noise sensitive receivers within 200 feet of active construction equipment. Temporary sound barriers may consist of sound blankets affixed to construction fencing along the construction site boundary facing potentially sensitive receivers
- **Idling.** Construction vehicles shall be prohibited from idling in excess of 5 minutes.
- **Plan Requirements and Timing.** Construction hours limitation and noise reduction measures shall be reflected on grading and building plans.
- **Monitoring.** The County shall demonstrate that the submitted plans conform to the required conditions. Grading and building inspectors shall ensure compliance in the field during construction activities.

Implementation of Mitigation Measures N-1 and N-2 would prevent nighttime noise and reduce overall noise levels from construction activity. Project construction would still exceed the County threshold of 65 dBA L_{eq}, however construction activities would be short term and temporary in nature. Therefore, impacts from construction would be less than significant with mitigation incorporated.

4.12 PUBLIC FACILITIES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. A need for new or altered police protection and/or health care services?			√		
b. Student generation exceeding school capacity?			√		
c. Significant amounts of solid waste or breach any national, state, or local standards or thresholds relating to solid waste disposal and generation (including recycling facilities and existing landfill capacity)?			√		
d. A need for new or altered sewer system facilities (sewer lines, lift-stations, etc.)?			√		
e. The construction of new storm water drainage or water quality control facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			√		

Impact Discussion

a, b. Police protection is provided by the City of Santa Barbara Police Department (SBPD). The Field Operations Division provides police services to the community, which includes a 24-hour 9-1-1 combined police and fire communications center, police patrol response to calls for service, traffic enforcement, parking enforcement, gang and nightlife enforcement, mental health co-response unit, restorative policing, and quality of life response teams. The nearest police station is located one block west from the project site. As a new headquarters location for the County Probation Department, police/sheriff services would be a part of daily project operations, serving occupants of the proposed new building. Because the project is an area served by existing service providers, the project would not have a significant impact on existing police protection or health care services.

The project would not introduce new population or generate students entering the local school system; therefore, the project would not exceed or strain existing exceeding school capacities. Existing service levels would be sufficient to serve the project and impacts associated with police, health, and school capacities would be less than significant.

c. Pursuant to the County's Environmental Threshold Manual, a project is considered to result in a significant impact to landfill capacity if it would generate five percent or more of the expected annual increase in waste generation thereby using a significant portion of the remaining landfill capacity, which equates to approximately 196 tons per year. The City of Santa Barbara disposes of solid waste at the Tajiguas Solid Waste Facility. The facility has a design capacity of approximately 23 million cubic yards of waste with an estimated closure date of 2036 (CalRecycle). Based on the emissions estimation and land use modeling prepared for the project (Attachment B), the project would generate 30.58 tons of waste per year or 113 cubic yards per year. The solid waste generated by the project would not exceed the County's threshold of significance and the project's increase would be minimal compared to the Tajiguas Solid Waste Facility's estimated four million cubic yards design total capacity through 2036. Pursuant to Assembly Bill 939 recoverable materials generated during construction would be separated and recycled to minimize construction and waste exportation from the site, resulting in limited demand on the landfills within the County. The project would comply with all local, state, and federal standards related to solid waste disposal and the project would not generate solid waste in excess of local capacities. The project would not result in the need for new or expanded solid waste facilities and impacts to the capacity of local infrastructure would be less than significant.

d. The Public Works Department operates the wastewater system for the City of Santa Barbara, which would serve the project's wastewater conveyance needs. The City owns and maintains 257 miles of sewer mains which deliver wastewater to El Estero Water Resource Center. The El Estero Water Resource Center treats six million gallons of wastewater per day, partly recycling for other beneficial uses. The City completed a Wastewater Collection System Master Plan which addresses existing and

future capacity deficiencies within the City. The project is located in an urbanized area of downtown Santa Barbara with existing wastewater utility infrastructure in place. The project would include new subsurface connections to the City's existing wastewater connection underneath Garden Street, and would not result in the need for new or altered sewer system facilities. If deficiencies are identified and upgrades to the City's existing wastewater utility infrastructure are required, any ground disturbing activities related to conveyance pipelines upgrades would be limited to previously disturbed areas where existing wastewater infrastructure is located. Impacts related to the need for new or altered sewer system facilities would be less than significant.

e. The project would be required to adhere to the guidelines in the Santa Barbara County Technical Guide, which implements and mandates the Clean Water Act's NPDES regulations for storm water discharge (County Municipal Code Chapter 29). The County requires development and redevelopment projects to install permanent storm water protection best management practices to comply with NPDES standards. The project includes the development of new stormwater drainage systems including catch basins/storm drains to capture stormwater on-site and the project would be required to implement design features to prevent an increase in peak stormwater flows on the project site during any storm event. Consequently, the project would not increase demand on stormwater drainage infrastructure or result in the need for new infrastructure beyond those improvements that are included in the project design. Thus, the project would not contribute to environmental effects related to storm water pollution and impacts related to stormwater management would be less than significant.

Cumulative Impacts: Cumulative development in the City of Santa Barbara would increase the demand for police protection services in the City. SBPD would continue to monitor population growth and land development throughout the City and identify additional resource needs including staffing, equipment, vehicles, and possibly station expansions or new station construction that may become necessary to achieve the desired level of service. Through the City's regular budgeting efforts, SBPD resource needs would be identified and monies allocated according to the priorities at the time. Any new or expanded police station would be funded via existing mechanisms (e.g., property and sales taxes, government funding, and developer fees) to which the proposed project and cumulative growth would contribute. Therefore, the cumulative impact on police protection services would be less than significant and the Project's contribution to cumulative impacts would not be cumulatively considerable.

The project would not introduce new population or generate students entering the local school system; therefore, the project would not contribute considerably to cumulative impacts related to school services.

While the County is not required to submit the Project to the City for development review per California Government Code Section 53090, which provides for intergovernmental immunity, cumulative development in the City would be subject to existing City regulations and would result in an intensification of existing prevailing land uses in an already urbanized area of the City and could further increase demands on existing City stormwater facilities. The City of Santa Barbara, similar to the County requirements described in the project-level evaluation above, requires that stormwater on individual project sites be, retained and treated in compliance applicable Municipal Code regulations, and directed towards existing storm drains. As a result, the amount of peak stormwater flows from new development in the area would not increase relative to existing conditions. Additionally, cumulative development within the service area of the El Estero Wastewater Treatment Plant would generate additional wastewater that would require treatment. The City's Wastewater Collection System Master Plan forecasts additional development in the City to ensure adequate supplies are available for the City's service area. As a result, cumulative development in the service area of the El Estero Wastewater Treatment Plant would be required to pay for in lieu fees for wastewater connection to the City's infrastructure, and if deficiencies are identified and upgrades to the City's existing wastewater utility infrastructure are required, any ground disturbing activities related to conveyance pipelines upgrades would be limited to previously disturbed areas where existing wastewater infrastructure is located. Therefore, the cumulative impact on stormwater and wastewater facilities would be less than significant and the Project's contribution to cumulative impacts would not be cumulatively considerable.

As with the proposed project, cumulative development in the City would be required to comply with applicable regulations related to solid waste, including those pertaining to waste reduction and recycling. Detailed components regarding waste reduction and recycling would be finalized for each related project on a project-by-project basis at the time of plan submittal for the necessary building permits and reviews. Pursuant to the County's Environmental Threshold Manual, a project is considered to result in a less than significant

contribution to regional cumulative solid waste impacts if it would generate less than 40 tons of solid waste per year. Therefore, Project's contribution to cumulative solid waste impacts would not be cumulatively considerable.

Mitigation and Residual Impact: Implementation of the project would not result in potentially significant impacts related to public facilities; therefore, no mitigation measures are required.

4.13 RECREATION

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Conflict with established recreational uses of the area?				√	
b. Conflict with biking, equestrian and hiking trails?				√	
c. Substantial impact on the quality or quantity of existing recreational opportunities (e.g., overuse of an area with constraints on numbers of people, vehicles, animals, etc. which might safely use the area)?				√	

Impact Discussion

a-c. The project site is not located on or near any biking, equestrian, or hiking trails. According to the City of Santa Barbara 2016 Bicycle Master Plan, the project is not located adjacent to an existing designated bike route. The project would not remove or impede any recreational uses and the project would not result in population growth, thereby resulting in increased demand for existing recreational uses/facilities. Since the project would not affect the quality or quantity of existing recreational opportunities, there would be no impact to recreational resources.

Cumulative Impacts: The Project would not induce population growth and thereby would not, directly or indirectly, contribute to significant cumulative impacts to recreation. Cumulative development in the City of Santa Barbara would be required to pay the City's Development Impact Fees pursuant to the City's Municipal Code, or other similar purpose fees, as appropriate to the projects' location and proposed uses, resulting in less than significant cumulative impacts on recreational resources. The project's contribution to cumulative recreational impacts would not be cumulatively considerable.

Mitigation and Residual Impact: Implementation of the project would not result in potentially significant impacts related to recreation; therefore, no mitigation measures are required.

4.14 TRANSPORTATION/CIRCULATION

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Generation of substantial additional vehicular movement (daily, peak-hour, etc.) in relation to existing traffic load and capacity of the street system?			√		
b. A need for private or public road maintenance, or need for new road(s)?			√		
c. Effects on existing parking facilities, or demand for new parking?			√		
d. Substantial impact upon existing transit systems (e.g. bus service) or alteration of present patterns of circulation or movement of people and/or goods?			√		
e. Alteration to waterborne, rail or air traffic?				√	
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians (including short-term construction and long-term operational)?			√		
g. Inadequate sight distance?			√		
ingress/egress?			√		
general road capacity?			√		
emergency access?			√		
h. Impacts to Congestion Management Plan system?				√	

Impact Discussion:

a. Section 15064.3, which was recently added to the State CEQA Guidelines, describes specific considerations for evaluating a project's transportation impacts. Section 15064.3(b) establishes vehicle miles traveled (VMT) as the most appropriate measure of transportation impacts, shifting away from the use of LOS analysis that evaluates a project's impacts on traffic conditions at nearby roadways and intersections. The County of Santa Barbara presumes that projects meeting one or more of the screening criteria, absent substantial evidence to the contrary, would have an insignificant VMT impact and would not require further VMT analysis. The screening criteria are listed below:

- Does the project generate 110 or fewer average daily trips?
- Is the project screened in a Transit Priority Area?
- Does the project have locally serving retail uses that are 50,000 square feet or less?
- Is the project located in a VMT efficient area for Residential uses?
- Is the project located in a VMT efficient area for Employment Uses?
- Is the residential portion of the project 100 percent affordable housing?

SBCAG has incorporated a sustainable community strategy into its 2050 Regional Transportation Plan/Sustainable Communities Strategy (Connected 2050 RTP/SCS), which is designed to help the region achieve its SB 375 GHG emissions reduction target. The Connected 2050 RTP/SCS includes strategies intended to reduce vehicle emissions. The Connected 2050 RTP/SCS focuses new growth in an urban infill pattern oriented around transit service, and has developed Transit Priority Areas[5] and Transit Priority Projects to identify locations for transit oriented infill projects. The transit oriented development type of growth intends to reduce VMT by promoting better balance of jobs and housing which reduce short and long distance single occupancy vehicle commuting. The project is located in a Transit Priority Area, as shown in Figure 3-3 of the Connected 2050 RTP/SCS. Therefore, the project

[5] Transit Priority Areas (TPAs) are defined as the areas within one half-mile of all major transit stops that are existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program or applicable Regional Transportation Plan.

would therefore not create a substantial increase in VMT which would substantially affect the local circulatory network or be inconsistent with the regional average. This impact would be less than significant.

b. The project site would be accessed via Garden Street, similar to existing conditions. The project would not result in significant impacts to public streets or right of way requiring new roads or a significant amount of increased roadway maintenance. This impact would be less than significant.

c. The project includes 49 at-grade County employee parking spaces accessible from Garden Street. 25 subterranean parking spaces would be provided below grade, for a total of 74 on-site spaces. The project would provide parking for probation staff and County employees only, with no public parking spaces designated as public. The project would not generate public vehicle trips, increasing demand for existing parking facilities in the area, and would not remove public parking spaces. The project would be required to provide all required employee parking spaces on-site, and out of the road right-of-way. This impact would be less than significant.

e. The project includes construction of a commercial office building on an existing infill site, one mile from the nearest watercourse, 0.9 mile from the nearest rail line, and 7.5 miles from the City of Santa Barbra Municipal Airport. The project would not result in alteration to waterborne, rail or air traffic, and there would be no impact.

f, g. The project would not create a traffic hazard for motorists, pedestrians, bicyclists, or transit users, or affect emergency access. The additional traffic caused by the project would not result in significant traffic safety impacts as circulation and access would remain similar to existing conditions. The project would not propose unsafe driveways; impede pedestrian, bicycle, or transit access; nor would it otherwise cause or exacerbate an unsafe traffic condition. These impacts would be less than significant.

h. Roadways and intersections in the project area operate at acceptable levels of service and are not subject to Congestion Management Plan requirements. There would be no impact.

Cumulative Impacts: Cumulative development in the City of Santa Barbara would result in an intensification of existing traffic in an already urbanized area. Regional and City-wide projects would be required to implement and support applicable County and City transportation planning goals and policies. As with the proposed project, cumulative projects would be subject to an approval process, including CEQA review, and would incorporate any required mitigation measures to reduce potential transportation impacts. Projects that do not demonstrate a significant project-level impact by demonstrating consistency with regional transportation planning efforts or by applying an efficiency-based impact threshold (i.e., VMT per capita or VMT per employee) would not contribute considerably to cumulative transportation impacts. The proposed project would not exceed with the County screening thresholds for VMT because the project is located in an identified Transit Priority Area and would not conflict with the Connected 2050 RTP/SCS. Therefore, the project's contribution to cumulative transportation impacts would not be cumulatively considerable.

Mitigation and Residual Impact: Implementation of the project would not result in potentially significant impacts related to transportation/circulation; therefore, no mitigation measures are required.

4.15 WATER RESOURCES/FLOODING

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?			√		
b. Changes in percolation rates, drainage patterns or the rate and amount of surface water runoff?			√		
c. Change in the amount of surface water in any water body?			√		
d. Discharge, directly or through a storm drain system, into surface waters (including but not limited to wetlands, riparian areas, ponds, springs, creeks, streams, rivers, lakes, estuaries, tidal areas, bays, ocean, etc) or alteration of surface water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution?			√		
e. Alterations to the course or flow of flood water or need for private or public flood control projects?			√		
f. Exposure of people or property to water related hazards such as flooding (placement of project in 100 year flood plain), accelerated runoff or tsunamis, sea level rise, or seawater intrusion?			√		
g. Alteration of the direction or rate of flow of groundwater?			√		
h. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or recharge interference?			√		
i. Overdraft or over-commitment of any groundwater basin? Or, a significant increase in the existing overdraft or over-commitment of any groundwater basin?			√		
j. The substantial degradation of groundwater quality including saltwater intrusion?			√		
k. Substantial reduction in the amount of water otherwise available for public water supplies?			√		
l. Introduction of storm water pollutants (e.g., oil, grease, pesticides, nutrients, sediments, pathogens, etc.) into groundwater or surface water?			√		

Impact Discussion

a-f, l. The project includes the removal and demolition of a surface parking lot. The project would not require removal of riparian vegetation and would not result in the channelization of any natural drainage channel. Although the project would alter the existing stormwater drainage on the site through the introduction of newly constructed impermeable surfaces (i.e., structures, driveways, patios, etc.), the project includes the development of new stormwater drainage systems including catch basins/storm drains to capture stormwater on-site. Pursuant to the Santa Barbara County Stormwater Technical Guide, the project would be required to implement design features to prevent an increase in peak stormwater flows on the project site during any storm event. Construction activities such as grading could increase temporary runoff and erosion. Under the County's conditions of the General Permit (Order no. 2013-0001-DWQ), the developer would be required to eliminate or reduce non-storm water discharges to waters of the nation, develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for the project construction activities, and perform inspections of the storm water pollution prevention measures and control

practices to ensure conformance with the site SWPPP. The General Permit prohibits the discharge of materials other than storm water discharges and prohibits all discharges that contain a hazardous substance in excess of reportable quantities established at 40 CFR 117.3 or 40 CFR 302.4. Consistent with the County's Municipal Code for storm drain system protection and remediation (Section 29.51), application of standard grading, erosion, and drainage-control measures would ensure that no significant increase of erosion or storm water runoff would occur. Best management practices are required for development and redevelopment projects, as discussed in Section 4.13, *PUBLIC FACILITIES*, which require implementation to ensure NPDES regulations are met. According to the Federal Emergency Management Agency (FEMA) Flood Hazard Map number 06083C1387J, the project site is located in an area of minimal flood risk (FEMA 2020). Impacts to water quality and water resources would be less than significant.

g-i The project would not include the direct extraction of groundwater and would not consume excess water outside of regular use as a commercial office project. Because project construction would not involve substantial excavation to depths where groundwater occurs and would not involve construction of wells to access groundwater, the project would not directly interfere with the groundwater table. Based on the land use and emissions modeling prepared for the project, the project would require approximately 10.5 million gallons of water per year or 37.4 acre feet per year (Attachment B). According to the County of Santa Barbara Water Supply and Demand Current Uses And Future Estimates Report, projections for the South Coast area indicate that the area has sufficient water supplies up to the year 2040. This is due to the variety of potential supplies available to South Coast purveyors including State Water Project water, groundwater, desalination, recycled water, and Cachuma, Gibraltar, and Jameson Reservoirs, along with the active conservation programs conducted by these purveyors (County of Santa Barbara 2013). As discussed in Threshold a-g, l, the project would not negatively or adversely impact water quality through adherence to existing City and NPDES regulations. The project would not interfere with or obstruct implementation of water quality standards or substantially degrade surface or ground water quality or supplies.

Cumulative Impact: Cumulative development in the City would be required to comply with applicable regulatory requirements regarding drainage and water quality, including implementation of a SWPPP/Stormwater Water Control and BMPs, conformance with NPDES permit conditions, and a LID or Standard Urban Stormwater Mitigation Plan, which would reduce individual project-level contributions to water resource impacts. The proposed project's consistency with the Santa Barbara County Stormwater Technical Guide and applicable General Permit requirements would ensure the project would not increase peak stormwater flows from the project site. Therefore, the Project would not contribute considerably to a cumulative impact regarding water resources and flooding.

Mitigation and Residual Impact: Implementation of the project would not result in potentially significant impacts related to water resources/flooding; therefore, no mitigation measures are required.

5.0 INFORMATION SOURCES

5.1 **County Departments Consulted** *(underline):*

Police, Fire, Public Works, Flood Control, Parks, Environmental Health,
Special Districts, Regional Programs, Other: _____

5.2 **Comprehensive Plan** *(check those sources used):*

√ Seismic Safety/Safety Element	√ Conservation Element
√ Open Space Element	√ Noise Element
√ Coastal Plan and Maps	√ Circulation Element
_____ ERME	_____ Other

5.3 **Other Sources** *(check those sources used):*

√ Field work	_____ Ag Preserve maps
√ Calculations	√ Flood Control maps
√ Project plans	√ Other technical references
√ Traffic studies	(reports, survey, etc.)
√ Records	√ Planning files, maps, reports
√ Grading plans	√ Zoning maps
√ Elevation, architectural renderings	√ Soils maps/reports
√ Published geological map/reports	_____ Plant maps
_____ Topographical maps	√ Archaeological maps and reports

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United States Green Building Council. 2008. “Building Area per Employee by Business Type.” May 13, 2008. https://www.usgbc.org/drupal/legacy/usgbc/docs/Archive/General/Docs4111.pdf. Accessed September 2022.

6.0 PROJECT SPECIFIC (short- and long-term) AND CUMULATIVE IMPACT SUMMARY

The project does not have potential impacts that cannot be feasibly mitigated to less than significant levels.

i. Project specific impacts which are of unavoidable significance levels: None

ii. Project specific impacts which are potentially significant but can be reduced to less than significant levels with incorporation of mitigation measures: Biological Resources, Cultural Resources, and Noise

iii. No potentially significant adverse cumulative impacts have been identified.

7.0 MANDATORY FINDINGS OF SIGNIFICANCE

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
1. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, contribute significantly to greenhouse gas emissions or significantly increase energy consumption, or eliminate important examples of the major periods of California history or prehistory?		√			
2. Does the project have the potential to achieve short-term to the disadvantage of long-term environmental goals?				√	
3. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects and the effects of probable future projects.)			√		
4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			√		
5. Is there disagreement supported by facts, reasonable assumptions predicated upon facts and/or expert opinion supported by facts over the significance of an effect which would warrant investigation in an EIR?				√	

Discussion

1. As discussed in Section 4.4, *BIOLOGICAL RESOURCES*, the project the project is located within a well-developed urban neighborhood with no environmentally sensitive habitat on or habitat suitable for floral and faunal resources. Implementation of Mitigation Measure BIO-1 is required to ensure nesting birds are not adversely affected during construction related activities. The project would not impact wildlife habitats or cause wildlife populations to drop below self-sustaining levels. As discussed in Section 4.5, *CULTURAL RESOURCES*, due to the potential to uncover unanticipated archaeological and tribal cultural resources and human remains during construction, Mitigation Measures CR-1 through CR-5 are required. With implementation of these mitigation measures, impacts would be less than significant, thereby reducing the potential to damage a culturally significant resource and eliminate an example of California history to a less than significant level.

2. There are no short-term environmental goals that would be achieved by the proposed project to the disadvantage of long-term environmental goals.

3. The project once completed would not increase beyond a level of significance project generated impacts that will cumulatively impact the environment. As discussed in the discussion of environmental checklist Sections 4.1 through 4.15, the project was found to have no impact, less than significant impacts, or less than significant impacts after mitigation in all environmental impact areas. Any overlapping construction impacts from other probable future projects in the project area would occur primarily in the areas of air

quality, noise, and traffic due to the potential for construction equipment and other construction activities to generate dust and other air quality emissions, noise, and construction traffic. The impacts of the project in these areas have been determined to be less than significant.

4. In general, and as analyzed in this Initial Study, impacts to human beings are associated with air quality contaminants, adverse geologic conditions, exposure to hazards and hazardous materials, and excessive noise. As detailed in analyses in Section 4.3, *AIR QUALITY – GREENHOUSE GAS EMISSIONS*, Section 4.8, *GEOLOGIC PROCESSES*, Section 4.9, *HAZARDOUS MATERIALS/RISK OF UPSET*, Section 4.11, NOISE, and Section 4.15, *WATER RESOURCES/FLOODING,* the proposed project would not result, either directly or indirectly, in adverse hazards. Compliance with applicable rules and regulations would reduce potential impacts on human beings to a less than significant level.

5. The site currently serves as an underdeveloped infill parking lot and the construction of a building was contemplated within planning and zone regulations. There is no disagreement among County planners, facility planners or other related experts over the significance of the effects analyzed in this Initial Study-Mitigated Negative Declaration which would warrant investigation in an EIR.

8.0 PROJECT ALTERNATIVES

Offsite Alternative: Consideration of an offsite alternative is not warranted because no significant impacts that cannot be mitigated have been identified.

Reduced Project: Reducing the size of the project may incrementally reduce impacts in a range of issue areas, such as public services, air quality, utilities, and transportation. However, as discussed in this Initial Study, the proposed project's impacts would not be significant in these areas. Reducing the project size would not be required, as no significant impacts or no significant impacts requiring mitigation have been identified.

No Action Alternative: If the project were not implemented, the project site could continue to serve as an underutilized lot that is undeveloped.

9.0 INITIAL REVIEW OF PROJECT CONSISTENCY WITH APPLICABLE SUBDIVISION, ZONING AND COMPREHENSIVE PLAN REQUIREMENTS

Government Code Section 53090 exempts government projects from the requirements of general or community plan regulations, and zoning regulations.

10.0 RECOMMENDATION BY STAFF

On the basis of the Initial Study, the Lead Agency:

_____ Finds that the proposed project WILL NOT have a significant effect on the environment and, therefore, recommends that a Negative Declaration (ND) be prepared.

_√_ Finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures incorporated into the REVISED PROJECT DESCRIPTION would successfully mitigate the potentially significant impacts. Staff recommends the preparation of an ND. The ND finding is based on the assumption that mitigation measures will be acceptable to the applicant, if not acceptable a revised Initial Study finding for the preparation of an MND may result.

_____ Finds that the proposed project MAY have a significant effect on the environment, and recommends that an EIR be prepared.

_____ Finds that from existing documents (previous EIRs, etc.) that a subsequent document (containing updated and site-specific information, etc.) pursuant to CEQA Sections 15162/15163/15164 should be prepared.

Potentially significant unavoidable adverse impact areas: None

__√__ With Public Hearing _____ Without Public Hearing

PROJECT EVALUATOR: **Shane Mahan** **DATE:** **March 19, 2024**

11.0 DETERMINATION BY ENVIRONMENTAL HEARING OFFICER

__√__ I agree with staff conclusions. Preparation of the appropriate document may proceed.
_____ I DO NOT agree with staff conclusions. The following actions will be taken:
_____ I require consultation and further information prior to making my determination.

SIGNATURE: DocuSigned by: Patrick Zuroske 779B14D1B96E491... *Patrick Zuroske, GS Assistant Director* **MND DATE:** 3/19/2024 | 12:17 PM PDT

12.0 ATTACHMENTS

A. Figures
B. Air Quality and Greenhouse Gas Modeling
C. Energy Demand Calculations
D. Noise Modeling and Calculations

Attachment A

Figures

Figure 1 Regional Location

Basemap provided by Esri and its licensors © 2022.

Project Location

N

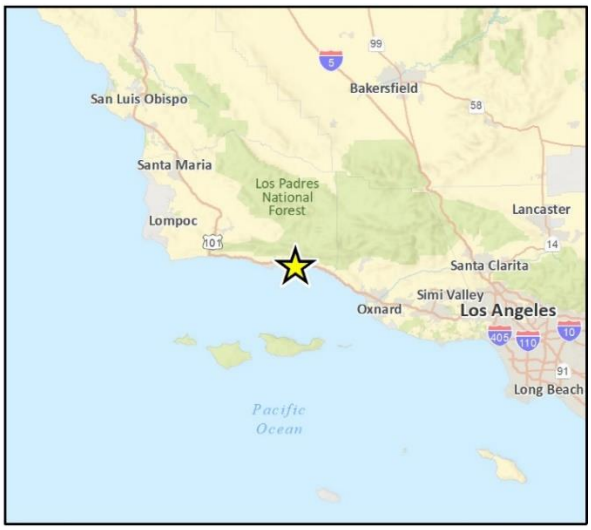
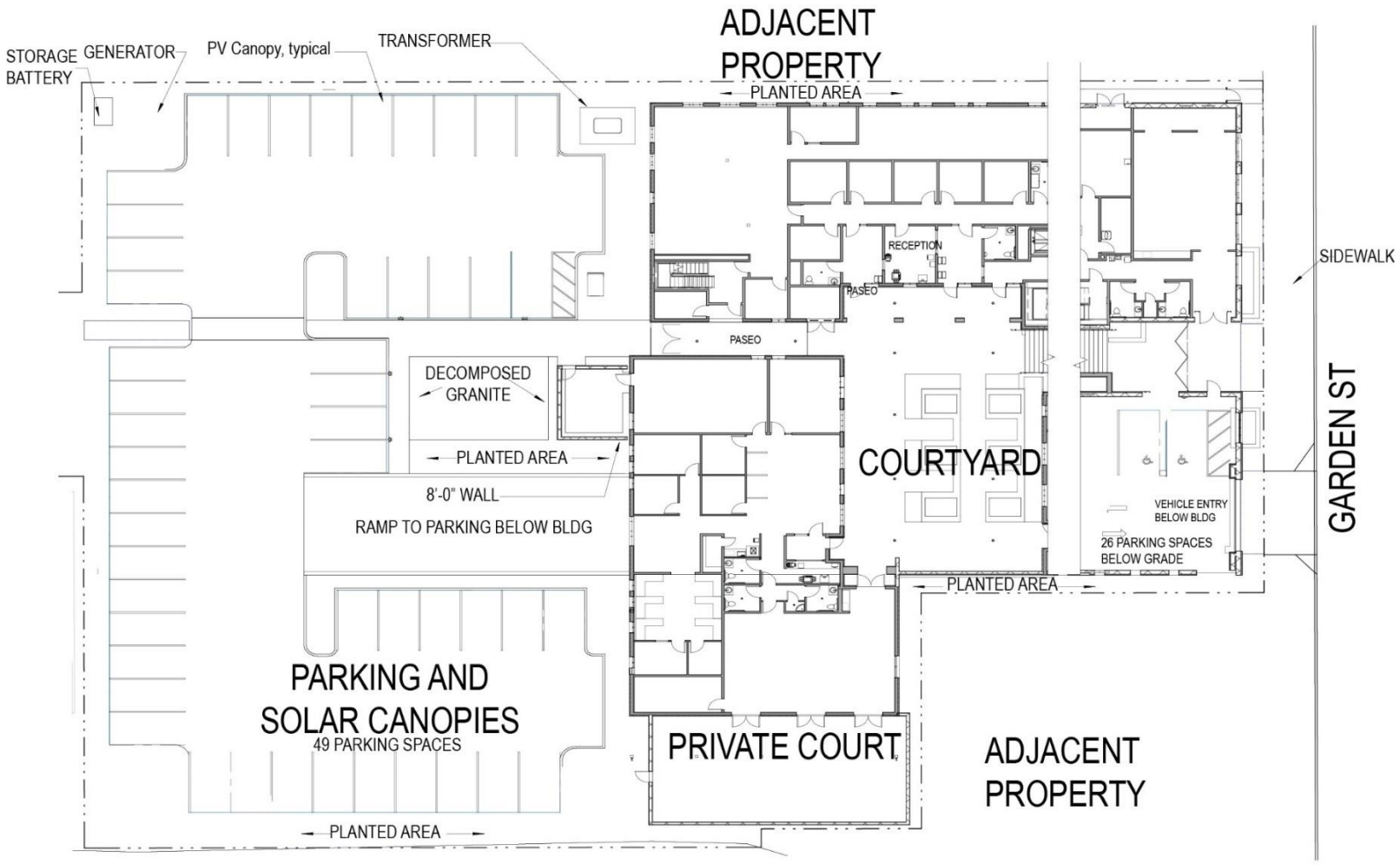


Fig 1 Regional Location

Figure 2 Project Location

Imagery provided by Microsoft Bing and its licensors © 2022.

Figure 3 Ground Floor Site Plan



Source: County of Santa Barbara, 2022.

Figure 4 East/North Exterior Elevations

Source: County of Santa Barbara, 2022.

Not To Scale N

Figure 5 West/South Exterior Elevations

Source: County of Santa Barbara, 2022.

Not To Scale N

Attachment B

CalEEMod Worksheets

Probation Dept HQ IS-MND - Santa Barbara County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Probation Dept HQ IS-MND

Santa Barbara County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	32.88	1000sqft	0.75	32,885.00	0
Enclosed Parking with Elevator	13.50	1000sqft	0.00	13,500.00	0
Parking Lot	49.00	Space	0.35	19,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Jan 1 2024 start date. 2026 Operational Year.

Land Use - Parking area adjusted to reflect lot acreage (1.1 AC). Square footages per applicant provided site plan. Ground floor parking area modeled as Enclosed Parking w elevator. Remainder of ground floor uses modeled as Govt Office Bldg.

Construction Phase - default

Demolition - no demo; existing use is parking lot.

Grading - 5,300 CY cut - 550 CY fill = 4,750 CY export. Fill assumed to use onsite, cut material.

Architectural Coating - per SBCAPCD rule 323.1

Vehicle Trips - Assumed to operate on weekends, therefore weekend trips adjusted to match weekday

Area Coating - per SBCAPCD rule 323.1

Energy Use - No natural gas per SB City ordinance

Probation Dept HQ IS-MND - Santa Barbara County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water And Wastewater - default

Construction Off-road Equipment Mitigation - water exposed area per SBCAPCD rule 345

Area Mitigation - per SBCAPCD rule 323.1

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Parking	250	100
tblEnergyUse	NT24NG	0.55	0.00
tblEnergyUse	T24NG	8.50	0.00
tblGrading	MaterialExported	0.00	4,750.00
tblLandUse	LandUseSquareFeet	32,880.00	32,885.00
tblLandUse	LotAcreage	0.31	0.00
tblLandUse	LotAcreage	0.44	0.35
tblVehicleTrips	ST_TR	0.00	22.59
tblVehicleTrips	SU_TR	0.00	22.59

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.3300	1.4245	1.5422	3.0900e-003	0.0487	0.0555	0.1041	0.0175	0.0532	0.0707	0.0000	265.1095	265.1095	0.0418	6.2100e-003	268.0058
Maximum	**0.3300**	**1.4245**	**1.5422**	**3.0900e-003**	**0.0487**	**0.0555**	**0.1041**	**0.0175**	**0.0532**	**0.0707**	**0.0000**	**265.1095**	**265.1095**	**0.0418**	**6.2100e-003**	**268.0058**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.3300	1.4245	1.5422	3.0900e-003	0.0372	0.0555	0.0926	0.0121	0.0532	0.0652	0.0000	265.1093	265.1093	0.0418	6.2100e-003	268.0056
Maximum	**0.3300**	**1.4245**	**1.5422**	**3.0900e-003**	**0.0372**	**0.0555**	**0.0926**	**0.0121**	**0.0532**	**0.0652**	**0.0000**	**265.1093**	**265.1093**	**0.0418**	**6.2100e-003**	**268.0056**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**23.54**	**0.00**	**11.00**	**31.14**	**0.00**	**7.71**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2024	3-31-2024	0.5031	0.5031
2	4-1-2024	6-30-2024	0.4256	0.4256
3	7-1-2024	9-30-2024	0.4303	0.4303
		Highest	0.5031	0.5031

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1464	1.0000e-005	8.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7000e-003	1.7000e-003	0.0000	0.0000	1.8200e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	92.9146	92.9146	7.8400e-003	9.5000e-004	93.3940
Mobile	0.2697	0.2699	1.9436	3.2200e-003	0.3538	2.6900e-003	0.3565	0.0948	2.5200e-003	0.0973	0.0000	306.5288	306.5288	0.0279	0.0188	312.8208
Waste						0.0000	0.0000		0.0000	0.0000	6.3504	0.0000	6.3504	0.3149	0.0000	14.2227
Water						0.0000	0.0000		0.0000	0.0000	2.3110	8.7531	11.0641	8.6900e-003	5.1200e-003	12.8058
Total	**0.4161**	**0.2700**	**1.9445**	**3.2200e-003**	**0.3538**	**2.6900e-003**	**0.3565**	**0.0948**	**2.5200e-003**	**0.0973**	**8.6614**	**408.1983**	**416.8596**	**0.3594**	**0.0248**	**433.2450**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1464	1.0000e-005	8.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7000e-003	1.7000e-003	0.0000	0.0000	1.8200e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	92.9146	92.9146	7.8400e-003	9.5000e-004	93.3940
Mobile	0.2697	0.2699	1.9436	3.2200e-003	0.3538	2.6900e-003	0.3565	0.0948	2.5200e-003	0.0973	0.0000	306.5288	306.5288	0.0279	0.0188	312.8208
Waste						0.0000	0.0000		0.0000	0.0000	6.3504	0.0000	6.3504	0.3149	0.0000	14.2227
Water						0.0000	0.0000		0.0000	0.0000	2.3110	8.7531	11.0641	8.6900e-003	5.1200e-003	12.8058
Total	**0.4161**	**0.2700**	**1.9445**	**3.2200e-003**	**0.3538**	**2.6900e-003**	**0.3565**	**0.0948**	**2.5200e-003**	**0.0973**	**8.6614**	**408.1983**	**416.8596**	**0.3594**	**0.0248**	**433.2450**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2024	1/26/2024	5	20	
2	Site Preparation	Site Preparation	1/27/2024	1/30/2024	5	2	
3	Grading	Grading	1/31/2024	2/5/2024	5	4	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	2/6/2024	11/11/2024	5	200	
5	Paving	Paving	11/12/2024	11/25/2024	5	10	
6	Architectural Coating	Architectural Coating	11/26/2024	12/9/2024	5	10	

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.35

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 49,328; Non-Residential Outdoor: 16,443; Striped Parking Area: 1,986 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	594.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	24.00	11.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0144	0.1389	0.1349	2.4000e-004		6.3100e-003	6.3100e-003		5.8900e-003	5.8900e-003	0.0000	21.0916	21.0916	5.3400e-003	0.0000	21.2250
Total	**0.0144**	**0.1389**	**0.1349**	**2.4000e-004**		**6.3100e-003**	**6.3100e-003**		**5.8900e-003**	**5.8900e-003**	**0.0000**	**21.0916**	**21.0916**	**5.3400e-003**	**0.0000**	**21.2250**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.1000e-004	2.3700e-003	1.0000e-005	8.0000e-004	0.0000	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6043	0.6043	2.0000e-005	2.0000e-005	0.6107
Total	**3.1000e-004**	**2.1000e-004**	**2.3700e-003**	**1.0000e-005**	**8.0000e-004**	**0.0000**	**8.1000e-004**	**2.1000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.6043**	**0.6043**	**2.0000e-005**	**2.0000e-005**	**0.6107**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0144	0.1389	0.1349	2.4000e-004		6.3100e-003	6.3100e-003		5.8900e-003	5.8900e-003	0.0000	21.0915	21.0915	5.3400e-003	0.0000	21.2250
Total	**0.0144**	**0.1389**	**0.1349**	**2.4000e-004**		**6.3100e-003**	**6.3100e-003**		**5.8900e-003**	**5.8900e-003**	**0.0000**	**21.0915**	**21.0915**	**5.3400e-003**	**0.0000**	**21.2250**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.1000e-004	2.3700e-003	1.0000e-005	8.0000e-004	0.0000	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6043	0.6043	2.0000e-005	2.0000e-005	0.6107
Total	**3.1000e-004**	**2.1000e-004**	**2.3700e-003**	**1.0000e-005**	**8.0000e-004**	**0.0000**	**8.1000e-004**	**2.1000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.6043**	**0.6043**	**2.0000e-005**	**2.0000e-005**	**0.6107**

