

PC EXHIBIT A



DEVELOPMENT SERVICES DEPARTMENT—PLANNING DIVISION

311 Vernon St, Roseville, CA 95678 (916) 774-5276

ADDENDUM TO THE 2035 GENERAL PLAN ENVIRONMENTAL IMPACT REPORT (SCH #2019080418, CERTIFIED ON AUGUST 5, 2020) AND CHECKLIST DOCUMENT

Project Title/File Number:	NCRSP PCL 42A – Shea Center Apartments Rezone/PL21-0307
Project Location:	The Project is comprised of five (5) vacant parcels totaling approximately 19.50 acres located at 540, 556, 564, 572, and 580 Gibson Drive. The Project site is within the North Central Roseville Specific Plan (NCRSP) area. The site is bordered by SR 65 on the north, Gibson Drive on the south, an office complex on the east, and an apartment complex on the west. The site has a General Plan land use designation of Business Professional (BP) and a zoning designation of Business Professional/Special Area North Central Roseville Specific Plan (BP/SA-NC).
Project Description:	The applicant requests a General Plan Amendment and Specific Plan Amendment to the North Central Roseville Specific Plan (NCRSP) to modify the land use designation from Business Professional (BP) to High Density Residential (HDR); a Rezone from Business Professional/Special Area North Central Roseville Specific Plan (BP/SA-NC) to Multi-Family Housing/Special Area North Central Roseville Specific Plan (R3/SA-NC) to allow the development of the site with up to 360 multi-family dwelling units; and a Tentative Subdivision Map to merge five parcels. In addition, the project includes a Development Agreement by and between the City of Roseville and Roseville Land Holdings, LLC to reflect the change in land use and housing units.
Project Applicant:	Brad Shirhall, TLA Engineering and Planning
Property Owner:	Roseville Land Holdings, LLC
Lead Agency Contact:	Escarlet Mar, 916-774-5247

An addendum to a previously certified environmental impact report may be prepared for a project if some changes or additions are necessary but none of the conditions calling for the preparation of a subsequent environmental impact report (EIR) have occurred (California Environmental Quality Act [CEQA] Guidelines Section 15164). The conditions calling for the preparation of a subsequent EIR are listed in CEQA Guidelines Section 15162, which is based on Public Resources Code section 21166.

Similarly, for later activities implementing a previously adopted plan or program, a lead agency can rely on the EIR prepared for that plan or program if the agency finds that pursuant to Section 15162, no subsequent EIR

would be required. (CEQA Guidelines Section 15168(c)(2).) In such a case, the agency can approve the activities as being within the scope of the project covered by the previously prepared EIR and no new environmental document is required. (*Id.*) Where the later activities involve site specific operations, the agency should use a written checklist or similar device to document that the environmental effects of those activities are within the scope of the program EIR. (CEQA Guidelines Section 15168(c)(4).)

Consistent with CEQA Guidelines Sections 15164 and 15168, the below analysis has been prepared in order to demonstrate that none of the conditions described in Section 15162 of the CEQA Guidelines calling for preparation of a subsequent EIR have occurred and that only minor changes or additions are necessary in order to deem the certified environmental impact report (EIR) for the 2035 General Plan (State Clearing Housing Number 2019080418), including addendums thereto, adequate to describe the impacts of the proposed project.

CEQA Guidelines Section 15164 states that an addendum need not be circulated for public review but can be included in or attached to the adopted or certified environmental document for consideration by the hearing body. Similarly, a checklist prepared pursuant to CEQA Guidelines Section 15168 need not be circulated for public review. This Addendum/Checklist (called Addendum throughout the remainder of this document) analyzes the environmental effects of the Project, with particular focus on those aspects of the Project, its circumstances, or its environmental impacts that require additional discussion.

Table of Contents

Project Description	4
Scope of Addendum	5
Initial Study Checklist	
I. Aesthetics	13
II. Agricultural & Forestry Resources	15
III. Air Quality	16
IV. Biological Resources	22
V. Cultural Resources	27
VI. Energy	32
VII. Geology and Soils	32
VIII. Greenhouse Gases	36
IX. Hazards and Hazardous Materials	39
X. Hydrology and Water Quality	42
XI. Land Use and Planning	45
XII. Mineral Resources	46
XIII. Noise	47
XIV. Population and Housing	50
XV. Public Services	51
XVI. Recreation	53
XVII. Transportation	54
XVIII. Tribal Cultural Resources	59
XIX. Utilities and Service Systems	63
XX. Wildfire	65
XXI. Mandatory Findings of Significance	67
Environmental Determination	69
Attachments	69

PROJECT DESCRIPTION

Project Location

The Project is comprised of five (5) vacant parcels totaling approximately 19.50 acres located at 540, 556, 564, 572, and 580 Gibson Drive (see Figure 1). The Project site is within the North Central Roseville Specific Plan (NCRSP) area. The site is bordered by SR 65 on the north, Gibson Drive on the south, an office complex on the east, and an apartment complex on the west. The site has a General Plan land use designation of Business Professional (BP) and a zoning designation of Business Professional/Special Area North Central Roseville Specific Plan (BP/SA-NC).

Figure 1: Project Location



Background

The Project site is within the North Central Roseville Specific Plan (NCRSP) area. The NCRSP encompasses approximately 2,330 acres and is situated generally between State Route (SR) 65 to the north, Washington Boulevard to the west, Diamond Oaks Golf Course to the south, and Interstate 80 to the east. The NCRSP was adopted on July 5, 1990, by the City Council. An Environmental Impact Report was certified with the NCRSP (State Clearinghouse Number 88053010), which examined the impacts of the NCRSP buildout.

Environmental Setting

The project site is comprised of five (5) individual parcels, the parcels create an irregular shaped lot. The site is undeveloped with the exception of frontage and landscape improvements along Gibson Drive. Frontage improvements consist of sidewalk, curb and gutter, street trees, and groundcover. The site was previously graded and disturbed. At one time, the site was used to stockpile spoils from adjacent development parcels. Vegetation on the site is sparse with few small trees and shrubs on the property. Topography of the site is sloped upwards. Several grade changes occur throughout the site. A single gravel driveway is located on the west portion of the site. Stockpile of rocks is still evident on the site. Much of the site's surface has been disturbed

throughout the years, with evidence of pedestrians noticeable by the discoloration of the ground in certain areas of the site, specifically closest to the bikeway and pedestrian path located northwest of the project site.

The site is adjacent to State Route 65 to the north, Business Professional uses to the east, and multi-family residential uses to the south across Gibson Drive and to the west. Table 1 below identifies the land use designation and uses of the site and surrounding properties.

Location	Zoning	General Plan Land Use	Actual Use of Property
Site	BP/SA-NC	BP	Vacant
North	-	-	State Route 65
South	R3	HDR	Condominiums
East	BP/SA-NC	BP	Office complex
West	R3	HDR	Apartment complex

Proposed Project

The conceptual site plan shows merger of the five (5) existing lots to allow the development of an up to 360 multi-family dwelling unit Project with landscaping, lighting, and parking improvements. In addition to the site improvements, the conceptual site plan shows several on-site outdoor play and activity areas located on the southern portion of the Project site, which will be shielded from State Highway 65 through the apartment buildings and setback. The conceptual site plan shows an on-site water quality treatment and detention features.

Entitlements

The applicant requests a General Plan Amendment and Specific Plan Amendment to the North Central Roseville Specific Plan (NCRSP) to modify the land use designation from Business Professional (BP) to High Density Residential (HDR); a Rezone from Business Professional/Special Area North Central Roseville Specific Plan (BP/SA-NC) to Multi-Family Housing/Special Area North Central Roseville Specific Plan (R3/SA-NC); and a Tentative Subdivision Map to merge the five parcels into a single parcel. In addition, the project includes a Development Agreement by and between the City of Roseville and Roseville Land Holdings, LLC to provide certainty for the City of Roseville and the project proponent. The list of entitlements are listed below:

1. General Plan Amendment
2. Specific Plan Amendment to the North Central Roseville Specific Plan
3. Rezone from Business Professional/Special Area North Central Roseville Specific Plan (BP/SA-NC) to Multi-Family Housing/Special Area North Central Roseville Specific Plan (R3/SA-NC)
4. Tentative Subdivision Map
5. Development Agreement by and between the City of Roseville and Roseville Land Holdings, LLC

SCOPE OF ADDENDUM

This Addendum tiers from the 2035 General Plan Environmental Impact Report (GP EIR) and the 2021 Housing Element Addendum (HE Addendum) (combined, the GP EIR and HE Addendum), which analyzed the impacts of full buildout of the City's General Plan land uses and implementation of its policies consistent with the General Plan and the 2021 Housing Element. The GP EIR is available for review on the City's website at

<https://www.roseville.ca.us/generalplan> and the HE Addendum is available at www.roseville.ca.us/housingelement. The GP EIR evaluated the following topical sections, as numbered below:

Chapter 4.0. Introduction to the Environmental Analysis

- Section 4.1. Land Use and Agriculture
- Section 4.2. Population, Employment, and Housing
- Section 4.3. Transportation
- Section 4.4. Air Quality
- Section 4.5. Greenhouse Gas Emissions
- Section 4.6. Noise and Vibration
- Section 4.7. Geology, Soils, and Paleontological Resources
- Section 4.8. Biological Resources
- Section 4.9. Cultural and Tribal Cultural Resources
- Section 4.10. Hazards, Hazardous Materials, and Wildfire
- Section 4.11. Public Services and Recreation
- Section 4.12. Utilities and Service Systems
- Section 4.13. Hydrology and Water Quality
- Section 4.14. Aesthetics
- Section 4.15. Energy

The HE Addendum evaluated the same impact areas, but was formatted in the same analysis order as the CEQA Guidelines Initial Study Checklist, in which impacts are evaluated by topic area in alphabetical order. For each impact topic and question, the HE Addendum listed the location (page number) where that topic was addressed in the GP EIR and the disposition of the impact. This Addendum follows the same format. The area analyzed in the GP EIR and HE Addendum included all areas within the City limits and those areas that are within the City's Sphere of Influence, referred to throughout as the Planning Area. For consistency with previous documentation, in this Addendum the Planning Area will continue to refer to the area assessed within the GP EIR and HE Addendum, while "Project area" will refer to the much smaller subarea of the Planning Area affected by the proposed Project.

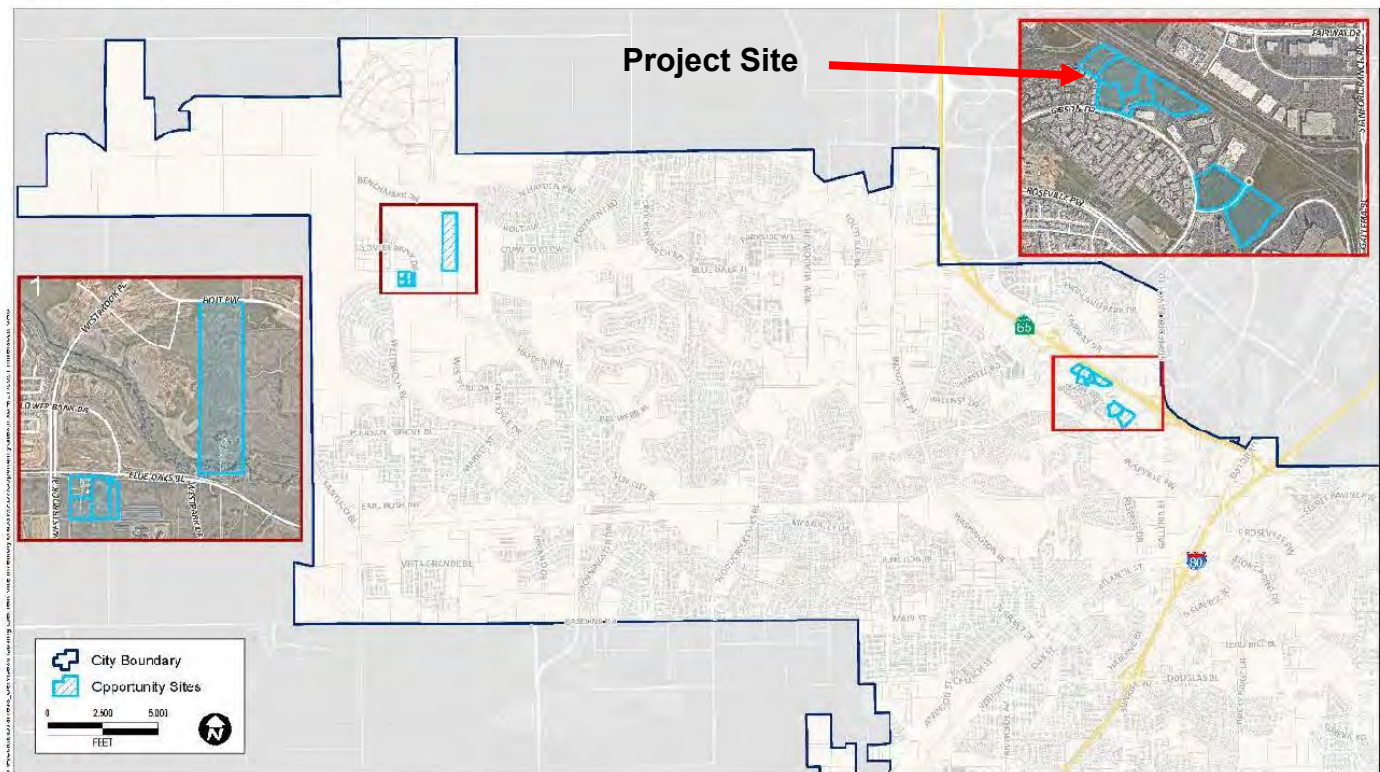
The GP EIR included a comprehensive analysis of the impacts of City buildout compared to baseline physical conditions and conservatively assumed that developable sites would be fully developed, rather than developing at average intensities. As of 2019 GP EIR baseline conditions, the City had approximately 21,000 units of residential development capacity before reaching buildout conditions, a figure which had dropped to approximately 19,000 units at the time of the HE Addendum, and which is currently estimated as 18,000 units. However, because of the conservative development assumptions within the GP EIR, the evaluation included the addition of between 20,000 and 25,000 units from existing conditions to buildout conditions, which is up to 4,000 units more than the City's buildout projections. A range was used in order to provide flexibility for future projects which could affect City buildout, ensuring that some future project changes could still fall within the scope of the GP EIR. The HE Addendum evaluated the addition of approximately 1,500 new high density units¹ to the City's projected buildout total as part of the Housing Element Rezone Program (Rezone Program), leaving 2,500 units

¹ The Rezone Program provided capacity for 2,086 "lower income" units. This is not equivalent to adding 2,086 new units to the City's cumulative buildout conditions. For Housing Element planning, density is used as a proxy for affordability; high density residential units at densities of 23 units per acre or greater are counted as "lower income." One of the Rezone Program strategies includes increasing the density of existing planned high density properties which are currently planned for densities below 23 units per acre. So a site planned for 200 units at 20 units per acre would have zero "lower income" units, but increasing the density of the site to 30 units per acre would move all of the units into the "lower income" category, thereby adding 300 lower income units while only adding 100 new units to buildout. The HE Addendum found the Rezone Program would add buildout capacity for 1,563 high density residential units.

of GP EIR buildout capacity. This total remained well within the range of development analyzed within the GP EIR. The HE Addendum indicated that the purpose and scope of the Addendum was focused on the way in which the Housing Element changed the mix of uses, rather than the use totals, by increasing residential density in certain areas and removing non-residential capacity.

This Addendum is focused in the same manner as the HE Addendum. The Project is within the scope of General Plan buildout and is consistent with and within scope of the Rezone Program. The Rezone Program included an “Opportunity Sites” strategy, which estimated that 600 units of additional capacity would be provided through the conversion of vacant non-residential sites to multifamily, High Density Residential sites. Housing Element page X-202 includes a detailed description of the Opportunity Sites strategy, including a map of potential sites (see Housing Element Figure X-36, below). The proposed Project site is specifically identified on the map as an opportunity site.

Figure X-36 | Opportunity Sites Map



The Housing Element was required by law to demonstrate a “realistic capacity,” which is a conservative amount of development capacity determined to be realistic based on market conditions, site constraints, and other factors. This analysis provides a conservative assumption, and is not a limit on the number of units which could be accommodated. The Rezone Program states that it “conservatively assumed” that 10 acres of the Shea property would be developed with 300 multifamily residential units and the remaining 9.5 acres would be developed with office and business professional uses consistent with the current land use designation. The development potential used in the GP EIR and HE Addendum is based on the average Floor Area Ratio (FAR). The Business Professional land use designation has an average FAR of 0.30, and therefore the 9.5 acres of Business Professional land was assumed to have the potential to support approximately 124,000 square feet of office uses.

The proposed Project includes up to 360 units of multifamily residential and no office uses, while the HE Addendum included 300 units plus 124,000 square feet of office uses. The proposed Project increases the

potential residential development by 60 units, but removes 124,000 square feet of potential office uses, resulting in a net decrease of development intensity compared to previous analyses. Therefore, the proposed Project falls within the scope of the GP EIR and HE Addendum analysis. The GP EIR and HE Addendum focused on program-level, citywide, and cumulative impacts. The Project falls within the scope of these analyses, and therefore this Addendum focuses on impacts particular to the site and the specific Project circumstances.

The geographic scope of the environmental setting relevant to a project's impacts varies depending on the issue topic. For example, the geographic scope of the environmental setting for air quality impacts related to ozone is the relevant air basin because this is the extent of the impacts' effects, whereas the geographic scope of the environmental setting for greenhouse gas emissions is global. Other impacts have more localized effects. For example, with impacts tied to construction, such as archeology and groundborne vibration from construction, the environmental setting is typically defined by the geographic scope of the construction area and its immediate surroundings.

The proposed Project does not facilitate or include construction within areas that had not previously been anticipated for construction within the GP EIR and HE Addendum. Therefore, the Project does not include any changes which would affect the GP EIR analyses related to the following categories:

- Section 4.7 Geology, Soils, and Paleontological Resources
- Section 4.8. Biological Resources
- Section 4.9. Cultural and Tribal Cultural Resources
- Section 4.10. Hazards, Hazardous Materials, and Wildfire
- Section 4.13. Hydrology and Water Quality
- Section 4.14. Aesthetics

This Addendum provides a summary of the GP EIR and HE Addendum analysis and its basis for determining impacts for each of the above topical sections, to clearly show that the Project does not change these impact evaluations.

The GP EIR and HE Addendum identified the following impacts as significant and unavoidable:

- Vehicle Miles Traveled (VMT) impacts
- Air Quality – Construction
- Air Quality – Operational
- Air Quality – Pollutant Concentrations
- Greenhouse Gases
- Noise and Vibration (short-term and long-term)
- Historical Resources
- Archeological Resources
- Disturbance of Human Remains
- Tribal Cultural Resources
- Construction of Utilities (indirect impacts)
- Aesthetics
- Light and Glare

All of the above impacts were also found to be significant and unavoidable cumulative impacts, along with the following:

- Biological Resources – Special-status plants, riparian habitat/sensitive natural communities, or wetlands and other waters

- Biological Resources – Special-status wildlife species and habitats

In order to assess the citywide impacts of changing the location and intensity of residential uses consistent with the Rezone Program, the HE Addendum included an updated citywide traffic impact study and VMT analysis. Analysis topics which use this information, including Air Quality, Greenhouse Gases, and Transportation, were updated based on the updated citywide study. The updated analyses found the Housing Element would actually reduce impacts compared to the analyses of the GP EIR. The HE Addendum found that analyses related to Geology, Soils, and Paleontological Resources; Biological Resources; Cultural and Tribal Cultural Resources; Hazards, Hazardous Materials, and Wildfire; Hydrology and Water Quality; and Aesthetics would generally be unchanged by the Housing Element. The HE Addendum found that the Housing Element would not result in any new or substantially increased impacts compared to the GP EIR analysis.

The analyses in this Addendum rely on the GP EIR and HE Addendum analysis with minor supplements or technical updates where appropriate. The Project implements a portion of the Housing Element Rezone Program, and is within the buildout range described within the GP EIR and HE Addendum and within the same development footprint. Therefore, the Project is not anticipated to change impacts or the general effects of urban development.

PURPOSE AND USE OF ADDENDUM

The adopted Rezone Program Opportunity Sites strategy was assumed to provide 600 high density residential units, with additional units provided through an infill strategy; commercial-to-residential rezone strategy; and increases in allowed density on existing, vacant multifamily sites. The capacity values for each strategy are explicitly described as estimates, with the Rezone Program further stating that the strategies would be implemented together or in part in order to achieve the total Rezone Program capacity.

The Housing Element did not approve any housing projects or land use amendments; it was a policy-level document establishing the framework for future actions. The HE Addendum stated:

After the 2021 Housing Element is adopted the City would begin identifying sites and taking specific land use actions, at which time an environmental review process will be needed to determine the physical effects which would result from those actions. To streamline that future environmental review, this Addendum evaluates the physical effects of implementing the rezone program to the extent reasonable and practicable, based on the Project description above.

The Addendum for the proposed Project is being prepared consistent with the above statement. As described, the Project includes a proposal to change the General Plan and Specific Plan land use designation and zoning district of the site from Business Professional and Business Professional/Special Area North Central Roseville Specific Plan to, respectively, High Density Residential and Multifamily Residential (R3)/Special Area North Central Roseville Specific Plan. Development of the entire site was assumed within the GP EIR and HE Addendum, because it had an urban land use designation, and therefore the Project does not increase the physical development footprint compared to what was analyzed in the GP EIR and HE Addendum.

Section 15152 of the CEQA Guidelines provides that where a first-tier EIR has “adequately addressed” the subject of cumulative impacts, such impacts need not be revisited in second- and/or third-tier documents. According to Section 15152(f)(3), significant effects identified in a first-tier EIR have been adequately addressed, for purposes of later approvals, if the lead agency determines that such effects have been either:

- A) “mitigated or avoided as a result of the prior [EIR] and findings adopted in connection with that prior [EIR]”; or
- B) “examined at a sufficient level of detail in the prior [EIR] to enable those effects to be mitigated or avoided by site-specific revisions, the imposition of conditions, or by other means in connection with the approval of the later project.”

The GP EIR and HE Addendum form a program EIR that helps determine the need for subsequent environmental documentation, as well as dictates the scope of project-level CEQA review. According to Section 15168(d) of the CEQA Guidelines, a program EIR can be used to simplify the task of preparing future environmental documents on later activities in the program. A program EIR can:

- 1) “Provide the basis in an Initial Study for determining whether the later activity may have any significant effects.
- 2) Be incorporated by reference to deal with regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the program as a whole.
- 3) Focus an EIR on a later activity to permit discussion solely of new effects which had not been considered before.”

Before preparing any additional environmental review, however, CEQA Guidelines Section 15168(c) states that lead agencies should first determine whether any of the conditions listed in Section 15162 have been met. Section 15162 prohibits a lead agency from preparing a subsequent EIR unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

- Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
 - The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

If none of the conditions in Section 15162 have been met, then no new environmental review is required, and the lead agency can approve the activity as being within the scope of the project covered by the program EIR. (CEQA Guidelines Section 15168(c)(2).) Nevertheless, a lead agency should use a written checklist or similar device to document the evaluation of the site and the activity that led it to conclude no additional environmental review is required. (CEQA Guidelines Section 15168(c)(4).)

This Addendum is the recommended written checklist for the Project. It also acts as an addendum pursuant to CEQA Guidelines Section 15164.

ENVIRONMENTAL ADDENDUM/CHECKLIST FOR ENVIRONMENTAL REVIEW

The purpose of this Addendum is to evaluate the categories in terms of any “changed condition” (i.e. changed circumstances, project changes, or new information of substantial importance) that may result in a changed environmental result. A “no” answer does not necessarily mean there are no potential impacts relative to the environmental category, but that there is no change in the condition or status of the impact since it was analyzed and addressed in prior environmental documents.

EXPLANATION OF CHECKLIST EVALUATION CATEGORIES

Where Impact Was Analyzed

This column provides a cross-reference to the pages of the prior environmental documents where information and analysis may be found relative to the environmental issue listed under each topic.

Do Proposed Changes Involve New Significant Impacts?

Pursuant to Section 15162(a)(1) of the CEQA Guidelines, this column indicates whether the changes represented by the current project will result in new significant impacts that have not already been considered

and mitigated by the prior environmental review documents and related approvals, or will result in a substantial increase in the severity of a previously identified impact.

Any New Circumstances Involving New Impacts?

Pursuant to Section 15162(a)(2) of the CEQA Guidelines, this column indicates whether there have been changes to the project site or the vicinity (circumstances under which the project is undertaken) which have occurred subsequent to the certification or adoption of prior environmental documents, which would result in the current project having new significant environmental impacts that were not considered in the prior environmental documents or that substantially increase the severity of a previously identified impact.

Any New Information Requiring New Analysis or Verification?

Pursuant to Section 15162(a)(3)(A–D) of the CEQA Guidelines, this column indicates whether new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence at the time the previous environmental documents were certified or adopted is available and requires an update to the analysis of the previous environmental documents to verify that the environmental conclusions and mitigation measures remain valid. Either “yes” or “no” will be answered to indicate whether there is new information showing that: (A) the project will have one or more significant effects not discussed in the prior environmental documents; (B) that significant effects previously examined will be substantially more severe than shown in the prior environmental documents; (C) that mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or (D) that mitigation measures or alternatives which are considerably different from those analyzed in the prior environmental documents would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative. If “no,” then no additional environmental documentation (supplemental or subsequent EIR) is required.

Mitigation Measures Implemented or Addressing Impacts

Pursuant to Section 15162(a)(3) of the CEQA Guidelines, this column indicates whether the prior environmental documents provide mitigation measures to address effects in the related impact category. In some cases, the mitigation measures have already been implemented. In any instance where mitigation was included, regardless of whether the mitigation has been completed at this time, the response will include the mitigation measure number. If “none” is indicated, this environmental analysis concludes a significant impact does not occur with this project, no mitigation was previously included, and no mitigation is needed.

DISCUSSION AND MITIGATION SECTIONS**Discussion**

A discussion of the elements of the checklist is provided under each environmental category in order to clarify the answers. The discussion provides information about the particular environmental issue, how the project relates to the issue and the status of any mitigation that may be required or has already been implemented.

Mitigation Measures

Applicable mitigation measures from the prior environmental review that apply to the project are listed under each environmental category.

Conclusions

A discussion of the conclusion relating to the analysis contained in each section.

CHECKLIST

I. Aesthetics

	Where Impact Was Analyzed in Prior Environmental Documents	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a. Have a substantial adverse effect on a scenic vista?	EIR 4.14-18 and Addendum page 15	No	No	No	None
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	EIR 4.14-18 and Addendum page 15	No	No	No	None
c. In non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	EIR 4.14-19 and Addendum page 15	No	No	No	None
d. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	EIR 4.14-24 and Addendum page 15	No	No	No	None

Discussion: Aesthetics and visual resources are subjective by nature, and therefore the extent of visual impacts associated with adoption and implementation of development evaluated at a program level is difficult to quantify. The GP EIR analysis was conducted qualitatively, assessing the potential implications of full buildout of the Planning Area.

There are no designated or eligible state scenic highways within or near the Planning Area, nor is the Planning Area visible from such a highway, so the GP EIR concluded there were no impacts with respect to this topic (GP EIR page 4.14-18). This evaluation remains adequate and is applicable to this Project.

Impacts related to substantial adverse effects on a scenic vista were found to be less than significant (GP EIR page 4.14-18) because there are no scenic vistas in the Planning Area. This evaluation remains adequate and is applicable to this Project.

Impacts related to, in a non-urbanized area, substantially degrading the visual character or quality of public views of the site and its surroundings, and in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality, were found to be significant (GP EIR page 4.14-19). The significance determination was driven by the impacts to *non-urbanized areas*, where buildout of the Planning Area will convert large areas of open, undeveloped land to urban uses. This is unrelated to the Project area, which occurs in an urbanized area.

In an urbanized area, the criteria for evaluation is whether a project will conflict with zoning or other regulations governing scenic quality. The GP EIR discusses the effects of infill and redevelopment at length, acknowledging that new development in infill settings may result in some buildings that are taller or of a greater scale than the current development in the local neighborhood. However, the analysis indicates that new development will be required to comply with the City's Zoning Ordinance, General Plan policies, and as applicable with the City's Community Design Guidelines, and that these are intended to foster development which is compatible and complementary with the existing development. Furthermore, the GP EIR notes that allowing for greater density and intensity can improve the character of neighborhood centers and corridors, that taller or larger buildings do not necessarily constitute a visual impact, and that adding uses and density typically improves visual quality by developing vacant or underused properties and improving maintenance of existing structures and yards.

The HE Addendum discussed the infill aspects of the Rezone Program, which includes the Project site. The Project site is located within an urban infill area of the City surrounded by existing urban uses. The proposed Project land use amendment and rezoning would be consistent with zoning and other regulations governing scenic quality. The Project is designed to comply with such regulations, including the development standards in the R3/SA-NC zone.

Similarly to impacts related to visual quality, the GP EIR and HE Addendum were found to be significant (GP EIR page 4.14-24), because buildout of the General Plan would introduce new sources of nighttime lighting in less developed areas on the edge of the urban portions of the City, where there is low existing ambient nighttime lighting. The Project involves nighttime lighting to provide for the security and safety of Project users. However, the Project is already located within an urbanized setting with many existing lighting sources from the office complex to the east and the condominiums to the west. Lighting will be conditioned to comply with City standards (i.e. Community Design Guidelines) to limit the height of light standards and to require cut-off lenses and glare shields to minimize light and glare impacts. The Project will not create a new source of substantial light. None of the Project elements are highly reflective, and thus the Project will not create a new source of glare.

Therefore, the GP EIR and HE Addendum adequately describes the potential impacts of the Project, and the Project does not result in new or substantially more severe increases in significant effects related to aesthetic impacts in urbanized areas.

Mitigation Measures: None.

II. Agricultural & Forestry Resources

	Where Impact Was Analyzed in Prior Environmental Documents	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	EIR 4.1-17 and Addendum page 17	No	No	No	None
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	EIR 4.1-17 and Addendum page 17	No	No	No	None
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	N/A	No	No	No	N/A
d) Result in the loss of forest land or conversion of forest land to non-forest use?	N/A	No	No	No	N/A
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	EIR 4.1-17 and Addendum page 17	No	No	No	None

Discussion: The GP EIR indicates approximately 20 acres of Prime Farmland borders Pleasant Creek within Reason Farms. The remainder of the Planning Area is designated by the Placer County Important Farmland map as Farmland of Local Importance, Grazing Land, Other Land, and Urban and Built-Up Land (California Department of Conservation 2016). These designations are not considered Important Farmland under CEQA (Public Resources Code Sections 21060.1 and 21095 and CEQA Guidelines Appendix G). The areas of Prime Farmland with Reason Farms is

not designated for conversion to urban land uses. Therefore, the GP EIR concluded buildout of the General Plan would not convert Important Farmland to nonagricultural uses and no impact would occur. This evaluation remains adequate and is applicable to this Project site, which is not planned for agricultural use and does not contain any type of farmland.

The Planning Area is not zoned for agricultural uses and no parcels are under Williamson Act contracts (Placer County 2020). Therefore, the GP EIR concluded buildout of the General Plan would not conflict with existing zoning for agricultural uses or a Williamson Act contract and no impact would occur. This evaluation remains adequate and is applicable to this Project site, which is zoned for office use.

The Planning Area does not contain any forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)), and therefore there are no impacts related to forest land. This evaluation remains adequate and is applicable to this Project.

Mitigation Measures: None.

