

**Framework Traffic Management Plan
Dundee Precious Metals Krumovgrad
Ada Tepe Gold Project, Bulgaria**



Submitted to

Dundee Precious Metals Krumovgrad EAD



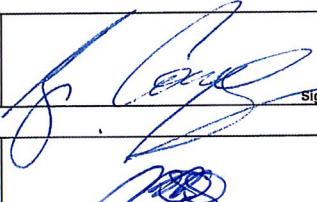
Submitted By

AMEC Earth & Environmental UK Ltd.



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OCTOBER 2014

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EXECUTIVE SUMMARY

Dundee Precious Metals (DPM) has negotiated an amended financial package with a consortium of banks for which the European Bank for Reconstruction and Development (EBRD) acts as environmental agent. According to the EBRD's Environmental and Social Policy (2008), and its associated Performance Requirements (PRs), a project of this type and scale requires a full Environmental and Social Impact Assessment (ESIA). The Project undertook a local national environmental impact assessment (EIA) to Bulgarian standards in 2010 and an environmental permit No. 18-8, 11/2011 was issued. Following an independent review of the local EIA reports, the EBRD required a number of supplementary environmental and social studies and documents to fill the gaps necessary to meet the EBRD PRs and international good practice. In addition to the EBRD PRs, some of the consortium banks refer to the Equator Principles and therefore the Project also references the IFC's Performance Standards (2012). The package of supplementary environmental and social documents as well as the local EIA reports together form the Project ESIA. The Project ESIA is summarised in a Non-Technical Summary.

This document, comprising a Framework Traffic Management Plan (FTMP), has been prepared by AMEC Environment and Infrastructure UK Ltd (AMEC) on behalf of the operator Dundee Precious Metals Krumovgrad (DPMK). The FTMP has been produced in relation to the mining and processing of gold ores from the Ada Tepe prospect in the Khan Krum Deposit, Krumovgrad Municipality in the District of Kardzhali and as part of the SLIP.

The FTMP describes strategies for minimising and managing traffic generated by the Project and the associated impacts on the capacity, efficiency and safety of the affected public highway network.

The FTMP has been developed to ensure the following:

- The traffic management goals are explicit and understood by all individuals involved (personnel, suppliers, contractors, visitors, statutory regulatory bodies, etc);
- The potential for traffic related hazards is minimised;
- Any incidents associated with vehicle activity in the vicinity of and on the mine site are minimised;
- Vehicle activity associated with the mine site does not contribute to dust, noise or vibration issues to residential areas along the public highway routes.

The FTMP is considered a 'live' document that should be regularly reviewed during the programme of works.

The FTMP addresses the following issues:



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- Roles and Responsibilities
- Legal and Administrative Framework
- Baseline Conditions
- Traffic Management Measures
- Specific Impact Mitigation Measure, and
- Monitoring and Review

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1.0 INTRODUCTION

Dundee Precious Metals (DPM) has negotiated an amended financial package with a consortium of banks for which the European Bank for Reconstruction and Development (EBRD) acts as environmental agent. According to the EBRD's Environmental and Social Policy (2008), and its associated Performance Requirements (PRs), a project of this type and scale requires a full Environmental and Social Impact Assessment (ESIA). The Project undertook a local national environmental impact assessment (EIA) to Bulgarian standards in 2010 and an environmental permit No. 18-8, 11/2011 was issued. Following an independent review of the local EIA reports, the EBRD required a number of supplementary environmental and social studies and documents to fill the gaps necessary to meet the EBRD PRs and international good practice. In addition to the EBRD PRs, some of the consortium banks refer to the Equator Principles and therefore the Project also references the IFC's Performance Standards (2012). The package of supplementary environmental and social documents as well as the local EIA reports together form the Project ESIA. The Project ESIA is summarised in a Non-Technical Summary.

This Framework Traffic Management Plan (FTMP) has been produced by AMEC Environment and Infrastructure for its Client, Dundee Precious Metals Krumovgrad (henceforth referred to as 'the Client' or 'DPM') in relation to the Ada Tepe Gold Mine Project ("the Project"), the location of which is shown in Figure 5.1.

The FTMP describes strategies for minimising and managing traffic generated by the Project and the associated impacts on the capacity, efficiency and safety of the affected public highway network.

1.1 Scope and purpose of this FTMP

This document outlines the mechanisms for managing the movement of all traffic associated with the Project for each of the three phases (construction, operation and decommission), in order to minimise associated risks for traffic accessing the mine facility from the public highway as well as on-site traffic interaction. This document applies to all construction work places and to all project and contractor personnel associated with the Ada Tepe Gold Mine Project.

The FTMP highlights the hazards, and the standard operating practices which will be adhered to in order to minimise the potential for undesirable incidents on site and on public roads for the period of open pit development and operations.

It should be noted that at the time of producing this FTMP, detailed information on the construction, operation and decommission of the site is unavailable. The principal role of this document is to provide framework guidance on traffic management measures in order to ensure that following criteria are met:



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- The traffic management goals are explicit and understood by all individuals involved (personnel, suppliers, contractors, visitors, statutory regulatory bodies, etc);
- The potential for traffic related hazards is minimised;
- Any incidents associated with vehicle activity in the vicinity of and on the mine site are minimised;
- Vehicle activity associated with the mine site does not contribute to dust, noise or vibration issues to residential areas along the public highway routes.

A final TMP will be provided once details regarding the construction programme and precise requirements of the site operation are made available.

It is the Client's intention to continue working with stakeholders throughout the development of the Project and it should be noted that this FTMP will remain "live" and thus subject to updates as and when new information becomes available. All changes made to this document will be discussed and agreed prior to implementation.

1.2 Objectives

The principal objectives of the FTMP are to:

- Ensure that all relevant statutory requirements in relation to traffic are met during the construction, operation and decommissioning of the Project;
- Establish the baseline traffic conditions;
- Describe the access routes for traffic generated by the Project;
- Detail traffic management measures to be implemented by the Project;
- Outline the roles and responsibilities for traffic management onsite;
- Outline a program to monitor and audit Project related traffic and associated impacts;
- Minimise disruption, congestion and delays as a result of construction activity.
- Identify, develop and implement additional traffic control measures as required.
- Ensure that traffic generated as a result of the Project will have a minimal impact on neighbouring settlements.

1.3 Related documentation

The FTMP forms a part of the broader management strategy to create a safe working environment at Ada Tepe mine site. Management frameworks, which will be prepared to complement and align with this FTMP, are as follows:

- Site access control processes for personnel, visitors and contractors;



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- Contractors' selection procedure;
- A procedure for material safety data sheets for chemicals and preparations;
- A procedure for hazard identification and risk assessment under the Occupational Health and Safety.

1.4 **Consultation**

The preparation of this Plan was initially recommended and informed through consultation between Dundee Precious Metals Krumovgrad EAD (DPM Krumovgrad) [a subsidiary of DMP], citizens of villages (Zvanarka, Dazhdovnik and Ovchari), town of Krumovgrad, Krumovgrad Municipality and relevant Non-Government Organisations (NGOs).

This document has also been developed through consultation with the consultants Wardell Armstrong, who represent the World Bank.

1.5 **Review and update**

An internal committee of DPM Krumovgrad and appropriate statutory regulatory bodies will supervise, monitor and regulate the implementation of this FTMP. The internal committee will review the FTMP on a regular basis, at least annually and will invite experts from the statutory regulatory bodies and local community representatives to take part in the process. Stakeholders will be informed of any identified changes to the FTMP. The FTMP will be published and its revisions will be publicized by meetings with the local community, written notifications to the mayors of all municipalities situated close to the access road, along with details of where the FTMP will be accessible for review. The FTMP document will be available for review at any time in the Information Centre of the Company, and clarifications will be provided about any recent changes to the document. The Plan will also be publicized by sending copies of it to the Krumovgrad municipal authorities.



2.0 ROLES AND RESPONSIBILITIES

2.1 General

Supervisory staff will ensure that the FTMP is implemented and adhered to during all aspects of the Project. As previously identified, the Client and representatives of relevant regulatory bodies will supervise, monitor and regulate the execution of the FTMP.

The FTMP will be monitored to ensure compliance by all site personnel, including management, supervisory staff, and contractors. All site personal will be responsible for the identification, reporting and correction of areas found to be in non-compliance to the FTMP, and adapt the plan where required, to encompass operational change during the phases of construction.

The community relations personnel will be responsible for any communication with counterparts and the community associated with the FTMP.

It will be the responsibility of DPM Krumovgrad to ensure that all mobile plant, equipment and vehicles shall comply with the required statutory and state legislation.

2.2 Management of Traffic during Construction

The Supervisor responsible for traffic will be charged with supervising and coordinating construction works traffic. The responsibilities of this role are as follows:

- Coordinating and scheduling heavy vehicle movements;
- Mitigating significant traffic related effects on local communities along the public highway route used by construction traffic;
- Overseeing the management of temporary signage and any potential disruptions to traffic during the construction;
- Taking records of any goods, including special purpose goods, and ensuring the goods are escorted by a special vehicle, if required.

2.3 Management for Emergencies or Incidents

The Executive Director for the mine site is legally responsible for the behaviour of drivers and the condition of vehicles on the mine site.

It is a condition that all roads can be used in an emergency to avoid loss of life.

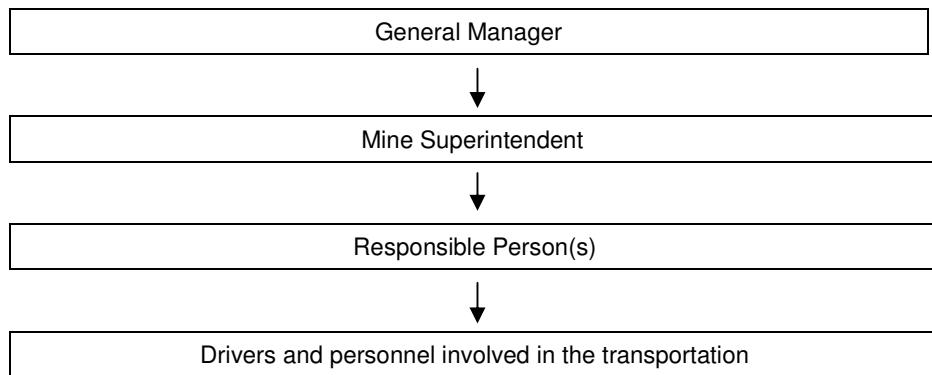
In such a situation, a standard emergency plan is required for all industrial operations and comprises different scenarios for different emergency situations. All production



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activities should stop and roads should be made available to the emergency response vehicles.

In the event of an emergency, information will be passed to all relevant personnel through the following arrangement:





3.0 LEGAL AND ADMINISTRATIVE FRAMEWORK

3.1 European Policy Context

Environmental and Social Impact Assessment work undertaken to date was completed in accordance with the Bulgarian Environmental legislation that is in compliance with the European Union (EU) legislation.

Given that DPM is negotiating a financial package with a consortium of banks led by the European Bank for Reconstruction and Development (EBRD), this FTMP is in compliance with the EBRD Performance Requirements (EBRD PR) and the International Finance Corporation (IFC) Performance Standards (2012) (PS).

3.2 EBRD Performance Requirements

EBRD has developed an Environmental and Social Policy 2008 which sets out the environmental and social issues and aspects of sustainable development and outlines how the Bank will put into practice its commitment to promote environmental and social sustainability. Key areas of focus include the following:

- Mainstreaming of environmental and social considerations into all its activities;
- Establishing the environmental and social performance requirements that clients will be expected to meet in a time frame acceptable to the Bank;
- Defining the respective roles and responsibilities of both the EBRD and its clients in achieving sustainable outcomes in line with the Policy and the performance requirements; and
- Setting a strategic goal to promote projects with high environmental and social benefits.

The EBRD seek to ensure through its environmental and social appraisal and monitoring processes that projects satisfy and fulfil the following conditions:

- A project/or operational activities are socially and environmentally sustainable;
- A project/or operational activities are respectful to the rights of affected workers and communities; and
- A project/or operational activities are designed and operated in compliance with applicable regulatory requirements and good international practice¹.

All projects financed by EBRD are required to meet good international practice in relation to sustainable development. To achieve this, a set of Performance standards for key environmental and social issues and impacts have been developed.

¹ WAI, 2014, Krumovgrad Gold project – Environmental and Social Gap Analysis



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This FTMP is intended to meet the following EBRD performance requirements.

Performance Standard 1: Environmental and Social Appraisal and Management

PR1 objectives are:

- The Bank requires clients to develop a systematic approach tailored to the nature of their activities or projects that will enable the client to comply with the Bank's Environmental and Social Policy

Relevant PR1 requirements include, but are not limited to the following:

- To identify and assess environmental and social impacts and issues, both adverse and beneficial, associated with the Project.
- To adopt measures to avoid, or where avoidance is not possible, minimize, mitigate, or offset/compensate for adverse impacts on workers, affected communities, and the environment.
- To identify and, where feasible, adopt opportunities to improve environmental and social performance.
- To promote improved environmental and social performance through a dynamic process of performance monitoring and evaluation.

Performance Standard 3: Pollution Prevention and Abatement

PR3 objectives are to:

- Avoid or, where avoidance is not possible, minimise adverse impacts on human health and the environment by avoiding or minimising pollution directly arising from projects.
- Assist clients in identifying project-related opportunities for energy and resource efficiency improvements and waste reduction.
- Promote the reduction of project-related greenhouse gas emissions.

Relevant PR3 requirements include, but are not limited to the following:

- Projects will be designed to comply with relevant EU environmental requirements as well as with applicable national law.
- Where EU environmental requirements do not exist, the client will apply other good international practice.
- The client will avoid the release of pollutants or, when avoidance is not feasible, minimise or control their release.



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- The client will avoid or minimise the generation of hazardous and non-hazardous waste materials and reduce its harmfulness as far as practicable.
- The client will be prepared to respond to process upset, accidental, and emergency situations in a manner appropriate to the operational risks and the need to prevent their potential negative consequences.
- The client will promote the reduction of project-related greenhouse gas (GHG) emissions in a manner appropriate to the nature and scale of project operations and impacts.

Performance Standard 4: Community Health, Safety and Security

PR4 objectives are to:

- Avoid or minimise risks to, and impacts on, the health and safety of the local community during the project life cycle from both routine and non-routine circumstances.
- Ensure that the safeguarding of project-related personnel and property is carried out in a legitimate manner that avoids or minimises risks to the community's safety and security.

Relevant PR4 requirements include, but are not limited to the following:

- The client will identify and evaluate the risks and potential impacts to the health and safety of the affected community during the design, construction, operation, and decommissioning of the project and will establish preventive measures and plans.
- The client will disclose relevant project-related information to enable the affected communities and relevant government agencies to understand these risks and potential impacts.
- The client will exercise commercially reasonable efforts to control the safety of transporting raw materials and of transportation and disposal of wastes, and will implement measures to avoid or control community exposure.
- The client will be prepared to respond to process upset, accidental, and emergency situations in a manner appropriate to the operational risks.

Krumovgrad Gold Project is considered as a 'Category A' Project, as it is currently a Greenfield Project located in a NATURA 2000 site with settlements in close proximity to the proposed mine complex.

3.3 Bulgarian Policy Context

The FTMP forms part of supplementary documentation in support of the Environmental Impact Statement (EIS) for the project, which is required under the Environment



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Protection Act ("EPA") and the Regulation on the Terms and Procedures for Conducting Environment Impact Assessments ("the EIA Regulation"). The FTMP is compliant and should, at all times, maintain compliance following any changes to any construction or other type of works, with the following legislation, effective in the Republic of Bulgaria.

