



This document outlines the minimum requirements for grading plans to be submitted as part of a Building Permit application. Hand-drawn sketches or photographs will not be accepted.

### Lot Grading Plan Requirements

Grading plans shall include and indicate, but not be limited to the following:

1. metric drawing, drawn to an appropriate scale such as 1:150, 1:200, 1:250, with a north arrow;
2. municipal address (street name and number), legal description (lot number and registered plan) with sufficient detail to describe the location;
3. all property lines shall be shown on the plan;
4. the street name shall be clearly labelled; if the property is on a corner, label both street names;
5. all lots and blocks within the subdivision, numbered in accordance with the plan proposed for registration;
6. elevations to be referenced to a City geodetic datum (City benchmark);
7. existing contours at maximum 0.5m intervals within the subdivision or subject property and sufficiently extended beyond the subdivision or subject property to demonstrate the existing drainage patterns;
8. driveway, patios, and amenity areas; the minimum driveway grade shall be 1.0 % and the maximum driveway grade shall be 8.0 %;
9. water service box locations;
10. location of foundation drain sump pump discharge points. Sump pump discharge shall be directed to a rear or side yard swale to promote infiltration and shall not be placed within the City's ditch system road allowance;
11. location of downspout leader discharge points. Downspouts shall be directed to splash pads a minimum of 0.6m away from the building edge and conveyed to grassed or garden areas to promote infiltration. Directly discharging to the City's ditch system road allowance is not permitted;
12. exterior opening to habitable building shall not be permitted below a minimum opening elevation equal to 220.5m Canadian Geodetic Survey datum within the Flood Hazard zones as per the City of Orillia Zoning By-law 2014-44;
13. elevations at existing trees with diameter at breast height (DBH), structures, watercourses, etc.;
14. centreline elevations of proposed and existing roads at 20m intervals;
15. proposed elevations at all corners of the existing and proposed building envelope with distances to property lines;
16. existing and proposed building elevations for the finished floor, top of foundation wall, top of slabs on grade, underside of footing, and garage floor;
17. proposed elevations at the corners of each lot and block and intermediate points of grade change;
18. proposed elevations at side yard highpoints if applicable;
19. proposed 0.5m contours for grading within large blocks and parks;
20. proposed grades and longitudinal slope for overland flow routes;
21. lot fabric of subject lands including lot, block and easement description;
22. physical structures such as fencing, retaining walls, etc.;
23. arrows indicating the direction of the surface water run-off from all lots;
24. all swales, along with percent grade and the invert elevation of the swale at regular intervals;
25. all swales to be topsoiled (minimum 100mm) and sodded;
26. all rear yard catch basins including the rim elevation of the catch basin and the invert elevation of the outlet pipe;
27. all terracing required with the intermediate grades specified;

28. all rear lot surfaces shall be constructed to a maximum lot grade of 12 % for 6m behind the house, remaining are to have slopes of 3:1 maximum;
29. the lot grading plan shall make note of the City Standard Drawings applicable to the grading of the development. The City reserves the right to refuse any house type, which is incompatible with the lot grading design, specified for a lot;
30. a 0.6m strip shall be left undisturbed along the boundary of the subdivision next to adjacent properties unless grading is required to eliminate drainage problems on adjacent properties. Such grading must be stipulated on the approved Lot Grading Plan.
31. sediment and erosion control measures deemed necessary for the subdivision or subject property shall be indicated on the grading plan and shall be implemented and maintained by the owner;
32. lot drainage is to be self-contained within the subdivision limits, where possible;
33. proposed locations for building envelopes and envelopes for private sewage disposal where required;
34. all proposed easements for registration;
35. heights of proposed retaining walls, fences, etc.; all retaining walls shall be identified with the top and bottom of retaining wall elevations and material and require a minimum setback of 0.5 m from the property line;
36. all retaining walls more than 1.2m to be engineered by a P.Eng.

[Click here](#) for the full version of the City's Engineering Design Criteria.