



## New Construction at Pakistan's Khushab Nuclear Site

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*New construction activity is taking place at the Khushab nuclear site in Pakistan. However, what is being constructed is not yet clear. Signatures visible through commercial satellite imagery at this time do not permit a definitive assessment of the site's ultimate purpose. ISIS will continue to monitor this construction.*

In January 2015 ISIS [highlighted](#) that new construction activity was taking place in the southwest corner of Pakistan's Khushab nuclear site, south of reactors 2, 3, and 4 (see figure 1). At the time, ISIS speculated that the site could be for another reactor. More recent imagery dated April 25, 2015 shows this construction progressing, but it remains unclear exactly what purpose the new site will serve.

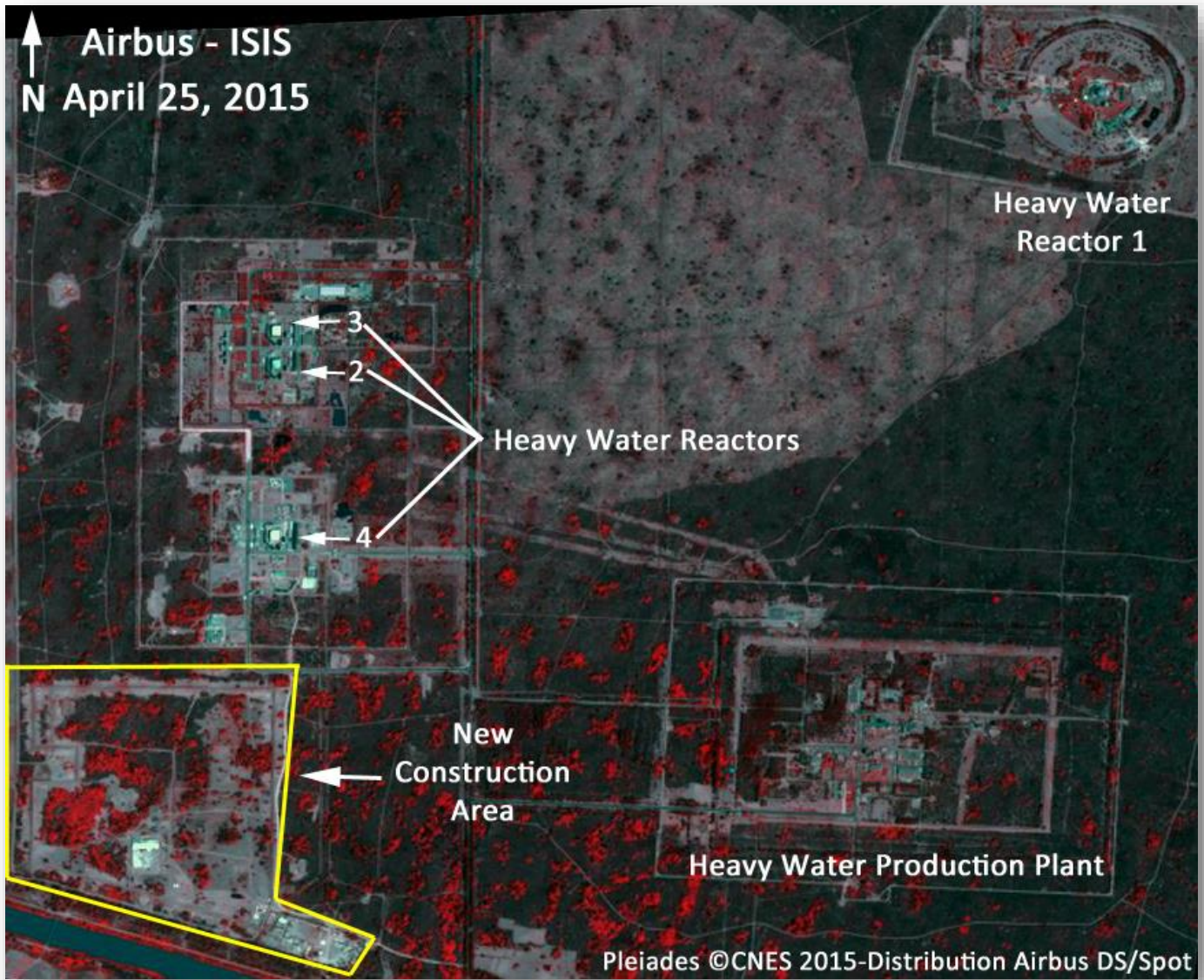
This new construction presents some similarities with the early construction activities of reactors 2, 3, and 4. First, the area is surrounded by a security perimeter that is, in shape and size (1 km by 1 km), similar to the perimeter surrounding reactors 2, 3, and 4. Second, the foundations that are visible within this security perimeter are, in shape and size, very similar to the foundations for reactor 4 (see figure 2, 3, and 4). Third, three smaller buildings, possibly administrative in nature, are nearby. These buildings are in shape and size similar to those visible near reactor 4.