- Road Traffic Act (RTA, effective 01.09.1999 and last amendments in SG 53/ 27 June, 2014) and the Rules for its implementation, along with any bylaws pertaining to the Road Traffic Act, applicable to the Company operations;

According to part.1 of the RTA:

"This Act shall define the road traffic rules applicable to any public roads, along with any requirements to vehicles using such roads and driver licensing, rights and obligations of any parties involved in traffic, the respective institutions and authorized officers, as well any enforcement which may apply, sanctions for violations of provisions of this Act and other regulatory documents issued on the basis of this Act."

- Regulation on Krumovgrad Municipal Roads Management The Regulation as adopted on the grounds of art. 23 of the Roads Act and is effective as of 01. 01. 2005

Art. 1 of the Regulation reads:

"This regulation shall define only the terms and conditions and any relationships involved in matters of ownership, use, management, construction, repair and maintenance of municipal roads, along with the right and obligations of the municipal authorities, and the powers of the Krumovgrad mayor, deriving from the Road Traffic Act and the Rules for Its Implementation."

- With regards to abnormal load traffic, art. 139 part 2 of the RTA states:

"(2) (amend. SG 43/02) The driving of vehicles of size, weight and load on axle exceeding the norms determined by the order of para 1, item 2, as well as the movement of vehicles, transporting dangerous cargo shall be carried out by an order, determined by the Minister of Regional Development and Public Works, in coordination with the Minister of Transport and Communications, with the Minister of Environment and Waters and with the Minister of Interior."

Any abnormal load deliveries required during the construction, operation or decommission of the project will adhere to the requirements specified above.

4.0 BASELINE CONDITIONS

4.1 Highway Network Description

The following sections set out a description of the public highway network in the vicinity of the site and used by construction and operational vehicles.

The national road network is exclusive state property and is open for use by anyone complying with the Road Traffic Act and related regulations. There are two roads in the vicinity of the mine site that are classified as national road network:

- Category II-59 (Momchilgrad-Krumovgrad-Ivaylovgrad).
- Category III-5902 and III-509 passing by Tokachka village

The remaining highways, which include Road 5355 as well as a number of unclassified highways located in and around the proposed site, are Municipal highways and thus managed by the District Road Management Authority.

The following provides a summary of the main highways located within proximity to the site.

II-59 (Category II) Road

The II-59 forms the main route through Krumovgrad. It passes through the centre of the town linking it with Momchilgrad to the west and Ivaylovgrad to the east.

Through the settlement of Krumovgrad the II-59 is a two-way single carriageway road of urban nature, subject to 50 km/h speed limit. It is a typical carriageway width, approx. 9m, with sidewalks on both sides.

Between Krumovgrad and Momchilgrad the carriageway width narrows to approximately 6m and the road is subject to a 90km/h speed limit (with exception of sections that pass through settlements, where the speed limit reduces to 50km/h). The road is predominantly sided by agricultural fields and woodland, with no sidewalks.

III-509 (Category III) Road

III-509 routes along a north-east south-west alignment, spanning from Krumovgrad to the north-east and Kukuryak to the south-west. The road passes through a number of villages and hamlets including Zvanarka, Kandilka, Topolka and Tokachka. Within settlements the road is subject to 50 km/h speed limit, outside settlements it is subject to 90km/h speed limit.



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Within Krumovgrad, the road is of urban nature with an approximate carriageway width of 8m. This road section has traffic lights and sidewalks. The remainder of the road length south-westwards is of a rural nature, with an approximate width of 6m. The road is predominantly sided by agricultural fields and woodland, with no sidewalks.

III-5902 (Category III) Road

The III-5902 is located to the east of the site, and routes on a north south alignment spanning from the junction with the III-509 and the junction with the II-59 at Zvezdel to the north. The III-5902 is a typical rural single carriageway, unlit, fronted by woodlands and agricultural land. The road is subject to the national speed limit (90km/h). The road has an approximate width 6m.

4.2 Baseline Traffic Flows

Traffic count data was collected over a period of four days (from Friday 11/06/2010 to Monday 14/06/2010 inclusive) at three count locations near to the site:

- Count 1 is located within the centre of Krumovgrad on Road III-59;
- Count 2 is located east of the Izgrev quarter of Krumovgrad on Road III-509; and
- Count 3 is located in Zvanarka village on Road III-509.

The traffic count survey results are presented in Table 4-1 below, categorised into light vehicles (LV) (cars, vans, light goods vehicles) and heavy goods vehicles (HGV), and Appendix 1 (Drawing reference 7879140150-2001) provides a map of vehicle count locations.

Table 4-1: Count Data Summary

Count Point	Friday 8 am through 8 pm		Saturday 8 am through 8 pm		Saturday/ Sunday (night) 8 pm through 8 am		Monday 8 am through 8 pm	
	LV	HGV	LV	HGV	LV	HGV	LV	HGV
No1 Knyaz Boris I Street	1000	146	306	70	163	24	747	111
No2 Hristo Botev Street	988	123	190	38	118	12	721	77
No3 Krumovgrad- Tokachka Road	122	13	34	4	27	8	133	15



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The count data represents the busiest traffic days of Krumovgrad municipality. Traditionally, Monday is a busy day for shopping, doing business and visits to institutions, whereas Friday has been for 25 years the day on which Krumovgrad residents have community meetings. It is also a heavy traffic day from a religious point of view, as the local mosque holds Friday prayers, which are an important part of Islam. It is also the open market day where locals sell their farming produce.

As can be seen from the above, the highest flows are experienced at Count Location 1 on Friday day between the hours of 8am and 8pm. Table 4-2 provides a breakdown of these flows over the 12 hour period:

Table 4-2: Count Data Summary

Time	Friday: 8 am through 8 pm		
	LV	HGV	HGV %
8am – 9am	65	16	19.8%
9am – 10am	80	8	9.1%
10am – 11am	86	12	12.2%
11am – 12pm	85	12	12.4%
12pm – 1pm	78	12	13.3%
1pm – 2pm	65	9	12.2%
2pm – 3pm	81	10	11.0%
3pm – 4pm	78	9	10.3%
4pm – 5pm	80	11	12.1%
5pm – 6pm	102	24	19.1%
6pm – 7pm	112	23	17.0%
7pm – 8pm	88	8	8.0%
Total	1000	146	12.7%

As can be seen from the above, the existing level of traffic on the local highways is relatively modest with a peak weekday hourly flow of 112 vehicles (6pm to 7pm) and a corresponding HGV % of 17.0%.

4.3 Accident/Safety Appraisal

Bulgarian traffic accident statistics are collected by the Traffic Police and issued by the Public Consultative Commission on the Problems of Road Safety.

On a national level, there is a positive 43% reduction in the number of fatalities over the last five years between 2008 and 2012, which is supported by the data in the Table 4-3 below.

Table 4-3: National Accident Statistics

Year	No of Accidents	Fatalities	Injured
2012	6,717	601	8,193
2011	6,638	658	8,301
2010	6,610	775	8,080
2009	7,068	901	8,674
2008	8,042	1,061	9,951

Source: State – Public Consultative Commission on the Problems of Road Safety Sofia, Bulgaria

Out of 6,717 accidents, 6,255 had driver at fault. Of those, around 15% of accidents involved a failure to give way to pedestrians when they had priority and 28% driving at a speed unsuitable for the prevailing road and traffic conditions.

Out of the accidents attributed to 'driver at fault', 546 (8%) involved goods vehicles and tractors with semi-trailers.

Pedestrians were involved in 30% of accidents occurring in 2012, comprising 22.5% of all fatalities.

On 22 December 2011, a new National Strategy for Improving Road Safety was adopted by the Bulgarian Council of Ministers aimed to further decrease of the number and consequences of road accidents, i.e. to decrease fatalities by 50% and injuries by 20% by 2020 compared to 2010.

With regards to the Project site, accident data is available for the Kardzhali Province in which the Project resides. The following table provides a summary of the 2012 and 2013 accident data for the Kardzhali Province by vehicle type, which is the only publicly information available at the time of compiling this FTMP.

Table 4-4: Kardzhali Province 2012 and 2013 Accident Data by Vehicle Type

Vehicle Type	2012		2013	
	Killed	Injured	Killed	Injured
Car	0	39	1	55
Freight	0	3	0	0
Tractor with Trailer	0	0	0	0
Special Car	1	0	0	0
Bus	0	0	0	0
Road Train	0	0	0	0
Tram	0	0	0	0



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Vehicle Type	2012		2013	
	Killed	Injured	Killed	Injured
Trolley	0	0	0	0
Motorcycle	1	3	0	2
Moped	0	5	0	8
Bicycle	0	3	0	3
Other	0	0	0	1
Total	2	53	1	69

As can be seen from the above, in 2012 a total of 55 accidents were recorded, two of which included a fatality. In 2013, a total of 69 accidents were recorded, one of which was fatal. Information for the Krumovgrad municipality is less detailed; however of the 55 accidents recorded in 2012, 13 occurred in the Krumovgrad municipality, none of which were fatal. Of the 69 accidents that were recorded in 2013, 14 occurred in the Krumovgrad municipality, one of which was fatal.

Given the above, it should be noted that of the accidents that have occurred in Kardzhali Province (within which the Project is sited) only three involved a freight vehicle. Given that HGV traffic will be the predominant traffic type generated by the Project, an increase in freight or other HGV traffic is considered to be an important factor.

Over the last two years, the statistics show that HGVs were involved in less than 3% of all traffic accident, and there was no fatality. As such it is considered unlikely that the level of traffic generated by the Project would be significant enough to further detriment local highway safety. However, as part of this FTMP, a number of highway safety measures have been incorporated in order to minimise the risk as far as practically possible.

Source

Public Consultative Commission on the Problems of Road Safety Sofia, Bulgaria 2012 and 2013

[2012 and 2013 ROAD ACCIDENTS IN THE REPUBLIC OF BULGARIA, MINISTRY OF INTERIOR, NATIONAL STATISTICS INSTITUTE]

5.0 DESCRIPTION OF DEVELOPMENT

5.1 Project Description

The Krumovgrad Project is a planned 850,000 tonnes per year ("tpa") open pit gold mine. The mill facilities and mine will be developed, constructed, and operated by DPMKr, a wholly owned subsidiary of DPM. The size of the Project footprint has been minimised as much as possible and is 85 ha, but considering the anticipated buffer, the footprint increases to an approximate maximum of 134 ha.

The licence area is located in the East Rhodope Mountains, approximately 320 km (by road) southeast of Sofia, in the Kardzali District immediately south of the regional township of Krumovgrad (25° 39' 15"E and 41° 26' 15"N).

The Ada Tepe deposit is located 3 km south of the Krumovgrad town site and trends in a north south direction. The deposit area comprises of hilly topography abutting a major regional river system. The Project area is readily accessible at all times of the year.

Figure 5-1: Location Plan of the Krumovgrad Gold Project Area





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5.2 Access

Strategic HGV access to the site is governed by the need to utilise Road II-59, which will be the primary route used to export the mined material from the site. In accordance with this requirement, the following two access routes have been identified and are illustrated within Appendix 1 (Drawing reference 7879140150-2001) attached to this document:

- Option A - Road II-59 (Momchilgrad - Krumovgrad) - Road III-509 – Unnamed Road (running adjacent the Krumovitsa River valley).
- Option B - Road II-59 (Momchilgrad - Kremenets) - Road III-5902 (Kremenets - Tokachka) - Road III-509 (Tokachka – Krumovgrad).

Following consultation with the District Road Management Authority, Option B has been recommended, since it avoids the township of Krumovgrad.

Local access into the site via Option B has been considered and two sub options have been identified, both of which are served from Road III-509. The following provides a summary of the two options:

Option B1

Leaves Road III-509 at Zvanarka village, along Road 5355, then to the Ada Tepe mine site via a dirt road:

Road No.5355 is a Municipal single lane asphalt road with an approximate width of 6.0m. The road is sided by private land primarily utilised for agricultural purposes and includes, agricultural buildings and tobacco plantations. The road traverses through the upper portion of Kaldzhik Gully via a small bridge before reaching Pobeda, the crosses Pobeda, which comprises primarily private residence buildings.

Immediately past Pobeda, the route towards Ada Tepe changes from an asphalt road to a dirt road. The former is Municipal property and only a section is state owned (the road section that passes through state forest lands). The road has a varied width, with the widest section between 5-6 m. This road passes through the priority habitats of East Rhodopes Protected Area. The dirt track section of the route is in poor condition, with pronounced degradation over the majority of its length (approximately 1km).

Option B2

A branch of Road III-509 just east of the Izgrev quarter of Krumovgrad, via an unnamed road which runs parallel with the River Krumovitsa, through the Kaldzhik Gully to Ovchari village and then uphill to the Ada Tepe mine site:

The no name road section is approx. 1.5 km long, 4.0m wide, provides a single lane access and has an asphalt surface (30-40mm thickness) but no base course. The road is sided by private cultivated fields. The road passes through both Protective Belts II and

III of the zones of protection around the existing drinking water abstractions supplying Krumovgrad. The distance between the fencing around Protective Belt I and the road is approx. 50m. The ends at the Kaldzhik Gully, where the previous bridge crossing has been destroyed.

Based on the descriptions provided above, the most viable HGV route is considered to be Option B1.

Option B1 Access Road Improvements and On-Site Roadways Construction

In anticipation of increased traffic along Option B1, 7 laybys will be constructed to facilitate vehicle passing (see Appendix 2) along the existing asphalt section of the route and the carriageway will be reinforced to ensure it can accommodate HGV traffic. The existing dirt road (950m in length), will be widened and paved to accommodate HGV traffic and minimise dust emissions.

Within the site, a 950m long road will connect with an exit from the open pit and provide access to the crusher area (see Appendix 3). The new road will provide a 20m wide running surface with 2m high by 3m wide berms located on the down slope side of the road. It will be surfaced with compacted stone, maintained by frequent grading and watered to minimise dust emissions.

The Integrated Mine Waste Facility access roads will provide access from the open pit to two embankment dams. One road will be 1.9 km in length and will connect the open pit with the north embankment construction site. A second road of 760m long will connect to the south embankment construction. It will be surfaced with compacted stone, maintained by frequent grading and watered to minimise dust emissions as necessary.

5.3 Traffic Generation/Types/Loads/Materials

At this stage in the planning process, the construction/operation and decommission programmes for the project have yet to be fully determined. The information available to date is set out in the following sections. As previously specified, this is a 'live' document that will be subject to updates as the project progresses. All information pertinent to the progression of the project through the relevant authorities will be supplied, discussed and agreed prior to any changes being made.

5.3.1 Vehicle Fleet

The vehicles required at the mine site are listed in Table 5-1 below:



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Table 5-1: Vehicle Fleet

Vehicle Type	Vehicle Classification/Number
Vehicles that will need vehicle recovery	Drill rigs – 2 Excavators - 2 Dump trucks - 5 Bulldozers - 2 Grader - 1 IT utility vehicle - 1 Front loader – 1
Vehicles that will move under their own power	Water trucks - 3 Fuel truck - 1 Escorting vehicles - 4 Platform tow truck – 1

5.3.2 Vehicle Traffic on site roadways

The mined ore and rock material will be hauled by 40 ton off-road dump trucks to the respective storage areas and will total approximately 396 trips per day. These trips will originate from the open pit and either travel approximately 200m to 1,000m to the run-off-mine (ROM) for processing or approximately 500m to 1,500m to the Integrated Mine Waste Facility (IMWF).

Vehicles within the open pit area will generally consist of dump trucks used to transfer the ore, Mobile Manufacturing Units (MMU) vehicles used during blasting activities and fuel trucks, used to re-fuel vehicles on site.

5.3.3 Vehicle Traffic: on national roads

Vehicle movements will be generated on a 24 hour basis due to the continuous nature of operations associated with the Project. It should be noted that there are currently no legal restrictions on vehicle movements on 'off-site' roads.