III. Air Quality

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Conflict with or obstruct implementation of the applicable air quality plan?	EIR 4.4-25 and Addendum page 18	No	No	No	MM 4.4-2a, MM 4.4-2b, and MM 4.4-3
b) Result in a cumulatively considerable net increase of any criteria for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	EIR 4.4-26 & 4.4-29 and Addendum page 18	No	No	No	MM 4.4-2a and MM 4.4-2b
c) Expose sensitive receptors to substantial pollutant concentrations?	EIR 4.4-36 and Addendum page 18	No	No	No	MM 4.4-3
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	EIR 4.4-49 and Addendum page 18	No	No	No	MM 4.4-5

Discussion: The City of Roseville, along with the south Placer County area, is located in the Sacramento Valley Air Basin (SVAB). The SVAB is within the Sacramento Federal Ozone Non-Attainment Area. Under the Clean Air Act, Placer County has been designated a "serious non-attainment" area for the federal 8-hour ozone standard, "non-attainment" for the state ozone standard, and a "non-attainment" area for the federal and state PM₁₀ standard (particulate matter less than 10 microns in diameter). Within Placer County, the Placer County Air Pollution Control District (PCAPCD) is responsible for ensuring that emission standards are not violated.

The GP EIR evaluated construction-related activities, which would result in temporary emissions of criteria air pollutants (e.g., PM₁₀, PM_{2.5}, CO) and ozone precursors (e.g., ROG and NO_x) from ground-disturbing activities (e.g., excavation, grading, and clearing); exhaust emissions from use of off-road equipment, material delivery, and construction worker commutes; building construction; asphalt paving; and application of architectural coatings. The GP EIR also evaluated activities associated with the operation of General Plan land uses, which would generate criteria air pollutant and precursor emissions from mobile, energy, and area sources. The California Emissions Estimator Model (CalEEMod) was used to estimate emissions resulting from both construction-related activities and operational activities. The Project also falls within the scope of the units evaluated by the GP EIR and HE Addendum. Further, the HE Addendum traffic model considered the Federal Bureau of Investigation (FBI) project as part of the existing conditions, and assumed additional square feet of industrial capacity on the balance of the original Blue Oaks Commerce Center site. The Project is within the assumed cumulative analysis and therefore, would not result in a change to the construction-related analysis in the GP EIR, which concluded that citywide emissions would exceed the adopted Placer County Air Pollution Control District significance thresholds, and that even after application of mitigation these impacts would remain significant and unavoidable. This citywide analysis remains appropriate and applicable to the Project.

Note that this evaluation considered the combined effects of development activities occurring concurrently across the City; individual projects may not, by themselves, result in significant impacts. The Sacramento Metropolitan Air Quality Management District (SMAQMD) CEQA Handbook (page 3-4) indicates that an individual project on a vacant site generally needs to involve 35 or more acres to exceed the construction-related significance threshold. The Project site is approximately 19.50-acres in size.

For operational emissions, the HE Addendum evaluation noted that the Housing Element did not change the total units analyzed but did change the location and density of uses, which can have an effect on operational emissions related to transportation. An updated analysis of vehicle miles traveled (VMT) was prepared for the Housing Element; the details and findings of this VMT analysis were discussed in greater detail in the Transportation section of the HE Addendum. To summarize, the updated analysis found the Housing Element had a beneficial effect on VMT generation. The updated analysis found existing conditions (2020) had an average citywide VMT of 15.7 VMT/resident and cumulative conditions (2035) have an average citywide VMT of 14.7 VMT/resident. This was an increase of baseline (existing conditions) VMT, which the GP EIR found to be 15.1 VMT/resident, but is a decrease of cumulative conditions VMT, which the GP EIR found to be 15.5 VMT/resident (with transportation facilities constrained) or 14.9 VMT/resident (with transportation facilities unconstrained). The HE Addendum found that operational criteria pollutant emissions would be decreased compared to the analysis of the GP EIR, because it reduced citywide VMT. The VMT reductions occurred because higher densities generally result in lower per-person vehicle miles traveled, especially in areas of the City which have low VMT rates due to proximity to services, jobs, and transit, such as the Project area. The Project is within the area of the City which generates low VMT per-person in the City, and therefore would also be expected to have a beneficial impact on per person VMT generation.

Given that the Project will reduce citywide VMT, it will also reduce all criteria pollutant emissions associated with transportation. The GP EIR and HE Addendum found that emissions related to operation were significant and unavoidable, because the application of mitigation was not sufficient to bring emissions below the significance thresholds. This conclusion remains adequate and is applicable to this Project. However, this is based on the citywide emissions; individual projects may not exceed the significance thresholds.

For substantial pollutant concentrations, the GP EIR and HE Addendum found construction and operation of the General Plan would generate localized air pollutant emissions that could affect existing and proposed sensitive receptors. Construction activities would generate diesel particulate matter (diesel PM) emissions. Existing regulations and policies, as well as revised policies were found to reduce potential exposure to substantial pollutant concentrations, but impacts related to diesel particulates were found to be significant and unavoidable. The Project would not change the location or extent of construction activities, so would result in no change to this analysis. This evaluation remains adequate and is applicable to this Project.

Buildout of the General Plan would also contribute vehicles to local intersections that could cause a CO hotspot (i.e., exceedance of the CO ambient air quality standard). However, due to requirements for cleaner vehicle emissions, proposed land use and transportation goals and policies, and use of intelligent transportation system equipment, the GP EIR concluded the General Plan's land uses would not contribute substantial vehicle volumes to existing or future intersections that could cause a CO hotspot. Existing regulations and policies, as well as revised policies were found to reduce potential exposure to substantial pollutant concentrations related to CO hotspots to a less than significant level. The HE Addendum included an updated Level of Service analysis (see the Transportation section of this Addendum) which found that the Housing Element would not change trip distribution in a manner that would cause the City's Level of Service policy to be exceeded, nor would it contribute significant trips to intersections already operating at acceptable levels. Therefore, the GP EIR and HE Addendum analysis related to CO hotspots remains adequate and is applicable to this Project.

For other emissions, the GP EIR found that buildout of the General Plan could involve actions which would expose people to objectionable odors. Construction-related activities would generate odors from the use of diesel-powered equipment and from paving and architectural coating activities. However, these odorous emissions would be temporary and disperse rapidly with distance from the source; therefore, construction-generated odors would not result in the frequent exposure of receptors to objectionable odor emissions. Future land uses could result in the operation of new land use that generates objectionable odors or the siting of sensitive receptors in proximity to existing odor-generating land uses within the Planning Area. Therefore, development under the General Plan could result in the exposure of receptors to objectionable odor emissions. Because buffer distances and implementation of specific technology- and design-based measures cannot be known at this time, it was conservatively assumed that sensitive receptors could be exposed to substantial odor-generating emissions, and the GP EIR found impacts to be significant and unavoidable after the application of mitigation. The HE Addendum indicated the Housing Element does not change the location and extent of urban development, and though it includes the potential placement of residential uses in locations which are currently designated for commercial uses, none are located in areas which are exposed to significant odor sources. This remains true of the Project. The Project area was evaluated using the SMAQMD odor screening methodology, and it was found that there were no significant odor sources that would affect the Project. As a housing project, the Project also would not create other emissions, such as odor, that would adversely affect a substantial number of people. Therefore the GP EIR and HE Addendum evaluation remains adequate and is applicable to this Project.

Mitigation Measures: All of the mitigation measures below were effectuated through inclusion in the City's 2035 General Plan Appendix A: Implementation Measures, but are included here for reference.

Mitigation Measure 4.4-2a – *The proposed General Plan Update should be amended as follows:*

Implementation Measure

Projects that could have a potentially significant effect, as demonstrated by exceedance of the PCAPCD-recommended thresholds of significance, shall incorporate applicable PCAPCD-recommended standard operational mitigation measures, as listed below or as they may be updated in the future, or those design features determined by the City to be as effective:

- ▶ Wood burning or pellet stoves shall not be permitted. Natural gas or propane fired fireplaces shall be clearly delineated on plans submitted to obtain building permits.
- ▶ Where natural gas is available, gas outlets shall be provided in residential backyards for use with outdoor cooking appliances such as gas barbeques.
- ▶ Electrical outlets should be installed on the exterior walls of both the front and back of residences to promote the use of electric landscape maintenance equipment.
- ▶ All newly constructed residential buildings including one- and two-family dwellings, townhomes, and multi-family units in low-rise and high-rise residential buildings shall comply with the California Green Building Standards Code (CalGreen).
- ▶ Covenants, Conditions & Restrictions (CC&Rs) shall include the required distribution of educational information on how homeowners can increase energy efficiency and conservation in their new homes. The information shall be delivered as part of a "move-in" packet prior to occupancy of the residence.
- ▶ Streets should be designed to maximize pedestrian access to transit stops.
- ▶ Site design shall maximize access to transit, to accommodate bus travel, and to provide lighted shelters at transit access points.
- ▶ A pedestrian access network shall link complementary land uses.
- ▶ Provide bicycle storage to promote bicycling.
- ▶ Vanpool parking only spaces and preferential parking for carpools should be required for employment-generating uses.
- ▶ Consider using concrete or other non-polluting materials for paving parking lots instead of asphalt.

- ▶ Landscaping should be designed to eventually shade buildings and parking lots.

Mitigation Measure 4.4-2b – *The proposed General Plan Update should be amended as follows:*

Implementation Measure

If, following implementation of Mitigation Measure 4.4-2a, a project's operational emissions would still exceed PCAPCD-recommended thresholds of significance, the City would require the project to offset remaining project emissions in excess of thresholds by establishing off-site mitigation or participation in PCAPCD's Off-site Mitigation Program.

Mitigation Measure 4.4-3 – *The proposed General Plan Update should be amended as follows:*

Implementation Measure

- ▶ The City shall require, as part of plans for development within the Planning Area, the implementation of ARB's *Air Quality and Land Use Handbook: A Community Health Perspective* guidance concerning land use compatibility and recommended setback distances with regard to sources of TAC emissions and sensitive land uses, or related guidance as it may be updated in the future.
- ▶ As an alternative to these buffer distances, proposed sensitive receptors, uses that involve substantial truck trips, and large gas stations may provide a site-specific health risk assessment, using methods consistent with applicable guidance from the Office of Environmental Health Hazard Assessment, with mitigation, if necessary, to demonstrate compliance with applicable PCAPCD-recommended health risk thresholds. When health risk impacts exceed PCAPCD-recommended thresholds, feasible on-site mitigation measures to reduce TAC exposure shall be implemented to mitigate health risk impacts below PCAPCD-recommended thresholds. On-site measures could include but are not limited to providing enhanced filtration systems (e.g., MERV 13 or greater) for near-by sensitive receptor buildings, use of solid barriers to pollution, and vegetation to reduce pollutant concentrations, changes to the TAC emission source's operation (e.g. technology or management practices that reduce harmful emissions at the Rail Yard), and positioning of exhaust and intake for ventilation systems to minimize exposure, among others.
- ▶ The City shall require, as part of development of land uses associated with sensitive receptors within 500 feet of high-volume roadways (defined as roadways carrying an average of 100,000 or more vehicles per day), the *incorporation* of feasible design measures to reduce exposure by sensitive receptors of substantial emissions of TACs from nearby high-volume roadways and operation of the Roseville Rail Yard. Design measures shall include recommended strategies from the ARB Technical Advisory, as listed below or as they may be updated in the future, or those design features determined by the City to be as effective:

- Design that promotes air flow and pollutant dispersion along street corridors, including the use of wider sidewalks, bicycle lanes, and dedicated transit lanes, which create space for better air flow and pollutant dispersion along with increasing active transportation and mode shift;
- Installation of solid barriers, particularly in the downwind direction. Note that consideration of this strategy should also weigh the negative effect of dividing neighborhoods and obscuring sightlines.
- Installation of vegetation for pollutant dispersion; maximum benefit of this strategy is typically seen when combined with solid barriers.
- Installation of indoor high-efficiency filtration systems and devices to remove pollutants from the air. If this strategy is selected, a plan for ongoing operation and maintenance of the systems must also be developed to ensure long-term efficiency is achieved as intended by the system.

Mitigation Measure 4.4-5 – *The proposed General Plan Update should be amended as follows:*

Implementation Measure

All new Specific Plans and proposed amendments to Specific Plans shall be evaluated for odor impacts using the SMAQMD-recommended screening distances for odor sources, or the most current adopted or recommended version. If the minimum buffer distance is not feasible, as an alternative to these buffer distances, technology- and design-based measures shall be evaluated as part of the Specific Plan design guidelines to minimize, contain, or prevent the generation of odor-causing emissions and the dispersion of such emissions to nearby sensitive receptors. For example, in the case of siting odor-producing sources, activities could be maintained within an enclosed space and appropriate air filtration systems could be implemented to reduce odors expelled from the building. For developments that would host sensitive receptors, design would include air site layout, landscaping, indoor air filtration systems, or other appropriate measures to minimize exposure of proposed sensitive receptors to odors.

IV. Biological Resources

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	EIR 4.8-60 (plants), 4.8-64 (wildlife), and Addendum page 23	No	No	No	MM 4.8-1 and 4.8-2
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	EIR 4.8-70 and Addendum page 23	No	No	No	MM 4.8-1, 4.8-2, and MM 4.8-3
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	EIR 4.8-73 and Addendum page 23	No	No	No	MM 4.8-1, 4.8-2, MM 4.8-3, and MM 4.8-4
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	EIR 4.8-76 and Addendum page 23	No	No	No	MM 4.8-1, 4.8-2, MM 4.8-3, and MM 4.8-4
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	EIR 4.8-79 and Addendum page 23	No	No	No	None

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	EIR 4.8-80 and Addendum page 23	No	No	No	None
--	---------------------------------	----	----	----	------

Discussion: The biological resources information presented in the GP EIR was based on review of the following sources: previous studies conducted for the West Roseville, Sierra Vista, Creekview, and Amoruso Ranch Specific Plan Areas and associated EIRs; a comment letter received from CDFW in response to the NOP; biological resource databases, including the United States Fish and Wildlife Service (USFWS) Information, Planning, and Conservation System (IPaC), USFWS Critical Habitat Mapper, USFWS National Wetlands Inventory (NWI) Wetlands Mapper, the California Natural Diversity Database (CNDDB) and Biogeographic Information and Observation System (BIOS), and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants; aerial photography interpretation; and the draft Western Placer County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP).

Impacts related to the loss and degradation of special-status plants and their habitats were found to be potentially significant (GP EIR page 4.8-60) as were impacts to special-status wildlife and their habitats (GP EIR page 4.8-64), impacts to riparian habitat or other sensitive natural communities (GP EIR page 4.8-70), impacts to protected wetlands and other waters (GP EIR page 4.8-73), and impacts to wildlife movement corridors and nursery sites (GP EIR page 4.8-76) because buildout of the General Plan could result in direct removal or take of special-status species; modification or removal of sensitive habitats, wildlife corridors, nursery sites, protected waters, and habitats suitable for special-status species; indirect effects to species or habitats that may result from construction-related runoff, sedimentation, erosion, and introduction of invasive weeds; and the introduction of new sources of noise and light. Implementation of mitigation, combined with General Plan policies and existing laws and regulations, were found to reduce impacts to less than significant levels, because new development would be required to identify, avoid, and preserve sensitive habitats, wildlife corridors, nursery sites, protected waters, and habitats which may support special-status populations to the extent feasible, and compensate for the loss of these resources through preservation, compensation, or other appropriate measures in coordination with state and federal agencies. Furthermore, the City's Specific Planning process has already resulted in the creation of connected open space corridors throughout the Planning Area which contain much of the sensitive habitat in the Planning Area.

Impacts related to conflicts with local ordinances protecting biological resources were found to be less than significant (GP EIR page 4.8-79) because while buildout of the Planning Area would result in impacts to biological resources, all development would be subject to and consistent with the city's ordinances and policies such as the Tree Preservation Ordinance. Therefore, impacts related to conflict with local ordinances were found to be less than significant.

Impacts related to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved Conservation Plan were found to be less than significant because there are no adopted plans which apply to the Planning Area.

All of the analyses described above are based on the potential impacts of grading and general development within the Planning Area, and the HE Addendum noted that the Housing Element neither changed the boundaries of the Planning Area nor the locations of potential grading and development within the Planning Area. Therefore, the GP EIR analyses of biological resources adequately and appropriately describe the potential impacts of the Housing Element.

The Project area is within a fully developed and urbanized location of the Planning Area, where significant impacts to biological resources would not be expected to occur. Further, as described in the environmental setting, the site vegetation is sparse with few small trees and shrubs on the site. The site was previously graded/disturbed, and no special status plants, riparian habitat/sensitive natural communities, wetlands, and loss of habitat and special status wildlife species have occurred or would occur on the site. The Project does not result in new or substantially more severe increases in significant biological effects and is within the scope of the impacts analyzed in the GP EIR and HE Addendum.

Mitigation Measures: All of the mitigation measures below were effectuated through inclusion in the City's 2035 General Plan Appendix A: Implementation Measures, but are included here for reference.

Mitigation Measure 4.8-1 The proposed General Plan Update should be amended as follows:

Implementation Measure for Special-Status Plants and Habitat

As appropriate to each individual project or Specific Plan, the following actions or those determined to be equally as effective by the City shall be implemented where there may be an adverse impact on special-status plants or habitat:

- a. In conjunction with environmental review pursuant to CEQA, for projects that could directly affect special-status plants or habitat, the City shall require that resource field surveys, including special-status plant surveys, be submitted concurrent with development applications inventorying the type, quantity, and quality of existing open space resources and conditions. This requirement may be waived if determined by the City that the proposed project area is already sufficiently surveyed, is within an adopted specific plan area, or contains resources considered less than significant.
- b. The City and project proponents will identify feasible opportunities to preserve special-status plant species occurrences and sensitive habitats through design and planning.
- c. If the City determines it is reasonable and feasible to do so, the City will require preservation of occupied special-status plant species habitat and sensitive habitat types as a condition of project approval. If adverse effects cannot be avoided, project proponents shall be required to mitigate all adverse effects in accordance with guidance from the appropriate state or federal agency charged with the protection of the subject species and habitat, including surveys conducted according to applicable standards and protocols, where necessary, implementation of impact minimization measures based on accepted standards and guidelines and best available science, and compensatory mitigation for unavoidable loss of special-status plant species and sensitive habitats.
- d. If the project would result in take of state or federally listed species, the City will require project proponent/s to obtain take authorization from the USFWS and/or the CDFW, as appropriate, depending on species status, and comply with all conditions of the take authorization.

- e. The City will require project proponents to develop and implement a mitigation and monitoring plan reflective of permit conditions required by State and/or federal regulatory agencies, to compensate for effects to or loss of special-status species and sensitive habitats. The mitigation and monitoring plan will describe in detail how impacts to special-status species or sensitive habitats shall be avoided or offset, including details on restoration and creation of habitat, compensation for the temporal loss of habitat, management and monitoring to avoid indirect habitat degradation (e.g., management of invasive plant species, maintenance of required hydrology), success criteria ensuring that habitat function goals and objectives are met and target special-status species cover and density parameters are established, performance standards to ensure success, and remedial actions if performance standards are not met. The plan will include detailed information on the habitats present within the preservation and mitigation areas, the long-term management and monitoring of these habitats, legal protection for the preservation and mitigation areas (e.g., conservation easement, declaration of restrictions), and funding mechanism information (e.g., endowment).
- f. If available, purchase of mitigation credits at an agency-approved mitigation bank (i.e., approved by the agency with jurisdiction over the affected species or habitat) in Placer County, will be acceptable for compensatory mitigation for special-status species.

Mitigation Measure 4.8-2 – *The proposed General Plan Update should be amended as follows:*

Implementation Measure for Special-Status Wildlife

If feasible, the City will require preservation of occupied special-status wildlife species habitat and sensitive habitat types as a condition of project approval. If adverse effects cannot be avoided, project proponents shall be required to mitigate all adverse effects in accordance with guidance from the appropriate state or federal agency charged with the protection of the subject species and habitat, including surveys conducted according to applicable standards and protocols, where necessary, implementation of impact minimization measures based on accepted standards and guidelines and best available science, and compensatory mitigation for unavoidable loss of special-status wildlife species and sensitive habitats.

Mitigation Measure 4.8-3 – *The proposed General Plan Update should be amended as follows:*

Implementation Measure for Riparian Habitat and Sensitive Natural Communities

If a proposed project would result in fill or alteration of a waterway or any body of water supporting riparian forest habitat, the City will require project proponent/s to notify the California Department of Fish and Wildlife, obtain a Lake and Streambed Alteration Agreement if determined necessary by the California Department of Fish and Wildlife, and comply with all conditions of the Lake and Streambed Alteration Agreement. Measures for riparian habitat and sensitive natural communities protection include, but are not limited to, avoid

impacts by establishing a buffer zone between adjacent land uses and riparian habitat and sensitive natural communities; protect and preserve riparian habitat and sensitive natural communities to the extent feasible; and compensate for loss of riparian habitat and sensitive natural communities by creating, restoring, or preserving off-site habitat in coordination with the applicable resource agencies.

Mitigation Measure 4.8-4 – *The proposed General Plan Update should be amended as follows:*

Implementation Measure for Wetlands and Other Waters

If a project would result in ground disturbance on sites containing waterways or other aquatic habitats, the City will require project proponent/s to complete a delineation of waters of the United States according to U.S. Army Corps of Engineers' methods, and to submit the completed delineation to the U.S. Army Corps of Engineers for jurisdictional determination. If the project would result in fill of wetlands or other waters of the United States, the City will require project proponent/s to obtain a Section 404 Clean Water Act permit from the U.S. Army Corps of Engineers and water quality certification from the Regional Water Quality Control Board pursuant to Section 401 of the Clean Water Act. If the project involves work in areas containing waters disclaimed by the USACE, project applicants shall obtain a Waste Discharge Requirement permit from the Regional Water Quality Control Board pursuant to the Porter Cologne Act. Project applicants shall be required to obtain all needed permits prior to project implementation, to abide by the conditions of the permits, including all mitigation requirements, and to implement all requirements of the permits in the timeframes required therein.

V. Cultural Resources

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Cause a substantial adverse change in the significance of an historic resource pursuant to in Section 15064.5?	EIR 4.9-30 and Addendum page 28	No	No	No	MM 4.9-1a
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	EIR 4.9-33 and Addendum page 28	No	No	No	MM 4.9-2a and 4.9-2b
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	EIR 4.9-37 and Addendum page 28	No	No	No	MM 4.9-3 and 4.9-4

Discussion: In order to identify known and potential historical resources to determine whether any buildings, structures, objects, districts, or sites had been previously recorded or evaluated in the Planning Area for the GP EIR, Historic Property Data Files for Placer County were examined, along with the current and previous General Plan, various Specific Plans and their environmental documents and technical appendices, and the City of Roseville Municipal Code. In addition to these standard sources of information, summaries of Record Search results for selected specific plans and projects were also used. A similar process was used for archaeological resources, including the evaluation of studies completed for Specific Plans and other projects.

Impacts related to adverse changes to the significance of a historical resource were found to be significant, as were adverse changes in the significance of an archeological resource and adverse impacts related to the disturbance of human remains because the Planning Area is known to contain resources and is also sensitive for the undiscovered presence of historic resources, archeological resources, and human remains. Although the General Plan and the City's Zoning Ordinance contain goals and policies which require identification and assessment of potential resources in advance of development, impacts to resources could nonetheless occur. Grading and site development within the Planning Area has the potential to impact undiscovered subsurface historic and archeological resources, as well as human remains – particularly remains which are interred outside of formal cemeteries. The GP included policy revisions to further strengthen protections and the GP EIR included mitigation measures to address these impacts, but nonetheless impacts could still occur. Therefore impacts to historic resources, archeological resources, and human remains were found to remain significant and unavoidable.

The analyses described above are based on the potential impacts of grading and general development within the Planning Area, and the HE Addendum noted that the Housing Element neither changed the boundaries of the Planning Area nor the locations of potential grading and

development within the Planning Area. Therefore, the GP EIR analyses of cultural resources adequately and appropriately described the potential impacts of the Housing Element. The mitigation measures included for the GP EIR and HE Addendum apply to the Project, and were implemented as part of the Project. The City undertook tribal consultation pursuant to SB 18, which is discussed in the Tribal Cultural Resources section of this Addendum. With regard to historical resources, there are no structures or other evidence of historical resources on the site and there are no records of such resources. There are no structures on the City's Master List or on the National Historic Register in the Project area. Therefore, the GP EIR and HE Addendum analysis adequately and appropriately describe the potential impacts of the Project, and the Project is consistent with the cultural resources policies of the General Plan.

In addition, the Project would need to comply with state laws that prevent significant impacts to unanticipated discoveries of human remains, including Health and Safety Code section 7050.5. The Project does not result in new or substantially more severe increases in significant effects and is within the scope of the impacts analyzed in the GP EIR and HE Addendum.

Mitigation Measures: All of the mitigation measures below were effectuated through inclusion in the City's 2035 General Plan Appendix A: Implementation Measures, but are included here for reference. As noted in Section XVIII, Tribal Cultural Resources, the Project will be subject to measures that implement General Plan EIR Mitigation Measures 4.9-2 through 4.9-4. The Project site does not contain historic resources and therefore General Plan EIR Mitigation Measure 4.9-1 is inapplicable.

Mitigation Measure 4.9-1a – The General Plan Update should be amended as follows:

Implementation Measure

As appropriate to each individual project or Specific Plan, the following actions or those determined to be equally as effective by the City shall be implemented where there may be an adverse impact on potential historical resources:

- a. Consult the City's Master List of Historical Resources Inventory and, as necessary, seek updated information from the North Central Information Center or other applicable data repositories to determine whether the project area has been surveyed, and whether historic built environment resources were identified.
- b. If a survey of the property or the area in which the property is located has not been conducted, a qualified architectural historian shall conduct a study of the project area for the presence of historic built environment resources.
- c. If a study is required, it will evaluate the significance of built environment resources greater than 45 years in age that may be directly or indirectly impacted by project activities. The study may include a field survey; background, archival and historic research; and consultation with local historical societies, museums or other interested parties; as necessary.

- d. If necessary, the qualified architectural historian's study will recommend appropriate protection or mitigative treatment, if any, and include recordation of identified built environment resources. Recommended treatment for historical resources identified in the report shall be implemented.
- e. If no significant historic built environment resources are identified in the study or prior survey of the project area that may be directly or indirectly impacted by project activities, there is no adverse change to documented built environment historical resources and no further action is required.
- f. If a significant built environment historical resource could be directly or indirectly impacted by project activities, avoidance shall be considered the primary mitigation option. If avoidance is not feasible, then the maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation, or reconstruction of the historical resource, conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties will reduce impacts to an acceptable level. If adherence to the Secretary of the Interior's Standards cannot avoid materially altering in an adverse manner the physical characteristics or historic character of the surrounding environmental setting that contribute to a resource's historic significance, additional mitigation may be required.
- g. If avoidance is not feasible and minimizing impacts through adherence to the Secretary of the Interior's Standards for the Treatment of Historic Properties is not feasible, documentation is required using, as appropriate, Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER), and/or Historic American Landscapes Survey (HALS) guidelines before the property is potentially altered during project activities.

Mitigation Measure 4.9-2a – The proposed General Plan Update should be amended as follows:

Implementation Measure

Projects that could have significant adverse impacts to potentially significant archaeological resources shall be required to assess impacts and provide feasible mitigation. The following steps, or those determined to be equally as effective by the City, will be followed:

- a. Request information from the California Native American Heritage Commission to obtain a review of the Sacred Lands File and a list of local Native American groups and individuals that may have specific knowledge of cultural resources in the area that could be affected by project implementation. Each Native American group and individual identified by the Native American Heritage Commission will be contacted to obtain any available information on cultural resources in the project area. Additional consultation with relevant tribal representatives may be appropriate, depending on the relative level of cultural sensitivity, as identified by Native American groups or individuals.
- b. Request updated information from the North Central Information Center of the California Historical Resources Information System (California State University, Sacramento) to determine whether the project area has been previously surveyed and whether archaeological resources were identified. In the event the records indicate that no previous survey has been conducted or existing survey data is greater than five

years old, the applicant will retain the services of a qualified archaeologist to assess the adequacy of the existing data (if any) and assess the archaeological sensitivity of the project area. If the survey did not meet current professional standards or regulatory guidelines, or relies on outdated information, a qualified archaeologist will make a recommendation on whether a survey is warranted based on the sensitivity of the project area for archaeological resources.

- c. If a survey is warranted, it will include all necessary background research, including that resulting from consulting with traditionally and culturally affiliated California Native American tribes in addition to an archaeological pedestrian survey. Based on findings of the survey, additional technical studies may be required, such as geoarchaeological sensitivity analysis, or other analysis scaled according to the nature of the individual project. A report will document the results of the survey and provide appropriate management recommendations, and include recordation of identified archaeological resources on appropriate California Department of Parks and Recreation site record forms and cultural resources reports.
- d. Management recommendations may include, but are not limited to additional studies to evaluate identified sites or archaeological monitoring at locations determined by a qualified archaeologist in consultation with culturally affiliated California Native American tribes to be sensitive for subsurface cultural resource deposits. The City will determine the need for tribal monitoring based upon the guidance provided in Volume I of the City's Internal Guidance for Management of Tribal Cultural Resources and Consultation.
- e. Once approved by the City, provide the North Central Information Center with appropriate California Department of Parks and Recreation site record forms and cultural resources reports for any resources identified. Any subsequent reports completed as a result of additional technical work will likewise be submitted to the Northcentral Information Center.
- f. If no archeological resources, including those which are TCRs or are associated with a TCR, are identified that may be directly or indirectly impacted by project activities, mitigation is complete as there would be no adverse change to documented archeological resources. The exception would be in the event of the discovery of a previously unknown archaeological site inadvertently exposed during project implementation. In such an event, a qualified archaeologist will be retained to assess the discovery and provide management recommendations as necessary, in accordance with the City's Internal Guidance for Management of Tribal Cultural Resources and Consultation Section 3.2.
- g. When a project will impact a known archaeological site, including those determined to be a TCR, and avoidance is not a feasible option, a qualified archaeologist, in consultation with traditionally and culturally affiliated California Native American tribes, shall evaluate the eligibility of the site for listing in the California Register of Historical Resources. If the archaeological site is found to be a historical resource as per CEQA Guidelines Section 15064.5 (a)(3), the qualified archaeologist shall recommend further mitigative treatment, which could include preservation in place or data recovery, consistent with Internal Guidance for Management of Tribal Cultural Resources and Consultation Section 3.2.4.

- h. If a site to be tested is prehistoric, the City should determine the need for tribal monitoring based upon the guidance provided in Volume I of the Internal Guidance for Management of Tribal Cultural Resources and Consultation Section 2.4.4.
- i. Appropriate mitigation may include curation of artifacts removed during subsurface testing, consistent with the City's Internal Guidance for Management of Tribal Cultural Resources and Consultation.
- j. If significant archaeological resources that meet the definition of historical or unique archaeological resources, including those determined by the City to be TCRs, are identified in the project area, the preferred mitigation of impacts is preservation in place. If impacts cannot be avoided through project design, appropriate and feasible treatment measures are required, which may consist of, but are not limited to actions, such as data recovery excavations. If only part of a site will be impacted by a project, data recovery will only be necessary for that portion of the site. Data recovery will not be required if the implementing agency determines prior testing and studies have adequately recovered the scientifically consequential information from the resources. Studies and reports resulting from the data recovery shall be deposited with the North Central Information Center. Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 of the Health and Safety Code, as outlined in the City's Internal Guidance for Management of Tribal Cultural Resources and Consultation.

Mitigation Measure 4.9-2b – The General Plan Update should be amended as follows:

Implementation Measure

Projects that could have significant adverse impacts to undiscovered, potentially significant archaeological resources and/or TCRs which may be discovered during construction shall be required to implement the Post-Review Discovery Procedures within Volume II Part C of the City's Internal Guidance for Management of Tribal Cultural Resources and Consultation, or those determined to be equally as effective by the City.

