



PROJECT:

EastMed Pipeline Project



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EastMed Greek Section – Environmental and
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Abbreviations

See Document Map.





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9 C.1. INTRODUCTION

9 C.1.1. General

Landscape analysis was carried out to determine the current state of the landscape before the project was implemented. In this way a documented impact assessment can be carried out in the landscape from the construction and operation of the project.

9 C.1.2. Study area and structure

According to the provisions of MD 170225/2014, the minimum area of study for sub-category A1 activities is defined as:

- For linear projects, 1 km buffer zone (on each side of the axis); and
- For areal projects, 2 km buffer zone (2 km radius from the boundaries of the plot).

Since the project under consideration includes both linear (pipelines) and areal characteristics (Main Facilities), a combination of the above study areas was selected.

However, the study area for the landscape is usually defined by the geographical area from which the proposed project is likely to be visible. Therefore, with a view to classifying and recognizing landscape types, a larger area was deemed necessary, i.e. a 10 km zone (5 km radius of the project components).

The elements considered include the pipeline, with an emphasis on the landfall sites, route along with the permanent facilities. These facilities include the Compressor, Metering and Heating Stations. BVSs and SSs were considered to be very small, local facilities and differentiated by the pipeline itself, along which they were constructed.

In order to allow the description of the current state of the environment and consequently the impact assessment to be monitored more fully and more easily, it was considered appropriate to separate the entire study area into discrete sections.

The technical design of the project distinguishes two large segments or parts of Greek EastMed:

- Onshore EastMed: including Crete facilities, CCS1 (along with Megalopoli's Branch, MS4/PRS4 & Heating Station, CS3), OSS4 and CCS2, and
- Offshore EastMed, including the Greek section of OSS2 and OSS3





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The footprint of the Project crosses areas with clearly different natural and/or geomorphological characteristics forming distinct geographical units. These units have been used throughout this section to describe most of the natural and environment parameters. The sections (units) defined are listed below. In addition, Table C.1-1 presents the selected sections and specific subsections defined:

- South Cretan Sea;
- Crete;
- South Aegean Sea;
- Peloponnese;
- Patraikos Gulf; and
- West Continental Greece.

Table C.1-1 Sections of ESIA Study Areas for Natural Environment.

Section	Description	Study Area (km²)	Subsections (Zoning) (used if applicable)	Remarks/ Justification
South Cretan Sea	The sea stretching from the start of the Greek section to the Crete Section.	785.98	Deep water zone	In deep waters (>40 m WD), the pipeline is simply laid on the seabed (at least in most cases).
Crete	The coastal area (marine, i.e. nearshore and terrestrial, i.e. coastal) zone and the mainland area hosting all Project components located on the island of Crete.	16.23*	Nearshore zoneBeach zoneMainland zone	Shore approach (starting from the 20 m isobath) shall be performed buring the pipeline within a trench. In addition, temporary construction facilities based on the beach and shore areas are associated with the shore approach. The mainland section hosts all onshore Project components.

¹ According to 00225-Ev32A-BOD-00053_3_20.04.2021 "EastMed Pipeline Project - FEED Offshore".





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Section	Description Study Area (km²)		Subsections (Zoning) (used if applicable)	Remarks/ Justification
South Aegean Sea	The sea stretching from Crete Section through the entire east coast of Crete, most of the north coast of Crete and reaching Peloponnese Section.	860.65	Deep water zone	See comment on South Cretan Sea.
Peloponnese	The coastal area (marine, i.e. nearshore and terrestrial, i.e. coastal) zone and the mainland zone hosting all Project components located in Peloponnese. In more details, the coastal area of LF3, Peloponnese geographical unit, and the coastal area of LF4	603.26**	Nearshore zoneBeach zoneMainland	See comment in Crete.
Patraikos Gulf	The sea stretching from LF4, through the entire Patraikos Gulf and reaching LF5 in Western Greece.	37.61	Deep water zone	See comment in South Cretan Sea.
West Continental Greece	The coastal area (marine, i.e. nearshore and terrestrial, i.e. coastal) zone and the mainland zone hosting all Project components located in Western Greece and Epirus.	451.79	Nearshore zoneBeach zoneMainland zone	See comment in Crete. The entire West Continental Greece is described, i.e. Region of Western Greece and Region of Epirus.





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Section	Description	Study Area (km²)	Subsections (Zoning) (used if applicable)	Remarks/ Justification
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^{*} Study areas of South Cretan Sea, Crete and South Aegean Sea are partially overlapping (in the area of LF2 for 4.13 km²)

ASPROFOS, 2022Prepared by: ASPROFOS, 2022.

Detailed mapping of ESIA's study areas and administrative jurisdiction is provided in Section 15.1.2 - Project Definition and Area of Interest Map.

9 C.1.3. Document Structure

The structure of the document is presented below:

- Landscape Legislation Review
 - ➤ Legislative framework in Greece
 - Identification of Landscapes of Outstanding Natural Beauty based on various regulations within the study area
- Description of landscape characterization and impact assessment methodology
- Landscape characterization and Impact Assessment for:
 - pipeline route
 - Major Permanent Facilities (CS, MS) (preparation of photorealistic and Zones of Visual Impacts)

The entire landscape section is supported by

- Chapter 14 PHOTOGRAPHIC DOCUMENTATION, where pictures from the approx. 200 Viewpoints are presenting the most prominent landscape characteristics (see Section 9 C.4.3).
- Chapter 15.1.9 Landscape and Morphology Map

^{**} It includes all separate Project components, i.e. Study Areas of CCS1 (575.11 km²), Megalopoli Branch (22.08 km²), CS3 (15.34 km²) and MS4/PRS4 and Heating Station (14.43 km²)



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9 C.2. OVERVIEW OF LANDSCAPE RELATED REGULATORY AND LEGISLATIVE FRAMEWORK

Ratification of the European Landscape Convention (also known as the Florence Convention) with Law 3827/2010 marks a radical shift in perception and the very meaning of the term. The Florence Convention (N. 3827/2010) defines the landscape as:

"an area, as it is perceived by man, which character is the result of the action and interaction of natural and/ or human factors".

In addition, Law 3827/2010 (G.G. A '30/2010) covers landscape protection, management and planning, incorporating the European Landscape Convention. Law 3937/2011 (G.G. A '60/2011) defines the following:

- Protected landscapes / seascapes. These are areas of great ecological, geological, aesthetic or cultural value and areas that are particularly suitable for recreation of the public or contribute to the protection of natural resources due to their particular natural or anthropogenic characteristics. Protected landscapes may be given, based on their main features, more specific names such as aesthetic forest, geopark, wildlife landscape, agricultural landscape, urban landscape. Landscaping features are parts, or components of, the landscape which have a particular ecological, aesthetic or cultural value or contribute to the protection of natural resources due to their particular natural or anthropogenic characteristics, such as small groves, traditional crops, farmhouses, paths, stone fences, terraces, springs.
- Protected natural formations. These are characterised as functional parts of nature or individual creations that have a particular scientific, ecological, geological, geomorphological or aesthetic value, or contribute to the preservation of natural processes and the protection of natural resources such as trees, tree and shrub clusters, sea, protective vegetation, riparian and coastal vegetation, natural fences, waterfalls, springs, gorges, reefs, caves, rocks, fossil forests, trees or parts thereof, palaeontology finds, coral, geomorphology formations, geotopes and habitats of priority interest or of community interest. Protected natural formations that are of a monumental nature are characterised in particular as Protected Natural Monuments. Actions or activities that may result in the destruction, deterioration or alteration of protected natural formations as well as protected landscapes or their components are prohibited in accordance with the more specific provisions for the protection of the designation decision.
- Landscapes that have been declared as aesthetic forests, as suburban forests, protected forests or preserved monuments of nature are hereby incorporated in the corresponding category. For landscapes which have already been declared of outstanding natural beauty according to a



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decision of the Minister of Environment, Energy and Climate Change, the conditions for their integration are regulated.

Prior to the abovementioned legislation, landscapes in Greece were protected as areas of high value and protection under various environmental and cultural laws (e.g. Law 86/1969, Law 998/1979, Law 1650/1986, Law 3028/2002, etc.).

Sections 9 C.2.2, 9 C.2.3 and 9 C.2.4 provide details on protected (within any regulatory framework) landscape features

9 C.2.1. Regional Landscape Zoning

In addition to the national protection categories set for different landscapes, Regional Frameworks of Spatial Planning and Sustainable Development also include some provisions in the field of landscape protection. No restrictions or special provisions for projects and activities are identified. In any case, they are representative of the regional sensitivities in terms of landscape. These are presented in the following sub-sections for each of the regions crossed by the proposed pipeline route.

9 C.2.1.1 Region of Crete

According to MD42284/2017 (HGG A.A.P. 260/8-11-2017) "Approval of Revision of Regional Spatial Framework of Region of Crete" the landscape zones located in the region are characterised and evaluated based on their value in International, National and Regional Value or in Particularly Degraded. These are listed below (Table C.2-1).

Table C.2-1 Landscape Zones of Region of Crete

Region	Name of Zone	Spatial Correlation of the Project
R.U. of Lasithi	Unit 1 – Eastern Coasts	n/a. Offshore route traverses the sea at a distance from the eastern coasts of Crete.
R.U. of Lasithi and NE of R.U. of Heraklion	Unit 2 – Merampelo Bay and broader surrounding area	n/a
R.U. of Heraklion	Unit 3 – Heraklion – Zeus – Knossos – Giouchta	n/a
R.U. of Heraklion	Unit 4 – Asterousia – Gortyna	n/a





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Region	Name of Zone	Spatial Correlation of the Project
R.U. of Rethymno	Unit 5 – Rethymno and surrounding area	n/a
R.U. of Rethymno	Unit 6 – Milopotamos – Idi	n/a
R.U. of Chania	Unit 7 – Chania – Akrotiri – Vammos	n/a
R.U. of Chania	Unit 8 – West coasts till Akrotiri (Cape) Crios	n/a
R.U. of Chania/ Rethymno	Unit 9 – South coasts to Fragkokastelo	n/a

Prepared by: ASPROFOS, 2022. Data from HGG A.A.P. 260/08-11-2017.

Apart from the Landscape Zones presented on Table C.2-1, several areas (spatial units) of particularly degraded landscapes have been identified for which the Regional Plan states that effort should be made for restoration of large scale landscape modifications (existing, due to various anthropogenic pressures in the areas). Specifically, the onshore footprint of the Project is included in one such zone, namely Zone A "Area of former Kapodistrian Municipalities of Sitia and Itanos".²

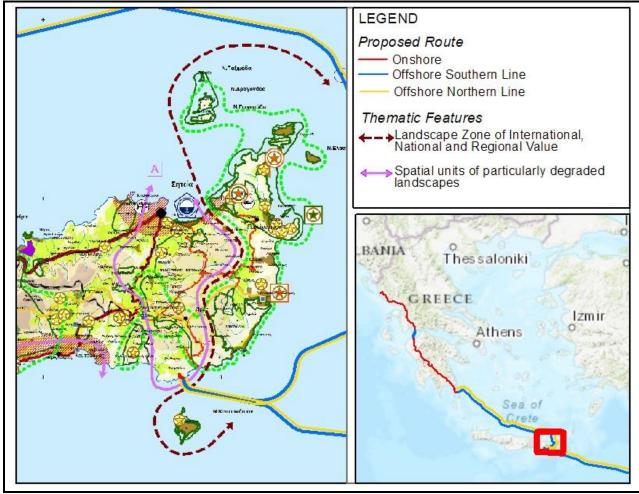
² This zoning refers to generic, broad areas and no clear restrictions are imposed. Details on project's compliance to statutory provisions is documented in Chapter 5.





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Prepared by: ASPROFOS, 2022. Base map from HGG A.A.P. 260/08-11-2017. Legend for the base map can be found in the relevant legislation.

Figure C.2-1 Landscape Zones of Region of Crete, Based on the Regional Spatial Framework (HGG A.A.P. 260/08-11-2017)

9 C.2.1.2 Region of Peloponnese

Revision of Regional Spatial Framework of Region of Peloponnese is currently under compilation. As such, some unofficial data are presented below based on the preliminary information that has been collected, focusing on the Regional Units crossed by the pipeline route, i.e. Laconia and Arcadia, or engaged with the enlarged Study Area for landscape (5 km on each side of the pipeline route). This information derives from Phase B': Revision – Specification of RFSPSD of Peloponnese. Vol. B Π 14 Landscape Study of the document under preparation.





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Table C.2-2 Landscape zones of Region of Peloponnese

Landscape Value	#	Name	Spatial Correlation of the Project
Landscape Zone	4	Neda River Valley	-
International Value	4.1	Temple of Epikouros Apollon (UNESCO site)	-
National Value	4.1	River Neda Gorge (TIFK AT1011014)	- (See Table C.2-5)
Landscape Zone	8	Monemvasia, Elafonisos, Akrcotiri Maleas (Cape Maleas)	From LF3 (KP 0) to Sykea settlement (KP 30)
International Value	8.1	Peninsula Maleas It includes Monemvasia UNESCO site (TIFK AT1010010), Elafonisos island (Natura2000 SAC GR2540002), Pavlopetri (ancient submerged towns, opposite Elafonisos island), Petrified Palm Forest of Agios Nikolaos coastal zone (southern coast of Peninsula)	LF3 is located approximately 10 km (straight line) south of Monemvasia UNESCO site. Route crosses for approximately 30 km through this area, in the northern limits (all features, except for Monemvasia, are located in the southern area of the Maleas Peninsula)
Landscape Zone	9	Laconiki Pediada, Ekvoles Evrota, Laconikos Kolpos (Valley of Laconia, R. Evrotas Estuary, Gulf of Laconia)	-
National Value	9.1	Gythio (TIFK AT 1010008)	-
National Value	9.2	Ekvoles Evrota, Ygrotopoi Ekvolon Evrota (R. Evrotas Estuary, Wetlands of R. Evrotas Estuary) (NATURA2000 SAC GR2540003 & SPA GR2540006))	-
Landscape Zone	10 & 11	Dytiki Pediada Evrota, Tayetos, Anatoliki Pediada Evrota, Parnonas (West Plain of Evrota, Tayetos, East Plain of Evrota, Parnonas)	-
International Value	10.1	Mystras (UNESCO site)	-
National Value	10.2	Acropoli of Sparti	-
Regional Value	10.1	Lagada Tayetou (Taygetos' Valley) (TIFK AT1080121)	-
Regional Value	10.2	Kentrikos Tayetos (Tayetos' Central section) (TIFK AT1010011)	-
Regional Value	10.3	Periochi Mystra – Paroriou-Agiou Ioannis (Area of Mystra – Parorio – Agios Ioannis) (TIFK AT1080120)	-





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Landscape Value	#	Name	Spatial Correlation of the Project
Landscape Zone	12	Ano Kilada Evrota (Upper Valley of Evrota)	From Sparti (KP 100) to Megalopoli (KP 145)
Landscape Zone	13	Oropedio Megalopolis (Megalopoli Plateau)	From Kyparisi (KP 128) to Mavria (KP 165)
Particularly Degraded	13.1	Oropedio Megalopolis (Megalopoli Plateau)	From Soulari (KP 140) to Mavria (KP 165)
Landscape Zone	14	Notia Kinouria & Zarakas (South Kinouria & Zarakas)	
National Value	14.1	Moni Elonas kai charadra Leonidiou (Elonas Monastery and Leonidio Gorge)	-
National Value	14.2	Ori Anatolikis Lakonias (Mt of Eastern Laconia) (NATURA2000 SPA GR2540007)	From Kalyves (KP 14) to Geraki (KP 70) settlements.
Landscape Zone	16	Oropedio Tripolis (Tripoli's Plateau)	-
National Value	16.1	Limni Taka (Lake Taka) (Natura2000 SAC GR2520002)	-
Regional Value	16.1	Lofos Stoxos Nestanis (Tsipianon) (Hill of Stoxos Nestanis (Tsipianon)) (TIFK AT1080128)	-
Regional Value	16.2	Kerasia – Vlachokerasia of Arcadia (TIFK AT1080115)	-
Regional Value	16.3	Battle ground of Vervenon (TIFK AT1011069)	
Landscape Zone	17	Orini Arkadia, Techniti Limni Ladona, Ladonas, Aflios (Mountainous Arcadia, Artificial Lake of Ladon, R. Ladon, R. Alfios)	-
Regional Value	17.1	Karytaina (TIFK 1011072)	~395 m from CCS1 ~1195 m from BVS07 (See Table C.2-5)

ASPROFOS, 2022Prepared by: ASPROFOS, 2022. Data from Phase B': Revision - Specification of RFSPSD of Peloponnese. Vol. B Π 14 Landscape Study.

