APPROVED BY SOUTHERN REGION DIRECTORATE - GJIROKASTRA <u>DIRECTOR</u> ANDI SHKURTA

CONTRACT II TECHNICAL REPORT (DESCRIPTIVE PROJECT)

Performance-based maintenance:1.K/ Muzinë - Delvinë (15 km), 2.Delvinë - Qafë Gjashtë (13.2 km), 3.Kardhiq Bridge - Prongji (7.2 km), 4.K/Shijan - Vergo (9.2 km), 5.Prongji - Vergo (Lot 4+5+6) (14.5 km) (Contract II, total 39.4 km)

1. Scope of services to be carried out

The services to be provided include all the activities, physical and others, which should be carried out by their compliance with the levels of service, and the criterion set for their performance fulfillment, or any other requirement.

In particular, they include managerial duties and physical works concerning road-related assets and items:

- -Asphalt
- -Shoulders
- -Road signs and supply of road safety devices
- -Drainage facilities
- -Vegetation control
- -Escarpments (excavations and shoulders)
- -Art works
- -Traffic management
- -Soil accumulation
- -Snow removal (if winter maintenance is available)

The services required by road maintenance are classified in:

- 2. Rehabilitation/Periodic Works in the form of quantity of a ceiling amount, while indicating the quantities of measurable works to be carried out in order for the road to meet its performance standards.
- 3. Routine Maintenance Services in the form of quantity expressed in a monthly ceiling amount (this will be a monthly quantity applicable throughout the contract duration, expressed in price per km for each month multiplied by road length and duration of services);
- 4. Emergency Works in the form of a traditional bill of quantities.

The main functions of maintenance bases in general should be as follows:

- 1. Supervision of road segment/section in certain periods by levels of service
- 2. Control of traffic data for this segment
- 3. Observation of meteorological factors
- 4. First aid in case of accidents (related to road and traffic elements)
- 5. Maintenance on desired road layers conditions
- 6. Maintenance of parking spaces, service, road signs, lighting systems, and future signaling and telecommunication.
- 7. Repairs and reconstruction after road accidents
- 8. Repairs and reconstruction after natural disasters
- 9. Cleaning operations of drains, culverts and other facilities related to the removal of water from road surface.

- 10. All the operations for the cleaning and maintenance of:
- road signs, safety devices (guardrails, parapets) and lighting system
- local repair of sidewalk damages
- vegetation protection
- winter activities for the removal of snow and ice.

Winter maintenance works include:

- 1. Preliminary works before winter
- 2. Organization of materials storage locations
- 3. Protective measures for snow, ice, snow piles and avalanches
- 4. Removal of snow from highway carriageway and communication signs and signals
- 5. Marking of carriageway sides
- 6. Ensuring carriageway drainage system operation
- 7. Removal of vehicles from the road
- 8. Installation of specific communication signals in case of special traffic regime for road closures
- 9. Ongoing public information on road conditions and traffic flow

5. Segments to be covered by the contract:

Road No.	No.	Road names	Road type	Total length (km)	Width (m)
78	1	K/ Muzinë - Delvinë	SHL	15	6
99	2	Delvinë – Qafë Gjashtë	SHL	13.2	9
N/A	3	Kardhiq Bridge - Prongji	SMTW	7.2	9.5
N/A	4	K/Shijan - Vergo	SMTW	9.2	9.5
N/A	5	Prongji - Vergo (Lot 4+5+6)	SMTW	14.5	9.5
CONTRACT II SUM				59.1	

Note: SFL – road in a field terrain with one carriageway, without winter maintenance, SHL – road in a hilly terrain with one carriageway, without winter maintenance, SMTW – road in a mountainous terrain with one carriageway, with winter maintenance.

6. Specific condition

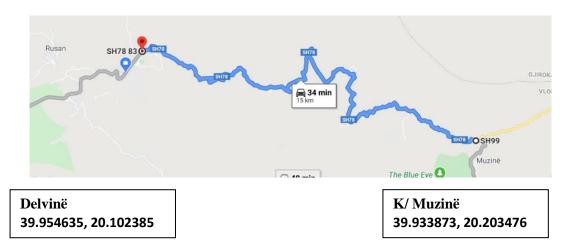
For each case, the segments to be included in investment (reconstruction) or other projects of the Albanian Road Authority will be reduced from the contract.

