

# Instant Site Grader

## Examples: Grade Terrain around Edge Loop

### Example 1: Merge site grades around terraced building

(If you're not using the pro version, the Offset Distance can not exceed **3 feet** (91 cm))

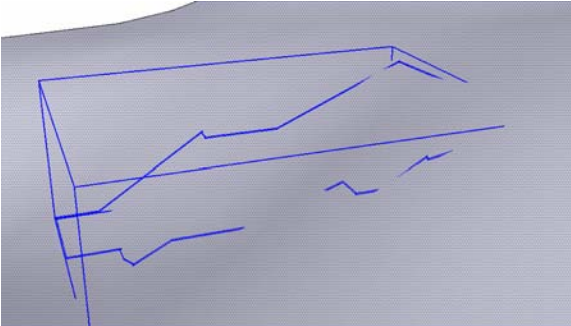
1. Start with a building component and a terrain mesh. Place the building in the terrain:



2. Create a new group. Within the group, draw a closed loop of lines around the building where you want the terrain to align:



3. Select the group plus the terrain. (For clarity, I hid the building component.)

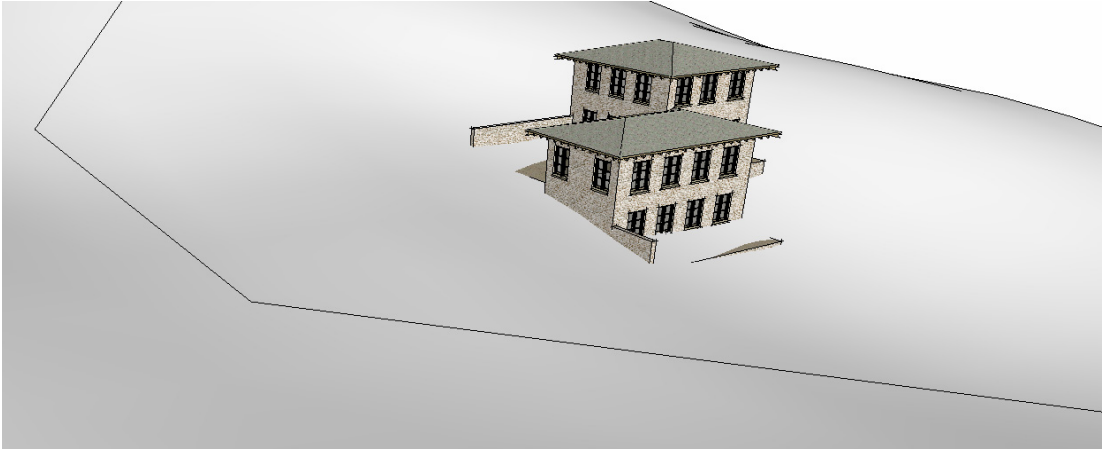


4. Grade the terrain: Chose "Plugins/ Instant Site Grader Pro" and enter **15 feet** (4.6m) for Offset Distance. Choose **OK**.