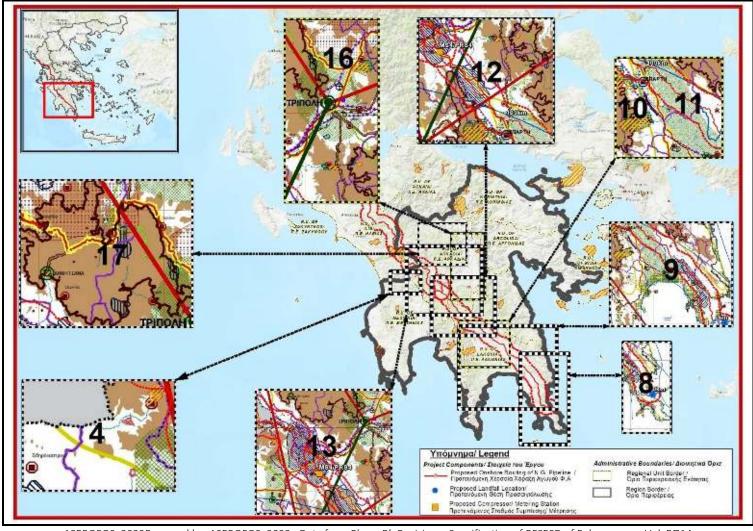
Figure C.2-2 highlights the spatial correlation of the interacting landscape zones of the region with the Project. It is noted that the purpose of the figure is only to illustrate in general terms the possible engagement of the landscape zones with the Project and not to depict the base map data in detail.



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ASPROFOS, 2022Prepared by: ASPROFOS, 2022.. Data from Phase B': Revision – Specification of RFSPSD of Peloponnese. Vol. BΠ14 Landscape Study. Base maps illustrating spatial correlation of the Project to the regional landscape zones are taken from the RFSPSD of Peloponnese.

Figure C.2-2 Landscape Zones of Region of Peloponnese, Based on the Regional Spatial Framework being Prepared

9 C.2.1.3 Region of Western Greece

According to MD118376/1419 (HGG D 845/24-12-2020) "Approval of Revision of Regional Spatial Framework of Region of Western Greece" the landscape zones located in the Region are characterized and evaluated based on their value in International, National and Regional Value or in Particularly Degraded. These are listed below (Table C.2-3).





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Table C.2-3 Landscape zones of Region of Western Greece

Code	Name	Spatial Correlation of the Project
AA1	LANDSCAPE UNIT – ZONE Oiniadon, Messolonghi Lagoons	From LF5 (KP 0) to Karitsa (KP 20) settlement
AA2	LANDSCAPE UNIT of Lakes	From Karitsa (KP 20) to Kanalos (KP 80) settlements
Z1	Landscape Zone of Mt. Valtou	
Z2	Landscape Zone of Lakes	
AA3	LANDSCAPE UNIT – ZONE of M. of Xiromerou and coastal regions of Ionian	-
AA4	LANDSCAPE UNIT of Nafpaktias	-
Z1	Landscape Zone of Mountainous Nafpaktia	-
Z2	Landscape Zone of Coastal Nafpaktia	-
AA5	LANDSCAPE UNIT – ZONE of Amvrakikos	From Kanalos (KP 80) to Marlesio (KP 125) settlements
A1	LANDSCAPE UNIT: Broader area of Patras – Panachaikou	From Kato Velitses (KP 265) to LF4 (KP 300)
Z1	Landscape Zone of Panachaiko	From Kato Velitses (KP 265) to Kareika (KP 290) settlements
Z2	Landscape Zone of coastal areas of Patraikos Gulf	From Kareika (KP 290) settlement to LF4 (KP 300)
A2	LANDSCAPE UNIT: Chelmos – Vouraikos – Aigialia	-
Z1	Landscape Zone of Chelmou – Vouraikou	-
Z2	Landscape Zone of Chlemos' Ridge and Mt Aphrodisio	-
Z3	Landscape Zone of areas of Korinthiakos Gulf and Mountainous Aigialia	-
H1	LANDSCAPE UNIT: Antiquities of Ilida, Olympia, temple of Epikouros Appolon and rivers Alfios, Neda and Pinios	From Rovia (KP 180) to Valmi (KP 260) settlements
Z1	Landscape Zone of Antiquities of Olympia, Ilida and rivers Pinios and Alfios	From Aspra Spitia (KP 205) to Lalas (KP 225) & from Goumero (KP 240) to Valmi (KP 260) settlements
Z2	Landscape Zone of Antiquities of Epikouros Appolon and river Neda	From Rovia (KP 180) to Aspra Spitia (KP 205) settlements
Z3	Landscape Zone of Lampia, Erimanthos, plateau of Foloi	From Lalas (KP 225) to Goumero (KP 240) settlements
H2	LANDSCAPE UNIT: Coastal landscape unit of Ilia	-





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Code	Name	Spatial Correlation of the Project
Z1	Landscape Zone of Kiparisiakos Gulf	-
Z2	Landscape Zone of Cheloniti Gulf	-
Z3	Landscape Zone: Killini Peninsula	-
Z4	Landscape Zone: Killinios Gulf	-

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LEGEND Proposed Route Onshore

Offshore

Thematic Features AA1. LANDSCAPE UNIT – ZONE Oiniadon, Messolonghi Lagoons

AA2. LANDSCAPE UNIT of Lakes - Z1. Landscape Zone of Mt. Valtou - Z2. Landscape Zone of Lakes

AA3. LANDSCAPE UNIT - ZONE of M. of Xiromerou and coastal regions of Ionian

AA4. LANDSCAPE UNIT of Nafpaktias - Z1. Landscape Zone of Mountainous Nafpaktia - Z2. Landscape Zone of Coastal Nafpaktia

AA5. LANDSCAPE UNIT - ZONE of Amyrakikos

A1. LANDSCAPE UNIT: Broader area of Patras -Panachaikou

 Z1. Landscape Zone of Panachaiko
 Z2. Landscape Zone of coastal areas of Patraikos Gul

A2. LANDSCAPE UNIT: Chelmos - Vouraikos -Aigialia

- Z1. Landscape Zone of Chelmou - Vouraikou - Z2. Landscape Zone of of Chlemos' Ridge and Mt Aphrodisio

- Z3. Landscape Zone of areas of Korinthiakos Gulf and Mountainous Aigialia

H1. LANDSCAPE UNIT: Antiquities of Ilida, Olympia, temple of Epikourios Appolon and rivers Alfios, Neda and Pinios - Z1. Landscape Zone of Antiquities of Olympia,

Ilida and rivers Pinios and Alfios

Z2. Landscape Zone of Antiquities of Epikourios Appolon and river Neda

23. Landscape Zone of Lampia, Erimanthos, plateau of Foloi

H2. LANDSCAPE UNIT: Coastal landscape unit of llia

Z1. Landscape Zone of Kiparisiakos Gulf Z2. Landscape Zone of Cheloniti Gulf Z3. Landscape Zone: Killini Peninsula Z4. Landscape Zone: Killinios Gulf

Prepared by: ASPROFOS, 2022. Base map from HGG D845/24-12-2020.



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Figure C.2-3 Landscape zones of Region of Western Greece, based on the Regional Spatial Framework (HGG D845/24-12-2020)

9 C.2.1.4 Region of Epirus

According to MD78523/1208/2018 (HGG A.A.P. 286/28-11-2018) "Approval of Revision of Regional Spatial Framework of Region of Epirus" the landscape zones located in the Region are characterized and evaluated based on their value in International, National and Regional Value or in Particularly Degraded, as shown below (Table C.2-4).

Table C.2-4 Landscape zones of Region of Epirus

Landscape Value Characterization	Name of Zone	Spatial Correlation of the Project
International Value (IV)	Amvrakikos Gulf Area	Crossing in the area of Louros R. (approx. from KP 164 to KP 165)
	Archaeological Site (A.S.) of Dodoni valley	-
	Archaeological Site (A.S.) of Nikopoli	-
National Value	Broader area of Zagori	-
(NV)	Broader area of Metsovo	-
	Broader area of North Tzoumerka	-
	Broader area of Konitsas – Mastorochorion - Grammou	-
	Broader area of Pogoni	-
	Pamvotida Lake and Ioannina city	-
Regional Value (RV)	Broader area of South Tzoumerka (R.U. of Arta)	-
	Coastal area of Ionian Sea (R.U. of Preveza)	Crossing in the area of Acherontas Plain (approx. from KP 193 to KP 200)
	Coastal area of Parga – Perdika – Sivota	Crossing in the area of Margariti Marshland (approx. from KP 212 to KP 214)
	Coastal area of Delta of Kalamas - Sagiada	-
Particularly Degraded (PD)	Linear entrance zones to Ioannina, Preveza, Arta and Igoumenitsa cities	-
	Zone of particularly degraded landscape of coastal settlements of Brachou and Loutsa, of Preveza	-



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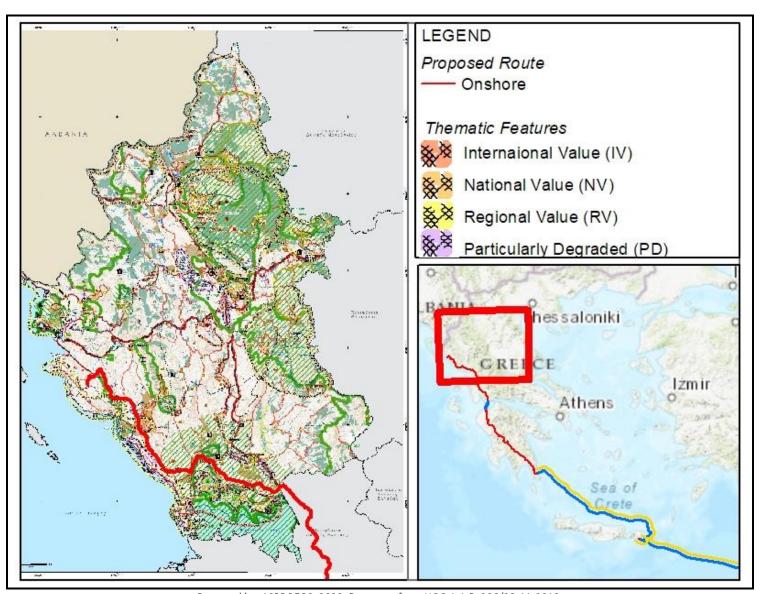
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Landscape Value Characterization	Name of Zone	Spatial Correlation of the Project
	Zone of extensive surface mining and abandoned	-

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Prepared by: ASPROFOS, 2022. Base map from HGG A.A.P. 286/28-11-2018.

Figure C.2-4 Landscape zones of Region of Epirus, based on the Regional Spatial Framework (HGG A.A.P. 286/28-11-2018)



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9 C.2.2. Protected landscapes / seascapes

No protected landscapes/ seascapes exist in the Study Area according to national database.³ However, the Monemvasia UNESCO site has been identified but it is located at a significant distance from the Project footprint (approximately 10 km).

9 C.2.3. Protected natural formations

No Protected Natural Formations exist in the Study Area according to national database.⁴ Only the Geopark of Sitia (a UNESCO site) is recorded in the vicinity (approx. 2.5 km to the NE of LF2); however, it lies outside the Study Area of the Project, and given the nature of the landscape and the activities to be developed, no effect on its quality is envisaged.

9 C.2.4. Landscapes of Outstanding Natural Beauty

According to Law 3937/2011 (G.G. A '60/2011), this category includes:

- Aesthetic forests,
- Protected forests or
- Preserved monuments of nature.

The Project does not cross any of the categories mentioned above along the pipeline route.

In addition to these features, in 1995, the Ministry of the Environment commissioned the National Technical University of Athens to designate Landscapes of Outstanding Natural Beauty (TIFK). As a result, from 1996 to 1999, 449 such areas were identified covering a total area of 6,270 km² (about 4.8% of the land area of Greece) and the Greek nature database FILOTIS⁵ was updated. Most of these areas are protected by more than one institutional framework (environmental, cultural, etc.). The following table brings together the TIFKs relevant to the Project. The potential interaction was determined based on the distance between the TIFK and the footprint of the Project.

³http://mapsportal.ypen.gr/layers/geonode:prostatevomenoi fysikoi sximatismoi etc ⁴http://mapsportal.ypen.gr/layers/geonode:prostatevomenoi fysikoi sximatismoi etc

⁵ https://filotis.itia.ntua.gr/



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Table C.2-5 Landscapes of Outstanding Natural Beauty (TIFK) of the FILOTIS program within the study area.

s/n	Section	From KP (approx. km)	To KP (approx. km)	FILOTIS Code	Name	Status of Protection	Minimum Distance from Project Footprint (Permanent Project Component) (m)	Total Area of Feature (m²)	% within the 5 km Study Area
1	Peloponnese (CCS1)	104	106	AT1080121	Lagada Taygetou (Taygeto Dale)	IBA GR2540005 (SAC) GR2550006 (SAC) GR2550009 (SPA)	4370 m	41832721.52	0.9%
2	Peloponnese (CCS1)	169	172	AT1011072	Karytaina	-	~395 m from CCS1 ~1195 m from BVS07	2601787.76	100%
3	Peloponnese (CCS1)	177	180	AT1011014	Faragi Potamoy Neda (R. Neda Gorge)	-	~ 4260 m	4652224.69	18%
4	Peloponnese (CCS1)	185	187	AT1011067	Andritsaina	-	~1200 m	1378350.72	100%



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s/n	Section	From KP (approx. km)	To KP (approx. km)	FILOTIS Code	Name	Status of Protection	Minimum Distance from Project Footprint (Permanent Project Component) (m)	Total Area of Feature (m²)	% within the 5 km Study Area
5	Peloponnese (CCS1)	186	208	AT1011011	Parapotami Alfeiou (Alfios Tributaries)	-	O CCS1 crosses the feature for approx. 14708 m BVS08 is located within the feature.	95391863.84	93%
6	Western Continental Greece (CCS2) Patraikos Gulf (OSS4)	0	9	AT2010026	Oros Varasova (Mt Varasova)	IBA GR2310005 (SAC)	100 m from CCS2 5500 m from LF5	11430659.90	89%
7	Western Continental Greece (CCS2)	130	150	AT3011006	Limnothalassa Logarou kai Delta Arachthou (Logaro Lagoon and R. Arachthos Delta)	IBA Barcelona Convention GR2110001 (SAC) GR2110004 (SPA)	1470 m from CCS2 2950 m from BVS19	69707445.39	40%



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s/n	Section	From KP (approx. km)	To KP (approx. km)	FILOTIS Code	Name	Status of Protection	Minimum Distance from Project Footprint (Permanent Project Component) (m)	Total Area of Feature (m²)	% within the 5 km Study Area
8	Western Continental Greece (CCS2)	149	169	AT3011007	Limnothalasses Rodias — Tsoukaliou (Lagoons of Rodias — Tsoukaliou)	IBA Barcelona Convention GR2110001 (SAC) GR2110004 (SPA)	1070 m from CCS2 6170 m from BVS19	50032563.30	46.5%
9	Western Continental Greece (CCS2)	195	200	AT3010051	Ekvoli Acheronta and Nekromanteio (R. Acheronta Estuary and Necromancer)	IBA GR2140001 (SAC)	O CCS2 crosses the feature for approx. 2730 m BVS08 is located within the feature.	18391011.50	95%





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s/n	Section	From KP (approx. km)	To KP (approx. km)	FILOTIS Code	Name	Status of Protection	Minimum Distance from Project Footprint (Permanent Project Component) (m)	Total Area of Feature (m²)	% within the 5 km Study Area
10	Western Continental Greece (CCS2)	198	202	AT3011003	Tmima Acheronta apo Gliki mechri Kastri (R. Acheronta section from Gliki to Kastri)	IBA	2340 m from CCS2 3325 m from BVS21	14028663.52	67%
11	Western Continental Greece (CCS2)	203	213	AT3011025	Elos Kalodiki Pargas (Kalodiki Marshland of Parga)	IBA WRA GR2120002 (SAC) GR2120006 (SPA)	660 from CCS2 5000 m from BVS21	3877046.28	100%

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9 C.3. METHODOLOGY

9 C.3.1. General approach

The main actions of the methodology followed include:

- Determining the Study Area;
- Determining the quality and sensitivity criteria of landscape and viewpoints; and
- Determining the baseline (existing situation) conditions of the landscape.

