

SITE ASSESSMENT



COMBINED SECURITY TRANSITION FORCES – CSTC-A



MINISTRY OF DEFENSE (MOD) AFGHANISTAN

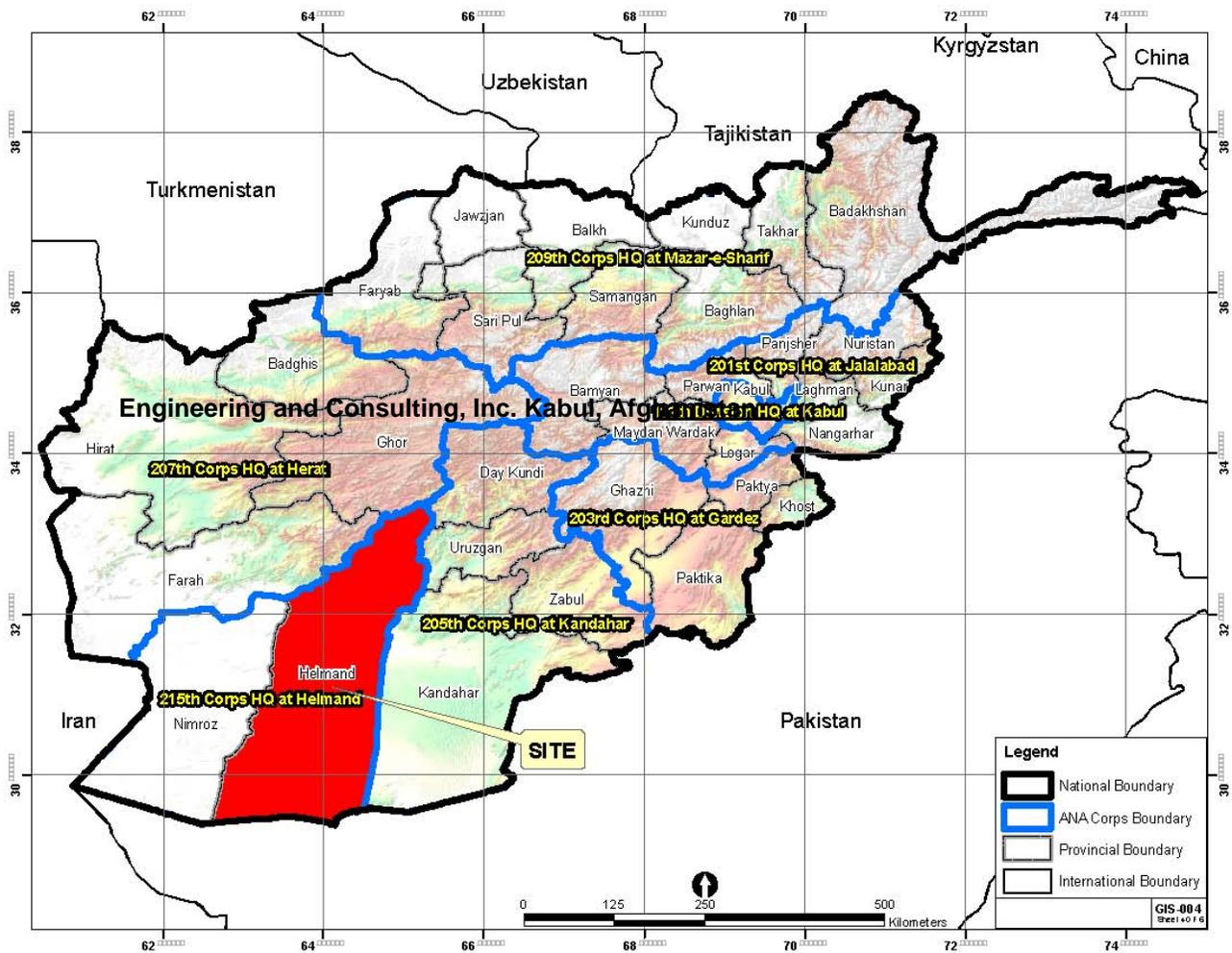


MACTEC ENGINEERING AND CONSULTING, INC.

SITE ASSESSMENT SURVEY

25 January 2011

GARM SER FOB DWYER ROADS AND RANGES, 215TH GARM SER DISTRICT, HELMAND PROVINCE, AFGHANISTAN
MACTEC PROJECT NO. 6144100221.05.0A.00031





**GARM SER FOB DWYER
ROADS AND RANGES, 215TH
GARM SER DISTRICT
HELMAND PROVINCE
AFGHANISTAN**

SITE ASSESSMENT

January 25, 2011

CDR Mark Edelson, USN
CJ-Engineering
Camp Eggers
Kabul, Afghanistan

SITE: Garm Ser FOB Dwyer Roads and Ranges, 215th
Garm Ser District
Helmand Province
South Region
MACTEC Project 6144100221.05.0A.00031
CJ-ENG Project Number Not Provided

CDR Edelson:

MACTEC Engineering and Consulting, Inc. (MACTEC) has prepared this Site Assessment for CSTC-A, CJ-Eng under Task Order 75 of AFCEE Contract. This site assessment report includes preliminary discussion of issues pertaining to site acquisition and development. This Site Assessment Survey Report was produced under the direction of the Project Manager and reviewed by the Principal Engineer.

Very Respectfully,

MACTEC Engineering and Consulting, Inc

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SITE ASSESSMENT

GARM SER FOB DWYER ROADS AND RANGES, 215th

GARM SER DISTRICT

HELMAND PROVINCE, AFGHANISTAN

1. INTRODUCTION

MACTEC Engineering and Consulting, Inc. (MACTEC) has completed a Site Assessment within the Garm Ser district of the Helmand province of Afghanistan. The site visit commenced on December 19, 2010.

The purpose of the assessment was to:

- Identify land requirements, site opportunities and constraints
- Evaluate the designated land and verify land ownership
- Provide data and background information necessary for a contractor to implement a timely and efficient construction program
- Identify evident constraints that may require remediation prior to or during the construction process

The intent is to assess:

- Land Ownership
- Adjacent land uses
- Impact (if any) of construction on adjacent land
- Availability of utilities to the site
- Existing facilities & structures
- Access roads
- Potential security issues / concerns
- Environmental constraints
- Area resources including:
 - Raw construction materials
 - Transportation to and from the site for construction material and equipment
 - Labor force
 - Emergency facilities in close proximity to the site

The site assessment survey is part of the basis for a Ministry of Defense (MoD) Facilities Master Plan which identifies required land area(s) and the location of required facilities within this area according to the SOR (Statement of Requirements)

2. SITE ASSESSMENT SUMMARY

1.1 Site Ownership

The proposed site is and has been under Ministry of Defense ownership for considerable number years. No claims on the site ownership were encountered during this assessment.

1.2 Site Location

The site is located approximately 600 kilometers (km) west of Kabul City and 65km southeast of the center of the province of Lashkar Gah.

1.3 Existing Site Development

The site currently is made up of unused desert and there are no existing structures within the identified parcel of land.

1.4 Site Topography

A majority of the site is relatively flat with a relief of 5m from south to north. However, the southeast corner has a hill which rises approximately 10 meters.

1.5 Site Geology

The published USGS Geologic Map of Afghanistan (2005) indicates that a majority of the Site is underlain by map symbol:

Q_{2a}: “Conglomerate and sandstone (middle Pleistocene)—Alluvium: shingly and detrital sediments, gravel, sand more abundant than silt and clay.”