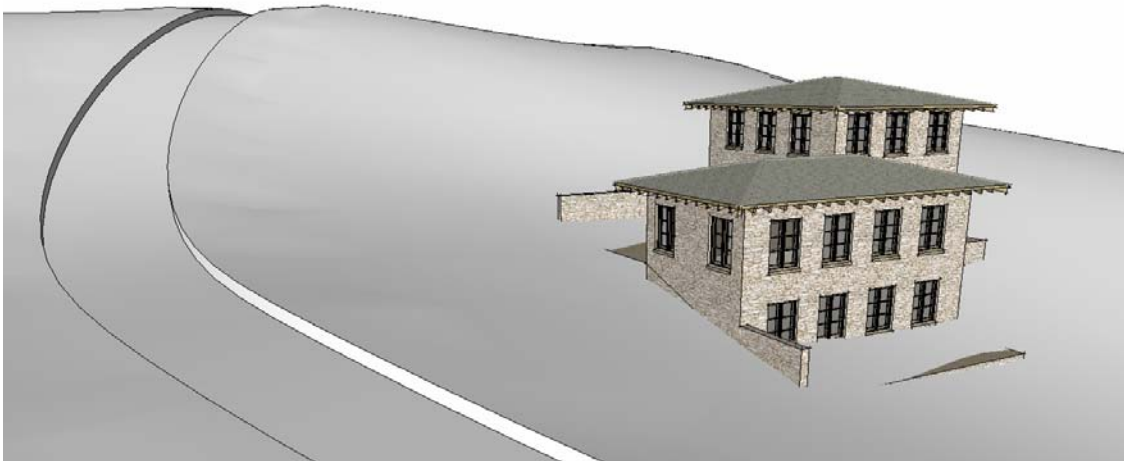


## Example 2: Make driveway connection between building and road.

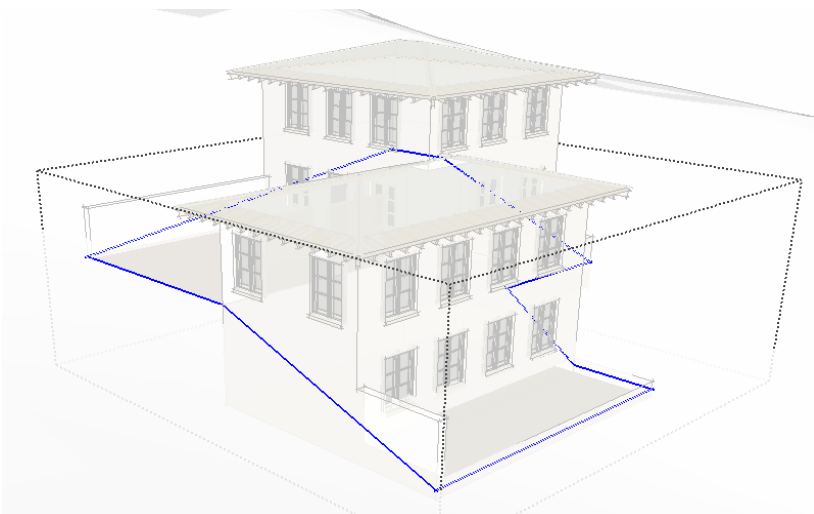
1. Start with a building component; and a terrain mesh with a road. Place the building in the terrain.



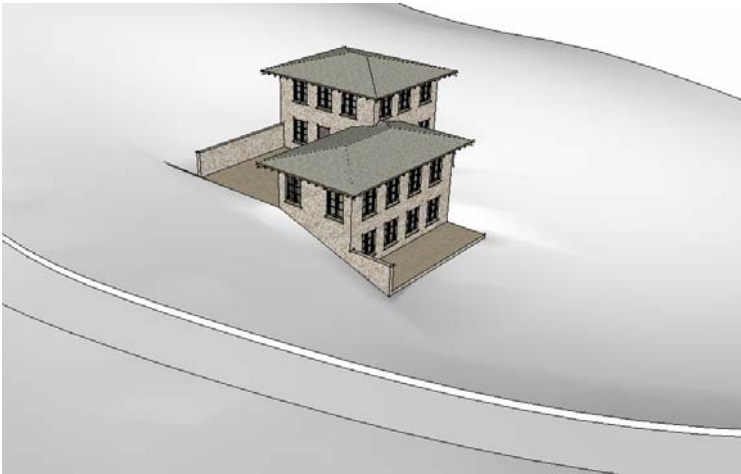
2. Here I created the road using *Instant Road* “Make Road from CenterLine Edge(s)”



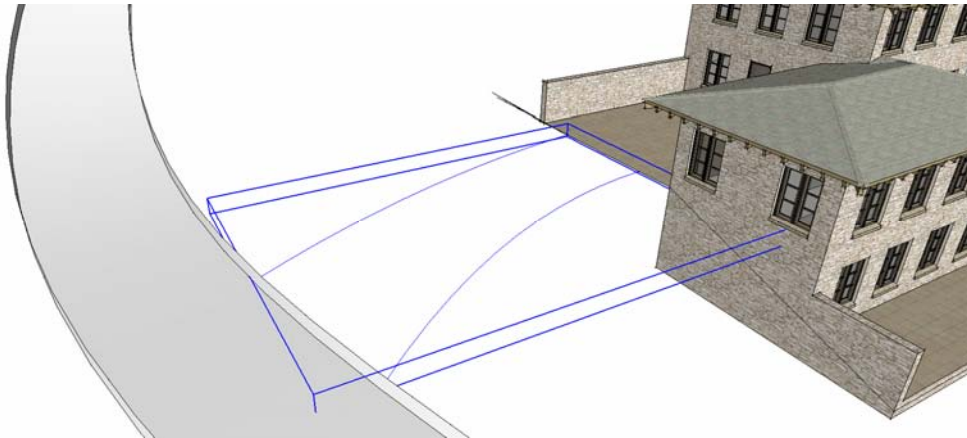
3. **Grade around Building:** As in example 1, create a new group and, within the group, draw a closed loop of lines where you want the terrain to align with the edge of the building:



4. Select the group plus the terrain and Chose “**Plugins/ Instant Site Grader Pro**” and enter **7 feet (2m)** for *Offset Distance*. Choose **OK**. The site is now graded around the building:



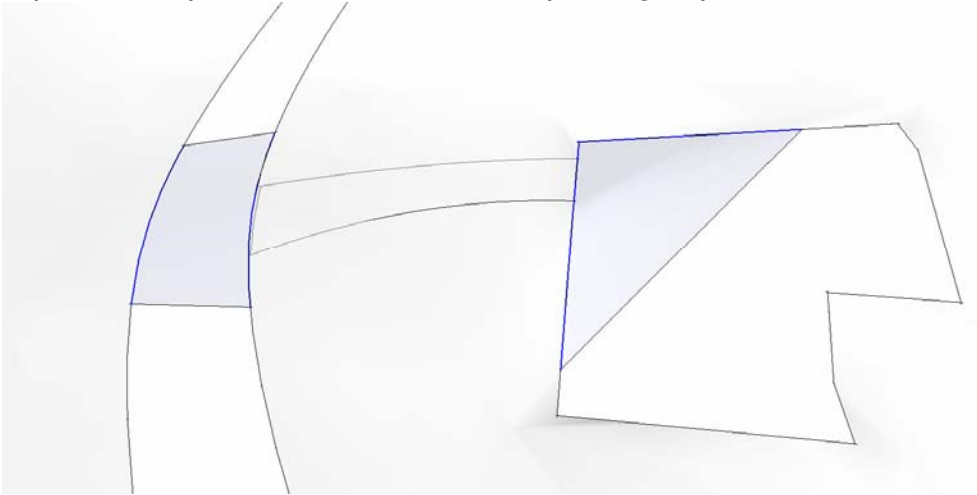
5. **Make Driveway Outline:** Make separate layers for the road and building and terrain. Turn OFF the terrain layer. Create a new group and draw the driveway connection outline between the road and the building. Select the group and choose “**Edit / Copy**” to make a copy on the clipboard. It will be used to make the driveway surface later.



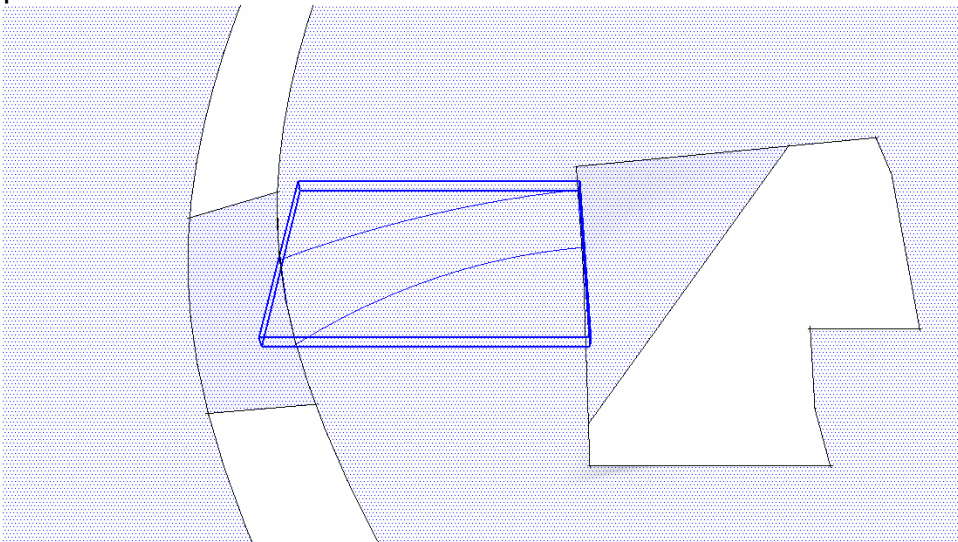
6. Turn ON the terrain layer and turn OFF the building and road layers. Here’s the point where we grade the terrain around the driveway outline. But there’s a problem: **Instant Site Grader** requires that the terrain be larger than the outline plus the offset distance, yet there are holes where the driveway abuts the road and the building:



