

Site Visit PoC UN House extension

2014/01/03



View south west across the site – showing a patch of bare rock in the foreground

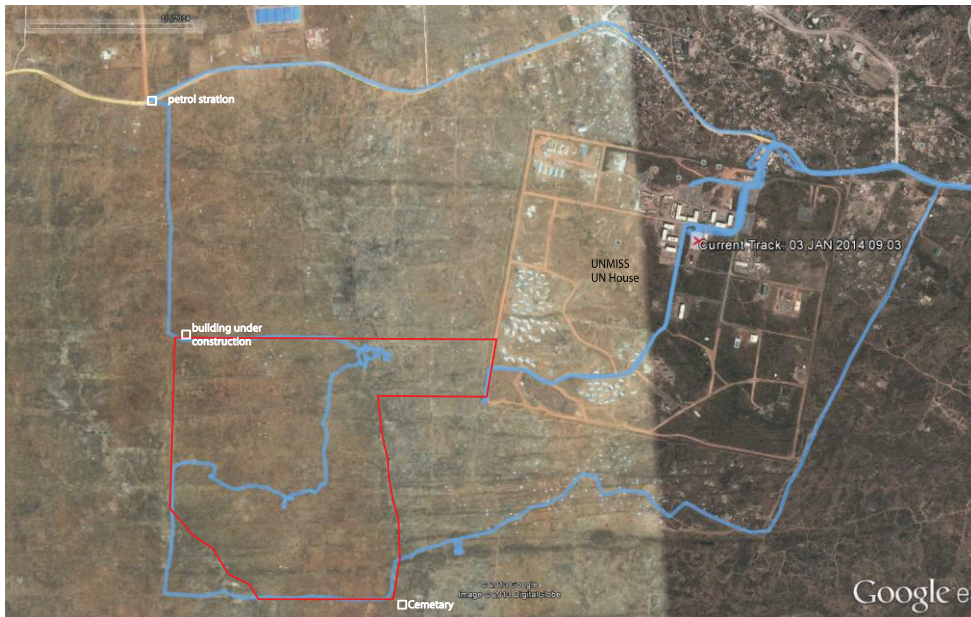
Exec summary:

- A Full site survey is required as a priority to fix site boundaries and provide detailed analysis of soil conditions.
- Host communities should be contacted to clarify site ownership issues.
- Given rockiness of soil:
 - o Site development should take place in phases to increase speed of readiness
 - o Approximately 20 % of the site is not usable for shelter construction or sanitation works on account of its rockiness.
 - o Site planning should take account of variable soil conditions and suitability for construction. Community blocks layouts should allow for empty plots where rocks prevent construction. This will require smaller plot sizes to allow for empty plots.
- The site is contoured but not sufficiently to create landslides or significant need for levelling.
- Streams to east and south west should form external boundaries of the site.
- Site plans should be developed following drainage needs.
- A market area should be considered to the north west of the site, nearest the main road.

Background:

This report was written following a site visit by: Thomas Hoehl (UNMIS) Liny Suharlim (ACTED), Joseph Ashmore (shelter cluster/IOM), Neil Thompson (Acted/WASH). The aim of the visit was to provide an overview of the site conditions and usable surface area of the proposed IDP site.

The site is under discussion in relation to de-densification of existing sites in the UNMISS bases, for reception of new arrivals and for potential contingency needs.



Overview of rapid site assessment (blue track shows path surveyed) with key landmarks

Ownership

No houses were observed onsite, but the survey was incomplete, and subsequently shelters were observed in satellite images. This requires further verification. Signs of previous occupancy and two brick kilns were observed in the site next to water courses.



One of two small scale Brick kilns observed on the site.



Example of a plot marker found on site. Note the rocky soil typical of many parts of the site

The site appears to be divided into plots with markers observed on site. Clarification is required in identifying ownership.

Site perimeter

The irregular shaped proposed site is on predominantly rocky soil bounded by streams to the east and south west. It consists of a strip approximately 200 m x 500m adjoining the southwest corner of UNMISS and a larger approximately rectangular area measuring approximately 900m x 700m. It is bounded by streams and dirt roads with approximate corners:

4°48'49"N, 31°31'29"E,	4°48'17N, 31°31'28"E,
4°48'26"N, 31°31'29"E,	4°48'17.48"N, 31°31'40"E,
4°48'41"N, 31°32'7"E	4°48'41"N, 31°31'54"E

Site boundaries will have to be set back 30 m from these points

Site Geography and conditions

There is an overall slope from the north east to the south west, with sharper drop offs to the streams on the east side and the south east corner. The overall height differential across the site is approximately 30m.

The site is primarily granite with varying degrees of fracturing and soil cover across the site. Some areas such as the corridor between the main site and the UNMISS base have large areas of exposed rock (estimate as 30% of this area is not usable.) To the east of the stream that splits this corridor from the main site, there are fewer areas of exposed rock, and the ground condition is variable. However, it is generally hard and rocky.

The site has vegetation cover consisting of grasses and mainly small shrubs. There are some trees which site clearance should aim to preserve.



Example of a rocky part of the site where tent pitching will not be possible.

Site Access

The site will be accessed primarily by a road departing from the Juba to Yei road leaving at the petrol station 4°49'18"N, 31°31'26"E. This road will require additional works and widening to be useable. Some clarification will be required with authorities and surrounding land owners surrounding this widening.

Additional access will be possible from the South West corner of the UNMSS base. Further access is possible by unmade track that passes to the south of the UNMISS base via Gormoyok cemetery, but this should not serve as primary access.

Potential access points to the south of the site should be discussed with host communities.

One small bridge may have to be considered for crossing the small stream, which has low water levels in dry season but which has potential for flooding at other times of year.

Site protection

Defensive fencing and burns are currently planned for the site. The ground conditions will make excavations and post placement challenging and potentially slow work.

It is suggested that works are conducted in a carefully phased manner so that sections of the site become serviceable as quickly as possible. This could potentially start with the "Corridor" section that adjoin the existing UMIS Base.

Firewood will be a significant issue for the site and could lead to conflicts with the surrounding populations.

Water and sanitation

- The site is sloped allowing for drainage. However some areas where ponding occurs were observed. Following site survey, some drainage ditches will be required.
- Tests showed the site was tested to have low permeability in some locations. This will have implications for placement and drainage of tap stands and washing facilities.
- Hard ground conditions will prove challenging for latrine construction. Raised latrines may be required in many parts of the site
- Access routes will need to be built for refuse collection

Shelter and site planning

- A flexible approach will be required for site planning, to adapt to the specific local ground conditions. The existence of exposed rock will mean that at many locations across the site shelter will not be built.
- Site planning for family plots and other structures should follow drainage planning and layout.
- Sledgehammers (shared with tent erection teams) additional pegs should be procured/made. Pegs can potentially be made from larger diameter (12+mm) steel reinforcement bars should be procured to secure tents in case of peg bending / failure.
- Additional time and human resources will be required to place tents given the hard ground.

Approximate site sketch - Key physical features and topography.

Dimensions are subject to verification and should not be used for detailed planning purposes. Practically boundaries will need to be offset from existing roads.