The eastern edge of the Site is underlain by map symbol:

Q_{3a} “Conglomerate and sandstone (late Pleistocene)—Alluvium: shingly and detrital sediments, gravel, sand more abundant than silt and clay”

We recommend a geotechnical investigation to assess subsurface conditions at the Site.

1.6 Site Seismicity

The Published USGS/USAID Seismic Hazard Map indicates Short (0.2 Second) and One Second Seismic Spectral Response Acceleration (S_s and S_1) per IBC 2006 of 0.16 and 0.10 g, respectively, based on a 2 percent probability of exceedance in 50 years. The Site Class should be determined based on a geotechnical exploration.

1.7 Site Drainage

The site is relatively flat therefore pooling of water may be expected. However site grades slope gently downward from south to north.

1.8 Water and Groundwater Resources

Based on the USACE Document "Provincial Water Resources Data Summary of Helmand, Afghanistan" dated April 2009, Figure 5, the site appears to overlies a fresh to brackish water sand and gravel aquifer with a yield of 100 to 400 liters per minute.

The adjacent Camp Dwyer has drilled a 300m well and encountered water at 200m. The well was not operational at the time of this assessment.

1.9 Site Expansion Potential

Adjacent land to the west, south and east is currently undeveloped therefore the site can be expanded in these directions. The northern sector of the site is tangential to the proposed FOB Dwyer.

1.10 Mines and Unexploded Ordnances

Based on a statement from commander of the first brigade, the Site has been cleared of mines. The commander also noted that people will come to this area to collect plants. However, no documentation for mine clearing of the Site was discovered.

1.11 Site Access

The proposed Site is surrounded by undeveloped desert and therefore may be accessed from all sides. There is an established natural road to the north that is used to access Camp Dwyer.

1.12 Force Protection and Security

The Site is currently undeveloped desert therefore force protection does not currently exist. However Camp Dwyer currently occupies land north of the Site.

1.13 Surrounding Land Use

To the north, the site is bordered by Camp Dwyer. To the south, west and east is undeveloped desert.

1.14 Utilities

The site does not have any existing utilities; however a weak signal from cell phone provider AWCC was obtained during the assessment.

1.15 Conclusion

There is no land dispute on the proposed site since it has been the property of the Ministry of Defense for an extended period of time without any challenge of ownership. The proposed Site is currently undeveloped desert and is adjacent to Camp Dwyer. The site appears to be clear of mines and UXOs. The site has the potential for expansion on the east, west and south and with limited expansion to the north owing to the presence of FOB Dwyer.

3. LIMITATIONS

The findings and opinions presented are relative to the dates of our site work and should not be relied on to represent conditions at other dates.

The opinions included herein are based on information obtained during the study and on MACTEC's experience. If additional information becomes available, we request the opportunity to review the information, reassess the potential impacts, and modify the report, if warranted. If this assessment included a review of documents prepared by others, MACTEC has no responsibility for the accuracy of information contained therein.

This document and information is based on a brief site visit, documents provided by CJ-Eng, Mol, or others, and interviews with local persons and officials familiar with or with responsibility over the site. Travel and security considerations limit personnel and equipment able to visit the site.

Location and elevation data are based on published documents and low resolution hand held GPS and should be considered approximate.

This document is intended for preliminary planning purposes only and should not be considered to replace detailed engineering studies such as site boundary and topographic surveys, geotechnical explorations, hydrologic studies, or other civil engineering effort.

SITE ASSESSMENT

TABLES

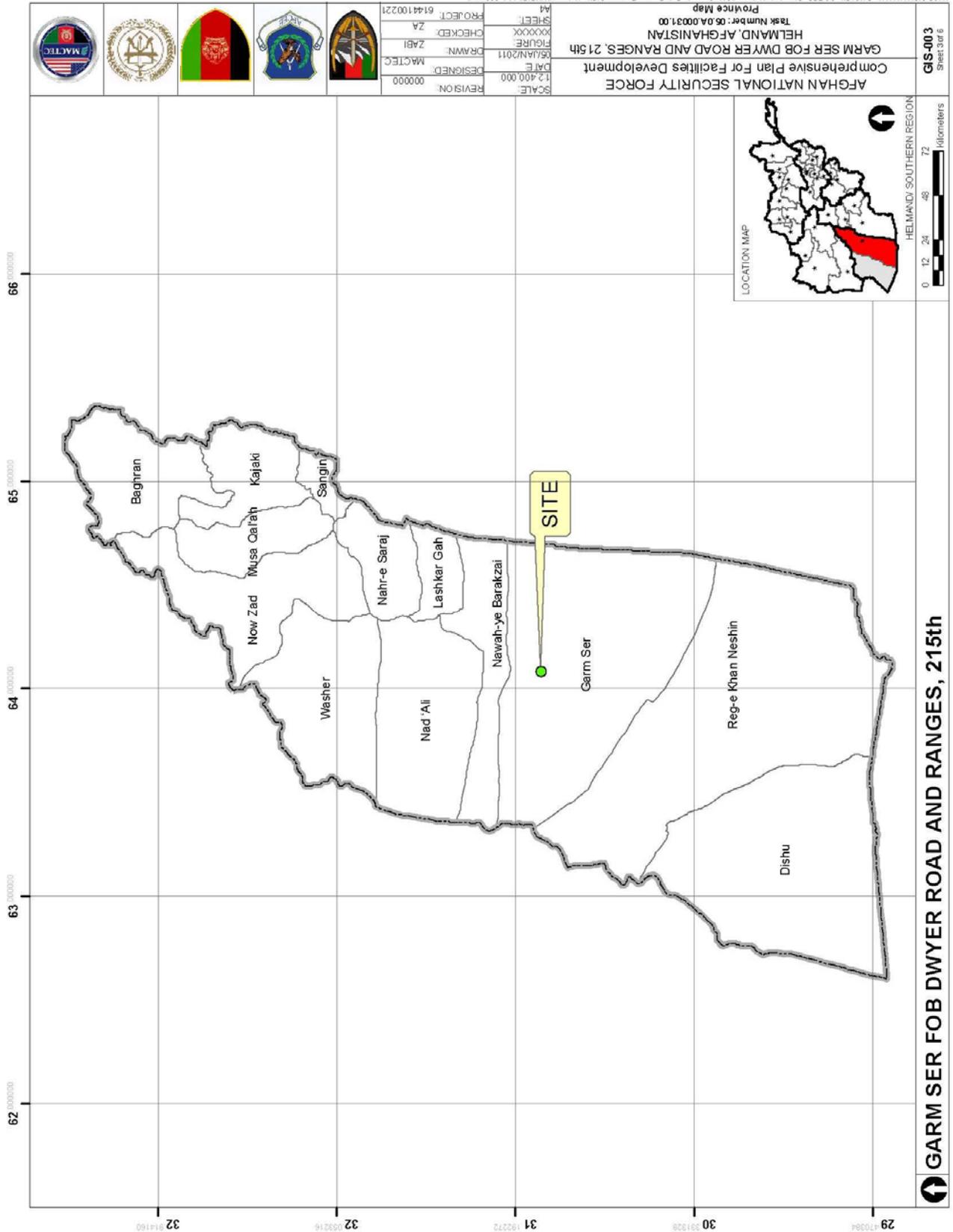
TABLE 1 SITE COORDINATES

Site Description	Site Location	Corner Point	MGRS	Elevation (m)
Garmsir FoB Dwyer Ranges 215 Th	Garmsir District, Helmand Province, Afghanistan	P1	41RPQ 03537 37484	651m
		P2	41RPQ 03511 38196	665m
		P3	41RPQ 02700 38321	651m
		P4	41RPQ 02183 39175	650m
		P5	41RPQ 00877 38465	649m
		P6	41RNQ 97257 36553	648m
		P7	41RPQ 01298 32020	654m
		P8	41RPQ 03985 32038	639m