For the above purposes, the following steps were followed:

- 1. **Desktop Study**. The first step was to define landscape categories. The landscape categories were identified based on the main geomorphological features and land characteristics (cover, use, texture, etc) of the wider areas surrounding the Project area. These were mainly determined by:
- Publicly available ground models;
- Geographic features, mainly mountains and rivers;
- Official maps of scale 1: 50,000;
- Satellite images;
- Official (statutory) and existing (CORINE-based) land uses; and
- Protected Area databases (including environmentally and culturally protected areas and the FILOTIS database for TIFK).

Based on the CORINE data (edition 2018), the main land cover classes were identified (Artificial areas, Agricultural areas, Forest and Semi-Natural areas). These were correlated with satellite imagery and verified (either in the field or through relevant applications, i.e. Google Earth Street View).

- Artificial areas were further distinguished in blocks of pure artificial cover (e.g. continuous urban areas) and of a mosaic of artificial and agricultural areas (e.g. discontinuous urban areas) corresponding to two different landscape types: Built Landscape and Rural Built Landscape;
- Agricultural areas were mostly grouped together in one single Agricultural Landscape. However, areas characterised by a mosaic of agricultural and natural areas, including tree crops or other natural-like areas, are classified separately; and
- Forest and Semi-natural areas were mainly distinguished between forest and shrub land landscapes (and brushwood in Crete). Nevertheless, these landscapes were further distinguished according to the terrain morphology of hilly or mountainous based on the morphological characteristics and altitude. To do that, overlay of the available Digital Elevation Model and ground truthing (physically or virtually) were performed.



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2. **Fieldwork**⁶. It was carried out within the Study Area to confirm the landscape and assess landscape quality in specific areas identified during the desktop study during the route selection campaign. A batch of selected geotagged photos were recovered representing the view of the construction zone as seen by the neighbouring recipients. The photos provide a representative picture of each landscape type, supporting landscape quality analysis, and were used to create photomontage of the metering and compressor stations.

It has to be noted that due to the COVID19 pandemic, fieldworks were difficult to perform. In order to support the previously completed fieldwork and ground-truthing (physical fieldworks), remote sensing procedures were used, mainly Google Earth Pro and the Street View applications (virtual fieldworks).

Several site visits were performed by various teams working for the Project. The most representative ones are presented in this document. Additional pictures from public domains have been used to allow for a more comprehensive understanding of landscape characteristics. This has been opted to allow the reader to be able to access the same databases as the study team and thus allow an easier familiarisation with the Project Study Area.

The assessment of the sensitivity and value of typical landscape types in the broader Study Area, but mainly in the landscapes encountered by the pipeline and its main onshore facilities was based on approximately 200 sampling locations. Specifically, 195 viewpoints (VP) have been selected/identified along the Project footprint and/ or in the broader area distributed throughout the entire Study Area (Chapter 14 – Photographic Documentation and Chapter 15.1.8 – Landscape Map allow for a better representation of the viewpoint locations). The number of VPs per landscape type is directly related to the extent of a specific landscape type within the Study Area.

3. Landscape Quality and Sensitivity Criteria. The sensitivity of a landscape is judged by the extent to which it can accept the change of a certain type and scale without any negative effects on its character (Χατζηστάθης & Ισπικούδης, 1995). The sensitivity varies according to the basic features of the space / landscape (e.g. land use, pattern, colour, texture, forms, contrast, balance and scale), existing elements (pylons, structures, buildings, settlements), protection status (e.g. TIFK) and of course the type of proposed development.

Based on the work of the Landscape Institute, LI, and the Institute of Environmental Management and Assessment, IEAM (Landscape Institute, LI, and Institute of Environmental Management and

⁶ Fieldworks providing input for landscape have been performed in parallel to route refinement fieldworks, mostly during 2020 and 2021. The specific date that each picture was taken is provided on a case by case basis.





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Assessment, IEMA, 2013), landscape sensitivity was evaluated on the basis of the following

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components (see Table C.3-1):

Table C.3-1 Landscape Sensitivity Assessment Criteria.					
Evaluation Criteria					
Landscape's physical condition. It may include the extent to which the typical character is represented in individual areas, the integrity of the landscape and the state of the individual elements					
Presence of rare elements or features in the landscape or the existence of a rare topographical nature					
If the landscape contains a specific character and / or features or elements that are considered to be particularly important examples					
The presence of wildlife, geosciences or archaeological / historical / cultural interests can add to the value of the landscape even if it is worth it on its own.					
Indications that the landscape can be appreciated for recreational activities where the experience of the landscape is important					
a landscape can be appreciated for the sensation that emits, for example, remarkable wildlife, tranquillity etc.					
Some landscapes are associated with specific people, such as artists or writers, or history, which contributes to the natural beauty of the area					

Based on (Landscape Institute, LI, and Institute of Environmental Management and Assessment, IEMA, 2013)

Table C.3-2 Determination of Landscape Sensitivity Classification.

Sensitivity	Criteria
High	A landscape of particular distinct, of particular high aesthetic value, considered sensitive to minor relative changes, eg within an institutionalized protected area or recognized as an important feature / symbol of the area.
Moderate	A landscape of moderate distinct, regional, or local value, showing some particular features that are tolerant to some degree of change, eg a landscape of local significance.
Low	A very resistant or degraded landscape of low aesthetics, with few distinctive features or remarkable features, and considered to be highly tolerant of change, e.g. an industrial area.

Prepared by: ASPROFOS, 2022. Based on (Landscape Institute, LI, and Institute of Environmental Management and Assessment, IEMA, 2013).





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Table C.3-3 presents the value of landscape. The descriptions of levels of sensitivity are indicative only. Each case is assessed on its own merits using professional judgement and experience, and there is no defined boundary between levels of impacts.

Table C.3-3 Landscape value classification.

Value	Description
High	Large numbers of viewers and/or those with proprietary interest and prolonged viewing opportunities such as residents and users of attractive and well-used recreational facilities. The quality of the existing view, as likely to be perceived by the viewer, is assessed as being high
Moderate	Small numbers of residents and moderate numbers of visitors with an interest in their environment. Large numbers of recreational road users. The quality of the existing view, as likely to be perceived by the viewer, is assessed as being medium
Low	Small numbers of visitors with interest in their surroundings. Viewers with a passing interest not specifically focussed on the landscape e.g. workers, commuters. The quality of the existing view, as likely to be perceived by the viewer, is assessed as being low

Prepared by: ASPROFOS, 2022. Based on (Landscape Institute, LI, and Institute of Environmental Management and Assessment, IEMA, 2013).

The intensity of the change in the aesthetic value of a landscape depends on the sensitivity and the value of the particular landscape. Relative is the Table C.3-4.

Table C.3-4 Determination of landscape aesthetic value change (intensity of change).

		Landscape sensitivity		
		High	Moderate	Low
Landscape	High	High	High	Moderate
	Moderate	High	Moderate	Low
	Low	Moderate	Low	Low

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In any case, it should be stressed that the above criteria are indicative and subjective. Each case is evaluated on the basis of its specific characteristics based on the professional judgment and experience, and there are no clear boundaries between the ranking levels.

It is evident that the methodology focuses on the terrestrial ecosystem (landscape); this has been opted since most (if not all) sensitive receptors are restricted onshore. Seascape is considered from the coastal onshore section.

9 C.3.2. Main Stations

The planned main stations (CS2/MS2-CS2/MS2 N in Crete, MS4/PRS4 & Heating Station in Megalopoli and CS3 in Achaia) are the largest facilities included in the Project. For this reason, the extent to which these installations would be theoretically visible was assessed. Using GIS application, the Zone of Visual Impact (ZVI) was determined and the theoretical area mapped from which the installations will be visible.

ZVI is considered theoretical as the area is computed digitally and is based on local topography without taking into account any obstacles from existing objects (e.g. vegetation, buildings, etc.). ZVI is depicted in a map format by covering a radius of 10 km from the center of the proposed main stations.

In addition, a photomontage of onshore installations has been prepared in order to be more representative in the presentation of the technical elements of the installations in the real space.

9 C.3.3. Viewpoints

The assessment of the sensitivity and value of typical landscape types in the broader study area, but mainly in the landscapes encountered by the Pipeline and its main onshore facilities, was based on the sampling locations presented in Table C.3-5.

Specifically, 195 viewpoint (VP) have been selected/ identified along the project footprint and/ or in the broader area (Figure C.3-1) distributed along the entire study area (Figure C.3-2). The number of the VPs per landscape type is relevant to the extent of a specific landscape type within the study area..

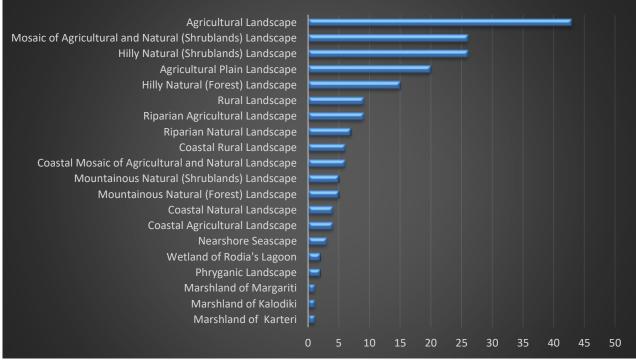




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Photographic documentation is provided in Chapter 14. Landscape Map (Chapter 1.17.9) is also relevant.



Prepared by: ASPROFOS, 2022.

Figure C.3-1 Viewpoints distribution along characteristic landscape types.







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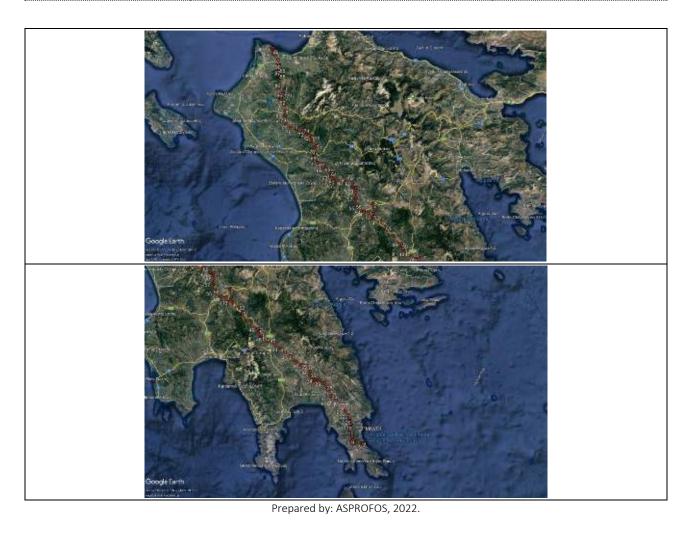


Figure C.3-2 Indicative locations of Viewpoints along the project footprint.



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Table C.3-5 Viewpoints of landscape's photographic documentation and quality assessment.

VP CODE	KP	Angle	Landscape Type	Project Component	Landscape Feature of Main Interest	Picture date	Picture source
Pipeline Section: 0	Crete						
VP-CRE-000	0	260	Coastal Rural Landscape		-	1/6/2021	ASPROFOS
VP-CRE-001	0	128	Coastal Rural Landscape		Goudouras	1/6/2021	ASPROFOS
VP-CRE-002	0	241	Coastal Agricultural Landscape		Goudouras	1/6/2021	ASPROFOS
VP-CRE-003	0	24	Agricultural Landscape	CS2/MS2-CS2/MS2 N	-	1/6/2021	ASPROFOS
VP-CRE-004	0	165	Agricultural Landscape	CS2/MS2-CS2/MS2 N	Koufonisi	1/6/2021	ASPROFOS
VP-CRE-005	0	350	Phryganic Landscape		-	1/6/2021	ASPROFOS
VP-CRE-006	0	250	Phryganic Landscape	LF2	Atherinolakkos Power Plant	1/6/2021	ASPROFOS
VP-CRE-007	0	160	Coastal Rural Landscape		-	1/6/2021	ASPROFOS
VP-CRE-008	0	165	Agricultural Landscape	CS2/MS2-CS2/MS2N	CS2/MS2-CS2/MS2N from Goudouras	1/6/2021	ASPROFOS
VP-CRE-009	0	195	Agricultural Landscape	CS2/MS2-CS2/MS2N	CS2/MS2-CS2/MS2N from Road	1/6/2021	ASPROFOS
Pipeline Section: CCS1							
Monemvasia01	0	181	Coastal Mosaic of Agricultural and Natural Landscape	OSS3, LF3 & CCS1	Panoramic View of LF3 and broader area from Monemvasia UNESCO site	28/5/2021	ASPROFOS





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VP CODE	KP	Angle	Landscape Type	Project Component	Landscape Feature of Main Interest	Picture date	Picture source
Monemvasia 02	0	184	Coastal Mosaic of Agricultural and Natural Landscape	OSS3, LF3 & CCS1	Panoramic View of LF3 and broader area from Monemvasia UNESCO site	28/5/2021	ASPROFOS
Monemvasia 03	0	184	Coastal Mosaic of Agricultural and Natural Landscape	OSS3, LF3 & CCS1	Panoramic View of LF3 and broader area from Monemvasia UNESCO site	28/5/2021	ASPROFOS
VP-CCS1-001	1	119	Coastal Mosaic of Agricultural and Natural Landscape	LF3 & LS03/SS01-ALT2	Seascape	12/10/2020	Project FEED
VP-CCS1-002	2	75	Coastal Mosaic of Agricultural and Natural Landscape		-	12/10/2020	Project FEED
VP-CCS1-003	1,5	100	Coastal Mosaic of Agricultural and Natural Landscape		-	12/10/2020	Project FEED
VP-CCS1-004	5	292	Hilly Natural (Shrublands) Landscape		-	12/10/2020	Project FEED
VP-CCS1-005	7,5	5,5	Hilly Natural (Shrublands) Landscape		-	12/10/2020	Project FEED
VP-CCS1-006	8,5	292	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	12/10/2020	Project FEED
VP-CCS1-007	9,5	330	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	13/10/2020	Project FEED





