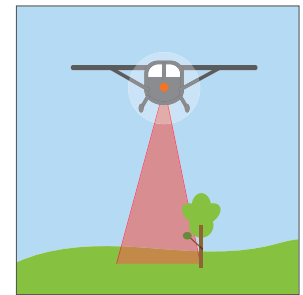


Using LiDAR For Map Amendments

LiDAR data can replace the requirement to submit elevation information certified by a licensed land surveyor or professional engineer, which can create a cost savings for property owners. However, LiDAR data may be less accurate than certified elevations and may not capture the full risk for the building or lot.

For more information on the standard LOMA process and requirements, please refer to [How to Request a Map Amendment Guide](#).



DOES MY COMMUNITY HAVE LIDAR?

Not all communities have LiDAR data available. Talk to your floodplain administrator to find out if your community has LiDAR data.

To be used in a LOMA request, LiDAR data must meet or exceed the U.S. Geological Survey (USGS) Quality Level 3 accuracy requirement. To learn more about this requirement, please use the USGS LiDAR Base Specification Guide.

The USGS plans to collect high quality LiDAR data across the United States using a 3D Elevation Program (3DEP). For more information on the 3DEP program and current USGS LiDAR availability, please visit their [3DEP webpage](#).

WHEN LIDAR CANNOT BE USED

There are situations when LiDAR cannot be used in a LOMA request. These include applications involving the following:

- Buildings or lots elevated using fill
- Buildings or lots in the regulatory floodway
- Buildings or lots in Coastal High Hazard Areas (Zone V, VE, or V1-V30)
- Buildings or lots in Zone AO, AR, or A99
- Buildings under construction. LiDAR would need to show that the lot or portion of the lot on which building will be located is above the Base Flood Elevation (BFE)
- Conditional determinations
- Electronic LOMAs (eLOMAs)
- Potential violations identified through the LOMA process
- Physical changes to the flooding source/Special Flood Hazard Area that require revisions to the Flood Insurance Rate Map
- Requests to supersede previously issued LOMAs based on certified elevation data

Additional information about LiDAR requirements for LOMAs is available in the [MT-1 Technical Guidance](#) document.



WHAT NEEDS TO BE SUBMITTED WITH MY APPLICATION?

When requesting a LOMA using LiDAR data, you must submit a paper map or digital PDF that displays:

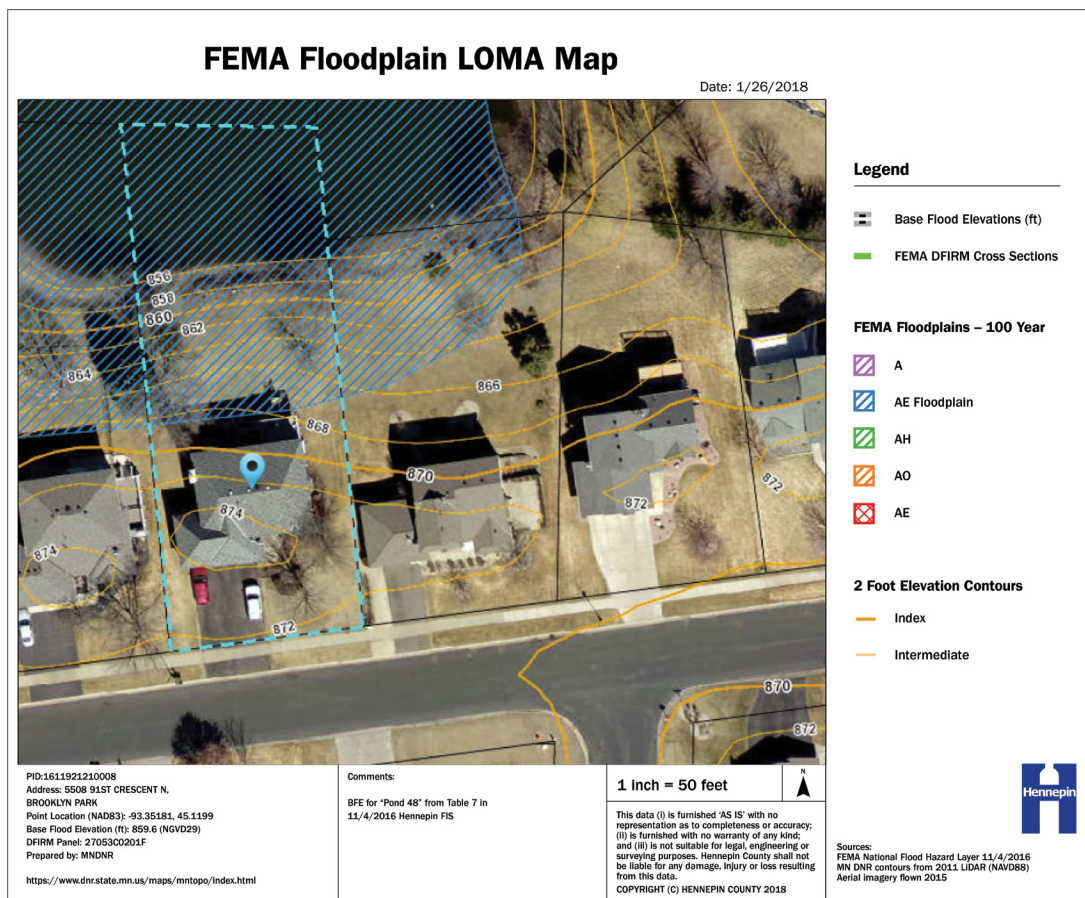
- (1) an overlay of the LiDAR contours (lines of equal elevation), or
- (2) an overlay of the LiDAR points (points with specific elevations).

Either overlay must include an aerial image of the building or lot with at least one street intersection shown on the map.

The map must also have:

- Scale and North arrow
- Address or Assessor's Parcel Number (APN) for the building/lot
- Clearly identified building and/or lot boundaries
- Name, organization, and contact information for the map overlay creator
- Aerial imagery that correctly represents the footprint of the building
- Date the LiDAR was collected
- Source of the LiDAR, including public website address. LiDAR must be provided by a Federal, State, or local government agency.
- LiDAR accuracy information (Does it meet Quality Level 3 standards?)
- Vertical Datum of elevation data (e.g., NAVD 88)
- Location of the data archive or metadata file (must be available for independent verification through a publicly available website or metadata)

Your floodplain administrator or a mapping professional can help you develop the map for your application. For other requirements, please use the How to Request a Map Amendment Guide.