FIGURES

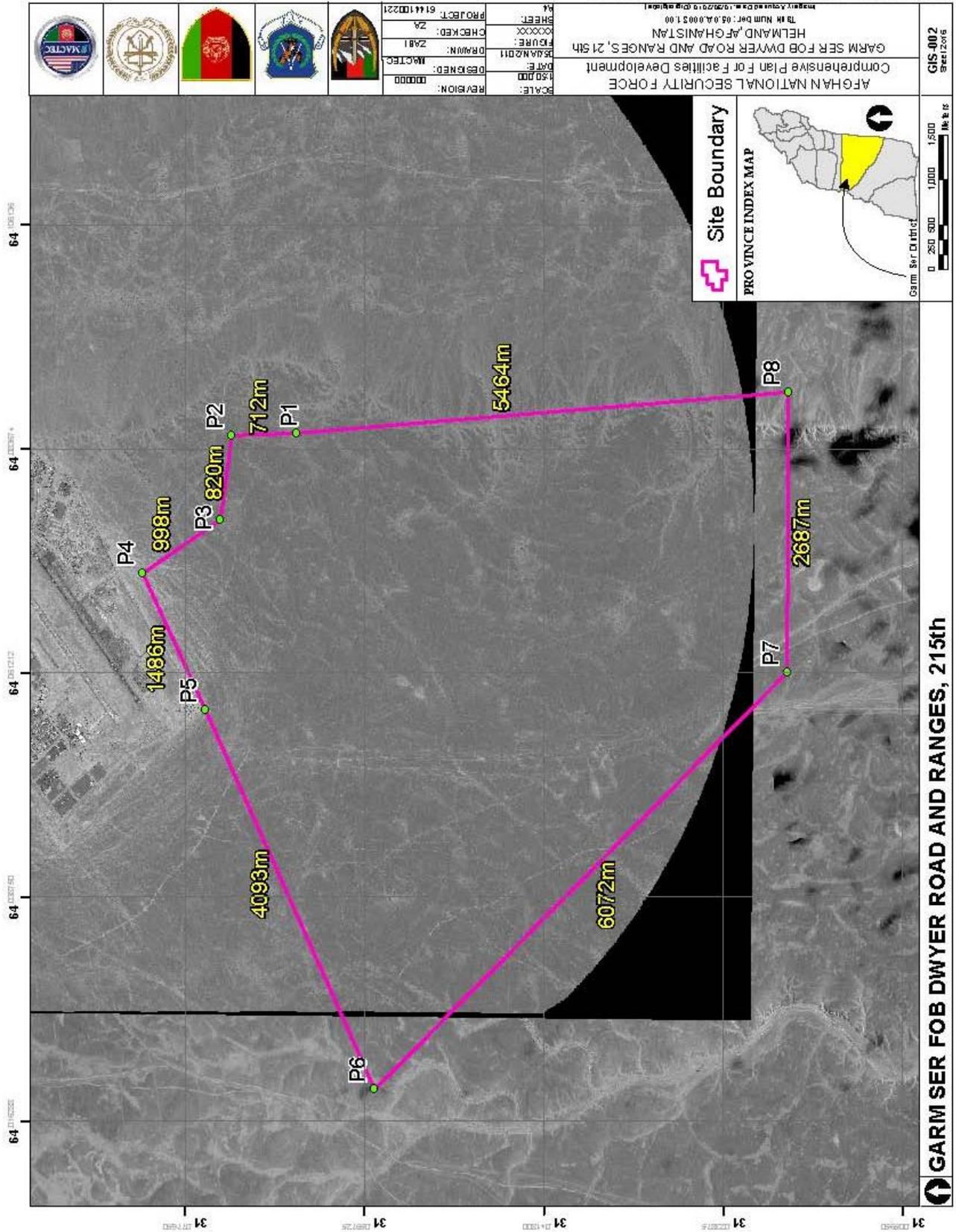
SITE ASSESSMENT

FIGURE 1 – HELMAND PROVINCIAL MAP



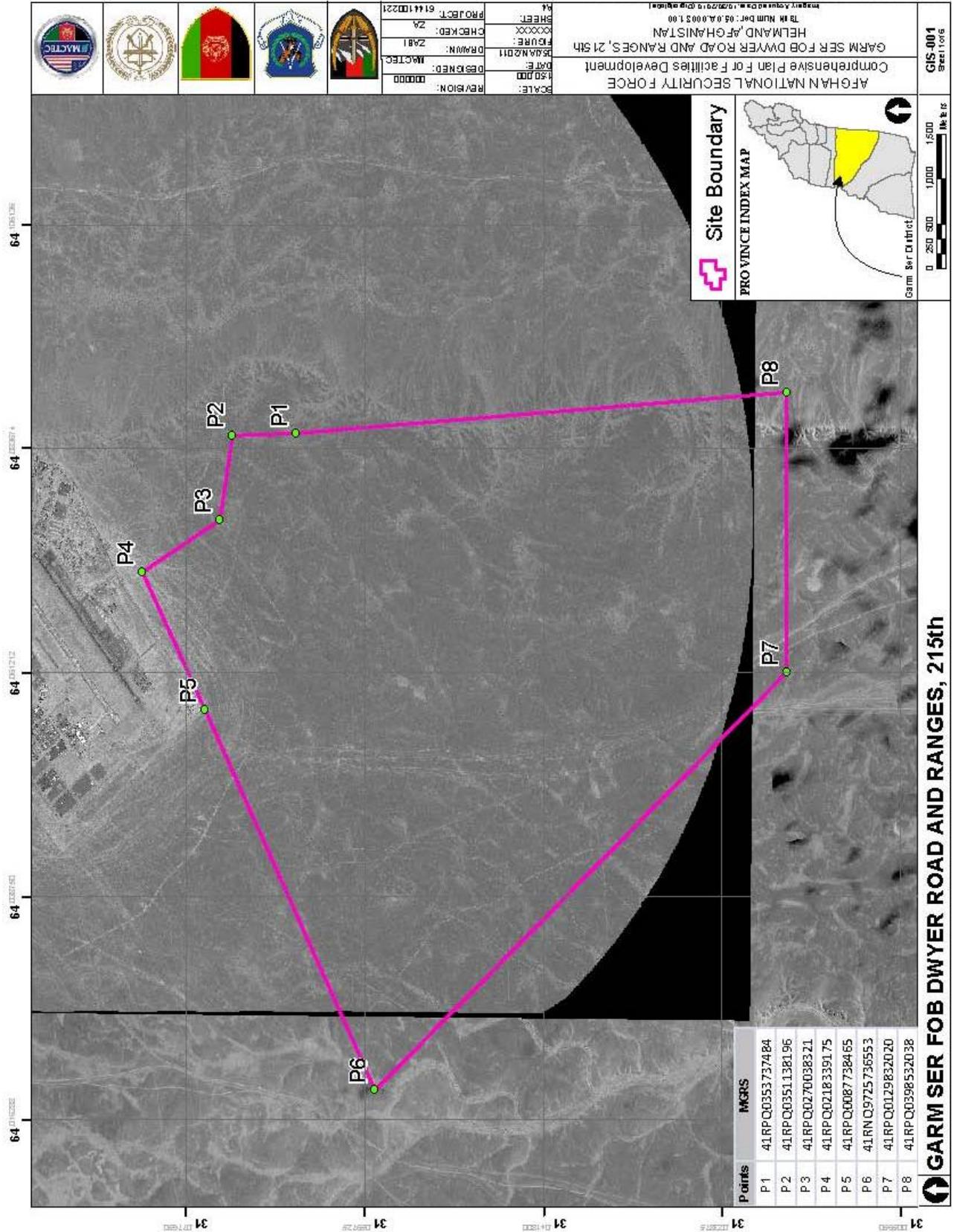
SITE ASSESSMENT

FIGURE 3 - SITE DIMENSIONS



SITE ASSESSMENT

