ROSEBEL GOLD MINES N.V.
罗斯贝尔金矿有限公司

SITE INVESTIGATION

NEW INFRASTRUCTURES

CAMP DAVID AREA

SCOPE OF WORK

数字签名人: Shan Baoshun
DN: cn=Shan Baoshun, ou=Surface Support, email=Shan_Baoshun@rosebel.com
日期: 2025.12.23 08:01:26 -03'00'

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Digitally signed by William Li
DN: cn=William Li, ou=RGM MINE Operations, email=William_Li@rosebel.com
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1. Works Information

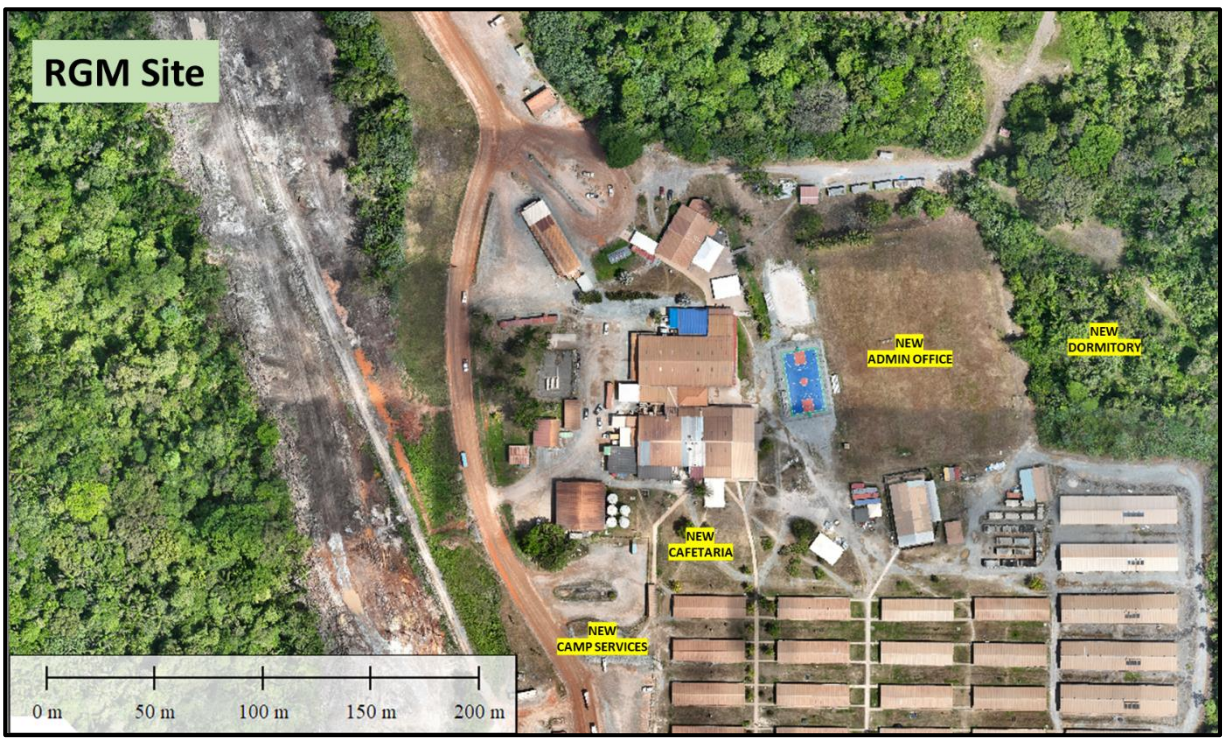
1.1. Introduction

Zijin - Rosebel Gold Mine plans to develop a new infrastructures building to support ongoing operational and administrative functions located near from Camp David area. The proposed building will be constructed on an existing soccer field and bus-stop area, which is a previously undeveloped area from a structural perspective and is understood to be underlain by soft and potentially compressible soils. Given the importance of the facility and the geotechnical sensitivity of the site, a structured and well-defined site investigation is required prior to detailed design and construction.

A comprehensive geotechnical site investigation is a fundamental step in reducing design and construction risks, particularly for developments on soft ground. The investigation will provide critical information on subsurface stratigraphy, groundwater conditions, and soil engineering properties, which will directly influence foundation selection, settlement assessment, construction methodology, and overall project feasibility.