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VP CODE	KP	Angle	Landscape Type	Project Component	Landscape Feature of Main Interest	Picture date	Picture source
VP-CCS1-008	9,5	14	Hilly Natural (Forest) Landscape		-	13/10/2020	Project FEED
VP-CCS1-009	11	256	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	13/10/2020	Project FEED
VP-CCS1-010	10,5	194	Hilly Natural (Forest) Landscape		-	13/10/2020	Project FEED
VP-CCS1-011	13	305	Hilly Natural (Forest) Landscape		-	14/10/2020	Project FEED
VP-CCS1-012	14,5	276	Hilly Natural (Shrublands) Landscape		-	14/10/2020	Project FEED
VP-CCS1-013	19	359	Agricultural Landscape		-	14/10/2020	Project FEED
VP-CCS1-014	18	10	Agricultural Landscape		-	14/10/2020	Project FEED
VP-CCS1-015	20,5	12	Agricultural Landscape		-	14/10/2020	Project FEED
VP-CCS1-016	18,5	0	Agricultural Landscape		-	14/10/2020	Project FEED
VP-CCS1-017	19	3	Agricultural Landscape		-	14/10/2020	Project FEED
VP-CCS1-018	23	0	Agricultural Landscape		-	15/12/2020	Project FEED
VP-CCS1-019	22	3	Agricultural Landscape		-	25/5/2021	Project FEED
VP-CCS1-020	25,5	3	Hilly Natural (Shrublands) Landscape		-	25/5/2021	Project FEED





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VP CODE	KP	Angle	Landscape Type	Project Component	Landscape Feature of Main Interest	Picture date	Picture source
VP-CCS1-021	25	1	Hilly Natural (Shrublands) Landscape		-	25/5/2021	Project FEED
VP-CCS1-022	27	325	Hilly Natural (Shrublands) Landscape	BVS02 & BVS02-ALT1	-	14/12/2020	Project FEED
VP-CCS1-023	31	100	Agricultural Plain Landscape		-	14/12/2020	Project FEED
VP-CCS1-024	40	35	Hilly Natural (Shrublands) Landscape		-	14/12/2020	Project FEED
VP-CCS1-025	44	5	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	14/12/2020	Project FEED
VP-CCS1-026	47	5	Hilly Natural (Shrublands) Landscape		-	14/12/2020	Project FEED
VP-CCS1-027	48	160	Agricultural Landscape		-	14/12/2020	Project FEED
VP-CCS1-028	49,5	240	Agricultural Landscape		-	14/12/2020	Project FEED
VP-CCS1-029	52,5	35	Hilly Natural (Shrublands) Landscape		-	25/5/2021	Project FEED
VP-CCS1-030	56	340	Hilly Natural (Shrublands) Landscape	BVS03-ALT3	-	14/12/2020	Project FEED
VP-CCS1-031	56	260	Agricultural Landscape		-	14/12/2020	Project FEED
VP-CCS1-032	58,5	175	Hilly Natural (Shrublands) Landscape	BVS03-ALT2	-	14/12/2020	Project FEED





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VP CODE	KP	Angle	Landscape Type	Project Component	Landscape Feature of Main Interest	Picture date	Picture source
VP-CCS1-033	57	355	Agricultural Landscape	BVS03	-	14/12/2020	Project FEED
VP-CCS1-034	63,5	9	Agricultural Landscape		-	15/12/2020	Project FEED
VP-CCS1-035	64	225	Agricultural Landscape		-	15/12/2020	Project FEED
VP-CCS1-036	65,5	235	Agricultural Landscape		-	15/12/2020	Project FEED
VP-CCS1-037	69,5	270	Hilly Natural (Shrublands) Landscape		-	15/12/2020	Project FEED
VP-CCS1-038	71,5	165	Agricultural Landscape		-	25/5/2021	Project FEED
VP-CCS1-039	73,5	345	Hilly Natural (Shrublands) Landscape		-	15/12/2020	Project FEED
VP-CCS1-040	77	290	Agricultural Landscape		-	15/12/2020	Project FEED
VP-CCS1-041	79	10	Agricultural Landscape		-	15/12/2020	Project FEED
VP-CCS1-042	82	350	Hilly Natural (Shrublands) Landscape		-	15/12/2020	Project FEED
VP-CCS1-043	87	2	Hilly Natural (Shrublands) Landscape	BVS04 & BVS04-ALT1	-	15/12/2020	Project FEED
VP-CCS1-044	90,5	210	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	15/12/2020	Project FEED
VP-CCS1-045	96,5	190	Agricultural Landscape		-	23/4/2021	Project FEED





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VP CODE	KP	Angle	Landscape Type	Project Component	Landscape Feature of Main Interest	Picture date	Picture source
VP-CCS1-046	99,5	270	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	23/4/2021	Project FEED
VP-CCS1-047	106	210	Hilly Natural (Forest) Landscape		-	22/4/2021	Project FEED
VP-CCS1-048	108	200	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	22/4/2021	Project FEED
VP-CCS1-049	112,5	210	Agricultural Landscape	BVS05	-	16/12/2020	Project FEED
VP-CCS1-050	111	230	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	22/4/2021	Project FEED
VP-CCS1-051	128	300	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	25/5/2021	Project FEED
VP-CCS1-052	133	350	Hilly Natural (Shrublands) Landscape		-	22/4/2021	Project FEED
VP-CCS1-053	138,5	315	Mosaic of Agricultural and Natural (Shrublands) Landscape	MS4/PRS4 & Heating Station - ALT3	-	21/4/2021	Project FEED
VP-CCS1-054	147,5	340	Hilly Natural (Forest) Landscape		-	21/4/2021	Project FEED





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VP CODE	KP	Angle	Landscape Type	Project Component	Landscape Feature of Main Interest	Picture date	Picture source
VP-CCS1-055	152	310	Mountainous Natural (Forest) Landscape		-	21/4/2021	Project FEED
VP-CCS1-056	154,5	359	Mountainous Natural (Forest) Landscape		-	21/4/2021	Project FEED
VP-CCS1-057	159,5	310	Rural Landscape		-	15/9/2020	Project FEED
VP-CCS1-058	165	320	Mountainous Natural (Shrublands) Landscape		-	15/9/2020	Project FEED
VP-CCS1-059	171,5	350	Mountainous Natural (Shrublands) Landscape		-	20/4/2021	Project FEED
VP-CCS1-060	177	220	Mountainous Natural (Shrublands) Landscape		-	20/4/2021	Project FEED
VP-CCS1-061	186	280	Mountainous Natural (Forest) Landscape		-	20/4/2021	Project FEED
VP-CCS1-062	176	90	Hilly Natural (Shrublands) Landscape		-	20/4/2021	Project FEED
VP-CCS1-063	190	60	Hilly Natural (Forest) Landscape		-	20/4/2021	Project FEED
VP-CCS1-064	192	260	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	20/4/2021	Project FEED
VP-CCS1-065	193,5	250	Hilly Natural (Forest) Landscape		-	20/4/2021	Project FEED



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VP CODE	KP	Angle	Landscape Type	Project Component	Landscape Feature of Main Interest	Picture date	Picture source
VP-CCS1-066	197	30	Agricultural Landscape	BVS08 & BVS08-ALT1	"Parapotamoi Alfiou" (TIFK AT1011011)	17/12/2020	Project FEED
VP-CCS1-067	199,5	175	Hilly Natural (Forest) Landscape		-	19/4/2021	Project FEED
VP-CCS1-068	204	355	Riparian Natural Landscape		River Erymanthos	28/10/2020	Project FEED
VP-CCS1-069	206	30	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	28/10/2020	Project FEED
VP-CCS1-070	210	115	Hilly Natural (Forest) Landscape		-	28/10/2020	Project FEED
VP-CCS1-071	215,5	170	Agricultural Landscape		-	28/10/2020	Project FEED
VP-CCS1-072	222,5	270	Agricultural Landscape	BVS09-ALT1	-	17/12/2020	Project FEED
VP-CCS1-073	227	160	Agricultural Landscape		-	15/10/2020	Project FEED
VP-CCS1-074	230,5	15	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	15/10/2020	Project FEED
VP-CCS1-075	235,5	330	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	15/10/2020	Project FEED
VP-CCS1-076	240,5	320	Agricultural Landscape		-	16/10/2020	Project FEED
VP-CCS1-077	245	245	Agricultural Landscape	BVS10	-	18/12/2020	Project FEED





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VP CODE	KP	Angle	Landscape Type	Project Component	Landscape Feature of Main Interest	Picture date	Picture source
VP-CCS1-078	247,5	300	Riparian Natural Landscape		-	30/10/2020	Project FEED
VP-CCS1-079	251	80	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	18/12/2020	Project FEED
VP-CCS1-080	251,5	260	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	30/10/2020	Project FEED
VP-CCS1-081	254	15	Agricultural Plain Landscape		-	30/10/2020	Project FEED
VP-CCS1-082	259	300	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	30/10/2020	Project FEED
VP-CCS1-083	263	340	Riparian Agricultural Landscape		-	30/10/2020	Project FEED
VP-CCS1-084	265	70	Agricultural Landscape	CS3	-	18/12/2020	Project FEED
VP-CCS1-085	264,5	60	Hilly Natural (Shrublands) Landscape		-	30/10/2020	Project FEED
VP-CCS1-086	271	210	Agricultural Landscape		-	27/10/2020	Project FEED
VP-CCS1-087	279,5	100	Hilly Natural (Forest) Landscape		-	27/10/2020	Project FEED
VP-CCS1-088	279	150	Hilly Natural (Forest) Landscape		-	18/12/2020	Project FEED





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VP CODE	KP	Angle	Landscape Type	Project Component	Landscape Feature of Main Interest	Picture date	Picture source
VP-CCS1-089	284	345	Hilly Natural (Shrublands) Landscape		-	27/10/2020	Project FEED
VP-CCS1-090	284	300	Rural Landscape		-	27/10/2020	Project FEED
VP-CCS1-091	286	0	Agricultural Landscape		-	27/10/2020	Project FEED
VP-CCS1-092	286	260	Agricultural Landscape		-	18/12/2020	Project FEED
VP-CCS1-093	288	60	Agricultural Plain Landscape		-	26/10/2020	Project FEED
VP-CCS1-094	288	170	Agricultural Landscape		-	26/10/2020	Project FEED
VP-CCS1-095	290,5	355	Rural Landscape		-	26/10/2020	Project FEED
VP-CCS1-096	290,5	265	Rural Landscape		-	27/10/2020	Project FEED
VP-CCS1-097	294	265	Agricultural Plain Landscape		-	26/10/2020	Project FEED
VP-CCS1-098	295,5	15	Rural Landscape		-	26/10/2020	Project FEED
VP-CCS1-099	297,5	60	Agricultural Plain Landscape		-	26/10/2020	Project FEED
VP-CCS1-100	299	80	Coastal Rural Landscape		-	12/10/2020	Project FEED
VP-CCS1-101	300	85	Coastal Natural Landscape	LF4	Hotel Seascape	12/10/2020	Project FEED
VP-CCS1-102	300	120	Coastal Natural Landscape		Hotel beach	12/10/2020	Project FEED
VP-CCS1-103	300	15	Coastal Natural Landscape	LF4	Shoreline	12/10/2020	Project FEED
VP-CCS1-104	300	115	Coastal Rural Landscape	LS04	Hotel	12/10/2020	Project FEED
VP-CCS1-105	300	10	Nearshore Seascape		Seascape	12/10/2020	Project FEED
VP-CCS1-106	300	310	Coastal Rural Landscape		Shoreline	12/10/2020	Project FEED





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VP CODE	KP	Angle	Landscape Type	Project Component	Landscape Feature of Main Interest	Picture date	Picture source
VP-CCS1-107	0	355	Nearshore Seascape	LF3	Monemvasia	12/10/2020	Project FEED
VP-CCS1-108	0	15	Nearshore Seascape	LF3	-	12/10/2020	Project FEED
VP-CCS1-109	0	345	Coastal Natural Landscape	LS03/SS01 & LS03/SS01-ALT1	Seascape	27/5/2021	ASPROFOS
VP-CCS1-110	60	175	Mosaic of Agricultural and Natural (Shrublands) Landscape	Pipeline Route	Mariorema Stream	14/12/2020	Project FEED
VP-CCS1-111	97	60	Riparian Natural Landscape	Pipeline Route	River Oinous	25/5/2021	Project FEED
VP-CCS1-112	101	180	Riparian Natural Landscape	Pipeline Route	River Evrotas	23/4/2021	Project FEED
VP-CCS1-113	138,5	330	Mosaic of Agricultural and Natural (Shrublands) Landscape	MS4/PRS4 & Heating Station	Megalopoli's Power Plant	16/12/2020	Project FEED
VP-CCS1-114	168	225	Hilly Natural (Shrublands) Landscape	BVS07	-	17/12/2020	Project FEED
VP-CCS1-115	202,5	270	Riparian Natural Landscape	Pipeline route	Alfios River	26/5/2021	Project FEED
VP-CCS1-116	223	355	Agricultural Landscape	BVS09	-	17/12/2020	Project FEED
VP-CCS1-117	263,5	30	Riparian Natural Landscape		Pinios river	30/10/2020	Project FEED
VP-CCS1-118	287,5	230	Agricultural Landscape	BVS12	-	26/10/2020	Project FEED
VP-CCS1-119	266	170	Agricultural Landscape	CS3	CS3 from Kato Velitses	30/11/2011	Google Earth
VP-CCS1-120	266	230	Agricultural Landscape	CS3	CS3 from Portes	30/11/2011	Google Earth





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VP CODE	КР	Angle	Landscape Type	Project Component	Landscape Feature of Main Interest	Picture date	Picture source
Lakopetra01	300	310	Coastal Agricultural Landscape	CCS1, LF4 & OSS4	Panoramic View of LF4 and broader area from the closest touristic development	12/10/2020	Project FEED
Pipeline Section:	Megalop	oli					
VP-MGB-001	3	355	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	26/5/2021	Project FEED
VP-MGB-002	85	85	Mosaic of Agricultural and Natural (Shrublands) Landscape		-	26/5/2021	Project FEED
VP-MGB-003	10	120	Rural Landscape		-	16/12/2020	Project FEED
VP-MGB-004	137	350	Agricultural Landscape	MS4/PRS4 & Heating Station	MS4/PRS4 & Heating Station from Soulari Settlement	21/4/2021	Project FEED
VP-MGB-005	139	89	Agricultural Landscape	MS4/PRS4 & Heating Station	MS4/PRS4 & Heating Station from Church to the W	17/12/2020	Project FEED
Pipeline Section:	CCS2						
VP-CCS2-001	0	240	Coastal Agricultural Landscape	LF5	-	12/10/2020	Project FEED
VP-CCS2-002	1,5	180	Agricultural Plain Landscape	CCS2	-	1/2/2021	Project FEED
VP-CCS2-003	6,5	340	Agricultural Plain Landscape	CCS2	-	17/9/2020	Project FEED