FIGURE 4 - SITE COORDINATES



SITE ASSESSMENT

FIGURE 5 – LAND USE MAP

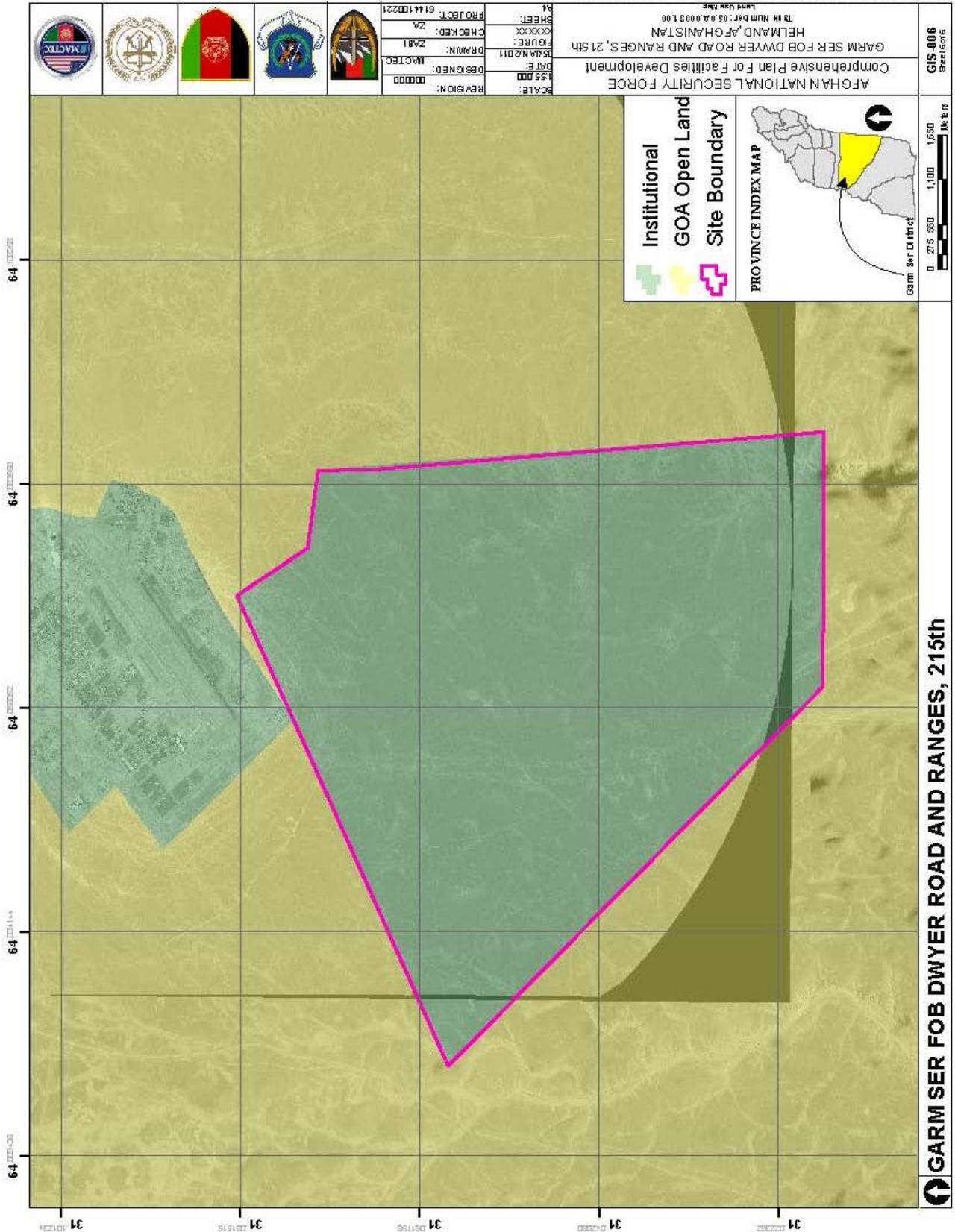
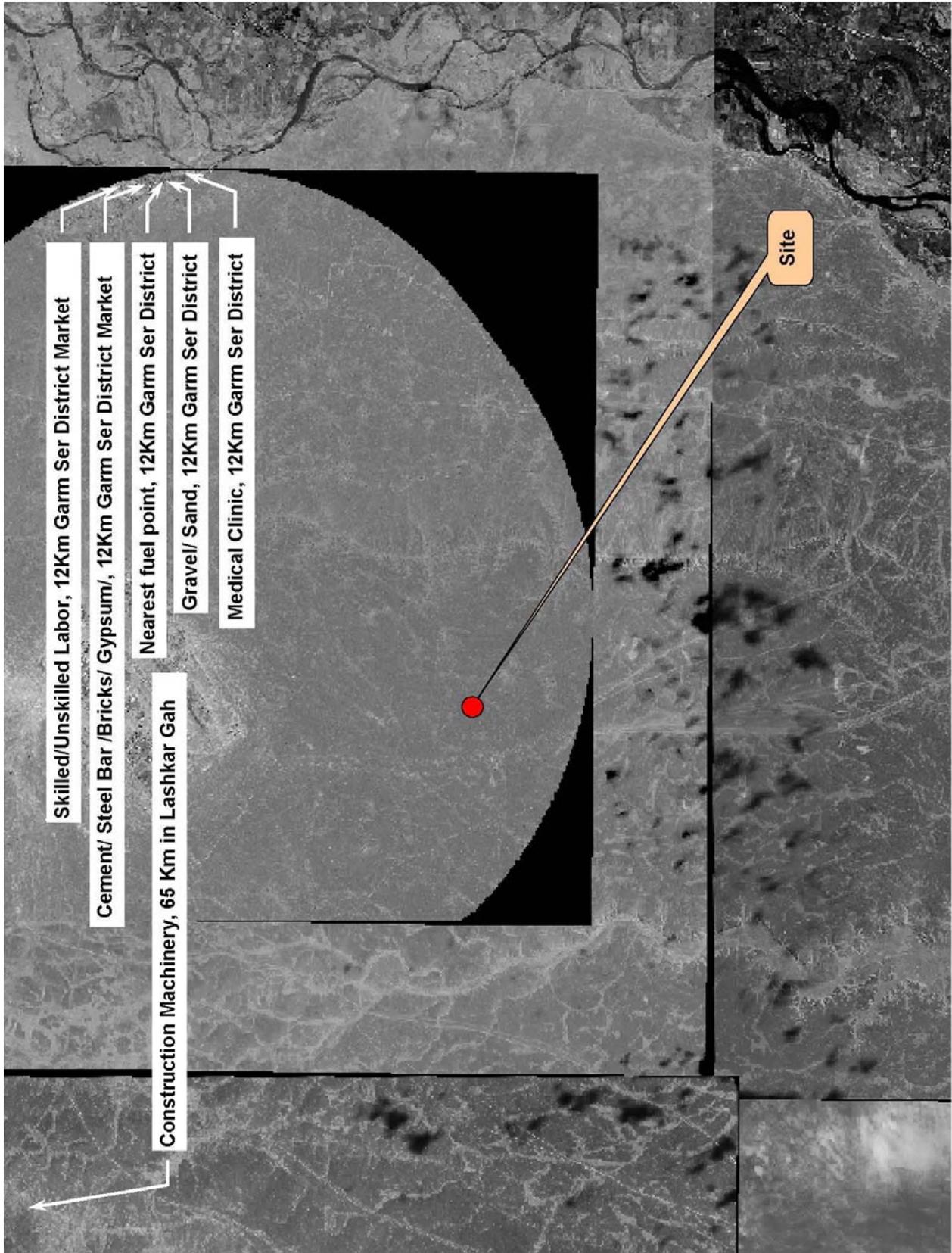
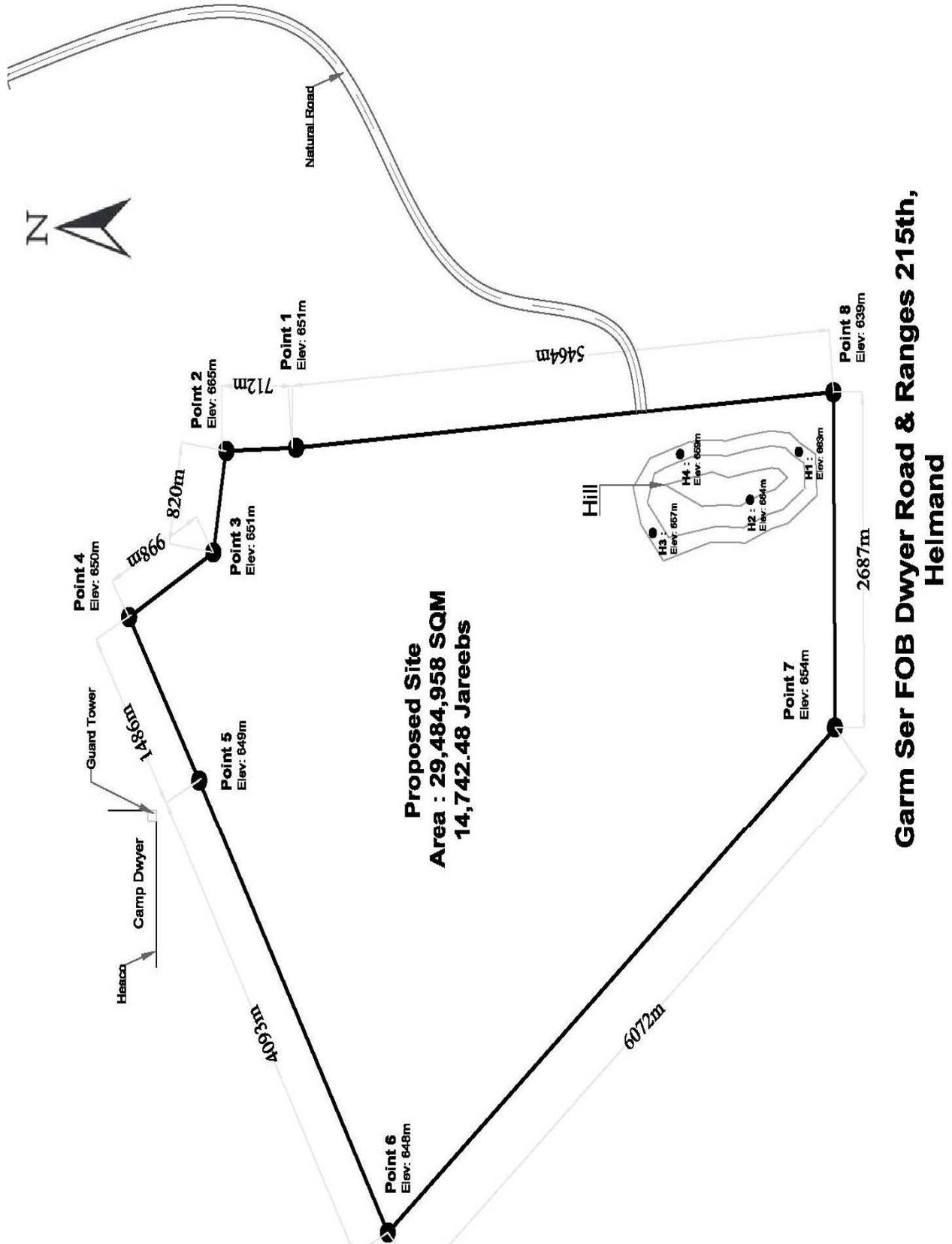