7. Road signs and safety

The maintenance of road signs and safety (guardrails) will be focused on repair and upgrade of the existing one.

8. Area description, Drawings and Technical Report.

1:K/ Muzinë - Delvinë (15 km)



Technical Report: K/ Muzinë - Delvinë road axis (15 km)

Name: K/ Muzinë – Delvinë It is a dual carriageway segment

Length: 15 km Width: 6 m

Construction year: old road

About road axis importance: secondary interurban road, category C, connecting Sarandë, Delvinë and Gjirokastrën, as well as villages between them.

About geology, engineering geology and hydrogeology: Stable formations. It includes art works, as well as necessary retaining and wing walls. There is a tendency of erosion in stone bridge piers from creek waters, so ongoing control is necessary. From km 22 to 24 there are formations eroded by surface waters, with a tendency of eroding the lower (left) slope of the road.

About main road components:

Road track: Penetration-based asphalt layers, totally amortized.

The shoulders and ditches need routine maintenance

Stable escarpments

Art works are normally operating

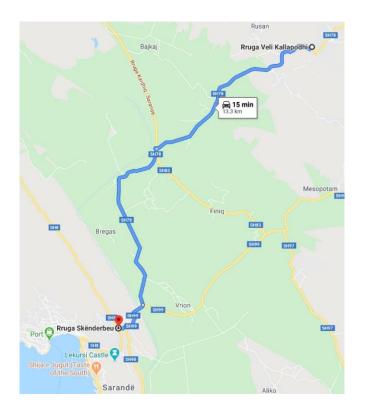
No road signs have been or are already installed, as it is an amortized road axis and the number of vehicles movement per hour is too low.

The entire road axis needs routine maintenance.

2:Delvinë – Qafë Gjashtë(13.2 km)

Delvinë 39.949736, 20.094082

Q. Gjashtë 39.875094, 20.027077



Technical Report: Delvinë – Qafë Gjashtë road axis(13.2 km)

Name: Delvinë – Qafë Gjashtë

Length: 13.2 km;

The Delvinë – Gajdari Bridge road is 11.9 km long, 6 m wide, and it is a dual carriageway segment.

The Gajdari Bridge – Qafë Gjashtë road is 1.3 km long and 9 m wide, and it is a single carriageway segment. The right carriageway has two lanes, whereas the left one has one lane.

Construction year: it is an old road, whereas the Gajdari Bridge – Qafë Gjashtë segment was reconstructed in 2018.

About road axis importance: secondary interurban road, category C, connecting Sarandë, Delvinë, and villages between them. This road axis is important with regards to economic, social and tourist aspects.

About geology, engineering geology and hydrogeology: Mixed formations as an area of alluvials soils, mainly in the field area across Kalase River, tuff formations, etc.

It includes art works, as well as necessary retaining and wing walls.

About main road components:

Road track: The Gajdari Bridge – Delvinë segment is an asphalted road, but it needs asphalt layers maintenance. The shoulders and ditches need routine maintenance. The road signs need to be completed, including guardrails in specific segments.

The Gajdari – Qafe Gjashte segment's asphalt layers conditions are very good. It is a segment equipped with lighting devices, gutters and complete road signs in good conditions.

Stable escarpments

Art works are normally operating

3:Kardhiq Bridge - Prongji (7.2 km)

Prongji
40.125830,
20.020946



Kardhiq Bridge **40.147348**, **20.095997**

Technical Report: Kardhiq Bridge - Prongji road axis (7.2 km)

Name: Kardhiq Bridge - Prongji road It is a dual carriageway segment

Length: 7.2 km

Width: 9.5 m (7 m + 2 x 1.25 m)Construction year: Under construction

About road axis importance: secondary interurban road, category C. It connects Sarandë and Delvinë to Gjirokaster, Tepelene, Fier, Lushnjë, Kavajë, Durrësi, Tiranë, etc. It is very important with regards to economic, social and tourist aspects.

