

Memo



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Date: September 14, 2022

To: Tricia Stevens, MIG

From: Mike Parker and Tanya Jones

Subject: Technical Report Review Comments for the Mallard Pointe Project

1.1 INTRODUCTION

MIG, Inc. (MIG) retained Ascent Environmental (Ascent) to conduct reviews of the technical reports submitted for the Mallard Pointe Project (project) to verify that the information adequately supports the City of Belvedere processing the project as exempt from the California Environmental Quality Act (CEQA). The applicant believes that the project is exempt from CEQA under 14 Cal. Code of Regulations 15332. This exemption is subject to a number of prerequisites and exceptions and the City must investigate whether this particular project qualifies under the prevailing circumstances.

Ascent understands the project is located in the City of Belvedere (City) and involves the demolition of 22 residential units in nine duplex buildings and one fourplex building at 1-22 Mallard Road and the construction of 40 new residential units including six single-family units, five duplex buildings, one accessory dwelling unit (ADU), and a 23-unit apartment building (project). The project has a General Plan designation of Medium Density Multi Family Residential (5-20 dwelling units/net acre) and will require waivers to several R-2 zoning requirements, including height, setback, and lot coverage (among others).

The applicant has submitted the technical studies listed below in support of the requested Infill Exemption. This memorandum provides Ascent's review comments on these studies:

- ▶ Air Quality and Greenhouse Gas Emissions Analysis prepared by FirstCarbon Solutions dated April 1, 2022
- ▶ Biological Site Assessment prepared by FirstCarbon Solutions dated February 11, 2021
- ▶ Historic Resource Evaluation prepared by Preservation Architecture dated October 6, 2021
- ▶ Archaeological Resources Technical Report prepared by Kleinfelder Inc. dated July 20, 2021
- ▶ Preliminary Geotechnical Investigation prepared by Miller Pacific Engineering Group dated January 18, 2022
- ▶ Phase I Environmental Site Assessment Report prepared by Partner Engineering and Science, Inc. dated August 18, 2020
- ▶ Storm Water Control Plan prepared by BKF dated May 2022
- ▶ Preliminary Drainage Strategy prepared by BKF dated May 10, 2022

- ▶ Construction Noise Impacts Constraints Analysis prepared by FirstCarbon Solutions dated January 20, 2022
- ▶ Final Mallard Pointe Transportation Study prepared by Parisi Transportation Consulting dated December 13, 2021
- ▶ Preliminary Utility Design Memo prepared by BKF dated May 20, 2022

1.2 AIR QUALITY AND GREENHOUSE GAS EMISSIONS ANALYSIS

1. Page 1, BAAQMD guidance related to “consistency with air quality plans” threshold question specifically directs agencies and CEQA document preparers to evaluate whether the project is consistent with the control measures in the Clean Air Plan and whether or not the project would hinder Clean Air Plan implementation, not just the General Plan. In this case, it seems the project would not hinder implementation because the project is near parks and city hall (i.e., walkable), and will include green building measures (LEED, drought tolerant landscape). These are all consistent with the Clean Air Plan, but these features are not discussed. This threshold discussion should be expanded upon consistent with BAAQMD guidance.
2. Table 1, page 3, confirm all construction modeling is based on CalEEMod defaults.
3. Table 2, page 4, and elsewhere, it is unclear if the analysis accounts for (i.e., nets out) emissions associated with operation of the 22 existing single-family units. Please clarify.
4. Page 4, this is the first time “stationary sources” comes up. It is unclear why the generators are included because residential uses do not typically require backup generators. Regardless, it is unclear without digging into the appendices how often the modeling assumed they would be tested, their size, and if a specific emissions tier was assumed. Please clarify the modeling assumptions in the report and why generators were included.

Specific comments related to the HRA (comments 5 – 13):