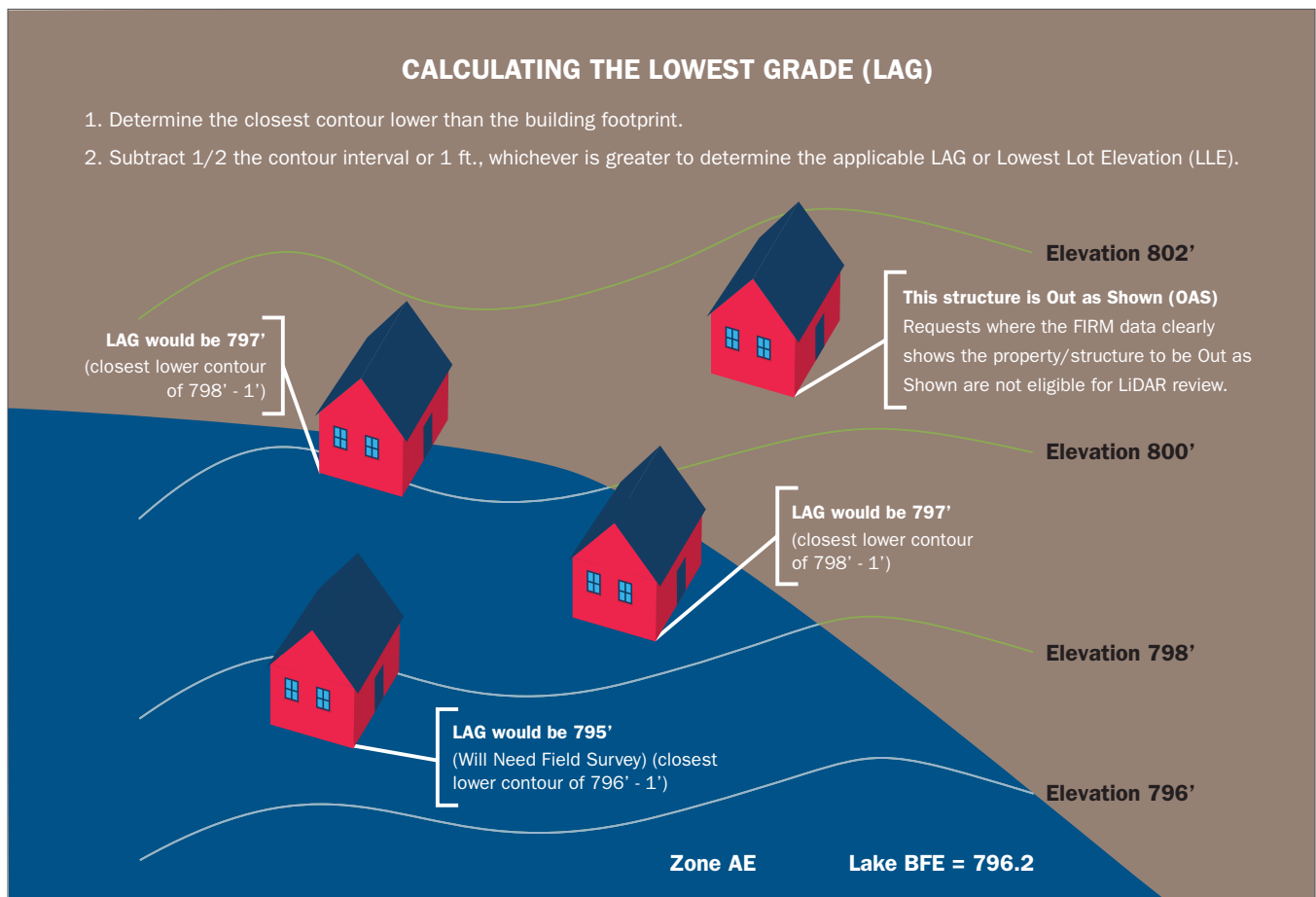


CALCULATING ELEVATIONS USING LIDAR

The lowest adjacent grade (LAG) for a building, or the lowest lot elevation (LLE) for a lot, will be compared to the effective Base Flood Elevation (BFE) to determine the flood zone. If LAG/LLE is at or above the BFE on the current flood map, FEMA can issue a removal determination. For buildings or lots that cannot be removed from the high-risk zone using LiDAR, certified elevation data will be required for a standard LOMA determination.