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VP-CCS2-004	8,5	190	Riparian Agricultural Landscape	CCS2	Evinos River	1/2/2021	Project FEED
VP-CCS2-005	9,5	335	Mosaic of Agricultural and Natural (Shrublands) Landscape	CCS2	-	1/2/2021	Project FEED
VP-CCS2-006	10,5	325	Hilly Natural (Shrublands) Landscape	CCS2	-	1/2/2021	Project FEED
VP-CCS2-007	13	315	Mountainous Natural (Forest) Landscape	CCS2	-	1/2/2021	Project FEED
VP-CCS2-008	27	15	Mosaic of Agricultural and Natural (Shrublands) Landscape	CCS2	-	2/2/2021	Project FEED
VP-CCS2-009	29,5	30	Agricultural Plain Landscape	BVS15	Trihonida Lake	2/2/2021	Project FEED
VP-CCS2-010	34,9	25	Agricultural Plain Landscape	CCS2	Trihonida Lake	2/2/2021	Project FEED
VP-CCS2-011	37	5	Agricultural Plain Landscape	CCS2	Enotiki Tafros (Between Trihonida & Lisimahia Lakes)	2/2/2021	Project FEED
VP-CCS2-012	39,3	195	Rural Landscape	CCS2	National Road	2/2/2021	Project FEED
VP-CCS2-013	44,5	190	Agricultural Plain Landscape	CCS2	Canal to Lisimahia Lake	2/2/2021	Project FEED
VP-CCS2-014	56	170	Riparian Agricultural Landscape	CCS2	-	2/2/2021	Project FEED



VP-CCS2-024

VP-CCS2-025

100

104

50

190

Landscape

Landscape

Hilly Natural (Shrublands)

Riparian Natural Landscape

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VP-CCS2-015	58	205	Riparian Agricultural Landscape	CCS2	Acheloos River	3/2/2021	Project FEED
VP-CCS2-016	60,5	110	Rural Landscape	CCS2	National Road/Starou Lake	3/2/2021	Project FEED
VP-CCS2-017	63,6	260	Agricultural Plain Landscape	CCS2	-	3/2/2021	Project FEED
VP-CCS2-018	73	135	Hilly Natural (Shrublands) Landscape	CCS2	-	3/2/2021	Project FEED
VP-CCS2-019	79	15	Mountainous Natural (Shrublands) Landscape	CCS2	-	3/2/2021	Project FEED
VP-CCS2-020	85,5	30	Hilly Natural (Shrublands) Landscape	CCS2	-	4/2/2021	Project FEED
VP-CCS2-021	88,8	280	Mosaic of Agricultural and Natural (Shrublands) Landscape	BVS17	-	4/2/2021	Project FEED
VP-CCS2-022	89,5	260	Hilly Natural (Shrublands) Landscape	CCS2	-	4/2/2021	Project FEED
VP-CCS2-023	96,5	10	Hilly Natural (Forest)	CCS2	-	4/2/2021	Project FEED

River Amfilochia

CCS2

CCS2





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VP CODE	KP	Angle	Landscape Type	Project Component	Landscape Feature of Main Interest	Picture date	Picture source
VP-CCS2-026	113,5	50	Mountainous Natural (Shrublands) Landscape	CCS2	-	4/2/2021	Project FEED
VP-CCS2-027	118	10	Hilly Natural (Forest) Landscape	SS05	-	4/2/2021	Project FEED
VP-CCS2-028	124,8	180	Mosaic of Agricultural and Natural (Shrublands) Landscape	CCS2	-	4/3/2021	Project FEED
VP-CCS2-029	135	10	Riparian Agricultural Landscape	CCS2	Arahthos River	3/3/2021	Project FEED
VP-CCS2-030	145,2	5	Agricultural Plain Landscape	BVS2	-	3/3/2021	Project FEED
VP-CCS2-031	160	110	Wetland of Rodia's Lagoon		Louros River	5/2/2021	Project FEED
VP-CCS2-032	166	310	Wetland of Rodia's Lagoon		Irrigation Channel	5/2/2021	Project FEED
VP-CCS2-033	174,5	0	Agricultural Plain Landscape	BVS20	Mt Zaloggo	3/3/2021	Project FEED
VP-CCS2-034	182	15	Mountainous Natural (Forest) Landscape		-	2/3/2021	Project FEED
VP-CCS2-035	179,5	310	Riparian Agricultural Landscape	Pipeline route	Arethoura River	2/3/2021	Project FEED
VP-CCS2-036	185	340	Agricultural Landscape & Hilly Natural (Forest) Landscape		-	2/3/2021	Project FEED
VP-CCS2-037	190,5	310	Agricultural Plain Landscape		Plain of Acherontas	2/3/2021	Project FEED





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VP CODE	KP	Angle	Landscape Type	Project Component	Landscape Feature of Main Interest	Picture date	Picture source
VP-CCS2-038	196	60	Riparian Agricultural Landscape		Acheron River	1/3/2021	Project FEED
VP-CCS2-039	204	190	Agricultural Landscape	BVS21	-	1/3/2021	Project FEED
VP-CCS2-040	207,5	5	Agricultural Plain Landscape		-	1/3/2021	Project FEED
VP-CCS2-041	211,5	225	Marshland of Kalodiki	CCS2	Kalodiki Marsh	30/11/2011	Google Earth
VP-CCS2-042	215	330	Marshland of Margariti	CCS2	Margariti Marsh	1/3/2021	Project FEED
VP-CCS2-043	220	285	Marshland of Karteri	CCS2	Next to Karteri Marsh	2/3/2021	Project FEED
VP-CCS2-044	222,5	190	Agricultural Plain Landscape	CCS2	View to Karteri Marsh	2/3/2021	Project FEED
VP-CCS2-045	226	100	Agricultural Plain Landscape, View to Mountainous Natural (Shrublands) Landscape	CCS2	-	1/3/2021	Project FEED
VP-CCS2-046	227,7	130	Rural Landscape	CCS2	Karteri Settlement	1/3/2021	Project FEED
VP-CCS2-047	231	40	Hilly Natural (Shrublands) Landscape	CCS2	-	2/3/2021	Project FEED
VP-CCS2-048	0,5	60	Agricultural Plain Landscape	LS05/SS04	Mt Varasova	1/2/2021	Project FEED
VP-CCS2-049	9	150	Agricultural landscape		Evinos River & Mt Varasova	1/2/2021	Project FEED
VP-CCS2-050	31	280	Agricultural Plain Landscape	Pipeline route	Platanias River	2/2/2021	Project FEED
VP-CCS2-051	41,5	210	Riparian Agricultural Landscape	n/a	Erimitsas River	2/2/2021	Project FEED
VP-CCS2-052	60	180	Agricultural Plain Landscape	BVS16	-	3/2/2021	Project FEED





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VP-CCS2-053	64	15	Rural Landscape	n/a		3/2/2021	Project FEED
VP-CCS2-054	233	210	Mosaic of Agricultural and Natural (Shrublands) Landscape	End of Project		2/3/2021	Project FEED
VP-CCS2-065	196	350	Riparian Agricultural Lansdcape	Route	TIFK of R. Acheron	1/3/2021	Project FEED
VP-CCS2-066	0	190	Coastal agricultural landscape	LF5	Patraikos Gulf	12/10/2020	Project FEED

Prepared by: ASPROFOS, 2022.





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9 C.4. LANDSCAPE CHARACTERIZATION

9 C.4.1. General morphological setting of the study area

Landscape diversity is evident mainly on the terrestrial environment. A basic element of the landscape of an area is the morphology. Morphology of the study area is characterized by continuous alternations of relief (lowland, semi-mountainous and mountainous) and slopes, along the EastMed Pipeline. Table C.4-1 and Table C.4-2 presents the distinction of the areas according to altitude and slopes, respectively.

Table C.4-1 Overall terrestrial morphological classification.

Morphological classification	Altitude
Lowland	0-200 m
Semi-mountainous	200-600 m
Mountainous	>600 m

Prepared by: (ASPROFOS, 2022).

Table C.4-2 Overall slopes classification classification.

Morphological classification	Slopes range (%)
Flat	0-2
Gentle Sloping	2 – 6
Sloping	6 – 12
Strongly Sloping	12 – 18
Heavily Sloping	18 – 25
Gentle Steep	25 – 35
Moderately Steep	35 – 50
Strongly Steep	> 50

Prepared by: (ASPROFOS, 2022).

Dominant (geo)morphological formations include mountains (mountain massifs or ranges or smaller formations), gorges, valleys, plateaus and lagoons. Table C.4-3 presents the most prominent morphological features in the broader area. Geographical correlation of the Project with the feature is indicative, given the lack of exact delineation of each mountain massif. Specifically, the location of each morphological feature is acquired by the place name of the sourced base map (mainly HGMS 1:50,000 scale maps) and/ or other remote sensing methods (e.g. digital elevation modelling).





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Table C.4-3 Most Prominent Terrestrial Morphological Features in the Broader Area of the Project

		Project		
Type	Name (Mountain Peak)	Spatial Correlation to Project (KP) (indicative)	Distance from Project Footprint (indicative) (km)	Section
Mountain	Kounos (716 m)	5	0	Peloponnese
Mountain	Koulochera (1125 m)	35	>5	Peloponnese
Mountain	Kalogerovouni (1095 m)	35	>5	Peloponnese
Plain	Molaoi	35	0	Peloponnese
Mountain	Gaidourovouni (1184 m)	45	>5	Peloponnese
Mountain	Megali Rachi (590 m)	45	0	Peloponnese
Mountain	Gidovouni (996 m)	50	>5	Peloponnese
Mountain	Kourkoula (916 m)	45	2	Peloponnese
Plain	Vrontamas - Geraki	65	0	Peloponnese
Mountain	Lykovouni (517 m)	70	>5	Peloponnese
Mountain Massif	Parnonas (1935 m)	90	>5	Peloponnese
Valley	Kopelia	100	3	Peloponnese
Valley	Evrotas	100	0	Peloponnese
Mountain Range	Tayetos (2405 m)	110	3	Peloponnese
Gorge	Louka	110	4.5	Peloponnese
Gorge	Kastora	115	3.5	Peloponnese
Gorge	Kardaris	115	3.5	Peloponnese
Mountain Range	Tayetos (2405 m)	130	1	Peloponnese
Mountain	Tseperou (1254 m)	135	>5	Peloponnese
Plateau	Megalopoli	150	0	Peloponnese
Mountain	Tetrazio (1389 m)	160	0	Peloponnese
Mountain	Mainalo (1981 m)	175	>5	Peloponnese
Gorge	Lousios	175	5	Peloponnese
Gorge	Alfios (Karytaina)	175	0.5	Peloponnese
Mountain Massif	Lykeo (1420 m)	180	0	Peloponnese
Mountain	Mateseiko (834 m)	185	0.5	Peloponnese
Mountain	Minthi (1344 m))	190	0	Peloponnese
Valley	Alfios	200	0	Peloponnese





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Туре	Name (Mountain Peak)	Spatial Correlation to Project (KP) (indicative)	Distance from Project Footprint (indicative) (km)	Section
Valley	Erimanthos'	205	0	Peloponnese
Mountain	Lapithas (821 m)	205	>5	Peloponnese
Mountain Massif	Foloi (800 m)	225	0	Peloponnese
Plateau	Foloi	230	0	Peloponnese
Gorge	Antroni	230	4	Peloponnese
Gorge	Goumero	235	2.5	Peloponnese
Plain	Pinios	255	0	Peloponnese
Lake	Artificial Lake of Pinios	265	1.5	Peloponnese
Mountain	Skolis (1016 m)	270	2	Peloponnese
Mountain Range	Movri (719 m)	280	0	Peloponnese
Plain	Achaia	290	0	Peloponnese
Lagoon	Kalogria	300	>5	Peloponnese
Lagoon	Klisova	0	>5	Western Greece
Lagoon	Messologi	0	>5	Western Greece
Mountain Massif	Varasova (914 m)	5	0.5	Western Greece
Plain	Evinochori	5	0	Western Greece
Mountain Massif	Arakinthos (984 m)	15	0	Western Greece
Lake	Trichonida	35	0.5	Western Greece
Lake	Lysimachia	40	0.5	Western Greece
Plain	Agrinio	50	0	Western Greece
Lake	Ozeros	60	5	Western Greece
Lake	Artificial Lake of Kastraki	60	2	Western Greece
Lake	Amvrakia	70	5	Western Greece
Mountain	Thiamon (Petala) (895 m)	80	0	Western Greece
Plain	Amphilochia	105	1	Western Greece
Mountain	Makrinoros (950 m)	120	0	Western Greece
Lagoon	Logaro	140	1	Western Greece
Plain	Arta	150	0	Western Greece
Lagoon	Rodia	155	1	Western Greece
Plain	Louros-Preveza	170	0	Western Greece





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Type	Name (Mountain Peak)	Spatial Correlation to Project (KP) (indicative)	Distance from Project Footprint (indicative) (km)	Section
Mountain	Zalogos (773 m)	185	0	Western Greece
Plain	Acheron	195	0	Western Greece
Mountain Massif	Souli (1613 m)	205	8.5	Western Greece
Mountain Massif	Paramithia (1658 m)	205	<1	Western Greece
Mountain Massif	Parga (926 m)	205	2.5	Western Greece
Marshland	Kalodiki	210	1	Western Greece
Marshland	Margariti	215	0.5	Western Greece
Marshland	Limni Kaneta (Lake Kaneta) (aka Karteri)	220	0.5	Western Greece
Plain	Margariti	220	0	Western Greece
It is noted that no	significant morphological featur	e has been identifie	ed in the area of C	rete.

Prepared by: (ASPROFOS, 2022). Data sources: http://www.topoguide.gr/, HMGS maps of 1:50.000 scale.

9 C.4.2. General Characteristics of Landscape in the Sections of the Study Area

This section presents a general overview of the landscape in the Study Area. Focus has been given to the onshore viewshed⁷, i.e. landscape of the Study Area, presenting and describing the most prominent landscape characteristics. This has been opted since almost all sensitive receptors are restricted onshore. Seascape is considered from the coastal onshore section.

Onshore Project footprint consists of two distinct sections, the one that crosses Peloponnese and the other Western Greece and Epirus. Additionally, one small section is located in Crete.

Detailed description of the landscape characteristics along the pipeline route and other project components is provided in Section 9 C.4.3.

It is repeated that landscape section is supported by

⁷ A viewshed is the geographical area that is visible from a location. It includes all surrounding points that are in line-of-sight with that location and excludes points that are beyond the horizon or obstructed by terrain and other features (e.g., buildings, trees). Conversely, it can also refer to area from which an object can be seen.





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- Chapter 14 PHOTOGRAPHIC DOCUMENTATION, where pictures from the approx. 200 Viewpoints are presenting the most prominent landscape characteristics (see Section 9 C.4.3).
- Section 15.1.9 Landscape Map

9 C.4.2.1 Crete Section

LF2 of the pipeline is located in south-eastern Crete in the area of Atherinolakkos in the Municipality of Sitia, Regional Unit of Lassithi. At a short distance from LF2 (~800 m north-west) lies the proposed site for construction of the compressor and metering stations (CS2-MS2, CS2N-MS2N). From the landfall point LF2 to the site of the compressor and metering station, the area is hilly with low vegetation (phrygana association) resulting in a phrygana landscape, which is characteristic of the Mediterranean region. Closer to the facilities site, the landscape is dominated by agriculture, mainly olive groves. The presence of the Atherinolakkos Power Plant just east to LF2 is also noteworthy.



