

LOT GRADING AND DRAINAGE INFORMATION BOOK



WHAT IS LOT GRADING?

Lot grading is the process of shaping and levelling the land around a building to ensure proper drainage of surface water. The primary goal is to direct water away from structures, such as houses or buildings, to prevent potential issues like basement flooding, foundation damage, or soil erosion. **This process aligns with Beaver County's Surface Drainage Bylaw 22-1120.**

LOT GRADING: A TWO-STAGE PROCESS

STAGE 1 – PRE-CONSTRUCTION PLAN

At the time of your development permit application, the development authority will assess whether a lot grading and drainage plan is required as part of your application.

If the development authority requests the plan, it is the responsibility of the landowner/applicant to contact a qualified Alberta land surveyor. The surveyor will prepare a detailed lot grading and drainage plan that demonstrates the post-construction lot grade, including natural features and any mitigating factors like swales or drainage ditches. This plan will show how surface water is directed away from structures, foundations, adjacent properties, and protected areas, such as wetlands.

Once you receive the plan, submit it to the development officer for approval. The development authority may require modifications to ensure proper water drainage to prevent potential issues such as foundation damage, soil erosion, impacts on adjacent properties or wetlands. Once the plan is approved, your application review process will begin.

STAGE 2 – POST-CONSTRUCTION PLAN

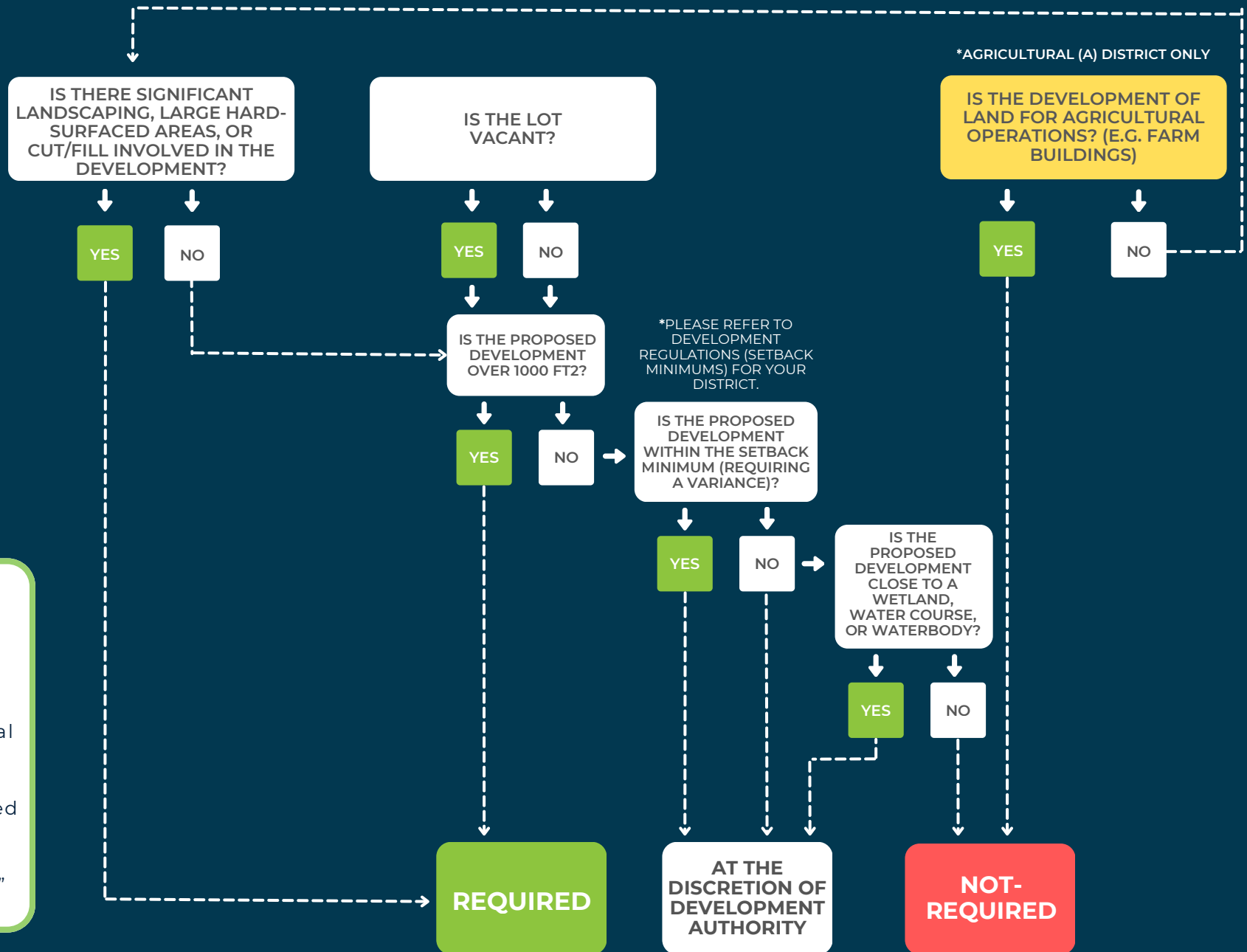
After project completion (typically within one year), contact the same surveyor who prepared your initial plan to conduct a final grade inspection. The surveyor will prepare a report confirming that the surface grades were designed and constructed according to the approved lot grading and drainage plan. Submit the final grading acceptance letter or certificate to the development authority once received. This final step ensures compliance with the lot grading and drainage requirements, confirming that the project meets all drainage and surface water management standards.

