



GRADING & DRAINAGE REQUIREMENTS

Marshall Fire Rebuilding Resources

JUNE 1, 2022

This document may be updated as necessary



GRADING & DRAINAGE REQUIREMENTS

This document outlines general requirements for grading and drainage, along with important distinctions in meeting these requirements for neighborhoods affected by the Marshall Fire. Please review the [Superior Municipal Code Chapter 16](#) for more complete information. For additional Marshall Fire-specific information go to the Town of Superior's [Marshall Fire Building Resources](#) and [Marshall Fire Community Planning Effort](#) pages.

DID YOU KNOW?

Before construction can begin, a site must be graded to guide the surface water runoff away from the building(s) on the site. Grading and drainage plans demonstrate how runoff will be captured, redirected, and removed from the site, and can also influence how building heights are calculated. It is important that this aspect of site design is factored into rebuilding during the initial design stages to address the unique conditions of each site.

GENERAL REQUIREMENTS

A grading and drainage plan must be submitted with each building permit application. Demonstration of compliance is required for permit approval. Specific requirements and methodologies used to satisfy requirements will vary by neighborhood, as discussed below.



AREAS WITH APPROVED GRADING AND DRAINAGE PLANS

Many of the neighborhoods affected by Marshall Fire have grading and drainage plans that were approved prior to original development. Applications will be reviewed against these plans.




APPLICABLE NEIGHBORHOODS	REQUIREMENT / METHODOLOGY
Sagamore Rock Creek Ranch Downtown Superior The Ridge Coal Creek Crossing	Re-establish grading in a manner consistent with the original approval in order to minimize the impact of drainage onto surrounding properties and to ensure storm water flows to the intended regional detention facilities.

It is understood that changes to grading may occur due to the debris removal and rebuilding processes. Effectively, elevations above sea level are known for these areas and the Town has data within the approved plans to review applications against. This is generally referred to as natural or existing grades. If a property reflected grades of 5505.2', 5505.9', 5506.1', and 5504.9' prior to the Marshall Fire on its respective property corners, the expectation will be for these grades to be reestablished as part of the rebuilding process. This will ensure storm water flows continue to function as designed, flow to appropriate swales and inlets, and do not risk negatively impacting private properties.

TOWN OF SUPERIOR PLANNING DEPARTMENT

-  [Planning Department Website](#)
-  planning@superiorcolorado.gov
-  303-499-3675 ext. 131

PUBLIC WORKS

-  [Public Works Office](#)
-  pwu@superiorcolorado.gov
-  303-499-3675 ext. 110



AREAS WITHOUT APPROVED GRADING AND DRAINAGE PLANS

Because of its longer history, Original Town does not have previously approved grading and drainage plans. In fact, many historic homes in Original Town were sited below the adjacent roadways that were constructed more recently than the homes they served. Because of this circumstance, grading and drainage requirements for Original Town, and the methodology used to calculate grade points, differ from the neighborhoods noted above that have existing designs to follow.

APPLICABLE NEIGHBORHOODS	REQUIREMENT / METHODOLOGY
Original Town	Derive grade points from adjacent streets and alleys, rather than existing grades on lots, which may sit below roadways. See associated handouts for direction on grading and drainage design requirements. Parcels that abut alleys may drain to both alleys and streets. Grading along shared lot lines is expected to be shared with each property grading ½ of swale when feasible.