Mitigation Measure 4.9-3 – The General Plan Update should be amended as follows:

Implementation Measure

Management of Tribal Cultural Resources and Consultation

Projects that could have significant adverse impacts to human remains or potential human remains shall implement the applicable procedures and recommended mitigation within the City's Internal Guidance for Management of Tribal Cultural Resources and Consultation.

Mitigation Measure 4.9-4

Implement Mitigation Measure 4.9-3 (Projects that could have significant adverse impacts to human remains or potential human remains shall implement the applicable procedures and recommended mitigation within the City's Internal Guidance for Management of Tribal Cultural Resources and Consultation).

VI. Energy

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	EIR 4.15-9	No	No	No	None
b) Conflict with or obstruct a state or local plan for renewable energy or energy inefficiency?	EIR 4.15-18	No	No	No	None

Discussion: The GP EIR and HE Addendum analyzed energy impacts by assessing energy usage associated with the construction and operation of projects developed as part of buildout of the General Plan. Energy demand was calculated consistent with the greenhouse gases (GHG) emissions modeling (see Greenhouse Gases section of this Addendum). The analysis found that fuel consumed by construction would be temporary and would not represent a significant demand, and further concluded that there are no anticipated unusual characteristics of buildout that would necessitate the use of equipment that is less energy-efficient than for other comparable projects. For building energy use, energy efficiency requirements will become more stringent over time, as they have in the past, so new projects will be more efficient than existing projects of the same type in the Planning area. The conclusions of the GP EIR and HE Addendum remain appropriate to describe the Project, because the Project does not change the location or extent of construction, the units are within the scope of the buildout analysis, and multi-family residential is a typical building use that does not result in unusual energy demand characteristics. Further, as the HE Addendum recognizes, the City of Roseville needs housing units to comply with its regional housing needs assessment and address existing demand for residences in the city. Accordingly, using energy resources to build and operate the Project and other units anticipated by the HE Addendum is necessary.

Transportation energy would be required in the form of fuel, and the average demand for fuel per resident will decrease over buildout conditions, because the transportation analysis shows that VMT per resident will decrease at buildout conditions compared to existing conditions (see the Transportation section of this Addendum). This remains true of the Project, which is located in a low-VMT area of the City.

The GP EIR and HE Addendum found all projects within the Planning Area would be required to comply with the California Energy Code and California Green Building Standards Code in effect at the time of building permit application, and would therefore not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. This would remain true for the Project.

The GP EIR and HE Addendum concluded that buildout would not result in significant impacts due to wasteful, inefficient, or unnecessary project construction and operational energy use, and impacts would be less than significant. This conclusion and the supporting analysis remains appropriate and applicable to the Project.

Mitigation Measures: None.

VII. Geology, Soils, and Paleontological Resources

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:		No	No	No	None
i) Ruptures of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	EIR 4.7-27 and Addendum page 36	No	No	No	None
ii) Strong seismic ground shaking?	EIR 4.7-28 and Addendum page 36	No	No	No	None

iii) Seismic-related ground failure, including liquefaction?	EIR 4.7-27 and Addendum page 36	No	No	No	None
iv) Landslides?	EIR 4.7-27 and Addendum page 36	No	No	No	None
b) Result in substantial soil erosion or the loss of topsoil?	EIR 4.7-29 and Addendum page 36	No	No	No	None
c) Be located in a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	EIR 4.7-31 and Addendum page 36	No	No	No	None
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	EIR 4.7-31 and Addendum page 36	No	No	No	None
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	EIR 4.7-27 and Addendum page 36	No	No	No	None
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	EIR 4.7-32 and Addendum page 36	No	No	No	MM 4.7-4

Discussion: The analysis prepared for the GP EIR relied on published geologic literature and maps, NRCS soil survey data, and a records search performed at the University of California Museum of Paleontology (UCMP). The information obtained from those sources was reviewed and summarized to present the existing conditions and to identify potential environmental impacts. The GP EIR indicated impacts due to surface fault rupture, liquefaction, landslides, or the use of septic systems did not require analysis because these risks were not evident (GP EIR page 4.7-27). The Planning Area does not include fault traces, soils subject to liquefaction or landslide hazards, and new development is required to connect to sewer systems.

Impacts due to strong seismic ground shaking were found to be less than significant (GP EIR page 4.7-28) because the evidence indicates strong shaking is unlikely and implementation of existing General Plan Seismic and Geologic Hazards goals and policies, in combination with compliance with the geologic and seismic requirements in the California Building Code (which the City has adopted), and the City's site-specific Design Review process (as set forth in the City's Design Standards Section 2, General Requirements), would reduce the potential for adverse impacts to people or structures related to seismic shaking.

Impacts due to soil erosion were found to be less than significant (GP EIR page 4.7-29) because compliance with existing stormwater, grading, and erosion control regulations and implementation of policies in the existing General Plan and proposed General Plan Update would reduce the soil erosion impact by requiring applicants to implement BMPs based on the City's *Stormwater Quality BMP Guidance Manual for Construction*,

develop and implement a SWPPP, comply with the City's Grading Ordinance, comply with the City's Design and Construction Standards, and comply with the avoidance and minimization measures contained in the Open Space Preserve Overarching Management Plan, all of which are specifically designed to minimize construction-related soil erosion and degradation of water quality to the maximum extent feasible.

Impacts due to unstable and expansive soils were found to be less than significant (GP EIR page 4.7-31) because implementation of General Plan Seismic and Geologic Hazards goals and policies and compliance with existing laws and regulations, including Section 111 (Grading) of the City's Design and Construction Standards related to soil testing for earthwork and backfill, would address issues related to unstable and expansive soils by requiring new construction to prepare site-specific geotechnical reports to identify areas of unstable soil and shrink-swell potential, and to follow design specifications contained in the CBC and standard engineering practices to prevent adverse impacts associated with these limitations.

Impacts related to the damage or destruction of unique paleontological resources or unique geologic features were found to be potentially significant (GP EIR page 4.7-32) because the Planning Area contains geologic formations known to be sensitive for paleontological resources and grading could damage these resources. As mitigation, General Plan Goal OS4.1 was revised and Policy OS4.11 was added to provide guidance and protection for paleontological resources. After mitigation impacts were found to be less than significant. The areas surrounding SR 65, including the Project site, contain geologic formations known to be sensitive for paleontological resources, as shown on the Paleontological Sensitivity Map included in the GP EIR. However, the areas surrounding the Project site have been developed and the Project site has been graded in the past, and no paleontological resources have been encountered during these activities. Therefore, the potential for the presence of subsurface paleontological resources on the Project site is low and mitigation is not required.

All of the analyses described above are based on the potential impacts of grading within the Planning Area, and the HE Addendum found the Housing Element neither changed the boundaries of the Planning Area nor the locations of potential grading within the Planning Area. This remains true of the Project. The Project will be required to comply with the *Stormwater Quality BMP Guidance Manual for Construction* and other relevant City standards prior to the issuance of any building permits or grading plans pursuant to existing City standard conditions of approval. Therefore, the GP EIR and HE Addendum analyses of geology, soils, and paleontological resources adequately and appropriately describe the potential impacts of the Project, and the Project does not result in new or substantially more severe increases in significant effects and is within the scope of the GP EIR and HE Addendum.

Mitigation Measures: The mitigation measure below was effectuated through inclusion in the City's 2035 General Plan Appendix A: Implementation Measures, but is included here for reference.

Mitigation Measure 4.7-4 – *The proposed General Plan Update should be amended as follows:*

Implementation Measure

Paleontological Resources

Where there is potential for a significant impact to paleontological resources:

1. Consult the Paleontological Sensitivity Map.

2. For projects located in geologic units that are not identified as paleontologically sensitive and which do not involve ground disturbance to a depth greater than 5 feet below the ground surface, no further actions related to paleontological resources shall be required.
3. For projects that would be located in paleontologically sensitive geologic units, or those that would be located in non-paleontologically sensitive surficial units but would involve ground disturbance to a depth greater than 5 feet, provide a site-specific analysis of the project's potential to damage or destroy unique paleontological resources, and measures designed to protect unique paleontological resources, as needed and appropriate. Such measures may include, but are not limited to, construction worker personnel training, periodic monitoring during construction activities, stopping work within 50 feet of any fossil that is discovered, evaluation of the fossil by a qualified paleontologist, and proper recordation and curation of the specimen.

VIII. Greenhouse Gases

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	EIR 4.5-18 and Addendum page 39	No	No	No	MM 4.4-2a, MM 4.3-1, and MM 4.5-1c
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	EIR 4.5-18 and Addendum page 39	No	No	No	MM 4.4-2a, MM 4.3-1, and MM 4.5-1c

Discussion: The GP EIR used CalEEMod to estimate GHG emissions which would result from construction and operation of completed land uses consistent with General Plan buildout. The construction emissions were summed and then amortized over a 30-year operational lifetime and added to the operational emissions associated with buildout. Thresholds of significance were developed for the GP EIR based on statewide demographics and data adjusted for land uses relevant in the City of Roseville. The GP EIR evaluation found existing conditions emissions of 5.13 MT CO₂e per service population (a combination of residents and employees) and that this would be reduced slightly to 5.12 MT CO₂e per service population in cumulative buildout conditions. This value exceeds the significance thresholds for the years 2020, 2035, and 2050 (5.07, 2.25, and 0.83 MT CO₂e per service population, respectively). The evaluation further found that mobile emissions from transportation sources

account for approximately 67% of citywide emissions and that emissions resulting from the operation of buildings (energy) were the next-largest sector, at approximately 19% of citywide emissions.

The HE Addendum evaluated the impact of changing the location and density of uses, which can have an effect on operational emissions related to transportation. An updated analysis of vehicle miles traveled (VMT) was prepared for the Housing Element; the details and findings of this VMT analysis are discussed in greater detail in the Transportation section of this Addendum. However, to summarize, the updated analysis found the Housing Element has a beneficial effect on VMT generation. The updated analysis found existing conditions (2020) have an average citywide VMT of 15.7 VMT/resident and cumulative conditions (2035) have an average citywide VMT of 14.7 VMT/resident. This is an increase of baseline (existing conditions) VMT, which the GP EIR found to be 15.1 VMT/resident, but is a decrease of cumulative conditions VMT, which the GP EIR found to be 15.5 VMT/resident (with transportation facilities constrained) or 14.9 VMT/resident (with transportation facilities unconstrained). Given that the Housing Element was found to reduce cumulative citywide VMT, it was also found to reduce transportation sector GHG emissions. The Project is located within the area of the City found to have low per-person VMT rate, where growth in the City would have the least impacts due to transportation-related GHG. In addition, the Project would meet Title 24 energy efficiency requirements, including providing solar. The GP EIR and HE Addendum found that GHG emissions were significant and unavoidable after the application of mitigation. The GP EIR and HE Addendum analyses of GHG adequately and appropriately describes the potential impacts of the Project, and the Project does not result in new or substantially more severe increases in significant effects and thus is within the scope of the GP EIR and HP Addendum.

Mitigation Measures: The mitigation measures below were effectuated through inclusion in the City's 2035 General Plan Appendix A: Implementation Measures, but is included here for reference.

Mitigation Measure 4.5-1a: Implement Mitigation Measure 4.4-2a.

Mitigation Measure 4.5-1b: Implement Mitigation Measure 4.3-1.

Mitigation Measure 4.5-1c. The proposed General Plan Update should be amended as follows:

Implementation Measure

Area Sources

- ▶ The City shall utilize electric landscape maintenance equipment to the extent feasible on parks and public/quasi-public lands.
- ▶ The installation of wood-burning fireplaces or appliances in new development shall not be permitted.

Energy

- ▶ The City will pursue within existing and future City facilities and may partner with other public agencies and organizations to promote replacement of appliances and office equipment with energy-efficient models with a priority from highest to lowest in terms of typical GHG reductions, on: water heater, vending machine, copier, refrigerator, printer, dishwasher, water cooler, computer, and clothes washer.
- ▶ The City will pursue improvements to existing and future City facilities and may partner with other public agencies and organizations to implement comprehensive building efficiency improvements, inclusive of, but not limited to, implement lighting efficiency upgrades, improved building temperature controls, building air sealing, duct air sealing and duct replacement, upgrading and/or insulating water heaters, ensuring proper functioning and efficiency of heating and air conditioning systems, reducing heat loss through and around windows, installation of cool roofs, and implementing energy conservation education.
- ▶ The City will support education and outreach to promote rebates, incentives, and other programs (as they become available) which would promote reductions in greenhouse gas emissions, and use available information on rebates used by consumers to determine where to focus education and outreach, including programs designed to promote electric appliances and replace natural gas appliances, and programs related to lighting.
- ▶ The City will promote the U.S. Department of Housing and Urban Development Energy Efficient Mortgage (EEM) program and similar programs that assist buyers in purchasing homes meeting energy-efficiency criteria.
- ▶ The City will partner with other agencies and organizations to expand the City's urban forest to promote sequestration, but also with a focus on selection and placement that reduces the need for air conditioning and the urban heat island effect.

Land Use and Transportation

- ▶ The City will direct its own investments and review proposed development projects to reduce vehicular travel demand, promote non-vehicular travel, and facilitate local purchase and use of electric vehicles.
- ▶ The City will continue to direct its own investments and pursue outside funding for infrastructure and operational programs to promote ease and convenience of pedestrian, bicycle, and transit travel for daily trips.
- ▶ The City will integrate its land use and transportation planning and review and condition proposed projects to better situate residents in proximity to workplaces, goods and services, and recreational opportunities, making updates to implementing plans, such as the Capital Improvement Program, Bicycle Master Plan, Pedestrian Master Plan, Transportation Systems Management program, transportation impact fee program, and transit plans.
- ▶ The City will support applications for affordable housing funds from agencies that reward and incentivize good planning, such as infill housing and housing built close to jobs, transportation, and amenities.

- ▶ The City will partner with other agencies and proposed developments to expand bicycle parking and other facilities, pedestrian facilities and amenities, and electric vehicle charging stations, with a focus on daily destinations.
- ▶ The City will support a reduction of parking requirements for projects with a location, design, surrounding mix of uses, access to non-vehicular transportation facilities, and/or ongoing travel demand management programs that would reduce the need for vehicular trips.

IX. Hazards and Hazardous Materials

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	EIR 4.10-20 and Addendum page 42	No	No	No	None
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	EIR 4.10-20 and Addendum page 42	No	No	No	None
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	EIR 4.10-21 and Addendum page 42	No	No	No	None
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	EIR 4.10-23 and Addendum page 42	No	No	No	None

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	EIR 4.10-19 and Addendum page 42	No	No	No	None
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	EIR 4.10-26 and Addendum page 42	No	No	No	None
g) Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	EIR 4.10-27 and Addendum page 42	No	No	No	None

Discussion: The GP EIR analyses in this section considered the range and nature of foreseeable hazardous materials use, storage, and disposal resulting from implementation of the General Plan, and identified the primary ways that hazardous materials could expose individuals or the environment to health and safety risks.

The GP EIR included a preliminary review of environmental risk databases, but because the analysis is at the programmatic level it did not include sampling, site specific review, laboratory analysis, or inspection of buildings or site surfaces. Sites within the Planning Area with potential environmental hazards were identified based on information obtained from the Cortese List (including SWRCB's GeoTracker database and DTSC's EnviroStor database), the Pipeline and Hazardous Materials Safety Administration (PHMSA) Public Map Viewer, and a review of California Important Farmlands mapped by the Department of Conservation. In addition, the Placer County Department of Environmental Health maintains lists of hazardous material sites, releases, and accident occurrences. The methodology for determining wildfire hazards included a review of aerial photographs, and a review of CAL FIRE's fire hazard severity zone maps.

Impacts related to airport safety and noise hazards were found to be less than significant because the nearest airport is approximately 6.3 miles southwest of the Planning Area. This remains correct, and therefore the impacts of the Project are consistent with this conclusion.

Impacts related to the creation of significant hazard through routine transport, use, or disposal or possible release of hazardous materials from upset or accident conditions were found to be less than significant because while population growth and new businesses in the Planning Area would increase the potential for exposure to impacts, implementation of General Plan policies combined with compliance with existing federal and state regulations would ensure impacts would not be substantial. The same conclusion was reached for impacts related to handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Regulations governing the transport, use, disposal, and handling of hazardous materials, substances, or waste, are detailed and stringent at both the federal and state level, and are developed and adopted to ensure that adverse health and safety impacts are prevented. In addition, the Planning Area does not contain any existing or planned industrial uses (those most likely to handle or use acutely hazardous materials) in proximity to an existing or proposed school.

Impacts related to public health hazards resulting from locating project development on a known hazardous materials site were found to be less than significant. Several sites within the City are listed on the state's Cortese List of known hazardous materials sites, and there are approximately

70 known listed hazardous materials sites in the City, most of which have been remediated and closed. The largest hazardous materials site in Roseville is associated with the former Southern Pacific Railyard, which is now the Union Pacific Railyard (Railyard), where cleanup and mitigation for contamination is ongoing and may affect surrounding properties. As noted below, the Project site is not on the Cortese List.

The GP EIR indicated that most new development was not planned to occur on listed sites, but there were redevelopment and infill sites within areas with existing hazardous materials issues. For redevelopment or infill development areas with existing hazardous materials issues, General Plan goals and policies, in addition to application of current regulations, would not absolutely prevent exposure to hazards and hazardous materials, but would use existing facility information to identify areas of hazardous materials use. In a programmatic analysis such as the GP EIR and HE Addendum site-specific review was not conducted, because the potential for impacts depends heavily on the exact nature and design of proposed construction, which could not be known. The GP EIR and HE Addendum indicated that while there is the potential for future exposure due to construction of infill and redevelopment sites, site-specific investigations would be required where applicable to address these conditions as part of project-level environmental review. This remains true of the Project.

Buildout of the General Plan would add additional traffic and residences requiring evacuation in case of an emergency. The GP EIR found implementation of General Plan policies was found to ensure conformance with local emergency-response programs and continued cooperation with emergency-response service providers. In addition, while buildout of the General Plan was found to have a potential to increase risk to fire for both people and property, by increasing the amount of structures in the Planning Area, implementation of General Plan policies and actions, along with existing regulations was found to ensure that people and structures would not be exposed to a significant risk of loss of injury involving fires. Impacts were found to be less than significant. The HE Addendum found that the Housing Element would not change the location or extent of uses in a manner that would affect local emergency response programs, nor are there any areas of the City which are at increased risk of wildfire hazard. This remains true for the Project. Therefore, the GP EIR and HE Addendum conclusion related to emergency response plans and wildfire hazard remain appropriate and applicable to describe the impacts of the Project.

The nature of general plans, consistent with state law and common practice, is that specific uses or developments normally are not identified at a project level. Rather, categories of land use are defined that would allow a wide range of specific uses. The specific types of businesses allowed, and whether or not they would generate or use hazardous materials, cannot be known at the programmatic level, though the analysis can make assumptions about the typical range of hazardous materials used by business such as gasoline service stations and dry cleaners. In short, the GP EIR indicated that development in the Planning Area could involve a variety of land uses, including residences, commercial uses, industrial uses, utilities and transportation facilities, office space, and public services facilities (i.e., educational and institutional uses), and the analysis assumed and evaluated a range of potential uses that could handle hazardous materials, and a broad range of potential hazardous materials that could be used, in order to reach conclusions as to impacts. The HE Addendum concluded the Housing Element does not change these assessments or conclusions, because it does not introduce new types of uses not previously analyzed and the Housing Element would add residential unit capacity, which is not associated with significant use, transport, or disposal of hazardous materials. This conclusion remains appropriate for the Project.

As it relates to hazardous materials sites, an investigation using SWRCB's GeoTracker database and DTSC's EnviroStor database was completed, and determined there are no active clean-up sites within the Project area or within 1,000 feet of the Project site. There are no observable site conditions that appear to warrant further assessment. The conclusion of the GP EIR and HE Addendum remains appropriate for the Project.

Existing required federal and state regulations pertaining to hazardous materials will ensure impacts related to the Project will remain less than significant. The GP EIR and HE Addendum analysis and conclusion remains appropriate and adequate to describe the potential impacts of the Project, and the Project does not result in new or substantially more severe increases in significant effects and thus is within the scope of the GP EIR and HP Addendum.

Mitigation Measures: None.

X. Hydrology and Water Quality

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	EIR 4.13-27 and Addendum page 45	No	No	No	None
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	EIR 4.13-30 and Addendum page 45	No	No	No	None
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:		No	No	No	None
i) result in substantial erosion or siltation on or off-site;	EIR 4.13-33 and Addendum page 45	No	No	No	None

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	EIR 4.13-35 and Addendum page 45	No	No	No	None
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater systems or provide substantial additional sources of polluted runoff; or	EIR 4.13-35 and Addendum page 45	No	No	No	None
iv) impede or redirect flood flows?	EIR 4.13-35 and Addendum page 45	No	No	No	
d) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	EIR 4.13-27 and Addendum page 45	No	No	No	None
e) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	EIR 4.13-41 and Addendum page 45	No	No	No	None
f) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	EIR 4.13-41 and Addendum page 45	No	No	No	None

Discussion: The GP EIR described potential impacts related to surface and groundwater hydrology and water quality, along with flooding, in the Planning Area. The analysis used the City's floodplain mapping (which includes Federal Emergency Management Agency floodplains); the 303(d) list of waterbodies impaired by pollution according to the State Water Resources Control Board; and a review of applicable watershed management, groundwater management, and restoration plans; and the environmental documentation provided for the City's Specific Plans.

Impacts related to violation of water quality standards or conflict with a water quality control plan were found to be less than significant because while buildout of the Planning Area would introduce uses which could result in additional discharges of pollutants, the policies of the General Plan combined with current land use stormwater, grading, and erosion control laws, along with regulations and permit conditions would ensure that significant impacts associated with violation of standards or conflicts with water quality control plans would not occur. The Project would have to comply with these rules and regulations.

Impacts related to substantial interference with groundwater recharge or decrease in water supplies that would impede implementation of a sustainable groundwater management plan were found to be less than significant because while buildout of the Planning Area would result in additional impervious surfaces and therefore could reduce infiltration to groundwater, the Planning Area soils are substantially impermeable and only provide low levels of groundwater recharge. In addition, while development would result in the use of additional water, some of which could

be from groundwater sources, the City's Urban Water Master Plan and the Western Placer County Groundwater Management Plan provide for sustainable management of groundwater supplies.

Impacts related to substantial alteration of drainage patterns resulting in substantial erosion or siltation were found to be less than significant because while construction and grading could result in runoff of soils and soil erosion, implementation of General Plan policies and existing regulations will ensure that substantial impacts do not result.

Impacts related to substantial alteration of drainage patterns resulting in runoff that would exceed the capacity of stormwater systems, cause an increase in flooding, or provide additional sources of polluted runoff were found to be less than significant because while buildout of the Planning Area would increase impervious surfaces and contribute to increased runoff, which could contribute additional pollutants, result in hydromodification, or increased flood potential, implementation of General Plan policies combined with current drainage and flood control regulations ensures that impacts are not substantial.

Impacts related to release of pollutants in flood hazard, tsunami, or seiche zones were found to be less than significant because General Plan policy and the City's development regulations do not permit permanent storage of materials within flood hazard zones, and temporary storage is only permitted with a Flood Encroachment Permit, part of the purpose of which is to ensure there will be no impacts to the floodplain or water quality. In addition, the Planning Area is not near any water bodies which pose a tsunami or seiche hazard.

The analyses described above are based on the potential impacts of grading and general development within the Planning Area, and the Housing Element neither changed the boundaries of the Planning Area nor the locations of potential grading and development within the Planning Area. Therefore, the GP EIR analyses of hydrology and water quality were found to adequately and appropriately describe the potential impacts of the Housing Element. This conclusion remains appropriate for the Project, because the Project will be required to meet low impact water quality design standards (LID), which will introduce landscaping and water quality treatment, such as bioswales. The conclusions of the GP EIR and HE Addendum remain appropriate, and the Project does not result in new or substantially more severe increases in significant effects and thus is within the scope of the GP EIR and HE Addendum.

Mitigation Measures: None.

XI. Land Use and Planning

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Physically divide an established community?	EIR 4.1-18 and Addendum page 48	No	No	No	None
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation of an agency adopted for the purpose of avoiding or mitigating an environmental effect?	EIR 4.1-19 and Addendum page 48	No	No	No	None

Discussion: The GP EIR and HE Addendum found that buildout of the General Plan and Housing Element would not physically divide the community, because the City's land use designations, roadway locations, transit systems, and pedestrian and bicycle pathways have been and will continue to be planned (per General Plan policy) comprehensively through the Specific Plan process to provide connected communities. Impacts were found to be less than significant. The Project does not include changes to the engineering or locations of any of the City's existing or planned roads, other paths of travel, or community connectivity, but includes connection to existing City public sidewalk.

The GP EIR and HE Addendum included an analysis of potential inconsistencies between the General Plan and other land use plans, policies, or regulations, including with the Sacramento Area Council of Governments (SACOG) 2020 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS), SACOG Blueprint, Placer County Local Agency Formation Commission, new Specific Plans, the Zoning Ordinance, and the Roseville/Placer County Memorandum of Understanding. In all cases, it was determined there were no inconsistencies between the General Plan and other plans that would result in significant impacts; impacts were found to be less than significant. Furthermore, adding high density residential development in the City's infill areas—particularly within the City's core—are actions supported by the SACOG MTP/SCS. Specifically, the change in land use of the Project site from office to residential was contemplated by the Housing Element and the Project is consistent with the Housing Element.

Based on the foregoing, the GP EIR analyses of potential land use impacts adequately and appropriately describe the potential impacts of the Project, and the Project does not result in new or substantial increases in significant effects.

Mitigation Measures: None.

XII. Mineral Resources

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	EIR 4.7-1 and Addendum page 49	No	No	No	None
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	EIR 4.7-1 and Addendum page 49	No	No	No	None
<p>Discussion: The City of Roseville does not overlie any known deposits of economically valuable mineral resources (Loyd 1995), and the City does not have a Surface Mining and Reclamation Act (SMARA) permit. No mining activities are currently underway nor does the City anticipate that any mining activities will take place in the future. Therefore, mineral resources were not evaluated in the GP EIR and HE Addendum, and need not be evaluated within this Addendum.</p> <p>Mitigation Measures: None.</p>					

XIII. Noise

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	EIR 4.6-43 and 4.6-46 and Addendum page 50	No	No	No	None
b) Generation of excessive ground borne vibration of ground borne noise levels?	EIR 4.6-66 and Addendum page 50	No	No	No	None
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	EIR 4.6-43 and Addendum page 50	No	No	No	None

Discussion: The GP EIR identified noise conditions for new noise-sensitive developments within areas with the potential to be affected by substantial existing or future transportation noise sources and stationary noise sources. Existing conditions were compared to cumulative buildout conditions, based on existing and future General Plan land uses. The methodology used for this analysis was consistent with approaches recommended by the Federal Transit Administration (FTA), the California Department of Transportation (Caltrans), and the City of Roseville. Noise modeling was conducted using the Federal Highway Administration's (FHWA) traffic noise prediction model (FHWA-RD-77-108) and the FTA's Transit Noise and Vibration Impact Assessment Guidance Manual (2018). Stationary-source noise levels were obtained from manufacturer specifications and industry-standard technical reports. Traffic data from the traffic impact analysis prepared for buildout of the General Plan were used to model existing and future traffic noise levels.

The Planning Area does not intersect with any military bases, special use airspaces, or low-level flightpaths and is not located in safety zones or noise contours associated with airfields or airports that are a concern for land use compatibility planning. The Planning Area is not located within 2 miles of a public or private airstrip. Therefore, impacts due to these issues were found to be less than significant without the need for detailed analysis. This evaluation does not require updating and is adequate.

The GP EIR and HE Addendum evaluated the potential for temporary, short-term noise and vibration impacts due to construction. The analysis found that while buildout of the General Plan would involve noise associated with construction and some level of vibration due to typical construction practices, the City's Noise Ordinance limits construction to daytime hours, because these are outside of the recognized sleep hours for residents and are also outside of evening and early morning hours and time periods when residents are most sensitive to noise and vibration. The analysis recognizes that the City's Noise Ordinance and General Plan policy ensure that the impact of construction is reduced to the extent practicable, given that construction cannot be avoided and is a necessary part of development. The GP EIR and HE Addendum concluded that vibration levels from construction were less than significant, because large-scale projects with extensive excavation and pile driving are not contemplated near vibration-sensitive uses. However, construction noise could cause significant impacts, and additional mitigation is not available. Construction noise impacts were found to be significant and unavoidable. The Project does not change the location or intensity of construction activities within the City and does not affect the maximum daily noise generation. Maximum daily noise is based on the maximum amount of land area or building area that can feasibly be developed during any given day, so while the Project may increase the duration of a construction project, it does not change the amount of construction per day or the intensity of construction. Accordingly, the construction noise impacts of the Project are within the scope of the impacts analyzed in the General Plan and HE Addendum.

The GP EIR and HE Addendum analysis of permanent or long-term noise impacts due to transportation and non-transportation noise included evaluations of roadway noise in existing and cumulative buildout conditions; landscape and building maintenance activities; mechanical equipment; solid waste collection; parking lots; commercial, office, and industrial activities; and residential, school, and recreation activities and events. The evaluation considered the impacts of these noise sources on sensitive receptors, including on residential uses. The analysis evaluated the potential for residential sites to be exposed to undue noise because of proximity to non-residential uses or other noise-generating sources, including an assessment of the cumulative noise generated by all of the City's higher-capacity roadways, and concluded that the City's General Plan includes extensive policies related to noise which are designed to reduce exposure to unacceptable noise

volumes to the extent feasible. Nonetheless, the GP EIR and HE Addendum concluded impacts would remain significant and unavoidable, since the City cannot demonstrate that adverse noise impacts will be absolutely prevented.

Potential noise exposure has already been evaluated in the GP EIR and HE Addendum for existing residential sites, so the development of these sites does not change these evaluations. However, residential uses on non-residential sites could expose sensitive receptors to noise, the most common of which is roadway noise. An Environmental Noise Assessment was prepared for the Project by Saxelby Acoustics (Noise study) and is included as Attachment 1. The Noise study found the traffic noise levels from Highway 65 are projected to increase by approximately 4 dB under future conditions based on the Noise Study Report for the SR 65 Capacity and Operational Improvements Project (ICF International, January 2016). The report found that based upon the exterior transportation noise levels along Highway 65 of 75 dBA L_{dn}, an exterior-to-interior noise level reduction of up to 30 dBA would be required to meet the City of Roseville General Plan standards. Saxelby Acoustics determined the necessary noise control measures to achieve this noise level reduction and are listed below as mitigation measures.

The City's existing Building Permit process includes review for compliance with the City's Noise Ordinance and the California Noise Insulation Standards (CCR Title 24, Part 2), to ensure interior noise meets the City's standard of 45 dBA L_{dn}. The Building Code also includes the same standard. While impacts to future project residents are not CEQA impacts, the Project must comply with the City's existing policies and ordinances related to noise and such compliance will ensure that interior noise levels are reduced to be consistent with the GP EIR and HE Addendum analysis and assumptions.

In addition to noise affecting residential uses, development of residential sites can have indirect effects on noise through the generation of traffic. The updated transportation analysis for the HE Addendum indicated that while adding units in the area would redistribute traffic, it generally does so in a manner that reduces travel (vehicle miles traveled), and therefore would result in noise consistent with the volumes evaluated in the GP EIR. These analyses remain applicable to the Project, which would not result in new or unanticipated traffic noise impacts.