Source: ASPROFOS, 2022 (02-06-2021).

Figure C.4-1 Panoramic View of LF2



Source: ASPROFOS, 2022 (02-06-2021). Orange line roughly indicates boundaries of the facilities.

Figure C.4-2 Panoramic View from CS2/MS2-CS2/MS2 N



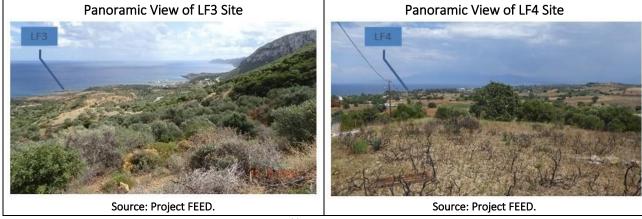
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9 C.4.2.2 Peloponnese Section

The section of the pipeline located in the Peloponnese starts from landfall point LF3 located about 300 m north of the settlement of Agios Fokas in the Municipality of Monemvasia of the R.U. of Laconia and following a north-north-western direction and terminates 2.8 km north-east of the settlement of Lakkopetra, on the southern shoreline of the Patraikos Gulf in the Municipality of Western Achaia of the R.U. of Achaia at the landfall point LF4.



Prepared by: ASPROFOS, 2022.

Figure C.4-3 Start (LF3) and End (LF4) at Peloponnese Section

The landfall site at Agios Fokas area is characterised by a mosaic of coastal agricultural and natural (shrublands) landscape. Limited rural development is identified at Agios Fokas settlement, but also near the landfall site itself, where abandoned structures of residential development exist (cluster of buildings which might be part of an abandoned overall tourist development). In Agios Fokas settlement a development (consisting of a conference centre) has been constructed but is also abandoned. LF3 coastal tranquil seascape (with a south-eastern view) includes the South Aegean Sea (aka Mirtoo Sea) and the easternmost mountainous coasts of Laconia Peninsula and the Malea Cape.





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Source: Project FEED, 12-10-2020.

Figure C.4-4 Seascape from LF3

More specifically, the routing runs ~ 6.5 km west of Monemvasia area, a Landscape of Outstanding Natural Beauty (and UNESCO site). The landfall area is barely visible from the south coastline of Monemvasia castle. Monemvasia is essentially a high, elongated and steep island with steep slopes and shallow perimeters and is connected to the mainland only through a narrow strip of land, the bridge (the only slope). The Upper Town at the top of the rock is completely ruined. The Lower Town at the foot, is maintained in fairly good condition and is inhabited. The Upper Town located inside the castle has a maximum length of about 600 m and a maximum width of about 300 m. The significant slope gives a general altitude difference of 100 m on the plateau. Two main axes, approximately parallel, ran through the city along its length. The Lower Town is surrounded by a wall. The islet-rock is the Accra-Minoa of the ancients. The original settlement, high on the plateau of the rock was founded at the end of the 6th century AD from the Lacedaemonians who left Sparta and creation of the lower second settlement followed not long after, so the whole developed gradually into a city with an important port and great strategic importance. It flourished tremendously in the 14th century. After World War II, the entire permanent population left the rock and settled on the opposite solid, in Nea Monemvasia, a settlement created by refugees after the Asia Minor catastrophe.





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LF3 view from entrance point of Monemvasia Castle Town



Source: Landscape Campaign of 27.05.2021

Figure C.4-5



LF3 view from Canon square of Monemvasia Castle Town



Monemvasia UNESCO Site and correlation to LF3

Route continues with a north-north-west course running north-north-east of the settlement of Molai and continues in the same direction to the settlement of Gouves. The pipeline route passes between the mountains of East Laconia, e.g. Mt Kounos or Gaidourovouni to the east and Mt Kourkoula to the west. The landscape of the wider area is characterised mainly by natural landscape, either shrublands or forest areas or mosaic of agricultural and natural areas. This visual impression is also supported by agricultural landscapes formed by the presence of olive groves (usually tall trees). Only south of Molai is the landscape typical of an agricultural plain (Molai Plain).

Prepared by: ASPROFOS, 2022.





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Source: Google Earth Pro. Imagery date: 11/2011.

Figure C.4-6 Loganikos mountainous forest landscape

This landscape pattern breaks at KP 60 (near Gouves settlement). There, the route turns north and crosses through a more agricultural landscape. Again, tree crops (mainly olive groves) allow for a more natural like impression, but an agricultural landscape is clearly visible (Vrontamas — Geraki Plain). Near Geraki settlement (KP 70) the route turns north-west and passes again through a mosaic of natural and agricultural landscapes, as in the first section of Peloponnese, until the broader area of Megalopoli (KP 140). The south-west foothills of Mt Parnon and the north-east foothills of Mt Taygetos provide for some mountainous shrubland or even forest landscapes at the outskirts of the Study Area. Some agricultural landscape can be viewed close to the Evrotas River (Valley of Evrotas). North of this area at the outskirts of the Study Area, three Gorges (Louka, Kastora, Kardaris) and some forested hills (close to Loganikos and Kyparissi settlements, at KP 123 and KP 128, respectively) allow for an excellent mountainous forest view.

At Megalopoli area, the Project stabs out Megalopoli Branch which, following a north direction, crosses mainly natural shrublands and/ or a mosaic of agricultural and shrublands; however, reaching the end of the branch, the landscape turns to that of rural developments, e.g. areas where built environment is present and well integrated within an overall agricultural landscape, but still stands out, disrupting the continuity of the agricultural landscape. The metering, regulating and heating station MS4/PRS4 & Heating Station is located approximately 1 km north of Soulari in an agricultural landscape at the hills between Mt Tsepero to the east and Mt Taygetos to the west.





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Source: Project FEED, 16-12-2020. Orange line roughly indicates boundaries of the facilities.

Figure C.4-7 Panoramic view from MS4/PRS4 & Heating Station

The broader Megalopoli area (KP 140 - KP 170) is essentially one extended plateau with a complex visual context. The complexity is caused by the following dominant characteristics:

- Geomorphological characteristics. The area is towered over by the surrounding mountain ranges
 of Lykaio, Tsepero (and Parnonas), Taygetos and Tetrazio (to the north, east, south, and west,
 respectively) and the surface water resources discharging precipitation (R. Elisson and R. Alfios);
- Anthropogenic pressures. The presence of the Megalopoli Power Plant (near KP 160) and of the lignite fields (and extraction scars evident in the broader area), have a significant impact on the overall landscape; and
- Flora associations. The abiotic parameters support a great variety of flora associations and habitats, providing a diversity of vegetation colours and texture to the landscape. Extensive areas of mixed agricultural cultivations (olive groves and annual crops) and shrublands or even forest (at Mt Tetrazio to the west and Mt Tseperou to the east) can be seen.

The route crosses mainly through the forested slopes of Mt Tetrazio. Part of the landscape has recently been severely degraded by fires (during the past decade) but its natural reforestation had already begun. Nevertheless, in August 2021, new fires broke out in the area (near KP 150).





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Source: Google Earth Pro. Imagery date: 12/2011. Orange line roughly indicates pipeline route.

Figure C.4-8 Megalopoli complex landscape

Exiting the Megalopoli area, the pipeline route enters one of the most important segments of the Peloponnese section from a landscape point of view (between Karytaina, at KP 170, and Aspra Spitia, at KP 205, settlements) following in general a west/ north-west direction. The pipeline route passes south-west (approx. 400 m) of Karytaina settlement (near KP 170), which is characterised as a Landscape of Outstanding Natural Beauty, keeping at distance from it. Route passes through forests and forested areas.

Karytaina is built on a hill that dominates the valley of Alfios, with a special beauty. Important islands of vegetation occur between the houses of the settlement. The Frankish castle (one of the most representative examples of 13th century French architecture) is one of the most impressive in the Peloponnese. The settlement has stone houses, some of which reach 4 floors high, and narrow cobbled streets. Near the Karytaina settlement, the Gorge of Alfios (Karytaina) is located, at a distance of approximately 500 m north of the pipeline route. This gorge is formed by the Alfios River running through the slopes of Mt Mateseiko.

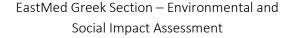
This pattern is essentially mirrored on the south side of the pipeline route. Just opposite of Karytaina (south of the pipeline route, near KP 172 at a distance of approximately 4,250 m) lies the Neda river TIFK.





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Source: https://www.newsbeast.gr

Figure C.4-9 Karytaina settlement TIFK

The river Neda originates on the southern slopes of Mount Lycaeus and flows into the gulf of Kyparissia. The gorge is located near its springs, between the villages of Neda, Petra, Ampeliona and Agios Sostis. The river descends from the mountain forming small waterfalls and ponds while at one point there is an old, single-arched stone bridge. In the wider area there are stone buildings reminiscent of Epirus. The slopes of the mountain around the gorge are covered with forests, mainly of oaks, while in the riverbed there are age-old plane trees and the gorge formed by the river.



Source: newsbeast.gr

Figure C.4-10 Neda River TIFK





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Near KP 186, at a distance of approximately 1,200 m from the pipeline route, lies the Anditsaina settlement also characterised as TIFK. It is an important traditional settlement of Arcadia that still retains many elements of local architecture. The village is built on the slopes of Mount Minthi (or Koukouveros), on a neck that controls the surrounding area. Its stone houses with tiled roofs are built so that they take advantage of the slope of the ground. On the main street a series of traditional shops are reminiscent of the old glories and trade that took place in this town. It is noted that both settlements played a significant role in the Greek Revolution of 1821. The route, in general, crosses natural, mountainous type landscape, either forests or shrublands.



Source: wikimapia.org

Figure C.4-11 Andritsaina settlement TIFK

Near Miloi settlement (near KP 187) the route enters the Alfios Tributaries TIFK which is crossed for approximately 15 km. It is an extensive area drained by eight consecutive small rivers that descend from Mount Minthi and flow into Alfios between hills forested with pines and oaks. Plane trees grow in the riverbeds. In some areas the monotony of the green is broken by the presence of small villages and settlements and crops with vineyards, olive groves and natural fences, forming the Valley of Alfios. Valley of Alfios is a rippled mosaic of agricultural, shrubland and forest landscapes. Part of the landscape has recently been severely degraded by fires but its natural reforestation has already begun.





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Source: Google Earth Pro. Imagery date: 11/2011. Orange line roughly indicates pipeline route.

Figure C.4-12 Alfios Tributaries TIFK

Another very important (from the landscape point of view) segment is the one following this cluster of TIFKs. The pipeline route crosses Erimanthos River (KP 204) entering the Valley of Erimanthos adopting a northward direction before entering the Plateau of Foloi (near Achaldini settlement, at KP 224) which is crossed in a west/ north-west direction to the Mouzaki settlement area (lying outside the Plateau of Foloi, near KP 245). The first part of the landscape is mainly dominated by a mosaic of agricultural and shrubland, with patches of mountainous forested areas, in ripple like terrain morphology. The second leg of this segment (from approximately KP 212 to KP 224), starting from Xirokampos and up to Achladini, suffered from wildfires that broke out in August 2021. The forested hills of the Nemouta – Achladini – Lalas settlements triangle were burnt along with numerous buildings (including residences).

From Achladini and towards Mouzaki, the route starts crossing an agricultural landscape, just before it enters the protected area of the Foloi Plateau, passing at the western most edges of the area. Approximately from Milies (KP 226) to Goumero (KP 238) settlements, the Foloi Plateau dominates the landscape. Foloi oak forest, covering most of the plateau's protected area, is a designated site under NATURA 2000 that dates back to ancient times. It is the only flat forest in Greece situated on the boundaries between R.U. of Ilia, Arcadia and Achaia, at an altitude of 600 m. It covers a total surface of 218,000 acres and it consists mainly of broadleaf oaks. According to mythology, the forest was named after the Centaur Pholus, who gave shelter to his friend, Hercules on his way to locate the Erymanthian Boar. Pholus offered Hercules a divine wine which excited the rest of the centaurs who attacked the two friends. During the battle, Pholus was injured (to the death) by mistake by one of Hercules' arrows. The hero decided then to name the forest Foloi after his friend. Although the





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route avoids the forest itself (i.e. the most sensitive feature of the protected area), the broader landscape is dominated by this unique flat oak forest landscape feature. The lands crossed by the route have suffered from wildfires during the past decade that have clearly left their marks on the landscape.



Source: wikimedia.org

Figure C.4-13 Plateau of Foloi

South of Goumero settlement (approx. 2 km south-west of the pipeline route) lies the Gorge of Goumero. At the western foot of Mount Foloi the exceptional gorge of Goumeros has been designated by the Ministry of Culture as a monument of natural beauty. The gorge is a semicircle that starts from Goumeros to end in it again. It includes the cave of Askiti, in which the ancient oracle of the athletes once operated, while later the Holy Monastery of Askiti was built there, which is characterised as an important monument of the Byzantine period, the ancient cobblestone path Byzantine church of 1200 AD and ends in the village of Goumero. On the path you will find the oldest olive trees in Greece from which branches were taken to crown the Olympians. The gorge is surrounded by lush vegetation and springs with cool water.





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Source: wikiloc.org.

Figure C.4-14 Gorge of Goumero

From Goumero settlement (KP 240) and up to Valmi settlement (KP 260), the route heads north, crossing the edges of Pinios (of Peloponnese) Plain. This means that the route crosses mainly through a mosaic of agricultural and natural shrubland landscapes with agricultural elements being dominant. The Ladon River traverses this area supporting some elements of natural riparian landscape and feeding the artificial lake of Pinios. Pinios River, crossed a bit more to the north (at KP 263), also discharges to the artificial lake. This system irrigates the surrounding agricultural fields, including annual and tree crops (and the fertile plains of Ilia – further to the west of the study area - and Achaia).



Source: Project FEED, 30-10-2020. Orange line roughly indicates pipeline route.

Figure C.4-15 View of Ladon (Pinios) Plain





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Further to the north (KP 260 – KP 275), the route crosses hilly shrubland landscape west of Mountain Skollis and east of the fertile plains of Ilias (Manolada). South of Kato Velitses and north of the Artificial Lake of Pinios is the planned location of CS3 (KP 265). The proposed plot lies on an agricultural landscape on a small ridge.



Source: Project FEED, 18-12-2020. Orange line roughly indicates pipeline route.

Figure C.4-16 Panoramic view from CS3



Source: Project FEED, 18-12-2020. Orange line roughly indicates pipeline route.

Figure C.4-17 Ascent (left) and descent (right) of Mt Movri

The last section of the route, from Pournari settlement (KP 285) to LF4, at Lakopetra coast (Kalamaki beach) passes through the fertile plain of Achaia (specifically West Achaia). Achaia plain is interrupted





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by numerous areas of rural development activities, including rural settlements and agricultural structures, discontinuous industrial and commercial zones and areas, road network, etc.



Source: Project FEED, 26 & 27-10-2020. Orange line roughly indicates pipeline route.

Figure C.4-18 Agricultural Plain (Left) and Rural Development Landscape (Right) of Plain of W. Achaia

The landfall site at Lakopetra beach (Kalamaki beach) is characterised by a mix of agricultural (plain) landscape and rural, tourist development. This development consists mainly of small summer houses, tourist beach establishments (mainly beach bars and seaside restaurants) but also significant tourist facilities, mainly the Casa Maron Grecotel (approx. 450 m to the East) and the Ionian Beach Bungalows Resort (approx. 1000 m to the West). LF4 coastal tranquil seascape (with a northward view) includes the Patraikos Gulf area and the mountains of the southern coasts of Etoloakarnania (Mt Arakynthos and Mt Varasova dimly visible).