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.2700e-003	0.0000	6.2700e-003	3.0000e-003	0.0000	3.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1100e-003	0.0118	6.6300e-003	2.0000e-005		4.8000e-004	4.8000e-004		4.4000e-004	4.4000e-004	0.0000	1.5113	1.5113	4.9000e-004	0.0000	1.5235
Total	**1.1100e-003**	**0.0118**	**6.6300e-003**	**2.0000e-005**	**6.2700e-003**	**4.8000e-004**	**6.7500e-003**	**3.0000e-003**	**4.4000e-004**	**3.4400e-003**	**0.0000**	**1.5113**	**1.5113**	**4.9000e-004**	**0.0000**	**1.5235**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.5000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0372	0.0372	0.0000	0.0000	0.0376
Total	**2.0000e-005**	**1.0000e-005**	**1.5000e-004**	**0.0000**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0372**	**0.0372**	**0.0000**	**0.0000**	**0.0376**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.8200e-003	0.0000	2.8200e-003	1.3500e-003	0.0000	1.3500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1100e-003	0.0118	6.6300e-003	2.0000e-005		4.8000e-004	4.8000e-004		4.4000e-004	4.4000e-004	0.0000	1.5113	1.5113	4.9000e-004	0.0000	1.5235
Total	**1.1100e-003**	**0.0118**	**6.6300e-003**	**2.0000e-005**	**2.8200e-003**	**4.8000e-004**	**3.3000e-003**	**1.3500e-003**	**4.4000e-004**	**1.7900e-003**	**0.0000**	**1.5113**	**1.5113**	**4.9000e-004**	**0.0000**	**1.5235**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.5000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0372	0.0372	0.0000	0.0000	0.0376
Total	**2.0000e-005**	**1.0000e-005**	**1.5000e-004**	**0.0000**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0372**	**0.0372**	**0.0000**	**0.0000**	**0.0376**

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0146	0.0000	0.0146	6.9100e-003	0.0000	6.9100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6000e-003	0.0276	0.0174	4.0000e-005		1.1400e-003	1.1400e-003		1.0500e-003	1.0500e-003	0.0000	3.6207	3.6207	1.1700e-003	0.0000	3.6500
Total	**2.6000e-003**	**0.0276**	**0.0174**	**4.0000e-005**	**0.0146**	**1.1400e-003**	**0.0157**	**6.9100e-003**	**1.0500e-003**	**7.9600e-003**	**0.0000**	**3.6207**	**3.6207**	**1.1700e-003**	**0.0000**	**3.6500**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.3000e-004	0.0477	0.0127	1.8000e-004	5.0700e-003	3.6000e-004	5.4300e-003	1.3900e-003	3.5000e-004	1.7400e-003	0.0000	18.1761	18.1761	1.3300e-003	2.9200e-003	19.0783
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	3.0000e-005	3.6000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0930	0.0930	0.0000	0.0000	0.0940
Total	**7.8000e-004**	**0.0478**	**0.0130**	**1.8000e-004**	**5.1900e-003**	**3.6000e-004**	**5.5500e-003**	**1.4200e-003**	**3.5000e-004**	**1.7700e-003**	**0.0000**	**18.2691**	**18.2691**	**1.3300e-003**	**2.9200e-003**	**19.1723**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.5500e-003	0.0000	6.5500e-003	3.1100e-003	0.0000	3.1100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6000e-003	0.0276	0.0174	4.0000e-005		1.1400e-003	1.1400e-003		1.0500e-003	1.0500e-003	0.0000	3.6207	3.6207	1.1700e-003	0.0000	3.6500
Total	**2.6000e-003**	**0.0276**	**0.0174**	**4.0000e-005**	**6.5500e-003**	**1.1400e-003**	**7.6900e-003**	**3.1100e-003**	**1.0500e-003**	**4.1600e-003**	**0.0000**	**3.6207**	**3.6207**	**1.1700e-003**	**0.0000**	**3.6500**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.3000e-004	0.0477	0.0127	1.8000e-004	5.0700e-003	3.6000e-004	5.4300e-003	1.3900e-003	3.5000e-004	1.7400e-003	0.0000	18.1761	18.1761	1.3300e-003	2.9200e-003	19.0783
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	3.0000e-005	3.6000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0930	0.0930	0.0000	0.0000	0.0940
Total	**7.8000e-004**	**0.0478**	**0.0130**	**1.8000e-004**	**5.1900e-003**	**3.6000e-004**	**5.5500e-003**	**1.4200e-003**	**3.5000e-004**	**1.7700e-003**	**0.0000**	**18.2691**	**18.2691**	**1.3300e-003**	**2.9200e-003**	**19.1723**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1420	1.1064	1.2517	2.2100e-003		0.0451	0.0451		0.0435	0.0435	0.0000	181.6113	181.6113	0.0302	0.0000	182.3674
Total	**0.1420**	**1.1064**	**1.2517**	**2.2100e-003**		**0.0451**	**0.0451**		**0.0435**	**0.0435**	**0.0000**	**181.6113**	**181.6113**	**0.0302**	**0.0000**	**182.3674**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3300e-003	0.0523	0.0175	2.0000e-004	6.4000e-003	3.0000e-004	6.7100e-003	1.8500e-003	2.9000e-004	2.1400e-003	0.0000	19.6257	19.6257	8.6000e-004	2.8900e-003	20.5097
Worker	5.7900e-003	3.9400e-003	0.0437	1.2000e-004	0.0148	7.0000e-005	0.0149	3.9400e-003	6.0000e-005	4.0000e-003	0.0000	11.1565	11.1565	4.0000e-004	3.6000e-004	11.2748
Total	**7.1200e-003**	**0.0562**	**0.0612**	**3.2000e-004**	**0.0212**	**3.7000e-004**	**0.0216**	**5.7900e-003**	**3.5000e-004**	**6.1400e-003**	**0.0000**	**30.7821**	**30.7821**	**1.2600e-003**	**3.2500e-003**	**31.7845**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1420	1.1064	1.2517	2.2100e-003		0.0451	0.0451		0.0435	0.0435	0.0000	181.6110	181.6110	0.0302	0.0000	182.3672
Total	**0.1420**	**1.1064**	**1.2517**	**2.2100e-003**		**0.0451**	**0.0451**		**0.0435**	**0.0435**	**0.0000**	**181.6110**	**181.6110**	**0.0302**	**0.0000**	**182.3672**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3300e-003	0.0523	0.0175	2.0000e-004	6.4000e-003	3.0000e-004	6.7100e-003	1.8500e-003	2.9000e-004	2.1400e-003	0.0000	19.6257	19.6257	8.6000e-004	2.8900e-003	20.5097
Worker	5.7900e-003	3.9400e-003	0.0437	1.2000e-004	0.0148	7.0000e-005	0.0149	3.9400e-003	6.0000e-005	4.0000e-003	0.0000	11.1565	11.1565	4.0000e-004	3.6000e-004	11.2748
Total	**7.1200e-003**	**0.0562**	**0.0612**	**3.2000e-004**	**0.0212**	**3.7000e-004**	**0.0216**	**5.7900e-003**	**3.5000e-004**	**6.1400e-003**	**0.0000**	**30.7821**	**30.7821**	**1.2600e-003**	**3.2500e-003**	**31.7845**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.0900e-003	0.0293	0.0441	7.0000e-005		1.4100e-003	1.4100e-003		1.3000e-003	1.3000e-003	0.0000	5.8870	5.8870	1.8700e-003	0.0000	5.9337
Paving	4.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.5500e-003**	**0.0293**	**0.0441**	**7.0000e-005**		**1.4100e-003**	**1.4100e-003**		**1.3000e-003**	**1.3000e-003**	**0.0000**	**5.8870**	**5.8870**	**1.8700e-003**	**0.0000**	**5.9337**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.1000e-004	1.1800e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3022	0.3022	1.0000e-005	1.0000e-005	0.3054
Total	**1.6000e-004**	**1.1000e-004**	**1.1800e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3022**	**0.3022**	**1.0000e-005**	**1.0000e-005**	**0.3054**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.0900e-003	0.0293	0.0441	7.0000e-005		1.4100e-003	1.4100e-003		1.3000e-003	1.3000e-003	0.0000	5.8870	5.8870	1.8700e-003	0.0000	5.9337
Paving	4.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.5500e-003**	**0.0293**	**0.0441**	**7.0000e-005**		**1.4100e-003**	**1.4100e-003**		**1.3000e-003**	**1.3000e-003**	**0.0000**	**5.8870**	**5.8870**	**1.8700e-003**	**0.0000**	**5.9337**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.1000e-004	1.1800e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3022	0.3022	1.0000e-005	1.0000e-005	0.3054
Total	**1.6000e-004**	**1.1000e-004**	**1.1800e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3022**	**0.3022**	**1.0000e-005**	**1.0000e-005**	**0.3054**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1570					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	**0.1579**	**6.0900e-003**	**9.0500e-003**	**1.0000e-005**		**3.0000e-004**	**3.0000e-004**		**3.0000e-004**	**3.0000e-004**	**0.0000**	**1.2766**	**1.2766**	**7.0000e-005**	**0.0000**	**1.2784**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.6000e-004	0.0000	1.5000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1162	0.1162	0.0000	0.0000	0.1175
Total	**6.0000e-005**	**4.0000e-005**	**4.6000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**1.6000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1162**	**0.1162**	**0.0000**	**0.0000**	**0.1175**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1570					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	**0.1579**	**6.0900e-003**	**9.0500e-003**	**1.0000e-005**		**3.0000e-004**	**3.0000e-004**		**3.0000e-004**	**3.0000e-004**	**0.0000**	**1.2766**	**1.2766**	**7.0000e-005**	**0.0000**	**1.2784**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.6000e-004	0.0000	1.5000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1162	0.1162	0.0000	0.0000	0.1175
Total	**6.0000e-005**	**4.0000e-005**	**4.6000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**1.6000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1162**	**0.1162**	**0.0000**	**0.0000**	**0.1175**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2697	0.2699	1.9436	3.2200e-003	0.3538	2.6900e-003	0.3565	0.0948	2.5200e-003	0.0973	0.0000	306.5288	306.5288	0.0279	0.0188	312.8208
Unmitigated	0.2697	0.2699	1.9436	3.2200e-003	0.3538	2.6900e-003	0.3565	0.0948	2.5200e-003	0.0973	0.0000	306.5288	306.5288	0.0279	0.0188	312.8208

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government Office Building	742.76	742.76	742.76	938,754	938,754
Parking Lot	0.00	0.00	0.00		
Total	742.76	742.76	742.76	938,754	938,754

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0
Government Office Building	6.60	5.50	6.40	33.00	62.00	5.00	50	34	16
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.503113	0.055239	0.207102	0.145750	0.026695	0.006629	0.011141	0.006248	0.000953	0.000569	0.029502	0.003405	0.003654
Government Office Building	0.503113	0.055239	0.207102	0.145750	0.026695	0.006629	0.011141	0.006248	0.000953	0.000569	0.029502	0.003405	0.003654

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Parking Lot	0.503113	0.055239	0.207102	0.145750	0.026695	0.006629	0.011141	0.006248	0.000953	0.000569	0.029502	0.003405	0.003654

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	92.9146	92.9146	7.8400e-003	9.5000e-004	93.3940
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	92.9146	92.9146	7.8400e-003	9.5000e-004	93.3940
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	73440	13.0243	1.1000e-003	1.3000e-004	13.0915
Government Office Building	443619	78.6738	6.6400e-003	8.0000e-004	79.0797
Parking Lot	6860	1.2166	1.0000e-004	1.0000e-005	1.2229
Total		**92.9146**	**7.8400e-003**	**9.4000e-004**	**93.3940**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	73440	13.0243	1.1000e-003	1.3000e-004	13.0915
Government Office Building	443619	78.6738	6.6400e-003	8.0000e-004	79.0797
Parking Lot	6860	1.2166	1.0000e-004	1.0000e-005	1.2229
Total		**92.9146**	**7.8400e-003**	**9.4000e-004**	**93.3940**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1464	1.0000e-005	8.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7000e-003	1.7000e-003	0.0000	0.0000	1.8200e-003
Unmitigated	0.1464	1.0000e-005	8.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7000e-003	1.7000e-003	0.0000	0.0000	1.8200e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0157					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7000e-003	1.7000e-003	0.0000	0.0000	1.8200e-003
Total	**0.1464**	**1.0000e-005**	**8.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.7000e-003**	**1.7000e-003**	**0.0000**	**0.0000**	**1.8200e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0157					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7000e-003	1.7000e-003	0.0000	0.0000	1.8200e-003
Total	**0.1464**	**1.0000e-005**	**8.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.7000e-003**	**1.7000e-003**	**0.0000**	**0.0000**	**1.8200e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	11.0641	8.6900e-003	5.1200e-003	12.8058
Unmitigated	11.0641	8.6900e-003	5.1200e-003	12.8058

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Government Office Building	6.53193 / 4.00344	11.0641	8.6900e-003	5.1200e-003	12.8058
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**11.0641**	**8.6900e-003**	**5.1200e-003**	**12.8058**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Government Office Building	6.53193 / 4.00344	11.0641	8.6900e-003	5.1200e-003	12.8058
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**11.0641**	**8.6900e-003**	**5.1200e-003**	**12.8058**

8.0 Waste Detail

8.1 Mitigation Measures Waste

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.3504	0.3149	0.0000	14.2227
Unmitigated	6.3504	0.3149	0.0000	14.2227

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	30.58	6.3504	0.3149	0.0000	14.2227
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**6.3504**	**0.3149**	**0.0000**	**14.2227**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	30.58	6.3504	0.3149	0.0000	14.2227
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**6.3504**	**0.3149**	**0.0000**	**14.2227**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

11.0 Vegetation

Probation Dept HQ IS-MND - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Probation Dept HQ IS-MND

Santa Barbara County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	32.88	1000sqft	0.75	32,885.00	0
Enclosed Parking with Elevator	13.50	1000sqft	0.00	13,500.00	0
Parking Lot	49.00	Space	0.35	19,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Jan 1 2024 start date. 2026 Operational Year.

Land Use - Parking area adjusted to reflect lot acreage (1.1 AC). Square footages per applicant provided site plan. Ground floor parking area modeled as Enclosed Parking w elevator. Remainder of ground floor uses modeled as Govt Office Bldg.

Construction Phase - default

Demolition - no demo; existing use is parking lot.

Grading - 5,300 CY cut - 550 CY fill = 4,750 CY export. Fill assumed to use onsite, cut material.

Architectural Coating - per SBCAPCD rule 323.1

Vehicle Trips - Assumed to operate on weekends, therefore weekend trips adjusted to match weekday

Area Coating - per SBCAPCD rule 323.1

Energy Use - No natural gas per SB City ordinance

Probation Dept HQ IS-MND - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water And Wastewater - default

Construction Off-road Equipment Mitigation - water exposed area per SBCAPCD rule 345

Area Mitigation - per SBCAPCD rule 323.1

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Parking	250	100
tblEnergyUse	NT24NG	0.55	0.00
tblEnergyUse	T24NG	8.50	0.00
tblGrading	MaterialExported	0.00	4,750.00
tblLandUse	LandUseSquareFeet	32,880.00	32,885.00
tblLandUse	LotAcreage	0.31	0.00
tblLandUse	LotAcreage	0.44	0.35
tblVehicleTrips	ST_TR	0.00	22.59
tblVehicleTrips	SU_TR	0.00	22.59

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	31.5980	36.8524	15.1891	0.1091	9.9240	0.7530	10.6770	4.1784	0.6994	4.8778	0.0000	12,062.4696	12,062.4696	1.3818	1.6081	12,576.2120
Maximum	**31.5980**	**36.8524**	**15.1891**	**0.1091**	**9.9240**	**0.7530**	**10.6770**	**4.1784**	**0.6994**	**4.8778**	**0.0000**	**12,062.4696**	**12,062.4696**	**1.3818**	**1.6081**	**12,576.2120**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	31.5980	36.8524	15.1891	0.1091	5.9228	0.7530	6.6758	2.2788	0.6994	2.9782	0.0000	12,062.4696	12,062.4696	1.3818	1.6081	12,576.2120
Maximum	**31.5980**	**36.8524**	**15.1891**	**0.1091**	**5.9228**	**0.7530**	**6.6758**	**2.2788**	**0.6994**	**2.9782**	**0.0000**	**12,062.4696**	**12,062.4696**	**1.3818**	**1.6081**	**12,576.2120**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**40.32**	**0.00**	**37.48**	**45.46**	**0.00**	**38.94**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8024	9.0000e-005	9.7100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0209	0.0209	5.0000e-005		0.0222
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.5347	1.3852	9.9662	0.0179	1.9873	0.0148	2.0021	0.5312	0.0138	0.5450		1,884.2617	1,884.2617	0.1582	0.1087	1,920.6010
Total	**2.3371**	**1.3853**	**9.9759**	**0.0179**	**1.9873**	**0.0148**	**2.0022**	**0.5312**	**0.0139**	**0.5451**		**1,884.2826**	**1,884.2826**	**0.1582**	**0.1087**	**1,920.6232**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8024	9.0000e-005	9.7100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0209	0.0209	5.0000e-005		0.0222
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.5347	1.3852	9.9662	0.0179	1.9873	0.0148	2.0021	0.5312	0.0138	0.5450		1,884.2617	1,884.2617	0.1582	0.1087	1,920.6010
Total	**2.3371**	**1.3853**	**9.9759**	**0.0179**	**1.9873**	**0.0148**	**2.0022**	**0.5312**	**0.0139**	**0.5451**		**1,884.2826**	**1,884.2826**	**0.1582**	**0.1087**	**1,920.6232**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2024	1/26/2024	5	20	
2	Site Preparation	Site Preparation	1/27/2024	1/30/2024	5	2	
3	Grading	Grading	1/31/2024	2/5/2024	5	4	
4	Building Construction	Building Construction	2/6/2024	11/11/2024	5	200	
5	Paving	Paving	11/12/2024	11/25/2024	5	10	
6	Architectural Coating	Architectural Coating	11/26/2024	12/9/2024	5	10	

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.35

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 49,328; Non-Residential Outdoor: 16,443; Striped Parking Area: 1,986 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40

Probation Dept HQ IS-MND - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	594.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	24.00	11.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4397	13.8867	13.4879	0.0241		0.6311	0.6311		0.5895	0.5895		2,324.9459	2,324.9459	0.5884		2,339.6562
Total	**1.4397**	**13.8867**	**13.4879**	**0.0241**		**0.6311**	**0.6311**		**0.5895**	**0.5895**		**2,324.9459**	**2,324.9459**	**0.5884**		**2,339.6562**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0309	0.0192	0.2332	6.6000e-004	0.0821	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		67.9245	67.9245	2.2400e-003	2.0200e-003	68.5830
Total	**0.0309**	**0.0192**	**0.2332**	**6.6000e-004**	**0.0821**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**67.9245**	**67.9245**	**2.2400e-003**	**2.0200e-003**	**68.5830**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4397	13.8867	13.4879	0.0241		0.6311	0.6311		0.5895	0.5895	0.0000	2,324.9459	2,324.9459	0.5884		2,339.6562
Total	**1.4397**	**13.8867**	**13.4879**	**0.0241**		**0.6311**	**0.6311**		**0.5895**	**0.5895**	**0.0000**	**2,324.9459**	**2,324.9459**	**0.5884**		**2,339.6562**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0309	0.0192	0.2332	6.6000e-004	0.0821	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		67.9245	67.9245	2.2400e-003	2.0200e-003	68.5830
Total	**0.0309**	**0.0192**	**0.2332**	**6.6000e-004**	**0.0821**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**67.9245**	**67.9245**	**2.2400e-003**	**2.0200e-003**	**68.5830**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1067	11.8407	6.6317	0.0172		0.4823	0.4823		0.4437	0.4437		1,665.8826	1,665.8826	0.5388		1,679.3521
Total	**1.1067**	**11.8407**	**6.6317**	**0.0172**	**6.2662**	**0.4823**	**6.7485**	**3.0041**	**0.4437**	**3.4478**		**1,665.8826**	**1,665.8826**	**0.5388**		**1,679.3521**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0190	0.0118	0.1435	4.1000e-004	0.0505	2.3000e-004	0.0508	0.0134	2.2000e-004	0.0136		41.7997	41.7997	1.3800e-003	1.2400e-003	42.2050
Total	**0.0190**	**0.0118**	**0.1435**	**4.1000e-004**	**0.0505**	**2.3000e-004**	**0.0508**	**0.0134**	**2.2000e-004**	**0.0136**		**41.7997**	**41.7997**	**1.3800e-003**	**1.2400e-003**	**42.2050**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8198	0.0000	2.8198	1.3518	0.0000	1.3518			0.0000			0.0000
Off-Road	1.1067	11.8407	6.6317	0.0172		0.4823	0.4823		0.4437	0.4437	0.0000	1,665.8826	1,665.8826	0.5388		1,679.3521
Total	**1.1067**	**11.8407**	**6.6317**	**0.0172**	**2.8198**	**0.4823**	**3.3020**	**1.3518**	**0.4437**	**1.7955**	**0.0000**	**1,665.8826**	**1,665.8826**	**0.5388**		**1,679.3521**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0190	0.0118	0.1435	4.1000e-004	0.0505	2.3000e-004	0.0508	0.0134	2.2000e-004	0.0136		41.7997	41.7997	1.3800e-003	1.2400e-003	42.2050
Total	**0.0190**	**0.0118**	**0.1435**	**4.1000e-004**	**0.0505**	**2.3000e-004**	**0.0508**	**0.0134**	**2.2000e-004**	**0.0136**		**41.7997**	**41.7997**	**1.3800e-003**	**1.2400e-003**	**42.2050**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.2749	0.0000	7.2749	3.4539	0.0000	3.4539			0.0000			0.0000
Off-Road	1.3015	13.8178	8.6998	0.0206		0.5722	0.5722		0.5265	0.5265		1,995.5803	1,995.5803	0.6454		2,011.7155
Total	**1.3015**	**13.8178**	**8.6998**	**0.0206**	**7.2749**	**0.5722**	**7.8472**	**3.4539**	**0.5265**	**3.9803**		**1,995.5803**	**1,995.5803**	**0.6454**		**2,011.7155**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3737	23.0198	6.3099	0.0879	2.5859	0.1805	2.7664	0.7078	0.1727	0.8805		10,014.6397	10,014.6397	0.7347	1.6065	10,511.7402
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0238	0.0147	0.1794	5.1000e-004	0.0632	2.9000e-004	0.0635	0.0168	2.7000e-004	0.0170		52.2496	52.2496	1.7300e-003	1.5600e-003	52.7562
Total	**0.3974**	**23.0345**	**6.4893**	**0.0884**	**2.6491**	**0.1808**	**2.8298**	**0.7245**	**0.1729**	**0.8975**		**10,066.8893**	**10,066.8893**	**0.7364**	**1.6081**	**10,564.4964**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.2737	0.0000	3.2737	1.5542	0.0000	1.5542			0.0000			0.0000
Off-Road	1.3015	13.8178	8.6998	0.0206		0.5722	0.5722		0.5265	0.5265	0.0000	1,995.5803	1,995.5803	0.6454		2,011.7155
Total	**1.3015**	**13.8178**	**8.6998**	**0.0206**	**3.2737**	**0.5722**	**3.8460**	**1.5542**	**0.5265**	**2.0807**	**0.0000**	**1,995.5803**	**1,995.5803**	**0.6454**		**2,011.7155**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3737	23.0198	6.3099	0.0879	2.5859	0.1805	2.7664	0.7078	0.1727	0.8805		10,014.6397	10,014.6397	0.7347	1.6065	10,511.7402
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0238	0.0147	0.1794	5.1000e-004	0.0632	2.9000e-004	0.0635	0.0168	2.7000e-004	0.0170		52.2496	52.2496	1.7300e-003	1.5600e-003	52.7562
Total	**0.3974**	**23.0345**	**6.4893**	**0.0884**	**2.6491**	**0.1808**	**2.8298**	**0.7245**	**0.1729**	**0.8975**		**10,066.8893**	**10,066.8893**	**0.7364**	**1.6081**	**10,564.4964**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**		**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0134	0.5051	0.1724	1.9700e-003	0.0652	3.0100e-003	0.0682	0.0188	2.8800e-003	0.0217		216.2212	216.2212	9.4700e-003	0.0319	225.9532
Worker	0.0570	0.0354	0.4306	1.2200e-003	0.1516	7.0000e-004	0.1523	0.0402	6.5000e-004	0.0409		125.3991	125.3991	4.1400e-003	3.7300e-003	126.6148
Total	**0.0705**	**0.5405**	**0.6030**	**3.1900e-003**	**0.2168**	**3.7100e-003**	**0.2205**	**0.0590**	**3.5300e-003**	**0.0625**		**341.6203**	**341.6203**	**0.0136**	**0.0356**	**352.5680**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**	**0.0000**	**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0134	0.5051	0.1724	1.9700e-003	0.0652	3.0100e-003	0.0682	0.0188	2.8800e-003	0.0217		216.2212	216.2212	9.4700e-003	0.0319	225.9532
Worker	0.0570	0.0354	0.4306	1.2200e-003	0.1516	7.0000e-004	0.1523	0.0402	6.5000e-004	0.0409		125.3991	125.3991	4.1400e-003	3.7300e-003	126.6148
Total	**0.0705**	**0.5405**	**0.6030**	**3.1900e-003**	**0.2168**	**3.7100e-003**	**0.2205**	**0.0590**	**3.5300e-003**	**0.0625**		**341.6203**	**341.6203**	**0.0136**	**0.0356**	**352.5680**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.8688	1,297.8688	0.4114		1,308.1547
Paving	0.0917					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7097**	**5.8607**	**8.8253**	**0.0136**		**0.2810**	**0.2810**		**0.2594**	**0.2594**		**1,297.8688**	**1,297.8688**	**0.4114**		**1,308.1547**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0309	0.0192	0.2332	6.6000e-004	0.0821	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		67.9245	67.9245	2.2400e-003	2.0200e-003	68.5830
Total	**0.0309**	**0.0192**	**0.2332**	**6.6000e-004**	**0.0821**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**67.9245**	**67.9245**	**2.2400e-003**	**2.0200e-003**	**68.5830**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.8688	1,297.8688	0.4114		1,308.1547
Paving	0.0917					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7097**	**5.8607**	**8.8253**	**0.0136**		**0.2810**	**0.2810**		**0.2594**	**0.2594**	**0.0000**	**1,297.8688**	**1,297.8688**	**0.4114**		**1,308.1547**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0309	0.0192	0.2332	6.6000e-004	0.0821	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		67.9245	67.9245	2.2400e-003	2.0200e-003	68.5830
Total	**0.0309**	**0.0192**	**0.2332**	**6.6000e-004**	**0.0821**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**67.9245**	**67.9245**	**2.2400e-003**	**2.0200e-003**	**68.5830**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	31.4054					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**31.5861**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0119	7.3700e-003	0.0897	2.5000e-004	0.0316	1.5000e-004	0.0317	8.3800e-003	1.4000e-004	8.5100e-003		26.1248	26.1248	8.6000e-004	7.8000e-004	26.3781
Total	**0.0119**	**7.3700e-003**	**0.0897**	**2.5000e-004**	**0.0316**	**1.5000e-004**	**0.0317**	**8.3800e-003**	**1.4000e-004**	**8.5100e-003**		**26.1248**	**26.1248**	**8.6000e-004**	**7.8000e-004**	**26.3781**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	31.4054					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**31.5861**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0119	7.3700e-003	0.0897	2.5000e-004	0.0316	1.5000e-004	0.0317	8.3800e-003	1.4000e-004	8.5100e-003		26.1248	26.1248	8.6000e-004	7.8000e-004	26.3781
Total	**0.0119**	**7.3700e-003**	**0.0897**	**2.5000e-004**	**0.0316**	**1.5000e-004**	**0.0317**	**8.3800e-003**	**1.4000e-004**	**8.5100e-003**		**26.1248**	**26.1248**	**8.6000e-004**	**7.8000e-004**	**26.3781**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5347	1.3852	9.9662	0.0179	1.9873	0.0148	2.0021	0.5312	0.0138	0.5450		1,884.2617	1,884.2617	0.1582	0.1087	1,920.6010
Unmitigated	1.5347	1.3852	9.9662	0.0179	1.9873	0.0148	2.0021	0.5312	0.0138	0.5450		1,884.2617	1,884.2617	0.1582	0.1087	1,920.6010

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government Office Building	742.76	742.76	742.76	938,754	938,754
Parking Lot	0.00	0.00	0.00		
Total	742.76	742.76	742.76	938,754	938,754

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0
Government Office Building	6.60	5.50	6.40	33.00	62.00	5.00	50	34	16
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.503113	0.055239	0.207102	0.145750	0.026695	0.006629	0.011141	0.006248	0.000953	0.000569	0.029502	0.003405	0.003654
Government Office Building	0.503113	0.055239	0.207102	0.145750	0.026695	0.006629	0.011141	0.006248	0.000953	0.000569	0.029502	0.003405	0.003654
Parking Lot	0.503113	0.055239	0.207102	0.145750	0.026695	0.006629	0.011141	0.006248	0.000953	0.000569	0.029502	0.003405	0.003654

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8024	9.0000e-005	9.7100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0209	0.0209	5.0000e-005		0.0222
Unmitigated	0.8024	9.0000e-005	9.7100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0209	0.0209	5.0000e-005		0.0222

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0860					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7155					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.9000e-004	9.0000e-005	9.7100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0209	0.0209	5.0000e-005		0.0222
Total	**0.8024**	**9.0000e-005**	**9.7100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0209**	**0.0209**	**5.0000e-005**		**0.0222**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0860					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7155					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.9000e-004	9.0000e-005	9.7100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0209	0.0209	5.0000e-005		0.0222
Total	**0.8024**	**9.0000e-005**	**9.7100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0209**	**0.0209**	**5.0000e-005**		**0.0222**

7.0 Water Detail

7.1 Mitigation Measures Water

Probation Dept HQ IS-MND - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Probation Dept HQ IS-MND - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Probation Dept HQ IS-MND

Santa Barbara County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	32.88	1000sqft	0.75	32,885.00	0
Enclosed Parking with Elevator	13.50	1000sqft	0.00	13,500.00	0
Parking Lot	49.00	Space	0.35	19,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Jan 1 2024 start date. 2026 Operational Year.

Land Use - Parking area adjusted to reflect lot acreage (1.1 AC). Square footages per applicant provided site plan. Ground floor parking area modeled as Enclosed Parking w elevator. Remainder of ground floor uses modeled as Govt Office Bldg.

Construction Phase - default

Demolition - no demo; existing use is parking lot.

Grading - 5,300 CY cut - 550 CY fill = 4,750 CY export. Fill assumed to use onsite, cut material.

Architectural Coating - per SBCAPCD rule 323.1

Vehicle Trips - Assumed to operate on weekends, therefore weekend trips adjusted to match weekday

Area Coating - per SBCAPCD rule 323.1

Energy Use - No natural gas per SB City ordinance

Probation Dept HQ IS-MND - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water And Wastewater - default

Construction Off-road Equipment Mitigation - water exposed area per SBCAPCD rule 345

Area Mitigation - per SBCAPCD rule 323.1

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Parking	250	100
tblEnergyUse	NT24NG	0.55	0.00
tblEnergyUse	T24NG	8.50	0.00
tblGrading	MaterialExported	0.00	4,750.00
tblLandUse	LandUseSquareFeet	32,880.00	32,885.00
tblLandUse	LotAcreage	0.31	0.00
tblLandUse	LotAcreage	0.44	0.35
tblVehicleTrips	ST_TR	0.00	22.59
tblVehicleTrips	SU_TR	0.00	22.59

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	31.5991	37.5094	15.2568	0.1091	9.9240	0.7533	10.6773	4.1784	0.6997	4.8781	0.0000	12,069.0644	12,069.0644	1.3807	1.6095	12,583.2069
Maximum	**31.5991**	**37.5094**	**15.2568**	**0.1091**	**9.9240**	**0.7533**	**10.6773**	**4.1784**	**0.6997**	**4.8781**	**0.0000**	**12,069.0644**	**12,069.0644**	**1.3807**	**1.6095**	**12,583.2069**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	31.5991	37.5094	15.2568	0.1091	5.9228	0.7533	6.6761	2.2788	0.6997	2.9785	0.0000	12,069.0644	12,069.0644	1.3807	1.6095	12,583.2069
Maximum	**31.5991**	**37.5094**	**15.2568**	**0.1091**	**5.9228**	**0.7533**	**6.6761**	**2.2788**	**0.6997**	**2.9785**	**0.0000**	**12,069.0644**	**12,069.0644**	**1.3807**	**1.6095**	**12,583.2069**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**40.32**	**0.00**	**37.47**	**45.46**	**0.00**	**38.94**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8024	9.0000e-005	9.7100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0209	0.0209	5.0000e-005		0.0222
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.4885	1.5024	11.2090	0.0177	1.9873	0.0148	2.0021	0.5312	0.0139	0.5450		1,858.1192	1,858.1192	0.1761	0.1157	1,896.9891
Total	**2.2909**	**1.5025**	**11.2187**	**0.0177**	**1.9873**	**0.0149**	**2.0022**	**0.5312**	**0.0139**	**0.5451**		**1,858.1401**	**1,858.1401**	**0.1761**	**0.1157**	**1,897.0113**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8024	9.0000e-005	9.7100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0209	0.0209	5.0000e-005		0.0222
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.4885	1.5024	11.2090	0.0177	1.9873	0.0148	2.0021	0.5312	0.0139	0.5450		1,858.1192	1,858.1192	0.1761	0.1157	1,896.9891
Total	**2.2909**	**1.5025**	**11.2187**	**0.0177**	**1.9873**	**0.0149**	**2.0022**	**0.5312**	**0.0139**	**0.5451**		**1,858.1401**	**1,858.1401**	**0.1761**	**0.1157**	**1,897.0113**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2024	1/26/2024	5	20	
2	Site Preparation	Site Preparation	1/27/2024	1/30/2024	5	2	
3	Grading	Grading	1/31/2024	2/5/2024	5	4	
4	Building Construction	Building Construction	2/6/2024	11/11/2024	5	200	
5	Paving	Paving	11/12/2024	11/25/2024	5	10	
6	Architectural Coating	Architectural Coating	11/26/2024	12/9/2024	5	10	

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.35

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 49,328; Non-Residential Outdoor: 16,443; Striped Parking Area: 1,986 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	594.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	24.00	11.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4397	13.8867	13.4879	0.0241		0.6311	0.6311		0.5895	0.5895		2,324.9459	2,324.9459	0.5884		2,339.6562
Total	**1.4397**	**13.8867**	**13.4879**	**0.0241**		**0.6311**	**0.6311**		**0.5895**	**0.5895**		**2,324.9459**	**2,324.9459**	**0.5884**		**2,339.6562**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0337	0.0219	0.2434	6.5000e-004	0.0821	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		66.5441	66.5441	2.4900e-003	2.2100e-003	67.2657
Total	**0.0337**	**0.0219**	**0.2434**	**6.5000e-004**	**0.0821**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**66.5441**	**66.5441**	**2.4900e-003**	**2.2100e-003**	**67.2657**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4397	13.8867	13.4879	0.0241		0.6311	0.6311		0.5895	0.5895	0.0000	2,324.9459	2,324.9459	0.5884		2,339.6562
Total	**1.4397**	**13.8867**	**13.4879**	**0.0241**		**0.6311**	**0.6311**		**0.5895**	**0.5895**	**0.0000**	**2,324.9459**	**2,324.9459**	**0.5884**		**2,339.6562**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0337	0.0219	0.2434	6.5000e-004	0.0821	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		66.5441	66.5441	2.4900e-003	2.2100e-003	67.2657
Total	**0.0337**	**0.0219**	**0.2434**	**6.5000e-004**	**0.0821**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**66.5441**	**66.5441**	**2.4900e-003**	**2.2100e-003**	**67.2657**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1067	11.8407	6.6317	0.0172		0.4823	0.4823		0.4437	0.4437		1,665.8826	1,665.8826	0.5388		1,679.3521
Total	**1.1067**	**11.8407**	**6.6317**	**0.0172**	**6.2662**	**0.4823**	**6.7485**	**3.0041**	**0.4437**	**3.4478**		**1,665.8826**	**1,665.8826**	**0.5388**		**1,679.3521**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0207	0.0135	0.1498	4.0000e-004	0.0505	2.3000e-004	0.0508	0.0134	2.2000e-004	0.0136		40.9502	40.9502	1.5300e-003	1.3600e-003	41.3943
Total	**0.0207**	**0.0135**	**0.1498**	**4.0000e-004**	**0.0505**	**2.3000e-004**	**0.0508**	**0.0134**	**2.2000e-004**	**0.0136**		**40.9502**	**40.9502**	**1.5300e-003**	**1.3600e-003**	**41.3943**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8198	0.0000	2.8198	1.3518	0.0000	1.3518			0.0000			0.0000
Off-Road	1.1067	11.8407	6.6317	0.0172		0.4823	0.4823		0.4437	0.4437	0.0000	1,665.8826	1,665.8826	0.5388		1,679.3521
Total	**1.1067**	**11.8407**	**6.6317**	**0.0172**	**2.8198**	**0.4823**	**3.3020**	**1.3518**	**0.4437**	**1.7955**	**0.0000**	**1,665.8826**	**1,665.8826**	**0.5388**		**1,679.3521**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0207	0.0135	0.1498	4.0000e-004	0.0505	2.3000e-004	0.0508	0.0134	2.2000e-004	0.0136		40.9502	40.9502	1.5300e-003	1.3600e-003	41.3943
Total	**0.0207**	**0.0135**	**0.1498**	**4.0000e-004**	**0.0505**	**2.3000e-004**	**0.0508**	**0.0134**	**2.2000e-004**	**0.0136**		**40.9502**	**40.9502**	**1.5300e-003**	**1.3600e-003**	**41.3943**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.2749	0.0000	7.2749	3.4539	0.0000	3.4539			0.0000			0.0000
Off-Road	1.3015	13.8178	8.6998	0.0206		0.5722	0.5722		0.5265	0.5265		1,995.5803	1,995.5803	0.6454		2,011.7155
Total	**1.3015**	**13.8178**	**8.6998**	**0.0206**	**7.2749**	**0.5722**	**7.8472**	**3.4539**	**0.5265**	**3.9803**		**1,995.5803**	**1,995.5803**	**0.6454**		**2,011.7155**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3565	23.6747	6.3698	0.0880	2.5859	0.1808	2.7667	0.7078	0.1730	0.8808		10,022.2964	10,022.2964	0.7334	1.6078	10,519.7484
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0259	0.0168	0.1872	5.0000e-004	0.0632	2.9000e-004	0.0635	0.0168	2.7000e-004	0.0170		51.1878	51.1878	1.9100e-003	1.7000e-003	51.7429
Total	**0.3824**	**23.6916**	**6.5570**	**0.0885**	**2.6491**	**0.1811**	**2.8301**	**0.7245**	**0.1732**	**0.8978**		**10,073.4842**	**10,073.4842**	**0.7353**	**1.6095**	**10,571.4913**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.2737	0.0000	3.2737	1.5542	0.0000	1.5542			0.0000			0.0000
Off-Road	1.3015	13.8178	8.6998	0.0206		0.5722	0.5722		0.5265	0.5265	0.0000	1,995.5803	1,995.5803	0.6454		2,011.7155
Total	**1.3015**	**13.8178**	**8.6998**	**0.0206**	**3.2737**	**0.5722**	**3.8460**	**1.5542**	**0.5265**	**2.0807**	**0.0000**	**1,995.5803**	**1,995.5803**	**0.6454**		**2,011.7155**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3565	23.6747	6.3698	0.0880	2.5859	0.1808	2.7667	0.7078	0.1730	0.8808		10,022.2964	10,022.2964	0.7334	1.6078	10,519.7484
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0259	0.0168	0.1872	5.0000e-004	0.0632	2.9000e-004	0.0635	0.0168	2.7000e-004	0.0170		51.1878	51.1878	1.9100e-003	1.7000e-003	51.7429
Total	**0.3824**	**23.6916**	**6.5570**	**0.0885**	**2.6491**	**0.1811**	**2.8301**	**0.7245**	**0.1732**	**0.8978**		**10,073.4842**	**10,073.4842**	**0.7353**	**1.6095**	**10,571.4913**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**		**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0132	0.5209	0.1772	1.9700e-003	0.0652	3.0200e-003	0.0682	0.0188	2.8900e-003	0.0217		216.4976	216.4976	9.4300e-003	0.0319	226.2499
Worker	0.0622	0.0404	0.4494	1.1900e-003	0.1516	7.0000e-004	0.1523	0.0402	6.5000e-004	0.0409		122.8507	122.8507	4.5900e-003	4.0900e-003	124.1829
Total	**0.0754**	**0.5613**	**0.6266**	**3.1600e-003**	**0.2168**	**3.7200e-003**	**0.2205**	**0.0590**	**3.5400e-003**	**0.0625**		**339.3483**	**339.3483**	**0.0140**	**0.0360**	**350.4328**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**	**0.0000**	**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0132	0.5209	0.1772	1.9700e-003	0.0652	3.0200e-003	0.0682	0.0188	2.8900e-003	0.0217		216.4976	216.4976	9.4300e-003	0.0319	226.2499
Worker	0.0622	0.0404	0.4494	1.1900e-003	0.1516	7.0000e-004	0.1523	0.0402	6.5000e-004	0.0409		122.8507	122.8507	4.5900e-003	4.0900e-003	124.1829
Total	**0.0754**	**0.5613**	**0.6266**	**3.1600e-003**	**0.2168**	**3.7200e-003**	**0.2205**	**0.0590**	**3.5400e-003**	**0.0625**		**339.3483**	**339.3483**	**0.0140**	**0.0360**	**350.4328**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.8688	1,297.8688	0.4114		1,308.1547
Paving	0.0917					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7097**	**5.8607**	**8.8253**	**0.0136**		**0.2810**	**0.2810**		**0.2594**	**0.2594**		**1,297.8688**	**1,297.8688**	**0.4114**		**1,308.1547**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0337	0.0219	0.2434	6.5000e-004	0.0821	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		66.5441	66.5441	2.4900e-003	2.2100e-003	67.2657
Total	**0.0337**	**0.0219**	**0.2434**	**6.5000e-004**	**0.0821**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**66.5441**	**66.5441**	**2.4900e-003**	**2.2100e-003**	**67.2657**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.8688	1,297.8688	0.4114		1,308.1547
Paving	0.0917					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7097**	**5.8607**	**8.8253**	**0.0136**		**0.2810**	**0.2810**		**0.2594**	**0.2594**	**0.0000**	**1,297.8688**	**1,297.8688**	**0.4114**		**1,308.1547**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0337	0.0219	0.2434	6.5000e-004	0.0821	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		66.5441	66.5441	2.4900e-003	2.2100e-003	67.2657
Total	**0.0337**	**0.0219**	**0.2434**	**6.5000e-004**	**0.0821**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**66.5441**	**66.5441**	**2.4900e-003**	**2.2100e-003**	**67.2657**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	31.4054					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**31.5861**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0130	8.4200e-003	0.0936	2.5000e-004	0.0316	1.5000e-004	0.0317	8.3800e-003	1.4000e-004	8.5100e-003		25.5939	25.5939	9.6000e-004	8.5000e-004	25.8714
Total	**0.0130**	**8.4200e-003**	**0.0936**	**2.5000e-004**	**0.0316**	**1.5000e-004**	**0.0317**	**8.3800e-003**	**1.4000e-004**	**8.5100e-003**		**25.5939**	**25.5939**	**9.6000e-004**	**8.5000e-004**	**25.8714**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	31.4054					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**31.5861**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0130	8.4200e-003	0.0936	2.5000e-004	0.0316	1.5000e-004	0.0317	8.3800e-003	1.4000e-004	8.5100e-003		25.5939	25.5939	9.6000e-004	8.5000e-004	25.8714
Total	**0.0130**	**8.4200e-003**	**0.0936**	**2.5000e-004**	**0.0316**	**1.5000e-004**	**0.0317**	**8.3800e-003**	**1.4000e-004**	**8.5100e-003**		**25.5939**	**25.5939**	**9.6000e-004**	**8.5000e-004**	**25.8714**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4885	1.5024	11.2090	0.0177	1.9873	0.0148	2.0021	0.5312	0.0139	0.5450		1,858.1192	1,858.1192	0.1761	0.1157	1,896.9891
Unmitigated	1.4885	1.5024	11.2090	0.0177	1.9873	0.0148	2.0021	0.5312	0.0139	0.5450		1,858.1192	1,858.1192	0.1761	0.1157	1,896.9891