The GP EIR anticipated the potential for vibration-sensitive land uses to be developed in areas with some amount of existing vibration, such as near the Union Pacific Railroad. A General Plan policy requires all feasible measures necessary, as a part of proposed development and public infrastructure projects, to avoid structural damage to adjacent structures and avoid substantial annoyance for adjacent vibration-sensitive uses, consistent with California Department of Transportation and Federal Transit Agency guidance—guidance that is specifically designed to avoid annoyance to vibration-sensitive uses and structure damage. Impacts due to vibration were found to be less than significant.

Based on the foregoing, the GP EIR and HE Addendum analyses of potential noise impacts adequately and appropriately describe the potential impacts of the Project, and the Project does not result in new or substantial increases in significant effects.

To ensure compliance with the City's 45 dBA L_{dn} interior noise standard and ensure the Project is designed to meet the Building Code, the implementation measures below apply:

Implementation Measure #1: Building facades shall include use of stucco with exterior sheathing and a resilient channel for hanging interior gypsum board. An alternative to RC channel is use of a staggered stud exterior wall.

Implementation Measure #2: Building Interior gypsum wallboards and gypsum ceiling shall be 5/8".

Implementation Measure #3: The mechanical ventilation penetrations for exhaust fans not face toward Highway 65. Where feasible, these vents should be routed towards the opposite side of the building to minimize sound intrusion to sensitive areas of the buildings. Where vents must face toward Highway 65, it is recommended that the duct work be increased in length and make as many "S" turns as feasible prior to exiting the dwelling.

Implementation Measure #4: Mechanical ventilation shall be provided to allow occupants to keep doors and windows closed for acoustic isolation.

XIV. Population and Housing

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents Mitigation Measures Implemented or Addressing Impacts.
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	EIR 4.2-10 and Addendum page 53	No	No	No	None
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	EIR 4.2-15 and Addendum page 53	No	No	No	None
<p>Discussion: The General Plan analyzed in the GP EIR did not include changes to land use, the Sphere of Influence, or new growth. Furthermore, the majority of the vacant land adjacent to the City's boundaries are within existing adopted Specific Plans within Placer County which contemplate urbanization and development. Therefore, the GP EIR concluded the General Plan did not induce substantial population growth either directly or indirectly, and impacts were found to be less than significant. The Housing Element includes additional residential units, but these units fall within the scope of the GP EIR analysis, as do the units associated with the Project. The Housing Element also contemplated</p>					

that the Project site would be rezoned and developed with housing. Therefore, the Project addition of units would not result in substantial unplanned direct or indirect population growth.

The General Plan analyzed in the GP EIR did not involve converting established residential areas to a non-residential land use or redeveloping existing residential areas with new residences by removing existing dwelling units, and displacement impacts were thus found to be less than significant, and nor did the Housing Element. The Project also does not convert established residential areas to non-residential use; on the contrary, the Project does the opposite by converting a non-residential site to multifamily residential use, as contemplated by the Housing Element. Therefore, the Project will not result in significant impacts related to the displacement of a substantial number of existing people or housing.

Based on the foregoing the GP EIR and HE Addendum analyses of potential growth inducement impacts and displacement adequately and appropriately describe the potential impacts of the Project, and the Project does not result in new or substantially more severe increases in significant effects and thus is within the scope of the GP EIR and HE Addendum.

Mitigation Measures: None.

XV. Public Services

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents Mitigation Measures Implemented or Addressing Impacts.
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any the public services:					
a) Fire protection?	EIR 4.11-23 and Addendum page 54	No	No	No	None

b) Police protection?	EIR 4.11-22 and Addendum page 54	No	No	No	None
c) Schools?	EIR 4.11-25 and Addendum page 54	No	No	No	None
d) Parks?	EIR 4.11-27 and Addendum page 54	No	No	No	None
e) Other public facilities?	N/A	N/A	N/A	N/A	N/A
<p>Discussion: The GP EIR and HE Addendum evaluated police, fire, school, and park facility/service demands resulting from buildout of the General Plan. The analysis indicated that all of these services would require additional facilities and/or staff, but that each of the City's adopted Specific Plans had anticipated and planned for these needs and had included the identification of sites and financing mechanisms. The EIRs for each Specific Plan had already evaluated the potential physical impacts of constructing the facilities. Therefore, the GP EIR and HE Addendum concluded that the General Plan would not result in substantial adverse physical impacts associated with the provision of new or altered facilities, and impacts were found to be less than significant. The Project is within the scope of the above GP EIR and HE Addendum analysis. The Project would not add units that would change the GP EIR and HE Addendum analysis, nor would it redistribute units in a manner that would concentrate service demands in an unanticipated location where service demands could not be met. Based on the foregoing, the GP EIR and HE Addendum analyses of potential public service impacts adequately and appropriately describe the potential impacts of the Project, and the Project does not result in new or substantially more severe increases in significant effects.</p> <p>Mitigation Measures: None.</p>					

XVI. Recreation

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents Mitigation Measures Implemented or Addressing Impacts.
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that physical deterioration of the facility would occur or be accelerated?	EIR 4.11-27 and Addendum page 55	No	No	No	None
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	EIR 4.11-27 and Addendum page 55	No	No	No	None
<p>Discussion: The GP EIR indicated that buildout of the General Plan would add residents to the City, and these residents would increase the use of existing parks and recreational facilities, and would require the construction or expansion of recreational facilities, but that each of the City's adopted Specific Plans had anticipated and planned for these needs and had included the identification of sites and financing mechanisms. The EIRs for each Specific Plan had already evaluated the potential physical impacts of constructing the facilities and the City's policies ensure that adequate parkland acreage is developed and maintained. Therefore, the GP EIR concluded that the General Plan would not result in substantial adverse physical impacts associated with the provision or maintenance of recreation facilities, and impacts were found to be less than significant. The HE Addendum indicated the Housing Element units were within the scope of the above GP EIR analysis, and would not redistribute units in a manner that would concentrate service demands in an unanticipated location. This conclusion is also correct for the Project, which will add residents within the City's core area, as contemplated by the HE Addendum. Based on the foregoing, the GP EIR and HE Addendum analyses of potential public service impacts adequately and appropriately describe the potential impacts of the Project, and the Project does not result in new or substantially more severe increases in significant effects.</p> <p>Mitigation Measures: None</p>					

XVII. Transportation

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents Mitigation Measures Implemented or Addressing Impacts.
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	EIR 4.3-43 and Addendum page 56	No	No	No	None
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	EIR 4.3-33 and Addendum page 56	No	No	No	MM4.3.1
c) Substantially increase hazards due to a geometric design feature(s) (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	EIR 4.3-42 and Addendum page 56	No	No	No	None
d) Result in inadequate emergency access?	EIR 4.10-27 and 4.3-42 and Addendum page 56	No	No	No	None
<p>Discussion: The GP EIR included a transportation analysis which estimated VMT using Roseville's travel forecasting model, and reported VMT both in per capita (per resident) and per service population. The analysis also included the development of a VMT threshold of significance based on a reduction of 15% below baseline conditions. The City's baseline VMT was found to be 15.1 VMT per resident and the resulting threshold was 12.8 VMT per resident. Per resident VMT includes VMT for trips produced by a home's residents, such as to work, school, or to shop, and any trips where one end of the trip was at the home.</p> <p>The transportation analysis found that the City's buildout VMT would be 15.5 VMT per resident in constrained conditions and 14.9 VMT per person in unconstrained conditions. Constrained conditions assumed a transportation network which only included future facilities with identified funding sources that were certain to be constructed by 2035, and was a worst-case evaluation provided to ensure the GP EIR did not underestimate any impacts. The unconstrained conditions included all facilities included in the SACOG 2020 MTP/SCS project list.</p>					

In addition to the citywide average VMT, the GP EIR also included a VMT evaluation by Specific Plan area. This evaluation showed that certain areas of the City are “low-VMT areas,” which are defined in the GP EIR as areas of the City with VMT below the significance threshold. This analysis was based on the constrained conditions, so even under worst-case conditions the following areas were found to be low-VMT: the Downtown Specific Plan, Del Webb Specific Plan, North Central Roseville Specific Plan, Northeast Roseville Specific Plan, and Riverside Gateway Specific Plan.

An updated VMT analysis was prepared by Fehr and Peers Transportation Consultants to evaluate VMT impacts resulting from the Housing Element. This analysis updated the baseline conditions to February 2020 in order to ensure the baseline represented normal conditions, unaffected by COVID, and used constrained conditions for the cumulative analysis. The analysis found the City’s baseline VMT has increased to 15.7 VMT per resident due to the fact that $\frac{3}{4}$ of new development since the prior analysis has occurred in the western area of the City, in Specific Plans with the highest VMT per resident. However, the cumulative conditions (2035) analysis found citywide VMT decreases to 14.7 VMT per resident with the Housing Element, which is both a reduction from baseline and a reduction compared to the GP EIR analysis of cumulative (2035) conditions. The Specific Plan analysis found that the same list of planning areas are low-VMT, plus the Highland Reserve North Specific Plan. While Housing Element VMT remained above the City’s adopted significant threshold of 12.8 VMT per resident, it was lower than VMT reported in the GP EIR.

The Project is located in the North Central Roseville Specific Plan, which is a low-VMT area in the City. The addition of residential units within this area would reduce citywide VMT by adding more residents within an area where VMT rates are low.

Per service population VMT includes all per resident VMT plus VMT from all other sources, including trips from homes outside the area to work or shop and trips inside the City with neither trips at the home (from work to shopping). The service population analysis of the GP EIR was included for informational purposes to provide a coarse assessment of how non-home-based trips change over time. The GP EIR stated that appropriate methodologies for service sector VMT were still being developed and the resulting data was less reliable. For this reason, a significance threshold for service population VMT was not developed. This conclusion remains current, as stated in the updated transportation analysis prepared for the Housing Element. The GP EIR found that in existing conditions the citywide average was 29 VMT per service population while the cumulative conditions citywide average would be 33 VMT per service population (constrained) or 32.4 VMT per service population (unconstrained). An updated service sector analysis was provided for the Housing Element, but it used an updated methodology and therefore cannot be directly compared to the results reported in the GP EIR. The service sector analysis calculated that in existing conditions the citywide average is 32.5 VMT per service population and the cumulative conditions citywide average is 35.1 VMT per service population. While the numbers from the GP and Project analysis cannot be compared, the trend can: in both analyses, the citywide average service sector VMT is anticipated to increase over time rather than decrease. This means that while trips generated by residents of the City will be traveling less over time (as measured by per resident VMT) it is expected that all trips will be traveling more over time.

The GP EIR and HE Addendum included a Level of Service (LOS) analysis, provided for informational purposes. While LOS is not an impact under CEQA, the City maintains an LOS policy requiring that 70% of intersections operate at LOS C or better during both the a.m. and p.m. peak hours. The GP EIR found that 83.5% of intersections would operate acceptably during a.m. peak hours and 71.9% would operate acceptably during p.m. peak hours. The updated analysis found that 80.5% of intersections would operate acceptably during a.m. peak hours and 72.9% would operate acceptably during p.m. peak hours. The minor changes in results are mainly due to model updates, which included

updates for the future and base year in the City of Rocklin using Rocklin's current circulation and development plans and roadway network updates based on current plans and data. However, in both the GP EIR and updated analysis, the City's intersections operate at LOS consistent with City policy. The Project is within the density anticipated by the GP EIR and HE Addendum analysis and in a location anticipated by the HE Addendum and therefore, the Project also would not result in conflict with the City's LOS policy and is within the scope of the GP EIR and HE Addendum.

The GP EIR and HE Addendum evaluated hazards due to design features, incompatible uses, or inadequate emergency access. The City's transportation networks have been comprehensively planned through the Specific Plan process to conform to the City's Design and Construction Standards. The City's Design and Construction Standards establish appropriate and safe designs, including minimum signal and driveway spacing, sidewalk and pedestrian crossing designs, bicycle lane designs, and other features which ensure a safe and reliable network. The City also maintains standards requiring minimum roadway widths, turnaround areas, and turning radii to ensure that emergency vehicles maintain access. Finally, the City's construction standards also provide for and regulate the use of temporary traffic controls at construction sites, including signage and flaggers. The City's comprehensive planning process also ensures that uses are compatible and do not increase hazards. The GP EIR and HE Addendum concluded impacts were less than significant. This conclusion remains appropriate for the Project, which does not change roadway engineering, introduce incompatible uses, or contemplate development which would negatively affect emergency access. Accordingly, the Project's impacts are within the scope of those analyzed in the GP EIR and HE Addendum.

Finally, the GP EIR and HE Addendum evaluation found the General Plan and Housing Element would not conflict with adopted policies, plans, or programs for transit, bicycle, or pedestrian facilities nor would it adversely affect performance or safety of such facilities; impacts were found to be less than significant. The General Plan will require all new facilities and facility improvements contained in the circulation diagram would be constructed to applicable design standards, including the City's Design and Construction Standards (City of Roseville 2020), which have been created to minimize the potential for conflicts or collisions. The Project does not change this conclusion, as it does not introduce any programs or policies which would conflict with transportation plans. On the contrary, increased densities are generally transit-supportive and the Project would include the construction of an eight foot (8') wide pedestrian/bikeway trail, adjacent to Highway 65, with connections from the project site to the trail.

Based on the foregoing, the GP EIR and HE Addendum analyses of potential transportation impacts adequately and appropriately describe the potential impacts of the Project, and the Project does not result in new or substantially more severe increases in significant effects.

Mitigation Measures: The mitigation measure below was effectuated through inclusion in the City's 2035 General Plan Appendix A: Implementation Measures, but is included here for reference.

Mitigation Measure 4.3.1 – *The proposed General Plan Update should be amended as follows:*

Implementation Measure

Proposed development projects that could have a potentially significant VMT impact shall consider reasonable and feasible project modifications and other measures during the project design and environmental review stage of project development that would reduce

VMT effects in a manner consistent with state guidance on VMT reduction. The below list of potential measures is not intended to be exhaustive, and not all measures may be feasible, reasonable, or applicable to all projects. The purpose of this list is to identify options for future development proposals, not to constrain projects to this list, or to require that a project examine or include all measures from this list. Potential measures include:

- improve or increase access to transit;
- increase access to common goods and services, such as groceries, schools, and daycare;
- incorporate affordable housing into the project;
- incorporate neighborhood electric vehicle network;
- orient the project toward transit, bicycle and pedestrian facilities;
- improve pedestrian or bicycle networks, or transit service;
- provide traffic calming;
- provide bicycle parking;
- unbundle parking costs;
- provide parking cash-out programs;
- implement roadway pricing;
- implement or provide access to a commute reduction program;
- provide car-sharing, bike sharing, and ride-sharing programs;
- provide transit passes;
- shifting single occupancy vehicle trips to carpooling or vanpooling, for example providing ride-matching services;
- providing telework options;
- providing incentives or subsidies that increase the use of modes other than single-occupancy vehicle;
- providing on-site amenities at places of work, such as priority parking for carpools and vanpools, secure bike parking, and showers and locker rooms;

- providing employee transportation coordinators at employment sites;
- providing a guaranteed ride home service to users of non-auto modes;
- locate the project near transit;
- increase project density;
- increase the mix of uses within the project or within the project's surroundings;
- increase connectivity and/or intersection density on the project site; and/or
- deploy management strategies (e.g., pricing, vehicle occupancy requirements) on roadways or roadway lanes.

The City shall evaluate the feasibility of a local or regional VMT impact bank or exchange. Such an offset program, if determined feasible, would be administered by the City or a City-approved agency, and would offer demonstrated VMT reduction strategies through transportation demand management programs, impact fee programs, mitigation banks or exchange programs, in-lieu fee programs, or other land use project conditions that reduce VMT in a manner consistent with state guidance on VMT reduction. If, through on-site changes, a subject project cannot demonstrate consistency with state guidance on VMT reduction, the project can contribute on a pro-rata basis to a local or regional VMT reduction bank or exchange, as necessary, to reduce net VMT impacts.

XVIII. Tribal Cultural Resources

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents Mitigation Measures Implemented or Addressing Impacts.
Would the project cause a substantial adverse change in the significance of a Tribal Cultural Resource as 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:					
a) 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)?	EIR 4.9-39 and Addendum page 61	No	No	No	MM 4.9-4
b) 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 California Native American tribe.	EIR 4.9-39 and Addendum page 61	No	No	No	MM 4.9-4
<p>Discussion: For the GP EIR the City of Roseville contacted the Native American Heritage Commission, pursuant to SB 18 and AB 52 consultation requirements, asking for a list of individuals that might have knowledge of the Planning Area. The City used this list to circulate a letter dated April 3, 2017 providing the opportunity to participate in consultation to ensure consideration of Tribal Cultural Resources in the context of local land use policy. The United Auburn Indian Community (UAIC) responded to the request for consultation and provided information on the presence of tribal cultural resources as well as historic resources (cultural resources) within the Planning Area.</p> <p>Impacts related to substantial adverse changes in the significance of a tribal cultural resources were found to be significant (GP EIR page 4.9-39) because the Planning Area is known to contain these resources and is sensitive for the presence of undiscovered or undocumented</p>					

resources. In addition, some tribal cultural resources may also be cultural resources. The UAIC has indicated tribal cultural resources of significant value to the tribe are present in the Planning Area and could be impacted by grading, excavation, or other ground-disturbing activities associated with buildout of the Planning Area. The General Plan included policy revisions to further strengthen protections, the GP EIR included mitigation measures to address these impacts, and the City adopted new Internal Guidance for Management of Tribal Cultural Resources and Consultation, all of which were developed within input from the UAIC. Nonetheless, impacts could still occur. After mitigation impacts were found to be significant and unavoidable.

Notice of the Housing Element was distributed pursuant to SB 18 and, since it was anticipated an EIR could be required, notice pursuant to AB 52 was also distributed. Both were distributed in letters dated September 22, 2020. No requests for consultation were received. The HE Addendum found the GP EIR analysis was based on the potential impacts of grading and general development within the Planning Area, and the Housing Element neither changed the boundaries of the Planning Area nor the locations of potential grading and development within the Planning Area.

For the Project the City of Roseville contacted the Native American Heritage Commission, pursuant to SB 18 consultation requirements, asking for a list of individuals that might have knowledge of the Planning Area. The City used the NAHC list to circulate a letter dated September 23, 2021, providing the opportunity to participate in consultation to ensure consideration of Tribal Cultural Resources in the context of local land use policy changes included in the Project and in compliance with General Plan Policies OS4.1. The United Auburn Indian Community (UAIC) responded to the request for consultation and requested a site visit, which occurred on November 9, 2021.

Through the consultation process between the City and UAIC, Project-specific ways to implement the City's Standard Mitigation Measures and Conditions of Approval in its adopted Internal Guidance for Management of Tribal Cultural Resources and Consultation and General Plan EIR Mitigation Measure 4.9-2b were agreed to and are included below. .

The GP EIR and HE Addendum analyses adequately and appropriately describe the potential impacts of the Project, and the Project is consistent with the tribal cultural resources policies of the General Plan. The Project does not result in new or substantial increases in significant effects.

Mitigation Measures: Mitigation consists of General Plan EIR Mitigation Measures 4.9-2 and, for human remains, 4.9-3 and 4.9-4. Mitigation Measure 4.9-2b states that projects that could have significant adverse impacts to undiscovered, potentially significant archaeological resources and/or TCRs which may be discovered during construction shall be required to implement the Post-Review Discovery Procedures within Volume II Part C of the City's Internal Guidance for Management of Tribal Cultural Resources and Consultation, or those determined to be equally as effective by the City. General Plan EIR Mitigation Measures 4.9-3 and 4.9-4 state that projects that could have significant adverse impacts to human remains or potential human remains shall implement the applicable procedures and recommended mitigation within the City's Internal Guidance for Management of Tribal Cultural Resources and Consultation. Below are the applicable procedures and recommended mitigation from Volume II Part C of the City's Internal Guidance for Management of Tribal Cultural Resources and Consultation that implement the General Plan EIR Mitigation Measures:

Implementation Measure TCR-1: Unpaid Tribal Observation

A minimum of seven days prior to beginning earthwork or other soil disturbance activities, the Construction Manager shall notify the City of the proposed earthwork start-date, in order to provide the City representative sufficient time to contact the consulting tribe(s). A single tribal representative shall be invited

to, at its discretion, voluntarily observe any or all ground-disturbing activities during construction, including any soil piles, trenches, or other disturbed areas. The tribe shall be provided 72 hours to accept or decline observation via email. The single tribal observer shall be required to comply with all job site safety requirements and shall sign a waiver of liability prior to entering the job site. During this inspection, a UAIC Tribal Representative or Tribal Monitor may provide an on-site meeting for construction personnel information on TCRs and workers awareness brochure. Should the tribe choose not to observe any or all of the activity, the City shall deem the mitigation measure completed in good faith without tribal observation as long as the notification was made and documented.

If any TCRs are encountered during this initial inspection, or during any subsequent construction activities, work shall be suspended within 100 feet of the find and the measures included in the **Post-Review Discovery Procedures Mitigation Measure** shall be implemented.

Implementation Measure TCR-2: Post-Review Discovery Procedures

If subsurface deposits believed to be cultural or human in origin, or tribal cultural resources, are discovered during construction, all work shall halt within a 100-foot radius of the discovery, and the Construction Manager shall immediately notify the City of Roseville Development Services Director by phone. The Construction Manager shall also immediately coordinate with the monitoring archeologist or project archaeologist and (if present) tribal monitor, or, in the absence of either, contact the consulting tribe(s) and a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for archaeology and subject to approval by the City, to evaluate the significance of the find and develop appropriate management recommendations in coordination with the consulting tribe(s) if the find is a tribal cultural resource.

All management recommendations shall be provided to the City in writing for the City's review and approval. If recommended by the qualified professional and consulting tribes and approved by the City, this may include modification of the no-work radius.

The professional archaeologist must make a determination, based on professional judgement and supported by substantial evidence, within one business day of being notified, as to whether or not the find represents a cultural or tribal resource or has the potential to be a cultural or tribal cultural resource. The consulting tribe shall also be given the opportunity to provide, within one business day of being notified, a determination as to whether or not the find represents a tribal cultural resource or has the potential to be a tribal cultural resource.

The type of discovery, as described below will determine the subsequent actions. These include: 1) a work pause that, upon further investigation, is not actually a discovery and the work pause was simply needed in order to allow for closer examination of soil (a "false alarm"); 2) a work pause and subsequent action for discoveries that are clearly not related to tribal resources, such as can and bottle dumps, artifacts of European origin, and remnants of built environment features; and 3) a work pause and subsequent action for discoveries that are likely related to tribal resources, such as midden soil, bedrock mortars, groundstone, or other similar expressions.

Whenever there is question as to whether or not the discovery represents a tribal resource, culturally affiliated tribes shall be consulted in making the determination. Whenever a tribal monitor is present, the monitor shall be consulted.

The following processes shall apply, depending on the nature of the find, subject to the review and approval of the City:

- **Response to False Alarms:** If the professional archaeologist determines that the find is negative for any cultural indicators, and tribal representatives have not indicated the find is a tribal cultural resource, then work may resume immediately upon notice to proceed from the City's representative. No further notifications or archaeological consultation is necessary if it is determined that the discovery is not a cultural or tribal cultural resource of any kind. The professional archaeologist shall provide written documentation of this finding to the City, which shall include as an attachment any written documentation provided by tribal representatives or monitors.
- **Response to Non-Tribal Discoveries:** If a tribal monitor is not present at the time of discovery and a professional archaeologist determines that the find represents a non-tribal cultural resource from any time period or cultural affiliation, the City shall be notified immediately, to consult on a finding

of eligibility and implementation of appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. The professional archaeologist shall provide a photograph of the find and a written description to the City of Roseville. The City of Roseville will notify any [tribe(s)] who, in writing, requested notice of unanticipated discovery of non-tribal resources. Notice shall include the photograph and description of the find, and a tribal representative shall have the opportunity to determine whether the find represents a tribal cultural resource. If a response is not received within 24 hours of notification (none of which time period may fall on weekends or City holidays), the City will deem this portion of the measure completed in good faith as long as the notification was made and documented. If requested by a [tribe(s)], the City may extend this timeframe, which shall be documented in writing (electronic communication may be used to satisfy this measure). If a notified tribe responds within 24 hours to indicate that the find represents a tribal cultural resource, then the Response to Tribal Discoveries portion of this measure applies. If the tribe does not respond or concurs that the discovery is non-tribal, work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to its satisfaction.

- Response to Tribal Discoveries: If the find represents a tribal or potentially tribal cultural resource that does not include human remains, the consulting tribe(s) and City shall be notified. The City will consult with the tribe(s) on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be either a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines, or a Tribal Cultural Resource, as defined in Section 21074 of the Public Resources Code. Preservation in place is the preferred treatment, if feasible. Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) not a Tribal Cultural Resource, as defined in Section 21074 of the Public Resources Code; or 3) that the treatment measures have been completed to its satisfaction.
- Response to Human Remains: If the find includes human remains, or remains that are potentially human, the construction supervisor or on-site archaeologist and (if present) tribal monitor shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641) and shall notify the City and Placer County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California Public Resources Code, and Assembly Bill 2641 shall be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the Native American Heritage Commission (NAHC), which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the Public Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. Public Resources Code § 5097.94 provides structure for mediation through the NAHC if necessary. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the Public Resources Code).

If no agreement is reached, the landowner must rebury the remains in a respectful manner where they will not be further disturbed (§ 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the treatment measures have been completed to its satisfaction.

XIX. Utilities and Service Systems

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents Mitigation Measures Implemented or Addressing Impacts.
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	EIR 4.12-21 and Addendum page 63	No	No	No	None
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	EIR 4.12-24 and Addendum page 63	No	No	No	None
c) Result in a determination by the wastewater treatment provider which serves the project that it has adequate capacity to serve the project's projected demand in addition of the provider's existing commitments?	EIR 4.12-26 and Addendum page 63	No	No	No	None
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	EIR 4.12-30 and Addendum page 63	No	No	No	None
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	EIR 4.12-30 and Addendum page 63	No	No	No	None

Discussion: The GP EIR evaluation of utility services was based on full buildout of the General Plan, and capacity evaluation used the metrics appropriate to the impact area, as follows: for water, dwelling units or dwelling unit equivalents (edu); for wastewater, demand factors based on acreage by land use type; and for waste, total population and employees. The GP EIR also evaluated the potential for facility expansions, including the planned expansion of the Dry Creek wastewater treatment plant; off-site construction of the Ophir water treatment plant by the Placer County Water Agency; a new planned substation and 60-kilovolt overhead transmission lines within the Creekview Specific Plan; and construction of water lines, sewer lines, electrical lines, and supporting facilities (e.g. pump stations). Except for the Ophir water treatment plant, expanded and new utilities and service systems would be within the Planning Area, and impacts associated with these facilities have already been identified and mitigated through Specific Plan EIRs. Therefore, with the exception of the Ophir plant, impacts were found to be less than significant. Construction of the Ophir plant was addressed in the Foothill Phase II Water Treatment Plant and Pipeline EIR, discussed in the GP EIR, and it found that construction air quality impacts would be significant and unavoidable. The GP EIR concluded that buildout of the General Plan would indirectly contribute to this significant and unavoidable impact, and the HE Addendum reached the same conclusion. No additional water or wastewater infrastructure offsite is required to support the Project, which is within the buildout assumptions of the GP EIR and HE Addendum.

Under buildout conditions, the City has a total water demand of 48,762 acre feet per year (afy), and has surplus water supply during normal years and during multiple-dry years 1 and 2. However, during a single-dry year there is an approximate 9,000-afy deficit and during multiple-dry year 3 there is an approximate 2,000-afy deficit. The City's conservation measures are sufficient during dry years to offset the deficit. Therefore, impacts were found to be less than significant. The Housing Element was within the scope of the total dwelling units analyzed within the GP EIR, and was therefore found to be within the scope of analysis of the water evaluation; no changes or updates to this analysis was found to be required in the HE Addendum. This conclusion remains appropriate for the Project, which is also within the scope of the GP EIR and HE Addendum.

The City's buildout demands on the wastewater system were reported in Table 4.12-7 of the GP EIR as 8.9 million gallons per day (mgd) of average dry weather flow, while the Pleasant Grove wastewater treatment plant's effective treatment capacity is 9.5 mgd, with plans to expand capacity to 12 mgd and the Dry Creek wastewater treatment plan has a permitted capacity of 18 mgd (note that treatment plants have service boundaries that include the City and other areas). The evaluation found there would be adequate capacity to serve full buildout of the City and impacts were found to be less than significant. The wastewater evaluation was based on the total acreage of citywide land uses, with approximately 13,000 acres of residential land use and 3,100 acres of commercial/office land use. The HE Addendum evaluated the result of changing the acreage of residential compared to commercial land uses, removing up to 20 acres of commercial land use and replacing it with up to 20 acres of residential land use. Table 4.12-7 of the GP EIR indicates that sewage demand for commercial sites is 850 gallons per day per acre, while for residential it is only 190 gallons per day per acre. Therefore, the land use change contemplated by the Housing Element was found to reduce wastewater system demands. However, in the context of the citywide demands the difference was negligible, and did not change the total average dry weather flow of 8.9 mgd. The Project is within the scope of the GP EIR and HE Addendum evaluation, which contemplates the land use change from commercial to residential, and does not change land use in a manner or to a degree that requires further evaluation of treatment capacity.

The City's additional waste demands were calculated based on the increase in population and employees between existing conditions and buildout conditions, and used CalRecycle solid waste disposal rates of 4.8 pounds per day (ppd) per resident and 8.2 ppd per employee. Based on these rates, buildout of the General Plan was found to generate an additional 428 ppd of solid waste. The GP EIR noted that this estimate was extremely conservative, as it does not account for recycling or waste diversion. The estimated increase in waste would be within the maximum daily throughput of the Western Regional Sanitary Landfill, and therefore impacts were found to be less than significant. The Project is within the scope of the population and employees analyzed within the GP EIR and HE Addendum, and is therefore within the scope of analysis of the waste evaluation; no changes or updates to this analysis are required.

In addition, future development accommodated under the General Plan would be required to comply with applicable federal, State, or local solid waste regulations or statutes, including the City's Construction and Demolition and Recycling Ordinance, the applicable CALGreen Code (for the Project, likely the 2022 CalGreen Code), and AB 1826 (mandatory commercial organics recycling). Furthermore, the City would continue to comply with AB 1601, which requires implementation of a commercial solid waste recycling program. Therefore, impacts related to compliance with regulations pertaining to solid waste were found to be less than significant. The Project has no effect on this analysis or conclusion.

Based on the foregoing, the GP EIR and HE Addendum analyses of utility services impacts, as updated, adequately and appropriately describe the potential impacts of the Project, and the Project does not result in new or substantially more severe increases in significant effects.

Mitigation Measures: None.

XX. Wildfire

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents Mitigation Measures Implemented or Addressing Impacts.
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	EIR 4.10-27 and Addendum page 66	No	No	No	None
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	EIR 4.10-27 and Addendum page 66	No	No	No	None
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	EIR 4.10-27 and Addendum page 66	No	No	No	None
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	EIR 4.10-27 and Addendum page 66	No	No	No	None

Discussion: The Planning Area is not located in or near state responsibility areas or land classified as very high fire hazard severity zones. The Planning Area is designated by CAL FIRE as a Local Responsibility Area, and there are no Very High Fire Hazard Severity Zones in or adjacent to the Planning Area. Therefore, the GP EIR concluded the wildfire hazard risk for the City is low. The City's comprehensive planning has ensured that existing and planned fire stations are distributed through the Planning Area, and the City maintains and plans connected transportation networks consistent with the City's Design and Construction Standards to ensure adequate emergency access and evacuation routes. The City maintains a Multi-Hazard Mitigation Plan and Emergency Operations Plan, and the GP EIR and HE Addendum found that the General Plan and Housing Element was consistent and supportive of these emergency planning documents. The proposed Project does not affect the foregoing analysis. The Project is within the scope of the above GP EIR and HE Addendum analysis. The Project would not add units that would exceed those analyzed in the GP EIR analysis of emergency service needs, nor would it distribute units in a manner that would concentrate emergency service demands in an unanticipated location, as residential development on the Project site is contemplated by the Housing Element. Based on the foregoing, the GP EIR and HE Addendum analyses of wildfire impacts adequately and appropriately describe the potential impacts of the Project, and the Project does not result in new or substantially more severe increases in significant effects.