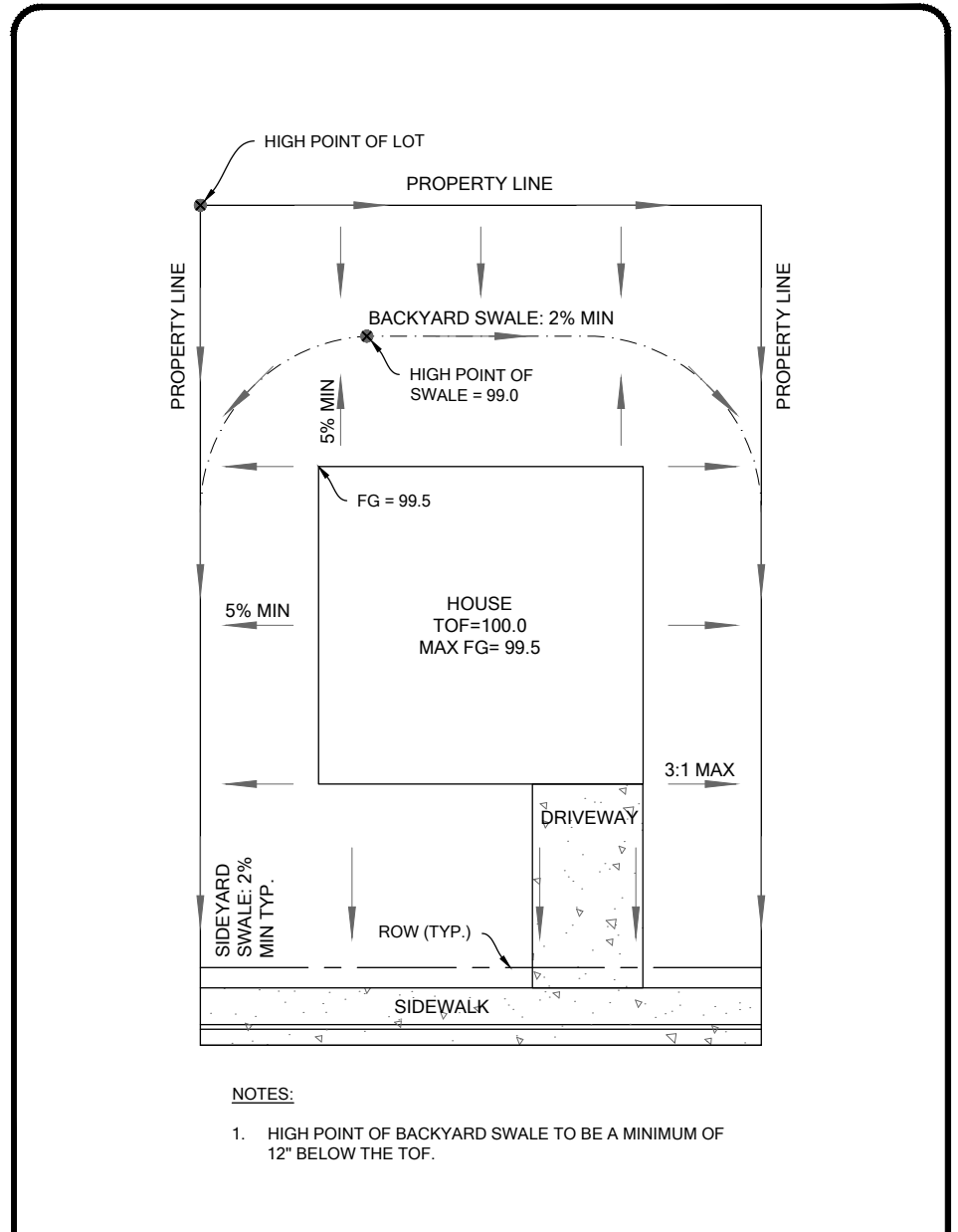
PLOT PLAN REQUIREMENTS

A site-specific [plot plan](#) for each rebuilt house is required. The plot plan must show the lot corner grades, high points, and swales and demonstrate compliance with either the approved drainage plan (for Sagamore, Coal Creek Crossing, Rock Creek, the Ridge, and Downtown Superior) or the guiding document which is being prepared for Original Town Grading. Illustrations on the following pages represent a range of grading types for different site conditions.