However, this comparison also highlights features that are not consistent with the construction of a reactor similar to reactors 2, 3, and 4. First, a large 100 meter by 41 meter building is being constructed adjacent to the main foundation area (a second smaller foundation is also visible nearby). Second, although the shape and size of the main foundation is similar to that of the previous reactors, the presence of a circle-shaped section of foundation on one side represents a noticeable difference from what was visible in the earlier reactor construction activities. A possibility is that this circular area is associated with a stack or cooling tower, but each stack in reactor 2, 3, and 4 was built at a considerable distance from the main building and cooling towers are also built at a similar distance. Third, a water pond and possible water pipes leading toward the river are visible nearby, and these pipes were not present during the construction of reactors 2, 3, and 4 (figures 3 and 4).

Close by this major new construction area appears to be an associated large construction staging area (see figure 5). It is worth noting that a helicopter pad is clearly visible here. Construction will continue to progress as new areas are being cleared of vegetation.

In sum, none of the features visible in the imagery allows a determination whether the new site will house another reactor. Notwithstanding some similarities, several other features at this stage of construction suggest that it is not a reactor. ISIS will continue monitoring the progress of this construction.

Any expansion activity may be part of an on-going effort to produce relatively large amounts of weapons-grade plutonium for more sophisticated nuclear weapons. According to a former senior Pakistani official, the purpose of the plutonium produced in the reactors at Khushab is to build smaller, shorter range nuclear weapons, including tactical nuclear-tipped missiles.



**Figure 1.** Airbus imagery dated April 25, 2015, showing the Khushab nuclear site in Pakistan. This is a color infrared image in which healthy vegetation appears red.