This document is issued as part of a tender invitation for a geotechnical site investigation campaign planned for early 2026.

Figure 1: Proposed Location Plan for New Infrastructures at Camp David Area



1.2. Location

Rosebel Gold Mines N.V. (RGM) is located in the Brokopondo district in northeastern Suriname. RGM lies approximately 85 kilometers (km) south of Paramaribo. The mining concession covers 170 square kilometers (km2), with the Suriname River to the east, the Saramacca River to the west, and the Brokopondo reservoir to the south (**see Figure 2**).

Site : Rosebel Gold Mines (Mine Site), Brokopondo, Suriname

Head Office : Rosebel Gold Mines N.V., President da Costalaan 2, Paramaribo, Suriname

Grid Reference : N 05, 07, 28 E 55, 14, 52

Figure 2: Showing the Rosebel Gold Mines location, Brokopodo, Suriname

1.3. General work background and constraints

The objectives of the geotechnical site investigation are to:

- Identify the stability of the site and foundation, stratigraphic structure, engineering characteristics of bearing and underlying layers, soil stress history, groundwater conditions, and adverse geological processes.
- Provide geotechnical parameters required for design and construction, determine foundation (pile) bearing capacity, and predict structural deformation characteristics
- Provide recommendations for foundation, excavation support, dewatering, and ground improvement design and construction schemes
- Analyse slope stability and the stability of structures built on or near slopes, assess the impact on downhill buildings, and propose optimal slope geometry and stabilization and monitoring measures
- Conduct seismic effect evaluation for the site and foundation; analyse and assess bank slope and foundation stability
- Conduct preliminary identification of geological structures, stratigraphy, geotechnical properties, and groundwater conditions
- Determine types, depths, distribution, and engineering properties of soil and rock layers within the construction area; evaluate foundation stability, homogeneity, and bearing capacity
- Make preliminary assessment of water and soil corrosiveness to construction materials
- For preliminary investigation of high-rise buildings, conduct initial assessment of possible foundation types, excavation and support, and dewatering schemes

1.4. Scope of Work

This Scope of Works (SoW) outlines the requirements for a geotechnical site investigation to support the planning, design, and construction of a new infrastructures building to be developed on the existing soccer field and bus-stop area at Camp David, Rosebel Gold Mine site, which is understood to be dominated by soft soil conditions.

The following working constraints should be considered for the proposal;

1. Estimations should include provision of onsite offices and workshop (if not already in place), a location of which will be provided by RGM. All mobilization and set-up costs (to include services and utilities)

will be the responsibility of the consultants, and therefore an allowance should be made in the bill of quantities for preliminary costs.

2. RGM will cover all board (food and accommodation) for consultant's personnel, unless there is a requirement for the personnel to be located off-site. In relation to the latter, a cost should be provided

3. RGM will cover all fuel for vehicles that are required for this site investigation project.

Access

Site entry will be carried out in accordance with RGM standards, and RGM will complete necessary inductions. All personnel working at Rosebel Gold Mines (RGM) will be required to provide the standard entry requirements (medical, police clearance, etc). Further details will be provided as required by the HR department. Only working vehicles (company-assigned) are permitted on-site. All Personal vehicles will have to be parked outside the main gate in a designated car park.

The Scope of Works consists of several integrated activities designed to adequately characterize subsurface conditions at the project site. These activities include preliminary planning and site preparation, intrusive field investigations (boreholes, in-situ testing, and trial pits), laboratory testing of representative soil samples, geotechnical analysis and interpretation, and preparation of a comprehensive geotechnical investigation report to support design and construction

1.4.1 Pre-liminary Works:

Prior to commencement of the field investigation, the consultant shall complete the following preliminary works:

- Review all available project information, including site layout plans, previous geotechnical reports (if any), topographic data, and proposed building layouts
- Conduct a site reconnaissance visit to assess access conditions, surface drainage, ground conditions, and potential constraints
- Identify and mark proposed investigation locations in coordination with the RGM
- Arrange utility clearance and verify the presence of underground services prior to drilling or excavation

- Prepare and submit a Site Investigation Method Statement, including drilling methods, testing procedures, HSE controls, and environmental protection measures
- Obtain all required permits, approvals, and site access requirements
- Establish site-specific HSE arrangements, including risk assessments, toolbox talks, and emergency procedures
- Mobilize personnel, drilling equipment (if required), and testing tools suitable for soft soil conditions.