Throughout all project stages, the Company will maintain waste collection, haulage and disposal contracts with companies specifically licensed to operate with any waste type generated on the site. The forecast will be prepared immediately before commencement of mining operations to indicate how many and how often such special type vehicles will be required to ensure proper haulage to waste treatment and disposal facilities. The number of these vehicles, the waste volume and frequency of waste collection/haulage will be subject to future negotiations. Any household waste will be hauled by the municipal waste collection company to the regional landfill in Kardzhali (50km away from Krumovgrad). The typical frequency of household waste collection is once or twice per week.



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Construction

During the construction phase of the Project there will be a need to transfer 14 vehicles to the site via a mix of low-loader and escorted abnormal load vehicles. These vehicles are as detailed in Table 5-1.

Details regarding the source of this equipment are as yet unknown and will no doubt be decided through competitive tender. Prior to the transfer of such vehicles, it will be the responsibility of DPM Krumovgrad or their appointed haulier to discuss the transfer routes, times and dates with the relevant state and Municipal authorities in order to gain agreement and sign off on any permits required. Waste haulage companies will be required under contractual provisions to use authorized routes/roads only. Approval of any haulage routes is usually a responsibility of the Municipal Council.

The operational and safety requirements of heavy truck traffic as part of the construction phase will be identical to those specified in Item 6.0 of this document. The mine site construction phase will require transportation of over-dimensional loads, which are subject to special traffic regulations as detailed in the Road Traffic Act (Section 3.2 of this document). Particular traffic arrangements will be mandatory for any vehicles involved in the Company operations, except those which are required for emergency response and are not part of the routine jobs on the site. Any operational and safety requirements will be applied to all DPMK contractors by force of contractual provisions and by the Company safety induction of individuals and contractors.

Operation

Gold/silver concentrate haulage, and haulage of supplies and materials will generate approximately 1,100 trips per annum. Vehicle types will vary in weight between 3.5 and 20 tons. They are listed in Table 5-2 below, with a monthly and annual breakdown for each material type:

Table 5-2: Off-Site Heavy Vehicle Traffic

Materials	Anticipated number of vehicles for a period of 330 days	
	Monthly	Yearly
Concentrate – 10,000 tpa 20 tonne truck	40	500
Reagents and consumables:	10	120
Fuels – 150,000 l/annum. (tank trucks, 500 l)	25	300
TOTAL	75	920



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The above trip generation figures do not include site personnel, since no information regarding shift patterns and the number of employees is currently available. The mine is expected to operate on the basis of 3 shifts, 8 hours each. It is unlikely that the traffic generated by site personnel will be significant and also unlikely that the shift patterns will coincide with peak traffic flow periods on the local highway network.

Decommission, Closure and Rehabilitation

This FTMP will be regularly revised at the mine operation stage to identify traffic management steps suitable for the closure and rehabilitation stage, along with their communication to stakeholders and approval by the national and local authorities responsible for traffic regulations.

5.3.4 Traffic Impact Analysis

With regards to the above (operational traffic), and based on a robust 28 day month, it is anticipated that the Project will generate approximately 3 additional HGVs per day.

As referenced within Section 5.2, all materials (HGV) will be delivered to the site via Route Option B1. Based on the traffic count data provided in Table 4-1 in item 4.2 of this document, Count Location No. 3 has been used to identify of the potential impact on the adjacent local road. To prepare the assessment, the anticipated generation of 3 HGVs has been compared against each of the traffic data collection time periods referenced.

This FTMP will be revised before commencement of each construction, operation, closure and rehabilitation phase. Before the start of any construction works, the FTMP will be revised on the basis of identified contractors and haulage equipment (for materials and waste).

Table 5-3 below sets out the existing, proposed and future traffic flows:

Table 5-3: Traffic Impact Summary

Location	Friday 8 am through 8 pm		Saturday 8 am through 8 pm		Saturday/ Sunday (night) 8 pm through 8 am		Monday 8 am through 8 pm	
	LGV	HGV	LGV	HGV	LGV	HGV	LGV	HGV
Existing	122	13	34	4	27	8	133	15
Proposed	0	3	0	3	0	3	0	3
Future	122	16	34	7	27	11	133	18

As evident above, the increase in HGV traffic against background traffic flows is relatively minor, with the worst case increase occurring between the hours of 20:00 – 08:00 Saturday night through to Sunday morning. It is therefore considered that the operation is unlikely to be detrimental to local highway capacity.

6.0 TRAFFIC MANAGEMENT MEASURES

This section sets out a series of traffic management measures that should be promoted and adhered to by all relevant personnel.

6.1 Education and Self-Policing Policy

A mine superintendent will supervise, monitor and police the implementation of this FTMP.

All personnel, contractors, subcontractors and visitors will be briefed on the traffic rules and requirements on site (including use of the access road). Additional training on the vehicle operating requirements will be delivered to personnel to refresh their knowledge and ensure compliance with the rules introduced by this FTMP.

Any breach of the established requirements will be subject to disciplinary procedures according to the internal rules and procedures of DPM Krumovgrad.

6.2 Fatigue Management

Personnel employed on the project shall be routinely rotated through a shift system to promote dedicated rest periods in between working hours.

In case of emergency, where personnel are required to repair a breakdown/mechanical/electrical failure, a member of the supervisory or office staff will collect and drop off the required person or persons at their home address to reduce the risk of driver fatigue.

6.3 Licensing of Personnel

The HR Manager will be responsible for ensuring all personnel are appropriately licensed.

6.4 Vehicle Registration

All vehicles operating on and off site must be registered and have the documentation required by the relevant Bulgarian and European legislation.

It will be the duty of the Legal Manager to ensure compliance with the vehicle registration rules. The Maintenance Manager will be responsible for ensuring vehicles are maintained and road worthy.

6.5 Code of Conduct for drivers

All drivers of light and/or heavy vehicles that have been engaged by DPM Krumovgrad to work on the Project must adhere to the following Code of Conduct for drivers.

- Obey all the laws and regulations that apply to vehicles on public and private roads;
- Respect the rights of others, including drivers and pedestrians, to use and share the road space;
- Maintain a safe following distance between vehicles;
- Ensure that the vehicle is clean and in good mechanical condition to reduce environmental impacts;
- Avoid travelling in convoys unless under approved escorts;
- Follow the designated access routes for the Project;
- Abide by all road rules and vehicle regulations; and
- Ensure a high level of courtesy.
- All vehicle operators operating on the access road, including personnel of the Company, contractors and suppliers, will be undergoing safety induction and regular safety sessions to watch for any livestock hazards on the road.
- Warning signs about livestock hazards will be installed by the road as required under the Road Traffic Act.

6.6 Segregation of Vehicle Types and Other Users

Segregation of light vehicles and large earth moving equipment is a primary focus of this FTMP. All light vehicles on site will be fitted with flashing lights. Control Traffic Points and signage will be used to designate the work areas on site. Pedestrians will be segregated in pedestrian areas and high visibility/reflective clothing will be mandatory for all personnel.

6.7 Car wash

A vehicle washdown facility will be provided adjacent to the diesel fuel refuelling area. It will comprise a bunded concrete slab sloping to a settling sump. Captured rainfall and diesel spillage from the adjacent diesel refuelling facility will also be directed to this sump. A sump pump will transfer dirty water to an oil/water separator.

Vehicles exiting the site onto the public highway will utilise this facility to ensure the transfer of materials on to the highway is minimised.

6.8 Management of Traffic during Blasting Activity

If appropriate and provided that relevant permits have been obtained, the access road can be closed to traffic during blasting. Two persons trained for this purpose will stop the traffic using a traffic baton until the blasting is completed. The road closure concerns only the new section (approx. 1.6km), which the DPMK intends to build in order to provide access to the mine site and thus avoid any impact on the traffic which is unrelated with the mine site operations.

6.9 Dilapidation Surveys

Annual condition monitoring surveys of the status of the principal site access road (between Road III-509, inclusive of the connecting junction, and the entrance to the mine) will be assessed and recorded to identify any areas of degradation attributed to the movement of mine generated traffic. DPM Krumovgrad will consult with the relevant Municipal and State Authority to discuss any repairs required and the funding arrangements for the repairs.

6.10 Traffic Arrangements for Company Personnel

The shift personnel of DPMK will be transported from Krumovgrad to the mine site by bus with 6 – 8 bus trips currently anticipated. The provision of a company bus service would limit the hazards associated with access using a private vehicle, not only on the access road but around the mine site in general. The company bus will operate on a fixed schedule which will be determined prior to the commencement of any construction activities.

6.11 Traffic Arrangements for DPMK Contractors and Suppliers

As part of DPMK tendering process for delivery goods and services, the Company will be notifying its contractors and suppliers about the use of the access road to the site. Each supply/service contract will have a clause, which will set provisions applicable to supplier/contractor personnel in terms of the route of the access road and the requirements for driving to the site, access and entry.

6.12 Loading and Off-Loading Arrangements

Temporary storage areas/stockpiles will be in place at the mine site specifically designated for construction materials required at the construction phase. Storage areas for borrowed soil material will be built as part of the construction phase. These areas will be used for storage of any earth and soil generated by stripping, processing and crushing operations, and also by the preparation work of the IMWF construction. The traffic impact mitigation measures will be the same as detailed in section 7.1 of this document and will also apply to on-site roadways. These measures will include dust

suppression and installation of temporary warning signs for cases where temporary repairs of vehicle breakdown on the road are required.

The IMWF construction will be an ongoing process as part of the mine operation phase, as the construction works will include waste rock and ore haulage. The generated dust emissions will be limited or eliminated by dust suppression (with water), placement of a soil layer over previously placed material in the IMWF, closure and rehabilitation of disturbed land, which has been abandoned and is no longer required for the operations, and maintenance of the natural green belt of vegetation.

As a mandatory measure, and in addition to dust suppression by sprinkling water, all trucks and other vehicles will be washed before leaving the mine site.

Supply deliveries will be controlled by the Company Supply Department, which will be applying an established Supply Procedure, including access road use and loading/offloading operations on the site.

No layout can be provided at the moment to illustrate the sites detailed above (buildings, facilities, internal road layouts and stockpiles), since they are at an early design preparation stage. The layout will be made available once the detailed designs are completed.

7.0 SPECIFIC IMPACT MITIGATION MEASURES

As part of the anticipated operation of the Project a number of site specific hazards and bespoke mitigations measures have been identified. These have been summarised in the following section.

7.1 Site Access: Potential Hazards and Mitigation Strategy

Hazard

Dust generation at any junction of asphalt road and dirt road may potentially reduce visibility and cause road accidents.

Impact Mitigation Strategy

- Such junctions will either be capped with asphalt or with a layer of compacted crushed stone and replaced at regular intervals (to be determined through annual inspection); A decision will be made whether it will be a one-off solution with a long-term effect or a regular activity;
- Unless capped with asphalt, the junction will be watered four times a day; this will be applied daily in the dry months.

- Road signage and possibly road markings will be placed to warn road users of mine traffic; and this is a one-off measure with a long-term effects.
- Speed limit signs and marking will be placed to ensure vehicles approaching the junction do so cautiously and with due care. This is a one-off measure with a long-term effect.

All heavy vehicles will be going through tire wash before leaving the mine site in order to reduce any potential dirt transfer to the roads. This will be applied daily.

Hazard

Due to limited visibility and manoeuvrability, large heavy haul trucks may not see small passenger vehicles on the mine site leading to a collision.

Impact Mitigation Strategy

- On site light and heavy traffic will be separated as much as practically possible;
- Barriers and signage will be used to segregate the different vehicle types;
- Heavy truck movements in work areas at the mine site will employ flashing lights to maximise visibility;
- Any light vehicles authorised to access the work areas will be brightly coloured and equipped with roof mounted flashing amber lights to maximise visibility;
- The speed limit on the road section between the mine site and Pobeda will be 20 km/h;
- Road extensions will be designed and built to serve as emergency exit points from the access road, using suitable materials for reducing the speed of a vehicle travelling downhill in the event of brake failure.

Hazard

Traffic of large-size vehicles on the access road to Pobeda to the mine site may cause dust and noise concerns for residential areas.

Impact Mitigation Strategy

- The speed limit on the road section between the mine site and Pobeda will be 50km/h (or perhaps even 30 km/h, based on discussions with the competent authorities). This will help reduce tyre and engine noise.
- Using company buses as main transport for personal will significantly reduce the number of private light cars going to mine site.



7.2 Public Highway: Potential Hazards and Mitigation Strategy

Hazard: Road between Zvanarka village and Ada Tepe

Any vehicles riding to the mine site will be using Road 5355 (a single-lane municipal road) to Pobeda. From a dirt road (going partly through Municipal land and partly through forest land) will be used for the distance from Pobeda to Ada Tepe. To adequately serve the mine and maintain a high level of highway safety, improvement works are required.

Impact Mitigation Strategy

- Extend the road and surface with asphalt or compacted stone (as appropriate);
- Place road signage;
- Restrict the free access of any persons and vehicles into the mine site, subject to agreement with Krumovgrad Municipality (with the exception of the authorities that have access rights pursuant to an Act or regulation);
- Install crash barriers at critical points (sharp and dangerous turns);
- Wash the tires and body of heavy vehicles leaving the site;
- Covering loaded materials with tarpaulin to avoid spilling any particulate matter on the highway; and
- Water roads where required to suppress dust.
- Construction of noise screen 9 (fence) to protect houses close to the road.

Hazard: Exit onto Road III-509

Mine traffic will exit Road 5355 in Zvanarka village onto a classified highway.

Impact Mitigation Strategy

- Road signage reading 'EXIT' will be placed on both sides of the junction to warn traffic to be watchful of approaching heavy vehicles at Zvanarka village.

Hazard: HGV traffic accessing the site via unapproved routes

Ensuring HGV traffic utilises the recommended access route from Momchilgrad and measures incorporated to safe guard other road users.



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Impact Mitigation Strategy

- Road signage placed along the whole transport route up to Road II-59 (Momchilgrad-Krumovgrad-Ivaylovgrad). This will ensure vehicles travelling towards the site do so via the recommended access route.
- The introduction of additional road signage to warn drivers of approaching heavy vehicles at locations where there is potential for road traffic accidents due to the difference in travelling speeds of heavy and light vehicles (to be agreed with the relevant Authority).
- The introduction of any signalling equipment required to avoid traffic accidents (to be agreed with the relevant Authority).

7.3 Traffic Signage Scheme

Traffic movement shall be controlled in all construction areas by the installation of signage at predetermined locations, indicating: travel direction, speed limit, and priority. All road signage will comply with Road Traffic Act and the relevant Bulgarian legislation.

Signage shall be installed and displayed to satisfy:

- Durability;
- Sound construction;
- Reflection (Night);
- Direction;
- Safe Movement; and
- Speed Limit

The location requirements of the signage are as follows:

- Signage to be within driver's vision;
- Signage cannot be obscured / blocked;
- Signage cannot obscure other signage from the driver's vision;
- Signage cannot become a hazard;
- Signage cannot direct traffic into an undesirable path;
- Signage stands shall be located at a maximum of 300 mm from road boundaries and intersection points;
- Signage will include but not be limited to: speed limit, priority to, parking/no parking, one way; and
- Signage will be displayed in all construction areas where applicable.

7.3.1 Proposed signage

Installation of a "Stop" sign by Pobeda, at the junction of Municipal Road 5355 and the dirt road to Ada Tepe. A medium berm (island) could be placed to separate and designate vehicle routing to avoid encroachment onto the opposite side of the carriageway when turning.



R1-1B

A no priority road sign will be placed at the junction of Municipal Road 5355 and Road III-509 (Krumovgrad - Tokachka) for all vehicles moving from Ada Tepe.



Warning signs of heavy trucks and cattle will be installed on Municipal Road 5355, approx. 200m before the junction on the way to Ada Tepe. Warning signs will also be installed on both sides of Road II-509 (Krumovgrad - Tokachka) on the Zvanarka junction. No priority road signs will also be placed at the junction.



