



Trimble SketchUp

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EXECUTIVE SUMMARY

Objective

To prepare a concept design for an upscale house using Trimble SketchUp. The minimum requirements include: five furnished rooms with coordinated style, texture, and color. A finished outdoor lawn and exterior patio, pool, jacuzzi, etc. Sidewalk and driveway along with a luxury car.

Goals

To meet all necessary requirements while creating an innovative, appropriate, and unique design that will please the employer.

Solution

A luxury upscale semi modern-contemporary home that includes seven rooms, outdoor patio, and garden. The interior of the house contains a garage, living room, dining room, recreational room, two bathrooms, theater, and two jacuzzis. The exterior includes a putting green, garden, barbecue, gazebo, and outdoor dining area. A link to the 3D Trimble SketchUp model can be found on my personal webpage at <http://www.personal.psu.edu/aph5364>

Project Outline



Floor Plan

This is an aerial view of the home. The exterior of the home includes a stone driveway, sidewalk, and patio. Additionally on the left is a garden and fountain surrounded by a circular walkway. It includes a mailbox that can be seen in the front view image of the home (below). Additionally there are three birch trees along the front entrance pathway along with four violet lily bushes. The entrance also includes a lamppost. In the back there is a 3 hole putting green along with an cherry blossom tree in the bottom left. There is also an outdoor dining table along with barbecue and gazebo better seen in images below. The interior garage has four large glass windows, craftsman toolbox, two glass shelving areas and a Maserati.

The next two rooms adjoined to the garage are a bathroom and theater. The bathroom has one sink, toilet, and walk-in shower. The theater includes a large screen LCD television along with hot tub, and a full surround sound stereo system. The biggest room includes a kitchen, dining area, recreational area, and living room portion. The kitchen includes an island with a single sink along with cabinetry along the wall. It also comes furnished with a stainless steel fridge. The dining area accommodates three people and includes a glass tabletop. The recreational area holds a ping-pong table and billiards table. The living room portion includes a white leather sofa, coffee table and large screen LCD television. There is also a bookshelf along with a Salvador Dali painting next to the front double door entrance. Three large arched windows let in lots of natural light and are connected to the outdoor patio. The following three rooms to the left make the master bedroom. A modern low laying bed along with television and closet space are in the bottom room. The top two rooms are a waterfall walk-in shower along with a double sink and toilet. The room to the right holds a surround sound stereo system along with a large jacuzzi.



Front View

This is the front view of the home. As you can see, there is a stone mailbox. This view also shows the two car cherry wood garage door. The stone siding of the house can also be seen along with better images of the driveway, sidewalk, lamppost, trees, and bushes.



Backside View

This is the backside view of the home. The gazebo can be seen in this view and holds 8 people. Additionally the stone barbecue along with outdoor table can be seen. On the left is the putting green and next to it is the cherry blossom tree (seen on cover page). The three arched windows can also be seen along with backside entrance. The Dali painting that covers the front entrance wall can also be seen.

BUDGET

Cost Breakdown

The home will cost just under half a million dollars. The construction cost which makes up 65% of the cost includes permitting fees, water and sewer inspection, excavation, foundation, and backfill, electrical wiring, siding, roofing, and all other necessary components. The total cost does not include all the furnishing. The total cost of furniture and appliances will add a sum total of \$254,698. Thus rounding the house at around \$750,000.

Description	Quantity	Unit Price	Cost
Lot Cost	1	\$ 82,749	\$ 82,749
Total Construction Cost	1	\$ 326,871	\$ 326,871
Financing Cost	1	\$ 8,925	\$ 8,925
Overhead and General Expenses	1	\$ 25,624	\$ 25,624
Marketing Cost	3	\$ 1,983	\$ 5,949
Sales Commission	3	\$ 4,631	\$ 13,893
Profit	1	\$ 35,951	\$ 35,951
Total			\$ 499,962