

city of edmonds development information



Height Calculation Information

PROCEDURE: Height must be calculated prior to any on-site grading or alteration of topography. It is understood that in rare occasions vegetation may have to be removed in order to gain access to grade. On formal subdivisions of property, a topography map is usually included in the recorded documents on file with Snohomish County or City of Edmonds. It is highly recommended that applicants utilize these maps for determination of height.

1. To determine the maximum height permitted on a site, stake out the smallest rectangle (within the boundaries of the site) that encompasses all four corners of the proposed building outline/building pad at original, undisturbed soil.
2. Projections such as bay windows must be included within this rectangle.
Exemptions: Chimneys and eaves projecting no more than 30 inches from the exterior wall of the building and uncovered decks.
3. Select a datum point to establish a starting mark to compute grade elevations at the designated four corners. The datum point must be a permanent point of reference. Use the top of a manhole cover, fire hydrant, or street monument. Reference the datum point elevation at +100. On the site plan describe the datum point and show its location and elevation.
4. Calculate the difference in elevation from the datum point to each corner of the rectangle (above or below the starting elevation of +100) at original, undisturbed soil. Next, add the four corner elevations together and divide by a factor of 4 to determine the average grade of the building pad. On the site plan show the elevations of the four corners and show the calculations of average grade.
5. Take the average grade number and add the maximum allowable height per the specified zoning district. This elevation is the maximum height allowed for the proposed location of the building. In the attached example, the single family average grade is +102.5, add +25 feet, for a maximum height of +127.5. As shown on the plot plan the actual height of the building is +125. Be sure the average grade, maximum allowed height and actual height are noted on the plot plan and elevation view.
6. As in the example on the submitted **plot plan** show all height calculations, the elevation of each corner, the datum point, the average grade, the maximum height allowed and the actual height of the building, and on one of the **elevation views** within the architectural plans, show the average grade, the maximum height allowed, and the actual height of the building.

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7. Height field verification shall be done by the applicant's agent/contractor and 'observed' by the building inspector. The agent/contractor shall set up the equipment; establish the datum point and the point of average grade. These items must be consistent with the approved plan.

If the proposed height of a building (as shown on the plans) is within 12 inches of the maximum height permitted for the zone an elevation survey is required. An elevation survey consists of three components, to be conducted by a licensed surveyor.

- Prior to construction the surveyor shall establish average grade as specified in ECDC 21.40.030, and shall establish a reference datum point that will be undisturbed and can be freely accessed.
- The surveyor shall locate the elevation of the first floor prior to the City under-floor inspection,
- A final letter of height confirmation shall be provided upon completion of the structure.

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Property Owner Name
 Property Address
 Tax Account Parcel #

SAMPLE PLOT PLAN

Scale: 1"=20'

IMPERVIOUS SURFACE CALCS (SOLID SURFACES)

Exist. Building Roof Outline: 2200 sf. (constr. in 1962)
 Existing Covered Porch: 75 sf. (constructed in 1962)
 Existing Driveway: 610 sf. (constructed in 1987)
 Existing Patio: 200 sf. (constructed in 1985)
 Proposed Addition: 440 sf.
 Proposed Garage: 500 sf.
 Proposed Deck: 90 sf.

HEIGHT CALCS

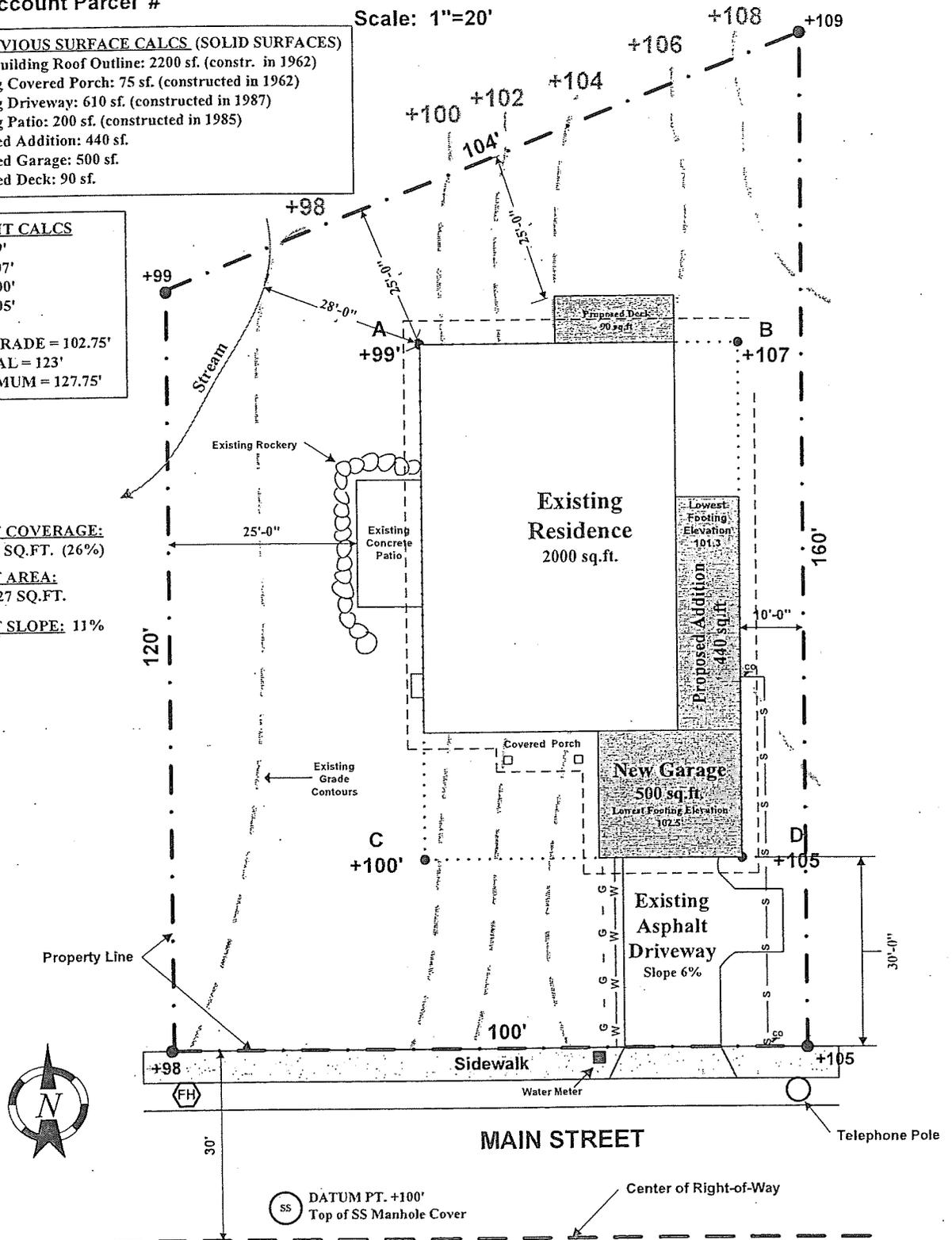
A = +99'
 B = +107'
 C = +100'
 D = +105'

