Our Visit to Peru: Pre-Incan, Incan and Spanish Influenced Sites

CE 401 Geotechnical Aspects of Incan Civilization
By Karl Higgins, Spring 2011
Cusco is an ancient City of the Incas in the Urubamba Valley of the Andes Mountain Range. The elevation of Cusco is much higher than Lima, at about 11,200 feet msl. The City has a mix of Inca and Spanish influences.
Cusco

Plaza Armas

Cathedral of Cusco
Cusco

Cathedral of Cusco

Inca Coricancha Temple inside Cathedral of Cusco which was built around the temple

Note transition between Inca Temple and Cathedral where stone work methods change
Pre-Incan Piquillaqta

Remains of Aqueduct System (top and bottom)

Incan Improvements to Aqueduct abutment
Pre-Incan Piquillaqta

Remains of Dwellings inside Compound (top and bottom)

Passageway inside Compound
Andahualilas Catholic Church

Called the “Sistine Chapel” of Peru. The ancient Catholic Church was undergoing renovations. We were prohibited from photographing the inside of the Church, but the art and craftsmanship were remarkable.
Tipon is a royal garden site of the ancient Incan empire. Twelve terraces are surrounded by traditional Incan stonewalls, canals, and decorative waterfalls. Tipon was called the “Water Engineering Masterpiece of the Inca Empire” by Kenneth Wright.
Tipon

Classic Incan Agricultural Terrace Walls

One of the beautiful fountains of Tipon near the mountain spring
Local Cuisine near Tipon

After hiking the Tipon Site, the group enjoyed a meal of Guinea Pig, Potatoes and of course Cervezas, local Peruvian cuisine.
Horseback Riding near Chinchero

The group went horseback riding on a primitive mountain trail that was challenging.
Sacsayhuman

Archaeological Restoration

Polishing Effects of Glaciers makes for sliding fun

Ancient site was believed to be inundated with water to serve as a type of astrological reflecting pool
This ancient site had some of the most remarkable stone work with respect to size. Some the individual stones are measured to be upwards of 120 metric tons.
Q’Enqo – Pukapukara - Tambomachay

Example of Alter Stone for sacrifices

Inset stone work at door displays significance of passageway

Sunset on Pukapukara

Incan Trail Entrance to Cusco
The ancient city of Pisac was known as a military outpost, religious shrine, and significant agricultural resource with terraces lining a significant portion of the hillside.
Pisac

Dead buried in hillside catacombs on vertical slopes
Ollantaytambo was the royal estate of the Inca Emperor Pachacuti. The City also served as the temporary capitol of the Incan Empire for Emperor Manco during the Spanish conquest. This city has been continuously occupied since the 15th Century. The City lies roughly midway between Machu Picchu and Pisac in the Urubamba Valley and on the Incan Trail.
Ollantaytambo

Terraced walls lead upward to a religious site

Ruined Dwellings

Fountains – water flows throughout the City

Modern day inhabitants. Note Peruvians built above old Incan stone walled structures.
Salty groundwater flows from springs all year round. Peruvians have been channeling water into cells that evaporate in the dry season, leaving salt behind, which is mined by hand.
Moray is known as an ancient Agricultural Laboratory whereby Incans experimented with growing crops at various altitudes in the descending circle terraces where humidity and temperature vary. The walls are being restored from damage by livestock and time, and artifacts (such as the stone cutting tool) are found during excavation.
Perhaps the best known Incan ruins in the world. The ancient Inca ruler Pachacuti built the royal estate on the Incan trail between the beautiful Huayna Picchu and Machu Picchu Mountains. The ruins contain evidence of a “hotel” for visitors passing along the Inca trail.
Machu Picchu

Llamas and Alpacas graze on grass

Graduate and Undergraduate students
Machu Picchu

Hitching Post of the Sun

Carved rock thought to represent the three nearby mountains

Temple of the Sun

Base of the Temple of the Condor
Machu Picchu

Inca Trail and pointing to Sun Gate near the top of Machu Picchu Mountain

Posing at Sun Gate after 2 hour hike

Hikers rest at Sun Gate before heading back down mountain
Machu Picchu

Famous Inca Bridge

Urubamba River that encircles Machu Picchu
Machu Picchu

Town at base of Machu Picchu
Picchu Mountain

Fast moving Urubama River
Lima

Lima is the Capitol of modern Day Peru. This coastal City is unlike the ancient Inca cities and is heavily influenced by the Spanish after they conquered the Incas. Unlike the humid mountains, Lima lies in a coastal desert.