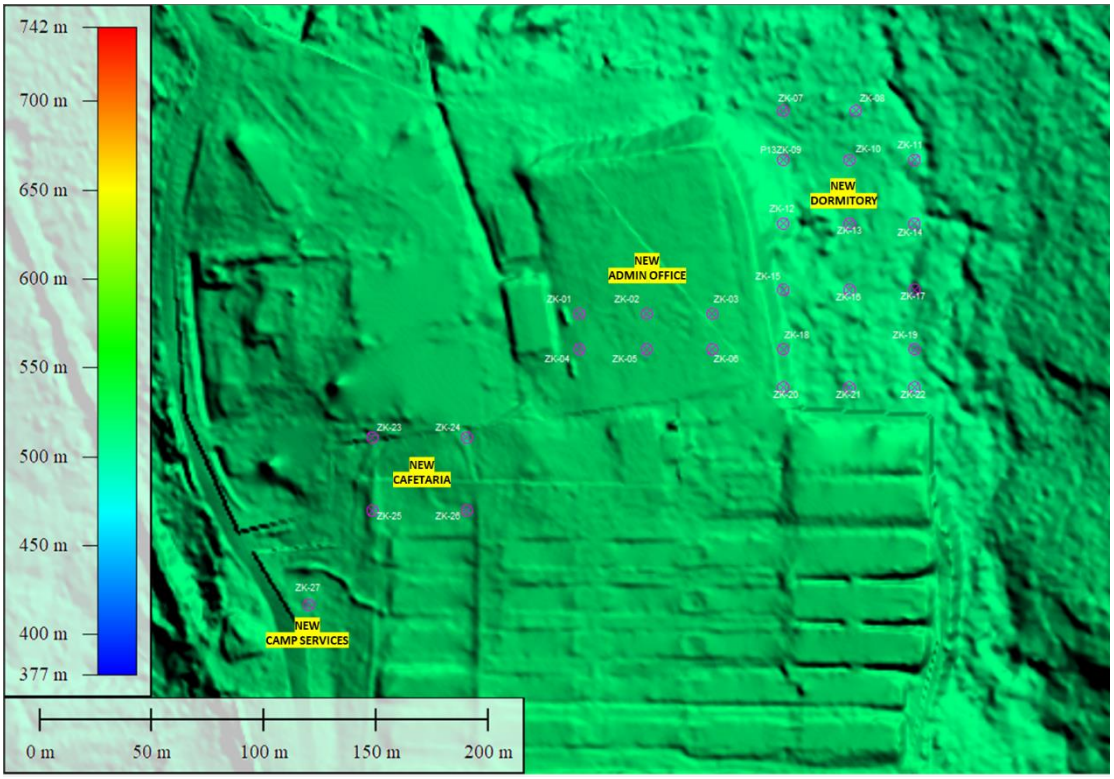
1.4.2 Field Investigation Works

The type of field tests to be performed will depend on the geological nature of the materials (soft soils or hard rock) in the area

A. Rotational Boreholes Drilling

- Drill a total 27 boreholes across the proposed building footprint (based on the design) or shall distribute to cover the project site, with locations agreed with the client (RGM)
- Borehole depth: 15-25m (below existing ground level), or extended further if required to encounter competent bearing strata or refusal
- Borehole spacing to provide adequate coverage of the entire building area, including corners and central zones, or adjusted plan of location consideration based on discussions with client (RGM)
- Boreholes shall be continuously logged by a qualified engineer, recording soil type, consistency, colour, structure, groundwater conditions, and drilling characteristics, etc.
- Collection of disturbed samples from all SPTs and undisturbed samples (shelby tube or equivalent) from cohesive soil layers for laboratory testing
- Installation of temporary or permanent groundwater standpipes/piezometers in selected boreholes to monitor groundwater levels
- Measurement of groundwater levels during drilling and at least 24 hours after completion

Figure 3: Fieldwork & Drill Plan for Site Investigation at Camp David Area



Based on the preliminary site layout and topographic assessment, a total of 27 investigation points are proposed for this site investigation drilling. The boreholes are strategically distributed across and around the existing soccer field area, including the surrounding zones identified as being underlain by soft soil conditions. The drill locations extend beyond the immediate building footprint to capture lateral variability in soil stratigraphy, groundwater conditions, and potential transition zones between soft and firmer ground. Several boreholes are positioned near existing and planned infrastructure, including adjacent access roads and mining haul road corridors, to assess the influence of traffic loading, historical ground disturbance, and drainage conditions on subsurface behavior.

