Appendix E

View Simulations Report
This page intentionally left blank.
MALIBU COAST ESTATE

VISUAL SIMULATIONS

NOVEMBER 29, 2012

PREPARED FOR

PCH PROJECT OWNER, LLC
SCOTT A. JOHNSON
863 CLOVER DRIVE
SANTA ROSA, CA 95401
707-764-6260
scott@scottjohnson.org
Introduction

In July, 2012, PCH Project Owner, LLC, the owner of 24108, 24120, 24134, 24150 and 24174 Pacific Coast Highway, Malibu, CA (APNs 4458-018-002; 018 and 019) (the “Project Site”) engaged Scott A. Johnson (“Consultant”) to prepare a computer 3-D model and visual simulations for PCH Project Owner, LLC’s (the “Owner”) proposed Malibu Coast Estate development (the “Project”) on the Project Site.

Owner had advised Consultant that it has applied for Coastal Development Permits and other land use approvals from the City of Malibu to permit the subdivision of the Project Site into seven lots. Five of the lots would be developed with a single-family residence, one lot would contain a private street with gatehouse and landscaping, and one lot would be used for public recreational purposes and parking. In connection with Owner’s Project, the City of Malibu (the “City”) is preparing an Environmental Impact Report (the “EIR”) and the City requested that Owner retain a qualified consultant to prepare visual simulations of the Project from specified locations in order to assist in the analysis of potential visual impacts of the Project to areas surrounding the Project Site.

The Project Site is a 24-acre irregular parcel that rises to approximately 200 feet above sea level when traveling east to west along Pacific Coast Highway from the Malibu Civic Center area. The northern portion of the Project Site slopes to Pacific Coast Highway, the southern portion of the Project Site, which is bifurcated with by a canyon, is an ocean facing bluff with views of the ocean to the east, south and west, the eastern portion of the Project Site slopes steeply to the adjacent property. Owner’s Project is located on the relatively flat portion of the Project Site, which is approximately 180 to 200 feet above sea level and the proposed development is set back from all slopes. There are both existing residential developments located at higher elevations and various distances to the north of the Project Site (Malibu Knolls and Malibu Country Estates) and at lower elevations and various distances to the south and east of the Project Site (Malibu Road and Malibu Colony). The significant change in elevations and distance of these existing developments frame the Project Site with large expanses of ocean and sky. In addition, the owner of a large undeveloped parcel immediately to the north of the Project Site has filed plans to develop a hotel on that site (“Rancho Malibu Site”). Both Pacific Coast Highway and Malibu Canyon Road are designated as scenic highways in Malibu’s Local Coastal Plan.

Methodology

Photography
Photographs for the visual simulations of the Project Site were taken on August 14, 2012 and January 5, 2013. As can be seen in the visual simulations, on the days of the Project Site visits, the weather was clear, the sky was blue and generally clear of cloud cover with excellent visibility. Story poles had been erected on the Project Site showing the location and dimensions of the proposed single-family residences development. The story poles are placed on the Project Site by Hawner Construction/Malibu Story Poles in order to depict the precise outlines of the specific residences designed by the Project architect, Landry Design Group, for which the Owner is seeking approval. Chris Nelson & Associates, Inc., Professional Land Surveyor, verified the accuracy of the location and height of the story poles and conformance of the story poles to the story poles exhibit prepared by the Project architect and approved by the City in its report to the City dated April 16, 2012. The clear weather conditions enabled the photographs to show clearly the story poles. Except for Views 2 and 3, the photographs were taken from a standing position of the photographer to represent the view of a person standing in that location. Views 2 and 3 were taken from 2 feet above the top of an 8-foot ladder to approximate the view of a person from the second floor of a building.

An Olympus E-P3 with a 20mm lens was used to create the photographs of the Project Site with the erected story poles. Care was taken to use equipment that would recreate a realistic ‘normal’ view of the Project Site and it’s surroundings. The human eye can perceive a field of view of almost 180 degrees, although most of the time individuals are generally not conscious of that full 180 degree range because some of the field of view is in the viewer’s peripheral vision. Commercial camera systems cannot capture a 180-degree field of view without significant distortion in perspective. Panoramic techniques can also be used to recreate a wider field of view while minimizing such distortion.