FIGURE 6 – CONSTRUCTION RESOURCES



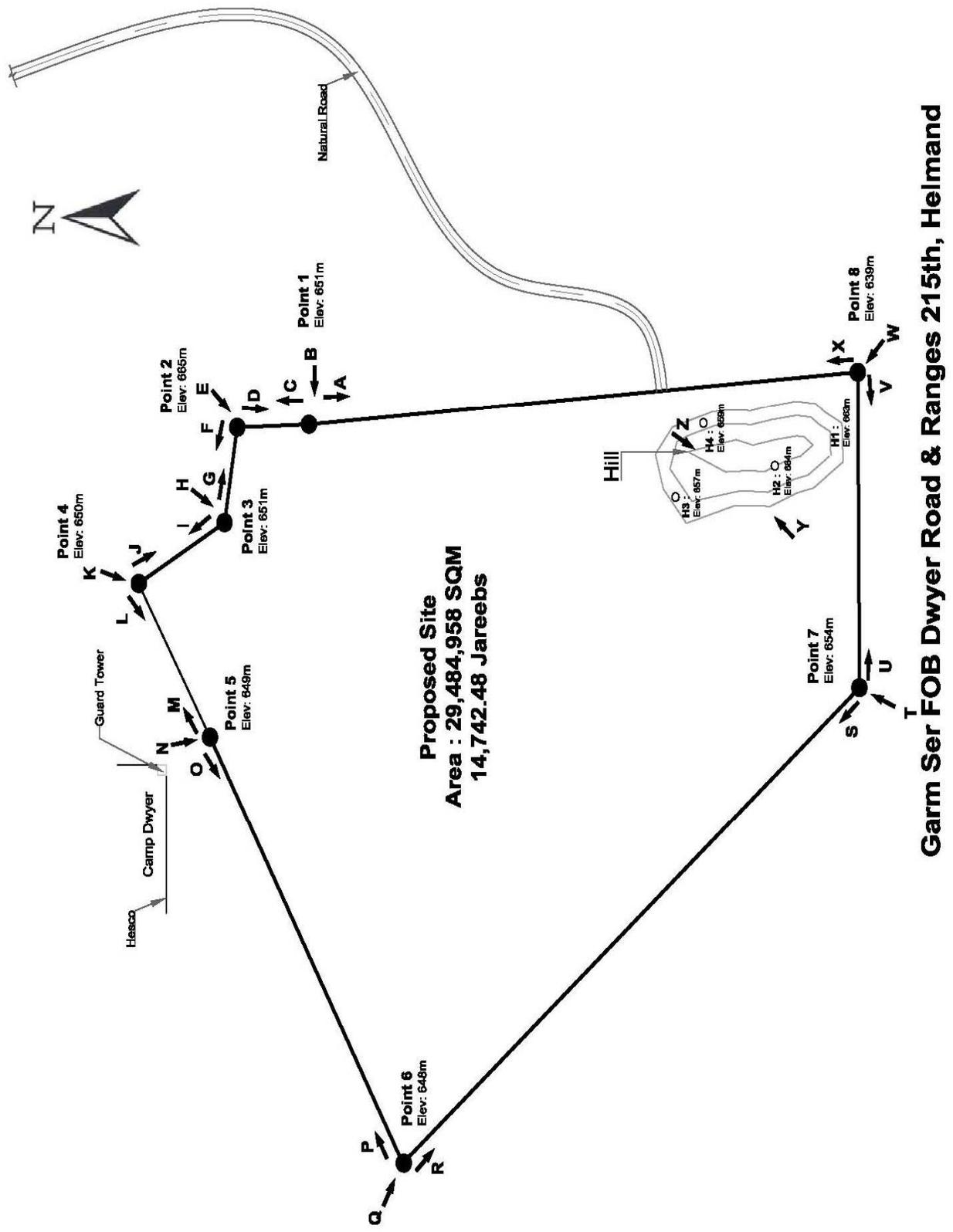
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FIGURE 7 – EXISTING SITE SKETCH