5. Page 7, confirm that the RMP method was not adjusted, and 95th percentile breathing rates through age 2 and 80th percentile breathing rates beyond age 2 were assumed.
6. Confirm haul trucks were modeled in the HRA to the freeway only.
7. Table 4 and paragraph above it on page 10 conflict, Table 4 shows cancer risk is highest at Belvedere Park even though the text indicates the highest risk is at the residence. Please confirm where the highest risk is.
8. Risk at Belvedere Park is unusually high. It is uncommon to see DPM-related risk higher at recreational uses than residential uses because exposure duration should be much lower. Does the HRA assume the same exposure at the park as the residential uses (30 years, 350 days/year)? If so, that is not appropriate and greatly exaggerates risk at the parks.
9. Related to modeling (pdf page 66/100), please identify what the 3.33-meter area source (equipment) and 2.83 meter volume source (truck) release height are based on. These seem reasonable but are not explained or cited.
10. It is unclear if the annual PM_{2.5} concentrations include fugitive dust or just exhaust. It should include both. Please clarify and adjust modeling if dust is not included.
11. Related to AERMOD inputs in the appendix, specifically the grams per hour (g/h) calcs for on-site emissions (PDF page 61/100), this 1.12 g/h number seems to be based on 18,279.6 grams divided by 16,296 elapsed hours. This is the annual average emission rate spread out over all hours of the year (24/7/365). Construction is typically a daytime-only activity. It is unclear if the “variable rates” (daytime only) function in AERMOD was used to only model daytime uses and meteorology, or if the AERMOD modeling is based on all meteorology assuming this annual average rate. This seems to be inappropriate because daytime winds are typically higher and more representative of actual construction activity, but again, it is unclear what was assumed.
12. It is unclear how HARP was used because the inputs are not included in the appendix. Please provide.
13. Page 13, under the Criterion 3 heading, the fact that BAAQMD permits stationary sources does not absolve the lead agency from analyzing said sources. There are 15 speculative backup diesel generators assumed, each tested (running) for 50 hours per year, totaling 750 hours of diesel engine testing. All of this testing is near homes. This amount of testing and associated DPM right next to homes needs to be discussed because this may not be an insignificant amount of diesel exposure.

Specific comments related to GHG analysis (comments 14 & 15):

14. Page 16, related to the GHG approach and threshold, emissions are small, and would likely result in less than significant impacts regardless of the approach. That said, this is not an appropriate use of the bright line, nor is the adjusted bright line math correct. The project is a residential use. The more appropriate numerical threshold would be the efficiency metric, which can be adjusted with some caveats. Assuming 2.86 people per unit (from Appendix D of CalEEMod), this comes to 120 capita (or service population). Then, the math is as follows: $290 \text{ MTCO}_2\text{e} / 120 \text{ service population} = 2.41 \text{ MTCO}_2\text{e} / \text{service population}$. If BAAQMD's efficiency metric is adjusted to 2025 (not 2030, as assumed in the bright line adjustment), the project is then likely to be below the 2025 efficiency metric. This adjustment to the efficiency metric is not perfect (does not account for "new" development), but it is more appropriate because both the numerator and denominator are adjusted (rather than just adjusting the "capture rate" in the numerical bright line), and this approach is used frequently for residential or mixed-use projects in BAAQMD. The analysis should disclose these caveats so the reader understands the methodology and results and should be supplemented with more discussion about the nature of the project (small, replaces similar uses, consistent with general plan, green building likely beyond code) and the fact that modeling likely overestimates emissions (seems default trip lengths and building utility consumption were used).
15. Page 16, unclear why construction emissions are summed, amortized, and added to operational emissions. This is not consistent with BAAQMD guidance.

1.3 BIOLOGICAL SITE ASSESSMENT

16. Page 5, first paragraph - Species of special concern and watch list species are not exactly equivalents. Species of special concern generally have a more limited distribution, higher threat level, and/or lower overall abundance statewide than watch list species. CDFW watch list species are generally not treated as special-status species in CEQA analyses and the threshold for significant impacts would be higher than for species of special concern. Impacts to watch list species may be considered significant pursuant to CEQA Section 15065 or 15380 on a case-specific basis.
17. Page 5, second paragraph, last sentence - In March 2010, CDFW changed the name of "CNPS List" or "CNPS Ranks" to "California Rare Plant Rank" (or CRPR). This was done to reduce confusion over the fact that CNPS and DFG jointly manage the Rare Plant Status Review groups (300+ botanical experts from government, academia, NGOs and the private sector) and that the rank assignments are the product of a collaborative effort and not solely a CNPS assignment.
18. Page 5, fourth paragraph - The last two sentences here do not apply to fully protected status but to CESA-listed species.
19. Page 6, first paragraph - Strictly speaking, there is no geographical extent to CDFW jurisdiction under 1602. As defined, their jurisdiction is over activities that may affect lakes, streams, or rivers, not over areas. Activities that may affect lakes, streams, and rivers are not restricted to the drip line or top of bank.
20. Page 6, second paragraph - As noted above, the ranking is done in collaboration with CSFW and technical experts. The rarity ranks are officially recognized by CDFW so they should not be described as an artifact of CNPS (an NGO) alone. They are sanctioned by the resource agency charged with the protection of plant and wildlife resources in the state. Also consider the relevancy of this regulation and the potential for habitat for special-status plants to occur. It can be stated in the text that it does not occur on site.
21. Page 14, Section 3.2.1 Vegetation – is all this necessary as there are no natural vegetation communities or native plant habitats on site?
22. Page 15, Section 3.2.3 Wildlife Movement Corridors – is the second paragraph necessary as it is clear the site is fully developed and surrounded by more development, so it does not serve as a wildlife movement corridor?
23. Page 17, Section 4.1 Environmental Setting – More context and information related to fill needs to be provided. Was the fill placed into San Pablo Bay to connect Belvedere Island to Tiburon Point?