GET STARTED TODAY!

The Beaver County Planning & Development Department are pleased to explain the various regulations and how they apply to your project. Please feel free to contact us at anytime.



IS A LOT GRADING & DRAINAGE PLAN REQUIRED WITH MY DEVELOPMENT PERMIT?



INCLUDES:

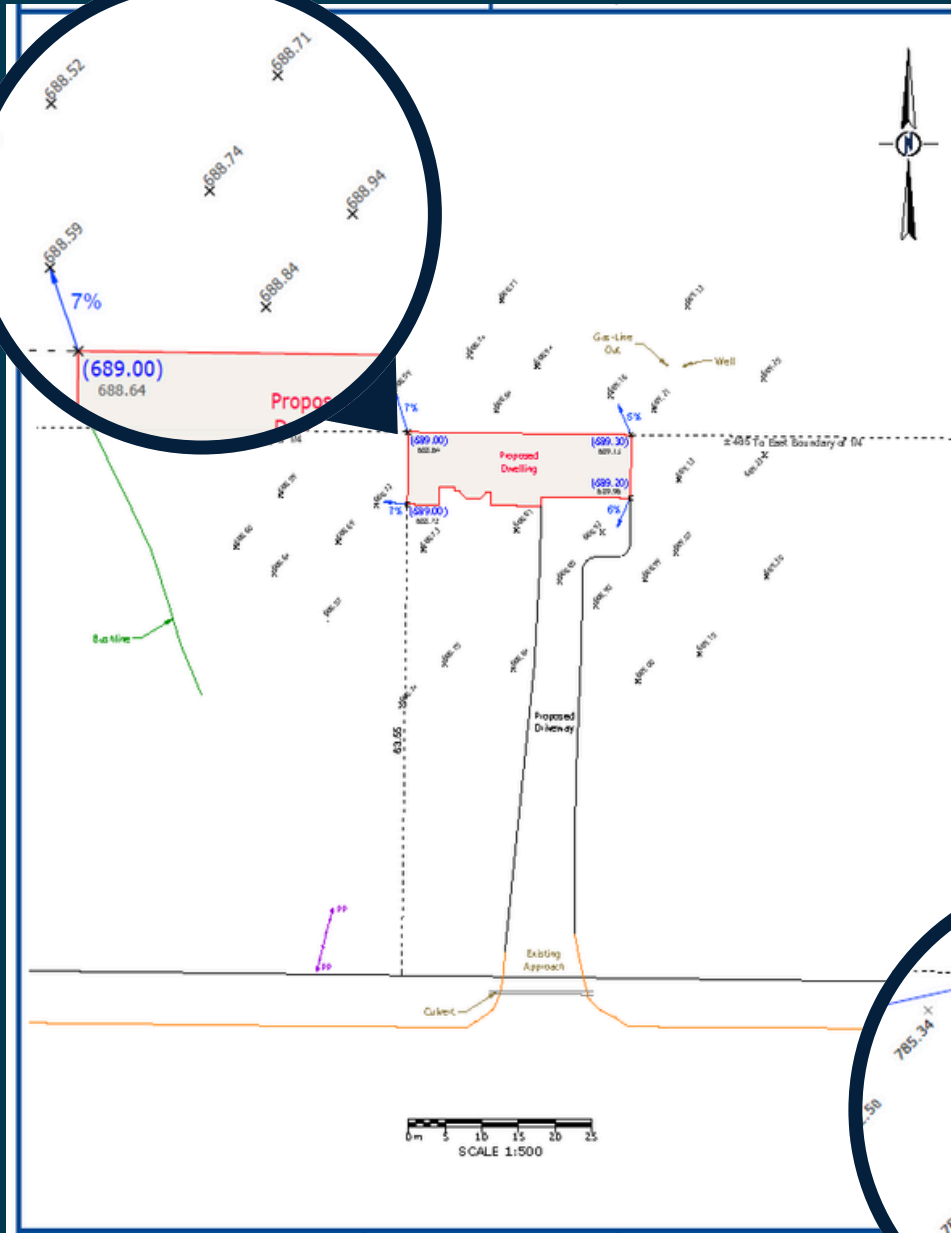
Dwellings (Single Detached, Semi-Detached, Accessory Unit, Manufactured/Mobile Homes), Accessory Buildings, Commercial/Industrial Buildings