The proposed layout also considers proximity to nearby facilities such as the planned administration office, dormitory, cafeteria, and camp services areas, allowing the investigation data to support both the current office building design and potential future developments in the Camp David area. Borehole spacing and distribution have been designed to provide adequate redundancy and confidence in geotechnical interpretation, particularly given the anticipated presence of compressible soils. All boreholes locations shall be verified and finalized during the site reconnaissance stage, taking into account site access, safety constraints, underground services, and ground conditions at the time of execution. Any relocation or modification of borehole locations, also additional drill plan arising from adjustments to the preliminary

site assessment shall be permitted, subject to prior discussion and mutual agreement between the consultant and RGM

B. In-Situ Testing

The following in-situ tests shall be carried out:

- Standard Penetration Tests (SPT) at 1.0-1.5m intervals, particularly within soft soil layers and at changes in strata
- Cone Penetration Tests (CPTu) (if accessible) to define continuous soil stratigraphy and strength
- Field vane shear tests in very soft cohesive soils (if encountered)
- If weathered rock would be encountered, will be cored 2 to 4 additional meters and will finish the drill, so, the minimum penetration on weathered rock, or level suitable for foundation, will be cored to a depth of 7 - 10m. If bedrock in not encountered the minimum N30 SPT value to finish drilling have to be 45 or greater. Undisturbed rock core samples should be collected every 1m, and whenever the nature of the rock changes, and should be plasticized and keeping the order from its natural disposition in the ground.
- Measurement of groundwater levels during and after drilling

C. Trial Pits

- Excavation of trial pits (up to 3m depth below existing ground level or shallower if groundwater inflow or instability is encountered) to assess near-surface soils, fill materials, and construction feasibility and visual inspection of soil consistency and groundwater seepage
- Trial pits shall be inspected for indications of instability, sloughing, soft spots, or artesian conditions
- Where safe, simple in-situ hand vane shear tests may be conducted in very soft cohesive soils

- Trial pits shall be properly backfilled, compacted, and reinstated immediately after logging and sampling to restore the surface conditions

- Test pits will be excavated mechanically with a backhoe, to a depth of 3m below ground surface, except if rock appears. When weathered rock was detected, a ripper utility should be used in order to get unweathered rock. When major cuttings (over 3m) are expected it will be necessary to carry out a specific study to define the angle of the slopes and any eventual stability problem. The test pit log should include, at least, determination of the subsurface structure of the soil, thickness and composition of the topsoil, characterization of the subgrade level, position of water table, etc. In each test pit a sample of the soil suitable to be the subgrade to support the road (not organic soil) will be taken. Includes sampling for posterior laboratory test, photographic report, carrying out of the appropriate in situ tests and classification of soils for engineering purposes using unified soil classification system (USCS)

D. Seismic Investigation

The Consultant shall carry out seismic field investigations to evaluate subsurface dynamic properties and site seismic conditions for building and infrastructure foundations. The field work shall include, but not be limited to, the following activities:

- Establishment of seismic survey lines and test locations in coordination with borehole positions and proposed foundation layouts

- Execution of MASW and/or seismic refraction surveys to determine shear wave velocity (Vs) and compression wave velocity (Vp) profiles.

- Seismic refraction surveys to identify subsurface layering and depth to competent strata

- Conduct downhole and/or crosshole seismic testing (if possible) to confirm Vs profiles at foundation depth

- Performance of microtremor (HVSR) measurements to identify site fundamental period and resonance characteristics

- Recording, quality control, and validation of seismic field data.