AVE GRADE = 102.75'
 ACTUAL = 123'
 MAXIMUM = 127.75'

LOT COVERAGE:
 3515 SQ.FT. (26%)

LOT AREA:
 13,527 SQ.FT.

LOT SLOPE: 11%

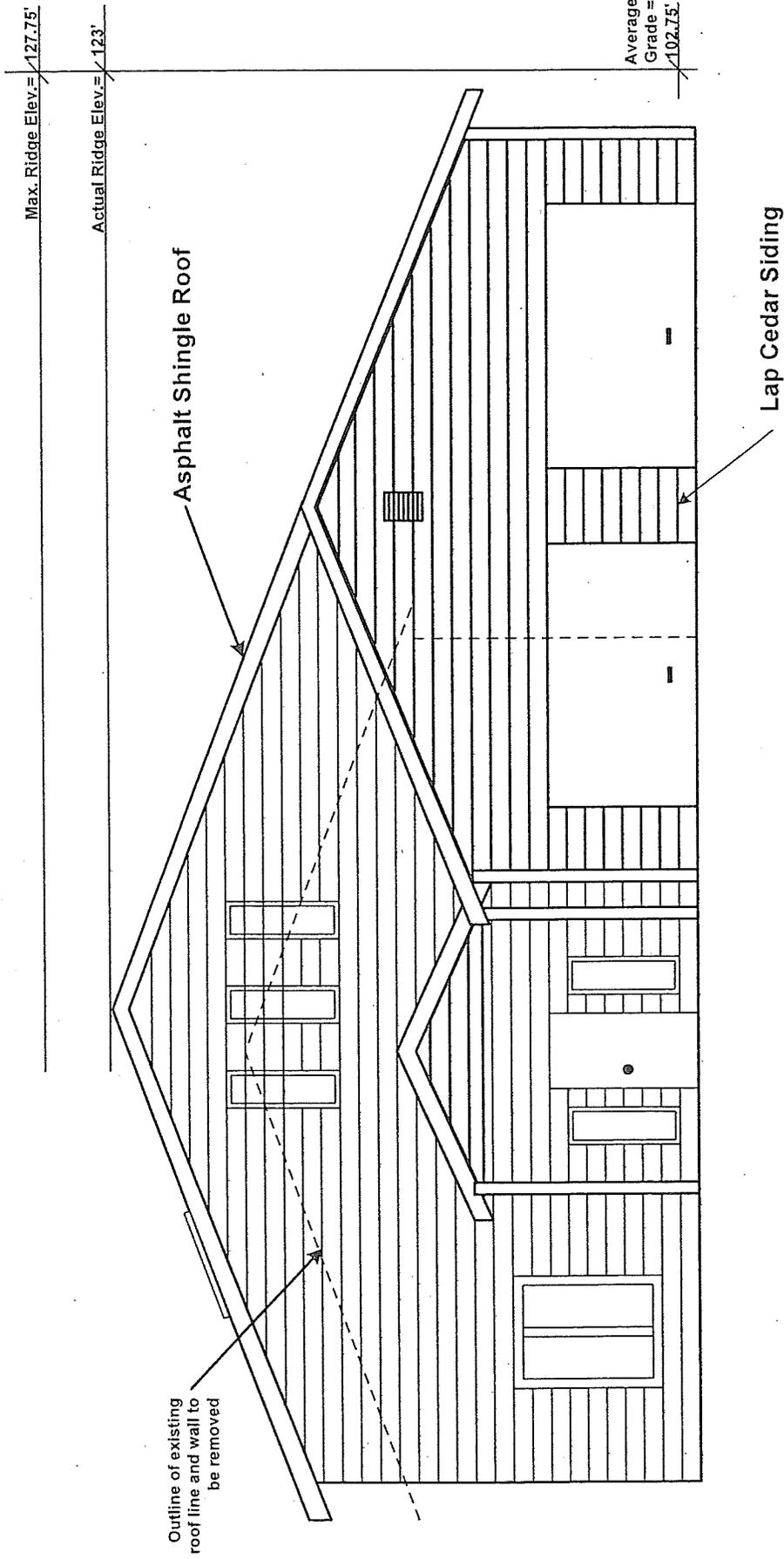


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ATTACHMENT A

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SAMPLE ELEVATION



SOUTH ELEVATION

ATTACHMENT E