

SAJ-2004-12518 (SP-JCM)
St. John Marina Yacht Club

Exhibit 5, Attachment A

Letter from TechnoMarine dated February 23, 2018



TECHNOMARINE™

February 23, 2018

Chaliese N. Summers
Managing Member
The Summer's End Group, LLC
5000 Estate Enighed, Suite #63
St John, U.S. Virgin Islands, 00830

RE: SAJ-2004-12518 (SP-JCM)

The following is response to the Regulatory Division, South Permits Branch, Antilles Section SAJ-2004-12518 (SP-JCM), statement/comment "5." (five) outlining Technomarine's pile installation method for the proposed development of the St. John Marina Yacht Club, located at Coral Harbor, Estate Carolina, Coral Bay, St. John, U.S. Virgin Islands.

Relying on our experience designing over 900 marinas in nearly identical geotechnical conditions, Technomarine proposes the following estimated pile length and pile driving description. Based on our 39 years of experience, the following basic comments can be made;

1. Average water depths within the marina footprint are approximately 12'; pile cutoff elevation will be roughly 5 feet above mean water; with an average embedment depth of 25', piles will be 45' long
2. Piles will be a combination of 14" square concrete piles and 16-18" diameter steel pipe piles, all 45 feet in length, with approximately 25-foot embedment depth
3. Assuming a mix of fine, silty sand and clay soil conditions, predicted blow counts using a typical 45,000 ft-lb impact hammer would be in the range of:
 - 5 blows per foot for the first 10 feet
 - 15 blows per foot for the next 10 feet
 - 20 blows per foot for the last 5 feet
 - Average 300 blow counts per pile install
4. Pile count and installation duration per dock section;
 - A Dock
 - Pile count: 140 total
 - Install duration: 23 days
 - B Dock
 - Pile count: 144 total
 - Install duration: 24 days
 - C Dock
 - Pile count: 77 total
 - Install duration: 13 days
 - D Dock
 - Pile count: 89 total
 - Install duration: 15 days

- E Dock
 - Pile count: 149 total
 - Install duration: 25 days
- F Dock
 - Pile count: 243 total
 - Install duration: 40 days
- G Dock
 - Pile count: 54 total
 - Install duration: 9 days
- H Dock
 - Pile count: 64 total
 - Install duration: 11 days

Project pile installation will be approximately 6 piles per day; at 960 piles total, pile-driving would occur for a duration of 160 days. Duration can be reduced by 50% with use of two pile driving crews. Also, an underwater "air bubble curtain" will be used during all pile driving activities to reduce underwater noise and keep aquatic creatures/fish away from all pile driving operations.

Again, these assumptions are based on Technomarine's extensive experience designing and driving piles for similar structures in similar environments.

Thank you,



Jat Talton, President
Technomarine Construction, Inc.
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