DOES NOT INCLUDE:

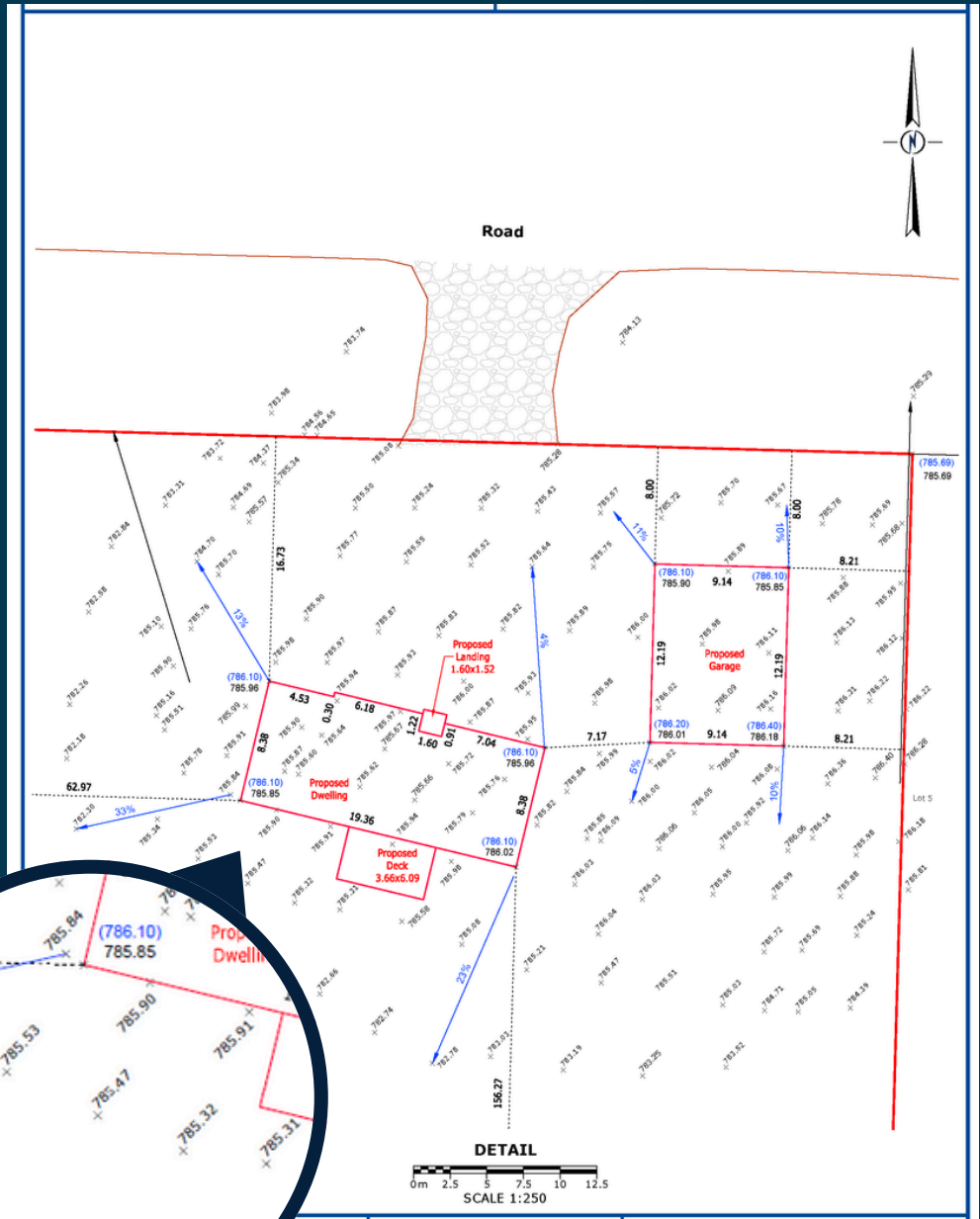
Development Outlined in Section 3.2 "Development Not Requiring A Development Permit"

EXAMPLES OF A LOT GRADING & DRAINAGE PLAN

Agricultural (A)



Country Residential (CR)



WHY IS LOT GRADING IMPORTANT?