Prohibition road signs will be placed at the Ada Tepe access junction where the dirt road to Ada Tepe meets Municipal Road 5355 to restrict the access to the mine site and prohibit any stopping or parking at the access junction (subject to agreement with Krumovgrad Municipality).



All road signage will follow the standards used to install and maintain traffic control devices.

The measures and signage schemes referenced within this FTMP will be implemented in compliance with the relevant Bulgarian legislation by a licensed traffic engineer and submitted in plan Regional Sector Traffic Police - Regional Directorate of the Ministry of Interior - Kardzhali, District Road Management - Kardjali, National Road Infrastructure Agency and Krumovgrad Municipality for approval prior to implementation.



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8.0 MONITORING AND REVIEW

DPM Krumovgrad will carry out a number of practices to monitor traffic movements associated with the Project during the operational phase. The actions will include:

- Traffic volume surveys: Traffic surveys will be carried out annually to monitor traffic volumes generated by the Project against the predictions referenced within this FTMP. These surveys will be conducted at a location that will allow DPM Krumovgrad to identify vehicle types (e.g. light and heavy vehicle). The results of the surveys will be submitted to the regulatory authorities along with an accompanying report outlining any changes and providing reasons/supporting evidence as appropriate.
- Road safety: Annual condition monitoring surveys of the status of the principal site access road (between Road III-509, inclusive of the connecting junction, and the entrance to the mine) will be assessed and recorded to identify any areas of degradation attributed to the movement of mine generated traffic. DPM Krumovgrad will consult with the relevant Municipal and State Authority to discuss any repairs required and the funding arrangements for the repairs. To ensure ongoing monitoring of the highway is undertaken, mine personnel will be encouraged to report any degradation encountered during their daily use of the road. This will ensure any ad hoc repairs required are quickly identified and dealt with through liaison with the Municipal and State Authorities.
- Regular education and auditing: As stated in Section 6, DPM Krumovgrad will educate and inform transport contractors and staff regarding the traffic access arrangements and advise of them of any updates to the FTMP and associated routes. DPM Krumovgrad will also conduct regular audits of its employees and contractors for compliance to this FTMP. Disciplinary action as allowed under the respective labour and contractual agreements will be implemented for those found to be in non-compliance with this control measure.

This FTMP has been prepared based on the information available at the time. As specified the document is 'live' and will be reviewed/updated on a regular basis during the progression of the project to ensure that it remains relevant and applicable. Where modifications are required to the FTMP, the document will be prepared in consultation with the relevant Statutory Authorities.

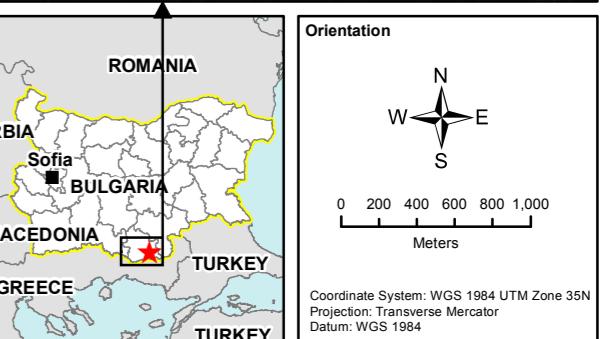
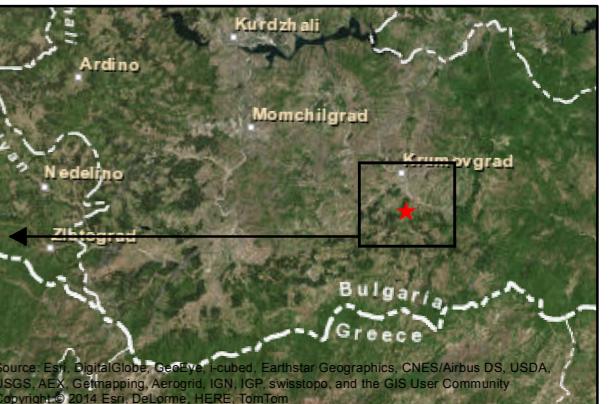
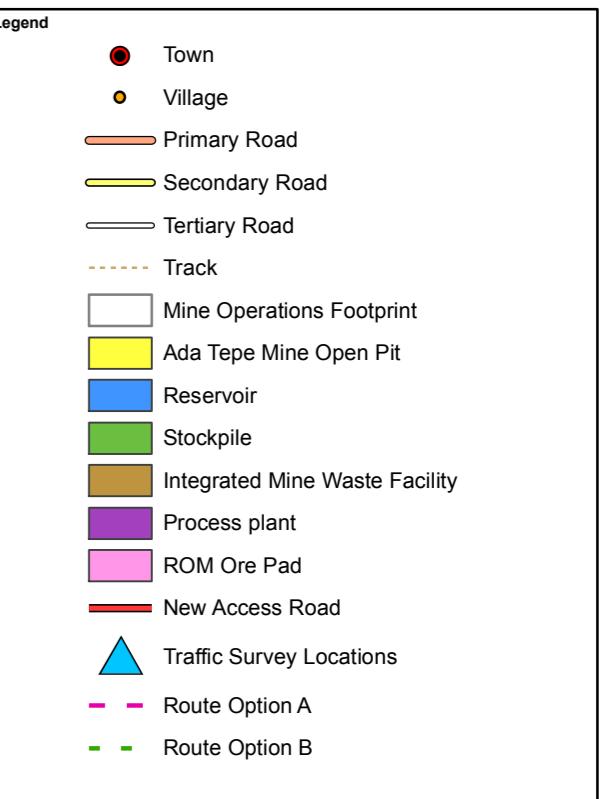
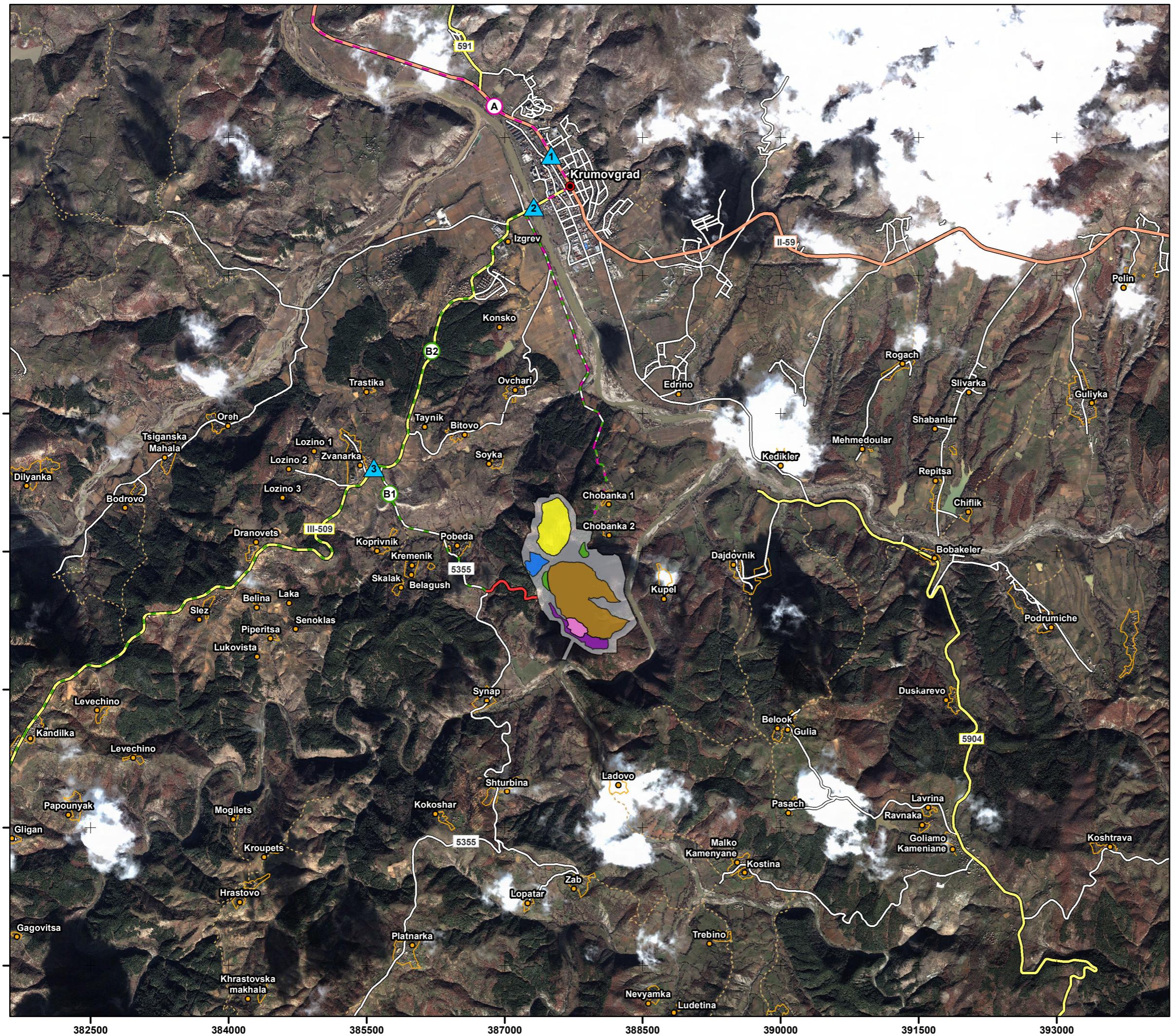


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APPENDICES

APPENDIX 1

Access Route Options and Traffic Data Count Locations



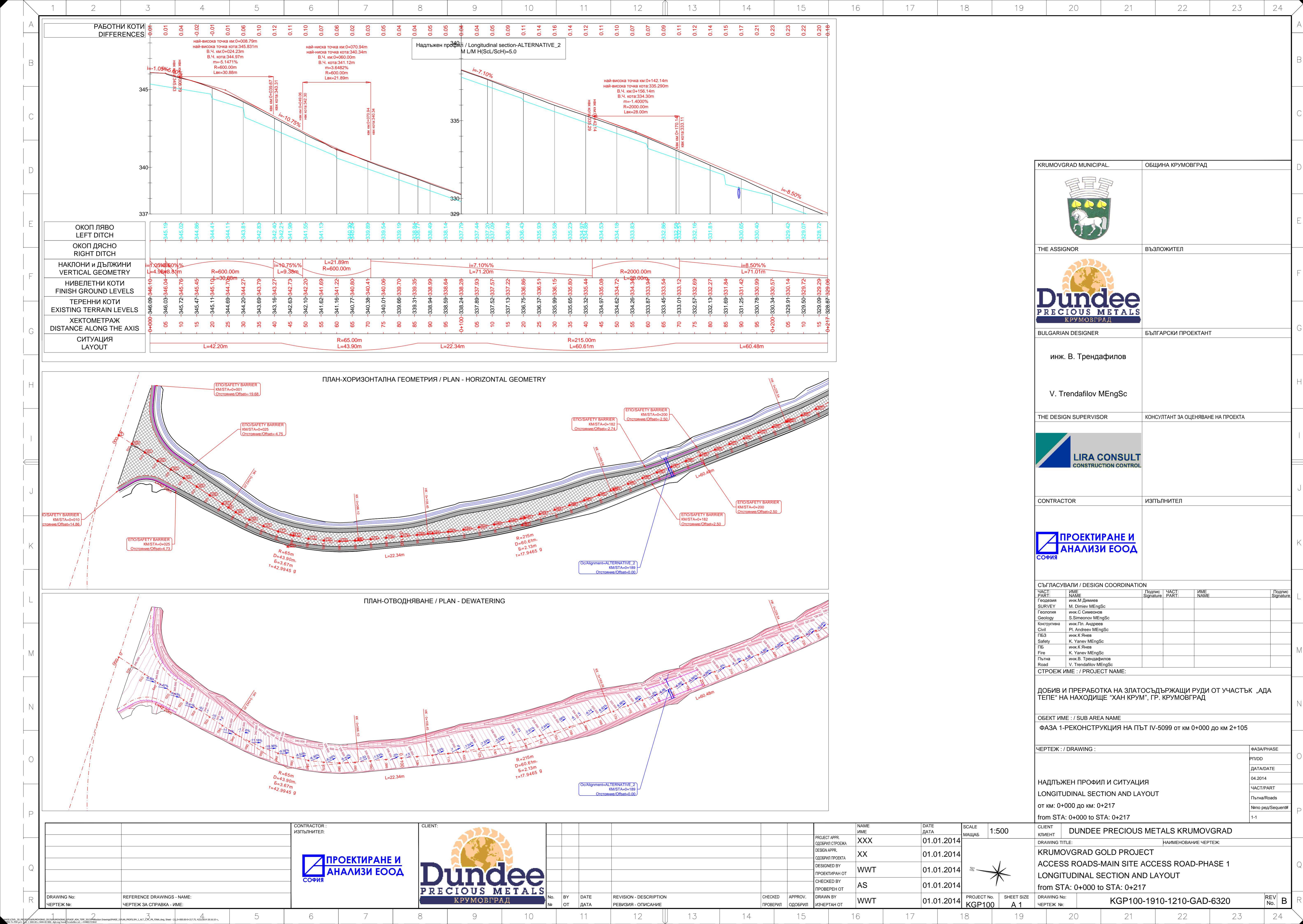
Project Framework Traffic Management Plan,
Ada Tepe Gold Mining Project, Bulgaria