About geology, engineering geology and hydrogeology: The project provides relevant solutions for all actual conditions of the above-mentioned elements in each kilometer.

About main road components:

Road track: The asphalt layers will be composed of bituminous conglomerates 8 cm, binder 6 cm and surface course 4 cm. The first 2 layers are paved, whereas the 4 cm surface course is missing.

The gutters are not available as the asphalt surface course has not been paved. The shoulders are asphalted 2 x 1.25 m, but the surface course is missing. The ditches' conditions are good, but routine maintenance is needed.

The escarpments are stable, but from km 4.8 to 5.2, landslides have been identified from escarpments being excavated, which cannot be prevented from the retaining walls and reach the road. The concrete wing and retaining walls' conditions are good. Routine maintenance is needed.

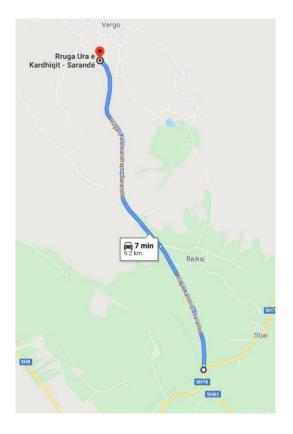
Art works are normally operating

As an object under construction, road signs are missing. Road signs installation is needed.

The entire road axis is under construction and there is a need just for routine maintenance.

4:K/Shijan - Vergo (9.2 km)

Vergo 39.998067, 20.006618



K/Shijan **39.922957, 20.040162**

Technical Report: K/Shijan - Vergo road axis (9.2 km)

Name: Kardhiq - Delvine road Lot 2 and 3

It is a dual carriageway segment

Length: 9.2 km

Width: 9.5 m (7 m + 2 x 1.25 m)Construction year: Under construction

About road axis importance: secondary interurban road, category C. It connects Sarandë and Delvinë to Gjirokaster, Tepelene, Fier, Lushnjë, Kavajë, Durrësi, Tiranë, etc. It is very important with regards to economic, social and tourist aspects.

About geology, engineering geology and hydrogeology: The project provides relevant solutions for all actual conditions of the above-mentioned elements in each kilometer.

About main road components:

Road track: In its first 4 kilometers, the road has been raised above the embankment, whereas the rest on the basement with excavation and filling. The asphalt layers will be composed of bituminous conglomerates 8 cm, binder 6 cm and surface course 4 cm. The first 2 layers are paved, whereas the 4 cm surface course is missing.

The gutters are not available as the asphalt surface course has not been paved. The shoulders are asphalted 2 x 1.25 m, but the surface course is missing. The ditches' conditions are good, but routine maintenance is needed.

Stable escarpments, but from km 7.8 to 8.0, the presence of soil in road has been identified. Routine maintenance is needed.

Art works are normally operating

As an object under construction, there is a minimum presence of road signs. Road signs installation is needed.

The entire road axis is under construction and there is a need just for routine maintenance. 2.5: Prongji - Vergo (Lot 4+5+6) (14.5 km)



Prongji 40.125830, 20.020946

> Vergo 39.998067, 20.006618

Technical Report: Prongji - Vergo road axis (Lot 4+5+6) (14.5 km)

Name: Prongji – Vergo road

It will be a dual carriageway segment

Length: 14.5 km

Width: 9.5 m (7 m + 2 x 1.25 m)Construction year: Under construction

About road axis importance: secondary interurban road, category C. It connects Sarandë and Delvinë to Gjirokaster, Tepelene, Fier, Lushnjë, Kavajë, Durrësi, Tiranë, etc. It is very important with regards to economic, social and tourist aspects.

About geology, engineering geology and hydrogeology: The project provides relevant solutions for all actual conditions of the above-mentioned elements in each kilometer.

About main road components: Currently subject to excavation work, reinforced concrete walls, etc.

This road axis is under construction, and the construction of a tunnel, reinforced concrete bridges, etc., has been foreseen.