For the purposes of this report a ‘normal’ lens refers to a lens that most closely approximates the correct perspective and a field of view to a human observer under normal viewing conditions that looks ‘natural’ compared with lenses that are more telephoto or wide-angle in focal length. A 20mm lens with the Olympus E-P3 camera is recognized as the best lens for this format to capture a realistic, normal view as perceived by the human eye because it most closely approximates the perspective of the human eye.1 As noted in the Wikipedia page referenced in footnote 1 for “Normal Lens, in the micro 4/3 format, which the Olympus E-P3 camera utilizes, a lens of 22mm is the ideal ‘normal’ focal length. To take the photographs for this report, the 20mm Panasonic lens was used because it is considered the highest quality for clarity, color rendition, and lack of distortion for that platform and the 20 mm focal length is sufficiently close to the ideal 22 mm focal length to reproduce the correct perspective of a human observer under normal viewing conditions.

Photographs that attempt to recreate the human field of view (i.e., the full 180 degree field of view) but are necessarily flattened onto a page seem distorted and

---

'unnatural'. Visual simulations need to provide information to stakeholders, policy makers, and the public with information that is accurate and understandable so that they may make informed decisions and comments about the Project. By providing views that are understandable and show correct perspective and the interrelationship of the Project and the existing environment, viewers can make a reasoned assessment of the Project’s potential visual impacts. Correct perspective and lack of distortion are more important than attempting to recreate the full human field of view.

Where appropriate, I have used panoramic images to provide wider fields of view, particularly when shown against the expansive ocean views. However, in the case of View 1, we have also provided standard, single frame fields of view in Views 2 and 3 as contrast and to allow greater focus on the Project.

Due to the physical features and location of the Project Site and the surrounding areas, as well as significant variations in elevations and distance between the Project Site and surrounding areas and proximity to designated scenic highways, panoramic imagery was used at several locations to provide a sense of context to any potential view impacts. The panoramic views reflect how the Project would look and be experienced by the human eye, although with a somewhat wider field of view.² Panoramic imagery was created by blending multiple images together to create a view that is wider than could be created in a single standard image or view. When used in the report “standard” image or view refers to normal field of view captured by a 20mm lens with the Olympus E-P3 camera (46.78 degrees horizontal field of view). This process, as noted above, most closely approximates the correct perspective compared with an image taken from a camera utilizing a lens with wide-angle or telephoto focal length. By using the same camera and lens as was used to create the standard images, the panoramic imagery was able to maintain the ‘natural’ perspective. Panoramic imagery was chosen for viewpoints where broad expanses of ocean were visible and the Project stretched beyond the field of view captured in a standard image. Other than the necessary changes to create panoramic photographs from a series of standard photographs (i.e overlapping images, and corrections for the distortion of projecting a cylindrical view onto a flat plane of paper), no photographs were cropped or adjusted in any way during post-production. Detailed photography notes can be found in Appendix A.

During the August 14th Project Site visit multiple photographs were taken from ten areas specified by the City’s Planning Department. The location where each photograph was taken was established by a GPS data logger. The GPS data log was taken with two devices simultaneously and at least five satellites were in-view and locked to each device during the duration of the visit to the Project Site, and both logs were combined and averaged to reduce possible errors. Once the photographs and locations were reviewed, thirteen were chosen to provide a broad representative

² The field of view for any given image is less important than what that view shows and that the perspective is correct. A discussion of degrees, whether somewhat wider or somewhat narrower field of view than what the human eye perceives has little effect on whether or not the Project has impacted the viewscape.

Malibu Coast Estate: Visual Simulations

Scott A. Johnson
sample of views from areas surrounding the Project Site. An aerial image with plotted photograph locations is provided in Appendix B.

During the January 5th Project Site visit multiple photographs were taken from various trails within Bluffs Park in order to determine a ‘worst-case’ viewpoint. The locations were captured using a GPS data logger and the viewpoint with the greatest potential impact was chosen. The location of this photograph is plotted as ‘13’ on the aerial image provided in Appendix B.

