The E-2 designation is to exclude all combination and single unit certified vehicles from crossing a specific bridge. For this to make more sense, I will mention several sections of state motor vehicle law.

RSA 266:18-a Weight on Non-interstate and General Highway System:
This section defines maximum vehicle weights for all highways not considered Interstate Highways. It also defines requirements for individual axle weights and spacings, and generally limits vehicle weights to:
Two axle single unit: 33,400 lbs.
Three axle single unit: 55,000 lbs.
Four axle single unit: 60,000 lbs.
Combination vehicles (Tractor -Trailer): 80,000 lbs.

RSA 266:18-b Weight on Non-interstate and General Highway System for vehicles with Additional Registration:
This section defines maximum vehicle weights for all highways not considered Interstate Highways. It also defines requirements for individual axle weights and spacings, and generally limits vehicle weights to:
Two axle single unit: 37,400 lbs.
Three axle single unit: 65,000 lbs.
Four axle single unit: 73,000 lbs.
Combination vehicles (Tractor -Trailer): 99,000 lbs.

RSA 266:18-d Additional Certification and Registration:
This section defines a process of Certification for vehicles to be eligible to purchase the additional registration to enable them to travel at the higher weight limits allowed in RSA 266:18-b. (This is why we use the term Certified Loads for the higher set of weight limits.)

RSA 266:18-c General Weight Provisions:
Section V describes the standard weight limit signs, and allows the commissioner of transportation to post standardized signs designating Caution Crossing Bridges and Excluded Bridges. (This includes the 'E-2' sign that excludes certified single unit and combination vehicles from crossing a bridge while traveling at the higher weight limit)

There is also an 'E-1' sign that excludes single unit vehicles from crossing a bridge, and a series of Caution Crossing signs that would allow the Certified Vehicles to cross only if they are the only truck on the bridge.

I hope this helps to explain the mysterious E-2 sign.

The next part of your question has to do with the ownership of bridges.

If a municipality owns a bridge, they are entirely responsible for the bridge, its use and maintenance. We, the NHDOT will inspect any bridge on a public highway for reporting to the National Bridge Inventory (NBI), in accordance with the National Bridge Inspection Standards (NBIS). One of the requirements is that we calculate a safe load capacity for each bridge we inspect, which is reported to the NBI and to the owner of the bridge. We do recommend a weight limit posting to the owner of the bridge, however when RSA 266:18-b went into effect, we decided that it should be up to a municipality to decide if the bridges should be considered for allowing Certified Vehicles to cross them.

The municipality could study its own bridges to see if they have a structural capacity suitable for the heavier Certified Vehicles. In some cases the NHDOT could help with the determination.

If we, the NHDOT, own the bridge, we have already made the determination about its maximum safe load capacity. If the capacity is not there and there were some interest in increasing the capacity, we could study the bridge and consider it for a future project.

The last part of your question implies a difference between 'residential' and 'construction-type' vehicles. Residential uses often lend themselves to the occasional concrete truck for a garage floor, a well drilling rig for a new well, truckload of gravel for the driveway, fuel oil for the furnace, etc. These vehicles could travel at the higher Certified weight limit to lower delivery costs. Trucks haulng gravel from a pit could travel at the lower ordinary weight limits, if desired to comply with an E-2 posting.