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TO: Jill R. Goldsmith, Town Manager
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CC:

FROM: Robert Duncanson, Ph.D., Director of Health & Natural Resources

DATE: February 18, 2023

SUBJECT: Update III – Fish Pier South Jog Bulkhead Replacement Project

MAS Building & Bridge, Inc., Project Contractor, has completed installation of the steel sheet piles for the entire bulkhead around the South Jog.

As you are aware from previous updates two issues prolonged installation of the new bulkhead. The first was failure of the original sheets to meet project specifications likely due to issues during manufacturing at the foundry. This was resolved by the Contractor obtaining new sheets from an alternative source. The second issue was due with unanticipated obstruction(s) below the mudline as the sheets were being driven. The Contractor spent significant effort trying to determine the obstruction(s) and remove them. This effort included utilizing divers on multiple occasions and a long-reach excavator to try and dig the obstruction out. Unfortunately, none of these efforts were successful due to the fine-grained nature of the sediments which continually sloughed back into excavated areas posing a threat to the divers and prohibiting excavation of a deep enough area at the obstruction.

Following multiple discussions among the Project Team the Contractor moved ahead with driving all the sheets to the maximum extent practicable. Of the approximately 51 full pairs of sheeting (each sheet consists of two pieces) 49.5 (97%) have been driven to the full design depth of 30' below mudline. The attached figure shows the results for the 10 sheet pairs moving south from the intersection with the Packing House bulkhead. One pair reached a depth of 28' below mudline in the area of an obstruction. The project Engineers, Foth, determined that reaching a depth of 20' below the mudline or greater would be acceptable. At a second location, one-half of one pair was only able to be driven to a depth of 8' below mudline before hanging up. The other half of the pair reached the design depth. The Contractor and Engineer determined that trying to

drive the shallow half was not recommended as it may result in damage to both sheets. The Engineers are currently reviewing if additional actions are necessary to address conditions where the one-half pair is shallow.