Most views were taken from public locations, such as streets and parks. Views 1 through 3 were taken from the future Rancho Malibu Site in an effort to simulate potential view impacts to both ground level and second-story views. With respect to Views 2 and 3, during the August 14, 2012 visit to the Rancho Malibu Site, the representative of Rancho Malibu indicated to Consultant and Owner that the primary view from the casitas on the plans filed with the City is oriented into the Rancho Malibu Site and east rather than south toward the Project Site. Rancho Malibu representatives requested that Owner prepare visual simulations from View locations 2 and 3 with primary views oriented south toward the Project Site because Rancho Malibu’s ownership intended to prepare and file new plans changing the view orientation of the casitas to face the direction of the Project Site. Accordingly, Views 2 and 3 represent to the best of my knowledge the view from the casitas as intended by the owner of Rancho Malibu.

**View Locations**

View 1: Panorama view from the Rancho Malibu Site looking south to south-east across PCH to the Project Site. Panorama view was chosen from this location because it provided the clearest, non-obstructed view (due to existing vegetation) of both the Project Site and expansive ocean views to the south and south-east towards downtown Malibu and beyond. This is also the proposed site of a gazebo and focal point for landscaping in the proposed Rancho Malibu Project.

View 2: Standard view from the Rancho Malibu Site (future casita placement, 2nd floor) looking south across PCH to the Project Site. Standard view was chosen from this location because existing vegetation, which will be removed upon the development of the Rancho Malibu Site, framed this view and a similar view (View 1) provided the panoramic view from this distance and perspective.

View 3: Standard view from the Rancho Malibu Site (future casita placement, 2nd floor) looking south-east across PCH to the Project Site. Standard view was chosen from this location because existing vegetation, which will be removed upon the development of the Rancho Malibu Site, framed this view and a similar view (View 1) provided the panoramic view from this distance and perspective.
View 4: Standard view from Blue Dane Lane (Malibu Country Estates) looking south-east towards the Project Site. Standard view was chosen from this location because the Project was contained within the center of this view, and while the nearby housing blocked ocean views to the east and the west, the significant distance between the Project Site, the ocean and this location, the otherwise unobstructed, as well as the significantly higher elevation at this location from the Project Site and Ocean enabled a standard view to capture what would be perceived as a wide field of vision.

View 5: Standard view from Vantage Point Terrace (Malibu Country Estates) looking south-east towards the Project Site. Standard view was chosen from this location because the Project was contained within the center of this view, and nearby housing and topography blocked extensive ocean views to the east and west.

View 6: Standard view from PCH & Cross Creek Road looking west towards the Project Site. Standard view was chosen from this location because the Project was contained within this view, and nearby structures, and trees framed this view. This view also approximates the view from an automobile moving along or across PCH.

View 7: Standard view from the beach looking west towards the Project Site. Standard view was chosen from this location because the Project was contained in this view, and approximates the view one would have walking west along the beach.

View 8: Standard view from Malibu Luna Park looking west towards the Project Site. Standard view was chosen from this location because the Project was contained in this view, and expansive ocean views are blocked by existing vegetation and topography.

View 9: Standard view from PCH & Webb Way looking west towards the Project Site. Standard view was chosen from this location because the Project was contained within this view, and nearby structures, and trees framed this view. This view also approximates the view from an automobile moving along or across PCH.

View 10: Panorama view from Coast View Drive (Malibu Knolls) looking south towards the Project Site. Panorama view was chosen from this location because it provided the clearest, non-obstructed view (due to existing vegetation) of both the Project Site and expansive ocean views to the south.

View 11: Panorama view from Malibu Canyon Road looking south towards the Project Site. Panorama view was chosen from this location because it provided the clearest, non-obstructed view (due to existing vegetation) of both the Project Site and expansive ocean views to the south. This view also approximates the view from an automobile traveling toward the ocean on Malibu Canyon Road.

