



INNOVATIONS SURVEYS

(LAND SURVEYING, GIS AND LAND ADMINISTRATION CONSULTANTS)
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January 7, 2022

The Director
TRECK
College of Engineering
KNUST
KUMASI

Dear Sir/Madam,

SUBMISSION OF REPORT FOR SURVEY WORKS

This is to inform you that the above-mentioned land survey works for the Regional Transport Research and Education Centre, Kumasi located at KNUST Research Hills has been completed.

I submit here with the following items:

- 9 Copies of cadastral plans for the site
- 2 Copies of topographic maps for the site
- 1 soft copy of the topographic map
- 1 Survey report

Thanks for the opportunity to be of service to you.

Yours faithfully,

Surv. Dr. Anthony Arko-Adjei

Licensed Surveyor No: 316

REPORT ON SURVEY CARRIED OUT FOR THE SITE FOR TRANSPORT RESEARCH & EDUCATION CENTRE, KUMASI (TRECK)

1. INTRODUCTION

This document is a report of a survey work carried out in preparation of site plan and topographic map for the site for the Transport Research & Education Centre, Kumasi (TRECK) located at Research Hills, KNUST. The document reports on the preparation of the final maps (site plan and topographical map) for the site. The report also includes the general description of the site. The work started on October 17, 2021 and completed on 4th December, 2021.

2. SCOPE OF WORK

The Terms of Reference (TOR) as conveyed in this assignment has two (2) components:

1. To demarcate and survey the site allocated for Transport Research & Education Centre, Kumasi (TRECK) located at Research Hills, KNUST.
2. To prepare certified plan and topographic plan for the site.

3. ACTIVITIES

3.1. Survey of the Site

The **1.78-acre** parcel of land was demarcated and set out on the ground. Five (5) Type 'B' beacons were built at the boundary corners of the parcel and numbered respectively with the station ID prefixed KNUST.TREK.10/2021/1-5. The inscription KNUST.TREK.10/2021/1-5 denotes a survey work carried out on KNUST land for TRECK surveyed in the month of October, 2021 and the last numbers are the numbers for each of the pillars. Two beacons with inscription **TBM 1** and **TBM 2** were also built as a temporary benchmark for the site.

Using Dual Frequency receivers, a differential GPS survey was carried out to pick the corners of the parcel. Spot heights were picked at 5m interval. Other details such as adjoining roads, fences, low voltage power lines, among others were surveyed.

3.2. Data Processing and Plotting

Two main drawings were produced:

- a) A certified plan plotted at the scale of 1: 2500. The certified plan shows the location of the site within the KNUST Campus.
- b) A topographic map plotted at the scale of 1:500. The topographic map shows the details of the site with respect to the new layout of the Research Hills, KNUST. The map shows the spot levels at interval of 5 m and a contour interval of 0.25 m.

4. ADESCRIPTION OF THE SITE

- 1) The site for **TRANSPORT RESEARCH & EDUCATION CENTRE, KUMASI (TRECK)** situate at KNUST in the Oforikrom Municipal Assembly in the Ashanti Region of the Republic of Ghana, is located at Research Hills, the South East of main KNUST campus.
- 2) The site is bounded on the North by the COLLEGE OF ENGINEERING POSTGRADUATE BUILDING, East by undeveloped land allocated to the FACULTY OF BUILT ENVIRONMENT, North-West by the REGIONAL WATER, ENVIRONMENT, SANITATION CENTRE KUMASI (RWESCK), South-West by the UNDEVELOPED LAND and South by UNDEVELOPED LAND.
- 3) The boundary of the parcel is bounded by SEVEN (7) survey beacons; FIVE (5) of which are inscribed as KNUST.TRECK.10/2021/1-5 and the remaining two inscribed based on an existing survey as KNUST.CEPB.10/2021/2,3.
- 4) The boundary commences at control pillar marked UST TP1 which bearing and all further bearings hereinafter mentioned is referred to meridian 1° West Longitude runs on a bearing of 175° 03' for a distance of 3195.2 feet (973.9 meters) to a pillar marked KNUST.CEPB.10/2021/2 which marks the northern-eastern edge of the acquisition and forms part of the survey and runs on a bearing of 173°38' for a distance of 206.3 feet (62.9 meters) to a pillar marked KNUST.TREK.10/2021/1 and thence on a bearing of 203°11' for a distance of 23.8 feet (7.2 meters) to a pillar marked KNUST.TREK.10/2021/2 and thence on a bearing of 234°59' for a distance of 24.2 feet (7.4 meters) to a pillar marked KNUST.TREK.10/2021/3 and thence on a bearing of 263°28' for a distance of 289.3 feet (88.2 meters) to a pillar marked KNUST.TREK.10/2021/4 and thence on a bearing of 351°09' for a distance of 142 feet (43.3 meters) to a pillar marked KNUST.TREK.10/2021/5 and thence on a bearing of 354°39' for a distance of 98 feet (29.9 meters) to a pillar marked KNUST.CEPB.10/2021/3 and thence on a bearing of 083°46' for a distance of 321.2 feet (97.9 meters) to a pillar marked KNUST.CEPB.10/2021/2 the point of commencement and thence also from pillar marked KNUST.CEPB.10/2021/3 on a bearing of 290°15' for a distance of 23089.9 feet (7037.8 meters) to close on control pillar marked SGA.CORS 2020 3.
- 5) The site covers an approximate area of 1.78 acres or 0.72 hectares.