Mitigation Measures: None.

XXI. Mandatory Findings of Significance

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents Mitigation Measures Implemented or Addressing Impacts.
a) Does the project have the potential to 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 an endangered, threatened or rare species, or eliminate important examples of the major periods of California history or prehistory?	EIR Chapter 5.0 and Addendum page 67	No	No	No	None

b) Does the project have impacts which 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.)	EIR Chapter 5.0 and Addendum page 67	No	No	No	None
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	EIR Chapter 5.0 and Addendum page 67	No	No	No	None

Discussion: Chapter 5.0 of the GP EIR includes an evaluation of cumulative impacts, growth inducing impacts, significant irreversible environmental changes, and a section on the significant and unavoidable impacts evaluated within the GP EIR. No new mitigation measures beyond those already identified in the topical sections of Chapter 4.0 were identified. As discussed in the sections above, the GP EIR found that General Plan buildout would result in significant and unavoidable impacts to biological resources, cultural resources, and tribal cultural resources. The analysis found the following impacts would also be cumulatively considerable: greenhouse gas emissions; VMT; construction and operational air quality emissions; exposure to substantial pollutant concentrations (long-term); operational noise due to traffic and stationary sources; biological resources including special status plants, riparian habitat/sensitive natural communities, wetlands, and loss of habitat and special status wildlife species; both cultural and tribal cultural resources; indirect impacts due to construction of the Ophir water treatment plant; visual quality; and creation of substantial light and glare. These significant cumulative impacts have the potential to cause adverse impacts on human beings. As described in the foregoing analyses, the Project is within the scope of all impacts evaluated by the GP EIR and HE Addendum and appropriately describe the potential impacts of the Project.

ENVIRONMENTAL DETERMINATION:

In reviewing the site specific information provided for this project and acting as Lead Agency, the City of Roseville, Development Services Department, Planning Division has analyzed the potential environmental impacts created by this project and determined that the findings of CEQA Section 15162 concerning the decision not to prepare a subsequent EIR or negative declaration and the findings of CEQA Section 15164 concerning the decision to prepare an Addendum can be made. As supported by substantial evidence within the Addendum to the 2035 General Plan Environmental Impact Report (SCH #2019080418) and the 2021 Housing Element Addendum, certified on August 5, 2020 and August 18, 2021 respectively, the Lead Agency makes the following findings:

[X] No substantial changes are proposed in the project which would require major revisions of the previous EIR or Mitigated Negative Declaration.

[X] No substantial changes have occurred with respect to the circumstances under which the project is undertaken.

[X] There is no new information of substantial importance which was not known and could not have been known with the exercise of due diligence at the time the previous EIR was certified as complete or the Mitigated Negative Declaration was adopted.

[X] Only minor technical changes or additions are necessary in order to deem the adopted environmental document adequate.

Addendum Prepared by:



Escarlet Mar, Associate Planner
City of Roseville, Development Services–Planning Division

Attachments:

1. Noise Study

Environmental Noise Assessment

Shea Apartments Project

City of Roseville, California

November 1, 2022

Project #211109

Prepared for:



TLA Engineering and Planning

1504 Eureka Road, Suite 110

Roseville, CA 95661

Prepared by:

Saxelby Acoustics LLC



Luke Saxelby, INCE Bd. Cert.

Principal Consultant

Board Certified, Institute of Noise Control Engineering (INCE)



Table of Contents

INTRODUCTION	2
ENVIRONMENTAL SETTING	2
<i>BACKGROUND INFORMATION ON NOISE</i>	<i>2</i>
EXISTING GENERAL AMBIENT NOISE LEVELS	7
REGULATORY CONTEXT	8
<i>FEDERAL</i>	<i>8</i>
<i>STATE</i>	<i>8</i>
<i>LOCAL</i>	<i>8</i>
EVALUATION OF TRANSPORTATION NOISE ON PROJECT SITE	9
<i>EXTERIOR NOISE LEVELS</i>	<i>12</i>
<i>INTERIOR NOISE LEVELS</i>	<i>12</i>
<i>ANALYSIS OF INTERIOR NOISE CONTROL MEASURES</i>	<i>12</i>
CONCLUSION	16
REFERENCES	18

List of Figures

Figure 1: Site Plan.....	3
Figure 2: Noise Measurement Locations	4
Figure 3: Future Transportation Noise Levels, L_{dn}	11
Figure 4: Interior Noise Control Measures	15

List of Tables

Table 1: Typical Noise Levels.....	5
Table 2: Summary of Existing Background Noise Measurement Data	7
Table 3: City of Roseville Land Use Compatibility Chart	9

Appendices

Appendix A: Acoustical Terminology	
Appendix B: Field Noise Measurement Data	
Appendix C: Interior Noise Reduction Calculations	

INTRODUCTION

The Shea Apartments project consists of the development of a vacant parcel for multi-family residential uses consisting of 18 apartment buildings. The project will include several amenities such as outdoor recreation areas and a pool area. The project site is located on Gibson Drive, south of Highway 65 in the City of Roseville, California.

Figure 1 shows the project site plan. **Figure 2** shows an aerial view of the project site and noise measurement locations.

ENVIRONMENTAL SETTING

BACKGROUND INFORMATION ON NOISE

Fundamentals of Acoustics

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment.



Shea Apartments Project

City of Roseville, California

Figure 1
Project Site Plan



Shea Apartments Project

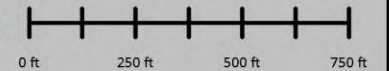
City of Roseville, California

Figure 2

Noise Measurement Sites

Legend

- Project Site
- ▲ Noise Measurement Site - Long Term



Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 11/19/2021



The decibel scale is logarithmic, not linear. In other words, two sound levels 10-dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10-dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn} , and shows very good correlation with community response to noise.

The day/night average level (DNL or L_{dn}) is based upon the average noise level over a 24-hour day, with a +10-decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Table 1 lists several examples of the noise levels associated with common situations. **Appendix A** provides a summary of acoustical terms used in this report.

TABLE 1: TYPICAL NOISE LEVELS

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft.)	--100--	
Gas Lawn Mower at 1 m (3 ft.)	--90--	
Diesel Truck at 15 m (50 ft.), at 80 km/hr. (50 mph)	--80--	Food Blender at 1 m (3 ft.) Garbage Disposal at 1 m (3 ft.)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft.)	--70--	Vacuum Cleaner at 3 m (10 ft.)
Commercial Area Heavy Traffic at 90 m (300 ft.)	--60--	Normal Speech at 1 m (3 ft.)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

Source: Caltrans, Technical Noise Supplement, Traffic Noise Analysis Protocol. September, 2013.

Effects of Noise on People

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1-dBA cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6-dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING GENERAL AMBIENT NOISE LEVELS

The existing noise environment in the project area is primarily defined by traffic on Highway 65. Secondary noise sources include traffic and miscellaneous noise from surrounding uses south and west of the project site.

To quantify the existing ambient noise environment in the project vicinity, Saxelby Acoustics conducted continuous (24-hr.) noise level measurements at two locations on the project site. Noise measurement locations are shown on **Figure 2**. A summary of the noise level measurement survey results is provided in **Table 2**. **Appendix B** contains the complete results of the noise monitoring.

The sound level meters were programmed to record the maximum, median, and average noise levels at each site during the survey. The maximum value, denoted L_{max} , represents the highest noise level measured. The average value, denoted L_{eq} , represents the energy average of all the noise received by the sound level meter microphone during the monitoring period. The median value, denoted L_{50} , represents the sound level exceeded 50 percent of the time during the monitoring period.

Larson Davis Laboratories (LDL) model 820 precision integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with a CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

TABLE 2: SUMMARY OF EXISTING BACKGROUND NOISE MEASUREMENT DATA

Site	Location	Date	L_{dn}	Daytime L_{eq}	Daytime L_{50}	Daytime L_{max}	Nighttime L_{eq}	Nighttime L_{50}	Nighttime L_{max}
LT-1	Southeastern Project Boundary (170' to CL of I-80)	11/16/21	73	69	68	85	67	64	82
LT-2	Northwestern Project Region (300' to CL of I-80)	11/16/21	67	62	61	77	60	58	72
Notes: <ul style="list-style-type: none"> • All values shown in dBA • Daytime hours: 7:00 a.m. to 10:00 p.m. • Nighttime Hours: 10:00 p.m. to 7:00 a.m. 									

Source: Saxelby Acoustics, 2021.

REGULATORY CONTEXT

FEDERAL

There are no federal regulations related to noise that apply to the Proposed Project.

STATE

There are no state regulations related to noise that apply to the Proposed Project.

LOCAL

City of Roseville General Plan

The City of Roseville General Plan Noise Element Policy N 1.2 establishes an acceptable interior noise level of 45 dBA L_{dn} for residential uses. For outdoor activity areas of residential uses, the normally acceptable exterior noise level standard is 60 dBA L_{dn} , as shown on General Plan Noise Element Table IX-1 (**Table 3**). Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn} /CNEL or less, an exterior noise level of up to 65 dB L_{dn} /CNEL may be conditionally acceptable. In this case new construction or development should be taken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.

For playgrounds and neighborhood park uses, a normally acceptable exterior noise standard of 65 dBA L_{dn} is applied.

TABLE 3: CITY OF ROSEVILLE LAND USE COMPATIBILITY CHART

Table IX-1 Exterior Noise Compatibility Standards for Uses Affected by Transportation Noise						
Land Use Category*	Community Noise Exposure L _{dn} or CNEL, dBA					
	55	60	65	70	75	80
Residential	Green	Green	Yellow	Orange	Red	Red
Lodging – Motels, Hotels	Green	Green	Yellow	Orange	Red	Red
Schools, Libraries, Places of Worship, Hospitals, Assisted Living	Green	Green	Yellow	Orange	Red	Red
Auditoriums, Concert Halls, Amphitheaters	Yellow	Yellow	Yellow	Orange	Red	Red
Sports Arena, Outdoor Spectator Sports	Yellow	Yellow	Yellow	Orange	Red	Red
Playgrounds, Neighborhood Parks	Green	Green	Yellow	Orange	Red	Red
Golf Courses, Riding Stables, Water Recreation, Cemeteries	Green	Green	Green	Orange	Red	Red
Office Buildings	Green	Green	Yellow	Orange	Red	Red

Interpretation

Green **Normally Acceptable**
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Yellow **Conditionally Acceptable**
New construction or development should be taken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

Orange **Normally Unacceptable**
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Red **Clearly Unacceptable**
New construction or development should generally not be undertaken.

* Land uses not listed on this table will be evaluated according to guidance for the land use category that is most similar with regard to noise sensitivity. The land use-noise compatibility standards apply to outdoor (exterior) activity areas associated with each land use. Outdoor activity areas are the portion of a noise-sensitive property where outdoor activities would normally be expected. Outdoor activity areas for the purposes of this element do not include gathering spaces alongside transportation corridors or associated public rights-of-way.

EVALUATION OF TRANSPORTATION NOISE ON PROJECT SITE

Saxelby Acoustics utilized the collected sound level data for Highway 65 to predict project transportation noise exposure levels. The traffic noise levels for Highway 65 adjacent to the project site are projected to increase by approximately 4 dB under future conditions based upon the Noise Study Report for the SR 65 Capacity and Operational Improvements Project (ICF International, January 2016). This future increase is accounted for in the noise model.

Saxelby Acoustics used the SoundPLAN noise model to map transportation noise levels at the proposed project site due to traffic on Highway 65. **Figure 3** shows cumulative plus project noise levels (dBA, L_{dn}) at the project site. It should be noted that the exterior noise levels account for the preliminary site grading plans dated January 31, 2022.





Shea Apartments Project

City of Roseville, California

Figure 3

Future Transportation Noise Contours
(dBA L_{dn})

Noise Level, dB(A)

70 <	<= 71
71 <	<= 72
72 <	<= 73
73 <	<= 74
74 <	<= 75
75 <	

Legend

- Project Building
- Project Boundary

Scale 1:250

0 50 100 200 300 400 feet



EXTERIOR NOISE LEVELS

As shown on **Figure 3**, the proposed outdoor recreation areas of the project are predicted to be exposed to future traffic noise levels of 51-58 dBA L_{dn} . This complies with the City's 60 dBA L_{dn} exterior noise standard for residential outdoor activity areas. Therefore, no exterior noise control measures are recommended.

INTERIOR NOISE LEVELS

As shown on **Figure 3**, façades of the proposed apartment uses would be exposed to maximum exterior noise levels up to 75 dBA L_{dn} . Modern building construction methods typically yields an exterior-to-interior noise level reduction of 25 dBA. Therefore, where exterior noise levels are 70 dBA L_{dn} , or less, no additional interior noise control measures are typically required. For this project, exterior noise levels are predicted to be up to 75 dBA L_{dn} at the second and third stories of the buildings closest to Highway 65. This would result in interior noise levels of up to 50 dBA L_{dn} based on typical building construction. This exceeds the City of Roseville General Plan Policy which requires that interior noise levels do not exceed 45 dB L_{dn} . Therefore, additional noise control measures are required to reduce interior noise to acceptable levels.

ANALYSIS OF INTERIOR NOISE CONTROL MEASURES

In order to calculate interior noise levels for the actual project construction, it is necessary to determine the noise reduction provided by the residential building facades. This may be calculated by using a measured A-weighted noise frequency spectrum for interstate traffic. The composite transmission loss and resulting noise level in the receiving room is first determined. After correcting for room absorption, the overall noise level in the room is calculated. It should be noted that the presence of carpet and pad flooring is known to provide substantial acoustic absorption, resulting in quieter interior noise levels. Because the presence of carpet lowers interior noise levels, this analysis examines windows STC ratings for rooms with typical residential carpet and pad versus rooms which may have hard surface flooring (i.e. tile, vinyl plank, wood, etc.) throughout the space. For living rooms which are carpeted it is assume that hard surface flooring may occur in entry and kitchen areas only.

Based upon the exterior transportation noise levels along Highway 65 of 75 dBA L_{dn} , an exterior-to-interior noise level reduction of up to 30 dBA would be required to meet the City of Roseville General Plan standards. Saxelby Acoustics determined the necessary noise control measures to achieve this noise level reduction. Noise control measures differ based on building location and floor levels. **Figure 4** shows the building groups and the facades requiring acoustic treatment. The noise control measures are summarized below:

Group 1

1st Floor

- Bedroom: STC 27 glazing and hard flooring, or carpet.
- Living Room: STC 27 glazing and hard flooring, or carpet.

2nd and 3rd Floor

- Bedroom: STC 30 glazing and carpet on pad, **OR** STC 32 glazing and hard flooring.
- Living Room: STC 31 glazing and carpet on pad, **OR** STC 34 glazing and hard flooring.

Group 2

1st Floor

- Bedroom: STC 30 glazing and carpet on pad, OR STC 31 glazing and hard flooring.
- Living Room: STC 30 glazing and carpet on pad, OR STC 33 glazing and hard flooring.

2nd and 3rd Floor

- Bedroom: STC 33 glazing and carpet on pad, OR STC 35 glazing and hard flooring.
- Living Room: STC 33 glazing and carpet on pad, OR STC 38 glazing and hard flooring.

Group 3

1st Floor

- Bedroom: STC 32 glazing and carpet on pad, OR STC 34 glazing and hard flooring.
- Living Room: STC 33 glazing and carpet on pad, OR STC 36 glazing and hard flooring.

2nd and 3rd Floor

- Bedroom: STC 33 glazing and carpet on pad, OR STC 36 glazing and hard flooring.
- Living Room: STC 34 glazing and carpet on pad, OR STC 38 glazing and hard flooring.

Interior noise control measures required for all indicated facades of Groups 1, 2, and 3.

- Building facades shall include use of stucco with exterior sheathing and a resilient channel for hanging interior gypsum board. An alternative to RC channel is use of a staggered stud exterior wall;
- Interior gypsum wallboards and gypsum ceiling shall be 5/8";
- Saxelby Acoustics recommends that mechanical ventilation penetrations for exhaust fans not face toward Highway 65. Where feasible, these vents should be routed towards the opposite side of the building to minimize sound intrusion to sensitive areas of the buildings. Where vents must face toward Highway 65, it is recommended that the duct work be increased in length and make as many "S" turns as feasible prior to exiting the dwelling. This separates the openings between the noise source and the living space with a long circuitous route. Each time the sound turns a

corner, it is reduced slightly. Flexible duct work is preferred ducting for this noise mitigation. Where the vent exits the building, a spring-loaded flap with a gasket should be installed to reduce sound entering the duct work when the vent is not in use;

- Mechanical ventilation shall be provided to allow occupants to keep doors and windows closed for acoustic isolation;
- No Packaged Terminal Air Conditioners (PTAC's) shall be used;
- In lieu of these measures, an interior noise control report may be prepared by a qualified acoustic engineer demonstrating that the proposed building construction would achieve the interior noise reduction requirement of up to 30 dBA.



Group 1

1st Floor:

Bedroom: STC 27 glazing and hard flooring or carpet

Living Room: STC 27 glazing and hard flooring or carpet

2nd and 3rd Floor:

Bedroom: STC 30 glazing and carpet on pad, OR

STC 32 glazing and hard flooring

Living Room: STC 31 glazing and carpet on pad, OR

STC 34 glazing and hard flooring

Group 2

1st Floor:

Bedroom: STC 30 glazing and carpet on pad, OR

STC 31 glazing and hard flooring

Living Room: STC 30 glazing and carpet on pad, OR

STC 33 glazing and hard flooring

2nd and 3rd Floor:

Bedroom: STC 33 glazing and carpet on pad, OR

STC 35 glazing and hard flooring

Living Room: STC 33 Glazing and carpet on pad, OR

STC 38 glazing and hard flooring

Group 3

1st Floor:

Bedroom: STC 32 glazing and carpet on pad, OR

STC 34 glazing and hard flooring

Living Room: STC 33 glazing and carpet on pad, OR

STC 36 glazing and hard flooring

2nd and 3rd Floor:

Bedroom: STC 33 glazing and carpet on pad, OR

STC 36 glazing and hard flooring

Living Room: STC 34 Glazing and carpet on pad, OR

STC 38 glazing and hard flooring



Interior Noise Control Measures (Required for All Indicated Facades of Groups 1, 2, and 3)

- o Exterior finish shall be stucco with sheathing;
- o Interior gypsum at exterior walls shall be 5/8" on resilient channel or 5/8" on staggered stud wall assembly;
- o Ceiling gypsum shall be 5/8";
- o Mechanical ventilation shall be installed in all residential uses to allow residents to keep doors and windows closed, as desired for acoustical isolation;
- o No PTAC's shall be used.

Shea Apartments Project

City of Roseville, California

Figure 4

Interior Noise Control Measures

Legend

- Facades Needing Acoustic Upgrades: Group 1
- Facades Needing Acoustic Upgrades: Group 2
- Facades Needing Acoustic Upgrades: Group 3



CONCLUSION

The proposed project is predicted to meet the City of Roseville General Plan noise level standards assuming the following requirements are incorporated into design for the new residential uses:

Group 1

1st Floor

- Bedroom: STC 27 glazing and hard flooring, or carpet.
- Living Room: STC 27 glazing and hard flooring, or carpet.

2nd and 3rd Floor

- Bedroom: STC 30 glazing and carpet on pad, **OR** STC 32 glazing and hard flooring.
- Living Room: STC 31 glazing and carpet on pad, **OR** STC 34 glazing and hard flooring.

Group 2

1st Floor

- Bedroom: STC 30 glazing and carpet on pad, OR STC 31 glazing and hard flooring.
- Living Room: STC 30 glazing and carpet on pad, OR STC 33 glazing and hard flooring.

2nd and 3rd Floor

- Bedroom: STC 33 glazing and carpet on pad, OR STC 35 glazing and hard flooring.
- Living Room: STC 33 glazing and carpet on pad, OR STC 38 glazing and hard flooring.

Group 3

1st Floor

- Bedroom: STC 32 glazing and carpet on pad, OR STC 34 glazing and hard flooring.
- Living Room: STC 33 glazing and carpet on pad, OR STC 36 glazing and hard flooring.

2nd and 3rd Floor

- Bedroom: STC 33 glazing and carpet on pad, OR STC 36 glazing and hard flooring.
- Living Room: STC 34 glazing and carpet on pad, OR STC 38 glazing and hard flooring.

Interior noise control measures required for all indicated facades of Groups 1, 2, and 3.

- Building facades shall include use of stucco with exterior sheathing and a resilient channel for hanging interior gypsum board. An alternative to RC channel is use of a staggered stud exterior wall;
- Interior gypsum wallboards and gypsum ceiling shall be 5/8";
- Saxelby Acoustics recommends that mechanical ventilation penetrations for exhaust fans not face toward Highway 65. Where feasible, these vents should be routed towards the opposite side of

the building to minimize sound intrusion to sensitive areas of the buildings. Where vents must face toward Highway 65, it is recommended that the duct work be increased in length and make as many “S” turns as feasible prior to exiting the dwelling. This separates the openings between the noise source and the living space with a long circuitous route. Each time the sound turns a corner, it is reduced slightly. Flexible duct work is preferred ducting for this noise mitigation. Where the vent exits the building, a spring-loaded flap with a gasket should be installed to reduce sound entering the duct work when the vent is not in use;

- Mechanical ventilation shall be provided to allow occupants to keep doors and windows closed for acoustic isolation;
- No Packaged Terminal Air Conditioners (PTAC’s) shall be used;
- In lieu of these measures, an interior noise control report may be prepared by a qualified acoustic engineer demonstrating that the proposed building construction would achieve the interior noise reduction requirement of up to 30 dBA.



REFERENCES

- American National Standards Institute. (1998). *[Standard] ANSI S1.43-1997 (R2007): Specifications for integrating-averaging sound level meters*. New York: Acoustical Society of America.
- American Standard Testing Methods, *Standard Guide for Measurement of Outdoor A-Weighted Sound Levels, American Standard Testing Methods (ASTM) E1014-08*, 2008.
- ASTM E1014-12. *Standard Guide for Measurement of Outdoor A-Weighted Sound Levels*. ASTM International. West Conshohocken, PA. 2012.
- ASTM E1780-12. *Standard Guide for Measuring Outdoor Sound Received from a Nearby Fixed Source*. ASTM International. West Conshohocken, PA. 2012.
- Barry, T M. (1978). *FHWA highway traffic noise prediction model* (FHWA-RD-77-108). Washington, DC: U.S. Department of transportation, Federal highway administration, Office of research, Office of environmental policy.
- California Department of Transportation (Caltrans), *Technical Noise Supplement, Traffic Noise Analysis Protocol*, September 2013.
- Egan, M. D. (1988). *Architectural acoustics*. United States of America: McGraw-Hill Book Company.
- Federal Highway Administration. *FHWA Roadway Construction Noise Model User's Guide*. FHWA-HEP-05-054 DOT-VNTSC-FHWA-05-01. January 2006.
- Hanson, Carl E. (Carl Elmer). (2006). *Transit noise and vibration impact assessment*. Washington, DC: U.S. Department of Transportation, Federal Transit Administration, Office of Planning and Environment.
- International Electrotechnical Commission. Technical committee 29: Electroacoustics. International Organization of Legal Metrology. (2013). *Electroacoustics: Sound level meters*.
- International Organization for Standardization. (1996). *Acoustic - ISO 9613-2: Attenuation of sound during propagation outdoors. Part 2: General methods of calculation*. Ginevra: I.S.O.
- Miller, L. N., Bolt, Beranek, & and Newman, Inc. (1981). *Noise control for buildings and manufacturing plants*. Cambridge, MA: Bolt, Beranek and Newman, Inc.
- SoundPLAN. SoundPLAN GmbH. Backnang, Germany. <http://www.soundplan.eu/english/>

Appendix A: Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
ASTC	Apparent Sound Transmission Class. Similar to STC but includes sound from flanking paths and correct for room reverberation. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by +5 dBA and nighttime hours weighted by +10 dBA.
DNL	See definition of Ldn.
IIC	Impact Insulation Class. An integer-number rating of how well a building floor attenuates impact sounds, such as footsteps. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
L(n)	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50% of the time during the one-hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
NIC	Noise Isolation Class. A rating of the noise reduction between two spaces. Similar to STC but includes sound from flanking paths and no correction for room reverberation.
NNIC	Normalized Noise Isolation Class. Similar to NIC but includes a correction for room reverberation.
Noise	Unwanted sound.
NRC	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
RT60	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
SEL	Sound Exposure Level. SEL is a rating, in decibels, of a discrete event, such as an aircraft flyover or train pass by, that compresses the total sound energy into a one-second event.
SPC	Speech Privacy Class. SPC is a method of rating speech privacy in buildings. It is designed to measure the degree of speech privacy provided by a closed room, indicating the degree to which conversations occurring within are kept private from listeners outside the room.
STC	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations. The STC rating is typically used to rate the sound transmission of a specific building element when tested in laboratory conditions where flanking paths around the assembly don't exist. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
Simple Tone	Any sound which can be judged as audible as a single pitch or set of single pitches.

Appendix B: Continuous Ambient Noise Measurement Results



Appendix B1: Continuous Noise Monitoring Results

Site: LT-1

Project: Shea Apartments Gibson Drive

Meter: LDL 820-7

Location: Northeastern Project Boundary

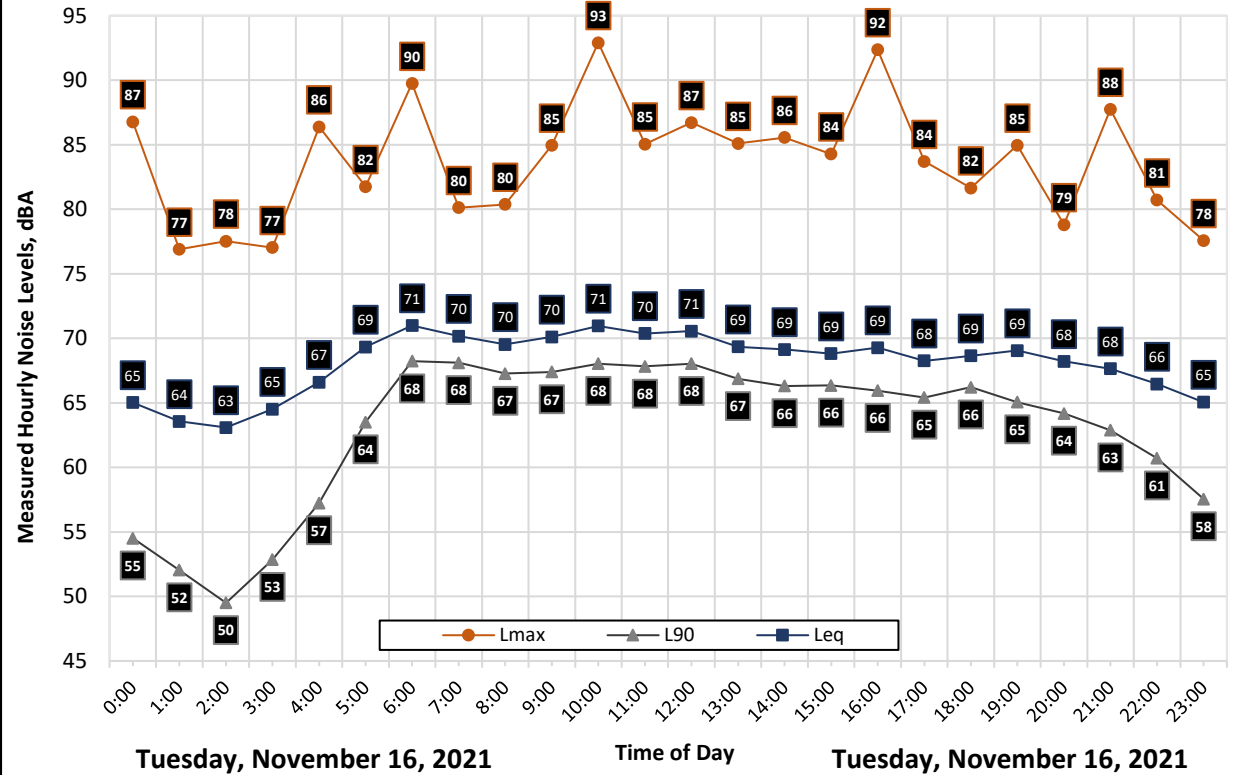
Calibrator: CAL200

Coordinates: 38.78084°, -121.27375°

Date	Time	Measured Level, dBA			
		L _{eq}	L _{max}	L ₅₀	L ₉₀
Tuesday, November 16, 2021	0:00	65	87	62	55
Tuesday, November 16, 2021	1:00	64	77	61	52
Tuesday, November 16, 2021	2:00	63	78	60	50
Tuesday, November 16, 2021	3:00	65	77	62	53
Tuesday, November 16, 2021	4:00	67	86	64	57
Tuesday, November 16, 2021	5:00	69	82	69	64
Tuesday, November 16, 2021	6:00	71	90	71	68
Tuesday, November 16, 2021	7:00	70	80	70	68
Tuesday, November 16, 2021	8:00	70	80	69	67
Tuesday, November 16, 2021	9:00	70	85	69	67
Tuesday, November 16, 2021	10:00	71	93	70	68
Tuesday, November 16, 2021	11:00	70	85	70	68
Tuesday, November 16, 2021	12:00	71	87	70	68
Tuesday, November 16, 2021	13:00	69	85	69	67
Tuesday, November 16, 2021	14:00	69	86	68	66
Tuesday, November 16, 2021	15:00	69	84	68	66
Tuesday, November 16, 2021	16:00	69	92	68	66
Tuesday, November 16, 2021	17:00	68	84	67	65
Tuesday, November 16, 2021	18:00	69	82	68	66
Tuesday, November 16, 2021	19:00	69	85	68	65
Tuesday, November 16, 2021	20:00	68	79	68	64
Tuesday, November 16, 2021	21:00	68	88	67	63
Tuesday, November 16, 2021	22:00	66	81	65	61
Tuesday, November 16, 2021	23:00	65	78	64	58

Statistics	Leq	Lmax	L50	L90
Day Average	69	85	68	66
Night Average	67	82	64	57
Day Low	68	79	67	63
Day High	71	93	70	68
Night Low	63	77	60	50
Night High	71	90	71	68
Ldn	73	Day %		77
CNEL	74	Night %		23