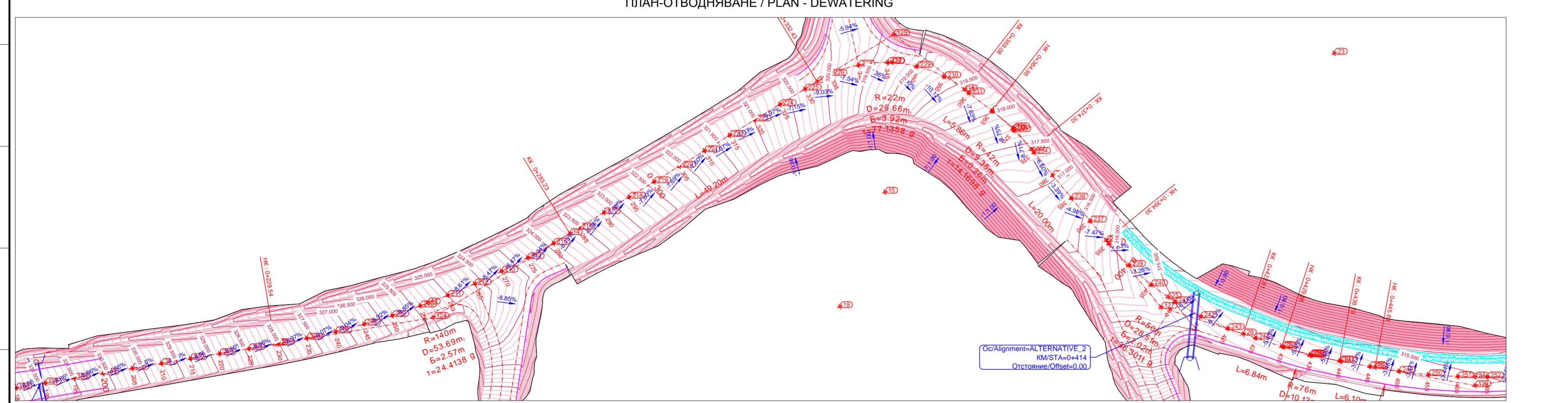
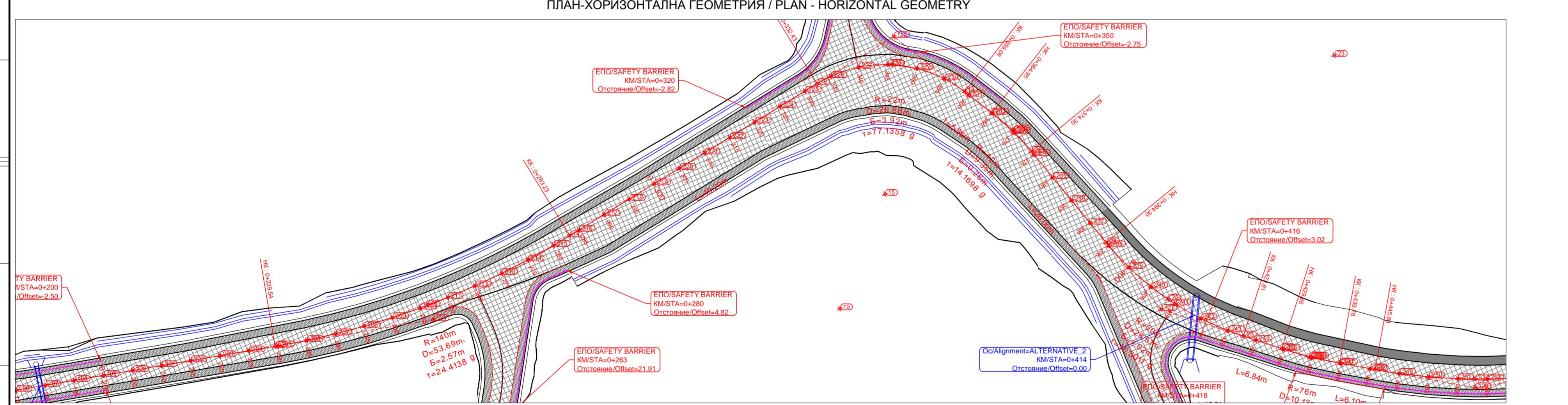
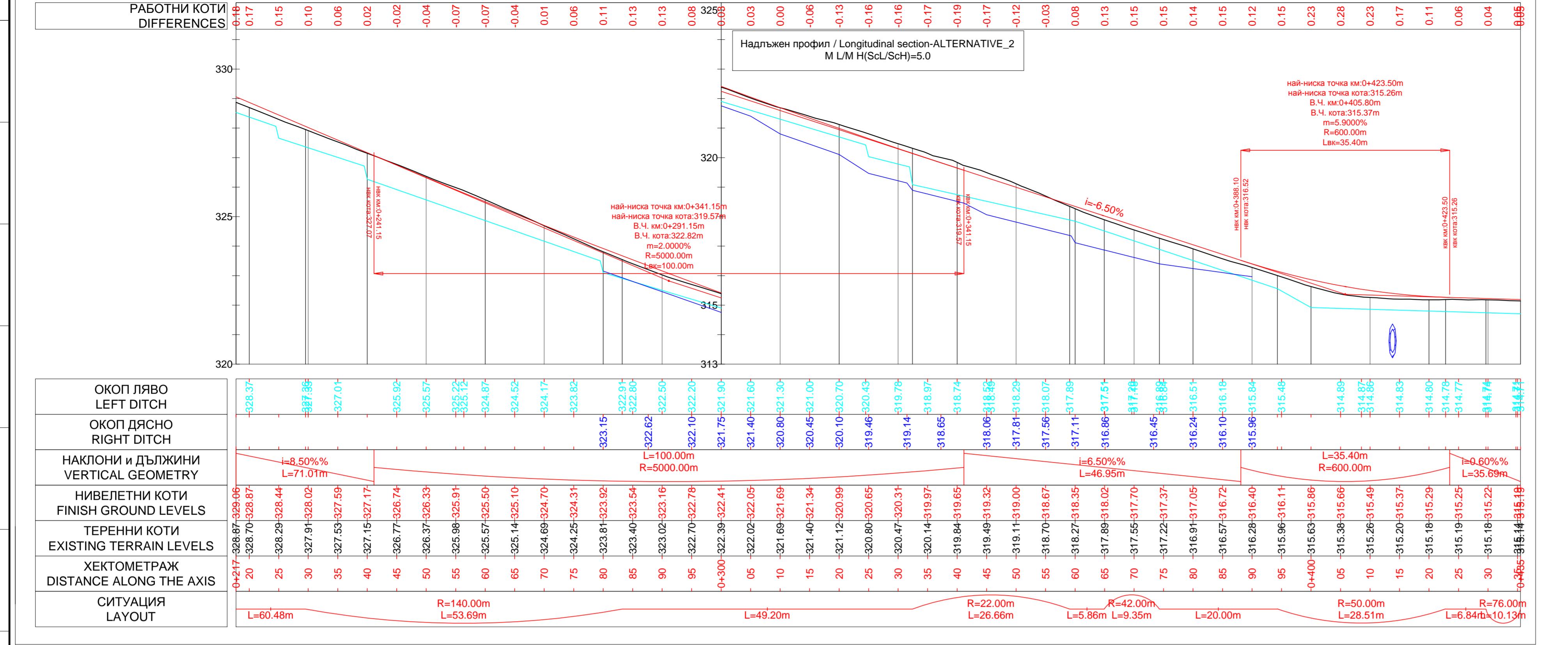
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Map Number	Revision	Scale
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Date	25/09/2014	Sheet Size
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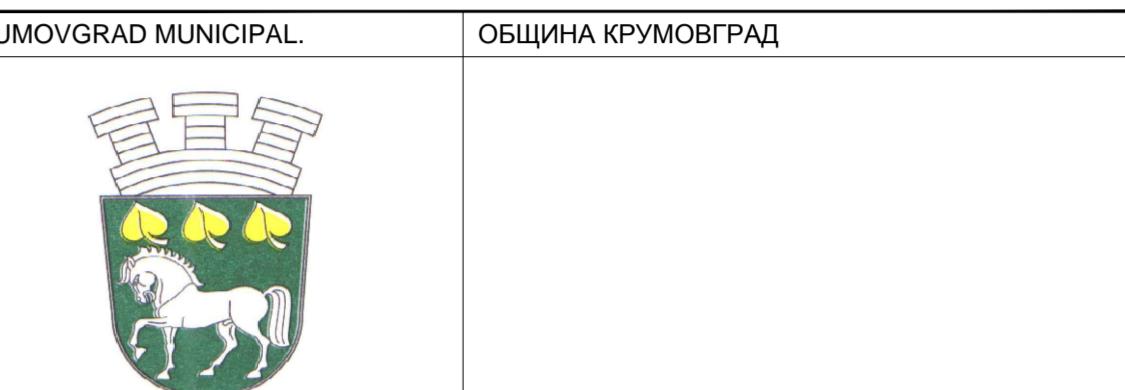
APPENDIX 2

Existing Road Layout





DRAWING No: ЧЕРТЕЖ №:	REFERENCE DRAWINGS - NAME: ЧЕРТЕЖ ЗА СПРАВКА - ИМЕ:	CONTRACTOR : Изпълнител:	CLIENT: Dundee PRECIOUS METALS КРУМОВГРАД	No. №	BY ОТ	DATE ДАТА	REVISION - DESCRIPTION РЕВИЗИЯ - ОПИСАНИЕ	NAME ИМЕ	DATE ДАТА	SCALE МАШТАБ	1:500



THE ASSIGNOR
ВЪЗЛОЖИТЕЛ



BULGARSK DESIGNER
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V. Trendafilov MEngSc

THE DESIGN SUPERVISOR
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CONTRACTOR
ИЗПЪЛНИТЕЛ



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Конструкуване Civil	инж. Г. Ангелов Pl. Angelov MEngSc		МЕДИА Media	инж. К. Янев K. Yanov MEngSc	
ПБ Fire	инж. К. Янев K. Yanov MEngSc		Пътища Road	инж. В. Трендафилов V. Trendafilov MEngSc	

СТРОЕЖ ИМЕ : / PROJECT NAME:

ДОБИВ И ПРЕРАБОТКА НА ЗЛАТОСЪДЪРЖАЩИ РУДИ ОТ УЧАСТЪК „АДА ТЕПЕ“ НА НАХОДИЩЕ „ХАН КРУМ“, ГР. КРУМОВГРАД

ОБЕКТ ИМЕ : / SUB AREA NAME

ФАЗА 1-РЕКОНСТРУКЦИЯ НА ПЪТ IV-5099 от км 0+000 до км 2+105

ЧЕРТЕЖ : / DRAWING :

ФАЗА/PHASE
РП/ДД
ДАТА/DATE
04.2014
ЧАСТ/PART
Пътища/Roads
Ново ред/Sequence#
1-2

НАДЪЛЪЖЕН ПРОФИЛ И СИТУАЦИЯ

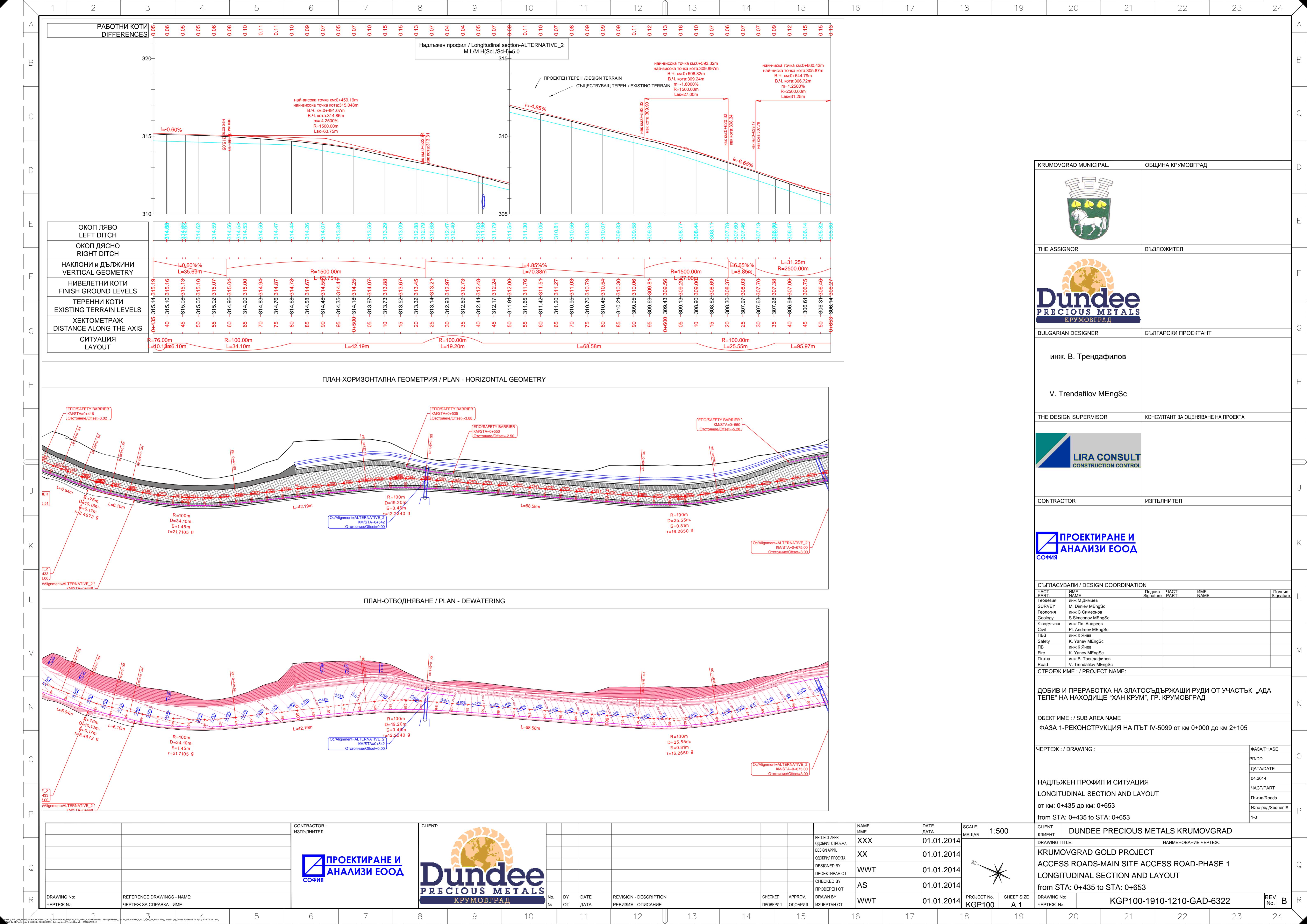
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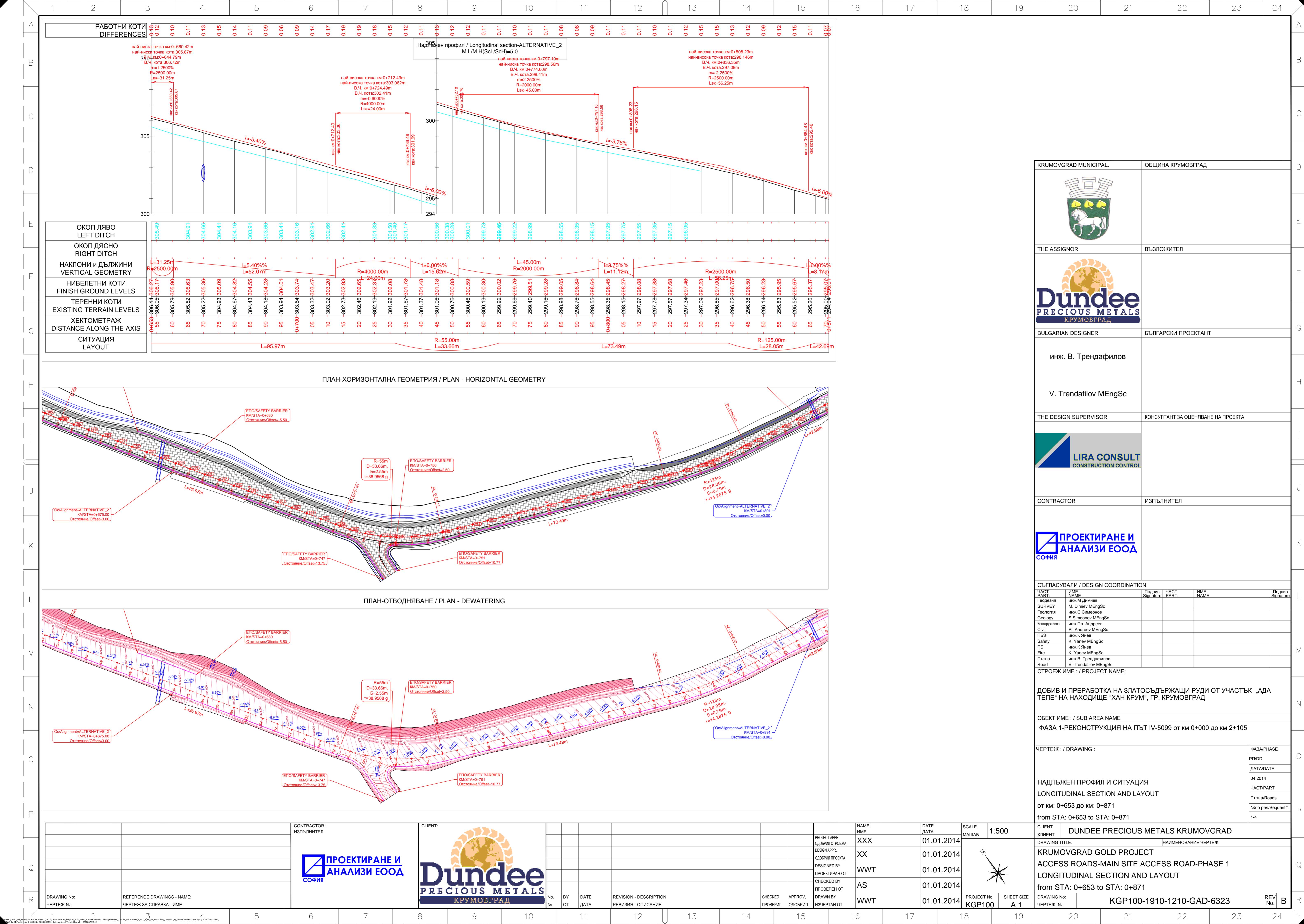
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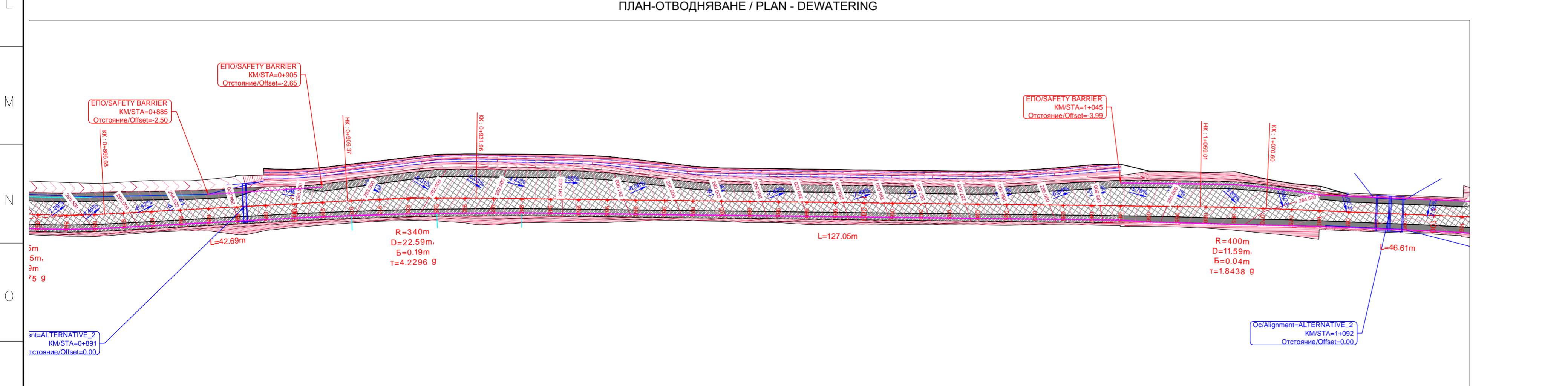
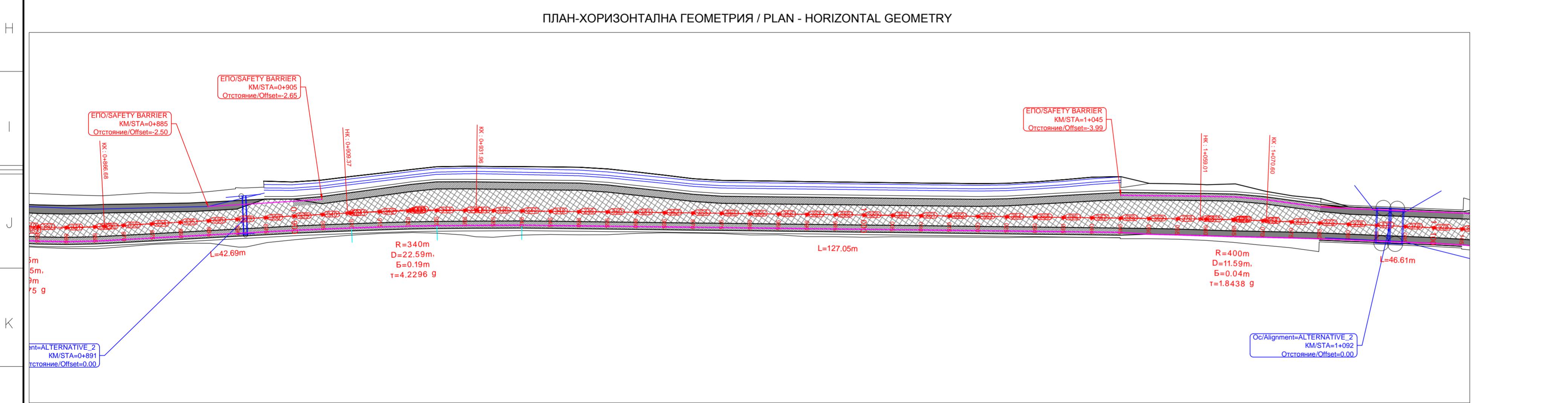
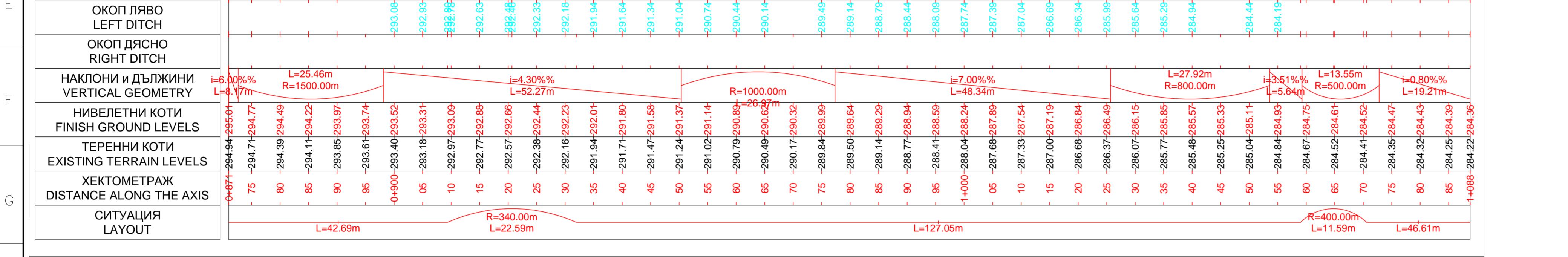
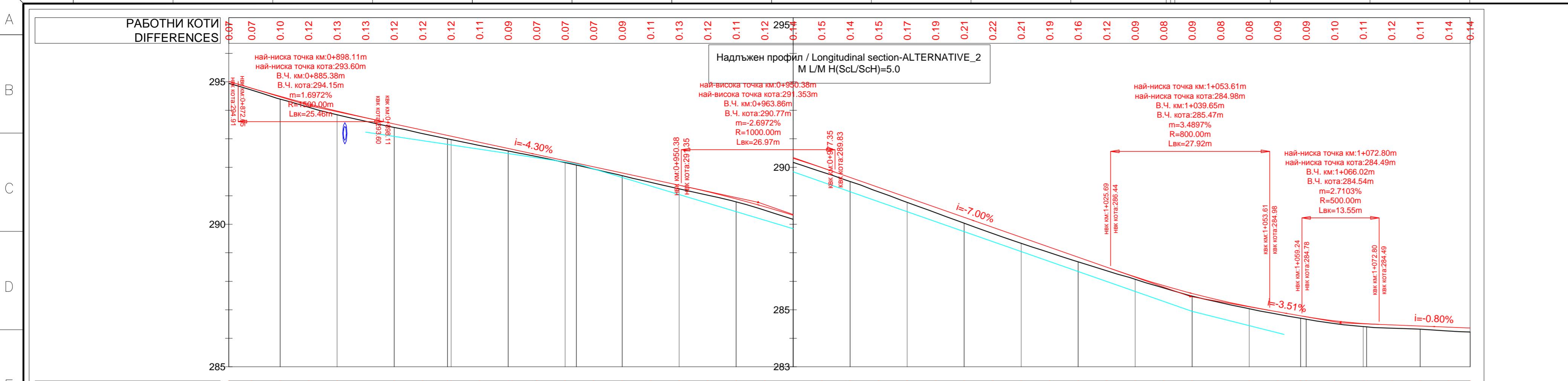
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REV. No. B

