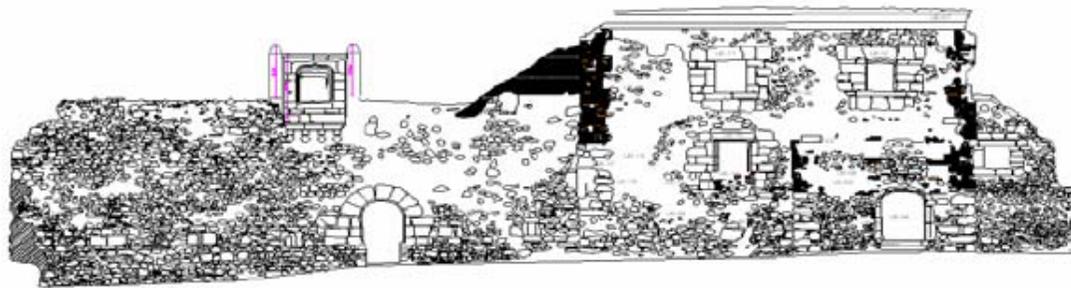


Restoration of the Wall of Arribalavilla Castle

Zalamea de la Serena

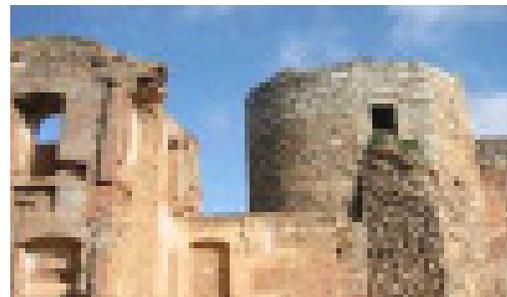
CLIENT	Town Council of Zalamea de la Serena
PROJECT DATE	2007
LOCATION	Zalamea de la Serena, Spain
FIELD OF ACTION	Research & Restoration projects



As a part of the research works carried out in Arribalavilla Castle stand out the ones whose aim is: to know the existing materials (both mechanical and petrological properties), diagnose the degradation processes and to establish corrective actions in the castle walls.

The characterization and the structural assesment-works are the following ones:

- The typological description of different elements of the wall.
- An overview of the mechanical properties and resistant performance of these elements.
- Finally, the identification of the processes and mechanisms due to a bad strength performance which are the reason why some damage were appearing on the Wall.



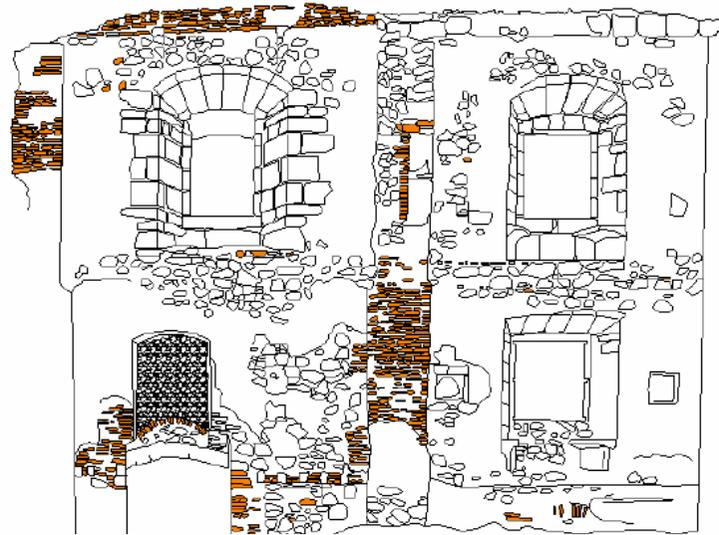
ines
ingenieros consultores

C/ Nuñez de Balboa, 120,3ºD
28006 Madrid, Spain
Tel.: +34 915237633

ines@inesingenieros.com
www.ines.es/en

Restoration of the Wall of Arribalavilla Castle

Zalamea de la Serena



A great number of structural typologies of the walls have been identified, which are made up of different masonries and materials.

The analyzed walls come from a long sequence of past interventions as demolitions, partial reconstructions, etc. These past interventions have sometimes generated several structural defects, which have been made worst as time goes by. Moreover, the main reasons of the detected structural damage are the compatibility problems whose origin is the created stiff points.

With regard to the carrying capacity of the walls, from the performed analysis is concluded that, if these elements are consolidated, its carrying capacity is adequate to resist its own load, providing the necessary stability, as well as being possible to increase slightly the vertical loads.



ines
ingenieros consultores

C/ Nuñez de Balboa, 120,3ºD
28006 Madrid, Spain
Tel.: +34 915237633

ines@inesingenieros.com
www.ines.es/en