

Utilities electric • stormwater • wastewater • water 700 Wood St. PO Box 580 Fort Collins, CO 80522

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## **Drainage Information Required for Residential Permit Applications**

If your project adds more than 350 square feet of new hard surface area or substantially changes the site grading on your lot, the following additional information must be submitted with your permit application. Hard surfaces are roofs, driveways, and sidewalks or any surface that does not allow water to penetrate into the soil.

Small projects: 350 square feet to 1,000 square feet of new hard surface.

- ✓ Using the site plan required by the building department, show drainage arrows indicating the direction the water flows away from the building and along all property lines.
- ✓ Show the location of the existing and proposed downspouts with flow arrows pointing in the direction the downspouts will be aimed.
- ✓ Show any other information that may affect the drainage such as sidewalks, driveways, curbs, gutters, retaining walls, and window well locations.
- $\checkmark$  See the attached example.

#### **Examples of Small Projects**

- A shed that will be between 350 and 1,000 sq. ft.
- Small addition to an existing structure that is between 350 and 1000 sq. ft.
- A permanent deck or patio roof that is between 350 and 1000 sq. ft.

**Exception**: Drainage in older parts of town, **particularly alleys in the Old Town Area** can be problematic, causing damage to downstream and neighboring properties. As part of any construction adding more than 350 sq. ft. of impervious area and draining to an alley or thru adjacent property, a drainage analysis will need to be completed by a Professional Civil Engineer addressing any additional drainage created by the project and showing how site drainage is conveyed to an adequate public facility without impacting downstream properties.

## Large Projects: Over 1000 square feet of new hard surface.

✓ A large project requires a drainage report and grading plan that complies with the City of Fort Collins Storm Drainage Design Criteria and Construction Standards including water quality treatment and water quantity detention requirements. This report and grading plan must be prepared by a Professional Engineer registered in Colorado.

(Over)



✓ A Professional Engineer must certify the site grading and drainage after the site grading is completed. This certification must be submitted **two weeks** prior to the time a Certificate of Occupancy is desired. The time is needed to schedule a site inspection by the Stormwater Certification Inspector. Contact the Utilities Development Review staff at <u>WaterUtilitiesEng@fcgov.com</u>.

**Exception:** The water quantity detention requirements can be waived if less than 5,000 square feet of hard surface is being added in the Old Town Drainage Basin OR if the final percentage of hard surfaces including one half the adjacent streets or alleys is equal to or less than the percentage used in the City's master drainage plan for your area of town. The area and percentage calculations do not need to be prepared by a Professional Engineer. The percentage used in the drainage master plan can be obtained from Stormwater Utility staff. If you have questions or want to discuss your project requirements, please contact the Utilities Development Review staff at WaterUtilitiesEng@fcgov.com.

### **Examples of Large Projects**

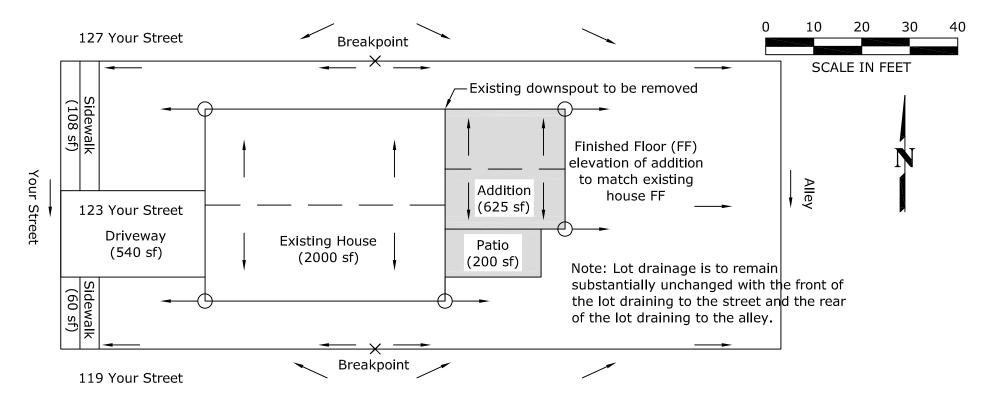
- A new house on a vacant lot in any older subdivision that does not have a drainage report or grading plan on file with the City.
- A new house or garage (in excess of 1,000 square feet) at the rear of a large lot.
- A large lot is split into two lots and a second structure is to be built on the new lot.
- A residential structure is added to a large lot for student housing around the CSU campus.
- A much larger home is proposed on a lot than is shown on the approved grading plan on file with the City. Especially if there will be easement encroachments.
- Landscaping berms or retaining walls are proposed to flatten yards or change the drainage patterns from the approved grading plan on file with the City.

If, during the review of the information submitted for either a small or large project, it is determined that the project is more complex and additional information is needed, applicants will be notified by telephone and/or in writing. Applicants may also contact the Building Department or the Utilities Development Review staff at <u>WaterUtilitiesEng@fcgov.com</u> to check the status of their application. A note concerning any additional requirements will have been entered into the City's building permit-tracking system.

These requirements do not apply to new residential structures in subdivisions that have an approved drainage and grading plan on file with the City, unless:

- ✓ The proposed grading is different than the approved plan such as when the proposed house is larger or located differently than shown on the grading plan,
- $\checkmark$  A yard is flattened, landscaped with earthen berms, or a retaining wall is proposed.

Please contact the Utilities Development Review staff at <u>WaterUtilitiesEng@fcgov.com</u> if you have any questions about drainage information that may be required for your permit application.



# **SAMPLE ONLY -- PLEASE USE YOUR SPECIFIC INFORMATION**

Grading Plan for 123 Your Street Building Permit # B1234567

- Contact Information
  - Name
  - Name

Address

Phone Number

Email Address

Existing Impervious Area:

House	2000 sf
Driveway	540 sf
Sidewalk	168 sf
New Impervious Area:	
Addition	625 sf
Concrete/Flagstone Patio	200 sf

Please include:

- All information listed to the left
- Arrows showing existing drainage
- Arrows showing proposed drainage Indicate any areas where drainage will be changing and provide written explanation if necessary. \*\*It is important to show that drainage will not cause additional runoff to adjacent properties.
- Breakpoints/high points
- Direction of flow on the roof
- Downspout locations and directions
- Area of new impervious area (ie. buildings/roofs, driveways, sidewalks, patios, etc. any area in which water cannot soak into the ground)
- Notes or arrows showing flow on surrounding lots, streets and alleys (How does the water get to the nearest stormwater inlet, ditch, river, pond or other outfall?)
- North arrow
- Scale (if drawn to scale)
- Addresses
- Elevation of the proposed addition
- \*\*The site plan provides a good base drawing to add the drainage arrows and other information and arrows/notes, etc. can be hand-drawn.