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FIGURE 8 – SITE PHOTOGRAPH LEGEND



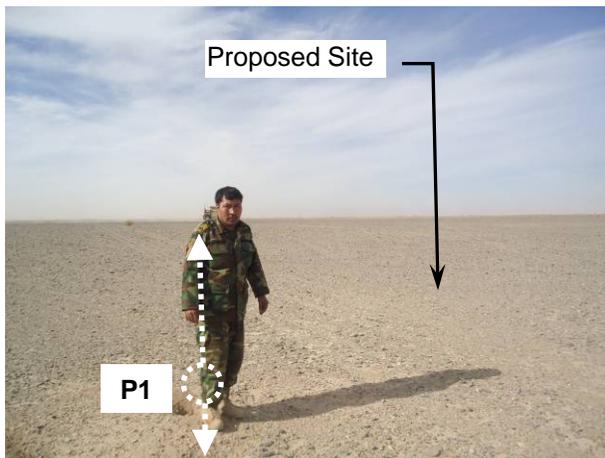
**Appendix B
Site Photos**

SITE ASSESSMENT

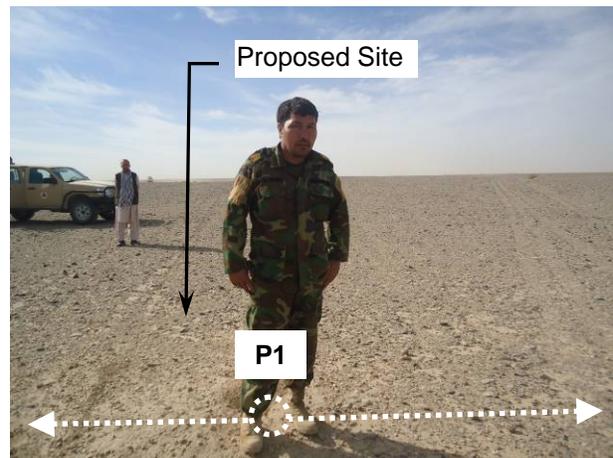
Site Corner Point Locations

Site Corner Point #1

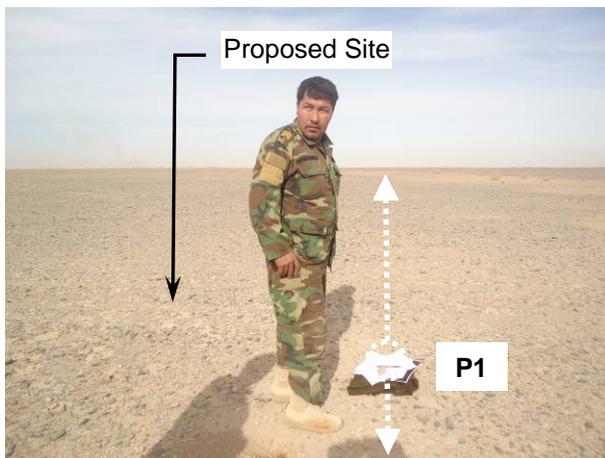
A – View to South



B – View to West



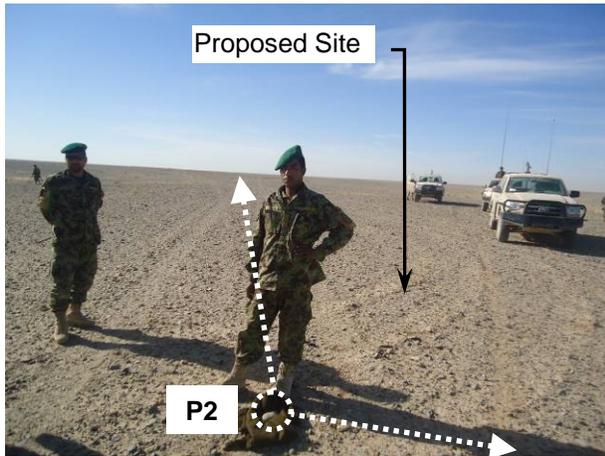
C - View to North



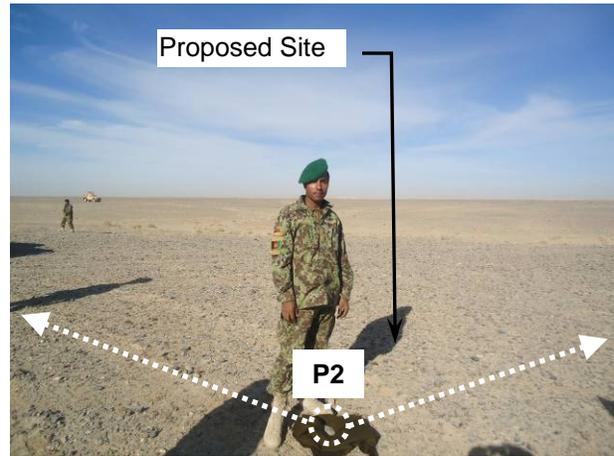
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Site Corner Point #2