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government Office Building	742.76	742.76	742.76	938,754	938,754
Parking Lot	0.00	0.00	0.00		
Total	742.76	742.76	742.76	938,754	938,754

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0
Government Office Building	6.60	5.50	6.40	33.00	62.00	5.00	50	34	16
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.503113	0.055239	0.207102	0.145750	0.026695	0.006629	0.011141	0.006248	0.000953	0.000569	0.029502	0.003405	0.003654
Government Office Building	0.503113	0.055239	0.207102	0.145750	0.026695	0.006629	0.011141	0.006248	0.000953	0.000569	0.029502	0.003405	0.003654
Parking Lot	0.503113	0.055239	0.207102	0.145750	0.026695	0.006629	0.011141	0.006248	0.000953	0.000569	0.029502	0.003405	0.003654

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8024	9.0000e-005	9.7100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0209	0.0209	5.0000e-005		0.0222
Unmitigated	0.8024	9.0000e-005	9.7100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0209	0.0209	5.0000e-005		0.0222

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0860					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7155					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.9000e-004	9.0000e-005	9.7100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0209	0.0209	5.0000e-005		0.0222
Total	**0.8024**	**9.0000e-005**	**9.7100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0209**	**0.0209**	**5.0000e-005**		**0.0222**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0860					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7155					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.9000e-004	9.0000e-005	9.7100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0209	0.0209	5.0000e-005		0.0222
Total	**0.8024**	**9.0000e-005**	**9.7100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0209**	**0.0209**	**5.0000e-005**		**0.0222**

7.0 Water Detail

7.1 Mitigation Measures Water

Probation Dept HQ IS-MND - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment C

Energy Calculations

Santa Barbara Probation Department Headquarters

Oct-22

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors **[1]**:

HP: 0 to 100	0.0588	HP: Greater than 100	0.0529

Values above are expressed in gallons per horsepower-hour/BSFC.

CONSTRUCTION EQUIPMENT

Construction Equipment	#	Hours per Day	Horsepower	Load Factor	Construction Phase	Fuel Used (gallons)
Rubber Tired Dozers	1	8	247	0.4	Demolition Phase	836
Tractors/Loaders/Backhoes	3	8	97	0.37	Demolition Phase	1,012
Concrete/Industrial Saws	1	8	81	0.73	Demolition Phase	556
Graders	1	8	187	0.41	Site Preparation Phase	65
Rubber Tired Dozers	1	7	247	0.4	Site Preparation Phase	73
Tractors/Loaders/Backhoes	1	8	97	0.37	Site Preparation Phase	34
Graders	1	8	187	0.41	Grading Phase	130
Rubber Tired Dozers	1	8	247	0.4	Grading Phase	167
Tractors/Loaders/Backhoes	2	7	97	0.37	Grading Phase	118
Cranes	1	6	231	0.29	Building Construction Phase	4,249
Forklifts	1	6	89	0.2	Building Construction Phase	1,255
Generator Sets	1	8	84	0.74	Building Construction Phase	5,844
Tractors/Loaders/Backhoes	1	6	97	0.37	Building Construction Phase	2,531
Welders	3	8	46	0.45	Building Construction Phase	5,839
Air Compressors	1	6	78	0.48	Architectural Coating Phase	132
Cement and Mortar Mixers	1	6	9	0.56	Paving Phase	18
Pavers	1	6	130	0.42	Paving Phase	173
Paving Equipment	1	8	132	0.36	Paving Phase	201
Rollers	1	7	80	0.38	Paving Phase	125
Tractors/Loaders/Backhoes	1	8	97	0.37	Paving Phase	169
					Total Fuel Used	**23,527**
						(Gallons)

Construction Phase	Days of Operation
Demolition Phase	20
Site Preparation Phase	2
Grading Phase	4
Building Construction Phase	200
Paving Phase	10
Architectural Coating Phase	10
Total Days	246

WORKER TRIPS

Constuction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Demolition Phase	24.1	13	8.3	89.54
Site Preparation Phase	24.1	8	8.3	5.51
Grading Phase	24.1	10	8.3	13.78
Building Construction Phase	24.1	24	8.3	1653.11
Paving Phase	24.1	13	8.3	44.77
Architectural Coating Phase	24.1	5	8.3	17.22
			Total	**1,823.93**

HAULING AND VENDOR TRIPS

Trip Class	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
HAULING TRIPS				
Demolition Phase	7.5	0	20.0	0.00
Site Preparation Phase	7.5	0	20.0	0.00
Grading Phase	7.5	594	20.0	1584.00
Building Construction Phase	7.5	0	20.0	0.00
Paving Phase	7.5	0	20.0	0.00
Architectural Coating Phase	7.5	0	20.0	0.00
			Total	**1,584.00**
VENDOR TRIPS				
Demolition Phase	7.5	0	6.4	0.00
Site Preparation Phase	7.5	0	6.4	0.00
Grading Phase	7.5	0	6.4	0.00
Building Construction Phase	7.5	11	6.4	1877.33
Paving Phase	7.5	0	6.4	0.00
Architectural Coating Phase	7.5	0	6.4	0.00
			Total	**1,877.33**

Total Gasoline Consumption (gallons)	**1,824**
Total Diesel Consumption (gallons)	**26,988**

Sources:

[1] United States Environmental Protection Agency. 2021. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES3.0.2* . September. Available at: https://www.epa.gov/system/files/documents/2021-08/420r21021.pdf.

[2] United States Department of Transportation, Bureau of Transportation Statistics. 2021. *National Transportation Statistics* . Available at: https://www.bts.gov/topics/national-transportation-statistics.

Santa Barbara Probation Department Headquarters

Oct-22

Populate one of the following tables (Leave the other blank):

Annual VMT		OR	Daily Vehicle Trips	
Annual VMT:	938,754		Daily Vehicle Trips:	
			Average Trip Distance:	

Fleet Class	Fleet Mix
Light Duty Auto (LDA)	0.503113
Light Duty Truck 1 (LDT1)	0.055239
Light Duty Truck 2 (LDT2)	0.207102
Medium Duty Vehicle (MDV)	0.145750
Light Heavy Duty 1 (LHD1)	0.026695
Light Heavy Duty 2 (LHD2)	0.006629
Medium Heavy Duty (MHD)	0.011141
Heavy Heavy Duty (HHD)	0.006248
Other Bus (OBUS)	0.000953
Urban Bus (UBUS)	0.000569
Motorcycle (MCY)	0.029502
School Bus (SBUS)	0.003405
Motorhome (MH)	0.003654

Fuel Economy (MPG) [1]	
Passenger Vehicles	24.1
Light-Med Duty Trucks	17.6
Heavy Trucks/Other	7.5
Motorcycles	44

Fleet Mix

Vehicle Type	Percent	Fuel Type	Annual VMT: VMT	Vehicle Trips: VMT	Fuel Consumption (Gallons)
Passenger Vehicles	*50.31%*	*Gasoline*	472,299	0.00	19,597
Light-Medium Duty Trucks	*40.81%*	*Gasoline*	383,097	0.00	21,767
Heavy Trucks/Other	*5.93%*	*Diesel*	55,662	0.00	7,422
Motorcycle	*2.95%*	*Gasoline*	27,695	0.00	629

Total Gasoline Consumption (gallons)	**41,994**
Total Diesel Consumption (gallons)	**7,422**

Sources:

[1] United States Department of Transportation, Bureau of Transportation Statistics. 2021. National Transportation Statistics. Available at: https://www.bts.gov/topics/national-transportation-statistics.

Attachment D

Noise Calculations and Specifications

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/05/2022
Case Description:

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
SR1	Residential	65.0	65.0	65.0

Description	Impact Device	Usage (%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	50.0	0.0
Front End Loader	No	40		79.1	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Night	Day	Calculated (dBA) Evening	Night	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Lmax
Equipment		Lmax	Leq	Lmax	Leq	Lmax	Leq			
Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq				
Dozer		81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A				
Front End Loader		79.1	75.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A				
	Total	81.7	79.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A				

Noise Attenuation and Contours

Input Variables

Point or Line Source	Point	
Hard or Soft Site	Hard	
Attenuation Rate	6	dBA/Doubling of Distance
(Choice: 3, 4.5, 6, or 7.5)		
Reference Noise Level	85	dBA
Reference Distance	1	feet

Note: Within 0-10 feet from the source, there is virtually no attenuation.

Noise Level at Receiver

Distance to Receiver		Noise Level	
50	ft	51.0	dBA
100	ft	45.0	dBA
150	ft	41.5	dBA
200	ft	39.0	dBA
400	ft	33.0	dBA
300	ft	35.5	dBA

Noise Contours

Noise Level Contour		Distance from Source	
80	dBA	2	ft
75	dBA	3	ft
70	dBA	6	ft
65	dBA	10	ft
60	dBA	18	ft
55	dBA	32	ft
50	dBA	56	ft
45	dBA	100	ft

Relative Increase in Noise Levels (Traffic)

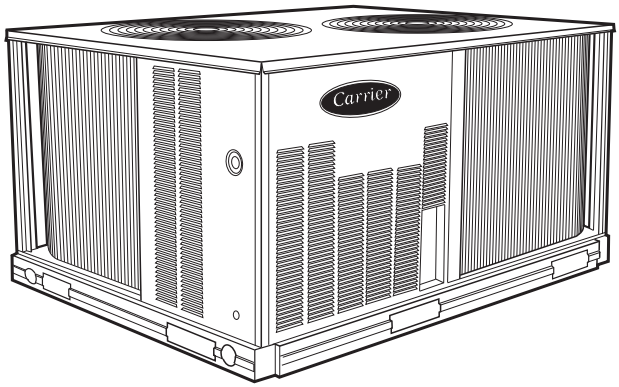
Traffic Volume Increase Calculations				
Roadway Segment	**Initial Traffic Volume**	**Future Traffic Volume**	**Percentage Increase in Traffic Volume**	**Increase in Noise Level (dBA)**
Garden N of Carrillo	6536	7279	11.4%	0.5

38AUZ/D 50 Hz
Commercial Split Systems
Air Conditioning Condensing Units
18.3 kW to 59.2 kW

Carrier
turn to the experts

Product Data

Gemini



C09227

38AUZ07-08 shown

Certified to ISO 9001

Carrier's air-cooled air conditioning split systems:

- provide a logical solution for commercial needs
- have a rugged, dependable construction
- are available in single and circuit scroll compressor capacity control
- have cooling capability up to 52°C (125°F) ambient and down to 2°C (35°F) ambient standard

FEATURES/BENEFITS

These dependable outdoor air cooled condensing units match Carrier's indoor-air handlers to meet a wide selection of cooling solutions.

Constructed for long life

The 38AUZ single circuit and 38AUD dual circuit, scroll compressor models are designed and built to last. The high efficient designed outdoor coil construction allows for a more efficient design in a smaller cabinet size that utilizes an overall reduction in refrigerant charge. Where conditions require, special coil coating coil protection option is available. Cabinets are constructed of prepainted galvanized steel, delivering unparalleled protection from the environment. Inside and outside surfaces are protected to ensure long life, good looks, and reliable operation. Safety controls are used for enhanced system protection and reliability.

Each unit utilizes the Comfort Alert diagnostic and troubleshoot control system. This protects the units operation and provides valuable diagnostic information when required.

Factory-installed options (FIOPs)

Certified and pre-engineered factory-installed options (FIOPs) allow units to be installed in less time, thereby reducing installed cost. FIOPs include:

- low ambient controls which provide cooling operation down to -29°C (-20°F) ambient temperatures
- non-fused disconnect
- special coil coating coil protection
- louvered hail guard

FEATURES AND BENEFITS (cont.)

Efficient operation

These air cooled condensing units will provide EER's up to 12.6 (tested in accordance with ASHRAE 90.1 standards).

This high efficiency will help reduce overall operating cost and energy consumption.

Controls for performance dependability

The 38AU condensing units offer operating controls and components designed for performance dependability. The high efficiency hermetic scroll compressor is engineered for long life and durability. The compressors include vibration isolation for quiet operation. The high-pressure switch protects the entire refrigeration system from abnormally high operating pressures. A low-pressure switch protects the system from loss of charge. These units also include anti-short-cycling protection, which helps to protect the units against compressor failure.

All units include a crankcase heater to eliminate liquid slugging at start-up. Each unit comes standard with the Comfort Alert™ control system. This provides:

- System Go LED indicator
- Fault LED indicator
- Compressor fault LED indicator
- Phase loss protection
- Phase reversal protection
- Safety pressure indicator
- Anti-short cycle protection

Innovative Carrier 40RU packaged air handlers are custom matched to 38AUZ/D condensing units

Information on matching 40RU DX packaged air handler follows for convenience. See separate product data for more details. The 40RU Series has excellent fan performance, efficient direct-expansion (DX) coils, a unique combination of indoor-air quality features, and is easy to install. Its versatility and state-of-the-art features help to ensure economical performance of the split system both now and in the future.

Indoor-air quality (IAQ) features

The unique combination of IAQ features in the 40RU Series air handlers help to ensure that only clean, fresh, conditioned air is delivered to the occupied space.

Direct-expansion (DX) 4 row cooling coils prevent the build-up of humidity in the room, even during part-load conditions.

Standard 2-in. (51mm) disposable filters remove dust and airborne particles from the occupied space for cleaner air.

The pitched, non-corroding drain pan can be adjusted for a right-hand or left-hand connection to suit many applications and provide positive drainage and prevent standing condensate.

The accessory economizer can provide ventilation air to improve indoor-air quality by using demand control ventilation. When used in conjunction with Carrier Comfort System and CO_2 sensors, the economizer admits fresh outdoor air to replace stale, recirculated indoor air.

Economy

The 40RU Series packaged air handlers provide reduced installation expense and energy-efficient performance.

Quick installation is ensured by the multipoise design. Units can be installed in either the horizontal or vertical configuration without modifications. Fan motors and contactors are pre-wired and thermostatic expansion valves (TXVs) are factory-installed on all 40RU models.

High efficiency, precision-balanced fans minimize air turbulence, surging, and unbalanced operation, cutting operation expenses.

The economizer accessory precisely controls the blend of outdoor air and room air to achieve comfort levels. When the outside air enthalpy is suitable, outside air dampers can fully open to provide "free" cooling without energizing mechanical cooling.

Rugged dependability

The 40RU series units are made to last. The die-formed galvanized steel panels ensure structural integrity under all operating conditions. Galvanized steel fan housings are securely mounted to a die-formed galvanized steel fan deck.

Rugged pillow-block bearings (40RU14) are securely fastened to the solid steel fan shaft with split collets and clamp locking devices. Smaller unit sizes have spider-type bearings.

Coil flexibility

Model 40RU direct- expansion coils have galvanized steel casings; inlet and outlet connections are on the same end. The coils are designed for use with Puron (R-410A) refrigerant and have $^3/_8$-in. diameter copper tubes mechanically bonded to aluminum sine-wave fins. The coils include matched, factory-installed thermostatic expansion valves (TXVs) with matching distributor nozzles and offers a removable power element and extended connections.

Easier installation and service

The multipoise design and component layout ensures quick unit installation and operation. Units can be converted from horizontal to vertical operation by simply repositioning the unit. Drain pan connections are duplicated on both sides of the unit. The filters, motor, drive, TXVs, and coil connections are all easily accessed by removing a single side panel.

MODEL NUMBER NOMENCLATURE

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
3	8	A	U	Z	A	0	7	A	0	A	9	–	0	A	0	A	0

Model Type
Commercial Air Cooled Cond. Unit
Puron® R–410A Refrigerant

Type of Coil
D = Dual Circuit
Z = Single Circuit

Refrigerant Options
A = Standard
B = Low Ambient Controls

Nominal Tonnage
07 = 18.3 kW (5.2 Tons)
08 = 23.2 kW (6.6 Tons)
12 = 29.1 kW (8.3 Tons)
14 = 35.2 kW (10.0 Tons)
16 = 45.8 kW (13.0 Tons)
25 = 59.2 kW (16.8 Tons)

Factory Assigned
A = Default

Factory Assigned
0 = Default

Coil Options (Condenser)
With Round Tube/Plate Fin Design
All models except 14 size (12.5 Ton)
A = Al/Cu Standard
B = Pre Coat Al/Cu
C = E–Coat Al/Cu
E = Cu/Cu
M = Al/Cu Standard with louvered hail guard
N = Pre Coat Al/Cu with louvered hail guard
P = E–Coat Al/Cu with louvered hail guard
R = Cu/Cu – Louvered hail guard
Coil Options (Condenser)
With All Aluminum – NOVATION Design (07–16 sizes)
G = Al/Al Standard
K = E–Coat Al/Al
T = Al/Al with louvered hail guard
W = E–Coat Al/Al with louvered hail guard

Voltage
9 = 400–3–50

Design Rev
– = Factory Assigned

Base Unit Controls
0 = Standard Electro–Mechanical Controls

Factory Assigned
A = Default

Service Options
0 = None

Electrical Options
A = None
C = Non–Fused Disconnect

Brand / Packaging
0 = Standard
1 = LTL

AHRI CAPACITY RATINGS

UNIT	COOLING STAGES	NOM. CAPACITY (TONS)	NET COOLING CAPACITY (MBH)	TOTAL POWER (kW)	EER
38AUZ07/40RU07	1	5	62.7	5.1	12.2
38AUZ08/40RU08	1	6.3	79.3	6.9	11.5
38AUD12/40RU12	2	8.3	103.0	8.2	12.6
38AUD14/40RU14	2	10.4	125.0	10.9	11.5
38AUD16/40RU16	2	12.5	162.0	13.5	12.0
38AUD25/40RU25	2	16.7	202.2	16.6	12.2

LEGEND

AHRI – Air Conditioning, Heating and Refrigeration Institute
ASHRAE – American Society of Heating, Refrigerating and Air Conditioning, Inc.
EER – Energy Efficiency Ratio
IEER – Integrated Energy Efficiency Ratio

NOTES

1. Rated in accordance with AHRI Standard 340/360, as appropriate.
2. Ratings are based on:
   Cooling Standard: 27°C (80°F) db, 19°C (67°F) wb indoor air temp and 35°C (95°F) db outdoor air temp.
3. All units comply with ASHRAE 90.1 Energy Standard for minimum EER and IEER requirements.

SOUND POWER LEVELS, dB

UNIT	COOLING STAGES	OUTDOOR SOUND (dB)								
		A–WEIGHTED	63	125	250	500	1000	2000	4000	8000
NOVATION – All Aluminum Coil Design										
38AUZ07	1	82	78.7	91.2	84.4	79.7	76.9	73.5	71.9	67.5
38AUZ08	1	81	81.7	89.7	82.6	77.6	74.4	70.3	68.0	64.2
38AUD12	2	78	79.2	81.1	78.4	75.0	72.9	68.2	66.4	68.2
38AUD14	2	79	76.2	78.6	78.1	75.1	75.2	71.4	67.9	65.1
38AUD16	2	80	90.3	81.8	78.0	76.7	75.2	70.5	66.4	61.9
RTPF – Round Tube/Plate Fin Coil Design										
38AUZ07	1	83	81.7	88.2	84.0	79.7	78.1	74.0	71.4	68.0
38AUZ08	1	83	81.7	88.2	84.0	79.7	78.1	74.0	71.4	68.0
38AUD12	2	80	76.0	79.9	79.8	77.4	75.6	69.8	67.8	66.4
38AUD16	2	83	86.7	81.2	78.9	80.4	78.0	74.2	70.2	65.0
38AUD25	2	85	91.0	85.0	80.0	86.0	79.0	73.0	68.0	63.0

NOTE: Outdoor sound data is measure in accordance with AHRI standard 270–2008.
LEGEND:
dB = Decibel

PHYSICAL DATA

SINGLE CIRCUIT MODELS with RTPF – Round Tube/Plate Fin Coil Design		
	38AUZ07	**38AUZ08**
Refrigeration System		
# Circuits / # Comp. / Type	1 / 1 / Scroll	1 / 1 / Scroll
R–410a shipping charge A/B (lbs, 50 Hz)	11	13
System charge w/ fan coil* (50 Hz)	14	17
Metering device	TXV	TXV
High–press. Trip / Reset (psig)	630 / 505	630 / 505
Low–press. Trip / Reset (psig)	54 / 117	54 / 117
Cond. Coil		
Material	Al/Cu	Al/Cu
Coil type	RTPF	RTPF
Rows / FPI	2 / 17	2 / 17
Total face area (ft2)	17.5	17.5
Cond. fan / motor		
Qty / Motor drive type	2 / direct	2 / direct
Motor HP / RPM	1/4 / 1100	1/4 / 1100
Fan diameter (in)	22	22
Nominal Airflow (cfm)	6000	6000
Watts (total)	610	610
Piping Connections		
Qty / Suction (in. ODS)	1 / 1 1/8	1 / 1 1/8
Qty / Liquid (in. ODS)	1 / 3/8	1 / 1/2

SINGLE CIRCUIT MODELS with NOVATION – All Aluminum coil Design		
	38AUZ07	**38AUZ08**
Refrigeration System		
# Circuits / # Comp. / Type	1 / 1 / Scroll	1 / 1 / Scroll
R–410a shipping charge A/B (lbs)	4.4	4.9
System charge w/ fan coil	8.4	10.2
System charge w/ fan coil (50hz)	9.0	12.3
Metering device	TXV	TXV
High–press. Trip / Reset (psig)	630 / 505	630 / 505
Low–press. Trip / Reset (psig)	54 / 117	54 / 117
Cond. Coil		
Material	Al	Al
Coil type	microchannel	microchannel
Rows / FPI	1 / 17	1 / 17
total face area (ft2)	17.5	20.5
Cond. fan / motor		
Qty / Motor drive type	2 / direct	2 / direct
Motor HP / RPM	1/4 / 1100	1/4 / 1100
Fan diameter (in)	22	22
Nominal Airflow (cfm)	6,000	6,000
Watts (total)	610	610

RTPF – Round tube /plate fin design

* Approximate system charge with about 25 ft piping of sizes indicated with matched 40RU.

PHYSICAL DATA (CONT)

DUAL CIRCUIT MODELS with RTPF – Round Tube/Plate Fin Coil Design			
	38AUD12	**38AUD16**	**38AUD25**
Refrigeration System			
# Circuits / # Comp. / Type	2 / 2 / Scroll	2 / 2 / Scroll	2 / 2 / Scroll
R–410a shipping charge A/B (lbs, 50 Hz)	8.0 / 8.0	16.0 / 16.0	14.0 / 14.0
System charge w/ fan coil* (50 Hz)	11.0 / 10.0	22.0 / 22.0	19.0 / 19.0
Metering device	TXV	TXV	TXV
High–press. Trip / Reset (psig)	630 / 505	630 / 505	630 / 505
Low–press. Trip / Reset (psig)	54 / 117	54 / 117	54 / 117
Compressor			
Model	ZP51 (2)	ZP83 (2)	ZP103 (2)
Oil Charge A/B (oz)	42 / 42	60 / 60	110 / 110
Speed rpm 50 Hz	2900	2900	2900
Cond. Coil			
Material	Al/Cu	Al/Cu	Al/Cu
Coil type	RTPF	RTPF	RTPF
Rows / FPI	2 / 17	2 / 17	2 / 17
Total face area (ft2)	25.1	23.5 x 2	25.0 x 2
Cond. fan / motor			
Qty / Motor drive type	2 / direct	3 / direct	4 / direct
Motor HP / RPM	1/4 / 1100	1/4 / 1100	1/4 / 1100
Fan diameter (in)	22	22	22
Nominal Airflow (cfm)	6000	9000	12000
Watts (total)	610	970	1150
Piping Connections			
Qty / Suction (in. ODS)	2 / 1 1/8	2 / 1 3/8	2 / 1 3/8
Qty / Liquid (in. ODS)	2 / 3/8	2 / 1/2	2 / 1/2

DUAL CIRCUIT MODELS with NOVATION – All Aluminum coil Design			
	38AUD12	**38AUD14**	**38AUD16**
Refrigeration System			
# Circuits / # Comp. / Type	2/2/Scroll	2/2/Scroll	2/2/Scroll
R–410a shipping charge A/B (lbs)	3.0 /3.1	3.7/3.9	6.1/6.1
System charge w/ fan coil	7.4 / 7.4	10.8 / 10.8	12.0/12.0
System charge w/ fan coil (50hz)	7.5 / 7.5	11.2 / 11.2	14.0 /14.0
Metering device	TXV	TXV	TXV
High–press. Trip / Reset (psig)	630 / 505	630 / 505	630 / 505
Low–press. Trip / Reset (psig)	54 / 117	54 / 117	54 / 117
Cond. Coil			
Material	Al	Al	Al
Coil type	microchannel	microchannel	microchannel
Rows / FPI	1 / 17	1 / 17	1 / 17
total face area (ft2)	25.0	31.8	25.0 x 2
Cond. fan / motor			
Qty / Motor drive type	2 / direct	2 / direct	3 / direct
Motor HP / RPM	1/4 / 1100	1/4 / 1100	1/4 / 1100
Fan diameter (in)	22	22	22
Nominal Airflow (cfm)	6,000	6,000	10,000
Watts (total)	610	610	970

RTPF – Round tube /plate fin design

* Approximate system charge with about 25 ft piping of sizes indicated with matched 40RU.

DIMENSIONS

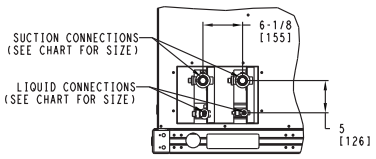
UNIT	STD. UNIT WT.		CORNER A		CORNER B		CORNER C		CORNER D		CENTER OF GRAVITY			UNIT HEIGHT
	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	X	Y	Z	H
38AUZ-07 (MCHX)	149	328	58	128	31	68	28	62	32	70	21 [533.4]	19 [482.6]	13 [330.2]	42-3/8 [1076.0]
38AUZ-08 (MCHX)	160	353	63	138	33	72	29	65	35	78	19 [482.6]	23 [584.2]	13 [330.2]	42-3/8 [1076.0]
38AUD-12 (MCHX)	226	499	88	193	50	111	38	72	56	123	20 [508.0]	23 [584.2]	15 [381.0]	50-3/8 [1279.2]
38AUD-14 (MCHX)	229	505	86	190	40	88	34	76	68	151	20 [508.0]	24 [609.6]	15 [381.0]	50-3/8 [1279.2]
38AUZ-07 (RTPF)	176	389	64	141	44	96	28	62	41	91	18 [457.2]	24 [609.6]	21 [533.4]	42-3/8 [1076.0]
38AUZ-08 (RTPF)	177	391	64	142	44	96	28	62	41	91	18 [457.2]	24 [609.6]	21 [533.4]	42-3/8 [1076.0]
38AUD-12 (RTPF)	234	516	84	185	53	117	38	83	59	131	19 [482.6]	23 [584.2]	24 [609.6]	50-3/8 [1279.2]

CG CENTER OF GRAVITY

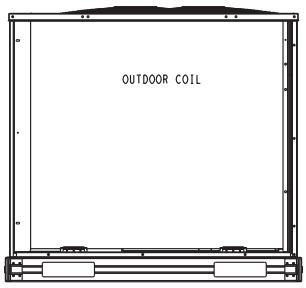
DIRECTION OF AIR FLOW

DIMENSIONS IN [ ] ARE IN MM

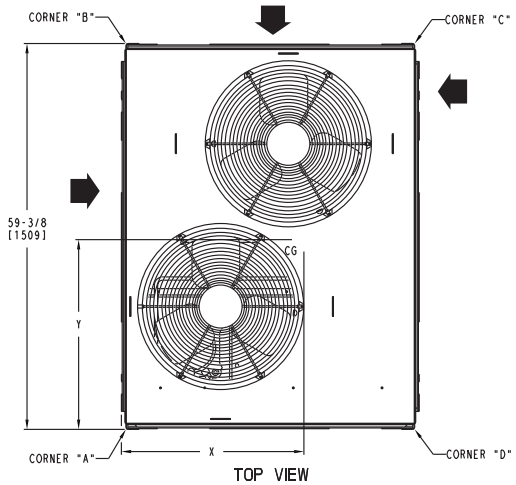
SERVICE VALVE CONNECTIONS		
UNIT	SUCTION	LIQUID
38AUZ07	1-1/8 [28.6]	3/8 [9.5]
38AUZ08	1-1/8 [28.6]	1/2 [12.7]
38AUD12	1-1/8 [28.6]	3/8 [9.5]
38AUD14	1-3/8 [34.9]	1/2 [12.7]



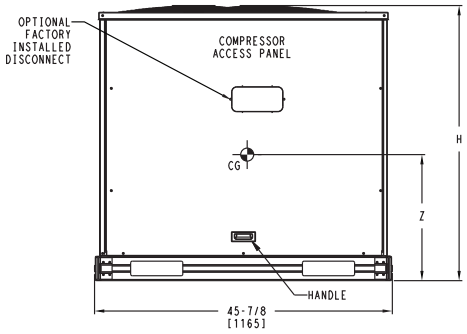
RIGHT SIDE VIEW
(FOR 38AUD SYSTEMS)



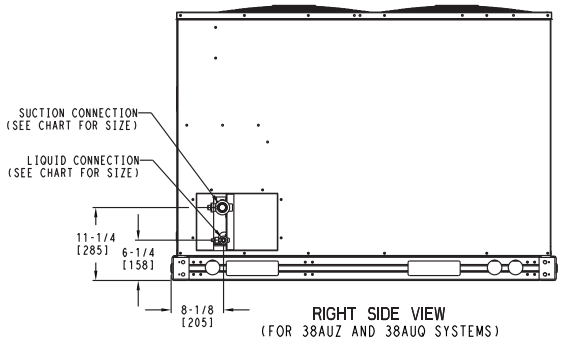
BOTTOM VIEW



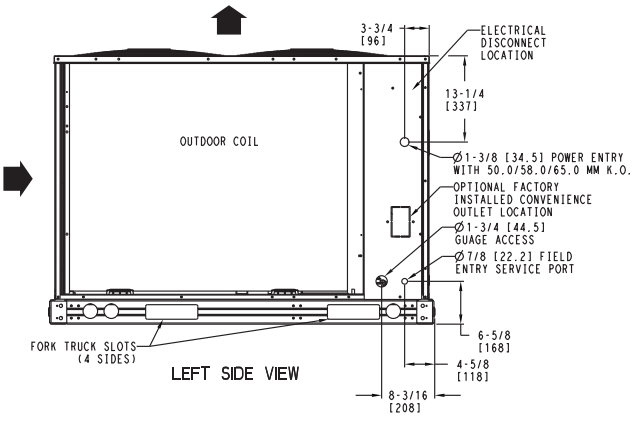
TOP VIEW



FRONT VIEW



RIGHT SIDE VIEW
(FOR 38AUZ AND 38AUQ SYSTEMS)



LEFT SIDE VIEW

NOTES:

1. MINIMUM CLEARANCE (LOCAL CODES OR JURISDICTION MAY PREVAIL):
   A. BOTTOM TO COMBUSTIBLE SURFACES: 0 INCHES.
   B. OUTDOOR COIL, FOR PROPER AIR FLOW: 36 INCHES ONE SIDE, 12 INCHES THE OTHER. THE SIDE GETTING THE GREATER CLEARANCE IS OPTIONAL.
   C. OVERHEAD: 60 INCHES, TO ASSURE PROPER OUTDOOR FAN OPERATION.
   D. BETWEEN UNITS: CONTROL BOX SIDE, 42 INCHES PER NEC.
   E. BETWEEN UNIT AND UNGROUNDED SURFACES: CONTROL BOX SIDE, 36 INCHES PER NEC.
   F. BETWEEN UNIT AND BLOCK OR CONCRETE WALLS AND OTHER GROUNDED SURFACES: CONTROL BOX SIDE, 42 INCHES PER NEC.
2. WITH EXCEPTION OF THE CLEARANCE FOR THE OUTDOOR COIL AS STATED IN NOTE 1B, A REMOVABLE FENCE OR BARRICADE REQUIRES NO CLEARANCE.
3. UNITS MAY BE INSTALLED ON COMBUSTIBLE FLOORS MADE FROM WOOD OR CLASS A, B OR C ROOF COVERING MATERIAL.

C10590

DIMENSIONS (cont.)