View 12: Standard view from Malibu Road looking north-east towards the Project Site. Standard view was chosen from this location because only parts of the Project are visible from Malibu Road, and this location appeared to show the largest portion of the Project. Expansive ocean views, or views other than existing roadway and structures were not available from this location.
View 13: Standard view from Bluffs Park (Santa Monica Mountains Conservancy) looking east towards the Project Site. Standard view was chosen from this location because the Project was contained in this view.

View 14: Panorama view from adjacent baseball outfield looking east towards the Project Site. Panorama view was chosen from this location because both the Project and expansive ocean views were available from this location and approximates the view one would have standing in center field of the existing baseball field at Bluffs Park

Model

A computer 3-D model of the Project was built using plans (including a topographic plan) in CAD format and sketches provided by the Owner’s architect, Landry Design Group, Owner’s landscape architect, Valleycrest Design Group and Owner’s civil engineer, Psomas. The model was created in 3D Studio Max, an industry standard, and vegetation models were created in either OnyxTree or stock models provided by Evermotion Arch Model libraries. Using topographical information, both existing and proposed, provided by Psomas, a 3D terrain was created. Using 3D Studio Max the CAD drawings, the Project structures, roadways, curbing, fencing, and other details were placed, lofted and otherwise turned into dimensionally accurate detailed 3D models. These were placed upon the 3D terrain and textured, or painted to match proposed materials, such as stucco, stone work, glass, etc.

Landscaping was created by either creating tree models or using stock models of species contained in the landscape plan. These were textured and placed in the model according to the landscape plan. This model included proposed colors, materials, and plantings as appropriate and supplied by Owner’s design team. While this is not a finalized, approved design, Consultant has been advised that the plans provided to him were the most recent plans filed with the City and are the plans for which the Owner has sought approval.

The model was created to provide an illustrative view of the intended scope, and style of the final Project. Plant and tree models were matched with the proposed landscape plans whenever possible, but where exact matches were not possible, plants and tree models with similar scale and form were selected. All efforts were made to use the most recent, best available information to provide an accurate example of the type of development and landscaping proposed for the Project.

Once photographs were taken, and the model was built, a series of virtual cameras were created within 3D Studio Max to match all the key elements of the physical cameras, such as location, elevation, bearing, lens field-of-view, and aspect ratio. Images were created of the model with these virtual cameras and the resulting views of the model were blended with the existing photographs to provide illustrative views of the Project after completion with mature landscaping in the visual simulations. The accuracy of the simulations is based on the accuracy of the plans, topography, and matching the camera’s location, elevation, bearing and azimuth, as well as focal length, field-of-view and aspect ratio. The presence of story poles on the Project Site provided
a confirmation of the accuracy of all the elements in the simulation. The story poles in the photographs verified that the size, scale and orientation of the proposed buildings were accurately depicted in the visual simulations.

**Conclusion**

Subject to the accuracy of the plans and other information provided to me by the Owner and Owner’s other consultants, it is my professional opinion that the visual simulations annexed to this report were prepared in a manner consistent with accepted standards and accurately represent how the Project with mature landscaping would look when viewed by human observer from the fourteen locations indicated in Appendix B.

The undersigned consents to the inclusion of the visual simulations and this report in the EIR for the Project.

________________________________________

Scott A. Johnson

Dated: January 9, 2013
BIOGRAPHY

Scott A. Johnson has more than eight years of experience in creating images for visual impact analysis, shade/shadow projections, solar access, and informational graphics. Scott has produced imagery for use in pre-visualization studies, constraints analysis, CEQA aesthetic analysis, and shade/shadow studies for a variety of private sector developers, legal teams, architects, and public agencies of all sizes. He has created a range of simulation products, from simple mass models to visualize the regulatory envelope, to multi-viewpoint, fully rendered photo-real composites as well as shade/shadow and solar access diagrams.