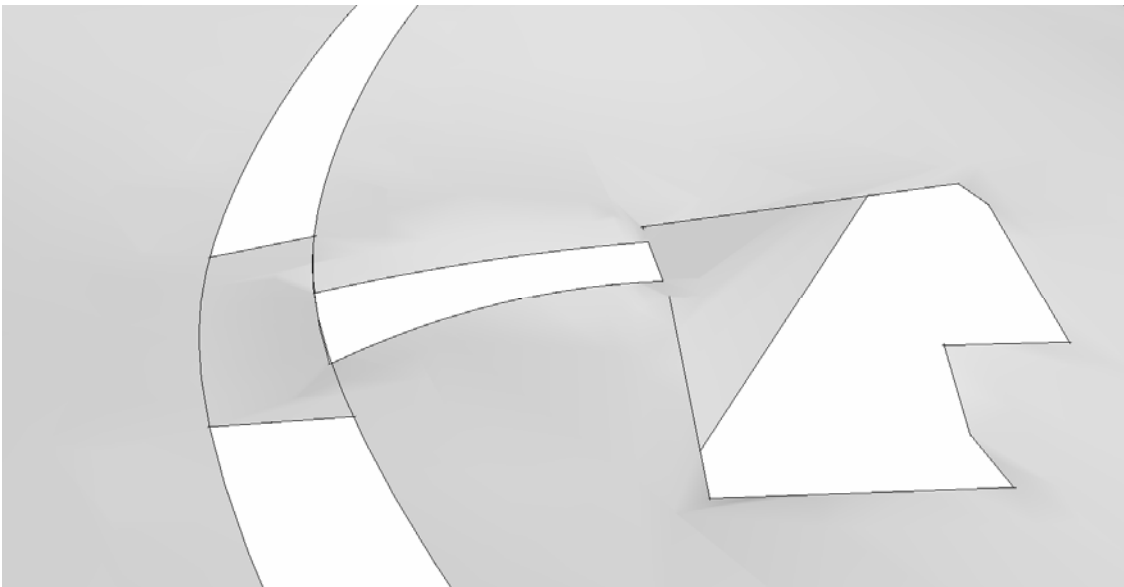
7. **Make Patches:** The solution is to make temporary “patches” to extend the terrain. 1 window selected both sides of the section of road shown and chose “**Draw / Sandbox / From Contours**” to make the one patch, and window selected 2 sides of the house outline and repeated. Explode both of these new patch groups.



8. **Grade the terrain:** Select the driveway connection outline group plus the terrain plus the 2 patch areas.