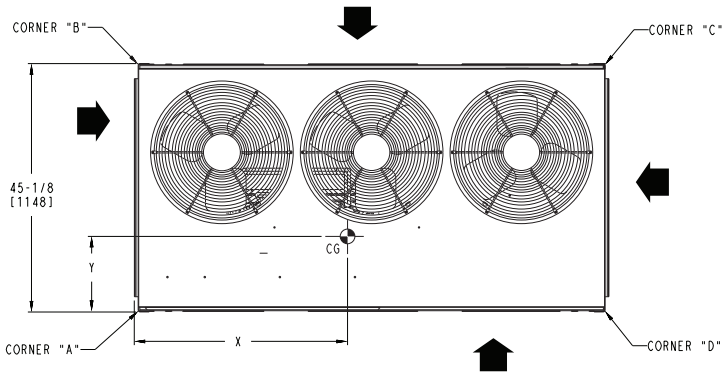
UNIT	STD. UNIT WT.		CORNER A		CORNER B		CORNER C		CORNER D		CENTER OF GRAVITY			UNIT HEIGHT
	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	X	Y	Z	H
38AUD16 (MCHX)	288	633	100	220	61	134	61.5	135	65.5	144	38 [965.2]	19 [482.6]	15 [381]	50-3/8 [1279.2]
38AUD16 (RTPF)	332	731	107	237	78	172	61	135	84	186	38 [965.2]	19 [482.6]	17 [431.8]	50-3/8 [1279.2]

CG CENTER OF GRAVITY

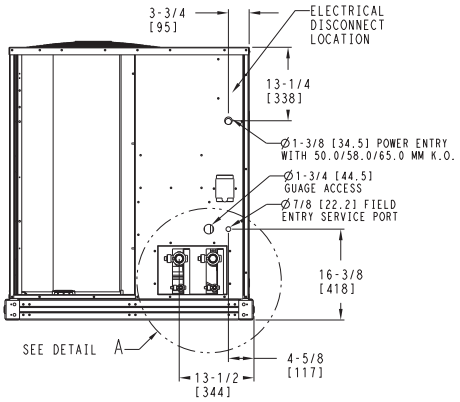
DIRECTION OF AIR FLOW

DIMENSIONS IN [ ] ARE IN MM

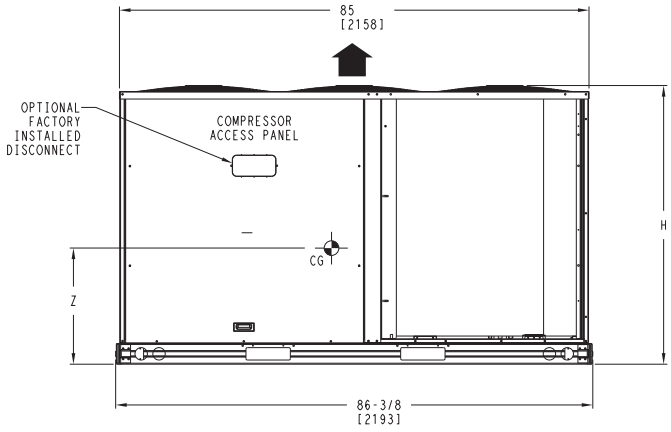
SERVICE VALVE CONNECTIONS			QTY
UNIT	SUCTION	LIQUID	
38AUD16	1-3/8 [34.9]	1/2 [12.7]	2 EA



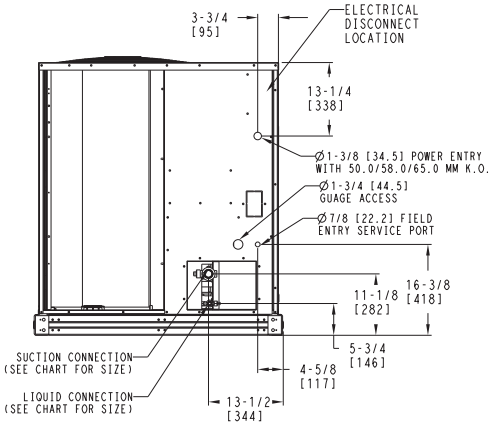
TOP VIEW



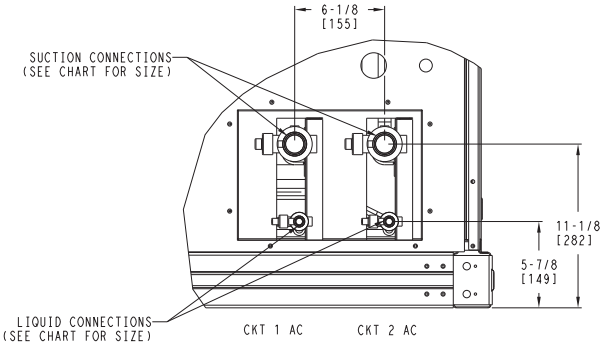
LEFT SIDE VIEW FOR 38AUD SYSTEMS



FRONT VIEW



LEFT SIDE VIEW



DETAIL A
(NOTE POSITION OF CKT 1)

NOTES:
1. MINIMUM CLEARANCE (LOCAL CODES OR JURISDICTION MAY PREVAIL):
   A. BOTTOM TO COMBUSTIBLE SURFACES: 0 INCHES.
   B. OUTDOOR COIL, FOR PROPER AIR FLOW: 36 INCHES ONE SIDE, 12 INCHES THE OTHER. THE SIDE GETTING THE GREATER CLEARANCE IS OPTIONAL.
   C. OVERHEAD: 60 INCHES, TO ASSURE PROPER OUTDOOR FAN OPERATION.
   D. BETWEEN UNITS: CONTROL BOX SIDE, 42 INCHES PER NEC.
   E. BETWEEN UNIT AND UNGROUNDED SURFACES: CONTROL BOX SIDE, 36 INCHES PER NEC.
   F. BETWEEN UNIT AND BLOCK OR CONCRETE WALLS AND OTHER GROUNDED SURFACES: CONTROL BOX SIDE, 42 INCHES PER NEC.
2. WITH EXCEPTION OF THE CLEARANCE FOR THE OUTDOOR COIL AS STATED IN NOTE 1B, A REMOVABLE FENCE OR BARRICADE REQUIRES NO CLEARANCE.
3. UNITS MAY BE INSTALLED ON COMBUSTIBLE FLOORS MADE FROM WOOD OR CLASS A, B OR C ROOF COVERING MATERIAL.

C10591

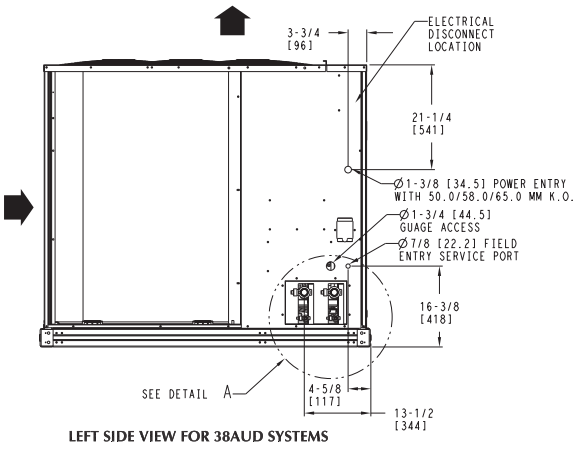
DIMENSIONS (cont.)

UNIT	STD. UNIT WT.		CORNER A		CORNER B		CORNER C		CORNER D		CENTER OF GRAVITY			UNIT HEIGHT
	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	X	Y	Z	H
38AUD25 (RTPF)	444	978	163	360	85	188	67	147	128	283	38 [965.2]	23 [584.2]	17 [431.8]	50-3/8 [1279.2]

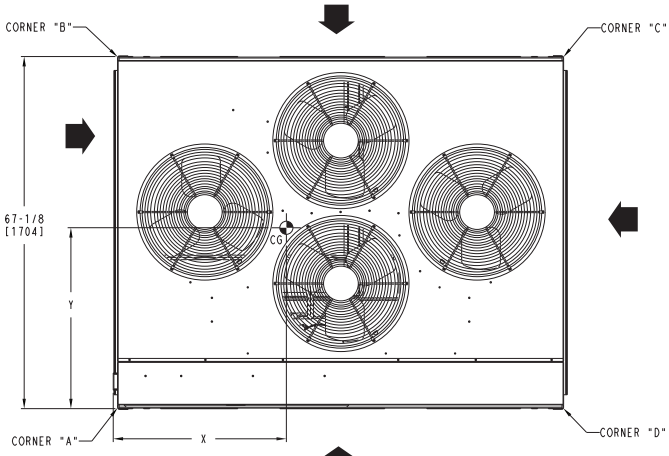
CG CENTER OF GRAVITY

DIRECTION OF AIR FLOW

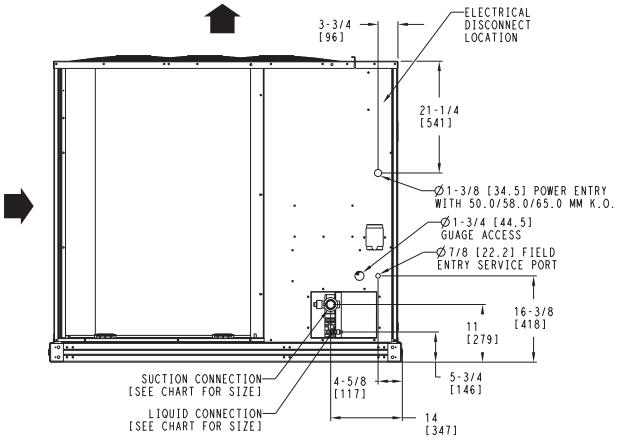
DIMENSIONS IN [ ] ARE IN MM



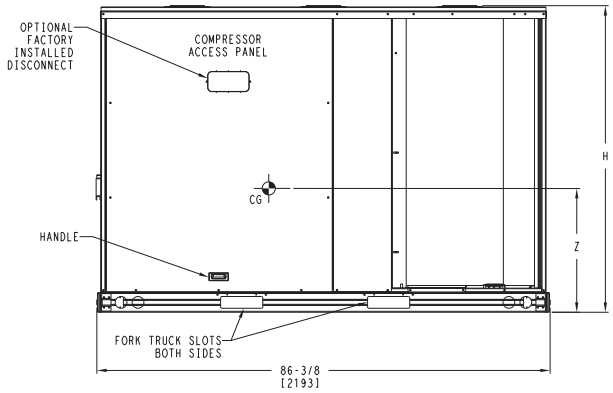
LEFT SIDE VIEW FOR 38AUD SYSTEMS



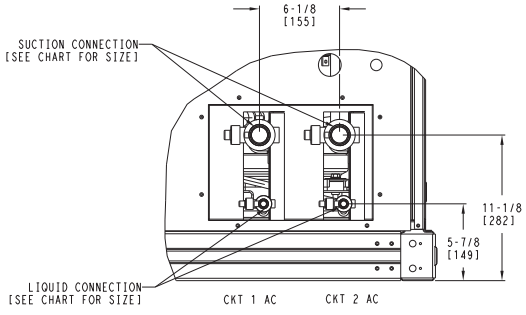
TOP VIEW



LEFT SIDE VIEW



FRONT VIEW



DETAIL A
(NOTE POSITION OF CKT 1)

NOTES:
1. MINIMUM CLEARANCE (LOCAL CODES OR JURISDICTION MAY PREVAIL):
   A. BOTTOM TO COMBUSTIBLE SURFACES: 0 INCHES.
   B. OUTDOOR COIL, FOR PROPER AIR FLOW: 36 INCHES ONE SIDE, 12 INCHES THE OTHER. THE SIDE GETTING THE GREATER CLEARANCE IS OPTIONAL.
   C. OVERHEAD: 60 INCHES, TO ASSURE PROPER OUTDOOR FAN OPERATION.
   D. BETWEEN UNITS: CONTROL BOX SIDE, 42 INCHES PER NEC.
   E. BETWEEN UNIT AND UNGROUNDED SURFACES: CONTROL BOX SIDE, 36 INCHES PER NEC.
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3. UNITS MAY BE INSTALLED ON COMBUSTIBLE FLOORS MADE FROM WOOD OR CLASS A, B OR C ROOF COVERING MATERIAL.

SERVICE VALVE CONNECTIONS			QTY
UNIT	SUCTION	LIQUID	
38AUD25	1-3/8 [34.9]	1/2 [12.7]	2 EA

C10592

OPTIONS AND ACCESSORIES

38AUZ/D OPTIONS AND ACCESSORIES

ITEM	OPTION*	ACCESSORY†
Disconnect Switch (non-fused)	X	
Special–coated Coil Protection	X	
Low Ambient Temperature MotorMaster I® Control	X	X
Wired Condenser Coil Grille (Novation 07–14 models only)		X
Louvered Hail Guard	X	X
Programmable Thermostats		X

* Factory-installed option.

† Field-installed accessory.

38AUZ/38AUD factory-installed options

E-coated aluminum-fin coils have a flexible and durable epoxy coating uniformly applied to all coil surfaces. Unlike brittle phenolic dip and bake coatings, E-coating provides superior protection with unmatched flexibility, edge coverage, metal adhesion, thermal performance, and most importantly, corrosion resistance.

E-coated coils provide this protection since all coil surfaces are completely encapsulated from environmental contamination. This coating is especially suitable in industrial environments.

Pre-coated coils (RTPF coils only) provide protection in mild coastal environments.

–29°C (–20°F) low-ambient temperature kit option (MotorMaster I®) controls outdoor-fan motor operation to maintain the correct head pressure at low outdoor ambient temperatures.

Louvered hail guard package protects coils against damage from flying debris and hail.

Non-fused disconnect switch is used to remove power locally at the condensing unit. This switch also includes a power lockout capability to protect the service person. This lockout switch saves the service person time and effort because there is no need to access a distant disconnect switch while servicing the unit.

NOTE: Non-fused disconnect switch cannot be used when unit MOCP electrical rating exceeds 80 amps.

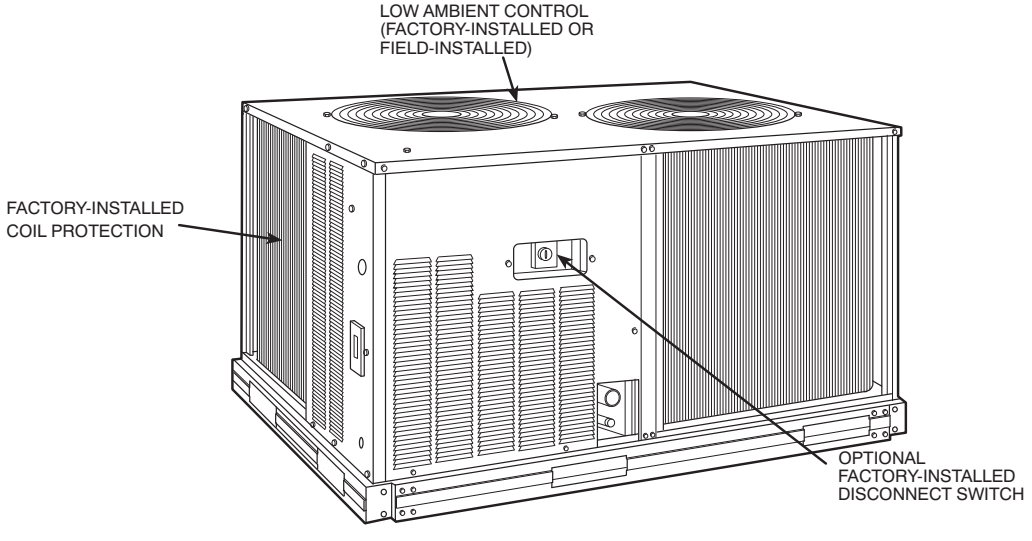
38AUZ/D field-installed accessories

–29°C (–20°F) low-ambient temperature kit accessory (MotorMaster I®) controls outdoor-fan motor operation to maintain the correct head pressure at low outdoor ambient temperatures.

Louvered hail guard package protects coils against damage from flying debris and hail.

Condenser coil grille package protects condensing unit coil from impact by large objects and vandalism.

Carrier's line of thermostats provide both programmable and non-programmable capability with the new **Debonair®** line of commercial programmable thermostats. The **Commercial Electronic** thermostats provide 7-day programmable capability for economical applications.



C10609

OPTIONS AND ACCESSORIES (cont.)

40RU OPTIONS AND ACCESSORIES

ITEM	OPTION*	ACCESSORY†
Alternate Fan Motors	X	
Alternate Drives	X	
CO_2 Sensors		X
Condensate Drain Trap		X
Discharge Plenum		X
Economizer		X
Electric Heat		X
Hot Water Heating Coils		X
Overhead Suspension Package		X
Prepainted Units	X	
Return Air Grille		X
Steam Heating Coil		X
Subbase		X

* Factory-installed option.

† Field-installed accessory.

40RU factory-installed options

Alternate fan motors and drives are available to provide the widest possible range of performance.

Units constructed of prepainted steel are available from the factory for applications that require painted units. Unit color is American Sterling Gray.

40RU field-installed accessories

Two-row hot water coils have $^5/_8$-in. diameter copper tubes mechanically bonded to aluminum plate fins. Coils have non-ferrous headers.

One-row steam coil has 1-in. OD copper tube and aluminum fins. The Inner Distributing Tube (IDT) design provides uniform temperatures across the coil face. The IDT steam coils are especially suited to applications where sub-freezing air enters the unit.

Electric resistance heat coils have an open-wire design and are mounted in a rigid frame. Safety cutouts for high temperature conditions are standard.

Economizer (enthalpy controlled) provides ventilation air and provides "free" cooling if the outside ambient temperature and humidity are suitable. The economizer can also be used in conjunction with Carrier Comfort System thermostats and CO_2 sensors to help meet indoor air quality requirements. The economizer can be used in both vertical and horizontal positions.

Discharge plenum directs the air discharge into the occupied space; integral horizontal and vertical louvers enable redirection of airflow. This accessory is available unpainted or painted.

Return-air grille provides a protective barrier over the return-air opening and gives a finished appearance to units installed in the occupied space. This accessory is available unpainted or painted.

Subbase provides a stable, raised platform and room for condensate drain connection for floor-mounted units. This accessory is available unpainted or painted.

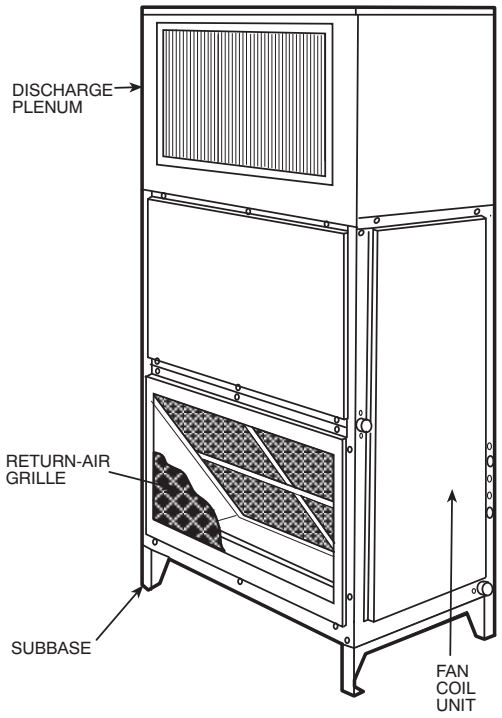
Overhead suspension package includes necessary brackets to support units in horizontal installations.

CO_2 sensors can be used in conjunction with the economizer accessory to help meet indoor air quality requirements. The sensor signals the economizer to open when the CO_2 level in the space exceeds the setpoint. A Carrier Comfort System programmable thermostat can also be used to override the sensor if the outside-air temperature is too high or too low.

Condensate drain trap includes an overflow shutoff switch that can be wired to turn off the unit if the trap becomes plugged. The kit also includes a wire harness that can be connected to an alarm if desired. The transparent trap is designed for easy service and maintenance.

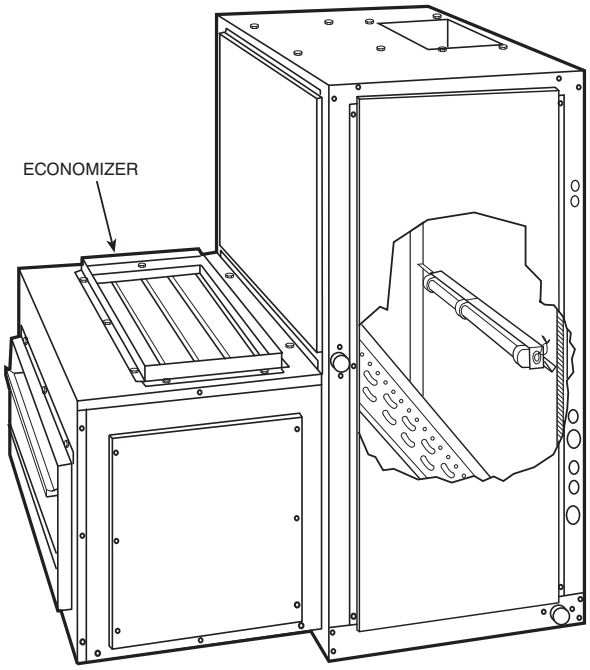
OPTIONS AND ACCESSORIES (cont.)

40RU WITH DISCHARGE PLENUM RETURN-AIR GRILLE AND SUBBASE

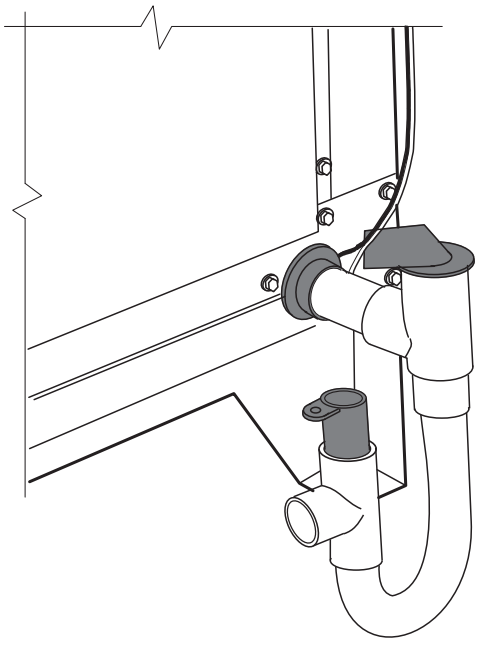


40RU WITH HOT WATER OR STEAM COIL

40RU WITH ECONOMIZER

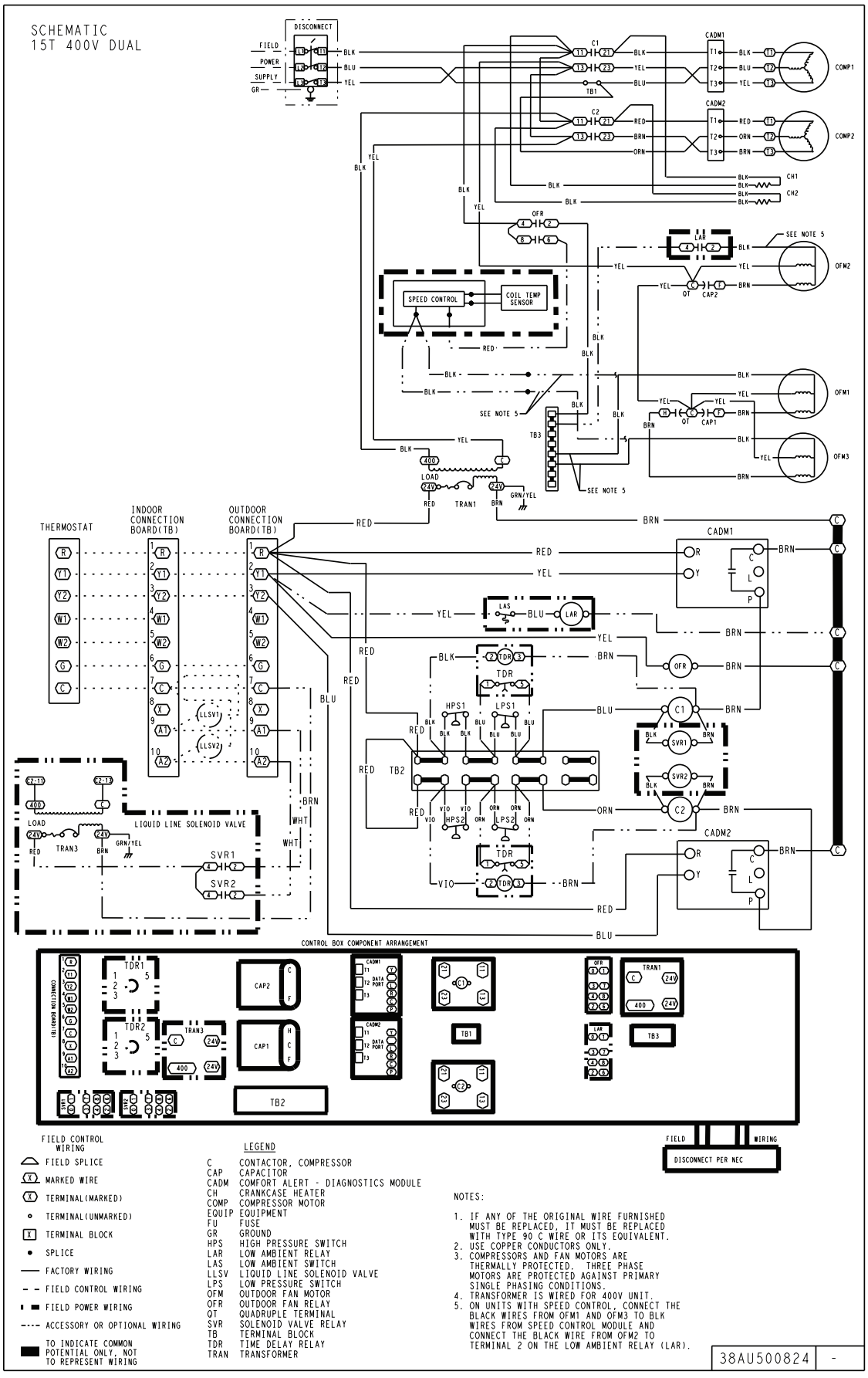


40RU WITH CONDENSATE TRAP



C10610

TYPICAL WIRING SCHEMATIC



C10593

Typical 38AUD16 Dual Circuit

PERFORMANCE DATA

38AUZ07 50 Hz CONDENSER ONLY RATINGS SI

SST (°C)		Air Temperature entering Condenser (°C)					
		27	29	35	41	46	52
-7	TC	11.9	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	35.4	38.1	44.2	49.5	54.5	59.6
-4	TC	13.2	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	35.9	38.7	44.2	49.5	54.3	60.0
-1	TC	14.6	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.5	39.3	44.8	50.0	54.9	61.9
2	TC	16.0	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	37.1	39.8	45.4	50.9	56.1	61.6
4	TC	17.4	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	37.7	40.4	45.9	51.5	56.9	62.2
7	TC	18.9	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	38.2	41.0	46.5	52.0	57.4	62.5
10	TC	20.3	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	38.8	41.6	47.1	52.5	57.9	63.3

38AUZ07 50 Hz CONDENSER ONLY RATINGS ENGLISH

SST (°F)		Air Temperature entering Condenser (°F)					
		80	85	95	105	115	125
20	TC	40.7	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	95.7	100.6	111.5	121.1	130.1	139.3
25	TC	45.2	43.8	41.0	38.0	34.5	31.3
	kW	3.6	3.8	4.4	5.0	5.7	6.4
	SDT	96.7	101.6	111.6	121.1	129.8	140.1
30	TC	49.8	48.4	45.5	42.2	38.6	36.0
	kW	3.5	3.8	4.4	5.0	5.7	6.6
	SDT	97.8	102.7	112.6	122.1	130.8	143.5
35	TC	54.6	53.2	50.2	47.0	43.2	40.0
	kW	3.5	3.7	4.3	5.0	5.8	6.6
	SDT	98.8	103.7	113.7	123.6	132.9	142.9
40	TC	59.5	58.0	54.9	51.6	48.1	44.3
	kW	3.4	3.7	4.3	5.0	5.7	6.6
	SDT	99.8	104.7	114.7	124.6	134.5	143.9
45	TC	64.4	62.9	59.7	56.4	52.8	48.6
	kW	3.3	3.6	4.2	4.9	5.7	6.5
	SDT	100.8	105.8	115.7	125.6	135.4	144.4
50	TC	69.3	67.8	64.6	61.2	57.6	53.6
	kW	3.2	3.5	4.2	4.9	5.6	6.5
	SDT	101.9	106.8	116.7	126.5	136.3	145.9

LEGEND:

kW – Compressor Power
SDT – Saturated Discharge Temperature at Compressor
SST – Saturated Suction Temperature
TC – Gross Cooling Capacity (1000 Btuh)

38AUZ08 50 Hz CONDENSER ONLY RATINGS SI

SST (°C)		Air Temperature entering Condenser (°C)					
		27	29	35	41	46	52
-7	TC	15.3	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	34.5	37.2	42.7	48.2	53.5	59.1
-4	TC	16.9	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	35.0	37.7	43.2	48.7	53.5	58.9
-1	TC	18.6	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	35.6	38.3	43.7	49.2	54.6	59.5
2	TC	20.3	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.1	38.8	44.3	49.7	55.1	60.5
4	TC	22.1	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.7	39.4	44.8	50.2	55.6	60.9
7	TC	23.8	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	37.3	40.0	45.4	50.7	56.1	61.4
10	TC	25.6	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	38.0	40.6	46.0	51.3	56.6	61.8

38AUZ08 50 Hz CONDENSER ONLY RATINGS ENGLISH

SST (°F)		Air Temperature entering Condenser (°F)					
		80	85	95	105	115	125
20	TC	52.2	50.6	47.2	43.7	39.9	36.3
	kW	4.1	4.4	5.2	6.0	6.8	7.8
	SDT	94.1	99.0	108.9	118.8	128.2	138.4
25	TC	57.7	55.9	52.3	48.6	44.0	40.1
	kW	4.1	4.5	5.2	6.0	6.9	7.9
	SDT	95.0	99.9	109.8	119.7	128.3	138.1
30	TC	63.4	61.5	57.7	53.8	49.6	44.7
	kW	4.2	4.5	5.3	6.1	7.0	8.0
	SDT	96.0	100.9	110.7	120.6	130.3	139.1
35	TC	69.3	67.3	63.3	59.2	54.9	50.4
	kW	4.2	4.6	5.3	6.2	7.1	8.0
	SDT	97.0	101.9	111.7	121.5	131.3	140.9
40	TC	75.2	73.3	69.2	64.9	60.4	55.6
	kW	4.3	4.6	5.4	6.2	7.1	8.1
	SDT	98.1	102.9	112.7	122.4	132.1	141.7
45	TC	81.3	79.3	75.2	70.7	66.0	61.0
	kW	4.3	4.6	5.4	6.2	7.2	8.2
	SDT	99.2	104.0	113.7	123.3	132.9	142.5
50	TC	87.4	85.4	81.1	76.6	71.7	66.5
	kW	4.3	4.7	5.5	6.3	7.2	8.2
	SDT	100.3	105.1	114.7	124.3	133.8	143.3

LEGEND:

kW – Compressor Power
SDT – Saturated Discharge Temperature at Compressor
SST – Saturated Suction Temperature
TC – Gross Cooling Capacity (1000 Btuh)

PERFORMANCE DATA (cont.)

38AUD12 Total Unit 50 Hz CONDENSER ONLY RATINGS SI

SST (°C)		Air Temperature entering Condenser (°C)					
		27	29	35	41	46	52
-7	TC	19.5	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	35.5	38.0	43.1	48.2	53.2	58.2
-4	TC	21.5	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.2	38.7	43.8	48.8	53.8	58.7
-1	TC	23.7	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.9	39.5	44.5	49.5	54.4	59.2
2	TC	26.0	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	37.7	40.2	45.2	50.1	55.0	59.8
4	TC	28.4	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	38.5	40.9	45.9	50.8	55.6	60.3
7	TC	30.9	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	39.2	41.7	46.6	51.5	56.2	60.9
10	TC	33.6	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	40.1	42.5	47.3	52.2	56.9	61.4

38AUD12 Total Unit 50 Hz CONDENSER ONLY RATINGS ENGLISH

SST (°F)		Air Temperature entering Condenser (°F)					
		80	85	95	105	115	125
20	TC	66.5	64.3	59.8	55.1	50.0	44.7
	kW	5.2	5.6	6.4	7.3	8.2	9.1
	SDT	95.9	100.5	109.6	118.8	127.8	136.7
25	TC	73.4	71.0	66.1	61.0	55.7	50.0
	kW	5.2	5.6	6.5	7.4	8.3	9.2
	SDT	97.2	101.7	110.8	119.9	128.9	137.7
30	TC	80.8	78.2	72.9	67.3	61.6	55.5
	kW	5.3	5.7	6.6	7.5	8.4	9.3
	SDT	98.5	103.0	112.1	121.1	129.9	138.6
35	TC	88.6	85.8	80.0	74.0	67.9	61.4
	kW	5.4	5.8	6.6	7.5	8.5	9.4
	SDT	99.8	104.3	113.3	122.3	131.1	139.6
40	TC	96.8	93.8	87.5	81.2	74.5	67.4
	kW	5.5	5.9	6.7	7.6	8.6	9.5
	SDT	101.2	105.7	114.6	123.4	132.2	140.6
45	TC	105.6	102.2	95.4	88.5	81.2	73.6
	kW	5.6	5.9	6.8	7.7	8.7	9.6
	SDT	102.6	107.0	115.9	124.6	133.2	141.6
50	TC	114.7	111.0	103.6	96.0	88.0	79.6
	kW	5.6	6.0	6.9	7.8	8.7	9.7
	SDT	104.1	108.4	117.2	125.9	134.3	142.6

LEGEND:

kW – Compressor Power
SDT – Saturated Discharge Temperature at Compressor
SST – Saturated Suction Temperature
TC – Gross Cooling Capacity (1000 Btuh)

PERFORMANCE DATA (cont.)

38AUD12 Circuit A 50 Hz CONDENSER ONLY RATINGS SI

SST (°C)		Air Temperature entering Condenser (° C)					
		27	29	35	41	46	52
-7	TC	9.6	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	35.4	37.9	43.0	48.1	53.1	58.0
-4	TC	10.6	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.1	38.6	43.7	48.7	53.7	58.6
-1	TC	11.7	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.8	39.3	44.3	49.3	54.3	59.1
2	TC	12.8	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	37.5	40.0	45.0	50.0	54.9	59.6
4	TC	14.0	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	38.3	40.8	45.7	50.6	55.5	60.1
7	TC	15.2	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	39.1	41.5	46.4	51.3	56.0	60.7
10	TC	16.5	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	39.9	42.3	47.1	52.0	56.6	61.2

38AUD12 Circuit A 50 Hz CONDENSER ONLY RATINGS ENGLISH

SST (°F)		Air Temperature entering Condenser (°F)					
		80	85	95	105	115	125
20	TC	32.9	31.8	29.6	27.2	24.7	22.1
	kW	2.6	2.8	3.2	3.6	4.1	4.5
	SDT	95.7	100.3	109.4	118.6	127.6	136.4
25	TC	36.3	35.1	32.6	30.1	27.4	24.6
	kW	2.6	2.8	3.2	3.7	4.1	4.6
	SDT	96.9	101.5	110.6	119.7	128.6	137.4
30	TC	39.9	38.6	35.9	33.2	30.3	27.3
	kW	2.6	2.8	3.3	3.7	4.2	4.7
	SDT	98.3	102.8	111.8	120.8	129.7	138.3
35	TC	43.7	42.2	39.4	36.4	33.3	30.1
	kW	2.7	2.9	3.3	3.8	4.2	4.7
	SDT	99.6	104.1	113.0	122.0	130.7	139.3
40	TC	47.6	46.1	43.0	39.8	36.5	32.9
	kW	2.7	2.9	3.3	3.8	4.3	4.8
	SDT	101.0	105.4	114.3	123.1	131.8	140.3
45	TC	51.8	50.1	46.8	43.3	39.6	35.9
	kW	2.8	3.0	3.4	3.8	4.3	4.8
	SDT	102.3	106.7	115.5	124.3	132.9	141.3
50	TC	56.2	54.3	50.6	46.8	42.8	38.6
	kW	2.8	3.0	3.4	3.9	4.3	4.8
	SDT	103.8	108.1	116.8	125.5	133.9	142.1

LEGEND:
kW – Compressor Power
SDT – Saturated Discharge Temperature at Compressor
SST – Saturated Suction Temperature
TC – Gross Cooling Capacity (1000 Btuh)

PERFORMANCE DATA (cont.)

38AUD12 Circuit B 50 Hz CONDENSER ONLY RATINGS SI

SST (°C)		Air Temperature entering Condenser (°C)					
		27	29	35	41	46	52
-7	TC	9.8	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	35.6	38.2	43.3	48.3	53.3	58.3
-4	TC	10.9	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.3	38.9	43.9	49.0	53.9	58.8
-1	TC	12.0	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	37.1	39.6	44.6	49.6	54.6	59.4
2	TC	13.2	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	37.8	40.3	45.3	50.3	55.2	60.0
4	TC	14.4	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	38.6	41.1	46.0	51.0	55.8	60.5
7	TC	15.7	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	39.4	41.8	46.8	51.6	56.4	61.1
10	TC	17.1	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	40.2	42.7	47.5	52.3	57.1	61.7

38AUD12 Circuit B 50 Hz CONDENSER ONLY RATINGS ENGLISH

SST (°F)		Air Temperature entering Condenser (°F)					
		80	85	95	105	115	125
20	TC	33.6	32.5	30.2	27.8	25.3	22.7
	kW	2.6	2.8	3.2	3.7	4.1	4.5
	SDT	96.1	100.7	109.9	119.0	128.0	136.9
25	TC	37.1	35.9	33.5	30.9	28.2	25.4
	kW	2.6	2.8	3.2	3.7	4.2	4.6
	SDT	97.4	101.9	111.1	120.2	129.1	137.9
30	TC	40.9	39.6	37.0	34.2	31.3	28.2
	kW	2.7	2.9	3.3	3.7	4.2	4.7
	SDT	98.7	103.3	112.3	121.3	130.2	138.9
35	TC	44.9	43.5	40.6	37.6	34.6	31.3
	kW	2.7	2.9	3.3	3.8	4.3	4.7
	SDT	100.1	104.6	113.6	122.6	131.4	139.9
40	TC	49.2	47.7	44.5	41.4	38.0	34.5
	kW	2.7	2.9	3.4	3.8	4.3	4.8
	SDT	101.5	106.0	114.9	123.7	132.5	141.0
45	TC	53.7	52.1	48.7	45.2	41.6	37.8
	kW	2.8	3.0	3.4	3.9	4.3	4.8
	SDT	102.9	107.3	116.2	125.0	133.6	142.0
50	TC	58.5	56.7	53.0	49.2	45.2	41.1
	kW	2.8	3.0	3.5	3.9	4.4	4.9
	SDT	104.4	108.8	117.6	126.2	134.7	143.0

LEGEND:

kW – Compressor Power
SDT – Saturated Discharge Temperature at Compressor
SST – Saturated Suction Temperature
TC – Gross Cooling Capacity (1000 Btuh)

PERFORMANCE DATA (cont.)