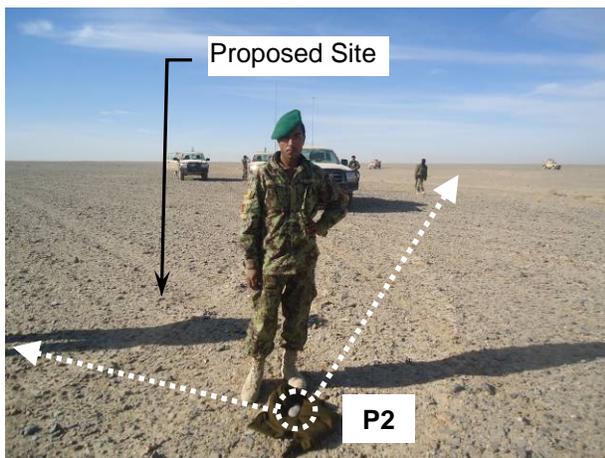
D – View to South



E – View to Southwest



F – View to Northwest



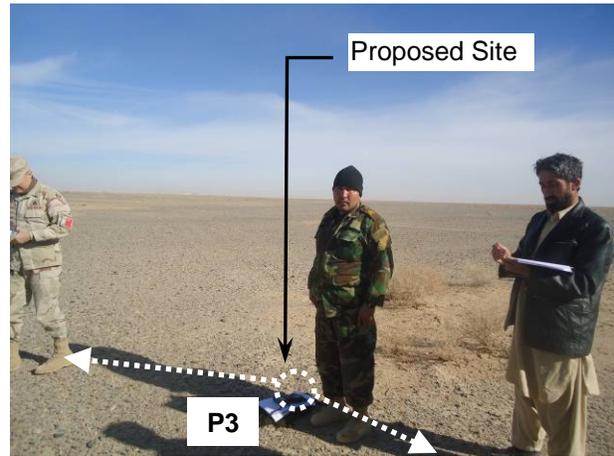
SITE ASSESSMENT

Site Corner Point #3

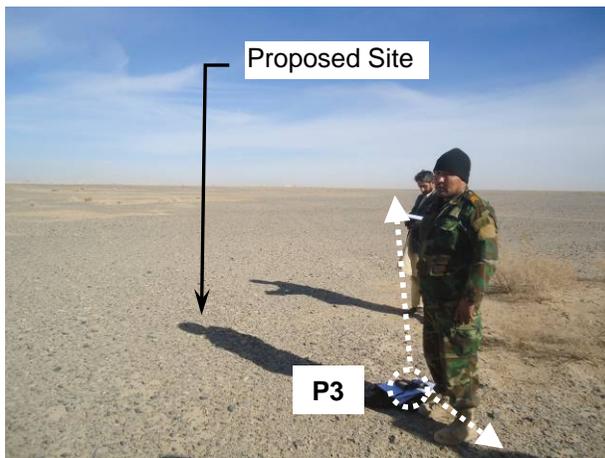
G – View to Southeast



H – View to Southwest



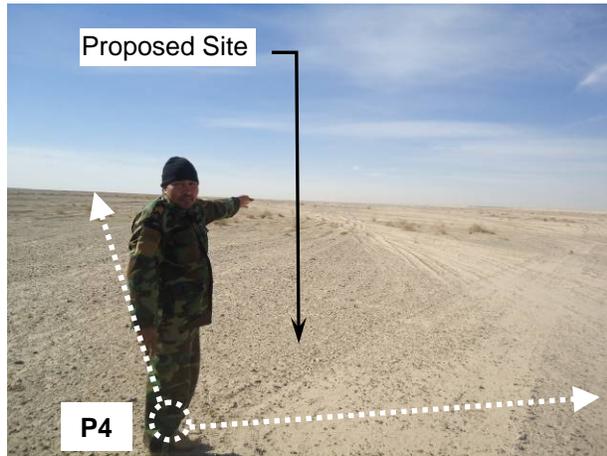
I – View to Northwest



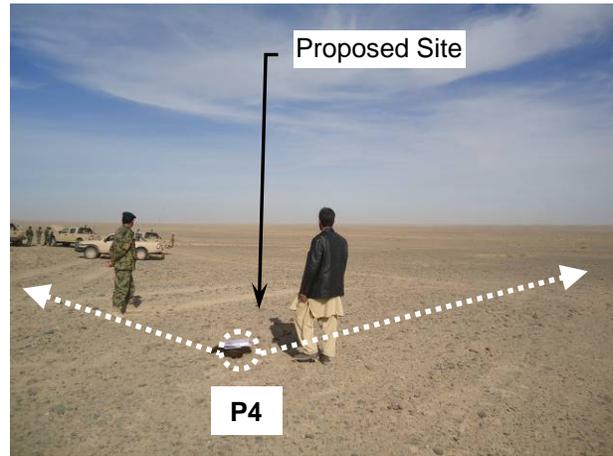
SITE ASSESSMENT

Site Corner Point #4

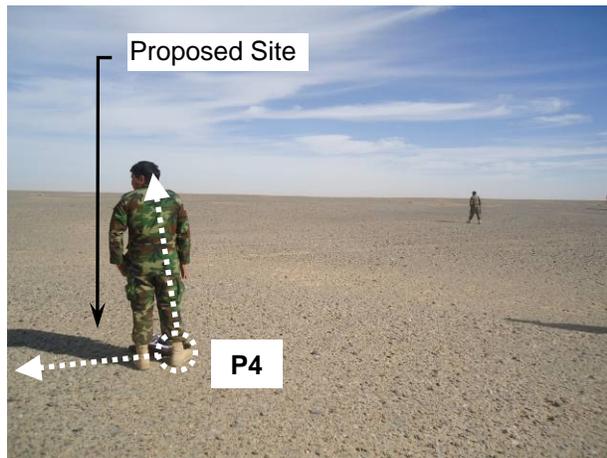
J – View to Southeast



K – View to Southwest



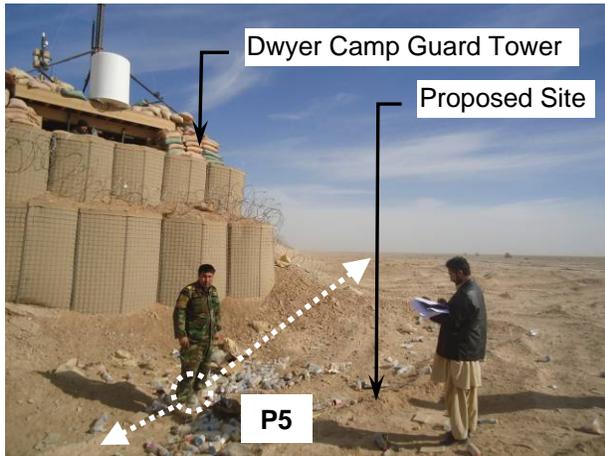
L – View to Southwest



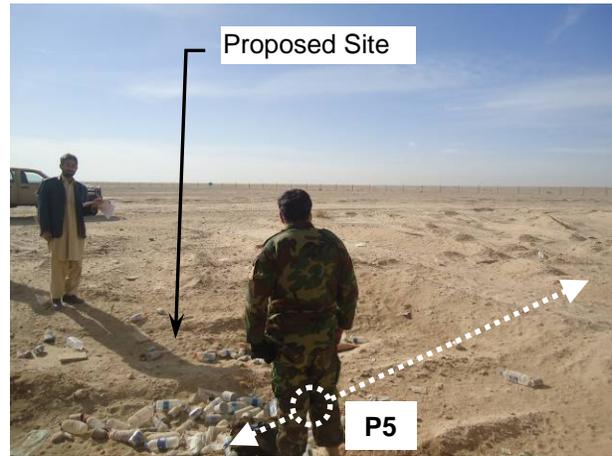
SITE ASSESSMENT

Site Corner Point #5

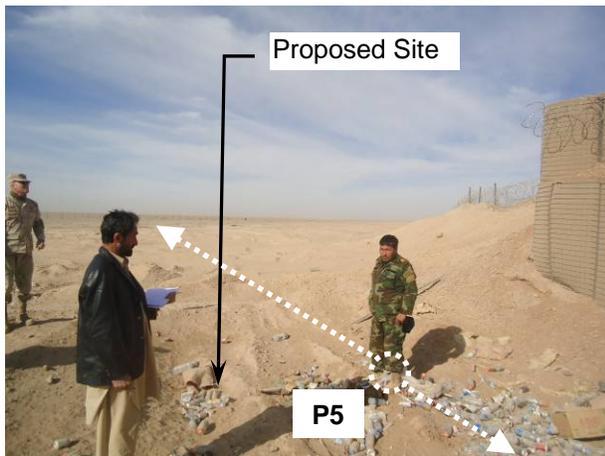
M – View to Northeast



N – View to South