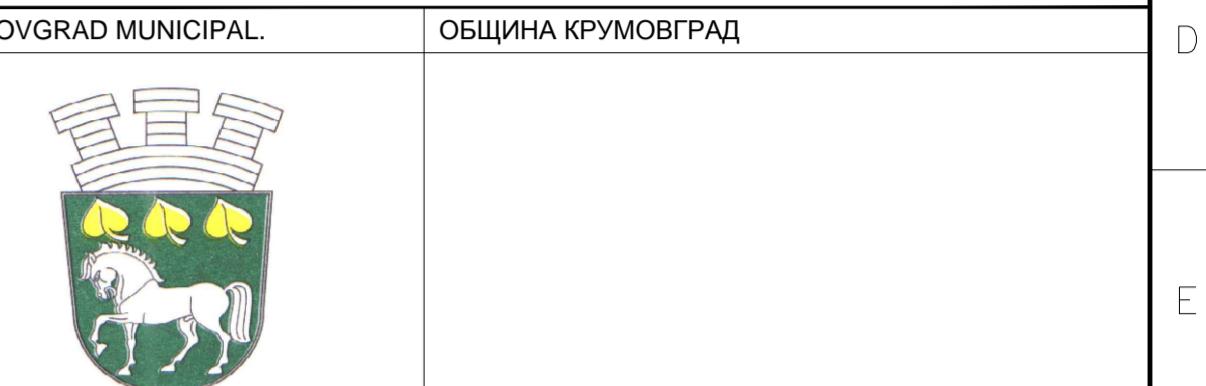
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CHEMICAL ELEMENTS
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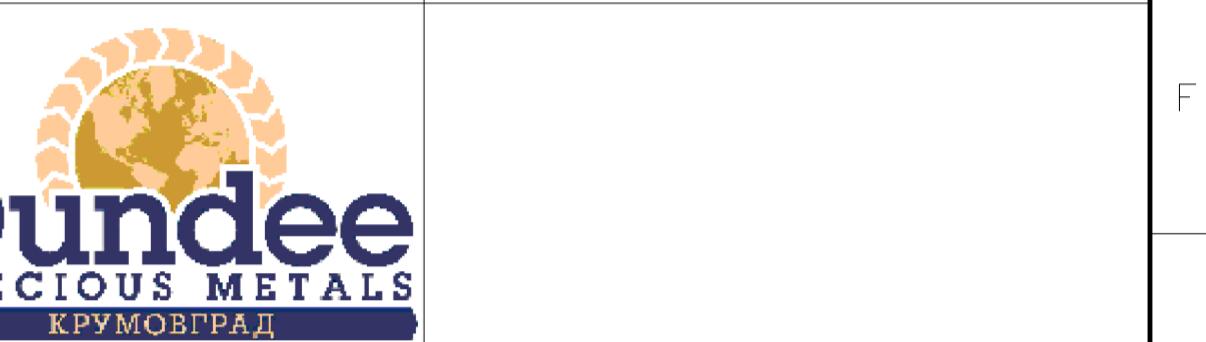




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THE ASSIGNOR
ВЪЗЛОЖИТЕЛ



BULGARSK DESIGNER
БЪЛГАРСКИ ПРОЕКТАНТ

инж. В. Трендафилов
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THE DESIGN SUPERVISOR
КОНСУЛТАНТ ЗА ОЦЕНИВАНЕ НА ПРОЕКТА



CONTRACTOR
ИЗПЪЛНИТЕЛ



СЪГЛАСУВАЛИ / DESIGN COORDINATION
ЧАСТ: PART: ИМЕ: NAME Полик. Signature ЧАСТ: PART: ИМЕ: NAME Полик. Signature
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Geodesy инж. С. Симеонов инж. С. Симеонов
Geology инж. Г. Ангелов инж. Г. Ангелов
Конструктива Civil инж. А. Андреев инж. А. Андреев
Civil инж. К. Янев инж. К. Янев
Строи. Constr. инж. К. Янев инж. К. Янев
ПБ Fire инж. К. Узунов инж. К. Узунов
Пътина Road инж. В. Трендафилов инж. В. Трендафилов
Road

СТРОЕЖ ИМЕ : / PROJECT NAME:

ДОБИВ И ПРЕРАБОТКА НА ЗЛАТОСЪДЪРЖАЩИ РУДИ ОТ УЧАСТЪК „АДА ТЕПЕ“ НА НАХОДИЩЕ „ХАН КРУМ“, ГР. КРУМОВГРАД

ОБЕКТ ИМЕ : / SUB AREA NAME

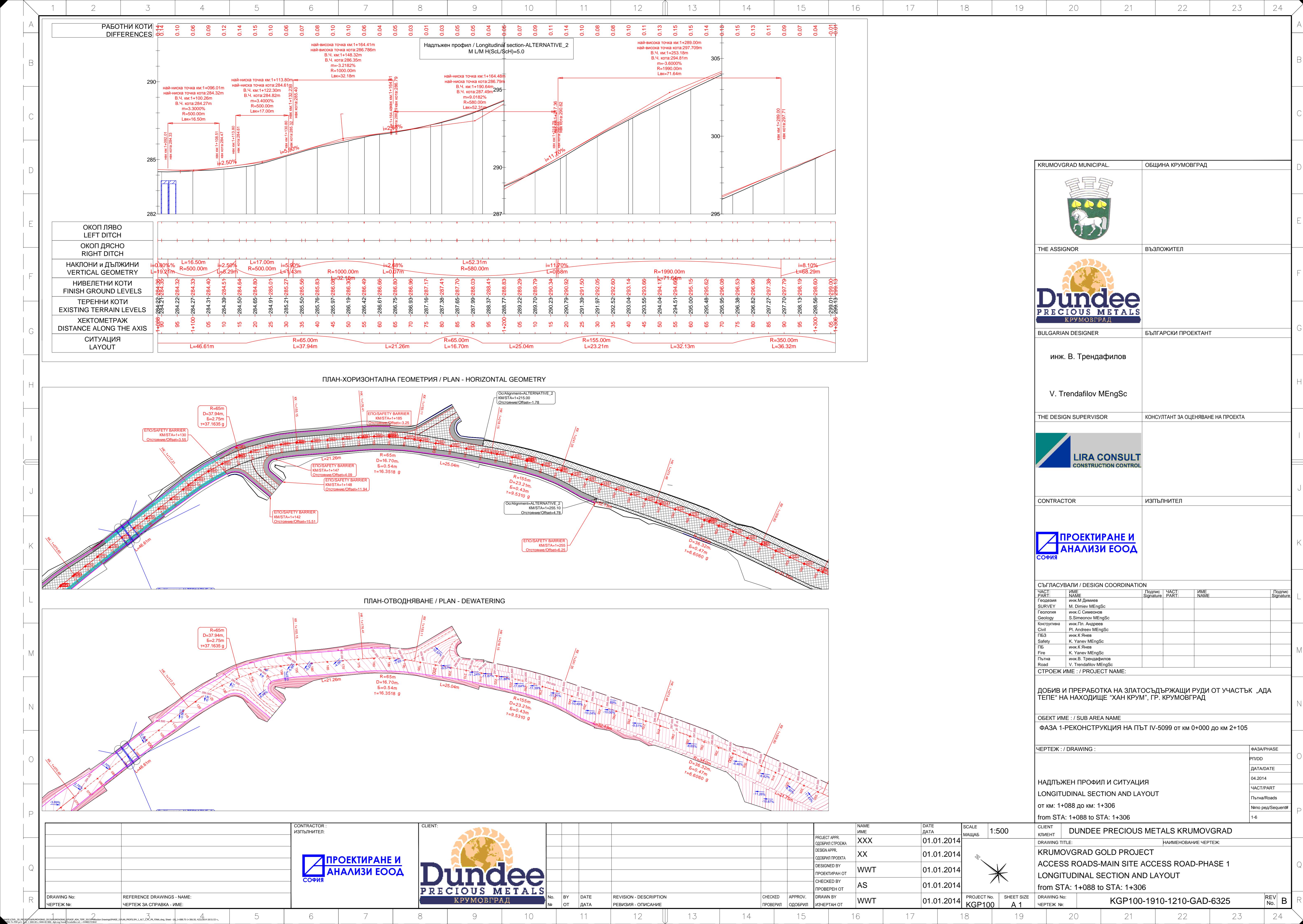
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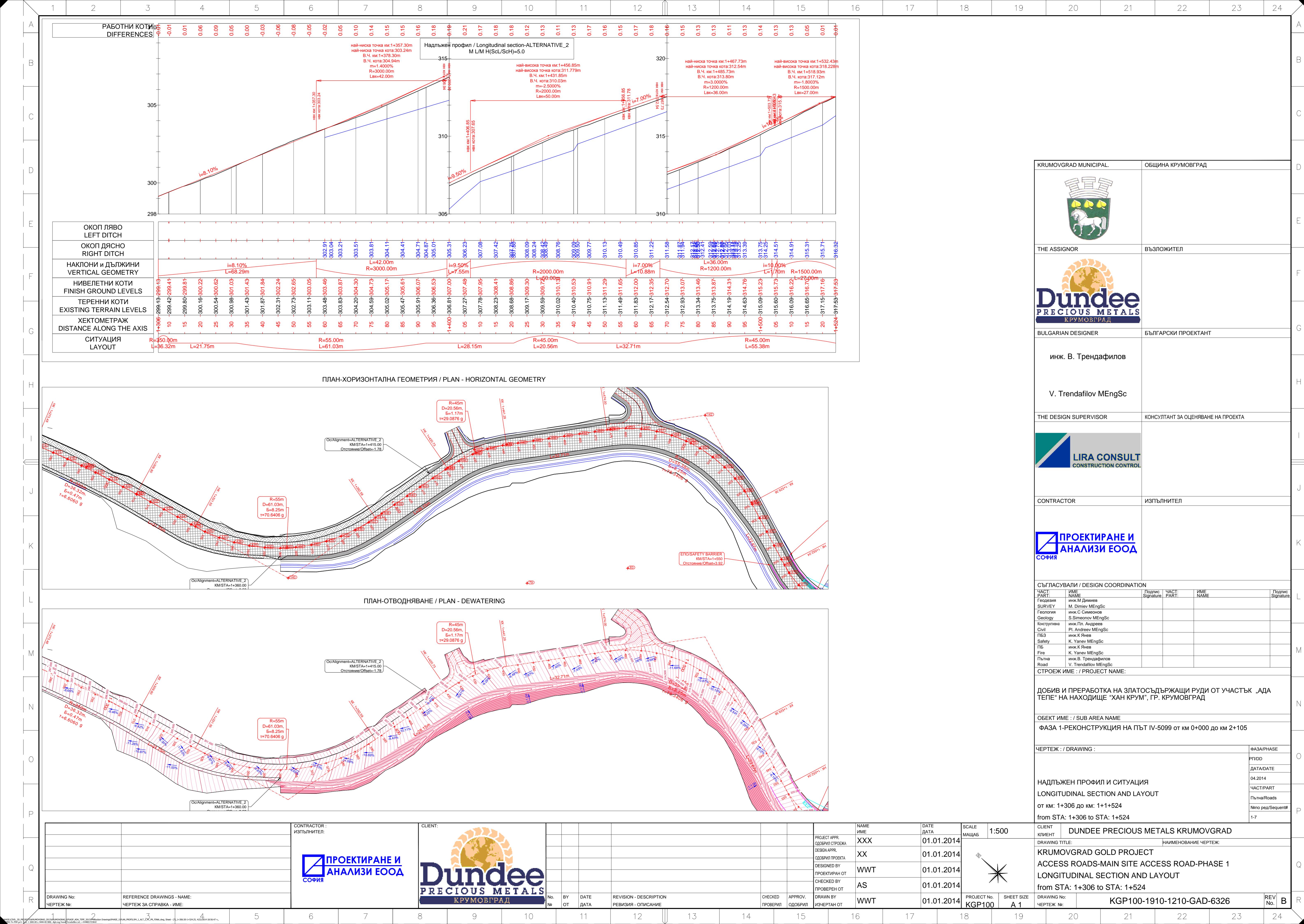
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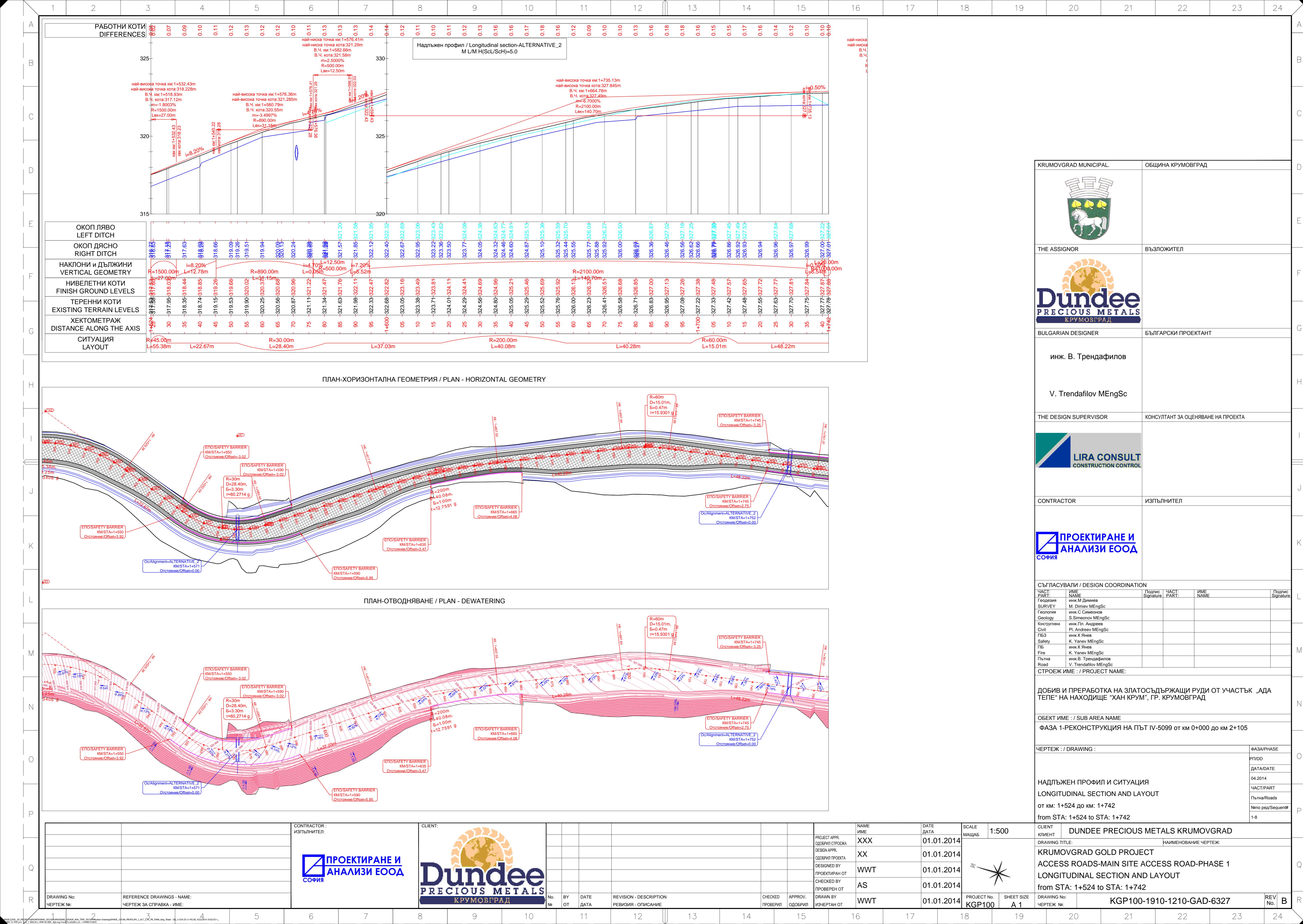
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РП/ДД
ДАТА/DATE
04.2014
ЧАСТ/PART
Пъти/Roads
Нюо ред/Sequent#
1-5

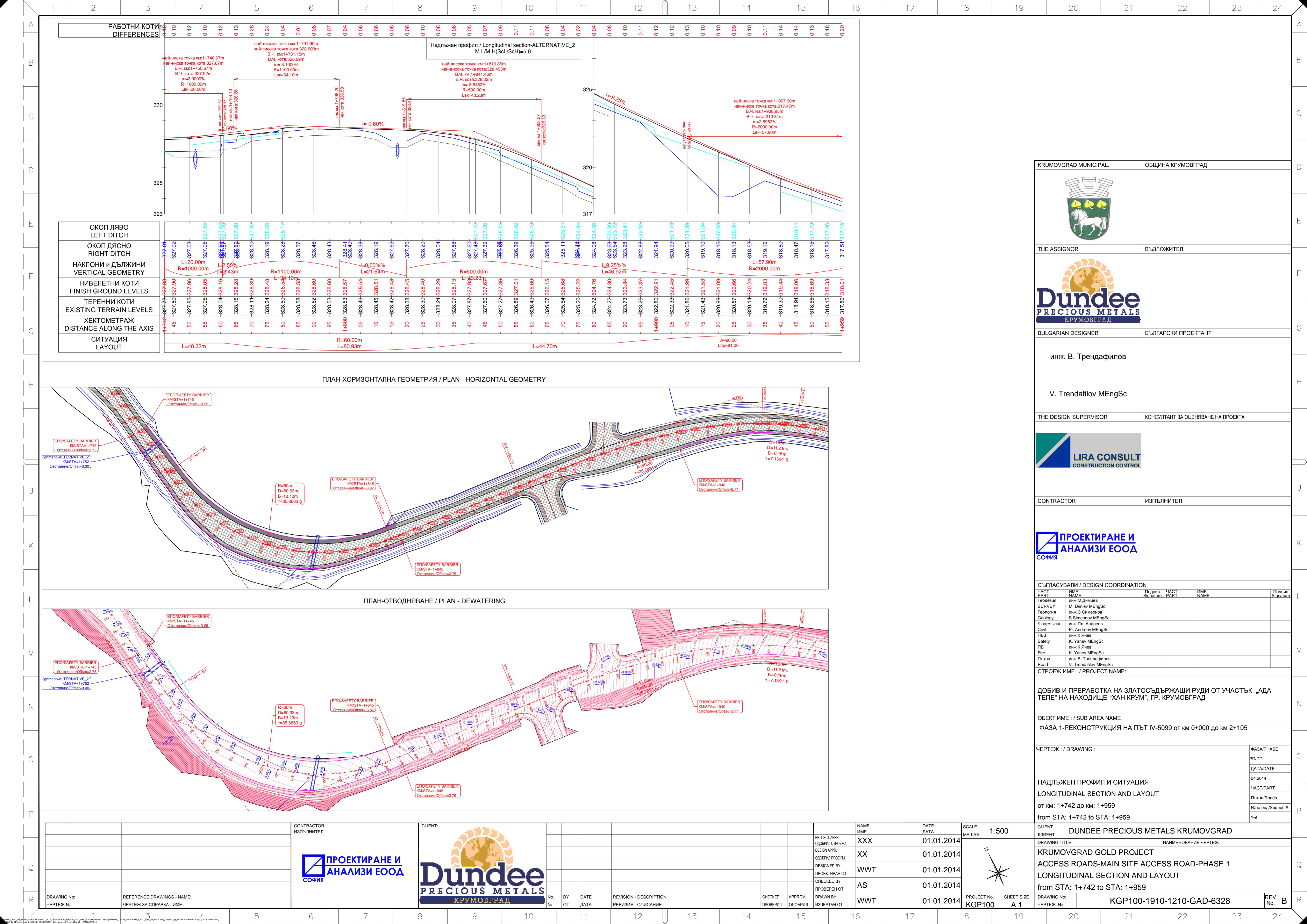
НАДЪЛЖЕН ПРОФИЛ И СИТУАЦИЯ
LONGITUDINAL SECTION AND LAYOUT
от km: 0+871 до km: 1+088
from STA: 0+871 to STA: 1+088

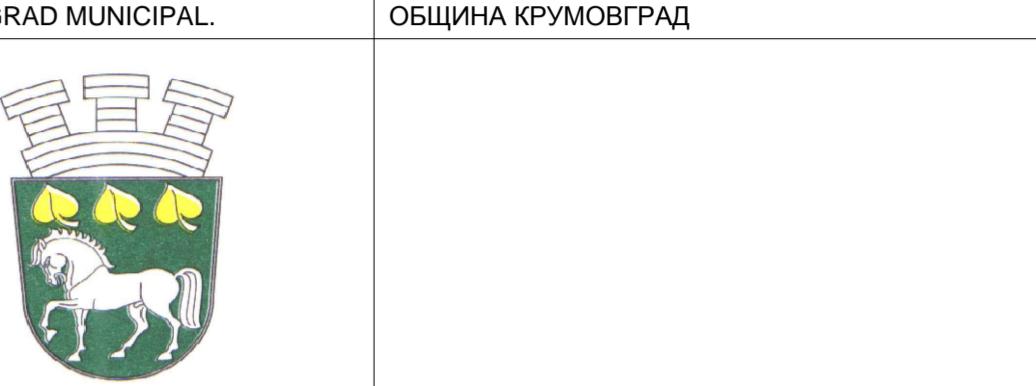
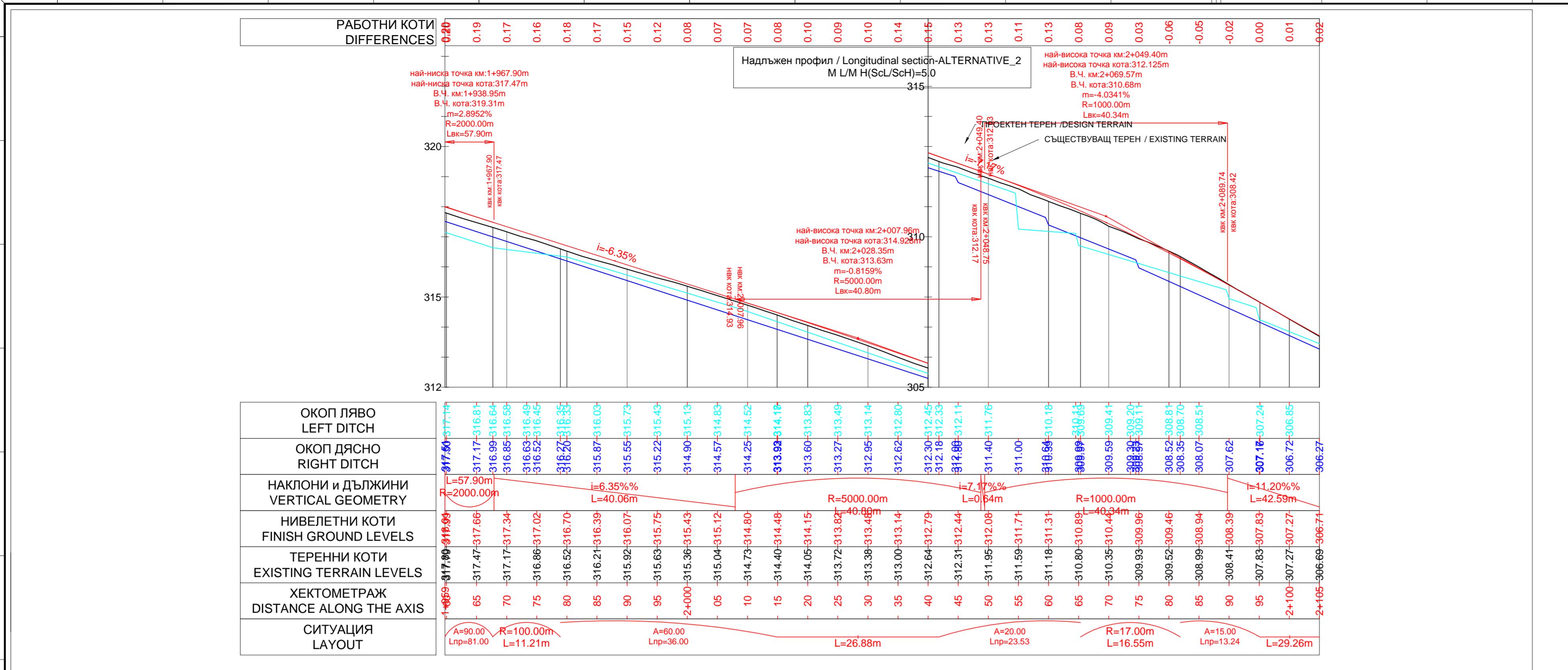
CLIENT DUNDEE PRECIOUS METALS KRUMOGRAD
DRAWING TITLE: НАИМЕНОВАНИЕ ЧЕРТЕЖ:
KRUMOGRAD GOLD PROJECT
ACCESS ROADS-MAIN SITE ACCESS ROAD-PHASE 1
LONGITUDINAL SECTION AND LAYOUT
from STA: 0+871 to STA: 1+088
DRAWING No: KGP100-1910-1210-GAD-6324
ЧЕРТЕЖ №: KGP100-1910-1210-GAD-6324
REV. No: B