38AUD14 Total Unit 50 Hz CONDENSER ONLY RATINGS SI

SST (°C)		Air Temperature entering Condenser (°C)					
		27	29	35	41	46	52
-7	TC	24.5	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.5	39.0	44.0	48.9	53.7	58.4
-4	TC	27.0	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	37.4	39.8	44.8	49.6	54.4	59.1
-1	TC	29.6	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	38.2	40.7	45.6	50.4	55.1	59.7
2	TC	32.3	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	39.1	41.5	46.4	51.2	55.9	60.4
4	TC	35.1	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	40.0	42.4	47.2	52.0	56.6	61.1
7	TC	38.0	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	40.9	43.3	48.1	52.8	57.4	61.7
10	TC	40.8	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	41.9	44.3	48.9	53.6	58.1	62.4

38AUD14 Total Unit 50 Hz CONDENSER ONLY RATINGS ENGLISH

SST (°F)		Air Temperature entering Condenser (°F)					
		80	85	95	105	115	125
20	TC	83.7	80.8	74.6	68.0	61.0	53.9
	kW	7.0	7.5	8.4	9.3	10.2	11.0
	SDT	97.8	102.2	111.2	120.0	128.7	137.2
25	TC	92.1	89.0	82.3	75.4	67.9	60.3
	kW	7.1	7.6	8.5	9.5	10.4	11.3
	SDT	99.3	103.7	112.6	121.4	129.9	138.3
30	TC	101.0	97.5	90.5	83.0	75.3	66.8
	kW	7.3	7.7	8.7	9.7	10.6	11.6
	SDT	100.8	105.2	114.0	122.7	131.3	139.5
35	TC	110.2	106.5	98.9	91.0	82.4	73.5
	kW	7.4	7.9	8.8	9.8	10.8	11.8
	SDT	102.4	106.8	115.5	124.2	132.6	140.8
40	TC	119.8	115.7	107.6	98.9	89.8	80.1
	kW	7.6	8.0	9.0	10.0	11.0	12.1
	SDT	104.0	108.3	117.0	125.6	133.9	141.9
45	TC	129.6	125.1	116.1	106.8	97.1	86.6
	kW	7.7	8.2	9.2	10.2	11.2	12.3
	SDT	105.7	110.0	118.5	127.0	135.2	143.1
50	TC	139.3	134.6	124.7	114.8	104.1	93.1
	kW	7.9	8.4	9.3	10.4	11.4	12.5
	SDT	107.4	111.7	120.1	128.5	136.5	144.4

LEGEND:

kW – Compressor Power
SDT – Saturated Discharge Temperature at Compressor
SST – Saturated Suction Temperature
TC – Gross Cooling Capacity (1000 Btuh)

PERFORMANCE DATA (cont.)

38AUD14 Circuit A 50 Hz CONDENSER ONLY RATINGS SI

SST (°C)		Air Temperature entering Condenser (°C)					
		27	29	35	41	46	52
-7	TC	12.3	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.3	38.8	43.7	48.7	53.5	58.2
-4	TC	13.6	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	37.1	39.6	44.5	49.4	54.2	58.9
-1	TC	14.9	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	37.9	40.4	45.3	50.1	54.9	59.5
2	TC	16.2	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	38.8	41.2	46.1	50.9	55.6	60.2
4	TC	17.7	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	39.7	42.1	46.9	51.7	56.4	60.9
7	TC	19.1	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	40.6	43.0	47.8	52.5	57.1	61.5
10	TC	20.6	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	41.6	43.9	48.6	53.3	57.8	62.2

38AUD14 Circuit A 50 Hz CONDENSER ONLY RATINGS ENGLISH

SST (°F)		Air Temperature entering Condenser (°F)					
		80	85	95	105	115	125
20	TC	42.0	40.5	37.4	34.2	30.7	27.1
	kW	3.5	3.8	4.2	4.7	5.1	5.5
	SDT	97.3	101.8	110.7	119.6	128.3	136.8
25	TC	46.2	44.7	41.4	37.9	34.2	30.3
	kW	3.6	3.8	4.3	4.8	5.2	5.7
	SDT	98.8	103.2	112.1	120.9	129.5	138.0
30	TC	50.7	49.0	45.5	41.7	37.9	33.7
	kW	3.7	3.9	4.4	4.9	5.3	5.8
	SDT	100.3	104.7	113.6	122.3	130.8	139.1
35	TC	55.4	53.5	49.7	45.8	41.5	37.0
	kW	3.7	4.0	4.4	4.9	5.4	5.9
	SDT	101.8	106.2	115.0	123.7	132.1	140.4
40	TC	60.2	58.2	54.1	49.8	45.2	40.4
	kW	3.8	4.0	4.5	5.0	5.6	6.1
	SDT	103.5	107.8	116.5	125.1	133.4	141.5
45	TC	65.2	62.9	58.4	53.8	48.9	43.7
	kW	3.9	4.1	4.6	5.1	5.6	6.2
	SDT	105.1	109.4	118.0	126.5	134.8	142.7
50	TC	70.2	67.8	62.8	57.9	52.5	47.0
	kW	4.0	4.2	4.7	5.2	5.7	6.3
	SDT	106.8	111.1	119.5	127.9	136.0	143.9

LEGEND:

kW – Compressor Power
SDT – Saturated Discharge Temperature at Compressor
SST – Saturated Suction Temperature
TC – Gross Cooling Capacity (1000 Btuh)

PERFORMANCE DATA (cont.)

38AUD14 Circuit B 50 Hz CONDENSER ONLY RATINGS SI

SST (°C)		Air Temperature entering Condenser (°C)					
		27	29	35	41	46	52
-7	TC	12.2	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.8	39.3	44.2	49.1	53.9	58.6
-4	TC	13.4	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	37.6	40.1	45.0	49.9	54.6	59.3
-1	TC	14.7	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	38.5	41.0	45.9	50.7	55.4	60.0
2	TC	16.1	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	39.4	41.8	46.7	51.5	56.1	60.7
4	TC	17.5	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	40.3	42.7	47.5	52.3	56.9	61.3
7	TC	18.9	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	41.3	43.6	48.4	53.1	57.6	62.0
10	TC	20.3	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	42.2	44.6	49.2	53.9	58.4	62.7

38AUD14 Circuit B 50 Hz CONDENSER ONLY RATINGS ENGLISH

SST (°F)		Air Temperature entering Condenser (°F)					
		80	85	95	105	115	125
20	TC	41.7	40.2	37.1	33.8	30.3	26.8
	kW	3.5	3.7	4.2	4.6	5.1	5.5
	SDT	98.2	102.7	111.6	120.4	129.1	137.6
25	TC	45.9	44.3	41.0	37.5	33.8	29.9
	kW	3.5	3.8	4.2	4.7	5.2	5.6
	SDT	99.7	104.2	113.1	121.8	130.3	138.7
30	TC	50.2	48.5	45.0	41.3	37.4	33.2
	kW	3.6	3.8	4.3	4.8	5.3	5.8
	SDT	101.3	105.7	114.5	123.2	131.7	139.9
35	TC	54.8	53.0	49.2	45.2	40.9	36.5
	kW	3.7	3.9	4.4	4.9	5.4	5.9
	SDT	102.9	107.3	116.0	124.6	133.0	141.2
40	TC	59.6	57.5	53.5	49.1	44.6	39.7
	kW	3.8	4.0	4.5	5.0	5.5	6.0
	SDT	104.6	108.9	117.6	126.1	134.4	142.4
45	TC	64.4	62.1	57.6	53.0	48.1	42.9
	kW	3.8	4.1	4.5	5.1	5.6	6.1
	SDT	106.3	110.5	119.1	127.5	135.7	143.6
50	TC	69.2	66.8	61.9	56.9	51.6	46.2
	kW	3.9	4.1	4.6	5.1	5.7	6.2
	SDT	108.0	112.3	120.6	129.0	137.0	144.8

LEGEND:
kW – Compressor Power
SDT – Saturated Discharge Temperature at Compressor
SST – Saturated Suction Temperature
TC – Gross Cooling Capacity (1000 Btuh)

PERFORMANCE DATA (cont.)

38AUD16 Total Unit 50 Hz CONDENSER ONLY RATINGS SI

SST (°C)		Air Temperature entering Condenser (°C)					
		27	29	35	41	46	52
-7	TC	31.6	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	35.4	38.0	43.2	48.3	53.4	58.4
-4	TC	34.8	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.2	38.7	43.8	48.9	53.9	58.9
-1	TC	38.3	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.9	39.5	44.5	49.5	54.5	59.4
2	TC	41.9	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	37.7	40.2	45.2	50.2	55.1	59.9
4	TC	45.6	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	38.5	41.0	45.9	50.9	55.7	60.5
7	TC	49.7	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	39.3	41.8	46.7	51.6	56.4	61.0
10	TC	53.9	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	40.2	42.6	47.5	52.3	57.0	61.6

38AUD16 Total Unit 50 Hz CONDENSER ONLY RATINGS ENGLISH

SST (°F)		Air Temperature entering Condenser (°F)					
		80	85	95	105	115	125
20	TC	107.8	104.6	97.9	90.9	83.7	76.1
	kW	8.4	8.9	10.0	11.2	12.5	13.9
	SDT	95.8	100.4	109.7	118.9	128.1	137.1
25	TC	118.8	115.3	107.9	100.4	92.4	84.1
	kW	8.6	9.1	10.2	11.4	12.7	14.1
	SDT	97.1	101.7	110.9	120.0	129.1	138.0
30	TC	130.5	126.6	118.6	110.3	101.6	92.7
	kW	8.7	9.2	10.3	11.6	12.9	14.3
	SDT	98.4	103.0	112.1	121.2	130.1	138.9
35	TC	142.8	138.5	129.7	120.8	111.5	101.6
	kW	8.9	9.4	10.5	11.7	13.0	14.4
	SDT	99.8	104.3	113.4	122.4	131.2	139.9
40	TC	155.8	151.0	141.6	132.0	121.7	110.7
	kW	9.1	9.6	10.7	11.9	13.2	14.6
	SDT	101.3	105.7	114.7	123.6	132.3	140.8
45	TC	169.5	164.3	154.0	143.4	132.0	120.1
	kW	9.3	9.8	10.9	12.1	13.4	14.8
	SDT	102.7	107.2	116.0	124.8	133.5	141.9
50	TC	183.9	178.2	166.8	154.9	142.6	129.5
	kW	9.5	10.0	11.1	12.3	13.6	15.0
	SDT	104.3	108.7	117.4	126.1	134.6	142.9

LEGEND:

kW – Compressor Power
SDT – Saturated Discharge Temperature at Compressor
SST – Saturated Suction Temperature
TC – Gross Cooling Capacity (1000 Btuh)

PERFORMANCE DATA (cont.)

38AUD16 Circuit A 50 Hz CONDENSER ONLY RATINGS SI

SST (°C)		Air Temperature entering Condenser (°C)					
		27	29	35	41	46	52
-7	TC	15.8	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	35.9	38.5	43.6	48.7	53.8	58.8
-4	TC	17.4	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.6	39.2	44.3	49.4	54.3	59.3
-1	TC	19.1	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	37.4	39.9	45.0	50.0	54.9	59.8
2	TC	20.8	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	38.2	40.7	45.7	50.7	55.6	60.3
4	TC	22.7	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	39.0	41.5	46.4	51.4	56.2	60.9
7	TC	24.7	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	39.9	42.3	47.2	52.1	56.8	61.5
10	TC	26.8	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	40.7	43.1	48.0	52.8	57.5	62.1

38AUD16 Circuit A 50 Hz CONDENSER ONLY RATINGS ENGLISH

SST (°F)		Air Temperature entering Condenser (°F)					
		80	85	95	105	115	125
20	TC	53.8	52.2	48.8	45.3	41.7	37.9
	kW	4.2	4.5	5.1	5.7	6.3	7.0
	SDT	96.6	101.2	110.5	119.7	128.8	137.8
25	TC	59.3	57.5	53.8	50.0	46.0	41.9
	kW	4.3	4.6	5.1	5.7	6.4	7.1
	SDT	97.9	102.5	111.7	120.8	129.8	138.7
30	TC	65.1	63.1	59.0	54.9	50.6	46.1
	kW	4.4	4.7	5.2	5.8	6.5	7.2
	SDT	99.3	103.9	112.9	122.0	130.9	139.6
35	TC	71.1	68.9	64.5	60.1	55.4	50.5
	kW	4.5	4.8	5.3	5.9	6.6	7.3
	SDT	100.7	105.2	114.2	123.2	132.0	140.6
40	TC	77.5	75.1	70.4	65.6	60.5	55.0
	kW	4.6	4.9	5.4	6.0	6.7	7.4
	SDT	102.2	106.7	115.6	124.5	133.2	141.6
45	TC	84.3	81.7	76.6	71.3	65.6	59.6
	kW	4.7	5.0	5.5	6.1	6.8	7.5
	SDT	103.7	108.1	117.0	125.7	134.3	142.7
50	TC	91.4	88.6	82.9	76.9	70.8	64.3
	kW	4.8	5.1	5.6	6.2	6.9	7.6
	SDT	105.3	109.7	118.4	127.0	135.5	143.7

LEGEND:

kW – Compressor Power
SDT – Saturated Discharge Temperature at Compressor
SST – Saturated Suction Temperature
TC – Gross Cooling Capacity (1000 Btuh)

PERFORMANCE DATA (cont.)

38AUD16 Circuit B 50 Hz CONDENSER ONLY RATINGS SI

SST (°C)		Air Temperature entering Condenser (°C)					
		27	29	35	41	46	52
-7	TC	15.8	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	35.0	37.6	42.7	47.9	53.0	58.0
-4	TC	17.5	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	35.7	38.3	43.4	48.5	53.5	58.5
-1	TC	19.2	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.4	39.0	44.0	49.1	54.1	59.0
2	TC	21.0	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	37.2	39.7	44.7	49.7	54.7	59.5
4	TC	22.9	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	38.0	40.4	45.4	50.4	55.3	60.0
7	TC	25.0	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	38.8	41.2	46.2	51.1	55.9	60.6
10	TC	27.1	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	39.6	42.0	46.9	51.8	56.5	61.2

38AUD16 Circuit B 50 Hz CONDENSER ONLY RATINGS ENGLISH

SST (°F)		Air Temperature entering Condenser (°F)					
		80	85	95	105	115	125
20	TC	54.0	52.4	49.1	45.6	42.0	38.2
	kW	4.2	4.4	5.0	5.6	6.2	6.9
	SDT	95.0	99.7	108.9	118.2	127.3	136.3
25	TC	59.6	57.8	54.2	50.4	46.4	42.3
	kW	4.2	4.5	5.0	5.6	6.3	7.0
	SDT	96.2	100.9	110.1	119.2	128.3	137.2
30	TC	65.5	63.5	59.5	55.4	51.1	46.6
	kW	4.3	4.6	5.1	5.7	6.4	7.1
	SDT	97.6	102.1	111.3	120.4	129.3	138.1
35	TC	71.7	69.5	65.2	60.7	56.0	51.1
	kW	4.4	4.7	5.2	5.8	6.5	7.2
	SDT	98.9	103.4	112.5	121.5	130.4	139.1
40	TC	78.2	75.9	71.2	66.3	61.2	55.7
	kW	4.5	4.8	5.3	5.9	6.5	7.2
	SDT	100.3	104.8	113.8	122.7	131.5	140.0
45	TC	85.2	82.6	77.4	72.1	66.4	60.4
	kW	4.6	4.9	5.4	6.0	6.6	7.3
	SDT	101.8	106.2	115.1	123.9	132.6	141.1
50	TC	92.4	89.6	83.9	77.9	71.8	65.2
	kW	4.7	5.0	5.5	6.1	6.7	7.4
	SDT	103.3	107.6	116.5	125.2	133.8	142.1

LEGEND:

kW – Compressor Power
SDT – Saturated Discharge Temperature at Compressor
SST – Saturated Suction Temperature
TC – Gross Cooling Capacity (1000 Btuh)

PERFORMANCE DATA (cont.)

38AUD25 Total Unit CONDENSER ONLY RATINGS SI

SST (°C)		Air Temperature entering Condenser (°C)					
		27	29	35	41	46	52
-7	TC	38.7	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	33.8	36.4	41.6	46.7	51.9	57.0
-4	TC	42.8	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	34.5	37.1	42.2	47.4	52.5	57.5
-1	TC	47.2	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	35.2	37.8	42.9	48.0	53.1	58.1
2	TC	52.0	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.0	38.6	43.6	48.7	53.7	58.6
4	TC	57.1	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.9	39.4	44.4	49.4	54.4	59.2
7	TC	62.6	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	37.8	40.3	45.2	50.2	55.1	59.8
10	TC	68.4	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	38.8	41.2	46.1	51.0	55.8	60.5

38AUD25 Total Unit CONDENSER ONLY RATINGS ENGLISH

SST (°F)		Air Temperature entering Condenser (°F)					
		80	85	95	105	115	125
20	TC	131.9	128.0	119.8	111.1	101.6	91.4
	kW	10.0	10.6	12.0	13.5	15.2	17.2
	SDT	92.8	97.5	106.9	116.1	125.4	134.6
25	TC	145.9	141.7	132.9	123.5	113.3	102.3
	kW	10.2	10.8	12.1	13.6	15.4	17.3
	SDT	94.1	98.7	108.0	117.3	126.4	135.5
30	TC	161.1	156.5	146.9	136.7	125.6	113.7
	kW	10.4	11.0	12.3	13.8	15.5	17.5
	SDT	95.4	100.0	109.2	118.4	127.5	136.5
35	TC	177.3	172.3	161.9	150.7	138.7	125.7
	kW	10.6	11.2	12.5	14.0	15.7	17.6
	SDT	96.9	101.4	110.5	119.6	128.7	137.6
40	TC	194.8	189.3	177.9	165.7	152.5	138.4
	kW	10.8	11.4	12.7	14.2	15.9	17.8
	SDT	98.4	102.9	111.9	120.9	129.8	138.6
45	TC	213.5	207.4	194.9	181.5	167.1	151.7
	kW	11.1	11.7	13.0	14.5	16.1	18.0
	SDT	100.0	104.5	113.4	122.3	131.1	139.7
50	TC	233.4	226.7	213.0	198.2	182.5	165.6
	kW	11.4	12.0	13.3	14.7	16.4	18.2
	SDT	101.8	106.2	115.0	123.7	132.4	140.9

LEGEND:
kW – Compressor Power
SDT – Saturated Discharge Temperature at Compressor
SST – Saturated Suction Temperature
TC – Gross Cooling Capacity (1000 Btuh)

PERFORMANCE DATA (cont.)

38AUD25 Circuit A 50 Hz CONDENSER ONLY RATINGS SI

SST (°C)		Air Temperature entering Condenser (°C)					
		27	29	35	41	46	52
-7	TC	19.3	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	33.6	36.2	41.4	46.6	51.7	56.8
-4	TC	21.4	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	34.3	36.8	42.0	47.2	52.3	57.3
-1	TC	23.6	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	35.0	37.5	42.7	47.8	52.9	57.9
2	TC	26.0	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	35.8	38.3	43.4	48.5	53.5	58.4
4	TC	28.6	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.6	39.1	44.1	49.2	54.1	59.0
7	TC	31.3	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	37.5	40.0	44.9	49.9	54.8	59.6
10	TC	34.3	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	38.4	40.9	45.8	50.7	55.5	60.3

38AUD25 Circuit A 50 Hz CONDENSER ONLY RATINGS ENGLISH

SST (°F)		Air Temperature entering Condenser (°F)					
		80	85	95	105	115	125
20	TC	66.0	64.0	60.0	55.6	50.9	45.8
	kW	5.0	5.3	5.9	6.7	7.6	8.5
	SDT	92.4	97.1	106.5	115.8	125.1	134.3
25	TC	73.0	70.9	66.5	61.8	56.7	51.2
	kW	5.1	5.4	6.0	6.8	7.6	8.6
	SDT	93.7	98.3	107.6	116.9	126.1	135.2
30	TC	80.6	78.3	73.5	68.4	62.9	57.0
	kW	5.2	5.5	6.1	6.9	7.7	8.7
	SDT	95.0	99.6	108.8	118.0	127.1	136.2
35	TC	88.8	86.2	81.1	75.5	69.5	63.0
	kW	5.3	5.6	6.2	7.0	7.8	8.8
	SDT	96.4	100.9	110.1	119.2	128.3	137.2
40	TC	97.5	94.8	89.1	83.0	76.4	69.4
	kW	5.4	5.7	6.3	7.1	7.9	8.9
	SDT	97.9	102.4	111.4	120.5	129.4	138.2
45	TC	106.9	103.9	97.6	91.0	83.8	76.0
	kW	5.5	5.8	6.5	7.2	8.0	9.0
	SDT	99.5	104.0	112.9	121.8	130.6	139.3
50	TC	116.9	113.6	106.7	99.4	91.5	83.0
	kW	5.7	6.0	6.6	7.3	8.1	9.1
	SDT	101.2	105.6	114.4	123.2	131.9	140.5

LEGEND:

kW – Compressor Power
SDT – Saturated Discharge Temperature at Compressor
SST – Saturated Suction Temperature
TC – Gross Cooling Capacity (1000 Btuh)

PERFORMANCE DATA (cont.)

38AUD25 Circuit B 50 Hz CONDENSER ONLY RATINGS SI

SST (°C)		Air Temperature entering Condenser (°C)					
		27	29	35	41	46	52
-7	TC	19.3	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	34.0	36.6	41.8	46.9	52.1	57.2
-4	TC	21.4	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	34.7	37.3	42.4	47.6	52.7	57.7
-1	TC	23.6	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	35.5	38.0	43.1	48.2	53.3	58.3
2	TC	26.0	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	36.3	38.8	43.9	48.9	53.9	58.8
4	TC	28.5	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	37.2	39.7	44.7	49.7	54.6	59.4
7	TC	31.2	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	38.1	40.6	45.5	50.4	55.3	60.1
10	TC	34.1	39.4	37.0	34.2	30.9	27.2
	kW	3.6	3.9	4.4	5.0	5.7	6.3
	SDT	39.1	41.5	46.4	51.2	56.0	60.7

38AUD25 Circuit B 50 Hz CONDENSER ONLY RATINGS ENGLISH

SST (°F)		Air Temperature entering Condenser (°F)					
		80	85	95	105	115	125
20	TC	65.9	63.9	59.9	55.5	50.7	45.6
	kW	5.0	5.3	6.0	6.8	7.6	8.6
	SDT	93.3	97.9	107.2	116.5	125.8	134.9
25	TC	72.9	70.8	66.4	61.7	56.6	51.0
	kW	5.1	5.4	6.1	6.8	7.7	8.7
	SDT	94.5	99.2	108.4	117.6	126.8	135.9
30	TC	80.5	78.2	73.4	68.2	62.7	56.7
	kW	5.2	5.5	6.2	6.9	7.8	8.8
	SDT	95.9	100.5	109.6	118.8	127.9	136.9
35	TC	88.6	86.0	80.8	75.2	69.2	62.7
	kW	5.3	5.6	6.3	7.0	7.9	8.9
	SDT	97.4	101.9	111.0	120.1	129.0	137.9
40	TC	97.3	94.5	88.8	82.7	76.1	69.0
	kW	5.4	5.7	6.4	7.1	8.0	8.9
	SDT	98.9	103.4	112.4	121.4	130.3	139.0
45	TC	106.6	103.5	97.2	90.5	83.3	75.6
	kW	5.6	5.9	6.5	7.3	8.1	9.0
	SDT	100.6	105.0	113.9	122.8	131.5	140.1
50	TC	116.5	113.1	106.2	98.8	91.0	82.5
	kW	5.7	6.0	6.7	7.4	8.2	9.2
	SDT	102.4	106.8	115.5	124.2	132.9	141.3

LEGEND:
kW – Compressor Power
SDT – Saturated Discharge Temperature at Compressor
SST – Saturated Suction Temperature
TC – Gross Cooling Capacity (1000 Btuh)

PERFORMANCE DATA (cont.)

38AUZ07 - 40RUA07 COMBINATION RATINGS SI

				Ambient Temperature														
				29.4			35.0			40.6			46.1			51.7		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4
850 L/S	EAT (wb)	14.4	THC	17.2	17.2	19.3	16.6	16.6	18.8	16.0	16.0	18.1	15.4	15.4	17.4	14.5	14.5	16.4
			SHC	15.0	17.2	19.3	14.5	16.6	18.8	14.0	16.0	18.1	13.5	15.4	17.4	12.7	14.5	16.4
			kW		3.6			4.3			4.9			5.7			6.5	
		16.7	THC	17.5	17.5	19.2	16.9	16.9	18.8	16.2	16.2	18.4	15.5	15.5	17.9	14.6	14.6	17.1
			SHC	13.8	16.5	19.2	13.5	16.2	18.8	13.2	15.8	18.4	12.8	15.4	17.9	12.2	14.6	17.1
			kW		3.6			4.2			4.9			5.7			6.5	
		19.4	THC	18.9	18.9	18.9	18.3	18.3	18.3	17.5	17.5	17.5	16.7	16.7	16.7	15.8	15.8	15.8
			SHC	11.2	13.9	16.6	10.9	13.6	16.3	10.6	13.3	16.0	10.3	13.0	15.7	9.9	12.6	15.3
			kW		3.6			4.2			4.9		5.7				6.5	
		22.2	THC	20.6	20.6	20.6	19.9	19.9	19.9	19.1	19.1	19.1	18.3	18.3	18.3	17.3	17.3	17.3
			SHC	8.4	11.2	13.9	8.2	10.9	13.6	7.9	10.6	13.3	7.6	10.3	13.0	7.2	9.9	12.7
			kW		3.5			4.1			4.8			5.6			6.5	
		24.4	THC	–	22.0	22.0	–	21.3	21.3	–	20.5	20.5	–	19.6	19.6	–	–	–
			SHC	–	9.0	11.8	–	8.7	11.5	–	8.4	11.2	–	8.1	10.9	–	–	–
			kW		3.5			4.1			4.8			5.6			–	
991 L/S	EAT (wb)	14.4	THC	17.9	17.9	20.2	17.4	17.4	19.5	16.7	16.7	18.8	16.1	16.1	18.1	15.3	15.3	17.3
			SHC	15.6	17.9	20.2	15.2	17.4	19.5	14.6	16.7	18.8	14.0	16.1	18.1	13.4	15.3	17.3
			kW		3.6			4.2			4.9			5.7			6.5	
		16.7	THC	18.0	18.0	20.6	17.4	17.4	20.3	16.7	16.7	19.6	16.1	16.1	18.8	15.3	15.3	17.9
			SHC	14.7	17.7	20.6	14.4	17.4	20.3	13.9	16.7	19.6	13.4	16.1	18.8	12.7	15.3	17.9
			kW		3.6			4.2			4.9			5.7			6.5	
		19.4	THC	19.3	19.3	19.3	18.6	18.6	18.6	17.8	17.8	17.8	17.0	17.0	17.1	16.1	16.1	16.7
			SHC	11.8	14.9	18.0	11.5	14.6	17.7	11.3	14.3	17.4	10.9	14.0	17.1	10.6	13.6	16.7
			kW		3.6			4.2			4.9			5.6			6.5	
		22.2	THC	21.0	21.0	21.0	20.3	20.3	20.3	19.5	19.5	19.5	18.6	18.6	18.6	17.6	17.6	17.6
			SHC	8.7	11.8	14.9	8.4	11.5	14.6	8.2	11.3	14.3	7.9	10.9	14.0	7.5	10.6	13.7
			kW		3.5			4.1			4.8			5.6			6.4	
		24.4	THC	–	22.4	22.4	–	21.7	21.7	–	20.8	20.8	–	–	–	–	–	–
			SHC	–	9.3	12.5	–	9.1	12.3	–	8.8	12.0	–	–	–	–	–	–
			kW		3.4			4.1			4.8			–			–	
1133 L/S	EAT (wb)	14.4	THC	18.5	18.5	20.8	17.9	17.9	20.2	17.3	17.3	19.5	16.6	16.6	18.7	15.8	15.8	17.8
			SHC	16.1	18.5	20.8	15.7	17.9	20.2	15.1	17.3	19.5	14.5	16.6	18.7	13.8	15.8	17.8
			kW		3.6			4.2			4.9			5.7			6.5	
		16.7	THC	18.5	18.5	21.7	17.9	17.9	21.0	17.3	17.3	20.2	16.6	16.6	19.4	15.8	15.8	18.5
			SHC	15.4	18.5	21.7	14.9	17.9	21.0	14.4	17.3	20.2	13.8	16.6	19.4	13.2	15.8	18.5
			kW		3.6			4.2			4.9			5.7			6.5	
		19.4	THC	19.6	19.6	19.6	18.9	18.9	19.0	18.1	18.1	18.7	17.3	17.3	18.3	16.3	16.3	17.9
			SHC	12.4	15.9	19.3	12.1	15.6	19.0	11.8	15.3	18.7	11.5	14.9	18.3	11.1	14.5	17.9
			kW		3.5			4.2			4.9			5.6			6.5	
		22.2	THC	21.2	21.2	21.2	20.5	20.5	20.5	19.7	19.7	19.7	18.8	18.8	18.8	17.8	17.8	17.8
			SHC	8.9	12.4	15.9	8.7	12.1	15.6	8.4	11.8	15.3	8.1	11.5	14.9	7.7	11.2	14.6
			kW		3.5			4.1			4.8			5.6			6.4	
		24.4	THC	–	22.7	22.7	–	21.9	21.9	–	21.1	21.1	–	–	–	–	–	–
			SHC	–	9.6	13.2	–	9.4	12.9	–	9.1	12.6	–	–	–	–	–	–
			kW		3.4			4.1			4.8			–			–	
1274 L/S	EAT (wb)	14.4	THC	19.0	19.0	21.4	18.4	18.4	20.7	17.7	17.7	20.0	17.0	17.0	19.2	16.2	16.2	18.3
			SHC	16.6	19.0	21.4	16.0	18.4	20.7	15.5	17.7	20.0	14.9	17.0	19.2	14.2	16.2	18.3
			kW	3.6			4.2			4.9			5.6			6.5		
		16.7	THC	19.0	19.0	22.2	18.4	18.4	21.5	17.7	17.7	20.8	17.0	17.0	19.9	16.2	16.2	19.0
			SHC	15.8	19.0	22.2	15.3	18.4	21.5	14.7	17.7	20.8	14.1	17.0	19.9	13.5	16.2	19.0
			kW	3.6			4.2			4.9			5.6			6.5		
		19.4	THC	19.8	19.8	20.5	19.1	19.1	20.2	18.3	18.3	19.9	17.5	17.5	19.5	16.5	16.5	19.1
			SHC	13.0	16.8	20.5	12.7	16.5	20.2	12.4	16.1	19.9	12.0	15.8	19.5	11.6	15.4	19.1
			kW	3.5			4.2			4.8			5.6			6.5		
		22.2	THC	21.5	21.5	21.5	20.8	20.8	20.8	19.9	19.9	19.9	19.0	19.0	19.0	–	–	–
			SHC	9.2	13.0	16.8	8.9	12.7	16.5	8.6	12.4	16.2	8.3	12.1	15.9	–	–	–
			kW	3.5			4.1			4.8			5.6			–		
		24.4	THC	–	22.9	22.9	–	22.2	22.2	–	21.3	21.3	–	–	–	–	–	–
			SHC	–	9.9	13.8	–	9.7	13.5	–	9.4	13.2	–	–	–	–	–	–
			kW		3.4			4.1			4.8			–			–	
1416 L/S	EAT (wb)	14.4	THC	19.4	19.4	21.9	18.8	18.8	21.2	18.1	18.1	20.4	17.4	17.4	19.6	16.6	16.6	18.6
			SHC	16.9	19.4	21.9	16.4	18.8	21.2	15.8	18.1	20.4	15.2	17.4	19.6	14.4	16.6	18.6
			kW		3.5			4.2			4.9			5.6			6.5	
		16.7	THC	19.4	19.4	22.7	18.8	18.8	22.0	18.1	18.1	21.2	17.4	17.4	20.3	16.6	16.6	19.4
			SHC	16.1	19.4	22.7	15.6	18.8	22.0	15.1	18.1	21.2	14.4	17.4	20.3	13.7	16.6	19.4
			kW		3.5			4.2		4.8			5.6			6.5		
		19.4	THC	20.0	20.0	21.7	19.3	19.3	21.4	18.5	18.5	21.0	17.6	17.6	20.6	16.7	16.7	20.1
			SHC	13.5	17.6	21.7	13.2	17.3	21.4	12.9	17.0	21.0	12.5	16.6	20.6	12.1	16.1	20.1
			kW		3.5			4.1		4.8			5.6				6.5	
		22.2	THC	21.7	21.7	21.7	20.9	20.9	20.9	20.1	20.1	20.1	19.1	19.1	19.1	–	–	–
			SHC	9.4	13.5	17.6	9.1	13.2	17.4	8.8	12.9	17.1	8.5	12.6	16.7	–	–	–
			kW		3.5			4.1			4.8			5.6			–	
		24.4	THC	–	23.1	23.1	–	22.3	22.3	–	21.4	21.4	–	–	–	–	–	–
			SHC	–	10.2	14.4	–	9.9	14.1	–	9.6	13.8	–	–	–	–	–	–
			kW		3.4			4.1			4.8			–			–	

LEGEND:

– = Do not operate
EAT(wb) = Entering air temp (wet bulb)
SHC = Sensible heat capacity (Gross)
EAT(db) = Entering air temp (dry bulb)
L/s = Liters per second
kW = Compressor kilowatts
THC = Total heat capacity (Gross)
Cfm = Cubic feet per minute (supply air)

				Ambient Temperature														
				85.0			95.0			105.0			115.0			125.0		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0
1800 cfm	EAT (wb)	58.0	THC	58.6	58.6	66.0	56.8	56.8	64.0	54.7	54.7	61.7	52.6	52.6	59.3	49.6	49.6	55.9
			SHC	51.1	58.6	66.0	49.6	56.8	64.0	47.8	54.7	61.7	45.9	52.6	59.3	43.3	49.6	55.9
			kW		3.6			4.3			4.9			5.7			6.5	
		62.0	THC	59.7	59.7	65.4	57.5	57.5	64.2	55.2	55.2	62.8	52.8	52.8	61.2	49.9	49.9	58.4
			SHC	47.2	56.3	65.4	46.2	55.2	64.2	44.9	53.9	62.8	43.6	52.4	61.2	41.5	49.9	58.4
			kW		3.6			4.2			4.9			5.7			6.5	
		67.0	THC	64.6	64.6	64.6	62.3	62.3	62.3	59.7	59.7	59.7	57.0	57.0	57.0	54.0	54.0	54.0
			SHC	38.2	47.4	56.6	37.2	46.4	55.6	36.2	45.4	54.6	35.1	44.3	53.4	33.8	43.0	52.2
			kW		3.6			4.2			4.9			5.7			6.5	
		72.0	THC	70.3	70.3	70.3	67.9	67.9	67.9	65.3	65.3	65.3	62.3	62.3	62.3	59.1	59.1	59.1
			SHC	28.8	38.1	47.4	27.9	37.2	46.5	27.0	36.2	45.5	25.9	35.1	44.4	24.7	33.9	43.2
			kW		3.5			4.1			4.8			5.6			6.5	
		76.0	THC	–	75.1	75.1	–	72.7	72.7	–	69.9	69.9	–	66.8	66.8	–	–	–
			SHC	–	30.6	40.2	–	29.8	39.3	–	28.8	38.3	–	27.7	37.2	–	–	–
			kW		3.5			4.1			4.8			5.6			–	
2100 cfm	EAT (wb)	58.0	THC	61.1	61.1	68.8	59.2	59.2	66.7	57.1	57.1	64.3	54.8	54.8	61.8	52.3	52.3	58.9
			SHC	53.3	61.1	68.8	51.7	59.2	66.7	49.8	57.1	64.3	47.9	54.8	61.8	45.6	52.3	58.9
			kW		3.6			4.2			4.9			5.7			6.5	
		62.0	THC	61.5	61.5	70.4	59.2	59.2	69.2	57.1	57.1	66.8	54.9	54.9	64.2	52.3	52.3	61.2
			SHC	50.3	60.3	70.4	49.2	59.2	69.2	47.4	57.1	66.8	45.6	54.9	64.2	43.5	52.3	61.2
			kW		3.6			4.2			4.9			5.7			6.5	
		67.0	THC	65.8	65.8	65.8	63.4	63.4	63.4	60.9	60.9	60.9	58.0	58.0	58.2	54.9	54.9	56.9
			SHC	40.4	50.9	61.4	39.4	49.9	60.4	38.4	48.9	59.3	37.2	47.7	58.2	36.0	46.4	56.9
			kW		3.6			4.2			4.9			5.6			6.5	
		72.0	THC	71.6	71.6	71.6	69.1	69.1	69.1	66.4	66.4	66.4	63.4	63.4	63.4	60.1	60.1	60.1
			SHC	29.7	40.3	50.9	28.8	39.4	49.9	27.9	38.4	48.9	26.8	37.3	47.8	25.6	36.1	46.6
			kW		3.5			4.1			4.8			5.6			6.4	
		76.0	THC	–	76.4	76.4	–	73.9	73.9	–	71.0	71.0	–	–	–	–	–	–
			SHC	–	31.8	42.6	–	30.9	41.8	–	29.9	40.8	–	–	–	–	–	–
			kW		3.4			4.1			4.8			–			–	
2400 cfm	EAT (wb)	58.0	THC	63.1	63.1	71.1	61.1	61.1	68.9	58.9	58.9	66.4	56.6	56.6	63.8	54.0	54.0	60.9
			SHC	55.1	63.1	71.1	53.4	61.1	68.9	51.5	58.9	66.4	49.4	56.6	63.8	47.1	54.0	60.9
			kW		3.6			4.2			4.9			5.7			6.5	
		62.0	THC	63.2	63.2	73.9	61.2	61.2	71.5	59.0	59.0	68.9	56.6	56.6	66.2	54.0	54.0	63.2
			SHC	52.5	63.2	73.9	50.8	61.2	71.5	49.0	59.0	68.9	47.0	56.6	66.2	44.9	54.0	63.2
			kW		3.6			4.2			4.9			5.7			6.5	
		67.0	THC	66.8	66.8	66.8	64.4	64.4	64.9	61.8	61.8	63.8	58.9	58.9	62.5	55.7	55.7	61.1
			SHC	42.4	54.2	65.9	41.4	53.2	64.9	40.4	52.1	63.8	39.2	50.9	62.5	37.9	49.5	61.1
			kW		3.5			4.2			4.9			5.6			6.5	
		72.0	THC	72.5	72.5	72.5	70.1	70.1	70.1	67.3	67.3	67.3	64.2	64.2	64.2	60.7	60.7	60.7
			SHC	30.5	42.3	54.1	29.7	41.4	53.2	28.7	40.4	52.2	27.6	39.3	51.0	26.4	38.1	49.7
			kW		3.5		4.1			4.8				5.6			6.4	
		76.0	THC	–	77.4	77.4	–	74.8	74.8	–	71.9	71.9	–	–	–	–	–	–
			SHC	–	32.8	44.9	–	32.0	44.0	–	31.0	43.0	–	–	–	–	–	–
			kW		3.4			4.1			4.8			–			–	
2700 cfm	EAT (wb)	58.0	THC	64.8	64.8	73.0	62.7	62.7	70.7	60.5	60.5	68.2	58.0	58.0	65.4	55.4	55.4	62.4
			SHC	56.6	64.8	73.0	54.7	62.7	70.7	52.8	60.5	68.2	50.7	58.0	65.4	48.3	55.4	62.4
			kW		3.6			4.2			4.9			5.6			6.5	
		62.0	THC	64.8	64.8	75.8	62.7	62.7	73.4	60.5	60.5	70.8	58.1	58.1	67.9	55.4	55.4	64.8
			SHC	53.9	64.8	75.8	52.1	62.7	73.4	50.3	60.5	70.8	48.2	58.1	67.9	46.0	55.4	64.8
			kW		3.6			4.2			4.9			5.6			6.5	
		67.0	THC	67.6	67.6	70.1	65.1	65.1	69.0	62.5	62.5	67.9	59.6	59.6	66.6	56.4	56.4	65.1
			SHC	44.3	57.2	70.1	43.3	56.2	69.0	42.3	55.1	67.9	41.1	53.8	66.6	39.7	52.4	65.1
			kW		3.5			4.2			4.8			5.6			6.5	
		72.0	THC	73.3	73.3	73.3	70.8	70.8	70.8	67.9	67.9	67.9	64.8	64.8	64.8	–	–	–
			SHC	31.3	44.3	57.2	30.4	43.3	56.3	29.4	42.3	55.2	28.3	41.2	54.1	–	–	–
			kW		3.5			4.1			4.8			5.6			–	
		76.0	THC	–	78.2	78.2	–	75.6	75.6	–	72.6	72.6	–	–	–	–	–	–
			SHC	–	33.9	47.1	–	33.0	46.2	–	32.0	45.2	–	–	–	–	–	–
			kW		3.4			4.1			4.8			–			–	
3000 cfm	EAT (wb)	58.0	THC	66.2	66.2	74.6	64.1	64.1	72.2	61.8	61.8	69.6	59.3	59.3	66.8	56.5	56.5	63.6
			SHC	57.8	66.2	74.6	55.9	64.1	72.2	53.9	61.8	69.6	51.8	59.3	66.8	49.3	56.5	63.6
			kW		3.5			4.2			4.9			5.6			6.5	
		62.0	THC	66.2	66.2	77.4	64.1	64.1	75.0	61.8	61.8	72.3	59.3	59.3	69.4	56.5	56.5	66.1
			SHC	55.0	66.2	77.4	53.3	64.1	75.0	51.4	61.8	72.3	49.3	59.3	69.4	46.9	56.5	66.1
			kW		3.5			4.2			4.8			5.6			6.5	
		67.0	THC	68.2	68.2	74.0	65.8	65.8	72.9	63.1	63.1	71.7	60.2	60.2	70.3	57.0	57.0	68.5
			SHC	46.1	60.1	74.0	45.1	59.0	72.9	44.0	57.9	71.7	42.7	56.5	70.3	41.3	54.9	68.5
			kW		3.5			4.1			4.8			5.6			6.5	
		72.0	THC	73.9	73.9	73.9	71.3	71.3	71.3	68.5	68.5	68.5	65.3	65.3	65.3	–	–	–
			SHC	32.0	46.1	60.2	31.1	45.2	59.2	30.1	44.1	58.2	29.0	43.0	57.0	–	–	–
			kW		3.5			4.1			4.8			5.6			–	
		76.0	THC	–	78.9	78.9	–	76.2	76.2	–	73.1	73.1	–	–	–	–	–	–
			SHC	–	34.8	49.2	–	33.9	48.2	–	32.9	47.2	–	–	–	–	–	–
			kW		3.4			4.1			4.8			–			–	

LEGEND:

– = Do not operate
EAT(wb) = Entering air temp (wet bulb)
SHC = Sensible heat capacity (Gross)
EAT(db) = Entering air temp (dry bulb)
L/s = Liters per second
kW = Compressor kilowatts
THC = Total heat capacity (Gross)
Cfm = Cubic feet per minute (supply air)

PERFORMANCE DATA (cont.)