24. Page 18, Aquatic (Belvedere Lagoon) – Clarity around the work that will be performed on the docks is needed. Would the project include strictly replacement of one-for-one replacement in the same location as existing docks? Would any new docks be constructed where none exist currently? Would replacement docks be in different locations and possibly require more piles?
25. Page 18 Aquatic (Belvedere Lagoon) – It is our understanding that runoff and water discharge from the site into the lagoon would no longer occur by sheet flow and is proposed through a new system that would discharge through the bulkhead. Provide more clarity around the amount of runoff that would be discharged and if it would be an increase from the existing condition. Also, are there any other properties on the lagoon that discharge runoff through the bulkhead?
26. Page 18 Aquatic (Belvedere Lagoon) – Clarity around improvements to the bulkhead are needed. Would the project be replacing the bulkhead or the entire site? Or performing upgrades/repairs in specific locations? If it is in specific locations, they need to be identified.
27. Page 27, AMM-1 – Some level of nest monitoring with performance standards should be added for determining if the buffer distance is sufficient as well as when the young have fledged and the avoidance buffer can be removed.
28. Page 27, AMM-2 - A requirement to determine species (can use acoustic identification) should be added as well as type of use (e.g., maternity) and base buffer on rarity and sensitivity of species present and type of use.

1.4 HISTORIC RESOURCE EVALUATION

29. As professional standard, DPR forms should accompany historic evaluation reports to fully document potential resources. Please provide.

1.5 ARCHAEOLOGICAL RESOURCES TECHNICAL REPORT

30. The Native American Consultation, on page 7 of the report, is inadequate. The section references the Native American Heritage Commission (NAHC) response letter in Appendix B but does not summarize their findings. This is important because the sacred lands file search was positive.
31. The paragraph on page 7 states that one of the purposes of contacting NAHC was to obtain “a list of interested Native American groups and individuals.” NAHC provided the list, but the archaeologist did not reach out to any of the tribes. The Native American outreach should be completed and will need to be if this project is not exempt under CEQA.

1.6 PRELIMINARY GEOTECHNICAL INVESTIGATION

32. The Preliminary Geotechnical Investigation includes mitigation measures. Where these measures would be complying with standard building codes, engineering practices or industry standards, please revise the text to clarify these measures are not mitigation but rather demonstrate how the project would comply with regulatory requirements.
33. In the event that a mitigation measure identified in the report goes beyond compliance with regulatory requirements and would be mitigating a unique geologic hazard specific to the project, its design and/or location, this should be clarified in the text and MIG should be consulted immediately.
34. The project includes construction of a semi-subterranean garage; however, this does not appear to be discussed in the report. The report should be updated to address and discuss this project element.
35. Please include a discussion on the presence/absence of paleontological resources/unique geologic resources.
36. Page 14, Section 5.2, Preliminary Grading Considerations – The last sentence of the first paragraph states “Load balancing of the new buildings should be considered so as to not incur new loading at the site that would induce

new settlements.” Include a discussion on how “load balancing” can be achieved specifically for the proposed project building layout/site building density.

37. Appendix B, Geotechnical Memorandum 01 – Did this geotechnical investigation consider the development of the project? Or, was the purpose of the geotechnical evaluation of the existing bulkhead to assess the current condition of the bulkheads and whether they need to be repaired/replaced in their current condition. It is unclear if this investigation was performed for the purposes of construction of the project and if the bulkheads would need repairs or replacement post construction of the project.

1.7 PHASE I ENVIRONMENTAL SITE ASSESSMENT

38. Ascent completed a review of this report and have no comments at this time.

1.8 STORM WATER CONTROL PLAN

39. Section III.A.3 states that the project limits meet normal jurisdictional creek, wetland, and riparian habitat setbacks. The plan should state these distances.
40. In Section III.D. clarify in the second to last sentence that the “minimum of 15 inches” is the diameter of the storm drain pipe (if this is the case).
41. There is missing text in Table 3, Bullet 1 of the Refuse Area row and Operational Source Control BMPs column.