Measured Ambient Noise Levels vs. Time of Day



Appendix B2: Continuous Noise Monitoring Results

Site: LT-2

Project: Shea Apartments Gibson Drive

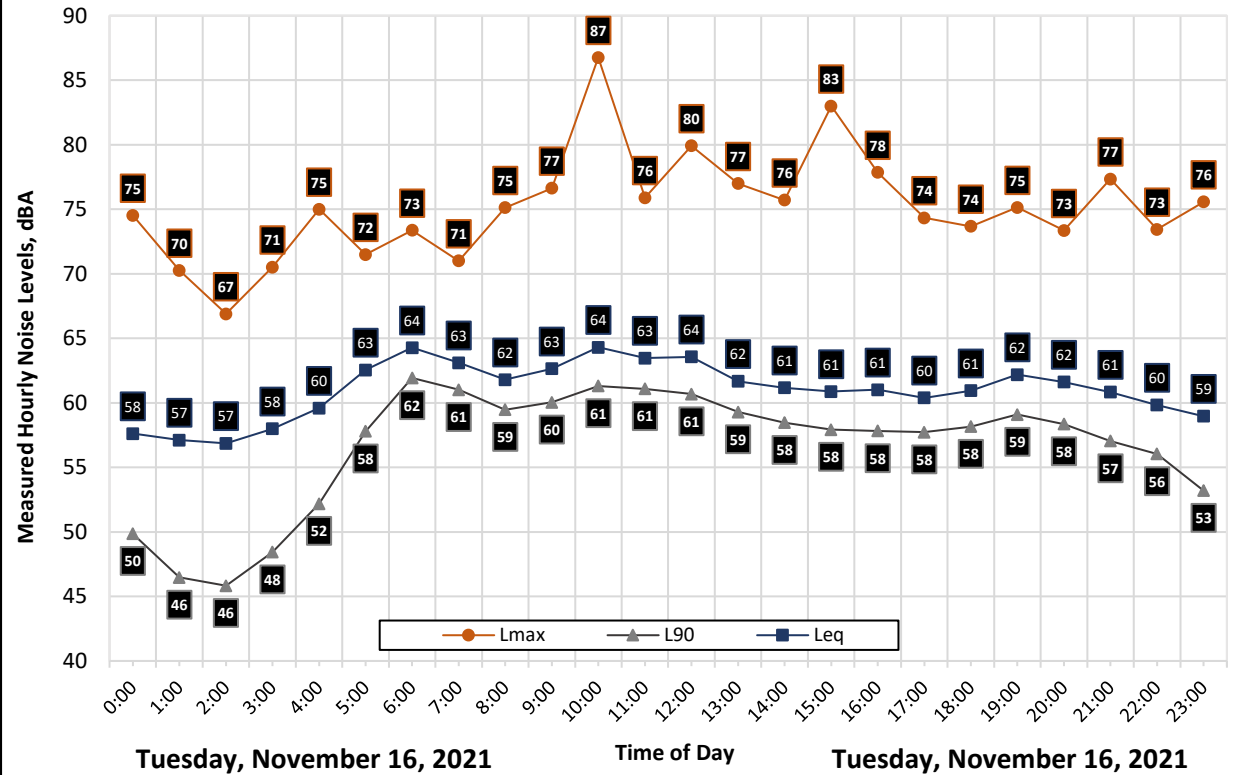
Meter: LDL 820-6

Location: Northwestern Project Boundary

Calibrator: CAL200

Coordinates: 38.78235°, -121.27761°

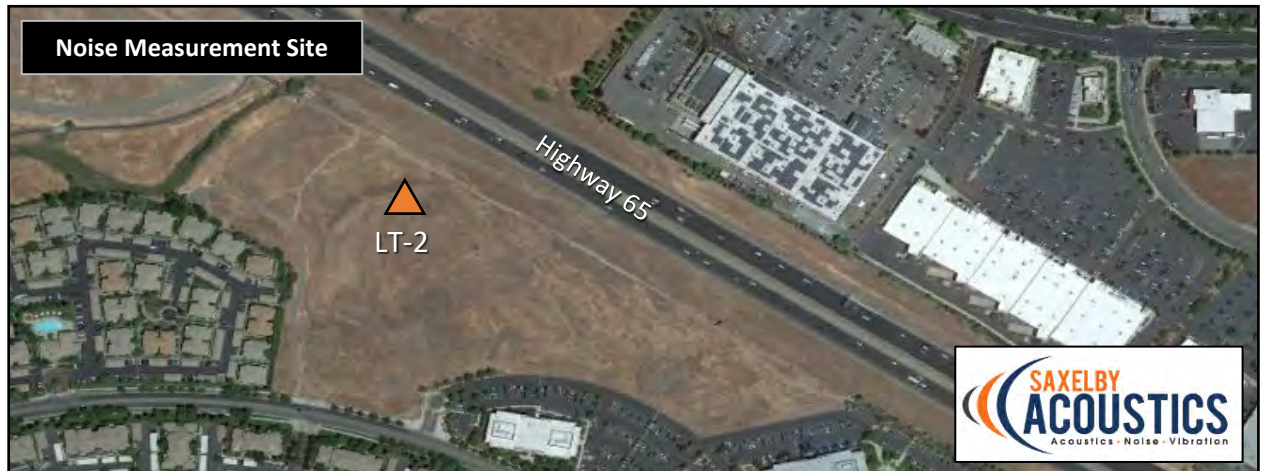
Measured Ambient Noise Levels vs. Time of Day



Date	Time	Measured Level, dBA			
		L _{eq}	L _{max}	L ₅₀	L ₉₀
Tuesday, November 16, 2021	0:00	58	75	56	50
Tuesday, November 16, 2021	1:00	57	70	55	46
Tuesday, November 16, 2021	2:00	57	67	55	46
Tuesday, November 16, 2021	3:00	58	71	56	48
Tuesday, November 16, 2021	4:00	60	75	58	52
Tuesday, November 16, 2021	5:00	63	72	62	58
Tuesday, November 16, 2021	6:00	64	73	64	62
Tuesday, November 16, 2021	7:00	63	71	63	61
Tuesday, November 16, 2021	8:00	62	75	61	59
Tuesday, November 16, 2021	9:00	63	77	62	60
Tuesday, November 16, 2021	10:00	64	87	63	61
Tuesday, November 16, 2021	11:00	63	76	63	61
Tuesday, November 16, 2021	12:00	64	80	63	61
Tuesday, November 16, 2021	13:00	62	77	61	59
Tuesday, November 16, 2021	14:00	61	76	60	58
Tuesday, November 16, 2021	15:00	61	83	60	58
Tuesday, November 16, 2021	16:00	61	78	60	58
Tuesday, November 16, 2021	17:00	60	74	60	58
Tuesday, November 16, 2021	18:00	61	74	60	58
Tuesday, November 16, 2021	19:00	62	75	62	59
Tuesday, November 16, 2021	20:00	62	73	61	58
Tuesday, November 16, 2021	21:00	61	77	60	57
Tuesday, November 16, 2021	22:00	60	73	59	56
Tuesday, November 16, 2021	23:00	59	76	58	53

Statistics

	Leq	Lmax	L50	L90
Day Average	62	77	61	59
Night Average	60	72	58	52
Day Low	60	71	60	57
Day High	64	87	63	61
Night Low	57	67	55	46
Night High	64	76	64	62
Ldn	67	Day %		75
CNEL	67	Night %		25



Appendix C: Interior Noise Calculation Inputs and Results

Appendix C1: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments
Room Description: B2 Bedroom 1 (Corner)

Inputs

Parallel Exterior level, dBA: 63.2 Ldn
Correction Factor, dBA: 3
Noise Source: Freeway Traffic - I80 Roseville @ 65
Room Perimeter, ft: 46
Room Area, ft: 134
Room Height, ft: 9
Transmitting Panel Length, ft: 23
Window & Door Area, ft: 45

Ceiling Finish: Gyp Board
Ceiling, sf: 134
Wall Finish 1: Gyp Board
Wall Finish 1, sf: 372
Wall Finish 2: Glass
Wall Finish 2, sf: 45.2
Floor: Marble or glazed tile
Floor, sf: 134
Misc. Finish: Soft Furnishings
Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC

Element 1, sf: 163

Transmitting Element 2: Window - WPI 9011 Pic. Win. STC 27

Element 2, sf: 45

Transmitting Element 3:

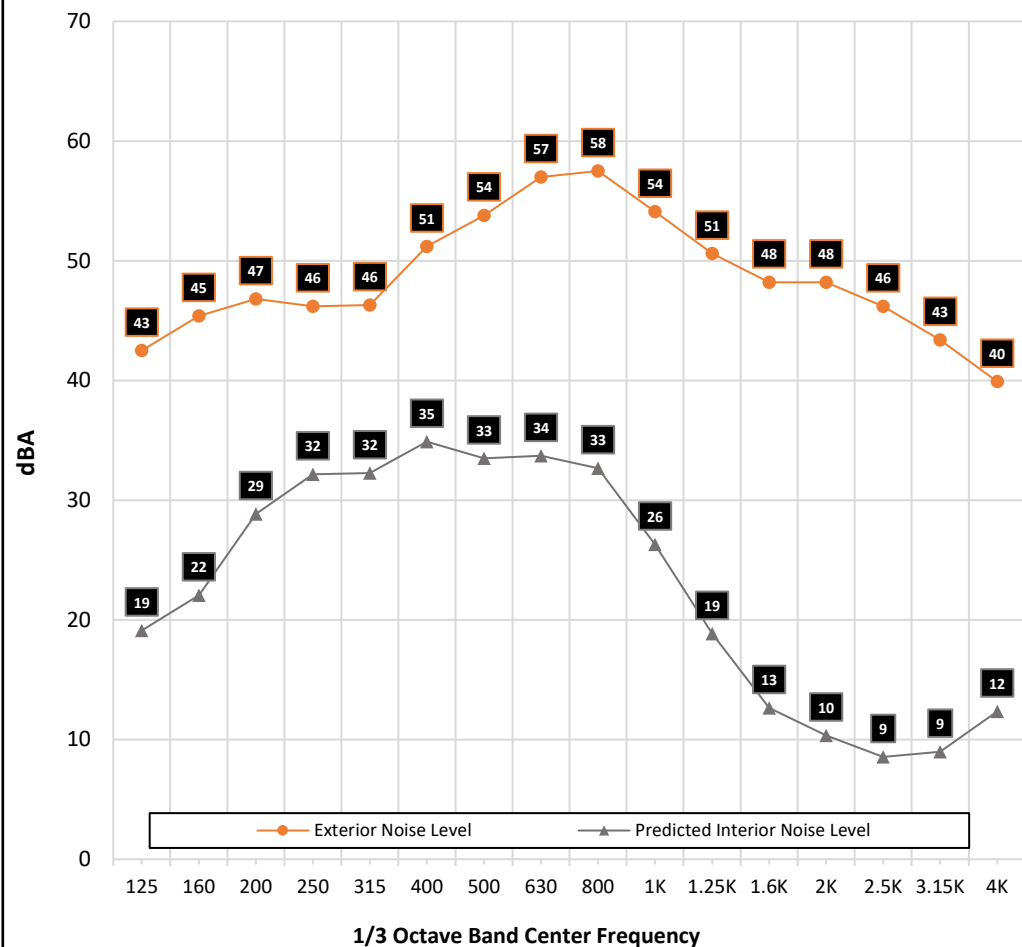
Element 3, sf:

Transmitting Element 4:

Element 4, sf:

Predicted Interior Noise Level, dBA: 42

Noise Reduction, dBA: -22



Appendix C2: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments

Room Description: B1 Living

Inputs

Parallel Exterior level, dBA: 63.2 Ldn
 Correction Factor, dBA: 3
 Noise Source: Freeway Traffic - I80 Roseville @ 65
 Room Perimeter, ft: 73
 Room Area, ft: 309
 Room Height, ft: 9
 Transmitting Panel Length, ft: 30
 Window & Door Area, ft: 110

Ceiling Finish: Gyp Board
 Ceiling, sf: 309
 Wall Finish 1: Gyp Board
 Wall Finish 1, sf: 569
 Wall Finish 2: Glass
 Wall Finish 2, sf: 85.7
 Floor: Marble or glazed tile
 Floor, sf: 309
 Misc. Finish: Soft Furnishings
 Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC

Element 1, sf: 160

Transmitting Element 2: Window - WPI 9011 Pic. Win. STC 27

Element 2, sf: 86

Transmitting Element 3: Window - WPI 9011 Pic. Win. STC 27

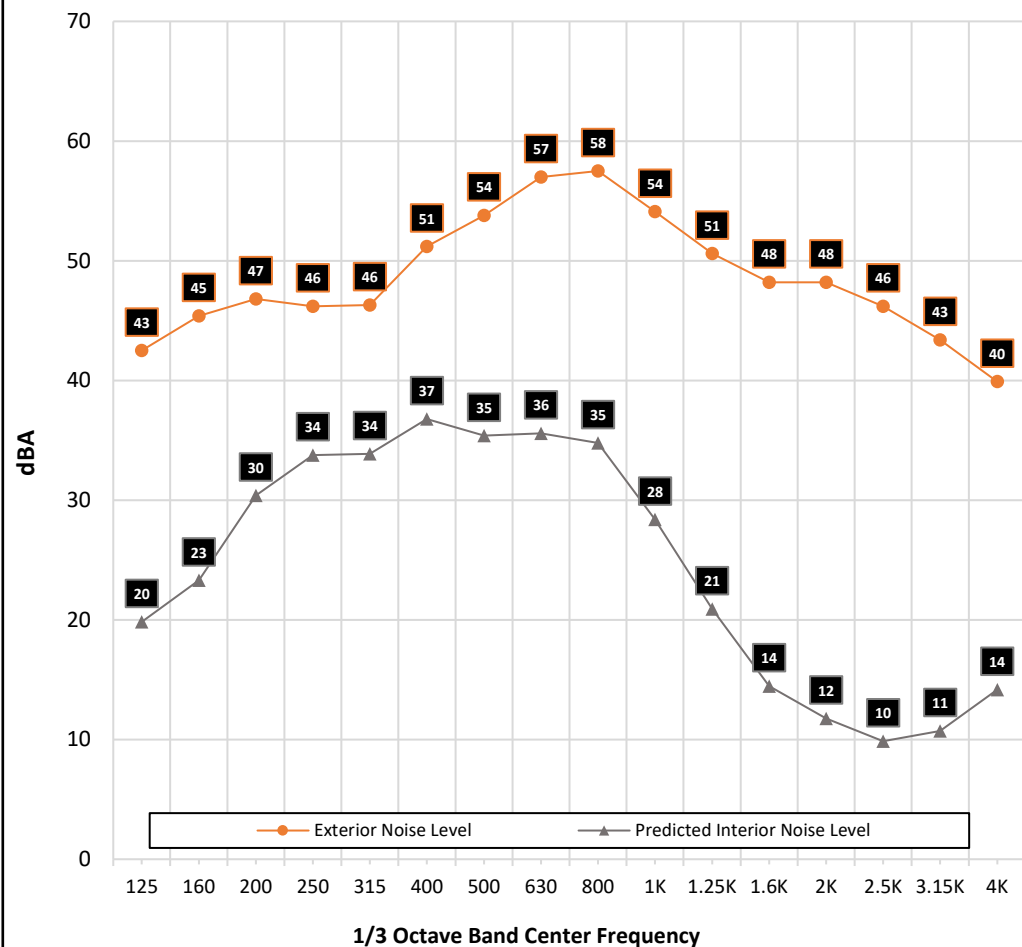
Element 3, sf: 24

Transmitting Element 4:

Element 4, sf:

Predicted Interior Noise Level, dBA: 43

Noise Reduction, dBA: -20



Appendix C3: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments
Room Description: B2 Bedroom 1 (Corner)

Inputs

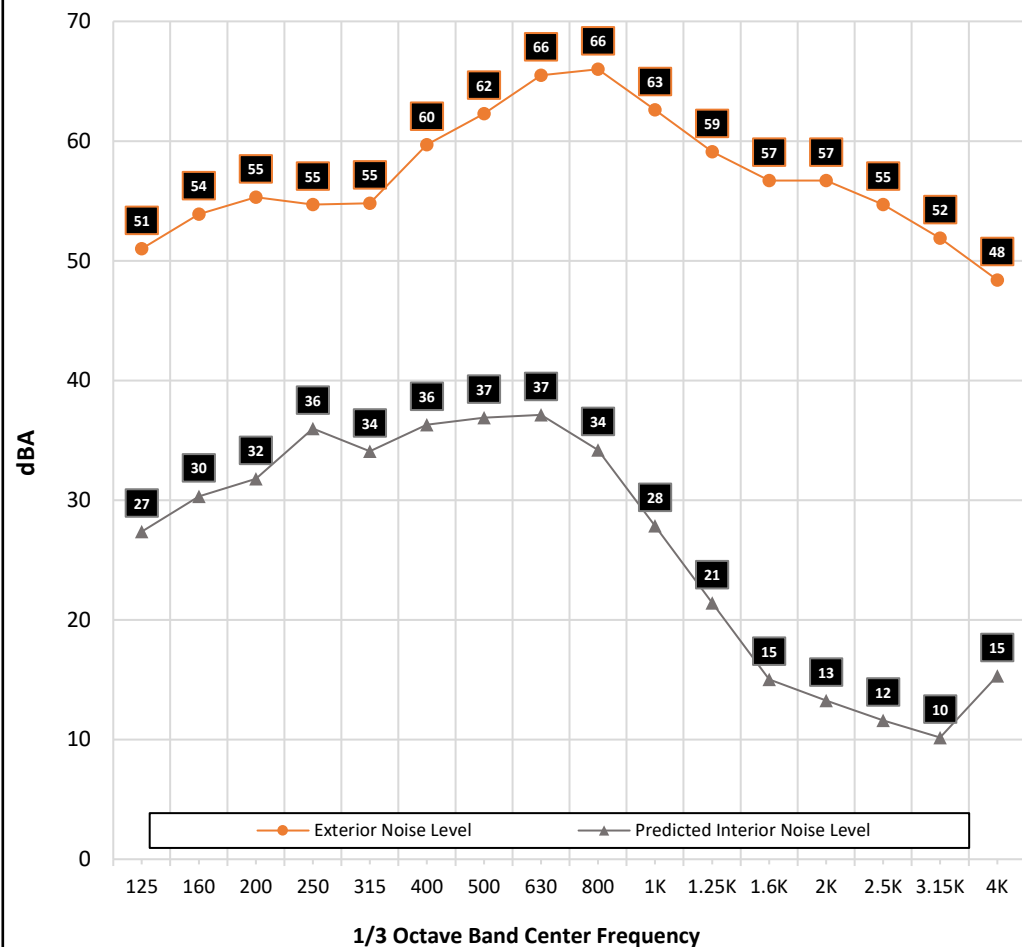
Parallel Exterior level, dBA: 71.7 Ldn
Correction Factor, dBA: 3
Noise Source: Freeway Traffic - I80 Roseville @ 65
Room Perimeter, ft: 46
Room Area, ft: 134
Room Height, ft: 9
Transmitting Panel Length, ft: 23
Window & Door Area, ft: 45

Ceiling Finish: Gyp Board
Ceiling, sf: 134
Wall Finish 1: Gyp Board
Wall Finish 1, sf: 372
Wall Finish 2: Glass
Wall Finish 2, sf: 45.2
Floor: Carpet, latex backing on foam pad
Floor, sf: 134
Misc. Finish: Soft Furnishings
Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
Element 1, sf: 163
Transmitting Element 2: Window - Millgard 910 1/8*1/8 STC 30
Element 2, sf: 45
Transmitting Element 3:
Element 3, sf:
Transmitting Element 4:
Element 4, sf:

Predicted Interior Noise Level, dBA: 44

Noise Reduction, dBA: -27



Appendix C4: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments
Room Description: B2 Bedroom 1 (Corner)

Inputs

Parallel Exterior level, dBA: 71.7 Ldn
Correction Factor, dBA: 3
Noise Source: Freeway Traffic - I80 Roseville @ 65
Room Perimeter, ft: 46
Room Area, ft: 134
Room Height, ft: 9
Transmitting Panel Length, ft: 23
Window & Door Area, ft: 45

Ceiling Finish: Gyp Board
Ceiling, sf: 134
Wall Finish 1: Gyp Board
Wall Finish 1, sf: 372
Wall Finish 2: Glass
Wall Finish 2, sf: 45.2
Floor: Marble or glazed tile
Floor, sf: 134
Misc. Finish: Soft Furnishings
Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC

Element 1, sf: 163

Transmitting Element 2: Window - WPI Model 9100HS STC 32

Element 2, sf: 45

Transmitting Element 3:

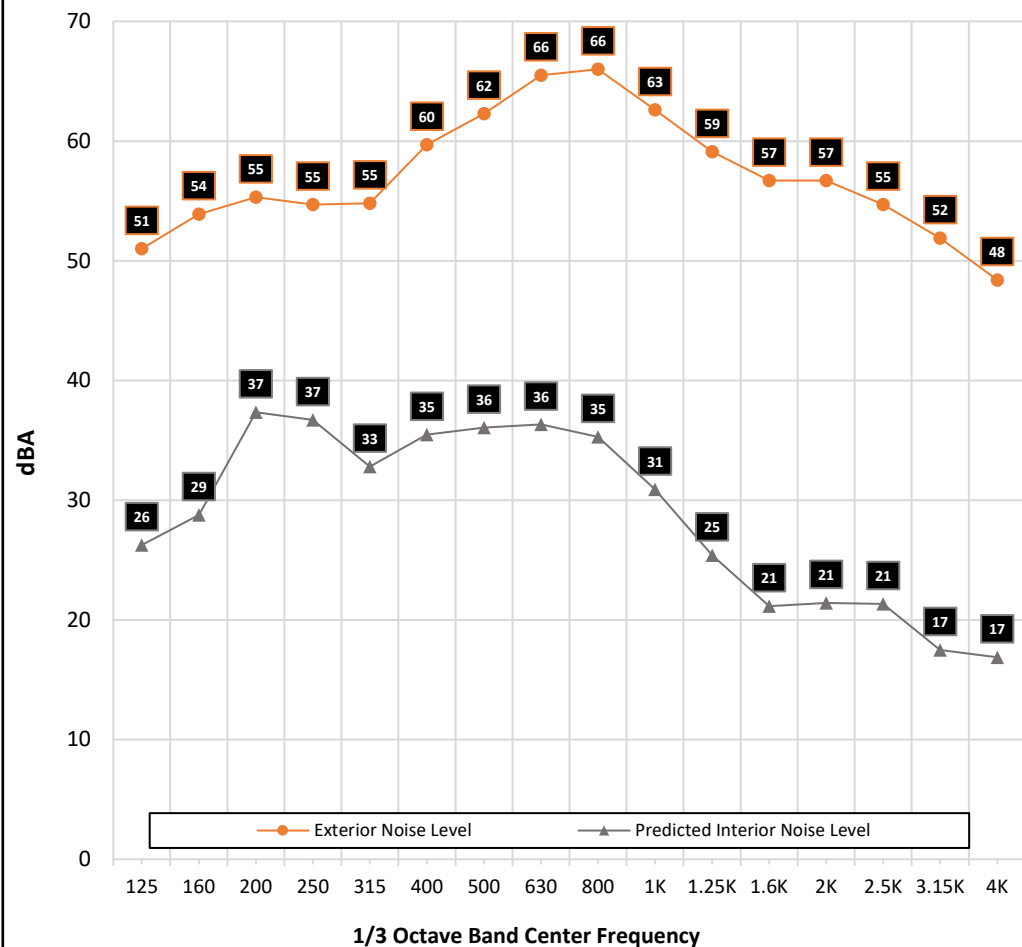
Element 3, sf:

Transmitting Element 4:

Element 4, sf:

Predicted Interior Noise Level, dBA: 45

Noise Reduction, dBA: -27



Appendix C5: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments

Room Description: B1 Living

Inputs

Parallel Exterior level, dBA: 71.7 Ldn
 Correction Factor, dBA: 3
 Noise Source: Freeway Traffic - I80 Roseville @ 65
 Room Perimeter, ft: 73
 Room Area, ft: 309
 Room Height, ft: 9
 Transmitting Panel Length, ft: 30
 Window & Door Area, ft: 110

Ceiling Finish: Gyp Board
 Ceiling, sf: 309
 Wall Finish 1: Gyp Board
 Wall Finish 1, sf: 569
 Wall Finish 2: Glass
 Wall Finish 2, sf: 85.7
 Floor: Carpet, latex backing on foam pad
 Floor, sf: 309
 Misc. Finish: Soft Furnishings
 Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC

Element 1, sf: 160

Transmitting Element 2: Window - WPI Model 9100HS STC 32

Element 2, sf: 86

Transmitting Element 3: Window - WPI Model 9100HS STC 32

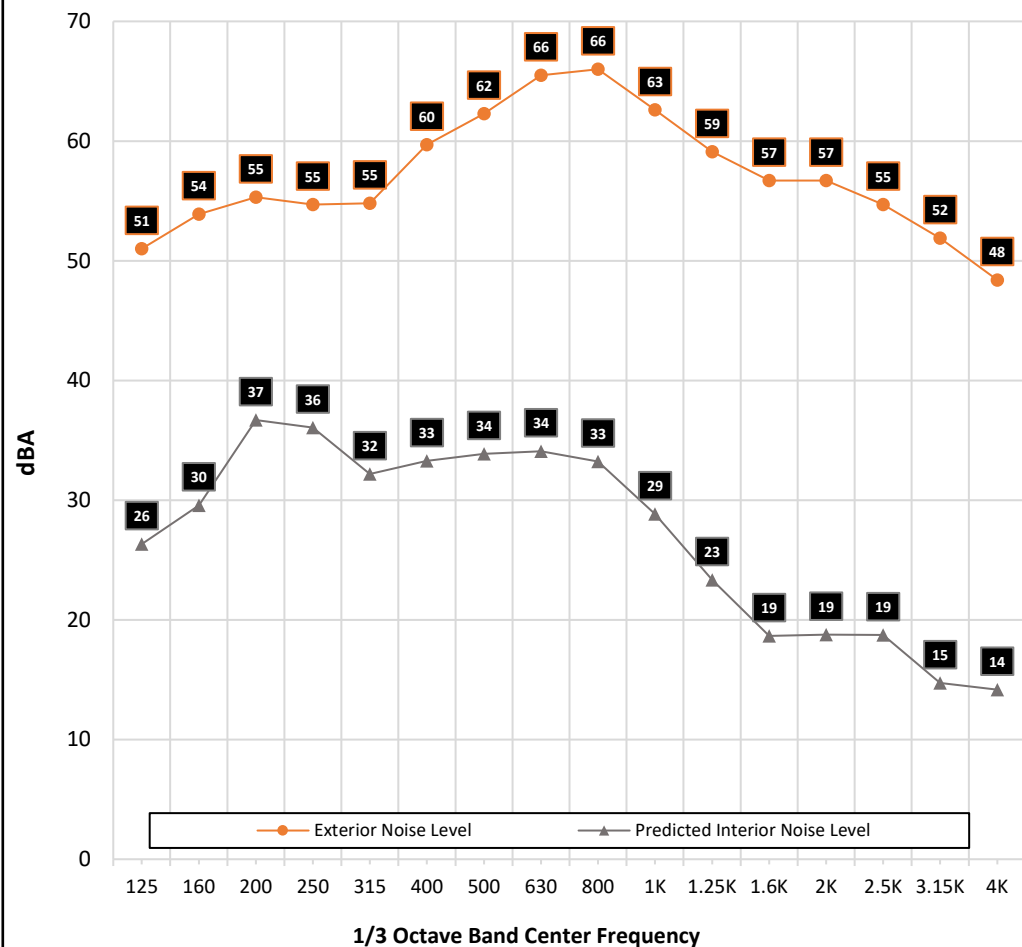
Element 3, sf: 24

Transmitting Element 4:

Element 4, sf:

Predicted Interior Noise Level, dBA: 43

Noise Reduction, dBA: -28



Appendix C6: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments

Room Description: B1 Living

Inputs

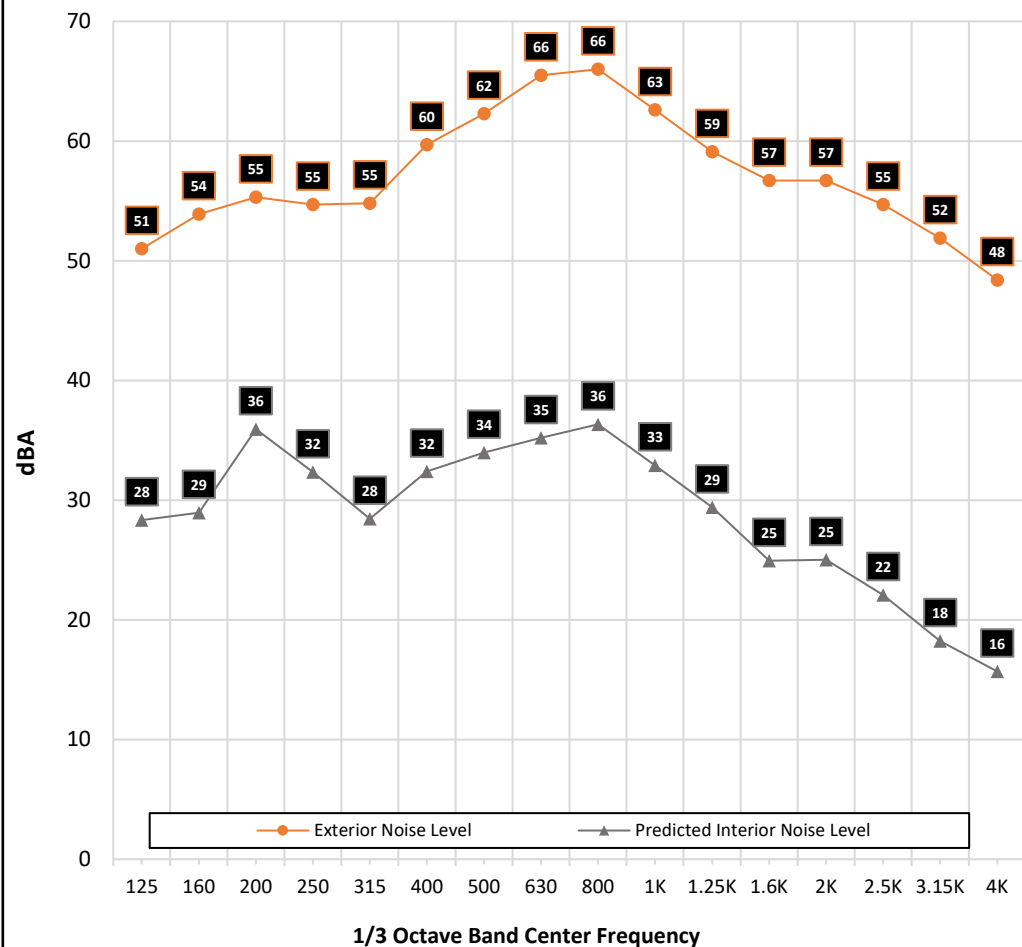
Parallel Exterior level, dBA: 71.7 Ldn
 Correction Factor, dBA: 3
 Noise Source: Freeway Traffic - I80 Roseville @ 65
 Room Perimeter, ft: 73
 Room Area, ft: 309
 Room Height, ft: 9
 Transmitting Panel Length, ft: 30
 Window & Door Area, ft: 110

Ceiling Finish: Gyp Board
 Ceiling, sf: 309
 Wall Finish 1: Gyp Board
 Wall Finish 1, sf: 569
 Wall Finish 2: Glass
 Wall Finish 2, sf: 85.7
 Floor: Marble or glazed tile
 Floor, sf: 309
 Misc. Finish: Soft Furnishings
 Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
 Element 1, sf: 160
 Transmitting Element 2: Window - Quiet Home STC 34
 Element 2, sf: 86
 Transmitting Element 3: Window - Quiet Home STC 34
 Element 3, sf: 24
 Transmitting Element 4:
 Element 4, sf:

Predicted Interior Noise Level, dBA: 44

Noise Reduction, dBA: -28



Appendix C7: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments
Room Description: B2 Bedroom 1 (Corner)