- 6) The parameter of the parcel is approximately 338.42 meters.
- 7) The land slopes from the north-east to south-west with an approximate height difference of 9.6 meters.
- 8) The highest area is at the south-eastern side of the parcel slopping uniformly towards north west and north east sides.
- 9) The highest elevation on the site approximately 302.4 meters above datum and a minimum elevation of approximately 292.8 meters above datum.
- 10) A Low KW Electricity power line closer to the site about 304.5 meters away from the boundary line.
- 11) The main adjoining road for access to the site runs from the north-eastern side to southern side parcel. The main KNUST Shuttle Ranch to Gyenyase road is about 120 meters from the site.



Surv. Dr. Anthony Arko-Adjei

Licensed Surveyor No. 316

Date: 02/02/2022

PLAN OF LAND

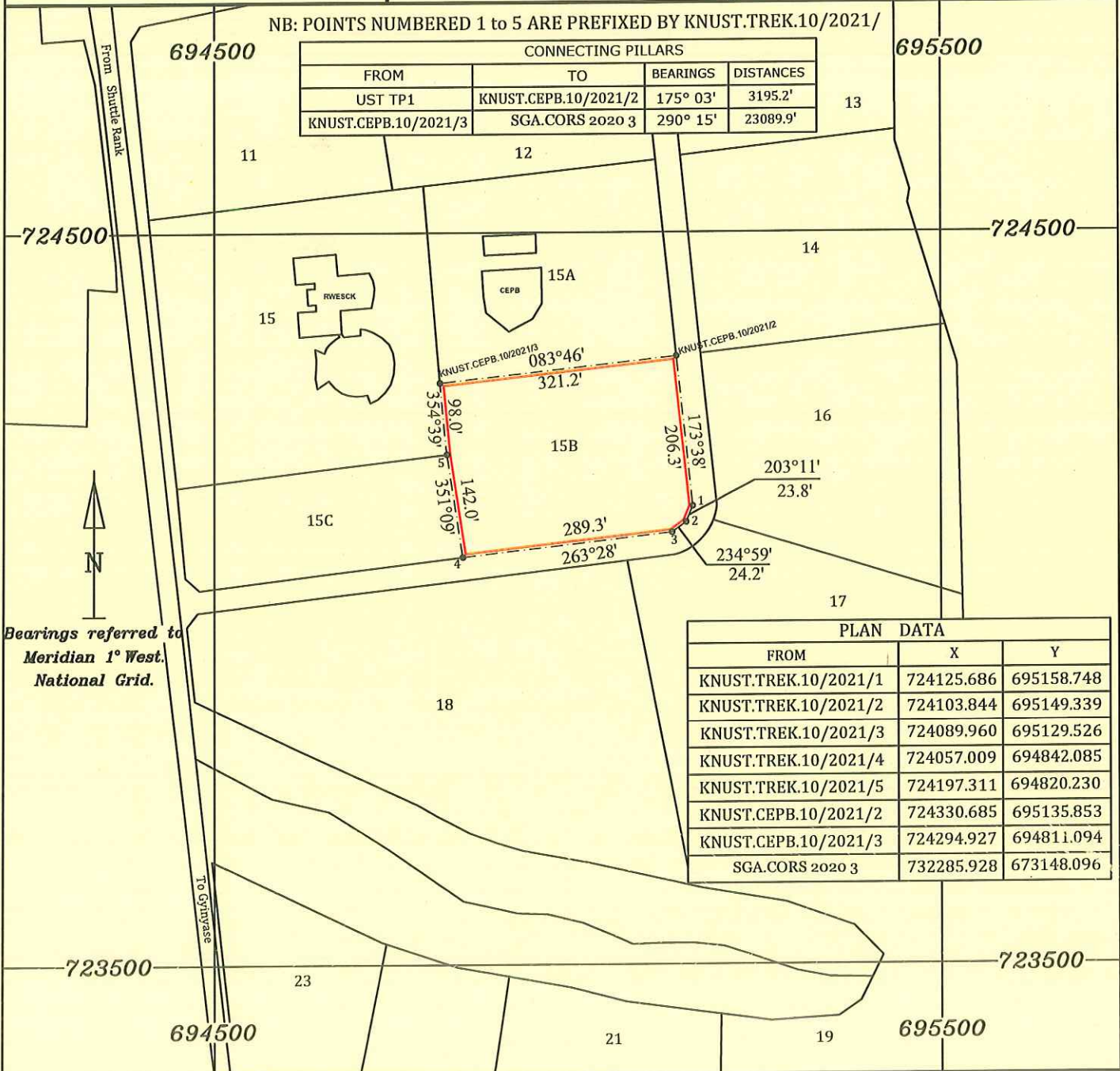
FOR: TRANSPORT RESEARCH & EDUCATION CENTRE, KUMASI (TRECK)

— *Shewn Edged Pink* —

Scale 1 : 2500

Plot No.15B, Research Hills
Area = 1.78 Acres (0.72 Ha)

LOCALITY KNUST	MUNICIPAL OFORIKROM	REGION ASHANTI
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I, **DR. A. ARKO-ADJEI**, Licensed surveyor, certify that this plan is faithfully and correctly executed and accurately shows the land within the limits of the description given to me by my client.

Date: 02/02/2022

Licensed Surveyor No. 316