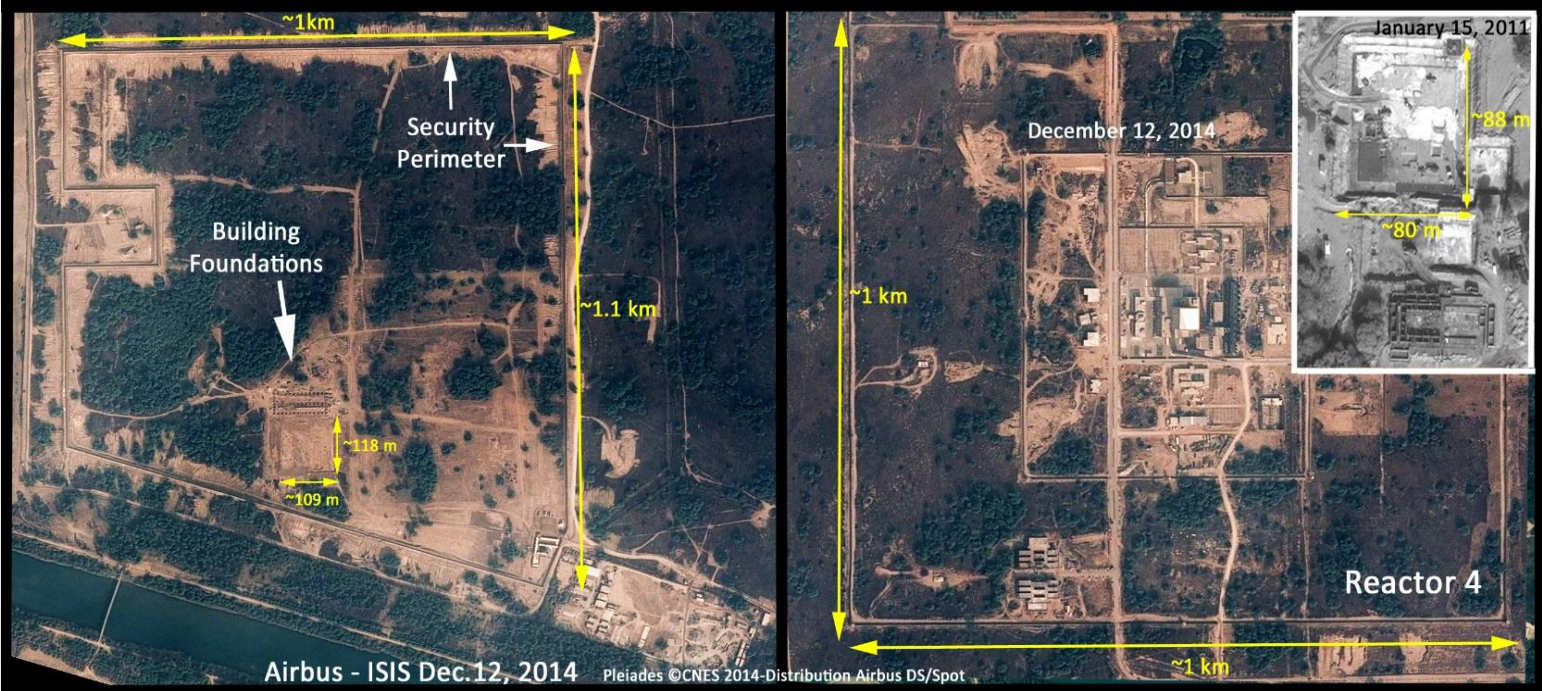
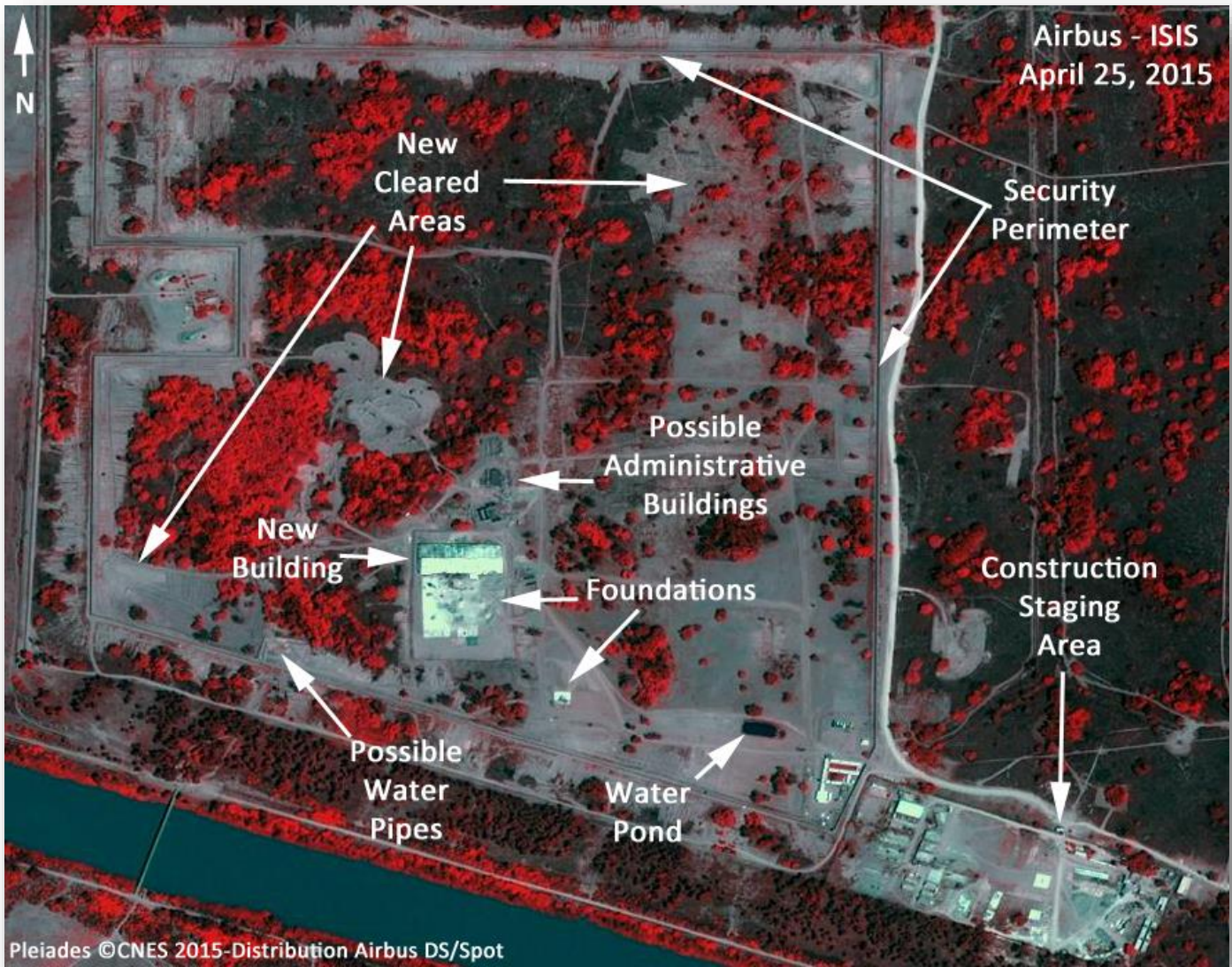
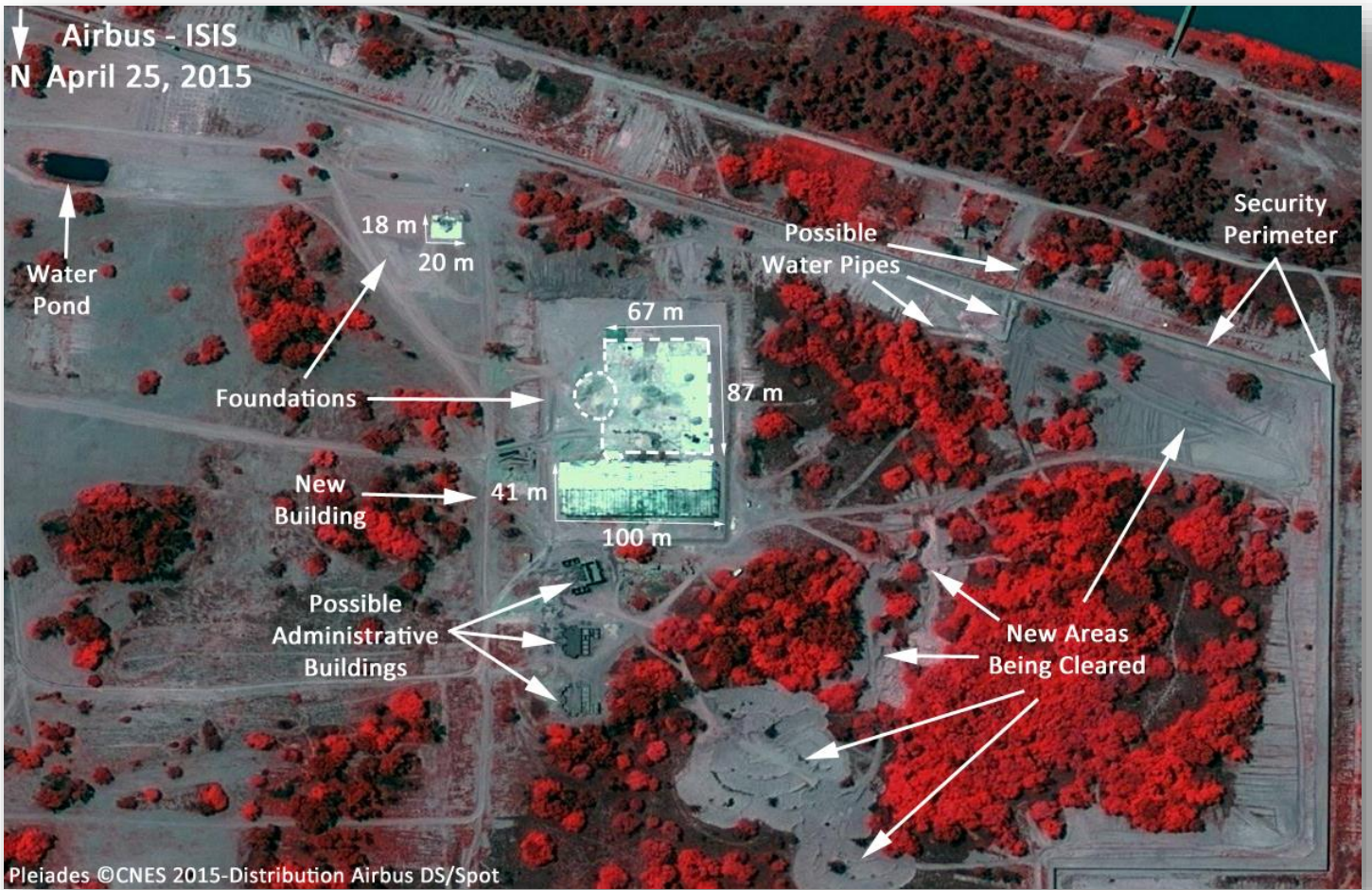


Figure 2. Airbus imagery comparing the new construction site to the fourth reactor at the Khushab nuclear site.



**Figure 3.** Airbus imagery showing the status of the new construction site south-west of the Khushab reactors on April 25, 2015. This is a color infrared image in which healthy vegetation appears red.



**Figure 4.** Close-up of Airbus imagery showing the status of the new construction site on April 25, 2015. This is a color infrared image in which healthy vegetation appears red.



**Figure 5.** Close-up of Airbus imagery showing the construction staging area nearby the new construction site on April 25, 2015. This is a color infrared image in which healthy vegetation appears red.