Inputs

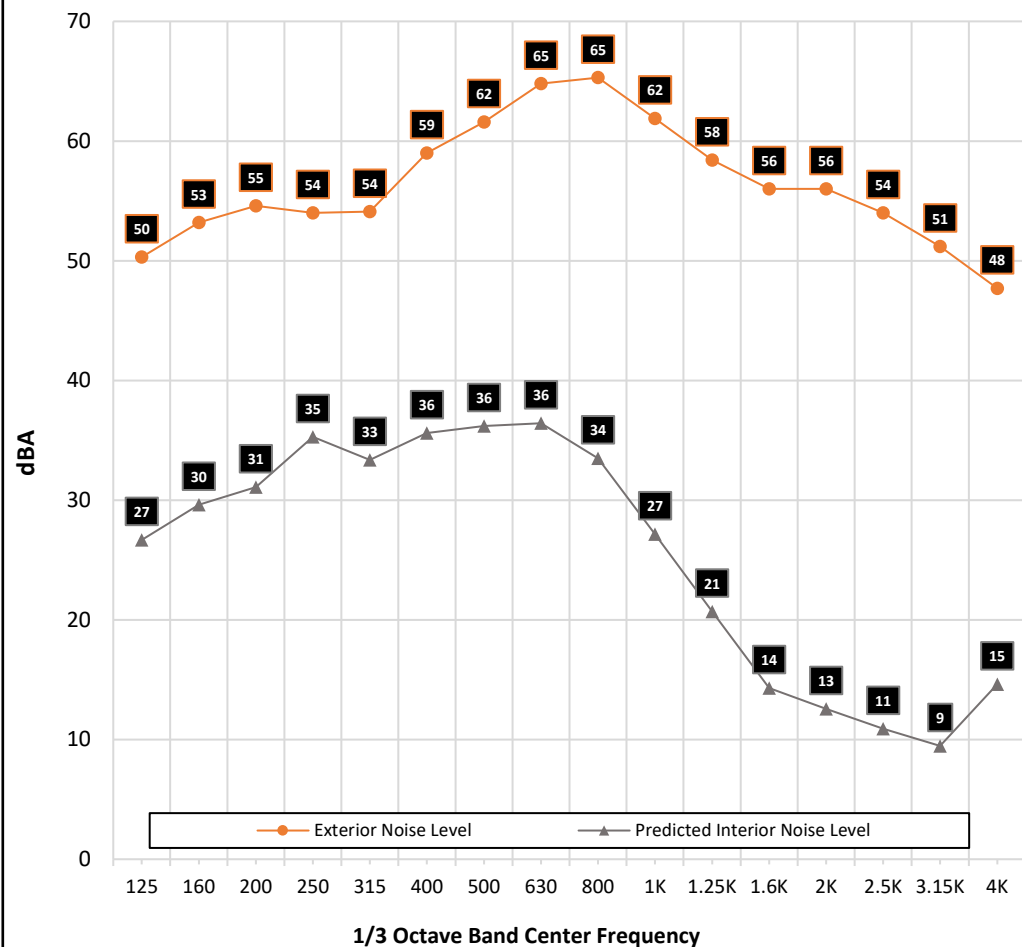
Parallel Exterior level, dBA: 71.0 Ldn
Correction Factor, dBA: 3
Noise Source: Freeway Traffic - I80 Roseville @ 65
Room Perimeter, ft: 46
Room Area, ft: 134
Room Height, ft: 9
Transmitting Panel Length, ft: 23
Window & Door Area, ft: 45

Ceiling Finish: Gyp Board
Ceiling, sf: 134
Wall Finish 1: Gyp Board
Wall Finish 1, sf: 372
Wall Finish 2: Glass
Wall Finish 2, sf: 45.2
Floor: Carpet, latex backing on foam pad
Floor, sf: 134
Misc. Finish: Soft Furnishings
Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
Element 1, sf: 163
Transmitting Element 2: Window - Millgard 910 1/8*1/8 STC 30
Element 2, sf: 45
Transmitting Element 3:
Element 3, sf:
Transmitting Element 4:
Element 4, sf:

Predicted Interior Noise Level, dBA: 44

Noise Reduction, dBA: -27



Appendix C8: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments
Room Description: B2 Bedroom 1 (Corner)

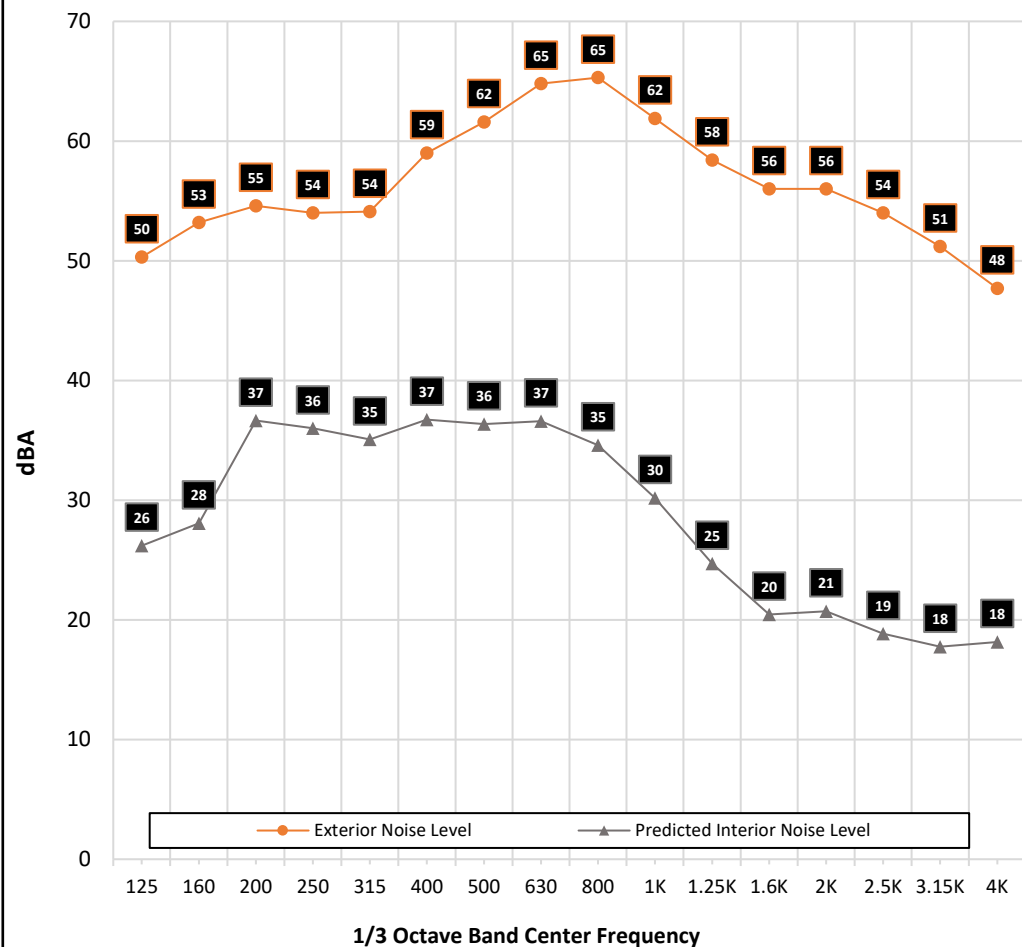
Inputs

Parallel Exterior level, dBA: 71.0 Ldn
Correction Factor, dBA: 3
Noise Source: Freeway Traffic - I80 Roseville @ 65
Room Perimeter, ft: 46
Room Area, ft: 134
Room Height, ft: 9
Transmitting Panel Length, ft: 23
Window & Door Area, ft: 45

Ceiling Finish: Gyp Board
Ceiling, sf: 134
Wall Finish 1: Gyp Board
Wall Finish 1, sf: 372
Wall Finish 2: Glass
Wall Finish 2, sf: 45.2
Floor: Marble or glazed tile
Floor, sf: 134
Misc. Finish: Soft Furnishings
Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
Element 1, sf: 163
Transmitting Element 2: Window - WPI Model 9100HS STC 31
Element 2, sf: 45
Transmitting Element 3:
Element 3, sf:
Transmitting Element 4:
Element 4, sf:

Predicted Interior Noise Level, dBA: 45
Noise Reduction, dBA: -26



Appendix C9: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments

Room Description: B1 Living

Inputs

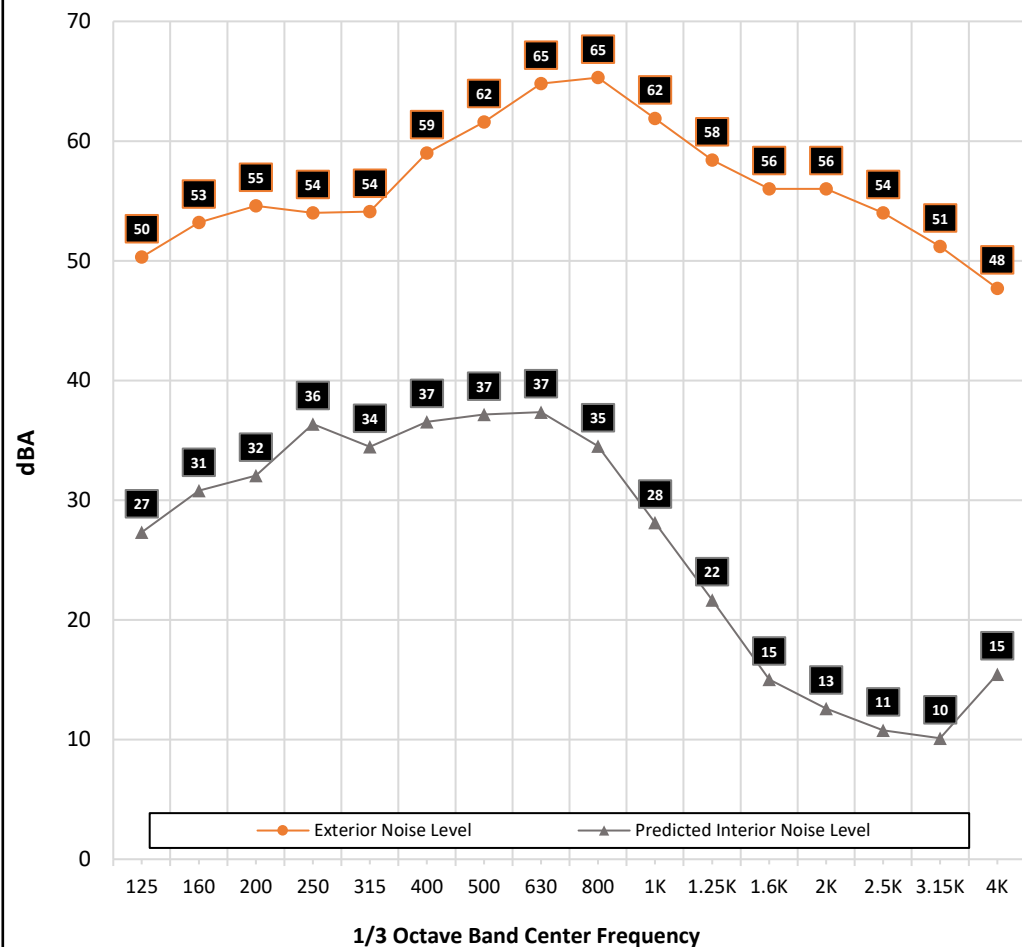
Parallel Exterior level, dBA: 71.0 Ldn
 Correction Factor, dBA: 3
 Noise Source: Freeway Traffic - I80 Roseville @ 65
 Room Perimeter, ft: 73
 Room Area, ft: 309
 Room Height, ft: 9
 Transmitting Panel Length, ft: 30
 Window & Door Area, ft: 110

Ceiling Finish: Gyp Board
 Ceiling, sf: 309
 Wall Finish 1: Gyp Board
 Wall Finish 1, sf: 569
 Wall Finish 2: Glass
 Wall Finish 2, sf: 85.7
 Floor: Carpet, latex backing on foam pad
 Floor, sf: 309
 Misc. Finish: Soft Furnishings
 Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
 Element 1, sf: 160
 Transmitting Element 2: Window - Millgard 910 1/8*1/8 STC 30
 Element 2, sf: 86
 Transmitting Element 3: Window - Millgard 910 1/8*1/8 STC 30
 Element 3, sf: 24
 Transmitting Element 4:
 Element 4, sf:

Predicted Interior Noise Level, dBA: 45

Noise Reduction, dBA: -26



Appendix C10: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments

Room Description: B1 Living

Inputs

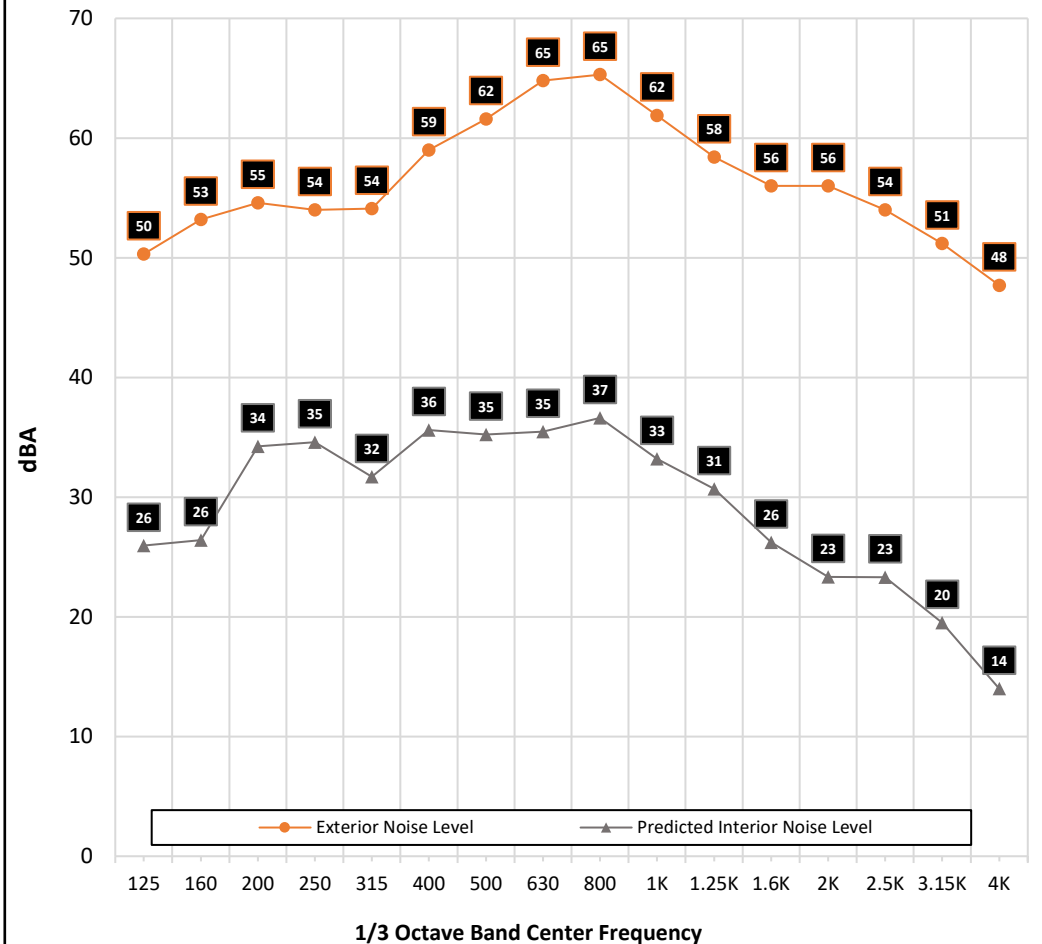
Parallel Exterior level, dBA: 71.0 Ldn
 Correction Factor, dBA: 3
 Noise Source: Freeway Traffic - I80 Roseville @ 65
 Room Perimeter, ft: 73
 Room Area, ft: 309
 Room Height, ft: 9
 Transmitting Panel Length, ft: 30
 Window & Door Area, ft: 110

Ceiling Finish: Gyp Board
 Ceiling, sf: 309
 Wall Finish 1: Gyp Board
 Wall Finish 1, sf: 569
 Wall Finish 2: Glass
 Wall Finish 2, sf: 85.7
 Floor: Marble or glazed tile
 Floor, sf: 309
 Misc. Finish: Soft Furnishings
 Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
 Element 1, sf: 160
 Transmitting Element 2: Window - Millgard 6610PD Patio Door STC 33
 Element 2, sf: 86
 Transmitting Element 3: Window - Millgard 6610PD Patio Door STC 33
 Element 3, sf: 24
 Transmitting Element 4:
 Element 4, sf:

Predicted Interior Noise Level, dBA: 44

Noise Reduction, dBA: -27



Appendix C11: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments
Room Description: B2 Bedroom 1 (Corner)

Inputs

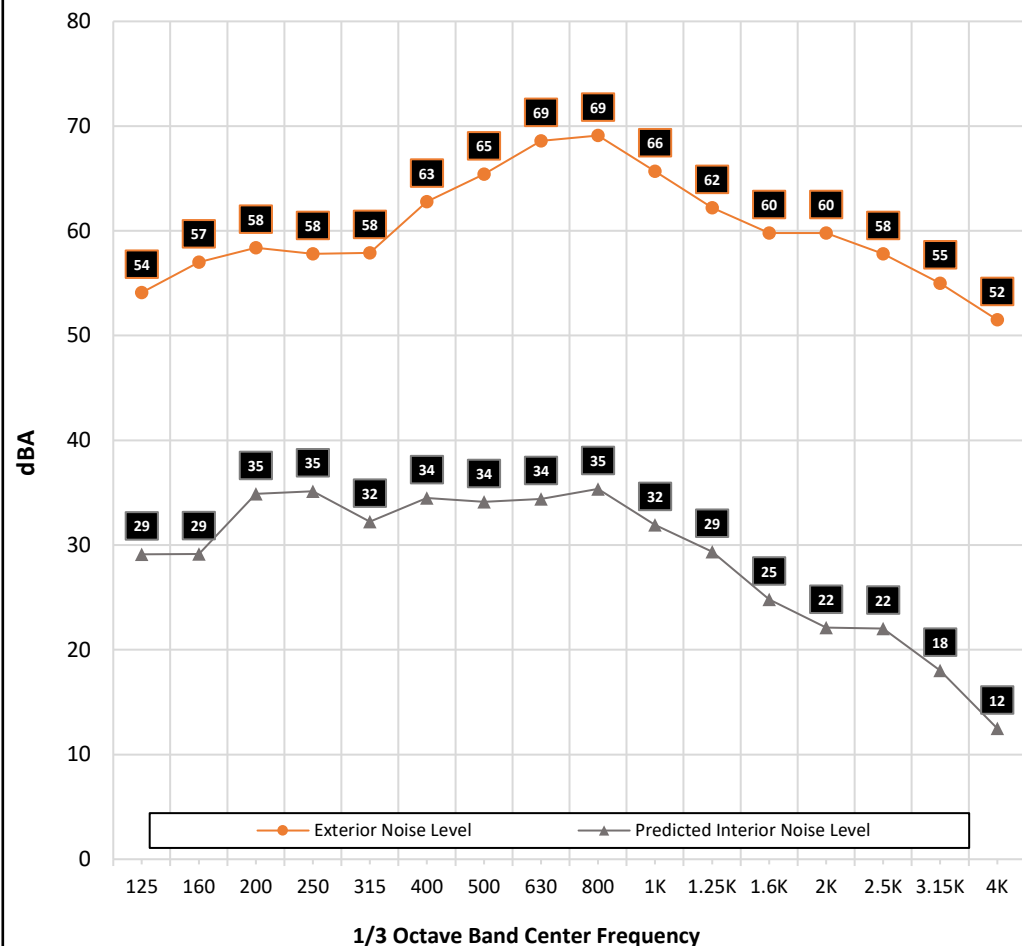
Parallel Exterior level, dBA: 74.8 Ldn
Correction Factor, dBA: 3
Noise Source: Freeway Traffic - I80 Roseville @ 65
Room Perimeter, ft: 46
Room Area, ft: 134
Room Height, ft: 9
Transmitting Panel Length, ft: 23
Window & Door Area, ft: 45

Ceiling Finish: Gyp Board
Ceiling, sf: 134
Wall Finish 1: Gyp Board
Wall Finish 1, sf: 372
Wall Finish 2: Glass
Wall Finish 2, sf: 45.2
Floor: Carpet, latex backing on foam pad
Floor, sf: 134
Misc. Finish: Soft Furnishings
Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
Element 1, sf: 163
Transmitting Element 2: Window - Millgard 6610PD Patio Door STC 33
Element 2, sf: 45
Transmitting Element 3:
Element 3, sf:
Transmitting Element 4:
Element 4, sf:

Predicted Interior Noise Level, dBA: 44

Noise Reduction, dBA: -31



Appendix C12: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments
Room Description: B2 Bedroom 1 (Corner)

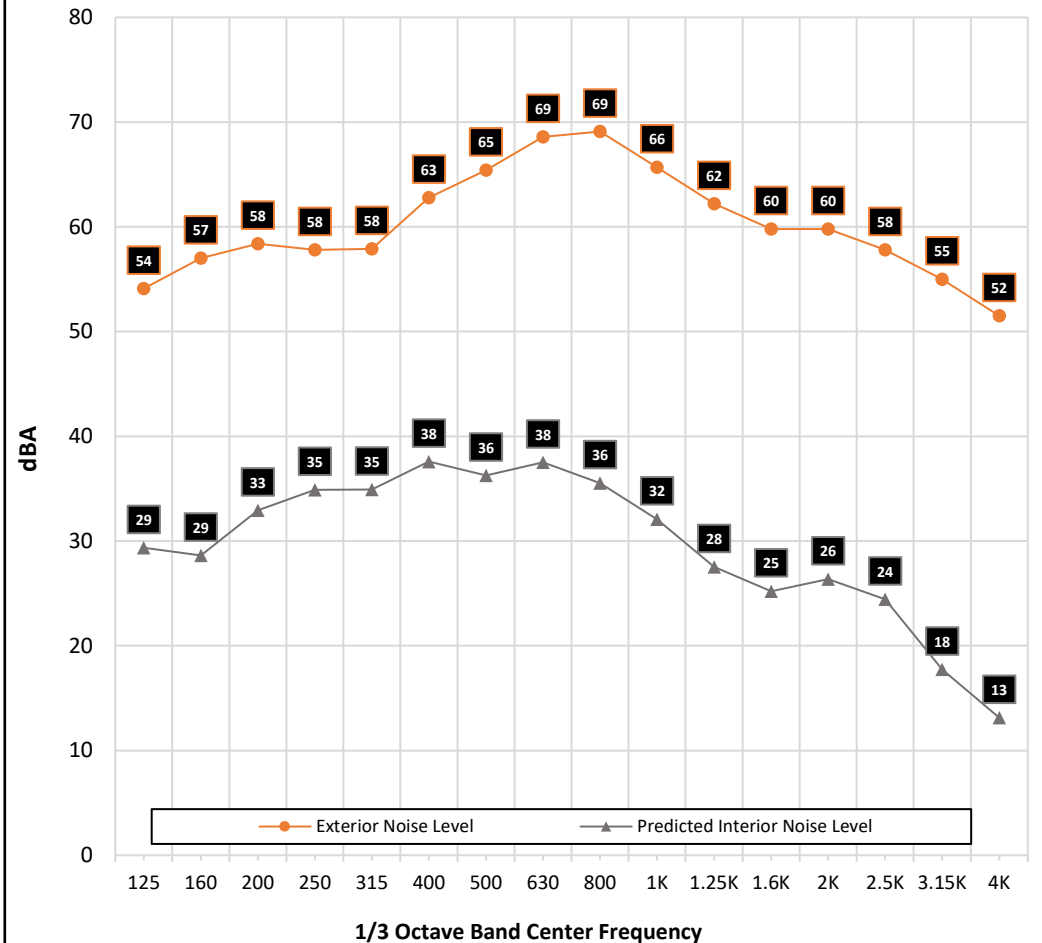
Inputs

Parallel Exterior level, dBA: 74.8 Ldn
Correction Factor, dBA: 3
Noise Source: Freeway Traffic - I80 Roseville @ 65
Room Perimeter, ft: 46
Room Area, ft: 134
Room Height, ft: 9
Transmitting Panel Length, ft: 23
Window & Door Area, ft: 45

Ceiling Finish: Gyp Board
Ceiling, sf: 134
Wall Finish 1: Gyp Board
Wall Finish 1, sf: 372
Wall Finish 2: Glass
Wall Finish 2, sf: 45.2
Floor: Marble or glazed tile
Floor, sf: 134
Misc. Finish: Soft Furnishings
Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
Element 1, sf: 163
Transmitting Element 2: Window - Millgard 6110 STC 35
Element 2, sf: 45
Transmitting Element 3:
Element 3, sf:
Transmitting Element 4:
Element 4, sf:

Predicted Interior Noise Level, dBA: 45
Noise Reduction, dBA: -30



Appendix C13: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments
Room Description: B1 Living

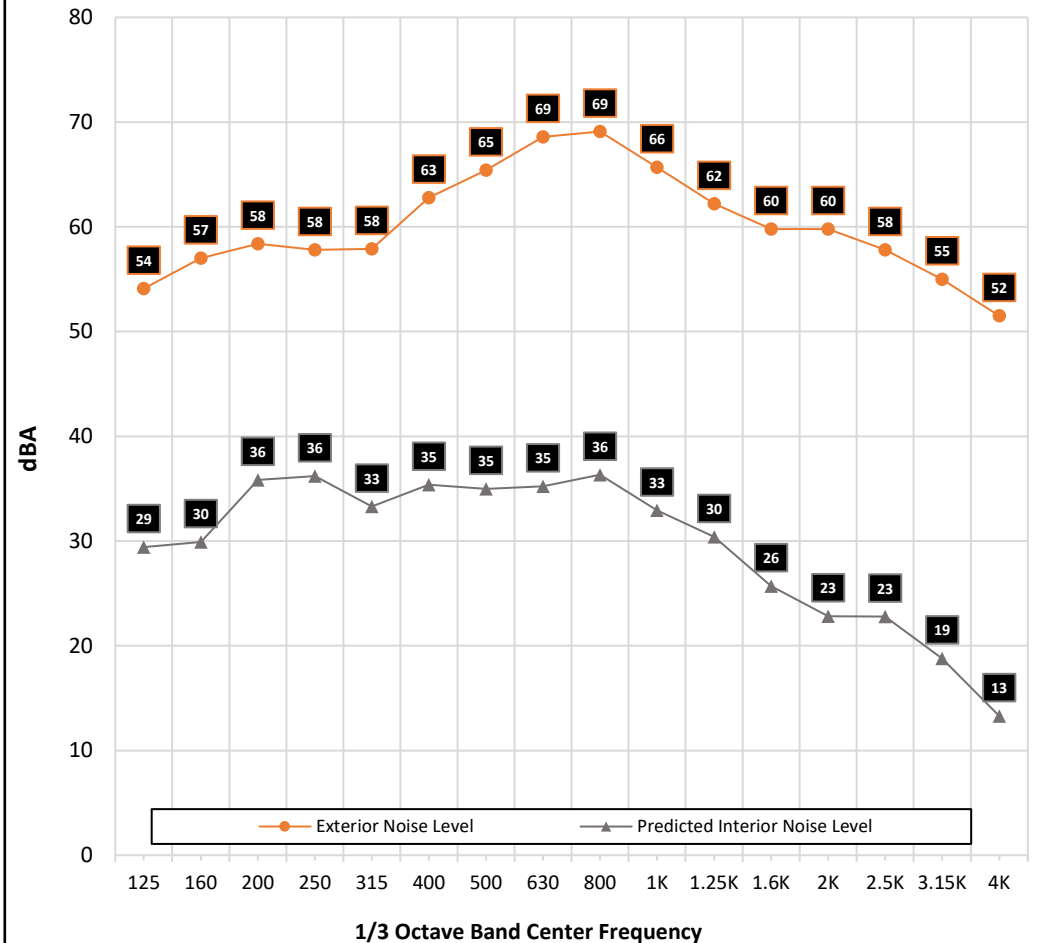
Inputs

Parallel Exterior level, dBA: 74.8 Ldn
Correction Factor, dBA: 3
Noise Source: Freeway Traffic - I80 Roseville @ 65
Room Perimeter, ft: 73
Room Area, ft: 309
Room Height, ft: 9
Transmitting Panel Length, ft: 30
Window & Door Area, ft: 110

Ceiling Finish: Gyp Board
Ceiling, sf: 309
Wall Finish 1: Gyp Board
Wall Finish 1, sf: 569
Wall Finish 2: Glass
Wall Finish 2, sf: 85.7
Floor: Carpet, latex backing on foam pad
Floor, sf: 309
Misc. Finish: Soft Furnishings
Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
Element 1, sf: 160
Transmitting Element 2: Window - Millgard 6610PD Patio Door STC 33
Element 2, sf: 86
Transmitting Element 3: Window - Millgard 6610PD Patio Door STC 33
Element 3, sf: 24
Transmitting Element 4:
Element 4, sf:

Predicted Interior Noise Level, dBA: 45
Noise Reduction, dBA: -30



Appendix C14: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments

Room Description: B1 Living

Inputs

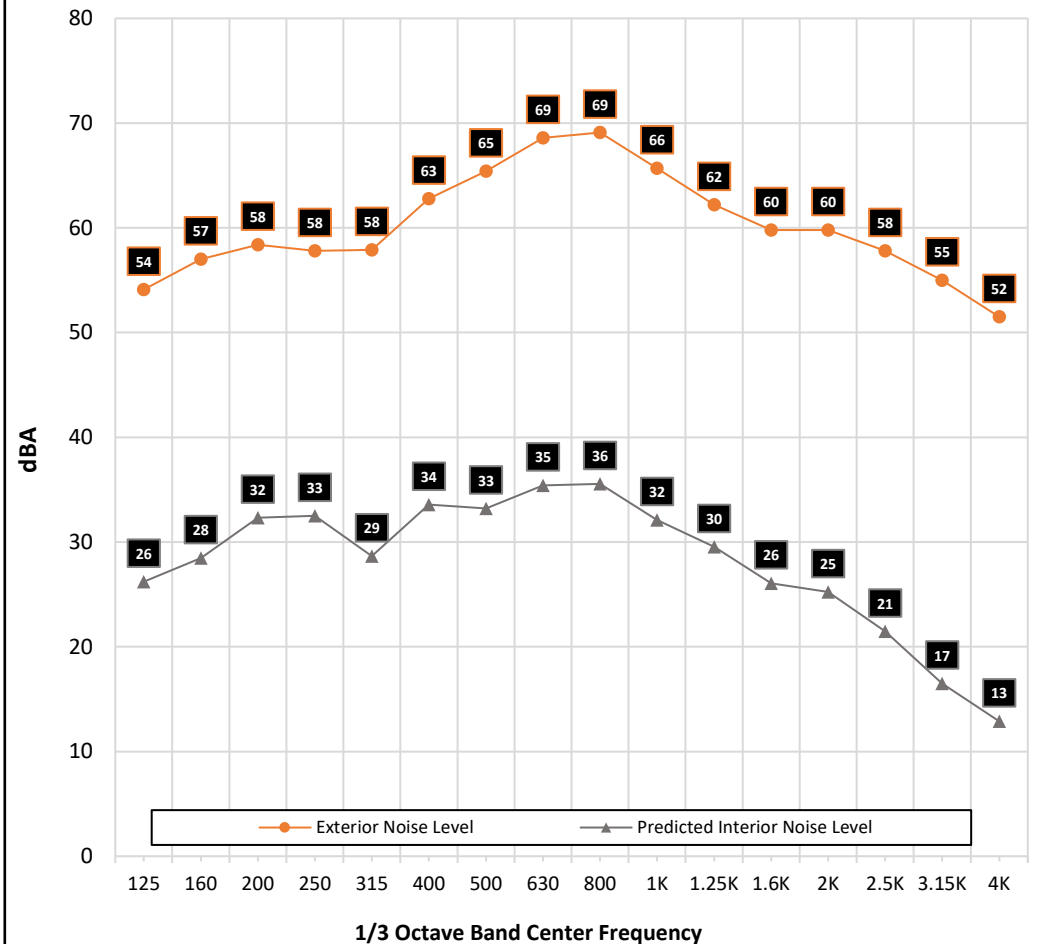
Parallel Exterior level, dBA: 74.8 Ldn
Correction Factor, dBA: 3
Noise Source: Freeway Traffic - I80 Roseville @ 65
Room Perimeter, ft: 73
Room Area, ft: 309
Room Height, ft: 9
Transmitting Panel Length, ft: 30
Window & Door Area, ft: 110