ГНОР ВЪЗЛОЖИТЕЛ



DESIGNER БЪЛГАРСКИ ПРОЕКТАНТ

В. Трендафилов

rendafilov MEngSc



3D CAD / DESIGN COORDINATION

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инж.С Симеонов S.Simeonov MEngSc				
инж.Пл. Андреев Pl. Andreev MEngSc				
инж.К Янев K. Yanev MEngSc				
инж.К Янев K. Yanev MEngSc				
инж.В. Трендафилов V. Trendafilov MEngSc				

И ПРЕРАБОТКА НА ЗЛАТОСЪДЪРЖАЩИ РУДИ ОТ УЧАСТЬК „АДА
А НАХОДИЩЕ „ХАН КРУМ“, ГР. КРУМОВГРАД

E : / SUB AREA NAME

РЕКОНСТРУКЦИЯ НА ПЪТ IV-5099 от км 0+000 до км 2+105

DRAWING : ΦΑΖΑ/PHASE

DATA/DATE

ХЕН ПРОФИЛ И СИТУАЦИЯ 04.2014

ЧАСТЬ/PART

960 до км: 2+105

1-10

DUNDEE PRECIOUS METALS KBLUMOV/GRAD

NAME: НАИМЕНОВАНИЕ ЧЕРТЕЖА:
VGRAD GOLD PROJECT

UPGRADING PROJECT

ROADS MAIN SITE ACCESS ROAD PHASE 1

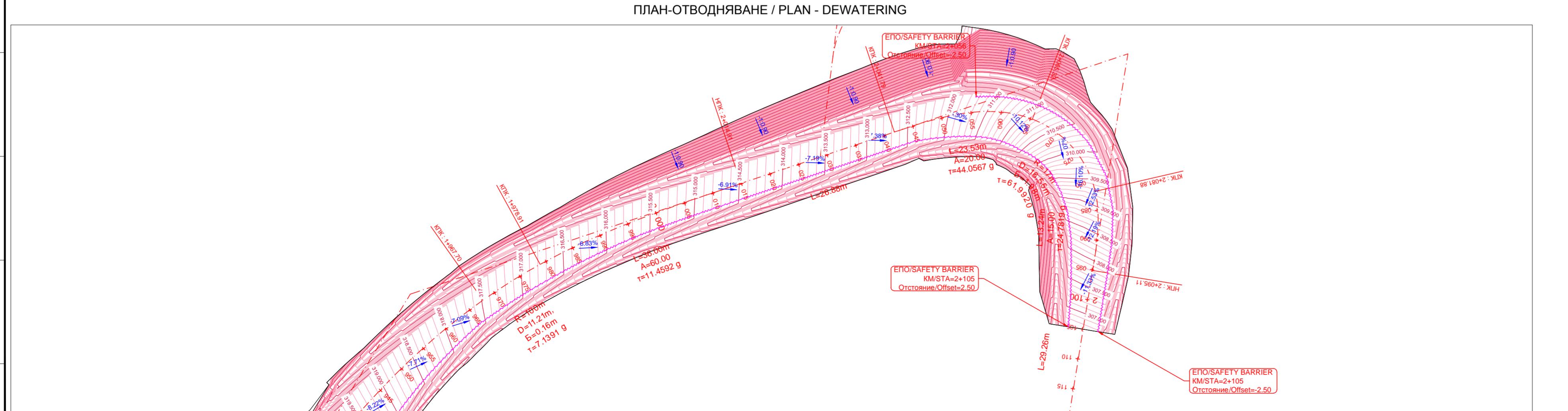
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A: 1+960 to STA: 2+105

KGP100-1010-1310-GAP-6320 REV

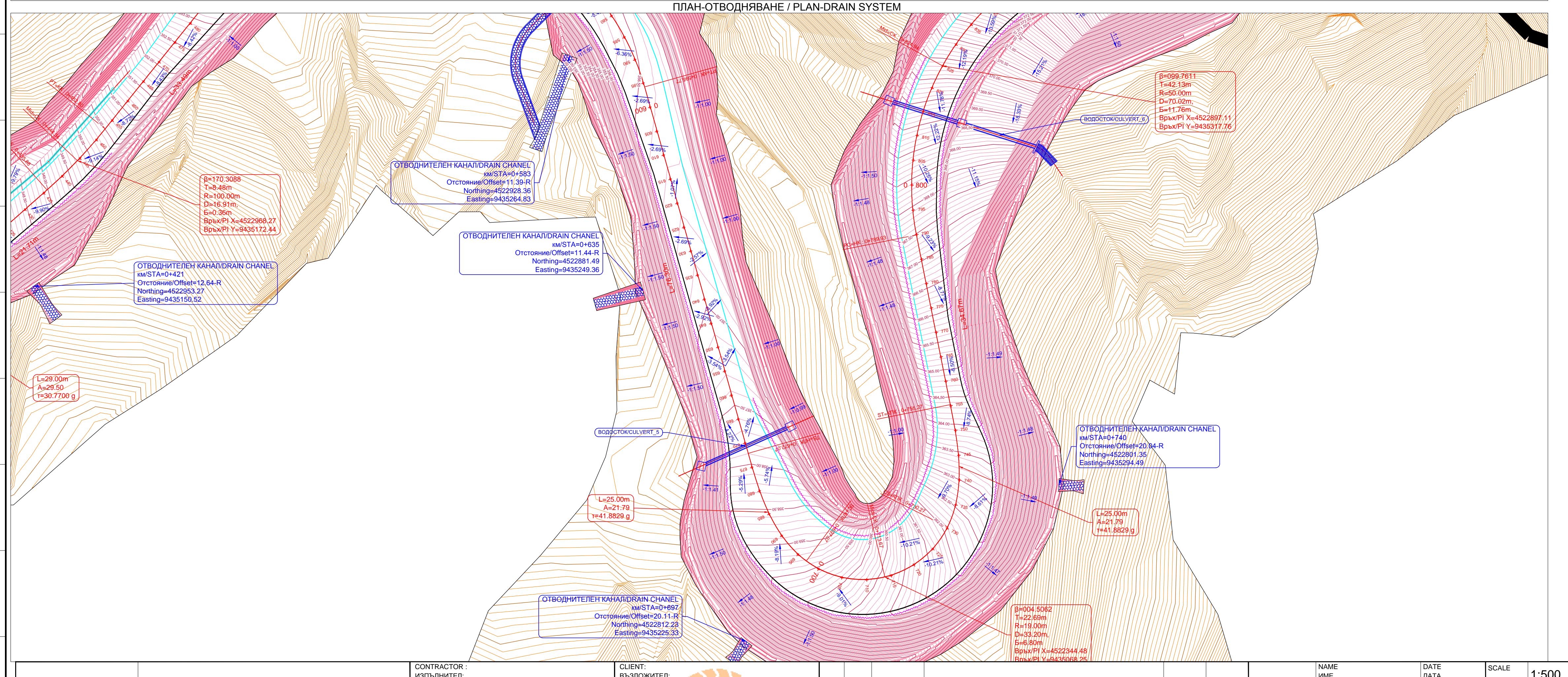
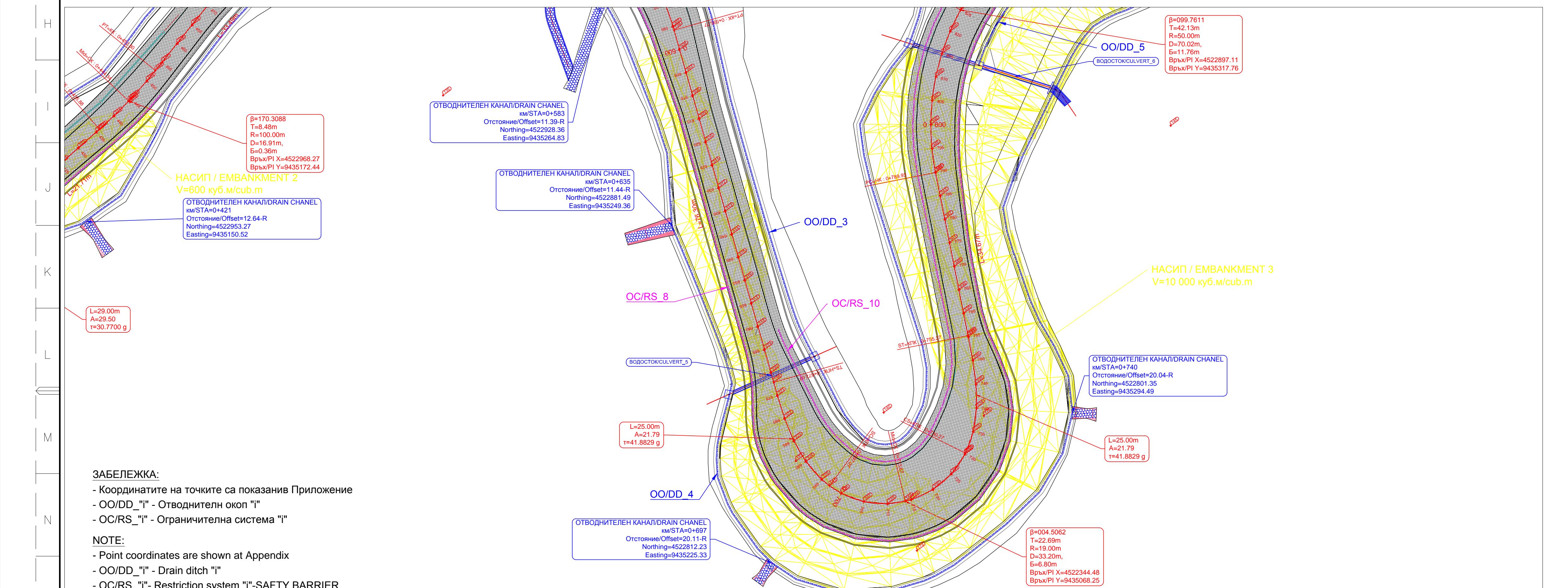
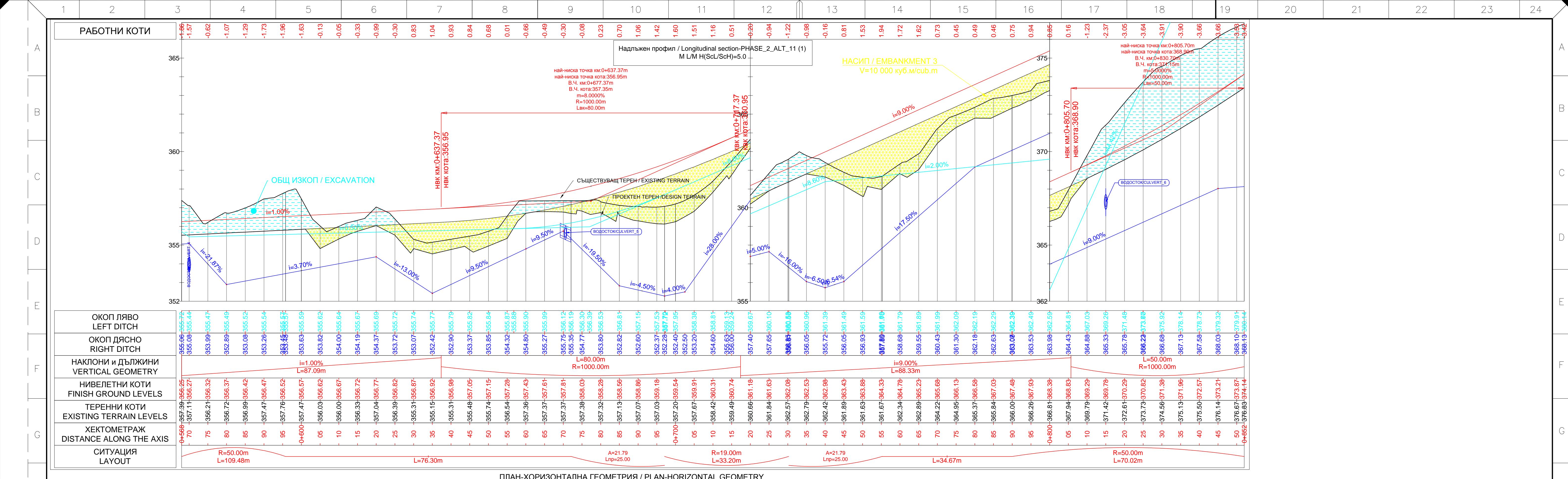
KGPT00-1910-1210-GAD-6329 No.

20 | 21 | 22 | 23 | 2



APPENDIX 3

New Site Access Track Layout



KRUMOGRAD MUNICIPAL. ОБЩИНА КРУМОВГРАД

THE ASSIGNOR ВЪЗЛОЖИТЕЛ

Dundee PRECIOUS METALS КРУМОВГРАД

BULGARIAN DESIGNER БЪЛГАРСКИ ПРОЕКТАНТ

инж. В. Трендафилов

V. Trendafilov MEngSc

THE DESIGN SUPERVISOR КОНСУЛТАНТ ЗА ОЦЕНЯВАНЕ НА ПРОЕКТА

LIRA CONSULT CONSTRUCTION CONTROL

CONTRACTOR ИЗПЪЛНИТЕЛ

ПРОЕКТИРАНЕ И АНАЛИЗИ ЕООД СОФИЯ

СЪПЛАСУВАЛИ / DESIGN COORDINATION

ЧЛ/ PART	NAME / ИМЕ	Подпись / SIGNATURE	ЧЛ/ PART	NAME / ИМЕ	Подпись / SIGNATURE
Геодезия	М. Димитров	Geodesia	М. Димитров		
Геология	С. Симеонов	Geology	С. Симеонов		
Координати	П. Ангелов	Coordinates	П. Ангелов		
ПБЗ	К. Уанев	PBZ	К. Уанев		
ПБ	К. Уанев	PB	К. Уанев		
Пътища	В. Трендафилов	Roads	В. Трендафилов		

СТРОЕЖ ИМЕ : / PROJECT NAME:

ДОБИВ И ПРЕРАБОТКА НА ЗЛАТОСЪДЪРЖАЩИ РУДИ ОТ УЧАСТЪК „АДА ТЕПЕ“ НА НАХОДИЩЕ „ХАН КРУМ“, ГР. КРУМОВГРАД

ОБЕКТ ИМЕ : / SUB AREA NAME

ФАЗА 2 - ИЗГРАЖДАНЕ НА НОВ ПЪТЕН УЧАСТЪК

ОТКЛОНЕНИЕ ОТ ПЪТ IV-5099

ЧЕРТЕЖ : / DRAWING :

Надлъжен профил и ситуация LONGITUDINAL SECTION AND LAYOUT

от km: 0+568 до km: 0+852
from STA: 0+568 до STA: 0+852

наименование чертеж:

KRUMOGRAD GOLD PROJECT

ACCESS ROADS-MAIN SITE ACCESS ROAD-PHASE 2 LONGITUDINAL SECTION AND LAYOUT

from STA: 0+568 до STA: 0+852

Rev. B