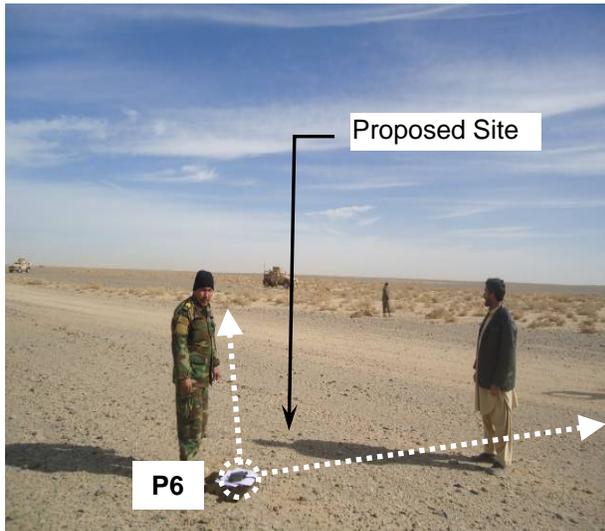
O – View to Southwest



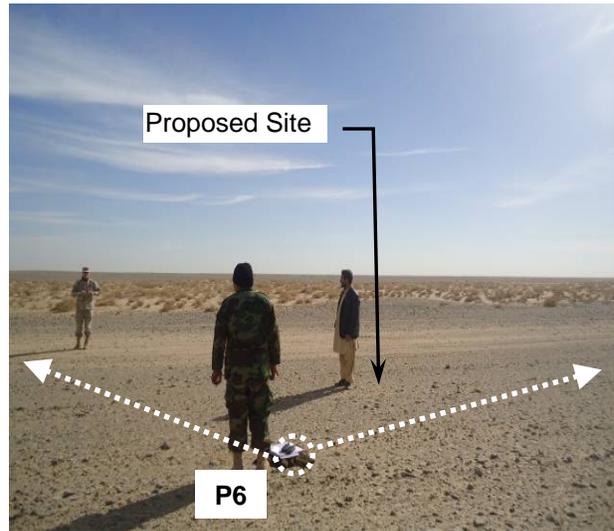
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Site Corner Point #6

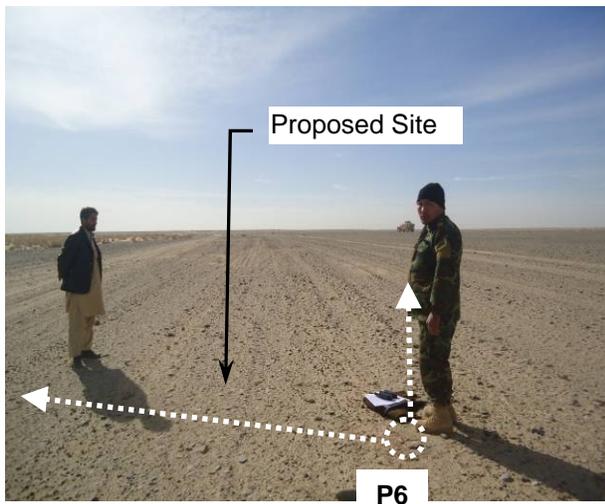
P – View to Northeast



Q – View to Southeast



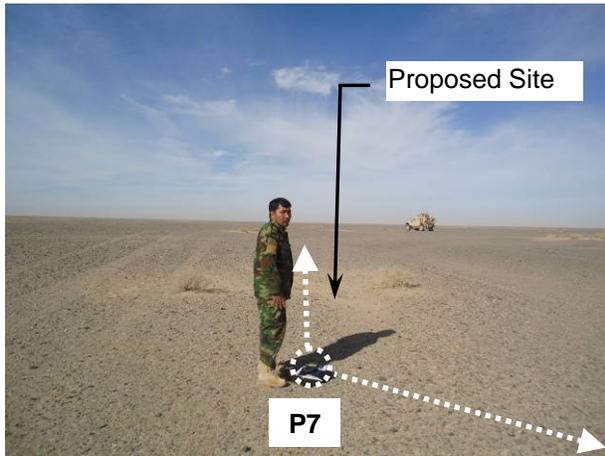
R – View to Southeast



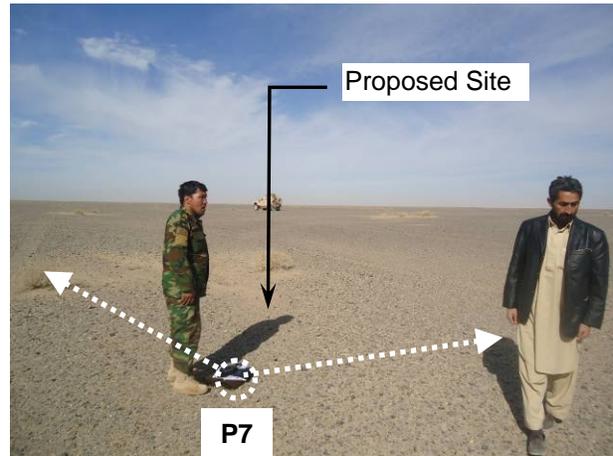
SITE ASSESSMENT

Site Corner Point #7

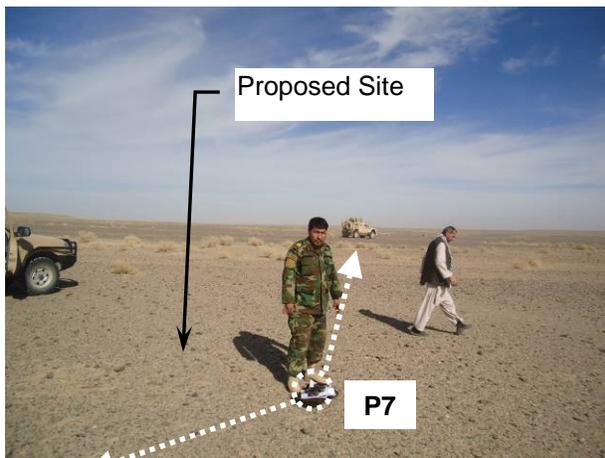
S – View to Northwest



T – View to Northeast



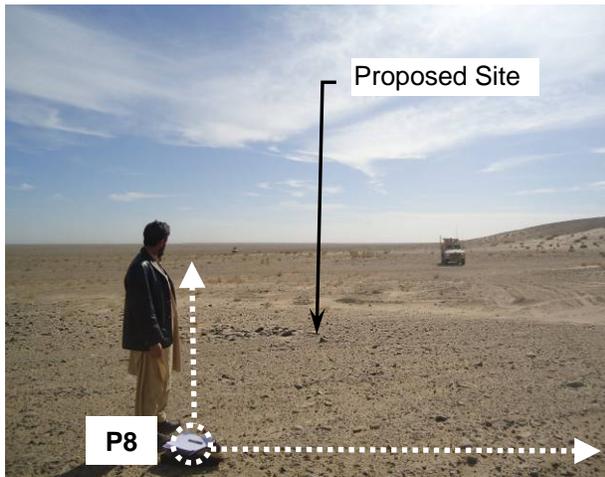
U – View to East



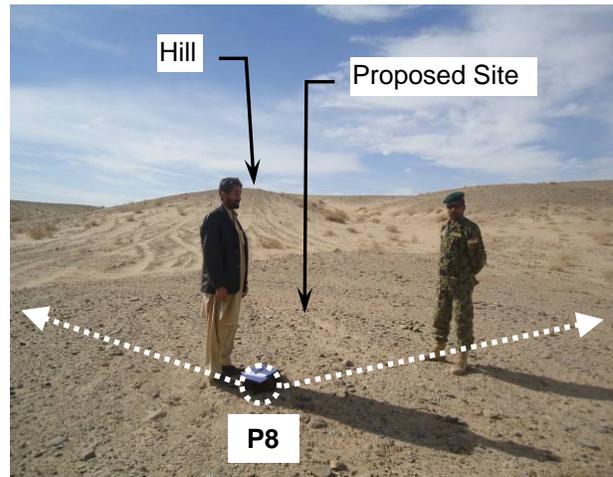
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Site Corner Point #8

V – View to West



W – View to Northwest



X – View to North