38AUZ08 - 40RUA08 **COMBINATION RATINGS** **SI**

				Ambient Temperature														
				29.4			35.0			40.6			46.1			51.7		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4
1062 L/S	EAT (wb)	14.4	THC	21.9	21.9	24.6	21.2	21.2	23.9	20.4	20.4	23.0	19.5	19.5	22.0	18.6	18.6	21.0
			SHC	19.1	21.9	24.6	18.5	21.2	23.9	17.8	20.4	23.0	17.1	19.5	22.0	16.2	18.6	21.0
			Kw		4.6			5.4			6.2			7.2			8.2	
		16.7	THC	22.5	22.5	24.3	21.6	21.6	23.9	20.7	20.7	23.3	19.6	19.6	22.7	18.6	18.6	21.7
			SHC	17.6	21.0	24.3	17.2	20.5	23.9	16.7	20.0	23.3	16.1	19.4	22.7	15.4	18.6	21.7
			kW		4.6			5.4			6.3			7.2			8.2	
		19.4	THC	24.4	24.4	24.4	23.5	23.5	23.5	22.4	22.4	22.4	21.3	21.3	21.3	20.0	20.0	20.0
			SHC	14.3	17.7	21.1	13.9	17.3	20.7	13.5	16.9	20.3	13.0	16.4	19.8	12.5	15.9	19.3
			kW		4.7			5.5			6.3			7.2			8.2	
		22.2	THC	26.5	26.5	26.5	25.5	25.5	25.5	24.4	24.4	24.4	23.2	23.2	23.2	–	–	–
			SHC	10.8	14.3	17.7	10.5	13.9	17.3	10.1	13.5	16.9	9.6	13.0	16.4	–	–	–
			kW		4.8			5.5			6.4			7.3			–	
		24.4	THC	–	28.3	28.3	–	27.3	27.3	–	26.1	26.1	–	24.8	24.8	–	–	–
			SHC	–	11.5	15.0	–	11.1	14.6	–	10.7	14.2	–	10.3	13.8	–	–	–
			kW		4.8			5.6			6.4			7.4			–	
1239 L/S	EAT (wb)	14.4	THC	22.9	22.9	25.8	22.1	22.1	24.9	21.3	21.3	24.0	20.4	20.4	22.9	19.4	19.4	21.8
			SHC	20.0	22.9	25.8	19.3	22.1	24.9	18.6	21.3	24.0	17.8	20.4	22.9	16.9	19.4	21.8
			kW		4.6			5.4			6.3			7.2			8.2	
		16.7	THC	23.1	23.1	26.4	22.2	22.2	25.9	21.3	21.3	24.9	20.4	20.4	23.9	19.4	19.4	22.7
			SHC	18.9	22.7	26.4	18.4	22.2	25.9	17.7	21.3	24.9	16.9	20.4	23.9	16.1	19.4	22.7
			kW		4.7			5.4			6.3			7.2			8.2	
		19.4	THC	24.9	24.9	24.9	23.9	23.9	23.9	22.9	22.9	22.9	21.7	21.7	21.7	20.4	20.4	21.1
			SHC	15.2	19.1	23.0	14.8	18.7	22.6	14.3	18.2	22.1	13.9	17.8	21.6	13.4	17.2	21.1
			kW		4.7			5.5			6.3			7.2			8.2	
		22.2	THC	27.1	27.1	27.1	26.0	26.0	26.0	24.9	24.9	24.9	23.6	23.6	23.6	22.2	22.2	22.2
			SHC	11.2	15.1	19.1	10.8	14.7	18.6	10.4	14.3	18.2	10.0	13.9	17.8	9.5	13.4	17.3
			kW		4.8			5.5			6.4			7.3			8.3	
		24.4	THC	–	28.9	28.9	–	27.8	27.8	–	26.6	26.6	–	–	–	–	–	–
			SHC	–	11.9	16.0	–	11.6	15.6	–	11.2	15.2						
			kW		4.8			5.6			6.5			–			–	
1416 L/S	EAT (wb)	14.4	THC	23.7	23.7	26.7	22.9	22.9	25.8	22.0	22.0	24.8	21.1	21.1	23.7	20.0	20.0	22.5
			SHC	20.7	23.7	26.7	20.0	22.9	25.8	19.2	22.0	24.8	18.4	21.1	23.7	17.5	20.0	22.5
			kW		4.7			5.4			6.3			7.2			8.2	
		16.7	THC	23.7	23.7	27.8	22.9	22.9	26.8	22.0	22.0	25.8	21.1	21.1	24.6	20.0	20.0	23.4
			SHC	19.7	23.7	27.8	19.1	22.9	26.8	18.3	22.0	25.8	17.5	21.1	24.6	16.6	20.0	23.4
			kW		4.7			5.4			6.3			7.2			8.2	
		19.4	THC	25.3	25.3	25.3	24.3	24.3	24.4	23.2	23.2	23.9	22.0	22.0	23.4	20.7	20.7	22.8
			SHC	16.0	20.4	24.8	15.6	20.0	24.4	15.2	19.5	23.9	14.7	19.0	23.4	14.1	18.5	22.8
			kW		4.7			5.5			6.3			7.3			8.3	
		22.2	THC	27.4	27.4	27.4	26.4	26.4	26.4	25.2	25.2	25.2	23.9	23.9	23.9	22.5	22.5	22.5
			SHC	11.5	15.9	20.3	11.1	15.6	20.0	10.7	15.1	19.5	10.3	14.7	19.1	9.8	14.2	18.6
			kW		4.8			5.6			6.4			7.3			8.3	
		24.4	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
1593 L/S	EAT (wb)	14.4	THC	24.4	24.4	27.5	23.5	23.5	26.5	22.6	22.6	25.5	21.6	21.6	24.4	20.5	20.5	23.1
			SHC	21.3	24.4	27.5	20.5	23.5	26.5	19.8	22.6	25.5	18.9	21.6	24.4	17.9	20.5	23.1
			kW		4.7			5.5			6.3			7.2			8.2	
		16.7	THC	24.4	24.4	28.5	23.6	23.6	27.5	22.6	22.6	26.5	21.6	21.6	25.3	20.5	20.5	24.0
			SHC	20.3	24.4	28.5	19.6	23.6	27.5	18.8	22.6	26.5	18.0	21.6	25.3	17.1	20.5	24.0
			kW		4.7			5.5			6.3			7.2			8.2	
		19.4	THC	25.6	25.6	26.5	24.6	24.6	26.0	23.5	23.5	25.5	22.2	22.2	25.0	21.0	21.0	24.4
			SHC	16.8	21.6	26.5	16.3	21.2	26.0	15.9	20.7	25.5	15.4	20.2	25.0	14.8	19.6	24.4
			kW		4.7			5.5			6.3			7.3			8.3	
		22.2	THC	27.7	27.7	27.7	26.7	26.7	26.7	25.5	25.5	25.5	24.2	24.2	24.2	–	–	–
			SHC	11.8	16.7	21.6	11.5	16.4	21.2	11.0	15.9	20.8	10.6	15.5	20.3	–	–	–
			kW		4.8			5.6			6.4			7.3			–	
		24.4	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
1770 L/S	EAT (wb)	14.4	THC	24.9	24.9	28.1	24.1	24.1	27.1	23.1	23.1	26.1	22.1	22.1	24.9	21.0	21.0	23.6
			SHC	21.8	24.9	28.1	21.0	24.1	27.1	20.2	23.1	26.1	19.3	22.1	24.9	18.3	21.0	23.6
			kW		4.7			5.5			6.3			7.3			8.3	
		16.7	THC	24.9	24.9	29.2	24.1	24.1	28.2	23.2	23.2	27.1	22.1	22.1	25.8	21.0	21.0	24.5
			SHC	20.7	24.9	29.2	20.0	24.1	28.2	19.2	23.2	27.1	18.3	22.1	25.8	17.4	21.0	24.5
			kW		4.7			5.5			6.3			7.3			8.3	
		19.4	THC	25.8	25.8	28.1	24.8	24.8	27.6	23.7	23.7	27.1	22.5	22.5	26.5	21.2	21.2	25.7
			SHC	17.5	22.8	28.1	17.1	22.3	27.6	16.6	21.8	27.1	16.1	21.2	26.5	15.4	20.6	25.7
			kW		4.7			5.5			6.3			7.3			8.3	
		22.2	THC	28.0	28.0	28.0	26.9	26.9	26.9	25.7	25.7	25.7	24.4	24.4	24.4	–	–	–
			SHC	12.1	17.5	22.9	11.8	17.1	22.5	11.3	16.7	22.0	10.9	16.2	21.6	–	–	–
			kW		4.8			5.6			6.4			7.3			–	
		24.4	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	

LEGEND:

– = Do not operate
EAT(wb) = Entering air temp (wet bulb)
SHC = Sensible heat capacity (Gross)
EAT(db) = Entering air temp (dry bulb)
L/s = Liters per second
kW = Compressor kilowatts
THC = Total heat capacity (Gross)
Cfm = Cubic feet per minute (supply air)

PERFORMANCE DATA (cont.)

38AUZ08 - 40RUA08 **COMBINATION RATINGS** **ENGLISH**

				Ambient Temperature														
				85.0			95.0			105.0			115.0			125.0		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0
2250 cfm	EAT (wb)	58.0	THC	74.7	74.7	84.1	72.2	72.2	81.4	69.6	69.6	78.4	66.6	66.6	75.1	63.4	63.4	71.5
			SHC	65.2	74.7	84.1	63.1	72.2	81.4	60.7	69.6	78.4	58.2	66.6	75.1	55.4	63.4	71.5
			kW		4.6			5.4			6.2			7.2			8.2	
		62.0	THC	76.7	76.7	83.0	73.7	73.7	81.4	70.5	70.5	79.6	67.0	67.0	77.3	63.5	63.5	74.2
			SHC	60.2	71.6	83.0	58.7	70.0	81.4	57.1	68.3	79.6	55.1	66.2	77.3	52.7	63.5	74.2
			kW		4.6			5.4			6.3			7.2			8.2	
		67.0	THC	83.3	83.3	83.3	80.1	80.1	80.1	76.5	76.5	76.5	72.6	72.6	72.6	68.4	68.4	68.4
			SHC	48.8	60.4	72.0	47.5	59.0	70.6	46.0	57.6	69.1	44.5	56.0	67.5	42.8	54.3	65.8
			kW		4.7			5.5			6.3			7.2			8.2	
		72.0	THC	90.5	90.5	90.5	87.1	87.1	87.1	83.3	83.3	83.3	79.2	79.2	79.2	–	–	–
			SHC	37.0	48.7	60.3	35.8	47.4	59.0	34.4	46.0	57.6	32.8	44.4	56.0	–	–	–
			kW		4.8		5.5			6.4				7.3			–	
		76.0	THC	–	96.5	96.5	–	93.0	93.0	–	89.1	89.1	–	84.7	84.7	–	–	–
			SHC	–	39.2	51.2	–	37.9	49.9	–	36.6	48.5	–	35.1	47.0	–	–	–
			kW		4.8		5.6			6.4				7.4			–	
2625 cfm	EAT (wb)	58.0	THC	78.1	78.1	88.0	75.5	75.5	85.1	72.7	72.7	81.9	69.5	69.5	78.3	66.1	66.1	74.5
			SHC	68.2	78.1	88.0	65.9	75.5	85.1	63.4	72.7	81.9	60.7	69.5	78.3	57.7	66.1	74.5
			kW		4.6		5.4			6.3				7.2			8.2	
		62.0	THC	78.8	78.8	90.1	75.7	75.7	88.5	72.7	72.7	85.0	69.6	69.6	81.4	66.2	66.2	77.4
			SHC	64.4	77.3	90.1	62.9	75.7	88.5	60.4	72.7	85.0	57.8	69.6	81.4	54.9	66.2	77.4
			kW		4.7		5.4			6.3				7.2			8.2	
		67.0	THC	85.1	85.1	85.1	81.7	81.7	81.7	78.0	78.0	78.0	74.0	74.0	74.0	69.7	69.7	72.0
			SHC	51.8	65.1	78.4	50.4	63.7	77.0	48.9	62.2	75.5	47.3	60.6	73.8	45.6	58.8	72.0
			kW		4.7			5.5			6.3			7.2			8.2	
		72.0	THC	92.3	92.3	92.3	88.7	88.7	88.7	84.9	84.9	84.9	80.6	80.6	80.6	75.9	75.9	75.9
			SHC	38.2	51.6	65.0	36.9	50.3	63.6	35.5	48.9	62.2	34.0	47.3	60.6	32.4	45.6	58.9
			kW		4.8			5.5			6.4			7.3			8.3	
		76.0	THC	–	98.5	98.5	–	94.7	94.7	–	90.7	90.7	–	–	–	–	–	–
			SHC	–	40.7	54.5	–	39.5	53.1	–	38.1	51.7	–	–	–	–	–	–
			kW		4.8			5.6			6.5			–			–	
3000 cfm	EAT (wb)	58.0	THC	80.9	80.9	91.2	78.2	78.2	88.1	75.2	75.2	84.7	71.9	71.9	81.0	68.3	68.3	76.9
			SHC	70.6	80.9	91.2	68.2	78.2	88.1	65.6	75.2	84.7	62.8	71.9	81.0	59.6	68.3	76.9
			kW		4.7			5.4			6.3			7.2			8.2	
		62.0	THC	81.0	81.0	94.7	78.3	78.3	91.6	75.2	75.2	88.0	71.9	71.9	84.1	68.3	68.3	79.9
			SHC	67.3	81.0	94.7	65.0	78.3	91.6	62.5	75.2	88.0	59.7	71.9	84.1	56.8	68.3	79.9
			kW		4.7			5.4			6.3			7.2			8.2	
		67.0	THC	86.3	86.3	86.3	82.9	82.9	83.1	79.2	79.2	81.5	75.1	75.1	79.7	70.7	70.7	77.8
			SHC	54.5	69.5	84.5	53.2	68.1	83.1	51.7	66.6	81.5	50.0	64.9	79.7	48.2	63.0	77.8
			kW		4.7			5.5			6.3			7.3			8.3	
		72.0	THC	93.6	93.6	93.6	90.0	90.0	90.0	86.0	86.0	86.0	81.6	81.6	81.6	76.9	76.9	76.9
			SHC	39.3	54.4	69.4	38.0	53.1	68.1	36.6	51.6	66.7	35.1	50.1	65.1	33.4	48.4	63.4
			kW		4.8			5.6			6.4			7.3			8.3	
		76.0	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–		–				–			–	
3375 cfm	EAT (wb)	58.0	THC	83.1	83.1	93.7	80.3	80.3	90.5	77.2	77.2	87.0	73.8	73.8	83.1	70.0	70.0	78.9
			SHC	72.6	83.1	93.7	70.1	80.3	90.5	67.4	77.2	87.0	64.4	73.8	83.1	61.1	70.0	78.9
			kW		4.7			5.5			6.3			7.2			8.2	
		62.0	THC	83.2	83.2	97.3	80.4	80.4	94.0	77.2	77.2	90.3	73.8	73.8	86.3	70.1	70.1	81.9
			SHC	69.1	83.2	97.3	66.8	80.4	94.0	64.2	77.2	90.3	61.3	73.8	86.3	58.2	70.1	81.9
			kW		4.7			5.5			6.3			7.2			8.2	
		67.0	THC	87.4	87.4	90.3	83.9	83.9	88.8	80.1	80.1	87.1	75.9	75.9	85.3	71.5	71.5	83.1
			SHC	57.2	73.7	90.3	55.7	72.3	88.8	54.2	70.7	87.1	52.5	68.9	85.3	50.6	66.9	83.1
			kW		4.7			5.5			6.3			7.3			8.3	
		72.0	THC	94.6	94.6	94.6	91.0	91.0	91.0	86.9	86.9	86.9	82.5	82.5	82.5	–	–	–
			SHC	40.4	57.1	73.8	39.1	55.8	72.4	37.7	54.3	71.0	36.1	52.8	69.4	–	–	–
			kW		4.8			5.6			6.4			7.3			–	
		76.0	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
3750 cfm	EAT (wb)	58.0	THC	85.1	85.1	95.8	82.1	82.1	92.5	78.9	78.9	88.9	75.4	75.4	84.9	71.5	71.5	80.6
			SHC	74.3	85.1	95.8	71.7	82.1	92.5	68.9	78.9	88.9	65.8	75.4	84.9	62.4	71.5	80.6
			kW		4.7			5.5			6.3			7.3			8.3	
		62.0	THC	85.1	85.1	99.5	82.2	82.2	96.1	79.0	79.0	92.3	75.4	75.4	88.2	71.5	71.5	83.6
			SHC	70.7	85.1	99.5	68.3	82.2	96.1	65.6	79.0	92.3	62.6	75.4	88.2	59.4	71.5	83.6
			kW		4.7			5.5			6.3			7.3			8.3	
		67.0	THC	88.2	88.2	95.8	84.7	84.7	94.2	80.9	80.9	92.4	76.7	76.7	90.3	72.2	72.2	87.8
			SHC	59.6	77.7	95.8	58.2	76.2	94.2	56.6	74.5	92.4	54.8	72.5	90.3	52.7	70.3	87.8
			kW		4.7			5.5			6.3			7.3			8.3	
		72.0	THC	95.5	95.5	95.5	91.7	91.7	91.7	87.6	87.6	87.6	83.1	83.1	83.1	–	–	–
			SHC	41.4	59.7	78.0	40.1	58.4	76.6	38.7	56.9	75.2	37.1	55.3	73.6	–	–	–
			kW		4.8			5.6			6.4			7.3			–	
		76.0	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	

LEGEND:

– = Do not operate
EAT(wb) = Entering air temp (wet bulb)
SHC = Sensible heat capacity (Gross)
EAT(db) = Entering air temp (dry bulb)
L/s = Liters per second
kW = Compressor kilowatts
THC = Total heat capacity (Gross)
Cfm = Cubic feet per minute (supply air)

PERFORMANCE DATA (cont.)

38AUD12 - 40RUA12 COMBINATION RATINGS SI

				Ambient Temperature														
				29.4			35.0			40.6			46.1			51.7		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4
1416 L/S	EAT (wb)	14.4	THC	28.2	28.2	31.8	27.2	27.2	30.7	26.1	26.1	29.4	24.9	24.9	28.1	23.5	23.5	26.5
			SHC	24.6	28.2	31.8	23.8	27.2	30.7	22.8	26.1	29.4	21.7	24.9	28.1	20.5	23.5	26.5
			kW		5.9			6.8			7.9			9.0			10.2	
		16.7	THC	28.7	28.7	31.9	27.5	27.5	31.2	26.2	26.2	30.4	24.9	24.9	29.2	23.6	23.6	27.5
			SHC	22.9	27.4	31.9	22.3	26.8	31.2	21.7	26.1	30.4	20.7	24.9	29.2	19.6	23.6	27.5
			kW		5.9			6.8			7.9			9.0			10.2	
		19.4	THC	31.2	31.2	31.2	29.9	29.9	29.9	28.5	28.5	28.5	26.9	26.9	26.9	25.1	25.1	25.1
			SHC	18.6	23.1	27.6	18.0	22.5	27.1	17.4	22.0	26.5	16.8	21.3	25.8	16.1	20.6	25.1
			kW		6.0			6.9			7.9			9.0			10.2	
		22.2	THC	33.8	33.8	33.8	32.5	32.5	32.5	31.0	31.0	31.0	29.3	29.3	29.3	–	–	–
			SHC	13.9	18.5	23.0	13.4	18.0	22.5	12.9	17.4	22.0	12.3	16.8	21.4	–	–	–
			kW		6.0		7.0				8.0			9.1			10.3	
		24.4	THC	–	36.1	36.1	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	14.7	19.3	–	–	–	–	–	–	–	–	–	–	–	–
			kW		6.1			–			–			–			–	
1652 L/S	EAT (wb)	14.4	THC	29.5	29.5	33.2	28.4	28.4	32.0	27.3	27.3	30.7	26.0	26.0	29.3	24.6	24.6	27.7
			SHC	25.7	29.5	33.2	24.8	28.4	32.0	23.8	27.3	30.7	22.7	26.0	29.3	21.4	24.6	27.7
			kW		5.9			6.9			7.9			9.0			10.2	
		16.7	THC	29.6	29.6	34.3	28.5	28.5	33.3	27.3	27.3	31.9	26.0	26.0	30.4	24.6	24.6	28.7
			SHC	24.4	29.3	34.3	23.6	28.5	33.3	22.7	27.3	31.9	21.6	26.0	30.4	20.4	24.6	28.7
			kW		5.9			6.9			7.9			9.0			10.2	
		19.4	THC	31.8	31.8	31.8	30.5	30.5	30.5	29.0	29.0	29.0	27.4	27.4	28.3	25.6	25.6	27.5
			SHC	19.7	24.9	30.1	19.1	24.4	29.6	18.6	23.8	29.0	17.9	23.1	28.3	17.2	22.4	27.5
			kW		6.0			6.9			7.9			9.1			10.2	
		22.2	THC	34.5	34.5	34.5	33.1	33.1	33.1	31.5	31.5	31.5	29.8	29.8	29.8	28.0	28.0	28.0
			SHC	14.4	19.6	24.9	13.9	19.1	24.4	13.3	18.6	23.8	12.7	17.9	23.2	12.0	17.3	22.5
			kW		6.1			7.0			8.0			9.1			10.3	
		24.4	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
1888 L/S	EAT (wb)	14.4	THC	30.5	30.5	34.3	29.4	29.4	33.1	28.2	28.2	31.7	26.8	26.8	30.2	25.3	25.3	28.5
			SHC	26.6	30.5	34.3	25.7	29.4	33.1	24.6	28.2	31.7	23.4	26.8	30.2	22.1	25.3	28.5
			kW		5.9			6.9			7.9			9.0			10.2	
		16.7	THC	30.5	30.5	35.7	29.4	29.4	34.4	28.2	28.2	33.0	26.8	26.8	31.4	25.4	25.4	29.7
			SHC	25.4	30.5	35.7	24.4	29.4	34.4	23.4	28.2	33.0	22.3	26.8	31.4	21.1	25.4	29.7
			kW		5.9			6.9			7.9			9.0			10.2	
		19.4	THC	32.3	32.3	32.5	30.9	30.9	31.9	29.4	29.4	31.3	27.8	27.8	30.6	26.0	26.0	29.8
			SHC	20.8	26.6	32.5	20.2	26.1	31.9	19.6	25.5	31.3	19.0	24.8	30.6	18.2	24.0	29.8
			kW		6.0			6.9			8.0			9.1			10.2	
		22.2	THC	34.9	34.9	34.9	33.5	33.5	33.5	31.9	31.9	31.9	30.2	30.2	30.2	–	–	–
			SHC	14.8	20.7	26.6	14.3	20.2	26.1	13.7	19.6	25.6	13.2	19.1	24.9	–	–	–
			kW		6.1			7.0			8.0			9.1			–	
		24.4	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
2124 L/S	EAT (wb)	14.4	THC	31.3	31.3	35.3	30.2	30.2	34.0	28.9	28.9	32.6	27.5	27.5	31.0	26.0	26.0	29.3
			SHC	27.3	31.3	35.3	26.3	30.2	34.0	25.3	28.9	32.6	24.0	27.5	31.0	22.7	26.0	29.3
			kW		6.0			6.9			7.9			9.1			10.2	
		16.7	THC	31.4	31.4	36.7	30.2	30.2	35.3	29.0	29.0	33.9	27.5	27.5	32.2	26.0	26.0	30.4
			SHC	26.1	31.4	36.7	25.1	30.2	35.3	24.0	29.0	33.9	22.9	27.5	32.2	21.6	26.0	30.4
			kW		6.0			6.9			7.9			9.1			10.2	
		19.4	THC	32.6	32.6	34.8	31.2	31.2	34.2	29.7	29.7	33.5	28.1	28.1	32.7	26.3	26.3	31.7
			SHC	21.8	28.3	34.8	21.2	27.7	34.2	20.6	27.1	33.5	19.9	26.3	32.7	19.1	25.4	31.7
			kW		6.0			6.9			8.0			9.1			10.2	
		22.2	THC	35.3	35.3	35.3	33.8	33.8	33.8	32.2	32.2	32.2	–	–	–	–	–	–
			SHC	15.2	21.8	28.3	14.7	21.2	27.8	14.2	20.7	27.3	–	–	–	–	–	–
			kW		6.1			7.0			8.0			–			–	
		24.4	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
2360 L/S	EAT (wb)	14.4	THC	32.0	32.0	36.1	30.9	30.9	34.8	29.5	29.5	33.3	28.1	28.1	31.7	26.5	26.5	29.9
			SHC	28.0	32.0	36.1	26.9	30.9	34.8	25.8	29.5	33.3	24.6	28.1	31.7	23.2	26.5	29.9
			kW		6.0			6.9			8.0			9.1			10.2	
		16.7	THC	32.0	32.0	37.5	30.9	30.9	36.1	29.6	29.6	34.6	28.1	28.1	32.9	26.6	26.6	31.0
			SHC	26.6	32.0	37.5	25.6	30.9	36.1	24.6	29.6	34.6	23.4	28.1	32.9	22.0	26.6	31.0
			kW		6.0			6.9			8.0			9.1			10.2	
		19.4	THC	32.9	32.9	36.9	31.6	31.6	36.2	30.0	30.0	35.5	28.4	28.4	34.5	26.6	26.6	33.3
			SHC	22.7	29.8	36.9	22.2	29.2	36.2	21.5	28.5	35.5	20.8	27.6	34.5	19.8	26.6	33.3
			kW		6.0			7.0			8.0			9.1			10.2	
		22.2	THC	35.6	35.6	35.6	34.1	34.1	34.1	–	–	–	–	–	–	–	–	–
			SHC	15.6	22.8	30.0	15.1	22.3	29.5	–	–	–	–	–	–	–	–	–
			kW		6.1			7.0			–			–			–	
		24.4	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	

LEGEND:

– = Do not operate
EAT(wb) = Entering air temp (wet bulb)
SHC = Sensible heat capacity (Gross)
EAT(db) = Entering air temp (dry bulb)
L/s = Liters per second
kW = Compressor kilowatts
THC = Total heat capacity (Gross)
Cfm = Cubic feet per minute (supply air)

PERFORMANCE DATA (cont.)

38AUD12 - 40RUA12 **COMBINATION RATINGS** **ENGLISH**

				Ambient Temperature														
				85.0			95.0			105.0			115.0			125.0		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0
3000 cfm	EAT (wb)	58.0	THC	96.3	96.3	108.5	92.9	92.9	104.6	89.1	89.1	100.4	85.0	85.0	95.8	80.3	80.3	90.5
			SHC	84.1	96.3	108.5	81.1	92.9	104.6	77.8	89.1	100.4	74.2	85.0	95.8	70.1	80.3	90.5
			kW		5.9			6.8			7.9			9.0			10.2	
		62.0	THC	98.0	98.0	108.7	94.0	94.0	106.4	89.5	89.5	103.8	85.1	85.1	99.5	80.4	80.4	94.0
			SHC	78.3	93.5	108.7	76.2	91.3	106.4	73.9	88.9	103.8	70.7	85.1	99.5	66.8	80.4	94.0
			kW		5.9		6.8			7.9			9.0				10.2	
		67.0	THC	106.4	106.4	106.4	102.0	102.0	102.0	97.1	97.1	97.1	91.7	91.7	91.7	85.8	85.8	85.8
			SHC	63.3	78.7	94.2	61.5	76.9	92.4	59.5	74.9	90.4	57.3	72.8	88.2	54.9	70.3	85.8
			kW		6.0		6.9			7.9			9.0				10.2	
		72.0	THC	115.4	115.4	115.4	110.8	110.8	110.8	105.8	105.8	105.8	100.1	100.1	100.1	93.8	93.8	93.8
			SHC	47.4	63.0	78.6	45.7	61.3	76.8	43.9	59.4	75.0	41.8	57.4	72.9	39.6	55.1	70.6
			kW		6.0			7.0			8.0			9.1			10.3	
		76.0	THC	–	123.2	123.2	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	50.2	66.0	–	–	–	–	–	–	–	–	–	–	–	–
			kW		6.1			–			–			–			–	
3500 cfm	EAT (wb)	58.0	THC	100.6	100.6	113.4	97.0	97.0	109.3	93.0	93.0	104.8	88.6	88.6	99.9	83.8	83.8	94.4
			SHC	87.8	100.6	113.4	84.7	97.0	109.3	81.2	93.0	104.8	77.4	88.6	99.9	73.1	83.8	94.4
			kW		5.9			6.9			7.9			9.0			10.2	
		62.0	THC	100.9	100.9	117.0	97.1	97.1	113.5	93.1	93.1	108.9	88.7	88.7	103.7	83.8	83.8	98.0
			SHC	83.2	100.1	117.0	80.6	97.1	113.5	77.3	93.1	108.9	73.7	88.7	103.7	69.6	83.8	98.0
			kW		5.9			6.9			7.9			9.0			10.2	
		67.0	THC	108.5	108.5	108.5	104.0	104.0	104.0	98.9	98.9	98.9	93.4	93.4	96.5	87.3	87.3	94.0
			SHC	67.2	85.0	102.8	65.3	83.1	100.9	63.3	81.1	98.8	61.1	78.8	96.5	58.7	76.3	94.0
			kW		6.0			6.9			7.9			9.1			10.2	
		72.0	THC	117.6	117.6	117.6	112.8	112.8	112.8	107.6	107.6	107.6	101.8	101.8	101.8	95.4	95.4	95.4
			SHC	49.0	66.9	84.8	47.3	65.2	83.1	45.4	63.3	81.2	43.4	61.2	79.1	41.1	59.0	76.8
			kW		6.1			7.0			8.0			9.1			10.3	
		76.0	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
4000 cfm	EAT (wb)	58.0	THC	104.0	104.0	117.2	100.3	100.3	113.0	96.1	96.1	108.3	91.5	91.5	103.1	86.4	86.4	97.4
			SHC	90.8	104.0	117.2	87.6	100.3	113.0	83.9	96.1	108.3	79.9	91.5	103.1	75.5	86.4	97.4
			kW		5.9			6.9			7.9			9.0			10.2	
		62.0	THC	104.1	104.1	121.8	100.4	100.4	117.4	96.2	96.2	112.5	91.6	91.6	107.1	86.5	86.5	101.2
			SHC	86.5	104.1	121.8	83.4	100.4	117.4	79.9	96.2	112.5	76.1	91.6	107.1	71.9	86.5	101.2
			kW		5.9			6.9			7.9			9.0			10.2	
		67.0	THC	110.1	110.1	110.9	105.5	105.5	109.0	100.3	100.3	106.8	94.7	94.7	104.4	88.6	88.6	101.6
			SHC	70.8	90.9	110.9	69.0	89.0	109.0	66.9	86.9	106.8	64.7	84.5	104.4	62.1	81.9	101.6
			kW		6.0			6.9			8.0			9.1			10.2	
		72.0	THC	119.2	119.2	119.2	114.3	114.3	114.3	109.0	109.0	109.0	103.1	103.1	103.1	–	–	–
			SHC	50.5	70.7	90.8	48.8	68.9	89.1	46.9	67.0	87.2	44.9	65.0	85.1	–	–	–
			kW		6.1			7.0			8.0			9.1			–	
		76.0	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
4500 cfm	EAT (wb)	58.0	THC	106.9	106.9	120.5	103.0	103.0	116.0	98.7	98.7	111.2	93.9	93.9	105.8	88.6	88.6	99.9
			SHC	93.3	106.9	120.5	89.9	103.0	116.0	86.2	98.7	111.2	82.0	93.9	105.8	77.4	88.6	99.9
			kW		6.0			6.9			7.9			9.1			10.2	
		62.0	THC	107.0	107.0	125.1	103.1	103.1	120.5	98.8	98.8	115.5	94.0	94.0	109.9	88.7	88.7	103.7
			SHC	88.9	107.0	125.1	85.6	103.1	120.5	82.0	98.8	115.5	78.1	94.0	109.9	73.7	88.7	103.7
			kW		6.0			6.9			7.9			9.1			10.2	
		67.0	THC	111.3	111.3	118.6	106.6	106.6	116.6	101.5	101.5	114.3	95.8	95.8	111.6	89.6	89.6	108.3
			SHC	74.3	96.5	118.6	72.4	94.5	116.6	70.3	92.3	114.3	67.9	89.7	111.6	65.2	86.7	108.3
			kW		6.0			6.9			8.0			9.1			10.2	
		72.0	THC	120.5	120.5	120.5	115.4	115.4	115.4	110.0	110.0	110.0	–	–	–	–	–	–
			SHC	51.9	74.3	96.7	50.2	72.5	94.9	48.3	70.7	93.0	–	–	–	–	–	–
			kW		6.1			7.0			8.0			–			–	
		76.0	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
5000 cfm	EAT (wb)	58.0	THC	109.3	109.3	123.1	105.3	105.3	118.6	100.8	100.8	113.6	95.9	95.9	108.1	90.5	90.5	102.0
			SHC	95.4	109.3	123.1	91.9	105.3	118.6	88.0	100.8	113.6	83.8	95.9	108.1	79.0	90.5	102.0
			kW		6.0			6.9			8.0			9.1			10.2	
		62.0	THC	109.3	109.3	127.8	105.3	105.3	123.2	100.9	100.9	118.0	96.0	96.0	112.2	90.6	90.6	105.9
			SHC	90.8	109.3	127.8	87.5	105.3	123.2	83.8	100.9	118.0	79.7	96.0	112.2	75.2	90.6	105.9
			kW		6.0			6.9			8.0			9.1			10.2	
		67.0	THC	112.4	112.4	125.8	107.7	107.7	123.6	102.5	102.5	121.0	96.8	96.8	117.8	90.7	90.7	113.7
			SHC	77.6	101.7	125.8	75.6	99.6	123.6	73.4	97.2	121.0	70.8	94.3	117.8	67.7	90.7	113.7
			kW		6.0			7.0			8.0			9.1			10.2	
		72.0	THC	121.5	121.5	121.5	116.4	116.4	116.4	–	–	–	–	–	–	–	–	–
			SHC	53.3	77.9	102.4	51.5	76.1	100.6	–	–	–	–	–	–	–	–	–
			kW		6.1			7.0			–			–			–	
		76.0	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	

LEGEND:

– = Do not operate
EAT(wb) = Entering air temp (wet bulb)
SHC = Sensible heat capacity (Gross)
EAT(db) = Entering air temp (dry bulb)
L/s = Liters per second
kW = Compressor kilowatts
THC = Total heat capacity (Gross)
Cfm = Cubic feet per minute (supply air)

PERFORMANCE DATA (cont.)

