



January 6, 2023

To: City of Belvedere  
450 San Rafael Avenue  
Belvedere, CA 94920

From: Mallard Pointe 1951, LLC

**Re: Applicant Response to CEQA questions for Mallard Pointe**

This memorandum responds to the questions emailed to the Applicant from Tricia Stevens (Contract Planner, MIG) on December 8, 2022.

**Dock Replacement:**

- Please provide a description of construction methods on how dock replacement would occur.

Dock repair and replacement will occur as needed. Currently, docks are supported by pressure-treated wooden posts set in concrete and encased in PVC sleeves. Repair or replacement will be made either in kind, or alternatively screwed-in helical piles may be used with minimal vibration or noise. Pile driving will not be required. Docks will be replaced in existing locations and will have the same footprint as the existing docks. Dock replacements will be engineered in compliance with the California Building Code.

- Please confirm if piles would be replaced in the same place/location as exiting piles. If not, describe how this would be different than the existing condition.

To the extent that existing dock posts need to be replaced or repaired, all replacement work will occur in existing locations.

- Batch 1 response document #24 says no piles would be required; however, the existing docks have piles.

No driven piles will be required. As stated above, repairs will be made in kind or screwed-in helical piles may be considered in some cases.

**New Docks:**

- Please provide a description of how new docks would be constructed/installed – [See response below](#).



- Please confirm if pile would be required for construction of new docks. If not, how would new docks be anchored?

New docks could be supported on either concrete/PVC-encased pressure-treated wood posts or screwed-in helical piles. Alternatively, floating docks may also be considered, which would be anchored on the land side, and may also be anchored to shallow posts/piles in the lagoon. Both concrete/PVC-encased wood posts and steel helical piles could be installed by equipment working from dry land with minimal noise and vibration. All new docks will be engineered in compliance with the California Building Code.

### **Bulkhead Replacement:**

- Please provide a description for how bulkhead replacement would occur.

Bulkhead replacement would occur as needed and will follow applicable design standards as determined by the City or the Belvedere Lagoon Property Owners Association (as applicable and as approved by the City of Belvedere). Sheet piles are typically installed on the landside of the existing bulkhead. The building footings will be designed to not introduce any new lateral pressure onto the existing bulkhead. Grades on the landside will not be changed from the existing condition.

- Would any in-water work be required?

A limited amount of in-water work may be required for clean-up and debris removal, or cosmetic work. This work could potentially be performed during winter when the waterline is lowered to minimize in-water work.

### **New source of drainage through the bulkhead**

- Please provide a description for the new discharge outlet proposed in the bulkhead.

Please review the revised TM-4A drawing. The project drainage will be discharged to/through the existing outfall between lots 7 and 8. No new discharge outlets are required for the proposed project as the existing outfall has capacity to handle the existing drainage shed, which is not being expanded. In addition, discharge rates from this outfall will be implicitly reduced by (1) the reduction of the amount of impervious area on the Mallard Pointe site and (2) the introduction of bioretention basins. It should be further noted that the quality of stormwater discharged from the project improves from the current conditions as it will be filtered through the bioswales.



- Please also state where the discharge outfall would be located. Would it be within the mean highwater line?

The discharge outlet remains at its current location between lots 7 and 8 in the new site plan. The lagoon is not tidal, but rather has a summer and winter elevation, at elevations 4.2 and 2.4 NAVD88, respectively, as controlled by the BLPOA at gates. The outfall mentioned above discharges at elevation -0.2 NAVD88.

- During a team meeting with the City and applicant, development of a stormwater collection system that discharges to the lagoon was discussed. If that is proposed, it would require permitting through State/Regional Water Boards, and may require USACE and CDFW LSAA, depending on how/where the outfall is constructed

This comment appears to be advisory only. There are no new discharge outlets for the proposed project. The project drainage will be discharged through the existing outfall between lots 7 and 8. Additional discharge outlets are not required.

### **Stormwater Rate and Discharge**

- Batch 1 response document #25 says the project would reduce the total amount of impervious area and therefore would reduce runoff. A reduction of impervious surface does not automatically equate to reduced runoff and discharge to the lagoon. This would need to be supported by hydraulic studies, stormwater management plan. Please provide an explanation and/or point us to the report where this is documented and where discharge rates for pre- and post-construction can be reviewed.

The combination of reduced impervious area (a reduction of 8,000 sf) and the flow attenuation provided by the introduction of bioretention basins, as detailed in the proposed plan, are both improvements that result in a reduction in stormwater discharge rates. All discharge from the current site into the lagoon is unregulated, and untreated. In addition, the offsite flows that are currently conveyed through the site are being rerouted around the new apartment building in the proposed design, which also contributes to a longer travel time and lower discharge rate of stormwater runoff.

### **Attachments:**

1. Tentative Map