- Correlation of seismic test locations with geotechnical boreholes and in-situ tests

Any additional works or changes to the fieldwork plan shall be subject to mutual agreement between the Consultant and RGM

1.4.3 Laboratory Testing

Representative soil samples shall be tested in an accredited laboratory, including:

Classification tests:

- Determination of the particle size distribution by sieving.
- Determination of the Atterberg limits (liquid limit, plastic limit, plastic index).
- Specific gravity of soils (bulk density and unit weight)
- Determination of the Moisture content.
- Proctor or modified Proctor test to determine the relationship between water content and dry unit weight of soils (compaction curve).
- Soil classification
- Chemical testing (sulfate, pH) if aggressive ground conditions are suspected

Mechanical tests:

- Rock unconfined compressive strength in accordance with ASTM D7012, “Standard Test Method for Unconfined Compressive Strength of Intact Rock Core Specimens”.
- Direct shear test. Cohesion and friction angle.
- California Bearing Ratio (CBR).
- In plastic, expansive or poorly consolidated clays: triaxial test or Oedometer test.
- In rock: geological classification of the sample as per ASTM D5878 - 08 using a suitable system of classification for Engineering Purposes. Rock quality designation, Rock Mass Rating.

- The mechanical test should make the point load test in case the core sample is not suitable for unconfined compressive strength

Chemical tests:

- Determination of environmental aggressiveness and corrosion risk for concrete: pH, carbonate and sulphate content in topsoil and water, if aggressive ground conditions are suspected

1.4.4 Geotechnical Analysis and Assessment

- The geotechnical assessment shall undertake the following analyses:
- Soil stratigraphy and engineering soil classification
- Bearing capacity analysis for shallow and deep foundations
- Immediate and long-term settlement analysis
- Identify unstable slopes around the site; assess stability impacts from excavation, filling, loading/unloading during construction
- Assess the likelihood of hazardous geological phenomena such as rockfalls, landslides, and debris flows
- Determine rock thickness, spatial distribution, bedrock surface variation, and free faces affecting foundation stability
- Assessment of suitability of shallow foundations vs deep foundations (e.g., piles, etc.);
- Ground improvement options recommendations (e.g., preloading, stone columns, soil replacement, and etc.)
- Groundwater impact on excavation and construction.

1.4.5 Reporting Deliverables and Standard

The final report from Geotechnical Investigation shall provide detail information including:

- Site description and investigation methodology

- Borehole logs, CPT profiles, and groundwater records
- Laboratory test results
- Interpreted soil profiles and geotechnical parameters
- Engineering analyses and calculations
- Foundation design recommendations
- Construction considerations and risks
- Limitations and assumptions

And all works and reporting shall be carried out in accordance with recognized standards and best practice, including: local building and geotechnical codes, ASTM/ISO standards for soil testing, relevant national foundation design standard, and international geotechnical engineering practice.

1.5. Health, Safety, and Environmental Requirements

All site investigation activities shall be planned and executed in strict compliance with applicable RGM (HSE) regulations, policies, and procedure. Given that the works will be conducted within an active site and on soft ground conditions, particular emphasis shall be placed on excavation safety, equipment operation, and environmental protection. RGM – Infrastructure Services department is responsible for ensuring the works are completed in accordance with RGM standards.

Nominated consultants are responsible for:

- Ensuring all activities and tools or machinery is safe and maintained in accordance with both company and required RGM standards.
- Risk assessments and health and safety plans are completed for all activities.
- All operations staff/personnels have the required documentation to complete their required activities, including work site inductions and medicals, and personal documentation relating to their individual skills/training.
- Ensuring the required project timelines are adhered to

1.6. Concluding Notes

This geotechnical site investigation is a critical component of the proposed new infrastructures building development on soft soil conditions. The scope has been designed to provide sufficient subsurface, groundwater, and laboratory data to enable safe, economical, and compliant foundation design.

The outcomes of this investigation will:

1. Reduce geotechnical uncertainty and construction risk
2. Support informed decisions on foundation type and ground improvement needs
3. Ensure compliance with applicable engineering standards and HSE requirements
4. Provide a sound technical basis for detailed structural and civil design.

All works shall be executed with a strong emphasis on safety, environmental stewardship, and data quality. Any unforeseen ground conditions encountered during the investigation shall be promptly communicated to RGM, and the scope shall be adjusted as necessary to ensure that the objectives of the investigation are fully achieved.

If any information provided in this document is unclear and requires further clarification, this should be raised to RGM. In the event that any area of this document is not understood and not otherwise raised with RGM staff, RGM will not be held responsible.