38AUD14 - 40RUA14 COMBINATION RATINGS SI

				Ambient Temperature														
				29.4			35.0			40.6			46.1			51.7		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4
1699 L/S	EAT (wb)	14.4	THC	34.2	34.2	38.5	33.0	33.0	37.2	31.7	31.7	35.7	30.2	30.2	34.0	28.5	28.5	32.1
			SHC	29.8	34.2	38.5	28.8	33.0	37.2	27.6	31.7	35.7	26.3	30.2	34.0	24.9	28.5	32.1
			kW		8.1			9.2			10.4			11.6			12.9	
		16.7	THC	34.8	34.8	38.3	33.4	33.4	37.5	31.9	31.9	36.6	30.2	30.2	35.3	28.5	28.5	33.3
			SHC	27.6	33.0	38.3	26.9	32.2	37.5	26.1	31.4	36.6	25.1	30.2	35.3	23.7	28.5	33.3
			kW		8.1			9.2			10.4			11.6			12.9	
		19.4	THC	37.5	37.5	37.5	36.0	36.0	36.0	34.3	34.3	34.3	32.4	32.4	32.4	30.3	30.3	30.3
			SHC	22.2	27.7	33.1	21.6	27.0	32.4	20.9	26.3	31.7	20.2	25.6	31.0	19.3	24.7	30.1
			kW		8.3			9.4			10.6			11.8			13.1	
		22.2	THC	40.7	40.7	40.7	38.8	38.8	38.8	37.0	37.0	37.0	35.1	35.1	35.1	32.9	32.9	32.9
			SHC	16.7	22.2	27.6	16.0	21.5	26.9	15.4	20.8	26.2	14.7	20.1	25.5	13.9	19.3	24.7
			kW		8.5			9.6			10.7			12.0			13.3	
		24.4	THC	–	43.6	43.6	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	17.7	23.3	–	–	–	–	–	–	–	–	–	–	–	–
			kW		8.7			–			–			–			–	
1982 L/S	EAT (wb)	14.4	THC	35.6	35.6	40.1	34.3	34.3	38.7	32.9	32.9	37.1	31.4	31.4	35.3	29.6	29.6	33.3
			SHC	31.1	35.6	40.1	30.0	34.3	38.7	28.8	32.9	37.1	27.4	31.4	35.3	25.8	29.6	33.3
			kW		8.2			9.3			10.5			11.7			13.0	
		16.7	THC	35.7	35.7	41.6	34.4	34.4	40.2	33.0	33.0	38.5	31.4	31.4	36.7	29.6	29.6	34.6
			SHC	29.5	35.6	41.6	28.5	34.4	40.2	27.4	33.0	38.5	26.1	31.4	36.7	24.6	29.6	34.6
			kW		8.2			9.3			10.5			11.7			13.0	
		19.4	THC	38.2	38.2	38.2	36.6	36.6	36.6	34.9	34.9	34.9	33.0	33.0	33.9	30.8	30.8	33.0
			SHC	23.6	29.8	36.1	22.9	29.2	35.4	22.3	28.5	34.7	21.5	27.7	33.9	20.6	26.8	33.0
			kW		8.4			9.4			10.6			11.8			13.1	
		22.2	THC	41.5	41.5	41.5	39.5	39.5	39.5	37.6	37.6	37.6	35.6	35.6	35.6	33.3	33.3	33.3
			SHC	17.3	23.5	29.8	16.6	22.8	29.1	15.9	22.2	28.4	15.2	21.4	27.7	14.4	20.6	26.9
			kW		8.6			9.6			10.8			12.0			13.3	
		24.4	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
2265 L/S	EAT (wb)	14.4	THC	36.7	36.7	41.4	35.4	35.4	39.9	33.9	33.9	38.2	32.3	32.3	36.4	30.5	30.5	34.3
			SHC	32.1	36.7	41.4	30.9	35.4	39.9	29.6	33.9	38.2	28.2	32.3	36.4	26.6	30.5	34.3
			kW		8.3			9.4			10.5			11.8			13.1	
		16.7	THC	36.8	36.8	43.0	35.4	35.4	41.4	34.0	34.0	39.7	32.3	32.3	37.8	30.5	30.5	35.6
			SHC	30.5	36.8	43.0	29.4	35.4	41.4	28.2	34.0	39.7	26.8	32.3	37.8	25.3	30.5	35.6
			kW		8.3			9.4			10.5			11.8			13.1	
		19.4	THC	38.7	38.7	39.0	37.1	37.1	38.2	35.3	35.3	37.5	33.4	33.4	36.7	31.2	31.2	35.7
			SHC	24.9	31.9	39.0	24.2	31.2	38.2	23.5	30.5	37.5	22.7	29.7	36.7	21.8	28.8	35.7
			kW		8.4			9.5			10.6			11.9			13.1	
		22.2	THC	42.1	42.1	42.1	39.9	39.9	39.9	38.0	38.0	38.0	36.0	36.0	36.0	–	–	–
			SHC	17.8	24.9	32.0	17.1	24.1	31.2	16.4	23.4	30.5	15.7	22.7	29.8	–	–	–
			kW															
		24.4	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
2549 L/S	EAT (wb)	14.4	THC	37.7	37.7	42.4	36.3	36.3	40.9	34.8	34.8	39.2	33.1	33.1	37.3	31.2	31.2	35.1
			SHC	32.9	37.7	42.4	31.7	36.3	40.9	30.4	34.8	39.2	28.9	33.1	37.3	27.2	31.2	35.1
			kW		8.3			9.4			10.6			11.9			13.1	
		16.7	THC	37.7	37.7	44.1	36.3	36.3	42.4	34.8	34.8	40.7	33.1	33.1	38.7	31.2	31.2	36.5
			SHC	31.3	37.7	44.1	30.2	36.3	42.4	28.9	34.8	40.7	27.5	33.1	38.7	25.9	31.2	36.5
			kW		8.3			9.4			10.6			11.9			13.1	
		19.4	THC	39.2	39.2	41.6	37.5	37.5	40.9	35.7	35.7	40.1	33.7	33.7	39.2	31.5	31.5	38.0
			SHC	26.1	33.9	41.6	25.4	33.1	40.9	24.7	32.4	40.1	23.9	31.5	39.2	22.9	30.5	38.0
			kW		8.4			9.5			10.7			11.9			13.2	
		22.2	THC	42.6	42.6	42.6	40.3	40.3	40.3	38.4	38.4	38.4	–	–	–	–	–	–
			SHC	18.3	26.2	34.0	17.5	25.4	33.2	16.9	24.7	32.6	–	–	–	–	–	–
			kW		8.7			9.7		10.8				–			–	
		24.4	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
2832 L/S	EAT (wb)	14.4	THC	38.5	38.5	43.3	37.0	37.0	41.7	35.5	35.5	40.0	33.7	33.7	38.0	31.8	31.8	35.8
			SHC	33.6	38.5	43.3	32.3	37.0	41.7	31.0	35.5	40.0	29.5	33.7	38.0	27.8	31.8	35.8
			kW		8.4			9.5			10.7			11.9			13.2	
		16.7	THC	38.5	38.5	45.0	37.0	37.0	43.3	35.5	35.5	41.5	33.8	33.8	39.5	31.8	31.8	37.2
			SHC	32.0	38.5	45.0	30.8	37.0	43.3	29.5	35.5	41.5	28.0	33.8	39.5	26.4	31.8	37.2
			kW	8.4			9.5			10.7			11.9			13.2		
		19.4	THC	39.6	39.6	44.2	37.8	37.8	43.4	36.0	36.0	42.5	34.0	34.0	41.4	31.8	31.8	39.9
			SHC	27.3	35.7	44.2	26.5	35.0	43.4	25.8	34.1	42.5	24.9	33.1	41.4	23.8	31.8	39.9
			kW		8.5			9.5			10.7			11.9			13.2	
		22.2	THC	43.0	43.0	43.0	40.7	40.7	40.7	–	–	–	–	–	–	–	–	–
			SHC	18.8	27.4	36.0	18.0	26.6	35.3	–	–	–	–	–	–	–	–	–
			kW	8.7			9.7			–			–			–		
		24.4	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	

LEGEND:

– = Do not operate
EAT(wb) = Entering air temp (wet bulb)
SHC = Sensible heat capacity (Gross)
EAT(db) = Entering air temp (dry bulb)
L/s = Liters per second
kW = Compressor kilowatts
THC = Total heat capacity (Gross)
Cfm = Cubic feet per minute (supply air)

PERFORMANCE DATA (cont.)

38AUD14 - 40RUA14 **COMBINATION RATINGS** **ENGLISH**

				Ambient Temperature														
				85.0			95.0			105.0			115.0			125.0		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0
3600 cfm	EAT (wb)	58.0	THC	116.6	116.6	131.3	112.5	112.5	126.8	108.0	108.0	121.7	102.9	102.9	115.9	97.1	97.1	109.4
			SHC	101.8	116.6	131.3	98.2	112.5	126.8	94.3	108.0	121.7	89.8	102.9	115.9	84.8	97.1	109.4
			kW		8.1			9.2			10.4			11.6			12.9	
		62.0	THC	118.8	118.8	130.6	114.0	114.0	128.0	108.7	108.7	124.9	103.0	103.0	120.4	97.2	97.2	113.7
			SHC	94.3	112.5	130.6	91.9	110.0	128.0	89.1	107.0	124.9	85.5	103.0	120.4	80.7	97.2	113.7
			kW		8.1			9.2			10.4			11.6			12.9	
		67.0	THC	128.0	128.0	128.0	122.8	122.8	122.8	117.1	117.1	117.1	110.6	110.6	110.6	103.4	103.4	103.4
			SHC	75.9	94.4	112.8	73.8	92.2	110.7	71.4	89.9	108.3	68.9	87.3	105.7	66.0	84.4	102.8
			kW		8.3			9.4			10.6			11.8			13.1	
		72.0	THC	138.8	138.8	138.8	132.5	132.5	132.5	126.4	126.4	126.4	119.7	119.7	119.7	112.1	112.1	112.1
			SHC	57.0	75.6	94.1	54.6	73.2	91.8	52.4	71.0	89.5	50.0	68.5	87.1	47.3	65.8	84.3
			kW		8.5			9.6			10.7			12.0			13.3	
		76.0	THC	–	148.6	148.6	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	60.5	79.4	–	–	–	–	–	–	–	–	–	–	–	–
			kW		8.7			–			–			–			–	
4200 cfm	EAT (wb)	58.0	THC	121.4	121.4	136.8	117.1	117.1	131.9	112.3	112.3	126.6	107.0	107.0	120.6	100.9	100.9	113.7
			SHC	106.0	121.4	136.8	102.2	117.1	131.9	98.1	112.3	126.6	93.4	107.0	120.6	88.1	100.9	113.7
			kW		8.2			9.3			10.5			11.7			13.0	
		62.0	THC	121.8	121.8	141.8	117.3	117.3	137.1	112.5	112.5	131.5	107.1	107.1	125.2	101.0	101.0	118.1
			SHC	100.8	121.3	141.8	97.4	117.3	137.1	93.4	112.5	131.5	88.9	107.1	125.2	83.9	101.0	118.1
			kW		8.2			9.3			10.5			11.7			13.0	
		67.0	THC	130.4	130.4	130.4	124.9	124.9	124.9	119.1	119.1	119.1	112.5	112.5	115.8	105.0	105.0	112.6
			SHC	80.5	101.8	123.1	78.3	99.6	120.8	76.0	97.2	118.5	73.4	94.6	115.8	70.4	91.5	112.6
			kW		8.4			9.4			10.6			11.8			13.1	
		72.0	THC	141.6	141.6	141.6	134.7	134.7	134.7	128.4	128.4	128.4	121.5	121.5	121.5	113.7	113.7	113.7
			SHC	59.0	80.3	101.7	56.5	77.8	99.2	54.2	75.6	97.0	51.8	73.1	94.5	49.0	70.4	91.7
			kW		8.6			9.6			10.8			12.0			13.3	
		76.0	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
4800 cfm	EAT (wb)	58.0	THC	125.3	125.3	141.2	120.8	120.8	136.1	115.8	115.8	130.5	110.2	110.2	124.2	103.9	103.9	117.1
			SHC	109.4	125.3	141.2	105.4	120.8	136.1	101.1	115.8	130.5	96.3	110.2	124.2	90.7	103.9	117.1
			kW		8.3			9.4			10.5			11.8			13.1	
		62.0	THC	125.5	125.5	146.7	120.9	120.9	141.3	115.9	115.9	135.6	110.3	110.3	129.0	104.0	104.0	121.6
			SHC	104.2	125.4	146.7	100.4	120.9	141.3	96.3	115.9	135.6	91.6	110.3	129.0	86.4	104.0	121.6
			kW		8.3			9.4			10.5			11.8			13.1	
		67.0	THC	132.2	132.2	132.9	126.5	126.5	130.5	120.6	120.6	128.0	113.9	113.9	125.1	106.4	106.4	121.7
			SHC	84.9	108.9	132.9	82.6	106.6	130.5	80.2	104.1	128.0	77.5	101.3	125.1	74.5	98.1	121.7
			kW		8.4			9.5			10.6			11.9			13.1	
		72.0	THC	143.8	143.8	143.8	136.3	136.3	136.3	129.8	129.8	129.8	122.8	122.8	122.8	–	–	–
			SHC	60.8	84.9	109.1	58.2	82.3	106.4	55.9	80.0	104.1	53.5	77.6	101.7	–	–	–
			kW		8.6			9.7			10.8			12.1			–	
		76.0	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
5400 cfm	EAT (wb)	58.0	THC	128.5	128.5	144.8	123.8	123.8	139.5	118.7	118.7	133.8	112.9	112.9	127.2	106.4	106.4	119.9
			SHC	112.2	128.5	144.8	108.1	123.8	139.5	103.6	118.7	133.8	98.6	112.9	127.2	92.9	106.4	119.9
			kW		8.3			9.4			10.6			11.9			13.1	
		62.0	THC	128.6	128.6	150.4	123.9	123.9	144.8	118.8	118.8	138.9	113.0	113.0	132.1	106.4	106.4	124.5
			SHC	106.8	128.6	150.4	102.9	123.9	144.8	98.7	118.8	138.9	93.8	113.0	132.1	88.4	106.4	124.5
			kW		8.3			9.4			10.6			11.9			13.1	
		67.0	THC	133.7	133.7	142.1	127.8	127.8	139.5	121.8	121.8	136.9	115.0	115.0	133.7	107.5	107.5	129.8
			SHC	89.1	115.6	142.1	86.7	113.1	139.5	84.2	110.6	136.9	81.4	107.6	133.7	78.1	103.9	129.8
			kW		8.4			9.5			10.7			11.9			13.2	
		72.0	THC	145.3	145.3	145.3	137.6	137.6	137.6	130.9	130.9	130.9	–	–	–	–	–	–
			SHC	62.5	89.3	116.1	59.8	86.6	113.4	57.5	84.3	111.1	–	–	–	–	–	–
			kW		8.7			9.7			10.8			–			–	
		76.0	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
6000 cfm	EAT (wb)	58.0	THC	131.2	131.2	147.9	126.3	126.3	142.3	121.0	121.0	136.4	115.1	115.1	129.7	108.4	108.4	122.2
			SHC	114.6	131.2	147.9	110.3	126.3	142.3	105.7	121.0	136.4	100.5	115.1	129.7	94.7	108.4	122.2
			kW		8.4			9.5			10.7			11.9			13.2	
		62.0	THC	131.3	131.3	153.6	126.4	126.4	147.8	121.1	121.1	141.6	115.2	115.2	134.7	108.5	108.5	126.8
			SHC	109.1	131.3	153.6	105.0	126.4	147.8	100.6	121.1	141.6	95.7	115.2	134.7	90.1	108.5	126.8
			kW		8.4			9.5			10.7			11.9			13.2	
		67.0	THC	135.0	135.0	150.8	128.9	128.9	148.0	122.8	122.8	145.0	116.1	116.1	141.3	108.6	108.6	136.2
			SHC	93.0	121.9	150.8	90.5	119.3	148.0	87.9	116.5	145.0	84.8	113.0	141.3	81.1	108.6	136.2
			kW		8.5			9.5			10.7			11.9			13.2	
		72.0	THC	146.6	146.6	146.6	138.8	138.8	138.8	–	–	–	–	–	–	–	–	–
			SHC	64.2	93.6	123.0	61.5	90.9	120.3	–	–	–	–	–	–	–	–	–
			kW		8.7			9.7			–			–			–	
		76.0	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	

LEGEND:

– = Do not operate
EAT(wb) = Entering air temp (wet bulb)
SHC = Sensible heat capacity (Gross)
EAT(db) = Entering air temp (dry bulb)
L/s = Liters per second
kW = Compressor kilowatts
THC = Total heat capacity (Gross)
Cfm = Cubic feet per minute (supply air)

38AU

PERFORMANCE DATA (cont.)

38AUD16 - 40RUA16 COMBINATION RATINGS SI

				Ambient Temperature													
				29.4			35.0			40.6			46.1			51.7	
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)	
				23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4
2124 L/S	EAT (wb)	14.4	THC	44.1	44.1	49.7	42.6	42.6	48.0	40.9	40.9	46.1	39.2	39.2	44.2	37.3	37.3	42.0
			SHC	38.5	44.1	49.7	37.2	42.6	48.0	35.8	40.9	46.1	34.2	39.2	44.2	32.5	37.3	42.0
			kW		9.7			10.9			12.3			13.8			15.4	
		16.7	THC	45.3	45.3	49.0	43.4	43.4	48.0	41.4	41.4	46.9	39.4	39.4	45.4	37.3	37.3	43.6
			SHC	35.5	42.3	49.0	34.6	41.3	48.0	33.6	40.3	46.9	32.4	38.9	45.4	31.0	37.3	43.6
			kW		9.7			10.9			12.3			13.8			15.4	
		19.4	THC	49.2	49.2	49.2	47.1	47.1	47.1	44.9	44.9	44.9	42.6	42.6	42.6	40.0	40.0	40.0
			SHC	28.8	35.6	42.5	28.0	34.8	41.6	27.1	33.9	40.7	26.1	32.9	39.7	25.1	31.9	38.7
			kW		9.9			11.1			12.4			13.9			15.5	
		22.2	THC	53.3	53.3	53.3	51.1	51.1	51.1	48.8	48.8	48.8	46.2	46.2	46.2	43.5	43.5	43.5
			SHC	21.8	28.7	35.5	21.0	27.9	34.7	20.1	27.0	33.9	19.2	26.1	32.9	18.2	25.1	31.9
			kW		10.1			11.3			12.6			14.1			15.6	
		24.4	THC	–	56.7	56.7	–	54.5	54.5	–	52.0	52.0	–	–	–	–	–	–
			SHC	–	23.0	30.0	–	22.2	29.2	–	21.4	28.3	–	–	–	–	–	–
			kW		10.3			11.5			12.8			–			–	
2478 L/S	EAT (wb)	14.4	THC	46.1	46.1	52.0	44.5	44.5	50.1	42.8	42.8	48.2	40.9	40.9	46.0	38.8	38.8	43.7
			SHC	40.3	46.1	52.0	38.9	44.5	50.1	37.3	42.8	48.2	35.7	40.9	46.0	33.9	38.8	43.7
			kW		9.8			11.0			12.4			13.8			15.4	
		16.7	THC	46.5	46.5	53.3	44.7	44.7	51.7	42.8	42.8	50.0	40.9	40.9	47.8	38.8	38.8	45.4
			SHC	38.0	45.6	53.3	36.8	44.3	51.7	35.6	42.8	50.0	34.0	40.9	47.8	32.2	38.8	45.4
			kW		9.8			11.0			12.4			13.8			15.4	
		19.4	THC	50.2	50.2	50.2	48.1	48.1	48.1	45.8	45.8	45.8	43.3	43.3	43.5	40.7	40.7	42.4
			SHC	30.6	38.4	46.3	29.7	37.5	45.4	28.8	36.6	44.5	27.8	35.6	43.5	26.8	34.6	42.4
			kW		10.0			11.2			12.5			13.9			15.5	
		22.2	THC	54.3	54.3	54.3	52.1	52.1	52.1	49.6	49.6	49.6	47.0	47.0	47.0	44.2	44.2	44.2
			SHC	22.5	30.4	38.3	21.7	29.6	37.5	20.8	28.7	36.6	19.9	27.8	35.6	18.9	26.8	34.6
			kW		10.2			11.4			12.7			14.1			15.7	
		24.4	THC	–	57.8	57.8	–	55.4	55.4	–	–	–	–	–	–	–	–	–
			SHC	–	23.9	31.9	–	23.1	31.1	–	–	–	–	–	–	–	–	–
			kW		10.4			11.6			–			–			–	
2832 L/S	EAT (wb)	14.4	THC	47.8	47.8	53.8	46.1	46.1	51.9	44.2	44.2	49.8	42.2	42.2	47.6	40.0	40.0	45.1
			SHC	41.7	47.8	53.8	40.2	46.1	51.9	38.6	44.2	49.8	36.8	42.2	47.6	34.9	40.0	45.1
			kW		9.9			11.1			12.4			13.9			15.5	
		16.7	THC	47.8	47.8	55.9	46.1	46.1	53.9	44.3	44.3	51.7	42.2	42.2	49.4	40.0	40.0	46.8
			SHC	39.7	47.8	55.9	38.3	46.1	53.9	36.8	44.3	51.7	35.1	42.2	49.4	33.3	40.0	46.8
			kW		9.9			11.1			12.4			13.9			15.5	
		19.4	THC	50.9	50.9	50.9	48.8	48.8	49.0	46.4	46.4	48.1	43.9	43.9	47.0	41.2	41.2	45.8
			SHC	32.2	41.1	49.9	31.3	40.2	49.0	30.4	39.2	48.1	29.4	38.2	47.0	28.3	37.1	45.8
			kW		10.0			11.2			12.5			14.0			15.5	
		22.2	THC	55.1	55.1	55.1	52.8	52.8	52.8	50.3	50.3	50.3	47.6	47.6	47.6	44.7	44.7	44.7
			SHC	23.2	32.1	41.0	22.3	31.2	40.2	21.5	30.4	39.2	20.5	29.4	38.3	19.5	28.4	37.3
			kW		10.2			11.4			12.7			14.2			15.7	
		24.4	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
3186 L/S	EAT (wb)	14.4	THC	49.1	49.1	55.4	47.3	47.3	53.3	45.4	45.4	51.1	43.3	43.3	48.8	41.0	41.0	46.2
			SHC	42.9	49.1	55.4	41.3	47.3	53.3	39.6	45.4	51.1	37.8	43.3	48.8	35.8	41.0	46.2
			kW		9.9			11.1			12.5			13.9			15.5	
		16.7	THC	49.2	49.2	57.5	47.4	47.4	55.4	45.4	45.4	53.1	43.3	43.3	50.6	41.0	41.0	47.9
			SHC	40.8	49.2	57.5	39.3	47.4	55.4	37.7	45.4	53.1	36.0	43.3	50.6	34.1	41.0	47.9
			kW		9.9			11.1			12.5			13.9			15.5	
		19.4	THC	51.5	51.5	53.4	49.3	49.3	52.5	47.0	47.0	51.4	44.4	44.4	50.3	41.7	41.7	49.0
			SHC	33.8	43.6	53.4	32.9	42.7	52.5	31.9	41.7	51.4	30.9	40.6	50.3	29.7	39.4	49.0
			kW		10.0			11.2			12.6			14.0			15.6	
		22.2	THC	55.7	55.7	55.7	53.3	53.3	53.3	50.8	50.8	50.8	48.0	48.0	48.0	45.0	45.0	45.0
			SHC	23.8	33.7	43.6	23.0	32.9	42.7	22.1	32.0	41.9	21.1	31.0	40.9	20.1	30.0	39.8
			kW		10.3			11.4			12.8			14.2			15.7	
		24.4	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
3540 L/S	EAT (wb)	14.4	THC	50.2	50.2	56.6	48.4	48.4	54.5	46.4	46.4	52.3	44.2	44.2	49.8	41.8	41.8	47.1
			SHC	43.9	50.2	56.6	42.2	48.4	54.5	40.5	46.4	52.3	38.6	44.2	49.8	36.5	41.8	47.1
			kW		10.0			11.2			12.5			14.0			15.6	
		16.7	THC	50.3	50.3	58.8	48.4	48.4	56.6	46.4	46.4	54.2	44.2	44.2	51.7	41.8	41.8	48.9
			SHC	41.8	50.3	58.8	40.2	48.4	56.6	38.5	46.4	54.2	36.7	44.2	51.7	34.8	41.8	48.9
			kW		10.0			11.2			12.5			14.0			15.6	
		19.4	THC	52.0	52.0	56.7	49.8	49.8	55.7	47.4	47.4	54.5	44.8	44.8	53.3	42.1	42.1	51.7
			SHC	35.3	46.0	56.7	34.3	45.0	55.7	33.3	43.9	54.5	32.2	42.7	53.3	30.9	41.3	51.7
			kW		10.1			11.3			12.6			14.0			15.6	
		22.2	THC	56.1	56.1	56.1	53.7	53.7	53.7	51.2	51.2	51.2	–	–	–	–	–	–
			SHC	24.4	35.3	46.1	23.6	34.4	45.3	22.7	33.5	44.4	–	–	–	–	–	–
			kW		10.3			11.5			12.8			14.2			–	
		24.4	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	

LEGEND:

– = Do not operate
EAT(wb) = Entering air temp (wet bulb)
SHC = Sensible heat capacity (Gross)
EAT(db) = Entering air temp (dry bulb)
L/s = Liters per second
kW = Compressor kilowatts
THC = Total heat capacity (Gross)
Cfm = Cubic feet per minute (supply air)

PERFORMANCE DATA (cont.)

38AUD16 - 40RUA16 **COMBINATION RATINGS** **ENGLISH**

				Ambient Temperature														
				85.0			95.0			105.0			115.0			125.0		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0
4500 cfm	EAT (wb)	58.0	THC	150.4	150.4	169.5	145.3	145.3	163.7	139.7	139.7	157.4	133.7	133.7	150.7	127.1	127.1	143.2
			SHC	131.3	150.4	169.5	126.8	145.3	163.7	122.0	139.7	157.4	116.7	133.7	150.7	111.0	127.1	143.2
			kW		9.7			10.9			12.3			13.8			15.4	
		62.0	THC	154.4	154.4	167.2	148.0	148.0	163.8	141.4	141.4	160.1	134.4	134.4	155.0	127.2	127.2	148.8
			SHC	121.2	144.2	167.2	118.0	140.9	163.8	114.7	137.4	160.1	110.5	132.8	155.0	105.7	127.2	148.8
			kW		9.7			10.9			12.3			13.8			15.4	
		67.0	THC	167.7	167.7	167.7	160.7	160.7	160.7	153.3	153.3	153.3	145.2	145.2	145.2	136.6	136.6	136.6
			SHC	98.3	121.6	144.9	95.4	118.7	142.0	92.4	115.7	138.9	89.1	112.4	135.6	85.6	108.9	132.1
			kW		9.9			11.1			12.4			13.9			15.5	
		72.0	THC	181.8	181.8	181.8	174.4	174.4	174.4	166.5	166.5	166.5	157.8	157.8	157.8	148.5	148.5	148.5
			SHC	74.4	97.8	121.2	71.7	95.1	118.5	68.7	92.1	115.5	65.5	88.9	112.3	62.1	85.5	108.8
			kW		10.1			11.3			12.6			14.1			15.6	
		76.0	THC	–	193.5	193.5	–	185.8	185.8	–	177.4	177.4	–	–	–	–	–	–
			SHC	–	78.4	102.4	–	75.8	99.7	–	72.9	96.7	–	–	–	–	–	–
			kW		10.3			11.5			12.8			–			–	
5250 cfm	EAT (wb)	58.0	THC	157.4	157.4	177.4	151.8	151.8	171.1	145.9	145.9	164.4	139.4	139.4	157.1	132.3	132.3	149.1
			SHC	137.4	157.4	177.4	132.6	151.8	171.1	127.4	145.9	164.4	121.7	139.4	157.1	115.5	132.3	149.1
			kW		9.8			11.0			12.4			13.8			15.4	
		62.0	THC	158.7	158.7	181.7	152.4	152.4	176.5	146.0	146.0	170.7	139.5	139.5	163.1	132.4	132.4	154.9
			SHC	129.7	155.7	181.7	125.7	151.1	176.5	121.3	146.0	170.7	115.9	139.5	163.1	110.0	132.4	154.9
			kW		9.8			11.0			12.4			13.8			15.4	
		67.0	THC	171.2	171.2	171.2	164.0	164.0	164.0	156.2	156.2	156.2	147.9	147.9	148.3	139.0	139.0	144.6
			SHC	104.3	131.1	157.9	101.3	128.1	154.9	98.2	125.0	151.8	94.9	121.6	148.3	91.3	118.0	144.6
			kW		10.0			11.2			12.5			13.9			15.5	
		72.0	THC	185.3	185.3	185.3	177.6	177.6	177.6	169.4	169.4	169.4	160.5	160.5	160.5	150.7	150.7	150.7
			SHC	76.8	103.7	130.7	74.0	100.9	127.9	71.0	98.0	124.9	67.9	94.7	121.6	64.4	91.3	118.1
			kW		10.2			11.4			12.7			14.1			15.7	
		76.0	THC	–	197.1	197.1	–	189.1	189.1	–	–	–	–	–	–	–	–	–
			SHC	–	81.5	109.0	–	78.8	106.2	–	–	–	–	–	–	–	–	–
			kW		10.4			11.6			–			–			–	
6000 cfm	EAT (wb)	58.0	THC	163.0	163.0	183.7	157.2	157.2	177.1	150.8	150.8	170.0	144.0	144.0	162.3	136.5	136.5	153.8
			SHC	142.4	163.0	183.7	137.2	157.2	177.1	131.7	150.8	170.0	125.7	144.0	162.3	119.2	136.5	153.8
			kW		9.9			11.1			12.4			13.9			15.5	
		62.0	THC	163.2	163.2	190.8	157.3	157.3	183.9	151.0	151.0	176.5	144.1	144.1	168.5	136.6	136.6	159.7
			SHC	135.6	163.2	190.8	130.6	157.3	183.9	125.4	151.0	176.5	119.7	144.1	168.5	113.5	136.6	159.7
			kW		9.9			11.1			12.4			13.9			15.5	
		67.0	THC	173.8	173.8	173.8	166.4	166.4	167.3	158.4	158.4	164.0	149.9	149.9	160.3	140.7	140.7	156.4
			SHC	109.9	140.1	170.3	106.9	137.1	167.3	103.7	133.8	164.0	100.3	130.3	160.3	96.6	126.5	156.4
			kW		10.0			11.2			12.5			14.0			15.5	
		72.0	THC	187.9	187.9	187.9	180.0	180.0	180.0	171.6	171.6	171.6	162.4	162.4	162.4	152.5	152.5	152.5
			SHC	79.0	109.4	139.8	76.2	106.6	137.0	73.2	103.6	133.9	70.0	100.3	130.7	66.6	96.9	127.2
			kW		10.2			11.4			12.7			14.2			15.7	
		76.0	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
6750 cfm	EAT (wb)	58.0	THC	167.6	167.6	188.9	161.5	161.5	182.0	154.9	154.9	174.5	147.7	147.7	166.4	139.8	139.8	157.6
			SHC	146.3	167.6	188.9	141.0	161.5	182.0	135.2	154.9	174.5	128.9	147.7	166.4	122.1	139.8	157.6
			kW		9.9			11.1			12.5			13.9			15.5	
		62.0	THC	167.7	167.7	196.1	161.6	161.6	188.9	155.0	155.0	181.2	147.8	147.8	172.8	139.9	139.9	163.6
			SHC	139.3	167.7	196.1	134.2	161.6	188.9	128.7	155.0	181.2	122.7	147.8	172.8	116.2	139.9	163.6
			kW		9.9			11.1			12.5			13.9			15.5	
		67.0	THC	175.8	175.8	182.2	168.3	168.3	179.0	160.2	160.2	175.5	151.5	151.5	171.6	142.3	142.3	167.1
			SHC	115.2	148.7	182.2	112.2	145.6	179.0	108.9	142.2	175.5	105.4	138.5	171.6	101.5	134.3	167.1
			kW		10.0			11.2			12.6			14.0			15.6	
		72.0	THC	189.9	189.9	189.9	181.9	181.9	181.9	173.2	173.2	173.2	163.9	163.9	163.9	153.7	153.7	153.7
			SHC	81.2	114.9	148.7	78.4	112.1	145.8	75.3	109.1	142.8	72.1	105.8	139.5	68.6	102.3	135.9
			kW		10.3			11.4			12.8			14.2			15.7	
		76.0	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
7500 cfm	EAT (wb)	58.0	THC	171.4	171.4	193.2	165.1	165.1	186.0	158.2	158.2	178.3	150.8	150.8	169.9	142.7	142.7	160.7
			SHC	149.7	171.4	193.2	144.1	165.1	186.0	138.1	158.2	178.3	131.6	150.8	169.9	124.6	142.7	160.7
			kW		10.0			11.2			12.5			14.0			15.6	
		62.0	THC	171.5	171.5	200.6	165.2	165.2	193.1	158.3	158.3	185.1	150.9	150.9	176.4	142.7	142.7	166.9
			SHC	142.5	171.5	200.6	137.2	165.2	193.1	131.5	158.3	185.1	125.3	150.9	176.4	118.6	142.7	166.9
			kW		10.0			11.2			12.5			14.0			15.6	
		67.0	THC	177.5	177.5	193.4	169.8	169.8	190.0	161.7	161.7	186.1	153.0	153.0	181.7	143.7	143.7	176.3
			SHC	120.3	156.8	193.4	117.1	153.5	190.0	113.7	149.9	186.1	110.0	145.8	181.7	105.6	140.9	176.3
			kW		10.1			11.3			12.6			14.0			15.6	
		72.0	THC	191.5	191.5	191.5	183.3	183.3	183.3	174.6	174.6	174.6	165.0	165.0	165.0	–	–	–
			SHC	83.2	120.3	157.3	80.4	117.4	154.5	77.4	114.4	151.4	74.1	111.1	148.1	–	–	–
			kW		10.3			11.5			12.8			14.2			–	
		76.0	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	

LEGEND:

– = Do not operate
EAT(wb) = Entering air temp (wet bulb)
SHC = Sensible heat capacity (Gross)
EAT(db) = Entering air temp (dry bulb)
L/s = Liters per second
kW = Compressor kilowatts
THC = Total heat capacity (Gross)
Cfm = Cubic feet per minute (supply air)

PERFORMANCE DATA (cont.)

38AUD25 - 40RUA25 COMBINATION RATINGS SI

				Ambient Temperature													
				29.4			35.0			40.6			46.1			51.7	
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)	
				23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4	23.9	26.7	29.4
2832 L/S	EAT (wb)	14.4	THC	58.3	58.3	65.7	56.2	56.2	63.3	54.0	54.0	60.8	51.5	51.5	58.0	48.7	48.7	54.9
			SHC	50.9	58.3	65.7	49.1	56.2	63.3	47.1	54.0	60.8	44.9	51.5	58.0	42.5	48.7	54.9
			kW	11.6			13.0			14.5			16.3			18.3		
		16.7	THC	59.8	59.8	64.9	57.3	57.3	63.6	54.5	54.5	62.0	51.7	51.7	59.8	48.7	48.7	57.0
			SHC	47.0	56.0	64.9	45.8	54.7	63.6	44.4	53.2	62.0	42.6	51.2	59.8	40.5	48.7	57.0
			kW	11.7			13.0			14.6			16.3			18.3		
		19.4	THC	65.4	65.4	65.4	62.5	62.5	62.5	59.4	59.4	59.4	56.0	56.0	56.0	52.3	52.3	52.3
			SHC	38.3	47.4	56.4	37.1	46.2	55.2	35.8	44.9	53.9	34.5	43.5	52.5	33.0	42.0	51.0
			kW		11.9			13.3			14.6			16.6			18.5	
		22.2	THC	71.6	71.6	71.6	68.4	68.4	68.4	65.0	65.0	65.0	61.3	61.3	61.3	57.2	57.2	57.2
			SHC	29.3	38.4	47.5	28.1	37.2	46.3	26.8	35.9	45.0	25.4	34.5	43.6	24.0	33.0	42.1
			kW		12.3			13.6			15.1			16.9		18.8		
		24.4	THC	–	76.8	76.8	–	73.4	73.4	–	69.7	69.7	–	–	–	–	–	–
			SHC	–	31.1	40.6	–	29.9	39.3	–	28.6	38.0	–	–	–	–	–	–
			kW		12.6			13.9			15.4			–			–	
3304 L/S	EAT (wb)	14.4	THC	61.1	61.1	68.8	58.9	58.9	66.4	56.4	56.4	63.6	53.7	53.7	60.6	50.7	50.7	57.2
			SHC	53.3	61.1	68.8	51.4	58.9	66.4	49.3	56.4	63.6	46.9	53.7	60.6	44.3	50.7	57.2
			kW		11.7			13.1			14.7			16.5		18.4		
		16.7	THC	61.7	61.7	70.5	59.1	59.1	68.5	56.5	56.5	66.0	53.8	53.8	62.9	50.8	50.8	59.4
			SHC	50.4	60.4	70.5	48.8	58.6	68.5	46.9	56.5	66.0	44.7	53.8	62.9	42.2	50.8	59.4
			kW		11.8			13.1			14.7			16.5			18.4	
		19.4	THC	67.0	67.0	67.0	64.0	64.0	64.0	60.7	60.7	60.7	57.2	57.2	57.5	53.3	53.3	55.9
			SHC	40.7	51.1	61.5	39.5	49.9	60.3	38.2	48.5	58.9	36.7	47.1	57.5	35.2	45.5	55.9
			kW		12.0			13.4			14.9			16.6			18.6	
		22.2	THC	73.2	73.2	73.2	69.9	69.9	69.9	66.3	66.3	66.3	62.4	62.4	62.4	58.2	58.2	58.2
			SHC	30.3	40.8	51.3	29.1	39.5	50.0	27.8	38.2	48.7	26.4	36.8	47.2	24.9	35.3	45.7
			kW		12.4			13.7			15.2			16.9			18.8	
		24.4	THC	–	78.5	78.5	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	32.4	43.2	–	–	–	–	–	–	–	–	–	–	–	–
			kW		12.7			–			–			–			–	
3776 L/S	EAT (wb)	14.4	THC	63.4	63.4	71.5	61.0	61.0	68.8	58.4	58.4	65.8	55.5	55.5	62.6	52.4	52.4	59.0
			SHC	55.4	63.4	71.5	53.3	61.0	68.8	51.0	58.4	65.8	48.5	55.5	62.6	45.7	52.4	59.0
			kW		11.9			13.2			14.8			16.6			18.5	
		16.7	THC	63.5	63.5	74.2	61.1	61.1	71.4	58.5	58.5	68.4	55.6	55.6	65.0	52.4	52.4	61.3
			SHC	52.7	63.5	74.2	50.7	61.1	71.4	48.6	58.5	68.4	46.2	55.6	65.0	43.6	52.4	61.3
			kW		11.9			13.2			14.8			16.6			18.5	
		19.4	THC	68.1	68.1	68.1	65.0	65.0	65.1	61.6	61.6	63.7	58.0	58.0	62.1	54.0	54.0	60.4
			SHC	42.9	54.7	66.4	41.7	53.4	65.1	40.3	52.0	63.7	38.8	50.5	62.1	37.3	48.8	60.4
			kW		12.1			13.4			15.0			16.7			18.6	
		22.2	THC	74.5	74.5	74.5	71.0	71.0	71.0	67.3	67.3	67.3	63.3	63.3	63.3	59.0	59.0	59.0
			SHC	31.2	43.1	54.8	30.0	41.8	53.6	28.7	40.4	52.2	27.3	39.0	50.7	25.8	37.5	49.2
			kW		12.4			13.8			15.3			17.0			18.9	
		24.4	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
4248 L/S	EAT (wb)	14.4	THC	65.4	65.4	73.7	62.8	62.8	70.8	60.1	60.1	67.7	57.1	57.1	64.3	53.8	53.8	60.6
			SHC	57.1	65.4	73.7	54.9	62.8	70.8	52.5	60.1	67.7	49.8	57.1	64.3	46.9	53.8	60.6
			kW		12.0			13.3			14.9			16.6			18.6	
		16.7	THC	65.4	65.4	76.5	62.9	62.9	73.5	60.1	60.1	70.3	57.1	57.1	66.8	53.8	53.8	62.9
			SHC	54.3	65.4	76.5	52.2	62.9	73.5	49.9	60.1	70.3	47.5	57.1	66.8	44.7	53.8	62.9
			kW		12.0			13.3			14.9			16.6			18.6	
		19.4	THC	69.1	69.1	71.0	65.9	65.9	69.7	62.4	62.4	68.1	58.7	58.7	66.4	54.7	54.7	64.5
			SHC	45.1	58.1	71.0	43.8	56.7	69.7	42.4	55.2	68.1	40.8	53.6	66.4	39.1	51.8	64.5
			kW		12.2			13.5			15.0			16.7			18.7	
		22.2	THC	75.5	75.5	75.5	72.0	72.0	72.0	68.1	68.1	68.1	64.0	64.0	64.0	–	–	–
			SHC	32.1	45.2	58.3	30.9	43.9	57.0	29.5	42.6	55.6	28.1	41.1	54.1	–	–	–
			kW		12.5			13.8			15.3			17.0			–	
		24.4	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	
4719 L/S	EAT (wb)	14.4	THC	67.0	67.0	75.5	64.4	64.4	72.6	61.5	61.5	69.3	58.4	58.4	65.8	54.9	54.9	61.8
			SHC	58.5	67.0	75.5	56.2	64.4	72.6	53.7	61.5	69.3	51.0	58.4	65.8	47.9	54.9	61.8
			kW		12.1			13.4			15.0			16.7			18.7	
		16.7	THC	67.1	67.1	78.4	64.4	64.4	75.4	61.5	61.5	72.0	58.4	58.4	68.3	54.9	54.9	64.2
			SHC	55.7	67.1	78.4	53.5	64.4	75.4	51.1	61.5	72.0	48.5	58.4	68.3	45.6	54.9	64.2
			kW		12.1			13.4			15.0			16.7			18.7	
		19.4	THC	69.9	69.9	75.4	66.6	66.6	74.0	63.1	63.1	72.3	59.3	59.3	70.4	55.3	55.3	67.9
			SHC	47.1	61.3	75.4	45.7	59.8	74.0	44.3	58.3	72.3	42.6	56.5	70.4	40.7	54.3	67.9
			kW		12.2			13.5			15.1			16.8			18.7	
		22.2	THC	76.3	76.3	76.3	72.7	72.7	72.7	68.7	68.7	68.7	–	–	–	–	–	–
			SHC	33.0	47.3	61.7	31.7	46.0	60.3	30.3	44.6	58.9	–	–	–	–	–	–
			kW		12.6			13.9			15.4			–			–	
		24.4	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			kW		–			–			–			–			–	

LEGEND:

– = Do not operate
EAT(wb) = Entering air temp (wet bulb)
SHC = Sensible heat capacity (Gross)
EAT(db) = Entering air temp (dry bulb)
L/s = Liters per second
kW = Compressor kilowatts
THC = Total heat capacity (Gross)
Cfm = Cubic feet per minute (supply air)

PERFORMANCE DATA (cont.)