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Source: Project FEED, 18-12-2020. Orange line roughly indicates pipeline route.

Figure C.4-19 Seascape from LF4

9 C.4.2.3 Western Continental Greece Section

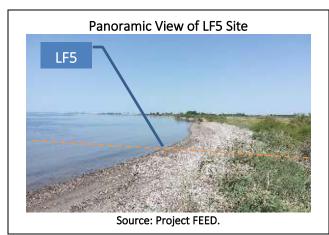
The section of the pipeline located in western Continental Greece starts from the landfall point LF5 located approximately 3 km south of the settlement of Galatas in the Municipality of Nafpaktia of the R.U. of Etoloakarnania, right east of the Klissovi Lagoon (of the National Park of Messolonghi – Etoliko Lagoons) and in a north-north-western direction ends in the mountainous area of Florovouni which is located ~ 3.5 km southeast of the settlement of Perdika, in the Municipality of Igoumenitsa of the R.U. of Thesprotia.





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Prepared by: ASPROFOS, 2022. Orange line roughly indicates pipeline route.

Figure C.4-20 Start (LF5) and End (Florovouni area) at Western Continental Greece Section

The landfall site at Galatas area is characterized by a very fertile agricultural landscape, within the Plain of Evinochori formed by Evinos River discharging at the Klissovi Lagoon. The site is located in between the boundaries of National Park of Messolonghi — Etoliko Lagoons (a gap to the National Park boundaries formed between the Klissovi Lagoon and the Mt Varasova, to the west and east of LF5, respectively. LF5 coastal tranquil seascape (with a south/ south-eastern view) includes the Patraikos Gulf area and also the northern coasts of Peloponnese (Mt Movri is dimly visible).





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Source: Project FEED, 12-10-2020. Orange line roughly indicates pipeline route.

Figure C.4-21 Seascape from LF5.

The plain agricultural landscape is maintained for the first 10 km, up to Koutsocheri settlement (approx. KP 10). The fields are very often flooded, thus allowing for a marshland like landscape. Evinochori plain is towered by Mt Varasova to the east and the southernmost roots of Mt Arakynthos to the west.





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Source: Project FEED, 30-10-2020. Orange line roughly indicates pipeline route.

Figure C.4-22 View of Evinochori Plain

Up to Gavalou settlement (close to KP 30) the route crosses the mountainous natural landscape of Mt Arakynthos forest. The foothills of Mt Arakynthos host either a mosaic of agricultural and natural (shrublands) landscape or an agricultural landscape. However, some of the landscape is dominated by the forest of the protected area Mt Arakynthos. This is a very pristine area, with almost complete absence of development. It is noteworthy that the Mt Arakynthos paved (asphalt) road network is very limited, if not non-existing. Arakynthos or Zygos is a low mountain (984 m), south of Lake Trichonida. In Arakynthos is the narrow gorge of Kleisoura through which the area of Messolonghi is connected with the area of Agrinio. Arakynthos is overgrown with cedars and oaks. Among them live wild boars, deer, squirrels, turtles and other wild animals. For its great ecological importance, Arakynthos together with the gorge of Kleisoura is included in the Natura (Nature) 2000 network.



Source: Google Earth Pro. Imagery date: 12/2011. Orange line roughly indicates pipeline route.

Figure C.4-23 View of Mt. Arakynthos



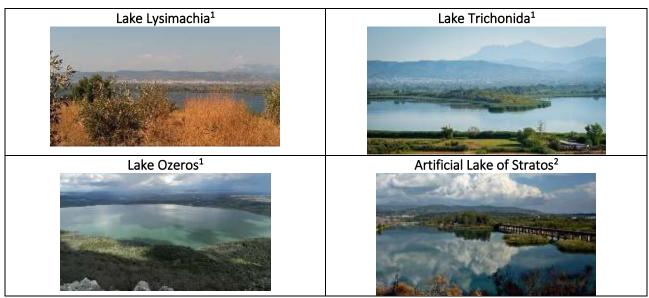


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Up to Lepenou settlement, at the southern foothills of Mt Thiamon (aka Petalas) (approximately KP 65), the landscape is dominated by Plain of Agrinio. It is one of the main tobacco-producing areas of the country, while rice, legumes, cereals, olives are still cultivated. The route passes almost exclusively through agricultural plain landscape, with limited rural development being present close to the small purely agricultural settlements and of course built landscape at the town of Agrinio (to the northern outskirts of the study area). However, there is a series of important landscape features along the way:

- Wetland of Trichonida & Lysimachia Lakes, also characterized as Natura2000 whilst Lysimachia is included in the National Park of Messolonghi Etoliko Lagoons (approx. 350 m to the N/E);
- Wetland of Artificial Lake of Stratos (approx. 2 km to the E); and
- Wetland of Ozeros Lake, also characterized as Natura2000 (approx. 5 km to the W).



1: Source: Wikipedia.org | 2: Source: Google Earth Pro. Imagery date: 11/2011.

Prepared by: ASPROFOS, 2022.

Figure C.4-24 Wetlands connected to the Agrinio Plain

In addition, several surface water systems are crossed; the most prominent ones are: R. Platania, Enotiki Tafros (the channel connecting lakes Trichonida and Lysimachia), R. Ermitsas, and of course Acheloos River. A large part of the Agrini Plain lays within the limits of the National Park of Messolonghi-Etoliko Lagoon; from Lysimachia Lake (KP 40) to Acheloos River (KP 58).





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Source: Google Earth Pro. Imagery date: 12/2011.

Figure C.4-25 View of Acheloos River

From Lepenou settlement (KP 65) up to Marlesi settlement (KP 125), the landscape presents a significant variety and complexity.

- For the first 20 km, from Lepenou (KP 65) to Varetada (KP 89), the route crosses, in a northward direction, the ridges of the eastern foothills of Mt Thiamon (aka Petalas). The landscape is purely natural, either shrubland like or forest like. The area is rich in small creeks and streams discharging to Ozeros Lake to the west and Artificial Lakes of Stratos or of Kastraki to the east. West of the route, the landscape is more hilly shrubland like; east of the route, the landscape is mountainous either shrubland or forest like;
- For the next 20 km, up to Xirolivado settlement (KP 107), the route turns northwest following a landscape of similar pattern. Nevertheless, the western most outskirts of the landscape study area are influenced by the proximity to Amvrakikos Gulf and the irrigated agricultural fields; hence the landscape at these areas is agricultural. The eastern most limits of the study area include the mountainous and natural vegetated ridges of Mt Makrinoros; and
- The last section of this segment, up to Marlesi settlement (KP 125), is dominated by the same natural landscapes (shrublands or forest) but, the influence of Amvrakikos Gulf is slightly different. With the exception of few areas supporting a mosaic of agricultural and natural (shrublands) landscape, the rest of the area supports exclusively natural landscapes (shrubland or forest); mountainous to the east of the pipeline route and hilly to the west. The climatic influence of the Amvrakikos Gulf, the geomorphology of the area and the rural development have left almost no (if any) land for typical and intensive agricultural activities.

Most part of this section falls within the boundaries of the National Park of Amvrakikos Gulf; a complex of protected areas, mainly aquatic but also including the surrounding terrestrial elements. These hilly (mountainous at locations) terrestrial elements are the ones crossed by the project and provide for the natural landscapes described above.





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The western outskirts of the study area, next to Amvrakikos Gulf, can be characterized as a wetland landscape but most importantly allow for an impressive coastal seascape; many viewpoints exist along the asphalt national road (at great distance from the project footprint), allow a seascape view through shrublands or even forest like landscapes. It is noted though, that no direct visual interaction between Amvrakikos Gulf and this segment of the project exists.

From Marlesi (KP 125) to Mirsini (KP 180) settlements, the project crosses some of the more fertile areas of Greece, Plain of Arta and Plain of Louros – Preveza, sited north of the Amvrakikos Gulf within the boundaries of the National Park of Amvrakikos Gulf.

The plain of Arta (indicatively up to Louros River, at KP 160) has almost entirely an agricultural plain landscape. Scattered rural developments, mostly rural settlements, do not significantly impact the overall landscape. Not even at the crossing of Aracthos River (a very important and protected features), is the landscape character modified; rather simply a more riparian character to the agricultural landscape is given by the presence of the river itself.



Source: Project FEED, 03-03-2021.

Figure C.4-26 View of Acheloos River

This landscape continues to the plain of Louros- Preveza, indicatively from Louros River (KP 160) to Mirsini settlement (KP 180). Main features are the same but the plain is now towered by the mountains of Zaloggo (to the north-west) and Valaora (to the north-east) (southern foothills of Thesprotiko Mountain Range). These two mountains leave much less land available for extensive agricultural plain landscape, but the landscape type remains, indisputably, that of agricultural plain. Nevertheless, the above mentioned mountains support mountainous natural landscapes, either shrublands or forests; in between these two mountains, a mosaic of agricultural and natural landscape, allows for a smooth visual continuity and slight landscape type modification.





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Source: Google Earth Pro. Imagery date: 11/2011. Orange line roughly indicates pipeline route.

Figure C.4-27 View of Acheloos River

Although the project footprint is at great distance, the following TIFKs, being part of National Park of Amvrakikos Gulf are highlighted:

- Wetland of Logarou Lagoon and Aracthos River Delta (approx. 1200 m to the South); and
- Wetland of Rodia Tsoukaliou Lagoons (approx. 1000 m to the South).

In general, Amvrakikos Gulf is a complex of 450km², which receives the salty waters and fish fauna of the Ionian Sea from an opening of 600 m, the Strait of Preveza. To the south are the mountains of Acarnania, but on its northern shores, from where the pipeline route passes, host three rivers - Louros, Arachthos and the small Vovos —that discharge sediments to the marine ecosystem, opposing the southerner direction winds, creating small peninsulas and islets which, in turn, form almost twenty lakes. The total area is divided into protection zones depending on the ecosystem - islets, brackish swamps, deltas, wetlands, lakeside forests, reeds - and natural fish farms, which feed and economically support local (and regional) population, and of course, over 250 species of birds, 78 of which are permanent residents.





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Prepared by: ASPROFOS, 2022. Source: https://amvrakikos.eu/park/

Figure C.4-28 Views of Amvrakikos Gulf National Park

From Mirsini (KP 180) till Chochla (KP 193) settlements, pipeline route continues north/ northwest. The landscape is characterized by the forested (either with forests or shrublands) western slopes of Mt Thesprotiko which are broken by small patches of agricultural fields (mainly in the area of Chimadio, at KP 186). It is noted that the western outskirts of the landscape study area include some touristic development (mainly at Loutsa beach and Vrachos beach); nevertheless, the project location is not visible from these areas.

The next clearly distinct segment, in terms of landscape, starts from Chochla settlement (KP 193), crosses Acherontas Plain and ends up at Spatharei settlement (KP 208). Especially, from KP 196 to KP 199, the "Ekvoli Acheronta kai Nekromantio" (Acheronta estuary and Necromantio) TIFK is present. Although the landscape is typical of the plain agricultural fields, the characterization of the area as TIFK also took into consideration cultural heritages characteristics. Acherontas River and its impressive rocky shore was considered the gateway to Hades. The Acheron riverbed is arranged-aligned in the last section until the estuary. The river is navigable up to the area of Nekromantio, on



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the banks there is rich tree vegetation and the route is impressive. The "Nekromantio" is in good condition and there is an underground area that can be visited. A small Byzantine church has been built above.



Source: Google Earth Pro. Imagery date: 10/2011. Orange line roughly indicates pipeline route.

Figure C.4-29 View of TIFK "Ekvoli Acheronta kai Nekromantio"

The last section, starting from Spatharei settlement (KP 208) reaching the end of the pipeline route (at Florovouni site) supports almost all of the landscape types identified within the study area. The route passes mainly through the plain of Margariti (from KP 216 to KP 228) a plain that could be easily characterized as a valley given that it is formed by the towering mountains of Parga (to the west) and Paramythia (to the east). The route crosses the roots of Mt Paramythia in the first section of this segment (from KP 208 to KP 216) with a mountainous natural (shrubland) landscape. The last section (from KP 228 to Florovouni site) crosses the hilly natural (shrubland) landscape of Mt Parga.

However, this plain (valley) of Margariti hosts the TIFK "Elos Kalodiki Pargas" (Marshland of Parga Kalodiki). It is an elongated swamp east of Parga, near the village of Morfi, full of water lilies (Nuphar lutea). On its banks there are small reeds and mats. In autumn, many waterfowl descend to the area that are easy to observe because the swamp is located next to the road Preveza-Igoumenitsa. In addition, Kalodiki Marshland is characterized as a Wildlife Refuge Area. It is noted that almost the entire plain of Margariti is characterized as a Natura2000 site, including not only Kalodiki Marshland, but also the marshlands of Margariti and of Karteri.

⁸ An ancient Greek temple of necromancy devoted to Hades and Persephone.





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Source: Project FEED, 02-03-2021.

Figure C.4-30 View of Florovouni site.





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9 C.4.3. Characteristic Landscape Types

9 C.4.3.1 Artificial Landscape

Artificial Landscape represents the most dominant urban characteristics, such as big cities, settlements, industrial areas, ports, airports etc.

For the purposes of the study Artificial Landscape, is distinguished in the following categories:

- Built landscape;
- Rural landscape; and
- Coastal Rural landscape.

BUILT LANDSCAPE

This type of landscape is characterized by continuous or discontinuous residential, industrial, small industry, transportation facilities (e.g. stations or road network) and generally artificial areas that demonstrate a strong man-made intervention and therefore a built (structured) environment.

Power plants in Atherinolakkos and Megalopoli, airports at Araxos and Agrinio, urban centres (Sparti, Megalopoli and Agrinio) are the basic components of this Landscape Type and can be detected within the boundaries of the larger study area.

Specifically, this landscape appears mainly in the following areas:"Atherinolakkos - Crete", "Megalopoli Plateau", "Achaia Plain" and "Agrinio Plain".

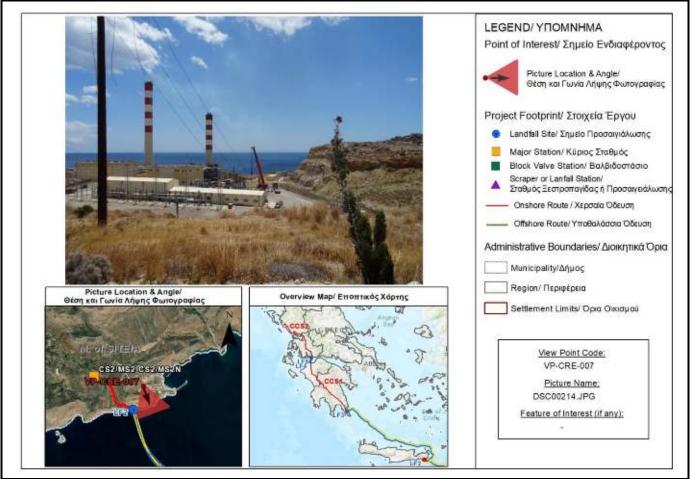
The following figure show an illustrative photo of this particular landscape.





