Don Russell 35000 Beach Road Capistrano Beach, CA 92624

Dear Don.

It seems a year has flown by, and we are at the end of our engagement for the shoreline camera at 35051 Beach Road. I wanted to share our sincere thanks to you and the Board for having worked with us, and give you a brief update along with our plan to vacate the premises over the next month.

Our goals for undertaking this project included:

- A local installation point that would serve as a serviceable research camera during the concluding 12 months of our CoastSAFE Alive grant work (reference http://www.google.com/#q=coastsafe+alive) to be used specifically to study shoreline measurability with low resolution security cameras in support of hazard identification and change management for coastal managers and public safety.
- A correlation of our findings with a local survey/engineering group to show a low cost alternative to higher resolution higher cost traditional survey methodologies.
- In support of a potential use for Security near the Fence on the North side of the Property, we would provide live vision and control of the camera for Beach Road uses.

Our research work has concluded successfully, and we are finalizing the outcomes of our grant work against milestones for delivery in January 2010.

To recap our outcomes:

- We met with success against our first goal. As I mentioned at the beginning of our engagement, we strive to measure and collect data, not necessarily interpret the beach readings. To that end, during the year we were able to calibrate our systems to read shoreline quite reliably from the camera to approximately a one meter resolution. Our belief is that while in the US market this is not a "granular"

resolution" such as a manual engineering survey or high resolution video survey may provide — it is able to provide a correlative accuracy and may be useful in the future for producing near real time readings and archival data that closes the gaps between survey dates using more traditional survey methods. We also proved the camera and software could be used for shoreline sensing in CA for hazard identification in support of surf lifesavers and lifesaving efforts.

- We were not as successful with our second goal. We processed several shoreline runs for each area of beach to the left, center, and right of the camera installation, specifically in the June/July timeframe. Enclosed in our binder you will find an outline and documentation of some of our efforts – most of which won't mean much in the context of the Beach Road surveys performed by the Guida Survey group. We've also posted this information online as outlined in the binder.

While we were able to meet with Guida back in August after your introduction, the outcome was less than fruitful as they were understandably unwilling to share/coordinate efforts to calibrate our findings against their prior surveys without compensation. That said, they acknowledge that the information if properly correlated to previous survey data could prove useful over time. Further testing of our methodology in tandem with theirs may prove useful should they ever desire the use of a camera for high sample rate, lower resolution shoreline data.

 Lastly, we hope the access to the camera was useful. You are the best judge as to whether or not having the video camera for security would be a useful longterm effort.

Given that our permitted agreement term is expired, we stand ready to remove the equipment and would like to schedule with you to be on site when it's convenient for the residents. Given the holiday season — we will be flexible, and are not in a rush. I'll speak to you regarding proper removal, sealing of the location on the awning/rooftop, and otherwise we are clear given that we did not penetrate the building. The Internet lines will be disconnected, and the power location will remain for the resident's use.

The data from this trial will remain online for a period of 1 year, accessible for Capistrano Bay District alone. See the binder for support/login info and note that we stand ready to assist any time.

Should the district desire any further interaction with regards to the data collected, including discussion and demonstrations of what was undertaken and accomplished I will assist however I can pro bono.

Again, my sincerest appreciation and thanks for allowing us to perform the research at your location, and note that we have already incorporated many of the findings from Capo into better analysis in support of lifeguard safety systems. We hope to further apply what we've learned as we work to make high frequency shoreline readings a possibly for those on a budget, and hope that you'll let us know if there's ever anything we can do for you Don.

Sincerely

Tim'Chandler

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