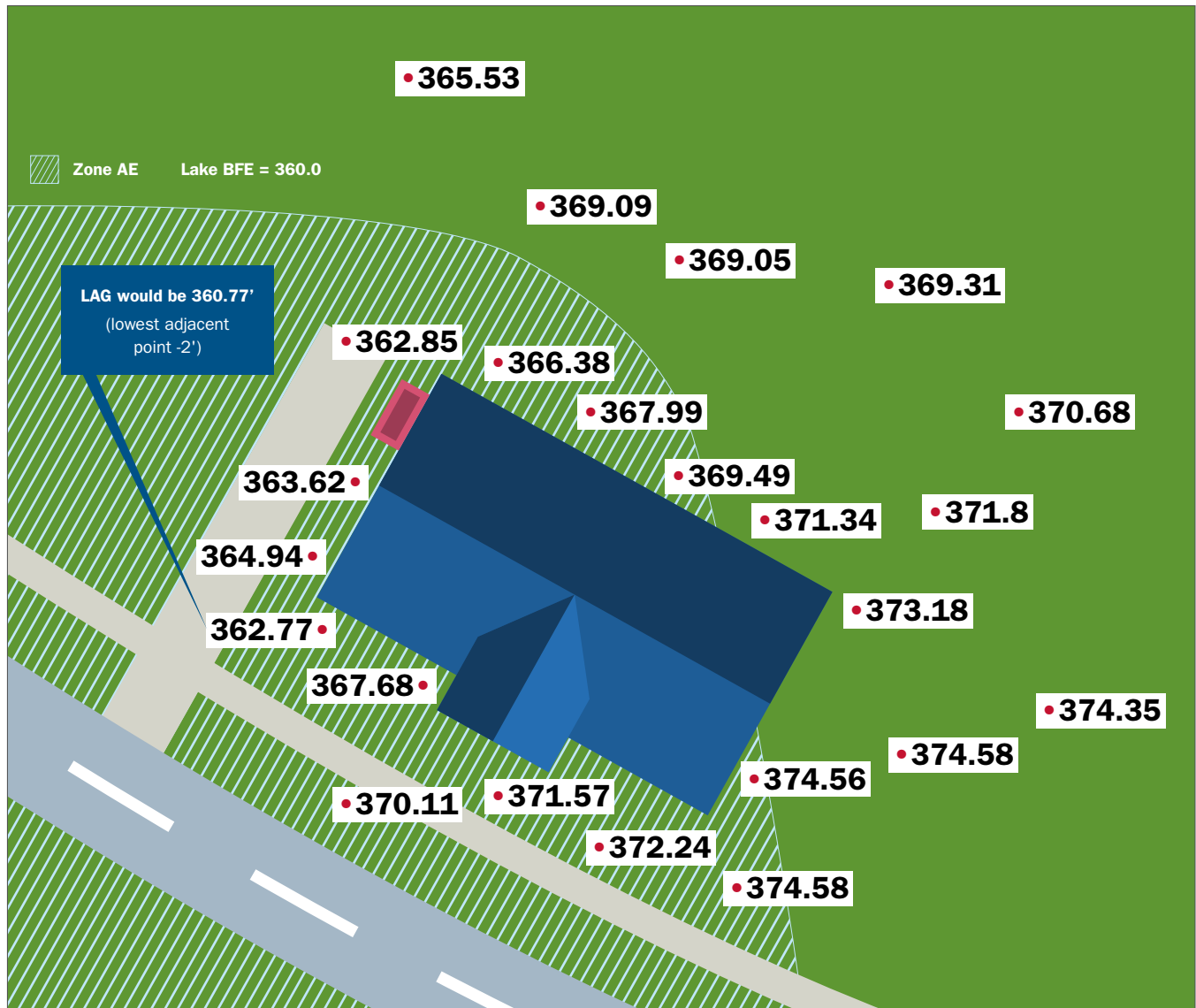
Using LiDAR Contours

For LOMA submittals that include LiDAR data contours, FEMA will subtract half the contour interval or 1 foot, whichever is greater, from the lowest contour closest to (but not going through) the building (to determine the LAG) or the lot (to determine the LLE).



Using LiDAR Point Data

For submittals that include LiDAR point data, FEMA will subtract 2 feet from the lowest point closest to the building (to determine the LAG) or the lowest point on the lot (to determine the LLE). Multiple points must cover the building/lot for this method.



WHERE DO I GO IF I NEED HELP?

To speak with a Map Specialist about the amendment process, contact the FEMA Map Information eXchange (FMIX) at 877-FEMA-MAP (877-336-2627) or FEMAMapSpecialist@riskmapcds.com