**Mulch**
Small branches, wood chips on bottom. Leaves, weeds, etc. in middle. Most attractive, uniform mulch material on top. No more than 4” in high fire area.

**Compost**
Compost, manure, or fertilizer under mulch prevents mulch from robbing nutrients from the soil. Nutrients are robbed from the compost instead, then time-released to the soil.

**Root Crown**
Above height of basin wall

**Original grade**

**Planting shelf**
Root ball sits directly on undisturbed soil to avoid settling. Note that most of rootball is above original grade.

**Root extent**

**Drip line**

**Root crown island**
Tree is planted high so graft union is well above soil level after settling, and so heavy rainfall infiltration or greywater peak use does not rot root crown. Must water frequently with dripper right on root ball until roots reach down into basin. Large mound of soil helps prevent drying of rootball. Once established, thin or zero mulch around root crown.

**Basin and walls**
Twice the final basin depth desired. For rainwater must have reinforced spillway 4” below wall top. Note that water capacity stops at spill point.

**Dirt from basin forms walls. Rounded edges are more durable.**

**Flat floored basin** — best for even water infiltration. Rounded edge walls at angle of repose or less.

**Deep rooting hole(s)**
Excavated and backfilled with soil/compost mix for fruit trees, plain native soil for natives; leads roots down deep.

**Basin width** = several times diameter of dripline. Each year or two basin is re-formed bigger to accommodate growth.

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Image from Create an Oasis with Greywater, © 2014 Art Ludwig