1.9 PRELIMINARY DRAINAGE STRATEGY

42. Ascent completed a review of this report and have no comments at this time.

1.10 CONSTRUCTION NOISE IMPACTS CONSTRAINTS ANALYSIS

43. Mitigation measures NOI-1 and NOI-2 limit construction activities and provide measures to reduce impacts associated with pile driving, should pile driving occur. However, city policy already limits construction times for all activity including pile driving and requires a vibration control plan if pile driving were to occur. If adherence to city policies would avoid potential impacts, the analysis should describe that, rather than include mitigation, and explain how the policies would avoid potential impacts. Would compliance with city policies avoid impacts and mitigation measures?
44. Related to the above comment, the study states pile driving would not occur but then evaluates pile driving in the event that pile driving would occur. Can we determine now if pile driving would be required to include the most relevant analysis now?
45. The project proposes additional residential uses, thus, operational increases in noise needs to be addressed.
46. On page 6-7 it is stated that “Project-related construction trips would not be expected to double the hourly traffic volumes along any roadway segment in the project vicinity.” This statement needs more substantiation. Increases in traffic on currently existing quiet/local roadways could result in perceptible increases, possibly substantial increases (note that recent court decisions have transitioned the focus of noise analysis from consistency with agency noise-related standards, policies, and ordinances to increases in ambient noise). Additional analysis should be included to support the conclusion.
47. On page 7, reference noise levels for front loaders are stated to be 85 dBA Lmax but Table 1 shows this equipment with a reference level of 80 dBA. Please correct text and associated modeling, if necessary.

48. On page 7, text discussing equipment reference levels is provided for trucks, loaders, and excavators but it is not clear if the modeling added noise from these three pieces together. Please explicitly state what equipment were combined together to result in the worst-case noise estimate.
49. Noise/vibration calculations that show modeling inputs and outputs needs to be included. Suggest including as appendices/attachments.

1.11 FINAL MALLARD POINTE TRANSPORTATION STUDY

50. On pages 3 and 4, please provide details regarding existing pedestrian facilities for each of the roadways in the vicinity of the project.
51. On page 7, Section 2.4 Public Transit Service, please provide the headways for the nearest transit stop servicing Marin Transit Route 219. This will tell us if the project could potentially be screened based proximity to transit as dictated by the OPR Technical Advisory.
52. On page 10, there is travel mode split data presented showing significant usage of alternative modes of transportation (i.e., transit, bike, ped). If this is not already accounted for in the VMT modeling it seems as though it should be incorporated into the trip generation and modeling to provide a more accurate (and lower) VMT estimate.
53. The Environmental Settings pertaining to bicycle and pedestrian facilities seems to suggest that there could be existing hazards due to lack of facilities in the area. Please address potential hazards in the analysis.
54. Consistent with significance criteria used to evaluate project impacts on transportation under CEQA (based on Appendix G of the State CEQA Guidelines), please analyze compliance with City bicycle and pedestrian plans, policies, standards, and ordinances. For example, does the project conform to the Belvedere Municipal Code (BMC) *18.12.060 Streets and other public ways – minimum requirements* which specifies right-of-way width standards, including for sidewalks along public ways? Additionally, analysis of if the project conflicts with general plan policies is needed.
55. The Transportation Study does not include a discussion regarding emergency access. Please include text related to the project's improvements to Mallard Road to comply with City standards and provide emergency access.
56. Would the preparation of a construction traffic management plan be required that addresses the need for any street closures, potential encroachment into the public right of way, equipment place, etc.? If not, how the project addresses these issues?

Specific comments related to VMT analysis Table 6, on page 16 (55-58):

57. It is unclear if the VMT being displayed is for the project or the TAZ as a whole without the project. If it is displaying the latter (as it appears to be), it would need to be revised to only report the VMT generated by the project as there could be other uses within the TAZ that effect this output.
58. Further explanation needs to be given related to what the area the TAZ encompasses, and other land uses it includes.
59. The table does not state what the numbers denote. Is this VMT/service population? VMT/resident? Other?
60. There needs to be a VMT comparison of the VMT generated by the project to that of the region (i.e., Bay Area) in both the existing and cumulative (2040) scenarios.
61. On page 17, are the transportation network recommendations required by any policies, plans, programs, or ordinances? Are these solely recommendations or should they be considered mitigation under CEQA?
62. Attached to this memo are the CEQA thresholds for transportation impacts. This should be referenced as a general framework to revise the study and address the comments in this memo.

1.12 PRELIMINARY UTILITY DESIGN MEMO

63. How many more residents are anticipated for the project?

64. Regarding sanitary sewers, please provide the estimated wastewater generation rate for the existing conditions and for the proposed project. Environmental effects need to consider the impacts of any increase in utilities and if the project would be adequately served by all utility providers.
65. Regarding water supply and design, please provide the estimated water generation rate for the existing conditions and for the proposed project. Environmental effects need to consider the impacts of any increase in utilities and if the project would be adequately served by all utility providers.

1.13 VISUAL SIMULATIONS

66. For project plan #A24, please include a key map for where the photos are taken from and please confirm if these are public or private views of the project site.
67. For the visual simulations, include details on the camera type, height, and lenses used for the visual simulations.

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ATTACHMENT: CEQA THRESHOLDS FOR TRANSPORTATION

Memo



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ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. Transportation.				
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>