2. Location Proposed Photographs

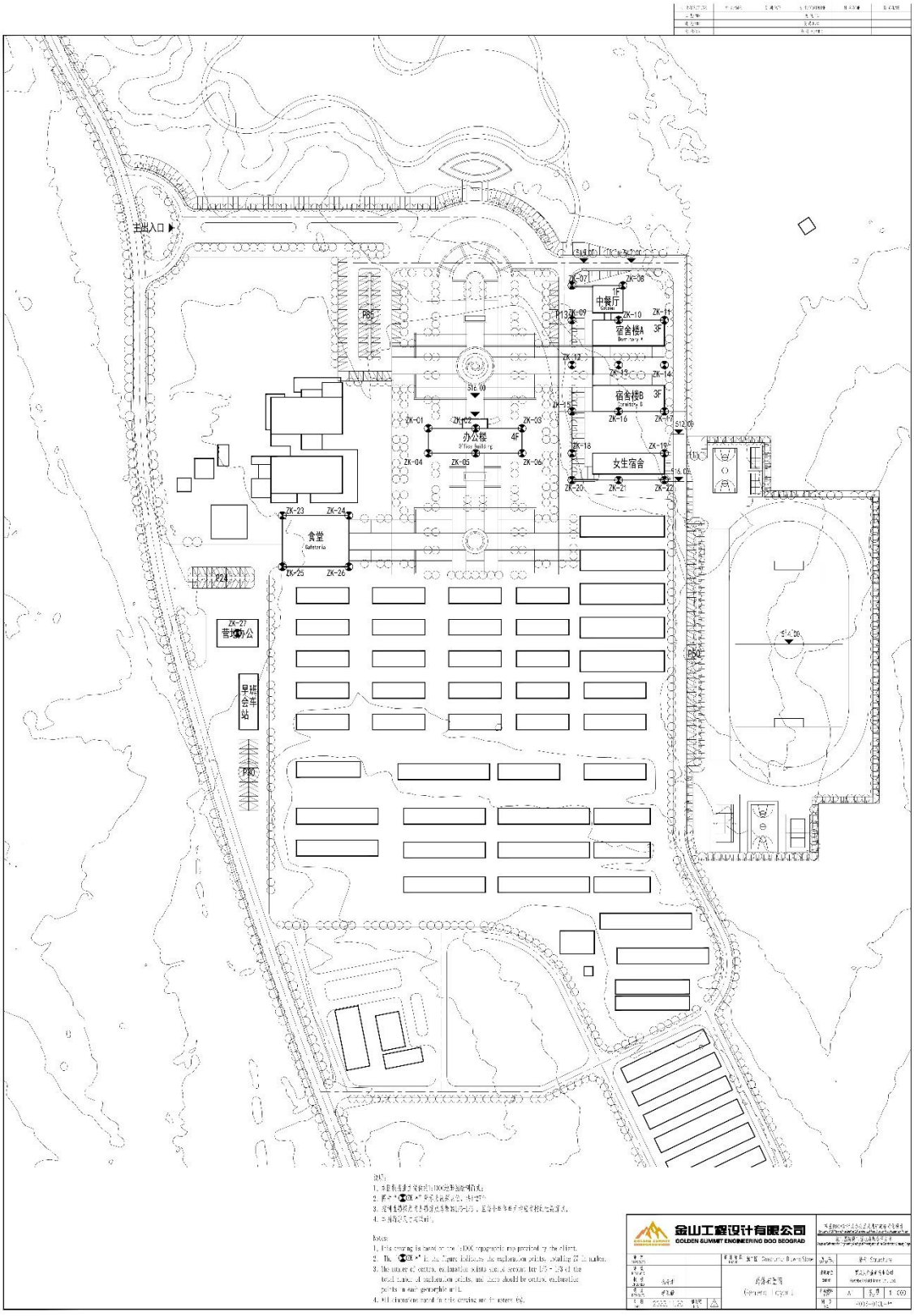
Photograph 1 Proposed Location for New Dormitory

Photograph 2 Proposed Location for New Admin Office

Photograph 3 Proposed Location for New Cafeteria

Photograph 4 Proposed Location for New Camp Services

3. Detail Plan Map of Site Investigation



4. Detail Plan Map with Drone of Site Investigation