Project Experience

- Ascension Heights Subdivision Project (EIR)
- Belvedere-Tiburon Library Expansion Project (EIR)
- Beverly Hilton (Presentation, Peer Review)
- Big Wave Wellness Center & Office Park (EIR)
- Bradley Landfill and Recycling Center Master Plan (EIR)
- Century Plaza Mixed-Use Development (EIR)
- Deer Creek Plaza (EIR)
- Dutra (EIR, Peer Review)
- Laguna Beach Village Entrance (EIR)
- Mammoth Crossing (EIR)
- Millennium Hollywood Project (EIR)
- NBC Universal Evolution Plan (EIR)
- Ponte Vista (EIR)
- Ponte Vista/Bisno Project (EIR)
- Sierra Star Master Plan (EIR, Peer Review)
- Snowcreek VIII (EIR)
- 10000 Santa Monica (Presentation)
- Tehachapi Walmart (EIR)
- The Prospects Project (EIR)
- Travelodge Hotel Project (Presentation & EIR)
- Verdugo Hills Golf Course Residential Development (EIR)
<table>
<thead>
<tr>
<th>View</th>
<th>Date</th>
<th>Time</th>
<th>Size</th>
<th>Exposure</th>
<th>Shutter Speed</th>
<th>ISO</th>
<th>Lens</th>
<th>35mm Equiv</th>
<th>FOV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>14-Aug</td>
<td>11:12</td>
<td>4032X3024</td>
<td>11</td>
<td>500</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>1B</td>
<td>14-Aug</td>
<td>11:12</td>
<td>4032X3024</td>
<td>11</td>
<td>500</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>1C</td>
<td>14-Aug</td>
<td>11:12</td>
<td>4032X3024</td>
<td>10</td>
<td>400</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>1D</td>
<td>14-Aug</td>
<td>11:13</td>
<td>4032X3024</td>
<td>6.3</td>
<td>1000</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>2</td>
<td>14-Aug</td>
<td>11:20</td>
<td>4032X3024</td>
<td>10</td>
<td>400</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>3</td>
<td>14-Aug</td>
<td>11:28</td>
<td>4032X3024</td>
<td>10</td>
<td>400</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>4</td>
<td>14-Aug</td>
<td>11:54</td>
<td>4032X3024</td>
<td>10</td>
<td>500</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>5</td>
<td>14-Aug</td>
<td>12:08</td>
<td>4032X3024</td>
<td>10</td>
<td>400</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>6</td>
<td>14-Aug</td>
<td>13:10</td>
<td>4032X3024</td>
<td>6.3</td>
<td>1000</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>7</td>
<td>14-Aug</td>
<td>13:28</td>
<td>4032X3024</td>
<td>10</td>
<td>500</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>8</td>
<td>14-Aug</td>
<td>14:00</td>
<td>4032X3024</td>
<td>10</td>
<td>400</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>9</td>
<td>14-Aug</td>
<td>14:23</td>
<td>4032X3024</td>
<td>10</td>
<td>500</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>10A</td>
<td>14-Aug</td>
<td>14:29</td>
<td>4032X3024</td>
<td>6.3</td>
<td>1000</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>10B</td>
<td>14-Aug</td>
<td>14:30</td>
<td>4032X3024</td>
<td>6.3</td>
<td>1000</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>10C</td>
<td>14-Aug</td>
<td>14:30</td>
<td>4032X3024</td>
<td>10</td>
<td>400</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>11A</td>
<td>14-Aug</td>
<td>14:40</td>
<td>4032X3024</td>
<td>5.6</td>
<td>800</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>11B</td>
<td>14-Aug</td>
<td>14:40</td>
<td>4032X3024</td>
<td>5.6</td>
<td>800</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>12</td>
<td>14-Aug</td>
<td>15:06</td>
<td>4032X3024</td>
<td>9</td>
<td>400</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>13</td>
<td>5-Jan</td>
<td>11:36</td>
<td>4032X3024</td>
<td>5.6</td>
<td>800</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>14A</td>
<td>14-Aug</td>
<td>15:35</td>
<td>4032X3024</td>
<td>10</td>
<td>400</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>14B</td>
<td>14-Aug</td>
<td>15:36</td>
<td>4032X3024</td>
<td>6.3</td>
<td>1000</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
<tr>
<td>14C</td>
<td>14-Aug</td>
<td>15:36</td>
<td>4032X3024</td>
<td>6.3</td>
<td>1000</td>
<td>200</td>
<td>Panasonic 20mm</td>
<td>40</td>
<td>46.78</td>
</tr>
</tbody>
</table>