TYPE A LOT GRADING

(GRADING ALL DRAINAGE TO THE STREET)

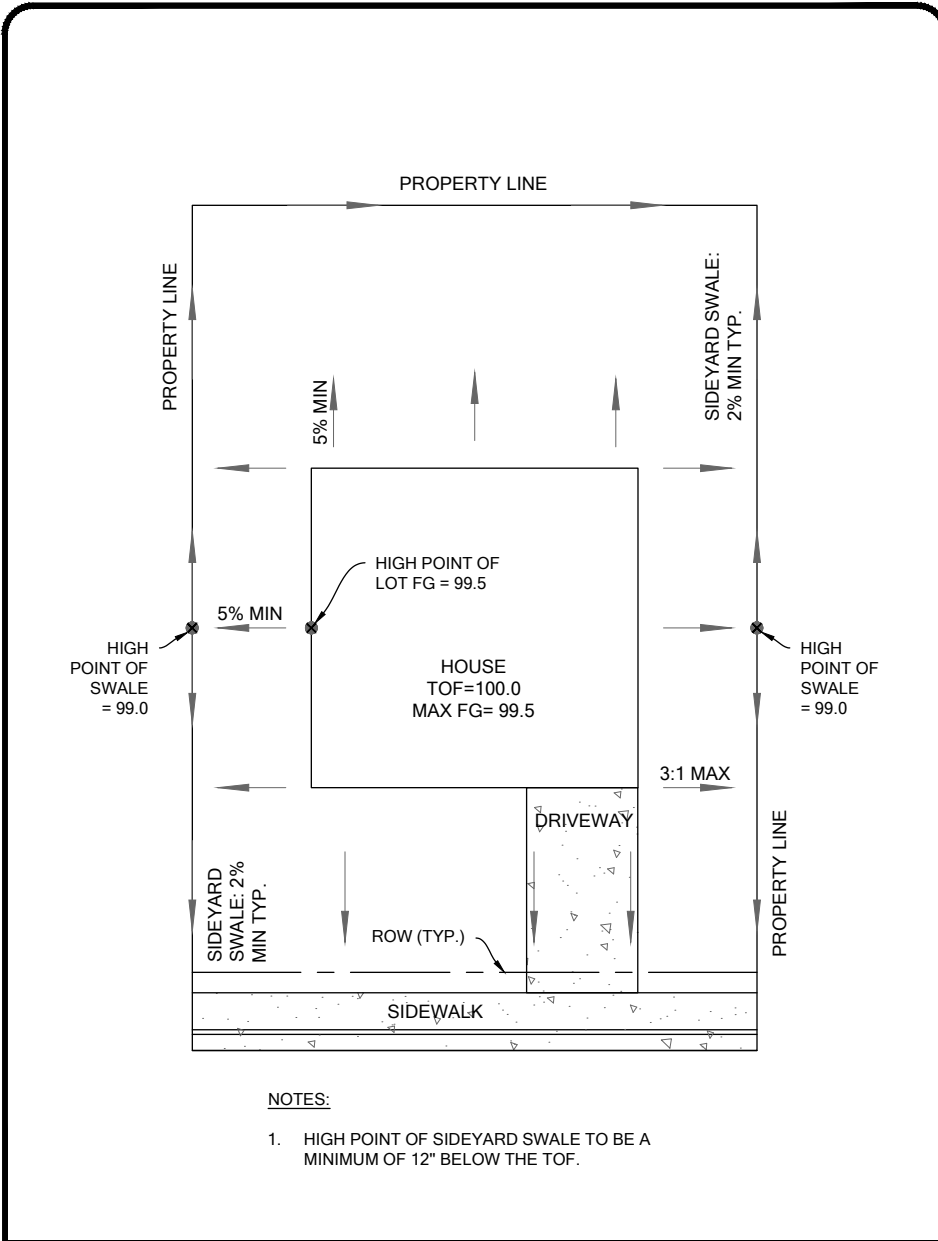
Rear yard swales behind the house convey surface water from rear yard to side yard swales (at a 2% minimum slope) which carry it to street for disposal through the street gutters and the public storm drainage system.



TYPE B LOT GRADING



Side yard swales (at a 2% minimum slope) with a high point along the side yard which conveys part of the lot drainage to the street and part of the lot drainage to the rear lot line.



TYPE G/W LOT GRADING

Garden Level or Walkout Basement with side yard swales (at a 2% minimum, to a 33% maximum slope) and a high point near the front face of the house which conveys part of the lot drainage to the street and part of the lot drainage to the rear lot line.