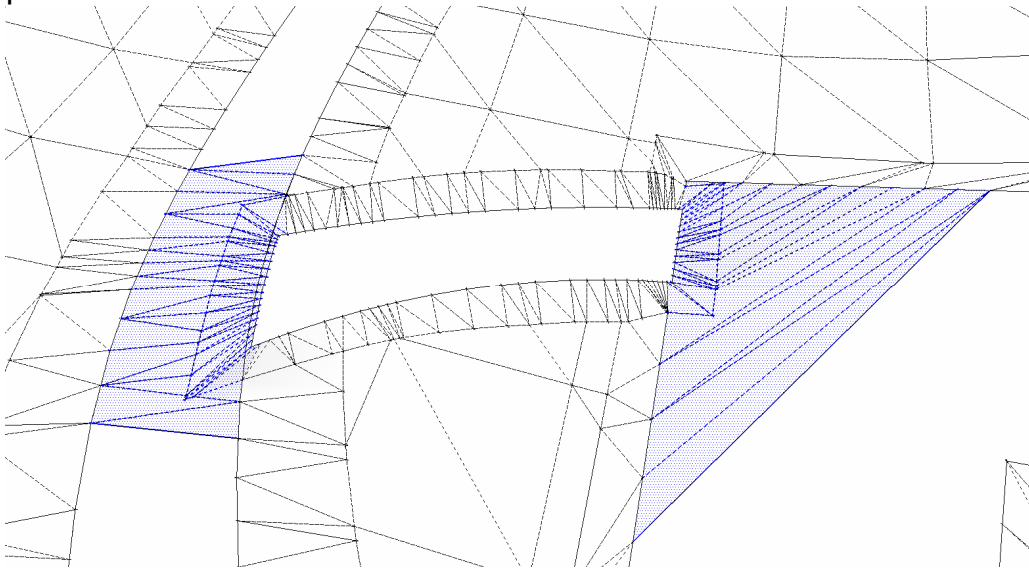


9. Chose “**Plugins/ Instant Site Grader**” and enter **5 feet** (1.5m). Choose **OK**.

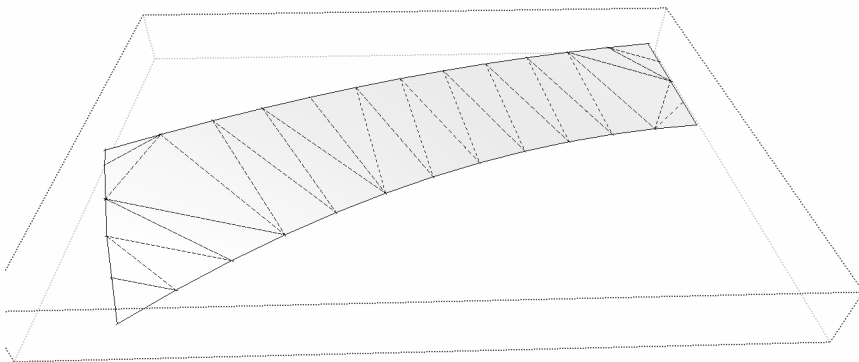




10. Erase the Temporary patches: Choose “View / Hidden Geometry”. Erase the temporary patches as shown below in blue:



11. Draw the Driveway surface: Choose “Edit / Paste in Place” to paste from the clipboard a new instance of the driveway connection outline group we copied in step 5. Double click the group, select the edges and choose “Draw / Sandbox / From Contours”:

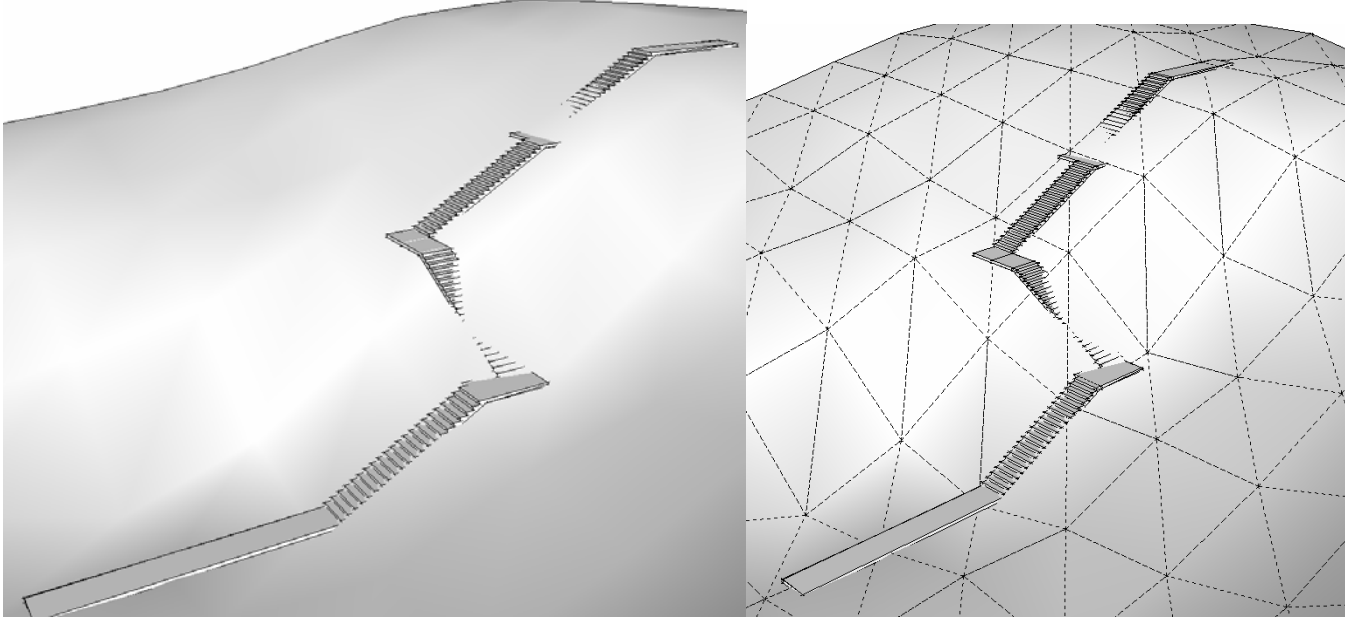


12. We’re done with the geometry. Turn back on the building and road layers, add materials and some entourage:

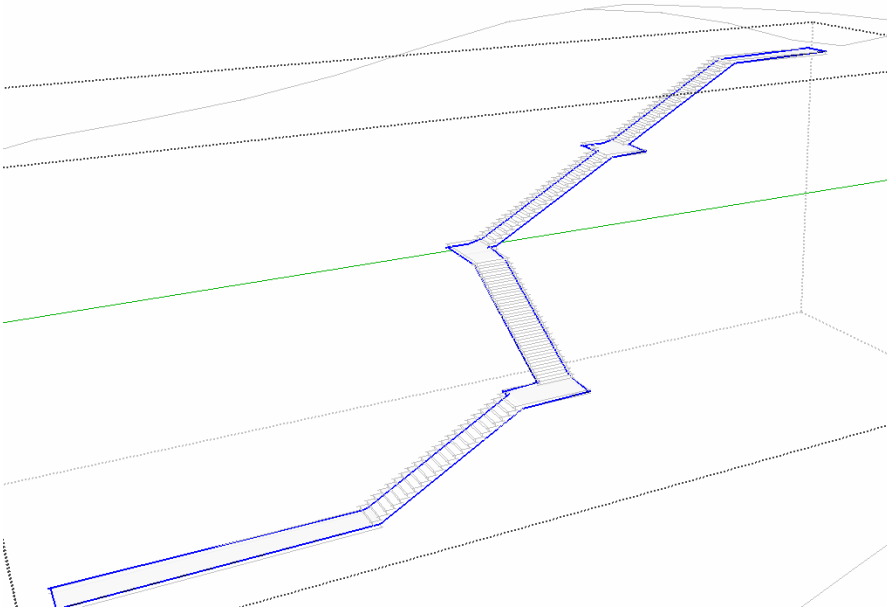


### Example 3: Grade terrain around site stairway.

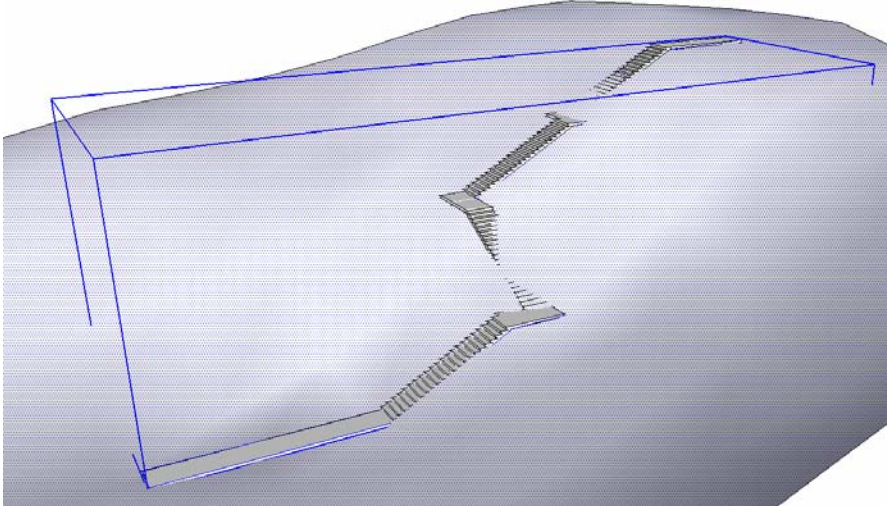
1. Start with a site stair component or group and a terrain mesh.



2. Draw a closed loop of edges around the stair and enclose the edges in a group.

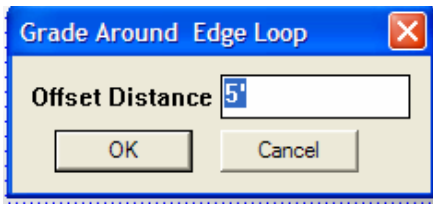


3. Select the group plus the terrain.





4. Chose “Plugins/ Instant Site Grader Pro” and enter 5 feet (1.5m) for *Offset Distance*.



5. Choose **OK**.

