

Figure 3: Photographs of the landscape around Grootvlei power station, showing farmsteads (top), cultivated land (middle) and residential development (bottom) as part of the receiving environment.

3. Visual impact analysis

The proposed retrofitting project includes alterations to existing infrastructure (ESPs at units 2, 3, & 4) and additions (workshop and compressor house), all of which will be located within the current footprint of the power station, as indicated on the aerial photograph in Figure 4.

The existing ESP's and new compressor house are located east of, and adjacent to, the power generating building. The workshop is located between two cooling towers to the south. These locations are largely hidden behind the tall structures of the power station, especially the cooling towers and the power house. The proposed retrofit to units 2, 3 and 4 will effectively increase the height of the abatement technology casing by 1.1 m, which is negligently small in comparison with the dimensions of the existing infrastructure on site. Taking only into account the cooling towers, the power house and emission stacks, these structures will largely screen any visual exposure of the retrofitted FFP casings and the new workshop, as indicated on the viewshed maps in Figures 5 and 6.



Figure 4: Position of units to be modified and new workshop to be constructed.