South Bay Aerial Photography

The Aerial Inspection, Mapping, Orthomosaic, and Photogrammetry Process

- Create Waypoint File We can do this on site or remotely and this step only needs to be done once
 - Review Location for Flight Limitations
 - Create Overlap Map per Requirements
 - Review Maps for Obstacles and Surrounding Area
 - Transform Maps Into Waypoint File
 - Upload Waypoint Files to Drone Control Software
- Fly Waypoint Mission and Process Data This can be repeated any time and is a great way to present progress performed or is useful in analysis of waste and stockpiles
 - · Go to Location and Fly Waypoint Mission
 - Process Aerial Photography / Videography per Customer Requirements





Inspection Process

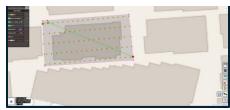
- Review Location for Flight Restrictions
 - In this case Class D Airspace in vicinity of Torrance Airport – Height restricted to 200 feet – Requires proper drone (RID), authority (UAS License), and FAA permission to unlock before flying may commence
- Create Flight Map of Inspection Area
 - Specify Inspection Area Overlay
 - Ground Sample Distance .3 cm
 - Direction Front to rear of home (85 deg)
 - Sidelap 85%, Frontlap 90%
 - Gimbal 70 deg
- Generate and Review Satellite and Non-Sat Map
- 4. Review Photo Overlay
- 5. Review Google Earth Pro
 - For obstacles (power lines), slope, view, and adjacent buildings

Review Flight Restrictions

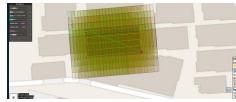


Create Map

Non-Sat Map of Flight Route



Non-Sat Map of Photo Overlay



Satellite Map of Flight Route

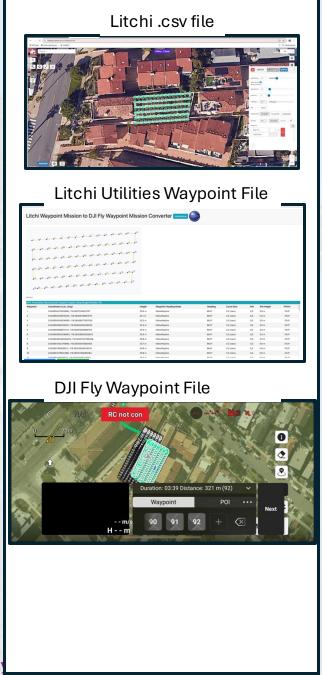


Google Earth Pro



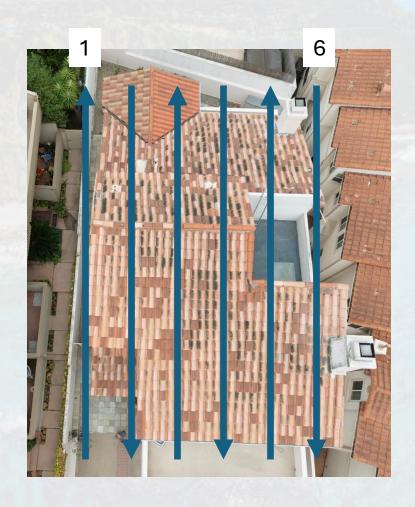
Inspection Process

- 6. Generate a .csv File of the Flight Map using Litchi
- 7. Create .kmz Waypoint File
 (automated flight
 profile) that is DJI
 Compliant in Litchi
 Utilities
- 8. Upload .kmz file into DJI Fly



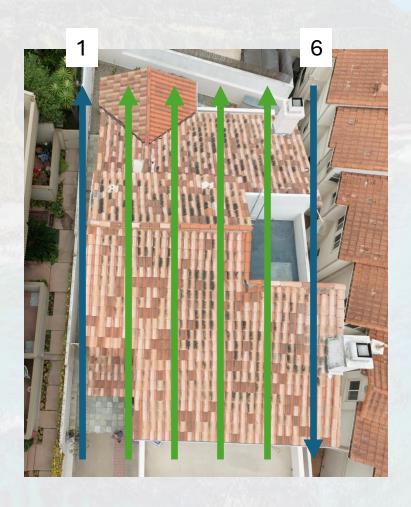
Inspection Process – Can be Repeated Over Time Anytime

- 9. Go to Location and Fly the Waypoint
 - Assure there are no new flight restrictions or NOTAMS
- 10. Process the Photos 90 Photos 48 MP

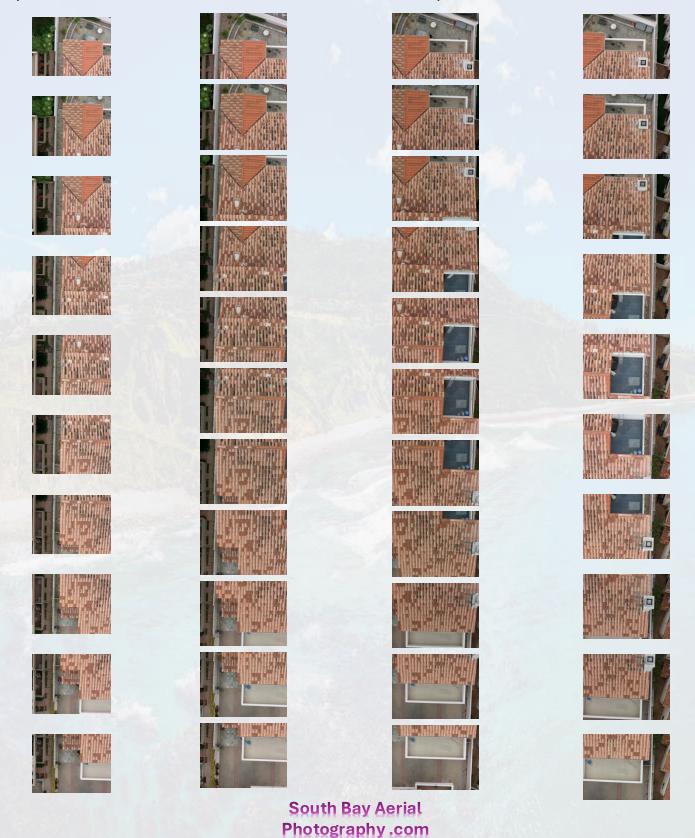


Pertinent Pictures

- Pertinent Pictures shown in green
- Those with only the inspection area in view are realigned to be consistently in one direction and linked to the photos
- Please see the next page



These are all linked to HD photos in the folder. These are the pertinent pics from the inside 4 runs, this set excludes pics where the roof is not in view or the drone is turning, all pics are available in the folder. The entire set was 90 pics, this set is 43.



These are all linked t inside 4 runs, this se all pics are available





















Aerial Inspections Pour Great Detail and Ple Review Time











Product Delivery

- We create a folder with
 - A full report in Adobe that provides the route the drone flew, pertinent pictures links to a folder with HD close ups of the inspection area
 - HD close ups of the inspection area, an overall view of the area, and an HD panorama of the area, all linked in a convenient Adobe file
- We create a Webpage on our website that is Password Protected
- The customer opens the webpage and inserts the password we provide, which opens a page with a link to a zip file that can be downloaded
- Unzipping creates a folder with all photos and an Adobe file