38AUD25 - 40RUA25 **COMBINATION RATINGS** **ENGLISH**

				Ambient Temperature															
				85.0			95.0			105.0			115.0			125.0			
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)			
				75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0	75.0	80.0	85.0	
6000 cfm	EAT (wb)	58.0	THC	198.8	198.8	224.1	191.8	191.8	216.1	184.1	184.1	207.4	175.6	175.6	197.9	166.1	166.1	187.2	
			SHC	173.6	198.8	224.1	167.5	191.8	216.1	160.7	184.1	207.4	153.3	175.6	197.9	145.1	166.1	187.2	
			kW		11.6			13.0			14.5			16.3			18.3		
		62.0	THC	204.2	204.2	221.5	195.5	195.5	216.9	186.1	186.1	211.6	176.5	176.5	204.0	166.3	166.3	194.5	
			SHC	160.5	191.0	221.5	156.2	186.5	216.9	151.4	181.5	211.6	145.3	174.7	204.0	138.1	166.3	194.5	
			kW		11.7			13.0			14.6			16.3			18.3		
		67.0	THC	223.1	223.1	223.1	213.4	213.4	213.4	202.7	202.7	202.7	191.2	191.2	191.2	178.5	178.5	178.5	
			SHC	130.8	161.7	192.6	126.7	157.6	188.4	122.3	153.2	184.0	117.6	148.4	179.2	112.5	143.3	174.1	
			kW		11.9			13.3			14.6			16.6			18.5		
		72.0	THC	244.3	244.3	244.3	233.5	233.5	233.5	221.8	221.8	221.8	209.1	209.1	209.1	195.3	195.3	195.3	
			SHC	99.9	131.0	162.2	95.9	126.9	158.0	91.5	122.5	153.6	86.8	117.8	148.8	81.8	112.7	143.7	
			kW		12.3			13.6			15.1			16.9			18.8		
		76.0	THC	–	262.2	262.2	–	250.5	250.5	–	237.8	237.8	–	–	–	–	–	–	
			SHC	–	106.2	138.4	–	102.1	134.2	–	97.7	129.6	–	–	–	–	–	–	
			kW		12.6			13.9			15.4			–			–		
7000 cfm	EAT (wb)	58.0	THC	208.5	208.5	234.9	200.9	200.9	226.4	192.5	192.5	216.9	183.3	183.3	206.6	173.1	173.1	195.1	
			SHC	182.0	208.5	234.9	175.4	200.9	226.4	168.1	192.5	216.9	160.1	183.3	206.6	151.1	173.1	195.1	
			kW		11.7			13.1			14.7			16.5		18.4			
		62.0	THC	210.4	210.4	240.6	201.7	201.7	233.7	192.7	192.7	225.3	183.5	183.5	214.6	173.3	173.3	202.6	
			SHC	171.9	206.2	240.6	166.4	200.1	233.7	160.0	192.7	225.3	152.4	183.5	214.6	143.9	173.3	202.6	
			kW		11.8			13.1			14.7			16.5			18.4		
		67.0	THC	228.5	228.5	228.5	218.2	218.2	218.2	207.0	207.0	207.0	195.0	195.0	196.1	181.9	181.9	190.6	
			SHC	138.9	174.4	210.0	134.7	170.2	205.7	130.2	165.6	201.1	125.3	160.7	196.1	120.0	155.3	190.6	
			kW		12.0			13.4			14.9			16.6			18.6		
		72.0	THC	249.9	249.9	249.9	238.6	238.6	238.6	226.3	226.3	226.3	213.0	213.0	213.0	198.6	198.6	198.6	
			SHC	103.4	139.1	174.9	99.2	134.9	170.6	94.8	130.4	166.1	90.0	125.6	161.2	84.9	120.4	155.9	
			kW		12.4			13.7			15.2			16.9			18.8		
		76.0	THC	–	268.0	268.0	–	–	–	–	–	–	–	–	–	–	–	–	
			SHC	–	110.5	147.3	–	–	–	–	–	–	–	–	–	–	–	–	
			kW		12.7			–			–			–			–		
8000 cfm	EAT (wb)	58.0	THC	216.4	216.4	243.8	208.2	208.2	234.7	199.3	199.3	224.6	189.5	189.5	213.6	178.7	178.7	201.4	
			SHC	188.9	216.4	243.8	181.8	208.2	234.7	174.0	199.3	224.6	165.5	189.5	213.6	156.0	178.7	201.4	
			kW		11.9			13.2			14.8			16.6			18.5		
		62.0	THC	216.6	216.6	253.3	208.4	208.4	243.7	199.5	199.5	233.3	189.7	189.7	221.8	178.8	178.8	209.1	
			SHC	179.9	216.6	253.3	173.1	208.4	243.7	165.7	199.5	233.3	157.6	189.7	221.8	148.6	178.8	209.1	
			kW		11.9			13.2			14.8			16.6			18.5		
		67.0	THC	232.5	232.5	232.5	221.8	221.8	222.2	210.3	210.3	217.3	197.9	197.9	212.0	184.4	184.4	206.0	
			SHC	146.5	186.6	226.6	142.2	182.2	222.2	137.6	177.4	217.3	132.5	172.2	212.0	127.1	166.5	206.0	
			kW		12.1			13.4			15.0			16.7			18.6		
		72.0	THC	254.2	254.2	254.2	242.4	242.4	242.4	229.7	229.7	229.7	216.0	216.0	216.0	201.2	201.2	201.2	
			SHC	106.6	146.9	187.1	102.4	142.6	182.8	97.9	138.0	178.1	93.0	133.1	173.1	87.9	127.8	167.7	
			kW		12.4			13.8			15.3			17.0			18.9		
		76.0	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			kW		–			–			–			–			–		
9000 cfm	EAT (wb)	58.0	THC	223.0	223.0	251.3	214.4	214.4	241.6	205.0	205.0	231.0	194.7	194.7	219.4	183.4	183.4	206.6	
			SHC	194.7	223.0	251.3	187.2	214.4	241.6	179.0	205.0	231.0	170.0	194.7	219.4	160.1	183.4	206.6	
			kW		12.0			13.3			14.9			16.6			18.6		
		62.0	THC	223.2	223.2	261.0	214.6	214.6	250.9	205.2	205.2	239.9	194.9	194.9	227.9	183.5	183.5	214.5	
			SHC	185.4	223.2	261.0	178.2	214.6	250.9	170.4	205.2	239.9	161.9	194.9	227.9	152.4	183.5	214.5	
			kW		12.0			13.3			14.9			16.6			18.6		
		67.0	THC	235.8	235.8	242.4	224.8	224.8	237.7	213.0	213.0	232.5	200.3	200.3	226.7	186.6	186.6	220.0	
			SHC	153.8	198.1	242.4	149.3	193.5	237.7	144.5	188.5	232.5	139.3	183.0	226.7	133.4	176.7	220.0	
			kW		12.2			13.5			15.0			16.7			18.7		
		72.0	THC	257.6	257.6	257.6	245.5	245.5	245.5	232.4	232.4	232.4	218.4	218.4	218.4	–	–	–	
			SHC	109.6	154.3	198.9	105.4	149.9	194.5	100.8	145.2	189.7	95.9	140.2	184.6	–	–	–	
			kW		12.5			13.8			15.3			17.0			–		
		76.0	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			kW		–			–			–			–			–		
10,000 cfm	EAT (wb)	58.0	THC	228.7	228.7	257.7	219.7	219.7	247.6	209.8	209.8	236.5	199.1	199.1	224.4	187.3	187.3	211.0	
			SHC	199.7	228.7	257.7	191.8	219.7	247.6	183.2	209.8	236.5	173.9	199.1	224.4	163.5	187.3	211.0	
			kW		12.1			13.4			15.0			16.7			18.7		
		62.0	THC	228.8	228.8	267.6	219.8	219.8	257.1	210.0	210.0	245.5	199.2	199.2	233.0	187.4	187.4	219.1	
			SHC	190.1	228.8	267.6	182.6	219.8	257.1	174.4	210.0	245.5	165.5	199.2	233.0	155.7	187.4	219.1	
			kW		12.1			13.4			15.0			16.7			18.7		
		67.0	THC	238.5	238.5	257.4	227.3	227.3	252.4	215.2	215.2	246.7	202.4	202.4	240.1	188.7	188.7	231.8	
			SHC	160.6	209.0	257.4	156.0	204.2	252.4	151.0	198.8	246.7	145.4	192.7	240.1	138.9	185.3	231.8	
			kW		12.2			13.5			15.1			16.8			18.7		
		72.0	THC	260.3	260.3	260.3	247.9	247.9	247.9	234.5	234.5	234.5	–	–	–	–	–	–	
			SHC	112.5	161.4	210.4	108.2	157.0	205.9	103.5	152.3	201.0	–	–	–	–	–	–	
			kW		12.6			13.9			15.4			–			–		
		76.0	THC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			SHC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			kW		–			–			–			–			–		

LEGEND:

– = Do not operate
EAT(wb) = Entering air temp (wet bulb)
SHC = Sensible heat capacity (Gross)
EAT(db) = Entering air temp (dry bulb)
L/s = Liters per second
kW = Compressor kilowatts
THC = Total heat capacity (Gross)
Cfm = Cubic feet per minute (supply air)

ELECTRICAL DATA

38AUZ07 COOLING 50 Hz

38AUZ07							WITHOUT PWRD C.O.		WITH PWRD C.O.	
V–Ph–Hz	VOLTAGE RANGE		COMP 1		OFM (ea)		MCA	Fuse	MCA	Fuse
	MIN	MAX	RLA	LRA	WATTS	FLA				
400–3–50	380	420	9.7	64	270	0.7	13.5	20	15.9	25

38AUZ08 COOLING 50 Hz

38AUZ08							WITHOUT PWRD C.O.		WITH PWRD C.O.	
V–Ph–Hz	VOLTAGE RANGE		COMP 1		OFM (ea)					
	MIN	MAX	RLA	LRA	WATTS	FLA	MCA	Fuse	MCA	Fuse
400–3–50	380	420	12.2	101	270	0.7	16.7	25	19.0	30

38AUD12 COOLING 50 Hz

38AUD12									WITHOUT PWRD C.O.		WITH PWRD C.O.	
V–Ph–Hz	VOLTAGE RANGE		COMP 1		COMP 2		OFM (ea)					
	MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA	MCA	Fuse	MCA	Fuse
400–3–50	380	420	7.8	51.5	7.8	51.5	270	0.7	19.0	25	21.3	30

38AUD14 COOLING 50 Hz

38AUD14									WITHOUT PWRD C.O.		WITH PWRD C.O.	
V–Ph–Hz	VOLTAGE RANGE		COMP 1		COMP 2		OFM (ea)					
	MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA	MCA	Fuse	MCA	Fuse
400–3–50	380	420	10.6	74	10.6	74	270	0.7	25.3	30	27.6	30

38AUD16 COOLING 50 Hz

38AUD16									POWER SUPPLY		DISCONNECT SIZE	
V–Ph–Hz	VOLTAGE RANGE		COMP 1		COMP 2		OFM					
	Min	Max	RLA	LRA	RLA	LRA	Qty	FLA (ea)	MCA	MOCP	FLA	LRA
400–3–50	360	440	12.2	101	12.2	101	3	0.7	29.6	40	30	208

38AUD25 COOLING 50 Hz

38AUD24									POWER SUPPLY		DISCONNECT SIZE	
V–Ph–Hz	VOLTAGE RANGE		COMP 1		COMP 2		OFM					
	Min	Max	RLA	LRA	RLA	LRA	Qty	FLA (ea)	MCA	MOCP	FLA	LRA
400–3–50	360	440	16.7	111	16.7	111	4	0.7	40.4	50	42	230

APPLICATION DATA

Operating limits

Maximum outdoor temperature . . . . . 125°F

Minimum return-air temperature (40RUA) . . . . . 55°F

Maximum return-air temperature (40RUA) . . . . . 95°F

Range of acceptable saturation suction temperature . . . . . 20 to 50°F

Maximum discharge temperature . . . . . 275°F

Minimum discharge superheat . . . . . 60°F

NOTES:

1. Select air handler at no less than 300 cfm/ton (nominal condensing unit capacity).
2. Total combined draw of the field-supplied liquid line solenoid valve and air handler fan contactor must not exceed 22 va. If the specified va must be exceeded, use a remote relay to control the load.

MINIMUM OUTDOOR-AIR OPERATING TEMPERATURE

UNIT 38AU	MINIMUM OUTDOOR TEMP (°F)	
	Std	With MotorMaster I® Control†
Z07	35	–20
Z08	35	
D12	35	
D14	35	
D16	35	
D25	35	

† Wind baffles (field-supplied and field-installed) are recommended for all units with MotorMaster I® control. Refer to Low Ambient Temperature Control Installation Instructions for additional information.

Refrigerant piping

IMPORTANT: Do not bury refrigerant piping underground.

It is recommended that the refrigerant piping for all commercial split systems include a liquid line solenoid valve, a liquid line filter drier and a sight glass.

For refrigerant lines longer than 75 lineal ft, a liquid line solenoid valve installed at the **indoor** unit and a suction accumulator are required. Refer to the Refrigerant Specialties Part Numbers table.

REFRIGERANT SPECIALTIES PART NUMBERS

LIQUID LINE SIZE (in.)	LIQUID LINE SOLENOID VALVE (LLSV)	LLSV COIL	SIGHT GLASS
3/8	EF680033	EF680037	KM680008
1/2	EF680035	EF680037	KM680004
5/8	EF680036	EF680037	KM680005

NOTE: 38AUD units require TWO sets of parts.

38AUZ 07-08 PIPING RECOMMENDATIONS (SINGLE-CIRCUIT UNIT)

R–410A	Equivalent Length									
	meter	0–12		12–23		23–34		34–46		46–57	
	feet	0–38		38–75		75–113		113–150		150–188	
Model	Linear Length										
	meter	0–7.5		7.5–15		15–23		23–30		30–38	
	feet	0–25		25–50		50–75		75–100		100–125	
38AUZ*07	Liquid Line	3/8		3/8	1/2	3/8	1/2	3/8	1/2	3/8	1/2
	Max Lift										
	SI (m)										
	Novation	7.5		15		16	23	9	29	10	34
	RTPF	7.5		15		19	23	12	30	11	38
	EN (ft)										
	Novation	25		50		53	75	34	97	33	112
	RTPF	25		50		63	75	42	100	38	125
	Suction Line	7/8	7/8	7/8		7/8		7/8		1–1/8	
	Charge										
	SI (kg)										
	Novation	3.8		4.4		4.9	5.9	5.4	6.8	6.1	7.9
	RTPF	6.4		7.0		7.4	8.5	7.9	9.3	8.7	10.4
	EN (lbs)										
	Novation	8.4		9.8		10.8	13.1	11.8	14.9	13.5	17.4
	RTPF	14.0		15.4		16.4	18.7	17.4	20.5	19.1	23.0
38AUZ*08	Liquid Line	1/2		1/2	5/8	1/2	5/8	1/2	5/8	1/2	5/8
	Max Lift										
	SI (m)										
	Novation	7.5		9	11	7	10	DNU	10	10	16
	RTPF	7.5		15	NR	23	NR	27	30	18	38
	EN (ft)										
	Novation	25		30	38	24	36	DNU	35	33	53
	RTPF	25		50	NR	75	NR	89	100	62	125
	Suction Line	7/8		7/8		1–1/8		1–1/8		1–1/8	
	Charge										
	SI (kg)										
	Novation	5.5		6.3	7.2	7.4	8.6	DNU	9.9	9.1	11.2
	RTPF	8.6		9.4	NR	10.4	NR	11.3	13.0	12.2	14.3
	EN (lbs)										
	Novation	12.2		13.9	15.8	16.2	19.0	DNU	21.9	20.0	24.8
	RTPF	19.0		20.7	NR	23.0	NR	24.9	28.7	26.8	31.6

Legend:

Equivalent Length – Equivalent tubing length, including effects of refrigeration specialties devices

Linear Length – Linear tubing length, feet

Liquid Line – Tubing size, inches OD.

Max Lift – Maximum liquid lift (indoor unit ABOVE outdoor unit only), at maximum permitted liquid line pressure drop
- Linear Length Less than 30 m (100 ft): Minimum 1.1° C (2.0° F) subcooling entering TXV
- Linear Length Greater than 30 m (100 ft): Minimum 0.3° C (0.5° F) subcooling entering TXV

Suction Line – Tube size, inches OD

Charge – Charge Quantity, lbs. Calculated for both liquid line sizes (where applicable), but only with larger suction line size (where applicable)

DNU – Do Not Use (pressure drop exceeds available subcooling in this model)

NR – Not Recommended (use smaller liquid tube size)

SI – Metric units of measure

EN – English units of measure (I–P)

NOTE: For applications with equivalent length greater than 57 m (188 ft) and/or linear length greater than 38 m (125 ft), contact your local Carrier representative.

38AUD 12-14 PIPING RECOMMENDATIONS (TWO-CIRCUIT UNIT)

NOTE: 38AUD requires TWO sets of refrigeration piping

R–410A	Equivalent Length									
	meter	**0–12**	**12–23**		**23–34**		**34–46**		**46–57**	
	feet	**0–38**	**38–75**		**75–113**		**113–150**		**150–188**	
Model	Linear Length									
	meter	0–7.5	7.5–15		15–23		23–30		30–38	
	feet	0–25	25–50		50–75		75–100		100–125	
38AUD*12	Liquid Line	3/8	3/8		3/8	1/2	3/8	1/2	3/8	1/2
	Max Lift									
	SI (m)									
	Novation	7.5	15		15	23	10	24	13	29
	RTPF	7.5	15		15	23	10	27	11	32
	EN (ft)									
	Novation	25	50		50	75	36	79	44	96
	RTPF	25	50		50	75	36	89	39	106
	Suction Line	7/8	7/8		7/8		7/8		1–1/8	
	Charge									
	SI (kg)									
	Novation	3.3	3.8		4.2	5.3	4.7	6.1	5.1	6.9
	RTPF	4.9	5.4		5.8	6.9	6.3	7.7	6.8	8.6
	EN (lbs)									
	Novation	7.3	8.3		9.3	11.6	10.3	13.4	11.3	15.2
	RTPF	10.9	11.9		12.9	15.2	13.9	17.0	14.9	18.8
38AUD*14	Liquid Line	3/8	1/2	5/8	1/2	5/8	1/2	5/8	1/2	5/8
	Max Lift									
	SI (m)									
	Novation	7.5	13	15	12	14	11	14	17	20
	EN (ft)									
	Novation	25	45	50	42	49	39	48	56	68
	Suction Line	7/8	7/8		7/8		1–1/8		1–1/8	
	Charge									
	SI (kg)									
	Novation	4.6	5.8	6.6	6.6	7.8	7.6	10.7	9.4	12.0
	EN (lbs)									
	Novation	10.1	12.7	14.6	14.5	17.3	16.8	23.5	20.7	26.4

Legend:

Equivalent Length – Equivalent tubing length, including effects of refrigeration specialties devices

Linear Length – Linear tubing length, feet

Liquid Line – Tubing size, inches OD.

Max Lift – Maximum liquid lift (indoor unit ABOVE outdoor unit only), at maximum permitted liquid line pressure drop
- Linear Length Less than 30 m (100 ft): Minimum 1.1° C (2.0° F) subcooling entering TXV
- Linear Length Greater than 30 m (100 ft): Minimum 0.3° C (0.5° F) subcooling entering TXV

Suction Line – Tube size, inches OD

Charge – Charge Quantity, lbs. Calculated for both liquid line sizes (where applicable), but only with larger suction line size (where applicable)

DNU – Do Not Use (pressure drop exceeds available subcooling in this model)

NR – Not Recommended (use smaller liquid tube size)

SI – Metric units of measure

EN – English units of measure (I–P)

NOTE: For applications with equivalent length greater than 57 m (188 ft) and/or linear length greater than 38 m (125 ft), contact your local Carrier representative.

38AUD 16-25 PIPING RECOMMENDATIONS (TWO-CIRCUIT UNIT)

NOTE: 38AUD requires TWO sets of refrigeration piping

R–410A	Equivalent Length									
	meter	0–12		12–23		23–34		34–46		46–57	
	feet	0–38		38–75		75–113		113–150		150–188	
Model	Linear Length										
	meter	0–7.5		7.5–15		15–23		23–30		30–38	
	feet	0–25		25–50		50–75		75–100		100–125	
38AUD*16	Liquid Line	3/8	1/2	3/8	1/2	3/8	1/2	3/8	1/2	1/2	
	Max Lift										
	SI (m)										
	Novation	7.5	NR	15	NR	21	23	13	30	38	
	RTPF	DNU	7.5	DNU	15	DNU	23	DNU	30	36	
	EN (ft)										
	Novation	25	NR	50	NR	71	75	43	100	125	
	RTPF	DNU	25	DNU	50	DNU	75	DNU	100	119	
	Suction Line	7/8		1–1/8		1–1/8		1–1/8		1–1/8	
	Charge										
	SI (kg)										
	Novation	5.8	NR	6.3	NR	7.0	8.0	7.5	8.9	9.8	
	RTPF	DNU	9.8	DNU	10.7	DNU	11.6	DNU	12.4	13.3	
	EN (lbs)										
	Novation	12.9	NR	13.9	NR	15.4	17.7	16.5	19.6	21.6	
	RTPF	DNU	21.7	DNU	23.6	DNU	25.5	DNU	27.4	29.3	
38AUD*25	Liquid Line	1/2		1/2		1/2		1/2	5/8	1/2	5/8
	Max Lift										
	SI (m)										
	RTPF	7.5		15		23		20	27	23	32
	EN (ft)										
	RTPF	25		50		75		67	91	76	107
	Suction Line	7/8		1–1/8		1–1/8		1–1/8		1–1/8	
	Charge										
	SI (kg)										
	RTPF	9.4		10.3		11.2		12.1	13.8	13.0	15.1
	EN (lbs)										
	RTPF	20.7		22.8		24.7		26.6	30.4	28.6	33.3

Legend:

Equivalent Length – Equivalent tubing length, including effects of refrigeration specialties devices

Linear Length – Linear tubing length, feet

Liquid Line – Tubing size, inches OD.

Max Lift – Maximum liquid lift (indoor unit ABOVE outdoor unit only), at maximum permitted liquid line pressure drop
- Linear Length Less than 30 m (100 ft): Minimum 1.1° C (2.0° F) subcooling entering TXV
- Linear Length Greater than 30 m (100 ft): Minimum 0.3° C (0.5° F) subcooling entering TXV

Suction Line – Tube size, inches OD

Charge – Charge Quantity, lbs. Calculated for both liquid line sizes (where applicable), but only with larger suction line size (where applicable)

DNU – Do Not Use (pressure drop exceeds available subcooling in this model)

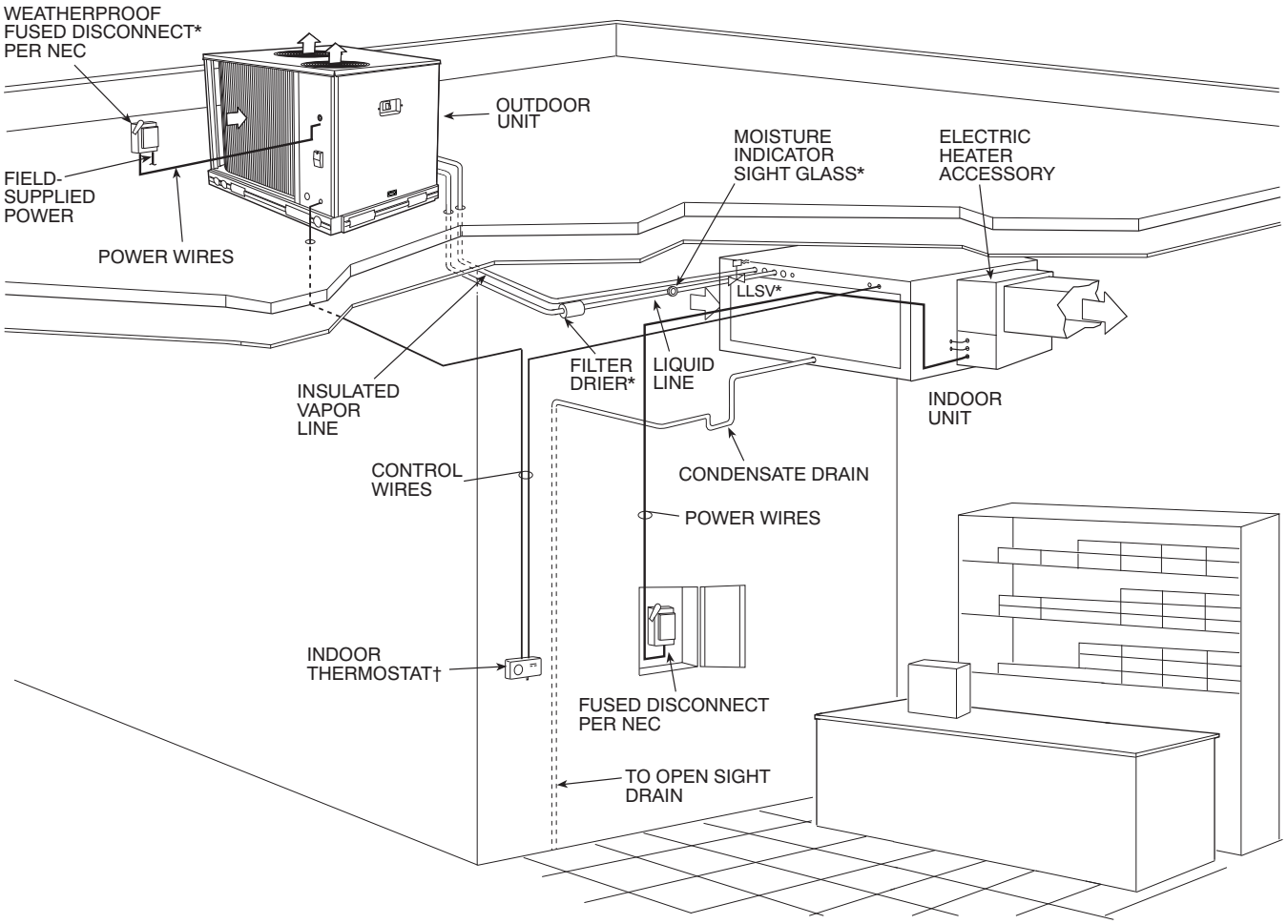
NR – Not Recommended (use smaller liquid tube size)

SI – Metric units of measure

EN – English units of measure (I–P)

NOTE: For applications with equivalent length greater than 57 m (188 ft) and/or linear length greater than 38 m (125 ft), contact your local Carrier representative.

TYPICAL PIPING AND WIRING



C09054

LEGEND:

NEC – National Electrical Code

TXV – Thermostatic Expansion Valve

* Field–supplied

† Double riser may be required. Consult condensing unit product data catalog for details.

NOTES:

1. All piping must follow standard refrigerant piping techniques. Refer to Carrier System Design Manual for details.
2. All wiring must comply with the applicable local and national codes.
3. Wiring and piping shown are general points-of-connection guides only and are not intended for, or to include all details for, a specific installation.
4. Liquid line solenoid valve (solenoid drop control) is recommended to prevent refrigerant migration to the compressor.
5. Internal factory-supplied TXVs not shown.

GUIDE SPECIFICATIONS

Commercial Air-Cooled Condensing Units

HVAC Guide Specifications

Size Range: 18.3 kW to 59.2 kW

Carrier Model Numbers: **38AUZ, Single Circuit (07 - 08 Models) 38AUD, Dual Circuit (12, 14, 16, 25 Models)**

Part 1 — General

1.01 SYSTEM DESCRIPTION

Outdoor-mounted, air-cooled condensing unit suitable for on-the-ground or rooftop installation. Unit shall consist of a hermetic scroll air-conditioning compressor(s) assembly, an air-cooled coil, propeller-type condenser fans, and a control box. Unit shall discharge supply air upward as shown on contract drawings. Unit shall be used in a refrigeration circuit matched with a packaged air-handling unit.

1.02 QUALITY ASSURANCE

A. Unit shall be rated in accordance with AHRI Standard 340/360.

B. Unit construction shall comply with ANSI/ASHRAE 15 safety code latest revision and comply with NEC.

C. Unit shall be constructed in accordance with UL 1995 standard and shall carry the UL and UL, Canada label.

D. Unit cabinet shall be capable of withstanding 500-hour salt spray exposure per ASTM B117 (scribed specimen).

E. Air-cooled condenser coils for hermetic scroll compressor units 38AUZ and 38AUD shall be leak tested at 150 psig, and pressure tested at 650 psig.

F. Unit shall be manufactured in a facility registered to ISO 9001:2008 manufacturing quality standard.

1.03 DELIVERY, STORAGE, AND HANDLING

Unit shall be shipped as single package only, and shall be stored and handled according to unit manufacturer's recommendations.

1.04 WARRANTY (FOR INCLUSION BY SPECIFYING ENGINEER.)

Part 2 — Products

2.01 EQUIPMENT

A. General:

Factory-assembled, single piece, air-cooled condensing unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, compressor, holding charge, and special features required prior to field start-up.

B. Unit Cabinet:

1. Unit cabinet shall be constructed of galvanized steel, bonderized and coated with a prepainted baked enamel finish.
2. A heavy-gauge roll-formed perimeter base rail with forklift slots and lifting holes shall be provided to facilitate rigging.

C. Condenser Fans:

1. Condenser fans shall be direct driven, propeller type, discharging air vertically upward.
2. Fan blades shall be balanced.
3. Condenser fan discharge openings shall be equipped with PVC-coated steel wire safety guards.
4. Condenser fan and motor shaft shall be corrosion resistant.

D. Compressor:

1. Compressor shall be of the hermetic scroll type .
2. Compressor shall be mounted on rubber grommets.
3. Compressors shall include overload protection.
4. Compressors shall be equipped with a crankcase heater.
5. Compressor shall be equipped with internal high pressure and high temperature protection.

E. Condenser Coils:

1. Standard Aluminum fin - Copper Tube Coils:

a. Standard evaporator and condenser coils shall have aluminum lanced plate fins mechanically bonded to seamless internally grooved copper tubes with all joints brazed.

b. Evaporator coils shall be leak tested to 150 psig, pressure tested to 450 psig, and qualified to UL 1995 burst test at 1775 psig.

c. Condenser coils shall be leak tested to 150 psig, pressure tested to 650 psig, and qualified to UL 1995 burst test at 1980 psig.

2. Optional Copper-fin evaporator and condenser coils:

a. Shall be constructed of copper fins mechanically bonded to copper tubes and copper tube sheets.

b. Galvanized steel tube sheets shall not be acceptable.

c. A polymer strip shall prevent coil assembly from contacting the sheet metal coil pan to minimize potential for galvanic corrosion between coil and pan.

3. Optional E-coated aluminum-fin evaporator and condenser coils:

a. Shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins.

b. Coating process shall ensure complete coil encapsulation of tubes, fins and headers.

c. Color shall be high gloss black with gloss per ASTM D523-89.

d. Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges.

e. Superior hardness characteristics of 2H per ASTM D3363-92A and cross-hatch adhesion of 4B-5B per ASTM D3359-93.

f. Impact resistance shall be up to 160 in.-lb (ASTM D2794-93).

g. Humidity and water immersion resistance shall be up to minimum 1000 and 250 hours respectively (ASTM D2247-92 and ASTM D870-92).

h. Corrosion durability shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117-90.

4. Standard All Aluminum Novation Coils:

a. Standard condenser coils shall have all aluminum Novation Heat Exchanger Technology design consisting of aluminum multi port flat tube design and aluminum fin. Coils shall be a furnace brazed design and contain epoxy lined shrink wrap on all aluminum to copper connections.

b. Condenser coils shall be leak tested to 150 psig, pressure tested to 650 psig, and qualified to UL 1995 burst test at 1980 psig.

5. Optional E-coated aluminum-fin, aluminum tube condenser coils:

a. Shall have a flexible epoxy polymer coating uniformly applied to all coil external surface areas without material bridging between fins or louvers.

b. Coating process shall ensure complete coil encapsulation, including all exposed fin edges.

c. E-coat thickness of 0.8 to 1.2 mil with top coat having a uniform dry film thickness from 1.0 to 2.0 mil on all external coil surface areas, including fin edges, shall be provided.

d. Shall have superior hardness characteristics of 2H per ASTM D3363-00 and cross-hatch adhesion of 4B-5B per ASTM D3359-02.

e. Shall have superior impact resistance with no cracking, chipping or peeling per NSF/ANSI 51-2002 Method 10.2.

F. Refrigeration Components:

Refrigeration circuit components shall include liquid line service valve, suction line service valve, a full charge of compressor oil, and a partial holding charge of refrigerant.

G. Controls and Safeties:

1. Minimum control functions shall include:

f. Control wire terminal blocks.

g. Compressor lockout on auto-reset safety until reset from thermostat.

h. Each unit shall utilize the Comfort Alert™ Diagnostic Board that provides:

(1.) System Pressure Trip fault code indication

(2.) Short Cycling fault code indication

(3.) Locked Rotor fault code indication

(4.) Open Circuit fault code indication

(5.) Reverse Phase 3 fault code indication

(6.) Welded Contactor fault code indication

(7.) Low Voltage fault code indication

(8.) Anti-short cycle protection

(9.) Phase reversal protection

2. Minimum safety devices which are equipped with automatic reset (after resetting first at thermostat), shall include:
   a. High discharge pressure cutout.
   b. Low pressure cutout.

H. Operating Characteristics:

1. The capacity of the condensing unit shall meet or exceed _____ Btuh at a suction temperature of _____°C/F. The power consumption at full load shall not exceed _____ kW.
2. The combination of the condensing unit and the evaporator or fan coil unit shall have a total net cooling capacity of _____ Btuh or greater at conditions of _____ cfm entering-air temperature at the evaporator at _____°C/F wet bulb and _____°C/F dry bulb, and air entering the condensing unit at _____°C/F.
3. The system shall have an EER of _____ Btuh/Watt or greater at standard AHRI conditions.
4. Standard unit shall be capable to operate up to 52°C (125°F) and down to 4°C (40°F)

I. Electrical Requirements:

1. Nominal unit electrical characteristics shall be _____ v, 3-ph, 50 Hz. The unit shall be capable of satisfactory operation within voltage limits of ____ v to _____ v.
2. Unit electrical power shall be single-point connection.
3. Unit control circuit shall contain a 24-v transformer for unit control.

J. Special Features:

1. Low-Ambient Temperature Control:
   A low-ambient temperature control shall be available as a factory-installed option or as a field-installed accessory. This low-ambient control shall regulate speed of the condenser-fan motors in response to the saturated condensing temperature of the unit. The control shall maintain correct condensing pressure at outdoor temperatures down to –29°C (-20°F).
2. Unit-Mounted, Non-Fused Disconnect Switch:
   Switch shall be factory-installed and internally mounted. NEC and UL-approved non-fused switch shall provide unit power shutoff. Switch shall be accessible from outside the unit and shall provide power off lockout capability. Non-fused disconnect cannot be used when unit MOCP electrical rating exceeds 80 amps.
3. Thermostat Controls:
   a. Programmable multi-stage thermostat shall have 7-day clock, holiday scheduling, large backlit display, remote sensor capability, and Title 24 compliance.
   b. Commercial Electronic Thermostat shall have 7-day time clock, auto-changeover, multi-stage capability, and large LCD (liquid crystal display) temperature display.
4. Louvered hail Guard Package:
   Louvered hail guard package shall protect coils against damage from hail and other flying debris.
5. Condenser Coil Grille (Novation 07-14 models only):
   Grille shall add decorative appearance to unit and protect condenser coil from large objects and vandalism.