Ceiling Finish: Gyp Board
Ceiling, sf: 309
Wall Finish 1: Gyp Board
Wall Finish 1, sf: 569
Wall Finish 2: Glass
Wall Finish 2, sf: 85.7
Floor: Marble or glazed tile
Floor, sf: 309
Misc. Finish: Soft Furnishings
Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
Element 1, sf: 160
Transmitting Element 2: Window - Quiet Home STC 38
Element 2, sf: 86
Transmitting Element 3: Window - Quiet Home STC 38
Element 3, sf: 24
Transmitting Element 4:
Element 4, sf:

Predicted Interior Noise Level, dBA: 43

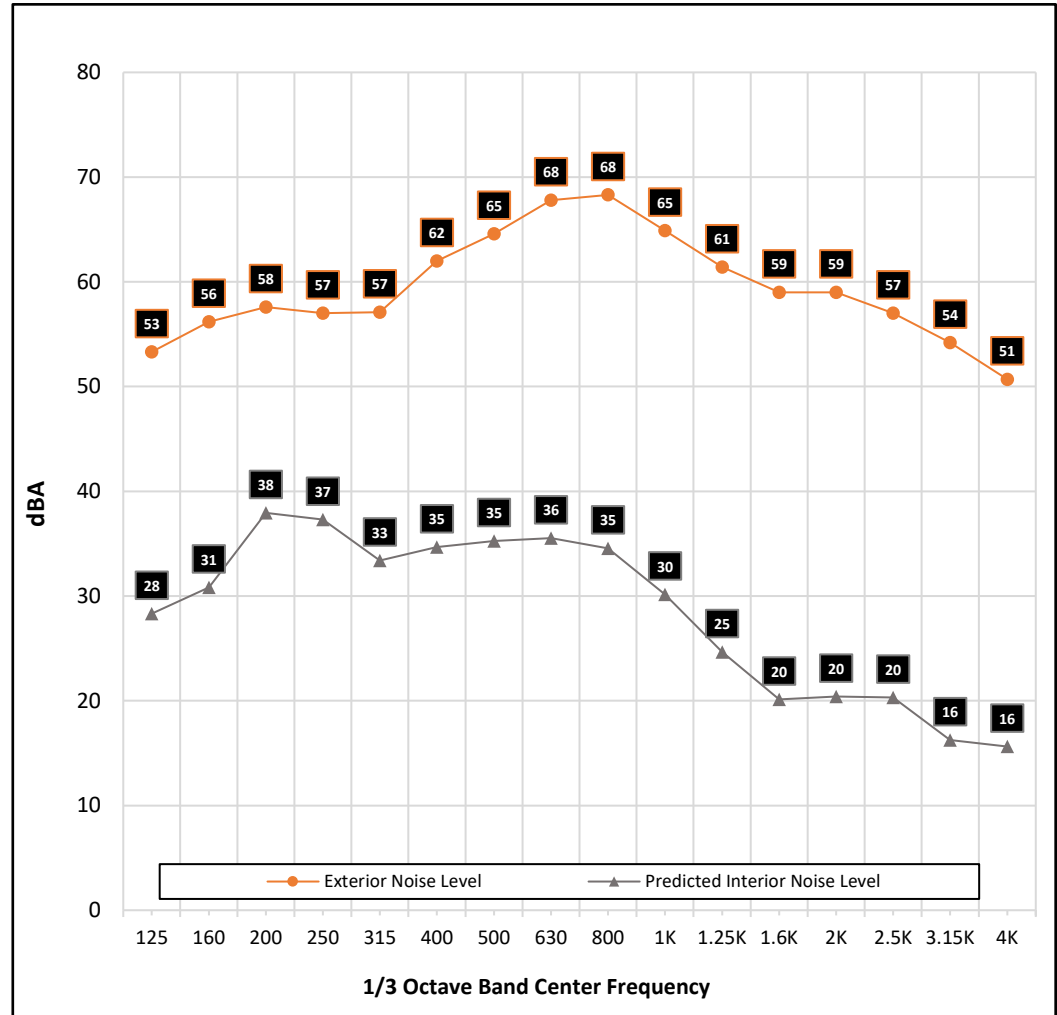
Noise Reduction, dBA: -32



Appendix C15: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments
Room Description: B2 Bedroom 1 (Corner)

Inputs	
Parallel Exterior level, dBA:	74.0 Ldn
Correction Factor, dBA:	3
Noise Source:	Freeway Traffic - I80 Roseville @ 65
Room Perimeter, ft:	46
Room Area, ft:	134
Room Height, ft:	9
Transmitting Panel Length, ft:	23
Window & Door Area, ft:	45
Ceiling Finish:	Gyp Board
Ceiling, sf:	134
Wall Finish 1:	Gyp Board
Wall Finish 1, sf:	372
Wall Finish 2:	Glass
Wall Finish 2, sf:	45.2
Floor:	Carpet, latex backing on foam pad
Floor, sf:	134
Misc. Finish:	Soft Furnishings
Misc. Finish, sf:	25
Transmitting Element 1:	Wall - 0.5" OSB, One Coat Stucco, RC
Element 1, sf:	163
Transmitting Element 2:	Window - WPI Model 9100HS STC 32
Element 2, sf:	45
Transmitting Element 3:	
Element 3, sf:	
Transmitting Element 4:	
Element 4, sf:	
Predicted Interior Noise Level, dBA: 45	
Noise Reduction, dBA: -29	



Appendix C16: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments
Room Description: B2 Bedroom 1 (Corner)

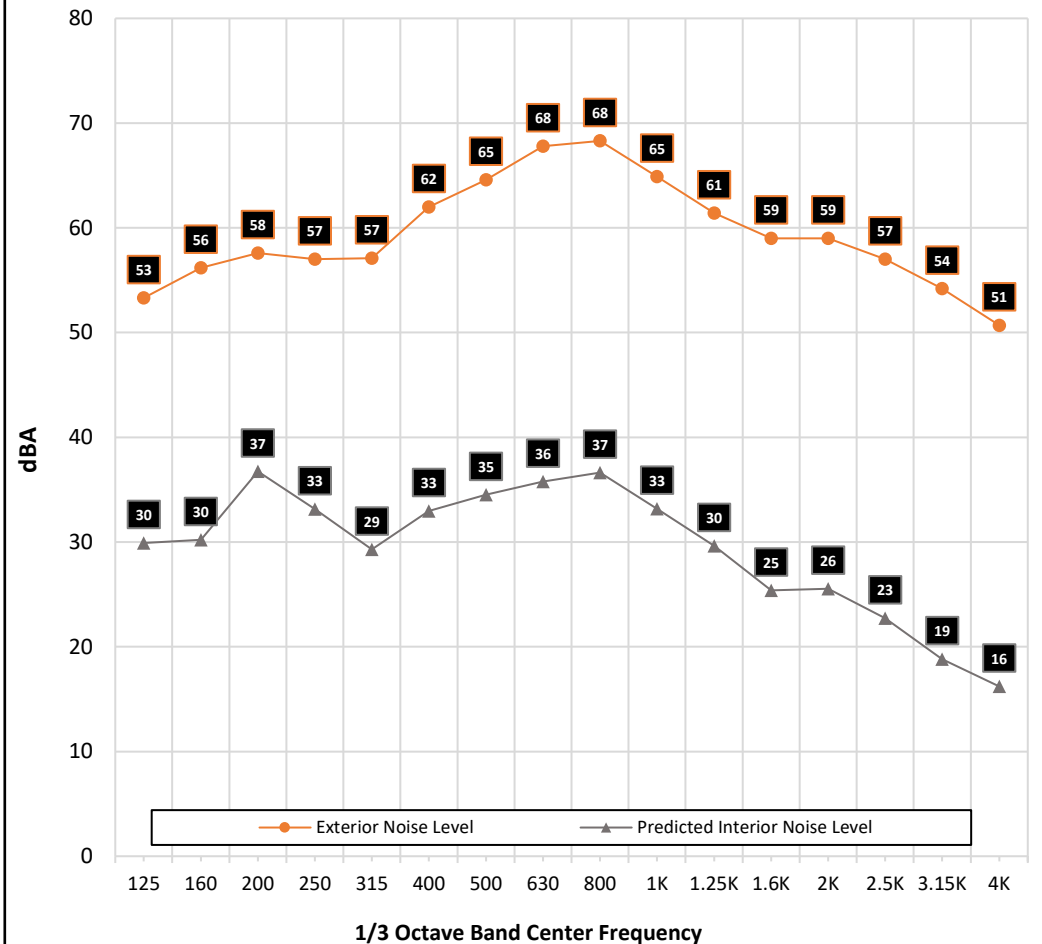
Inputs

Parallel Exterior level, dBA: 74.0 Ldn
Correction Factor, dBA: 3
Noise Source: Freeway Traffic - I80 Roseville @ 65
Room Perimeter, ft: 46
Room Area, ft: 134
Room Height, ft: 9
Transmitting Panel Length, ft: 23
Window & Door Area, ft: 45

Ceiling Finish: Gyp Board
Ceiling, sf: 134
Wall Finish 1: Gyp Board
Wall Finish 1, sf: 372
Wall Finish 2: Glass
Wall Finish 2, sf: 45.2
Floor: Marble or glazed tile
Floor, sf: 134
Misc. Finish: Soft Furnishings
Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
Element 1, sf: 163
Transmitting Element 2: Window - Quiet Home STC 34
Element 2, sf: 45
Transmitting Element 3:
Element 3, sf:
Transmitting Element 4:
Element 4, sf:

Predicted Interior Noise Level, dBA: 44
Noise Reduction, dBA: -30



Appendix C17: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments

Room Description: B1 Living

Inputs

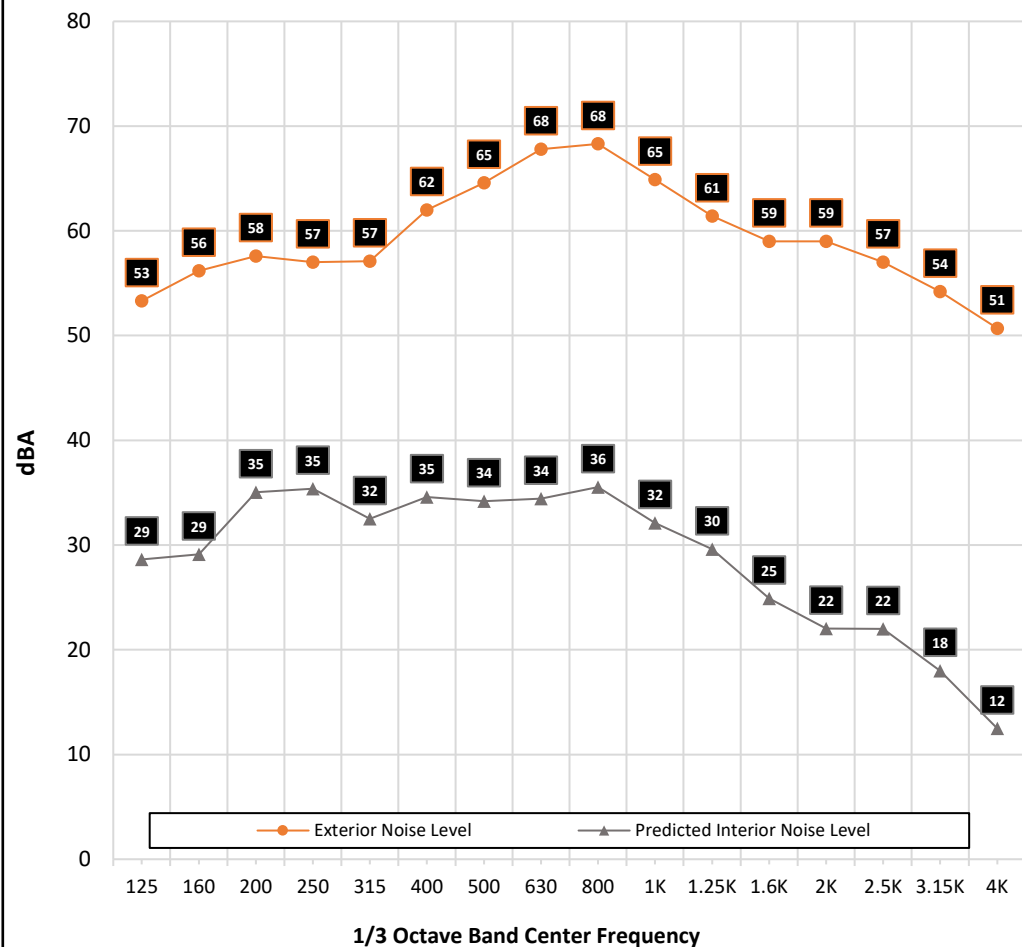
Parallel Exterior level, dBA: 74.0 Ldn
 Correction Factor, dBA: 3
 Noise Source: Freeway Traffic - I80 Roseville @ 65
 Room Perimeter, ft: 73
 Room Area, ft: 309
 Room Height, ft: 9
 Transmitting Panel Length, ft: 30
 Window & Door Area, ft: 110

Ceiling Finish: Gyp Board
 Ceiling, sf: 309
 Wall Finish 1: Gyp Board
 Wall Finish 1, sf: 569
 Wall Finish 2: Glass
 Wall Finish 2, sf: 85.7
 Floor: Carpet, latex backing on foam pad
 Floor, sf: 309
 Misc. Finish: Soft Furnishings
 Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
 Element 1, sf: 160
 Transmitting Element 2: Window - Millgard 6610PD Patio Door STC 33
 Element 2, sf: 86
 Transmitting Element 3: Window - Millgard 6610PD Patio Door STC 33
 Element 3, sf: 24
 Transmitting Element 4:
 Element 4, sf:

Predicted Interior Noise Level, dBA: 44

Noise Reduction, dBA: -30



Appendix C18: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments
Room Description: B1 Living

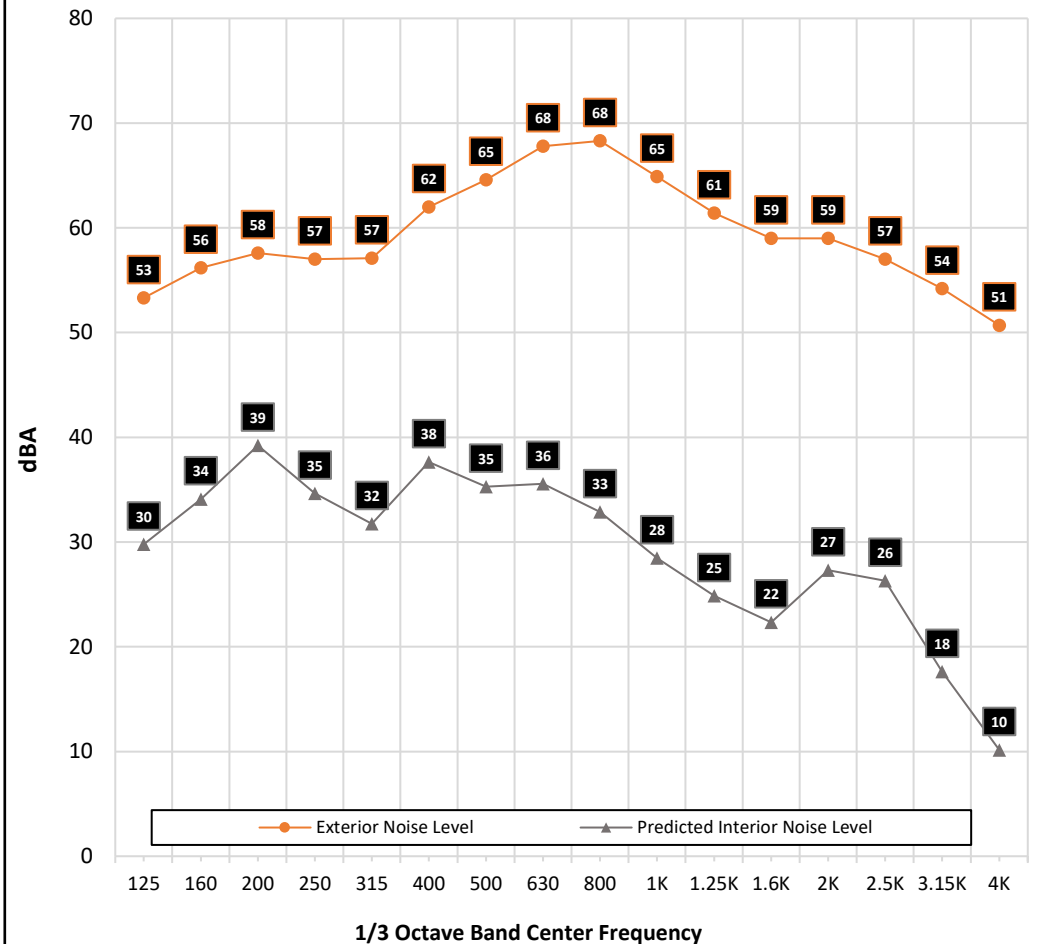
Inputs

Parallel Exterior level, dBA: 74.0 Ldn
Correction Factor, dBA: 3
Noise Source: Freeway Traffic - I80 Roseville @ 65
Room Perimeter, ft: 73
Room Area, ft: 309
Room Height, ft: 9
Transmitting Panel Length, ft: 30
Window & Door Area, ft: 110

Ceiling Finish: Gyp Board
Ceiling, sf: 309
Wall Finish 1: Gyp Board
Wall Finish 1, sf: 569
Wall Finish 2: Glass
Wall Finish 2, sf: 85.7
Floor: Marble or glazed tile
Floor, sf: 309
Misc. Finish: Soft Furnishings
Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
Element 1, sf: 160
Transmitting Element 2: Window - Millgard 6340 Fixed STC 36
Element 2, sf: 86
Transmitting Element 3: Window - Millgard 6340 Fixed STC 36
Element 3, sf: 24
Transmitting Element 4:
Element 4, sf:

Predicted Interior Noise Level, dBA: 45
Noise Reduction, dBA: -29



Appendix C19: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments
Room Description: B2 Bedroom 1 (Corner)

Inputs

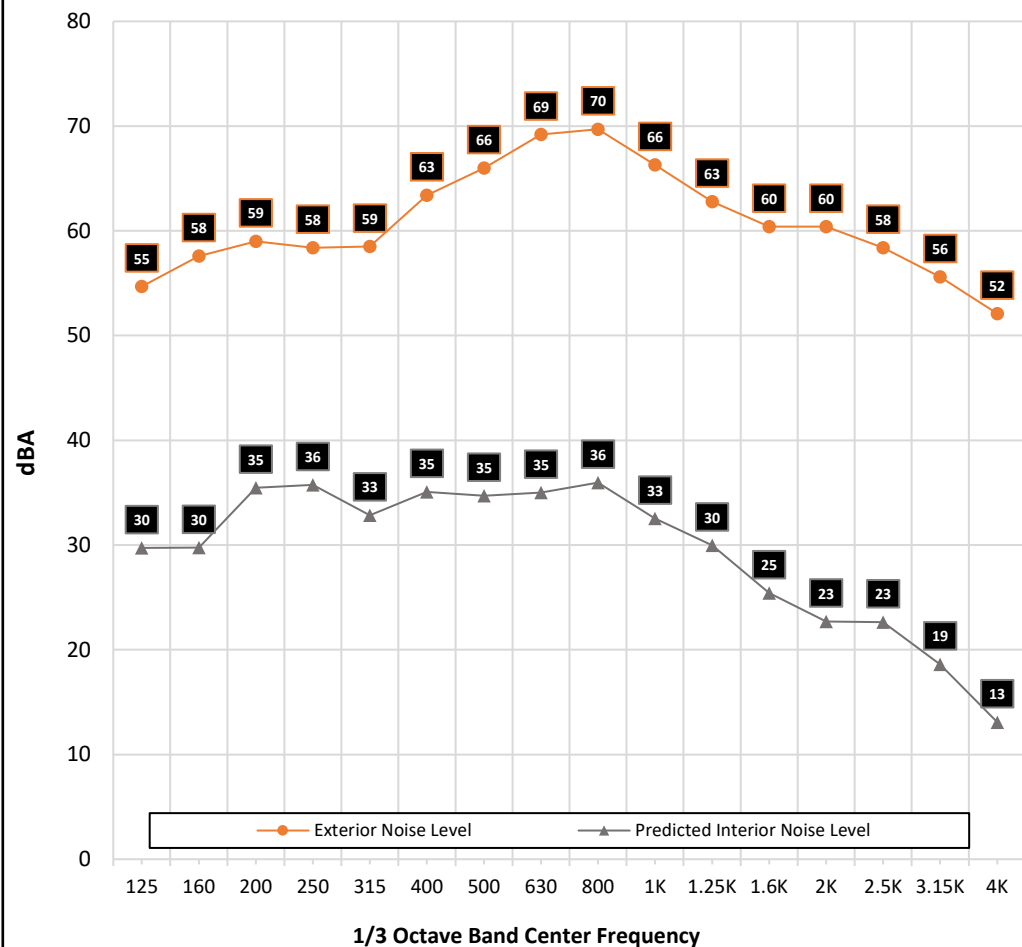
Parallel Exterior level, dBA: 75.4 Ldn
Correction Factor, dBA: 3
Noise Source: Freeway Traffic - I80 Roseville @ 65
Room Perimeter, ft: 46
Room Area, ft: 134
Room Height, ft: 9
Transmitting Panel Length, ft: 23
Window & Door Area, ft: 45

Ceiling Finish: Gyp Board
Ceiling, sf: 134
Wall Finish 1: Gyp Board
Wall Finish 1, sf: 372
Wall Finish 2: Glass
Wall Finish 2, sf: 45.2
Floor: Carpet, latex backing on foam pad
Floor, sf: 134
Misc. Finish: Soft Furnishings
Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
Element 1, sf: 163
Transmitting Element 2: Window - Millgard 6610PD Patio Door STC 33
Element 2, sf: 45
Transmitting Element 3:
Element 3, sf:
Transmitting Element 4:
Element 4, sf:

Predicted Interior Noise Level, dBA: 44

Noise Reduction, dBA: -31



Appendix C20: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments
Room Description: B2 Bedroom 1 (Corner)

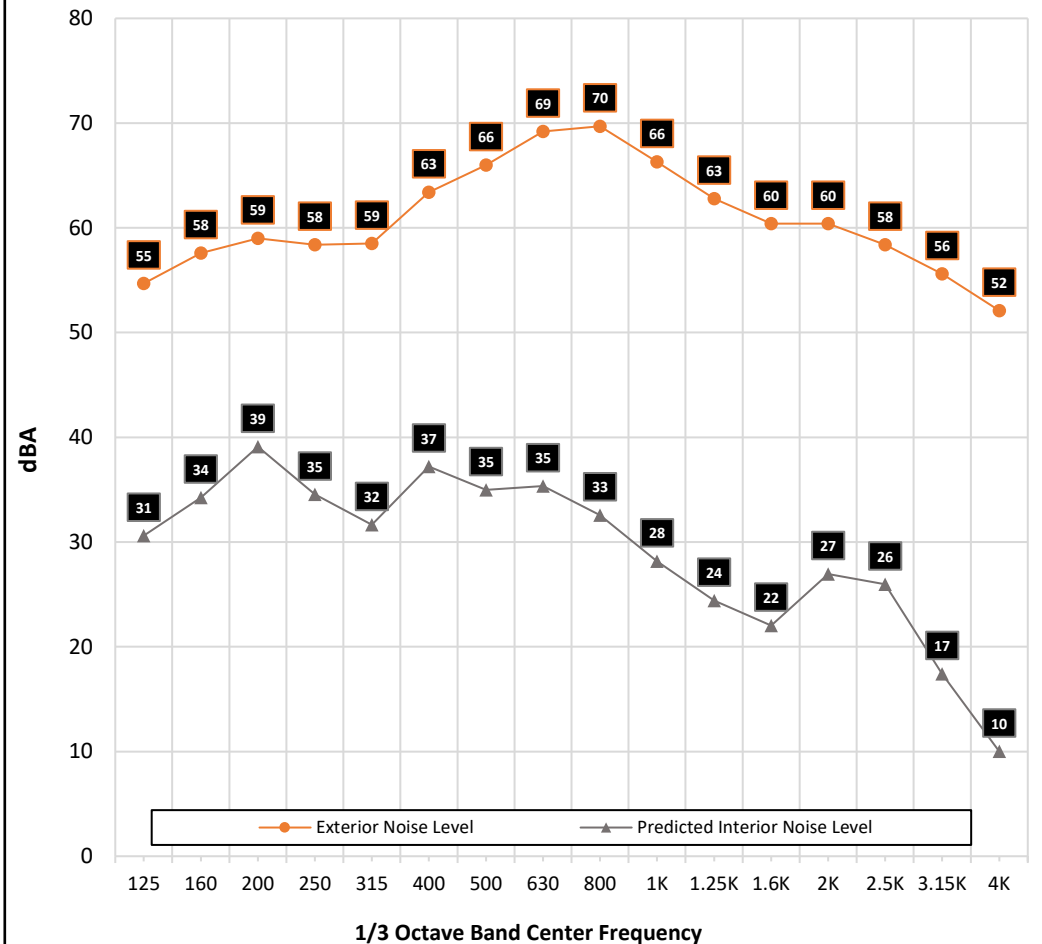
Inputs

Parallel Exterior level, dBA: 75.4 Ldn
Correction Factor, dBA: 3
Noise Source: Freeway Traffic - I80 Roseville @ 65
Room Perimeter, ft: 46
Room Area, ft: 134
Room Height, ft: 9
Transmitting Panel Length, ft: 23
Window & Door Area, ft: 45

Ceiling Finish: Gyp Board
Ceiling, sf: 134
Wall Finish 1: Gyp Board
Wall Finish 1, sf: 372
Wall Finish 2: Glass
Wall Finish 2, sf: 45.2
Floor: Marble or glazed tile
Floor, sf: 134
Misc. Finish: Soft Furnishings
Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
Element 1, sf: 163
Transmitting Element 2: Window - Millgard 6340 Fixed STC 36
Element 2, sf: 45
Transmitting Element 3:
Element 3, sf:
Transmitting Element 4:
Element 4, sf:

Predicted Interior Noise Level, dBA: 45
Noise Reduction, dBA: -30



Appendix C21: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments

Room Description: B1 Living

Inputs

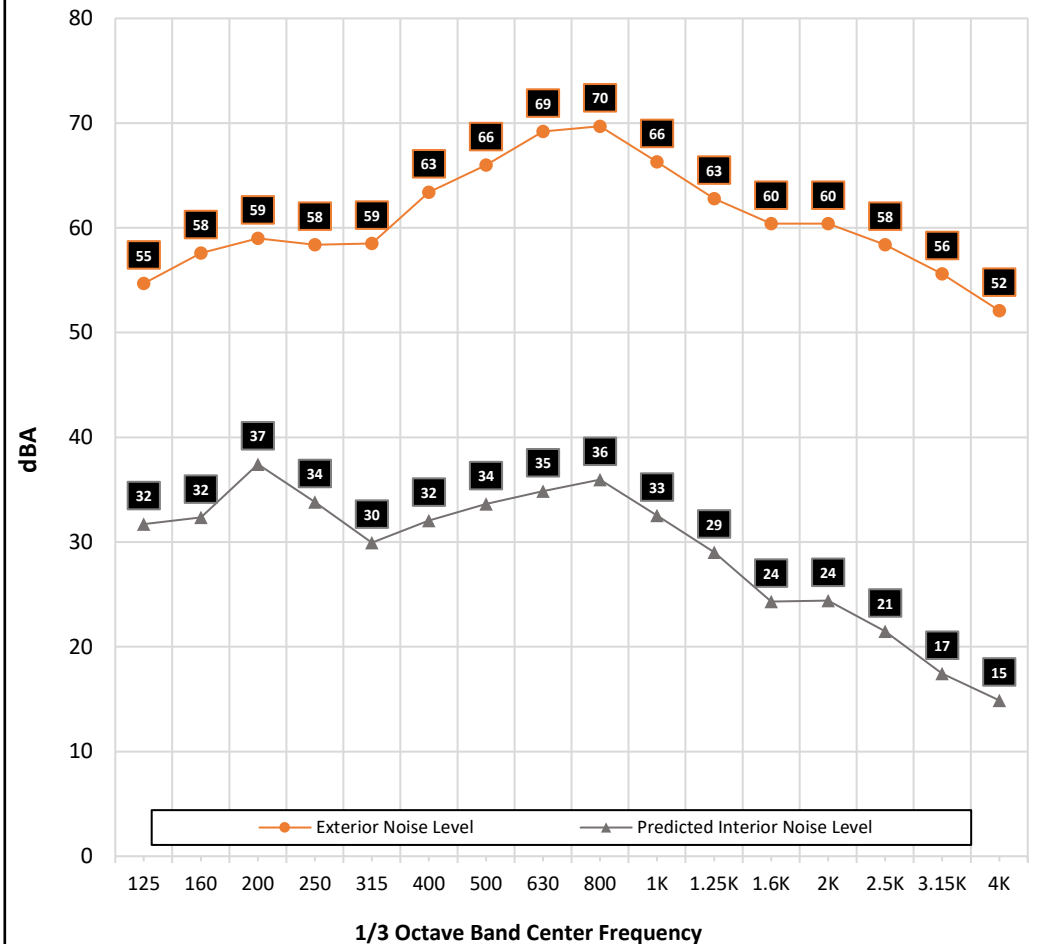
Parallel Exterior level, dBA: 75.4 Ldn
 Correction Factor, dBA: 3
 Noise Source: Freeway Traffic - I80 Roseville @ 65
 Room Perimeter, ft: 73
 Room Area, ft: 309
 Room Height, ft: 9
 Transmitting Panel Length, ft: 30
 Window & Door Area, ft: 110

Ceiling Finish: Gyp Board
 Ceiling, sf: 309
 Wall Finish 1: Gyp Board
 Wall Finish 1, sf: 569
 Wall Finish 2: Glass
 Wall Finish 2, sf: 85.7
 Floor: Carpet, latex backing on foam pad
 Floor, sf: 309
 Misc. Finish: Soft Furnishings
 Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
 Element 1, sf: 160
 Transmitting Element 2: Window - Quiet Home STC 34
 Element 2, sf: 86
 Transmitting Element 3: Window - Quiet Home STC 34
 Element 3, sf: 24
 Transmitting Element 4:
 Element 4, sf:

Predicted Interior Noise Level, dBA: 44

Noise Reduction, dBA: -31



Appendix C22: Interior Noise Calculation Sheet

Project: 211109 Shea Apartments

Room Description: B1 Living

Inputs

Parallel Exterior level, dBA: 75.4 Ldn
 Correction Factor, dBA: 3
 Noise Source: Freeway Traffic - I80 Roseville @ 65
 Room Perimeter, ft: 73
 Room Area, ft: 309
 Room Height, ft: 9
 Transmitting Panel Length, ft: 30
 Window & Door Area, ft: 110

 Ceiling Finish: Gyp Board
 Ceiling, sf: 309
 Wall Finish 1: Gyp Board
 Wall Finish 1, sf: 569
 Wall Finish 2: Glass
 Wall Finish 2, sf: 85.7
 Floor: Marble or glazed tile
 Floor, sf: 309
 Misc. Finish: Soft Furnishings
 Misc. Finish, sf: 25

 Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
 Element 1, sf: 160
 Transmitting Element 2: Window - Quiet Home STC 38
 Element 2, sf: 86
 Transmitting Element 3: Window - Quiet Home STC 38
 Element 3, sf: 24
 Transmitting Element 4:
 Element 4, sf:

Predicted Interior Noise Level, dBA: 44

Noise Reduction, dBA: -32