Property Damage Prevention: Positive drainage pushes surface water runoff away from residential structures, and adjacent properties, minimizing the risk of water damage. This helps to preserve the integrity of building foundations, sidewalks, driveways, and other structures!

Cost Savings: Investing in proper grading upfront can lead to significant cost savings over time by reducing the need for costly repairs and maintenance.

Compliance with Regulations: Most municipalities have lot grading and drainage regulations in place to prevent drainage problems and protect water quality. Proper grading ensures compliance with these regulations and helps property owners avoid neighbour disputes, fines, and legal issues.

Improved Safety: Proper grading and drainage enhances safety for landowners and visitors by eliminating slippery surfaces caused by water pooling in low lying areas. Taking a proactive approach will also help prevent future safety issues occurring due to structural damage, flooding, etc.

Supports Vegetation and Landscaping : Proper grading helps to manage moisture levels in the soil, promoting healthy vegetation growth. Positive drainage supports the establishment and maintenance of gardens, trees, and lawns. Additionally, landscaping will become more aesthetically pleasing due to the prevention of stagnant water and waterlogging.

Reduced Soil Erosion: There is less possibility of detrimental soil erosion when drainage plans are clearly mapped out. As such, soil quality will improve and sedimentation in stormwater systems and natural waterways will be minimized.

Groundwater Recharge: Proper lot grading and drainage can facilitate infiltration of rainwater into the ground. This helps to recharge groundwater supplies, maintaining healthy aquifers!

Improved Water Quality: By directing surface water runoff away from paved surfaces, proper grading can reduce the amount of pollutants making their way into stormwater systems and natural waterways.

Flood Prevention: Lot grading plays a vital role in managing stormwater runoff during heavy rainfall events, reducing the risk of localized flooding. Positive drainage ensures that water flows away from vulnerable areas and towards appropriate drainage systems.

Climate Resilience: As extreme weather events become more frequent and intense due to climate change, proper grading and effective drainage are essential for strengthening community resilience. Well-planned drainage systems help manage heavy rainfall, minimizing the risk of flooding and storm damage.



These images show examples of proper lot grading.

Image credit to the City of Beaumont.



ALBERTA LAND SURVEYORS THAT PROVIDE PLANS FOR LOT GRADING AND DRAINAGE IN BEAVER COUNTY

WHO USES THE LOT GRADING AND DRAINAGE PLAN?

CONTACT US

Aureum Construction Services

(Allan McKay)
587-800-3724
allan.mckay@aureumcs.ca

CORE Geomatics

780-886-0078 or 780-336-5308
connie.petersen@coregeomatics.com
jeff.oracheski@coregeomatics.com

Geodetic Surveys

780-465-3389
hello@geodeticsurveys.com

GeoVerra

780-481-3399
info@geoverra.com

Gillmore Surveys

780-465-0096
gillmore100@gmail.com

Ivo Nedev

780-232-4880
office@ivosurveys.ca

Milestone Surveys

Moe Mouallem, ALS, CLS, P.Eng.
587-338-0791
mmouallem@mesl.ca

Quantum Geomatics

780-242-2012
rdavid@qgeo.ca

Homeowners and Property Owners

To ensure water does not pool around their home or cause damage to foundations, basements, or landscaping.

Developers and Builders

To comply with municipal regulations during the construction of new homes, subdivisions, or commercial properties and ensure proper water drainage.

Engineers and Surveyors

To design and evaluate the grading and drainage plan, ensuring it meets local codes and supports efficient water runoff.

Municipalities and Local Governments

To review and approve grading plans during development permit applications or building inspections.

Landscapers and Contractors

To implement the grading plan during construction and ensure it aligns with the approved design.

Phone: 780-663-3730

Toll Free: 1-866-663-1333

Email:

planning@munplan.ab.ca

Business Hours:

Monday - Friday
8:30 a.m. - 4:30 p.m.

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Ryley AB T0B 4A0

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