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Figure C.4-31 Built landscape – Atherinolakkos PPC Substation (Crete Section near LF2, VP-CRE-007)

RURAL LANDSCAPE

Scattered settlements is the component that characterizes the particular landscape type. It should be stressed that many settlements exist along the study area, but the characteristics of their landscape are 'lost' to the characteristics of the wider region, especially the agricultural landscape.

Specifically, this landscape appears mainly in the sections: "Megalopoli Plateau", "Achaia Plain" and "Agrinio Plain".

The following figures show typical photos of the particular landscape.





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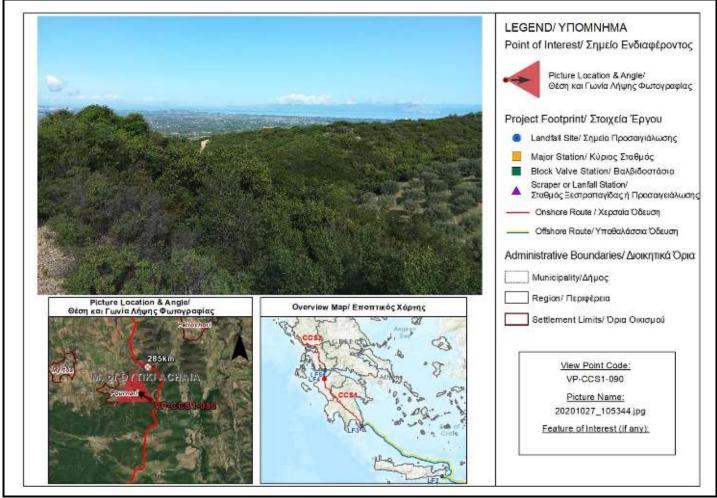


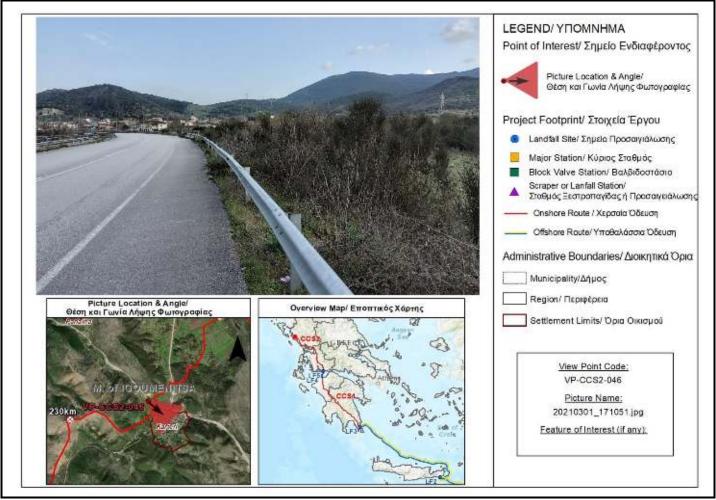
Figure C.4-32 Rural landscape – View to Achaia Plain (CCS1, KP284, VP-CCS1-090)





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Figure C.4-33 Rural landscape – View to Karteri Settlement (CCS2, KP227.7, VP-CCS2-046)

COASTAL RURAL LANDSCAPE

This Landscape type have the same characteristics of a simple Rural Landscape. The only difference is that it is detected near the coastline which is why, apart from artificial environment, the marine parameter is added in the Landscape.

Specifically, this landscape appears mainly around LF2 and LF4 (LF3 and LF5 do not support any noteworthy rural development).

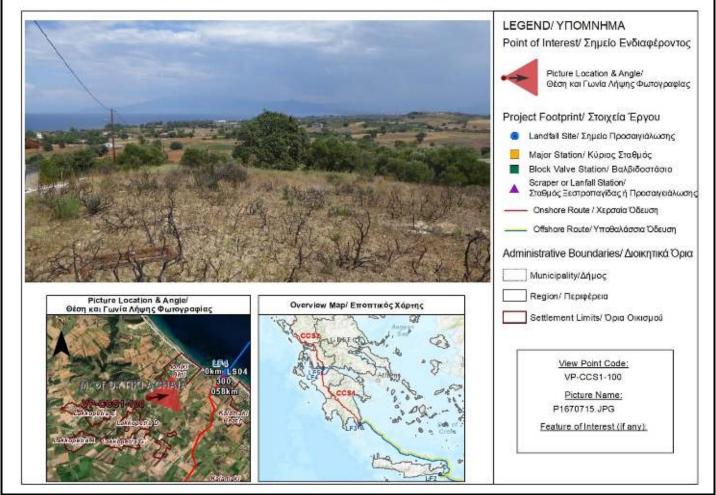
The following figure shows typical photos of this landscape type.





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Figure C.4-34 Coastal Rural landscape –View toLF4 (CCS1, KP299, VP-CCS1-100)

9 C.4.3.2 Agricultural Landscape

This type of landscape is characterized by areas where mainly perennial (fruit trees) but also annual crops are cultivated. The landscape consists of agricultural parcels which are interrupted by small rural settlements or natural areas, but not so densely as to alter the agricultural character of the landscape, in limited or mild morphological relief.

Regarding the type of Agricultural Landscape, it is pointed out that the largest part of crops in Peloponnese peninsula include olive trees, especially in the southern and central part. Nevertheless,



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in the northern part of Peloponnese apart from olive trees, crops with species of low water requirements (e.g. vine yards) can also be detected.

Agricultural Landscape presents different type of crops in Western Continental Greece. Due to the numerous streams, rivers, lakes and other water systems, very fertile plains can be found around. Crops in this specific section include apart from olive trees, tobacco and cotton cultivation in smaller extent. Moreover, high livestock rates are observed in this area.

The following figure present typical photos of this landscape type.

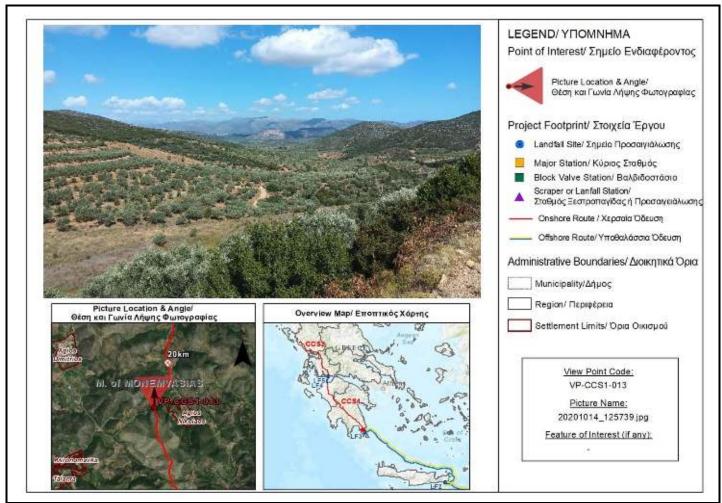


Figure C.4-35 Agricultural Landscape – (CCS1-KP19, VP-CCS1-013)





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In this type of landscape there are some subcategories that can be detected which are mainly related with the morphological characteristics of the agricultural area. Subcategories have been described in the following sections.

AGRICULTURAL PLAIN LANDSCAPE

This type of landscape is characterized by relatively low areas or areas with no or limited morphological ridges. Their predominant feature, however, is the cultivation of annual or perennial (tree-crops) plants in irrigated or non-irrigated land. The landscape is composed of parcels that are interrupted by small rural settlements, but not so densely as to alter the agricultural nature of the landscape. It is noted that there are many settlements along the studied area, but their characteristics are absorbed by the dominant agricultural landscape of the wider region.

This landscape appears in the lowlands agricultural areas: "Molaoi Plain-Peloponnese", "Vrontamas - Geraki Plain-Peloponnese", "Pinios Plain- Peloponnese", "Achaia Plain- Peloponnese", "Evinochori Plain- Western Continental Greece", "Agrinio Plain- Western Continental Greece", "Arta Plain-Western Continental Greece", "Louros- Preveza Plain- Western Continental Greece", "Acherontas Plain- Western Continental Greece" and "Margariti Plain- Western Continental Greece".

The following figures show characteristic photos of this landscape type.





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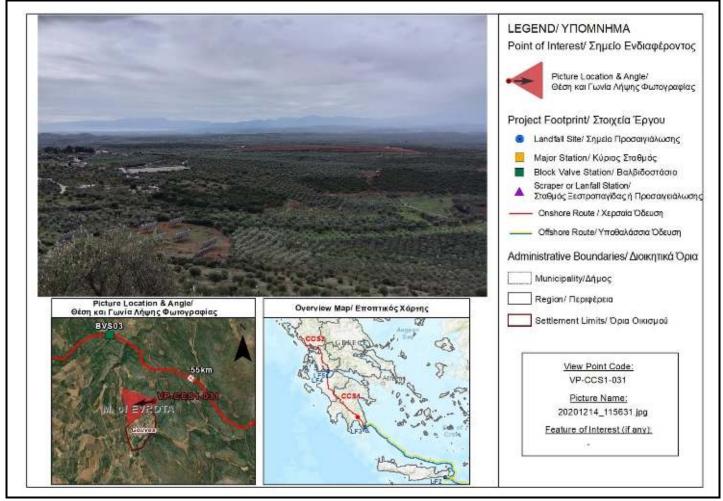


Figure C.4-36 Agricultural Plain Landscape – View to Vrontamas-Geraki Plain (CCS1-KP55, VP-CCS1-013)





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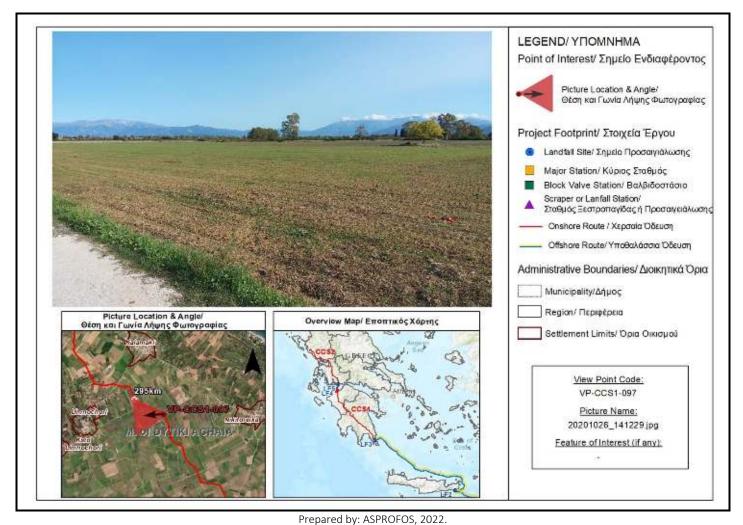


Figure C.4-37 Agricultural Plain Landscape – Achaia Plain (CCS1-KP295, VP-CCS1-097)





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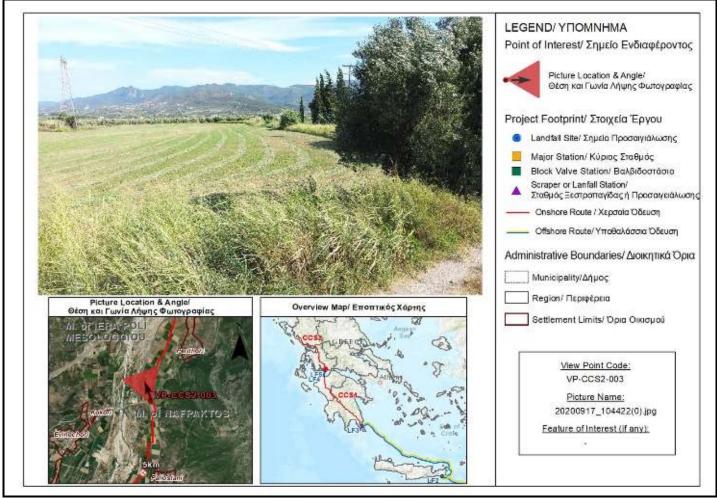
Figure C.4-38 Agricultural Plain Landscape – Flooded fields near Klissovi Lagoon (CCS2-KP0.5, VP-CCS2-048)





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Figure C.4-39 Agricultural Plain Landscape – Evinochori Plain (CCS2-KP5.5, VP-CCS2-003).

COASTAL AGRICULTURAL LANDSCAPE

This type of Agricultural Landscape appears next to coastal areas, so the Landscape apart from the agriculture includes also the coastal element. This means also that crops and cultivations are influenced from the coastal element.

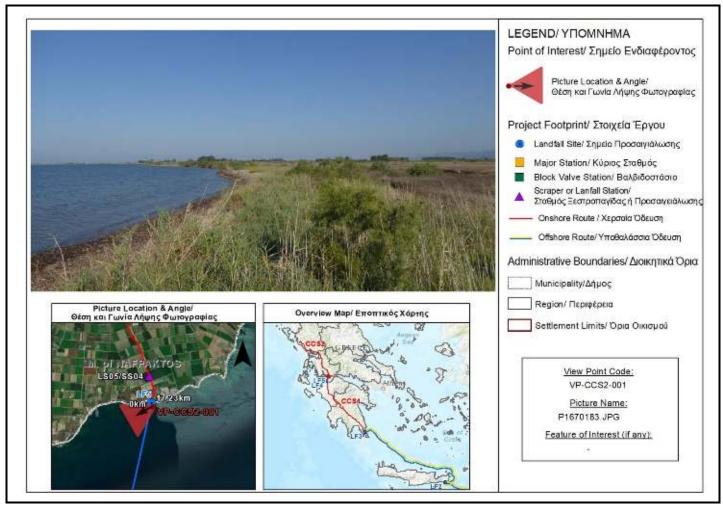
The following figure show characteristic photo of this landscape type.





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Figure C.4-40 Coastal Agricultural Landscape – (LF5, VP-CCS2-001)

RIPARIAN AGRICULTURAL LANDSCAPE

This type of Agricultural Landscape appears along river banks, so the landscape apart from the agriculture includes also the river element. This means also that crops and cultivations are influenced from the existence of the river waters.

The following figure show characteristic photo of this landscape type.





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Figure C.4-41 Riparian Agricultural Landscape – Evinos River, (CCS2, KP9.5, VP-CCS2-004)

9 C.4.3.3 Natural Landscape

The landscape category includes natural vegetated areas. It is distinguished based on the vegetation type, the morphology and finally, presence of any other important feature (mainly water bodies).

It is noted that the difference between the two landscape types of forest or shrubland natural landscape is subjective and mainly limited to the type of vegetation (bush or tree species) in the overall study area section. Another noteworthy feature is the fact that due to the impact of the abiotic environment to vegetation development (climate, morphology, man-made pressures, etc.) the climax plant association is different in Crete, Peloponnese and in Western Continental Greece. As such, it is





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often the case that a hilly shrubland landscape in Western Continental Greece has similar viewshed as a hilly forest landscape in Peloponnese; or a mountainous shrubland landscape in Peloponnese has similar features to a hilly forest landscape in Western Continental Greece. This is caused by the fact that the overall morphology of the study area in Peloponnese has much lower altitude than the study area in Western Continental Greece and the other abiotic factors that affect the climax plant association of Peloponnese and Western Continental Greece are quite different.

HILLY NATURAL (FOREST OR SHRUBLANDS) LANDSCAPE

This type of landscape is characterized by natural landscapes, mainly includes shrubs and grasslands but some forest areas can also be found. An additional characteristic is the hilly morphology of the terrain, without intense excursions but differentiated from lowland or mountainous morphologies.

Hilly Natural Shrublands Landscape appears in the sections: "Kounos Mountain", "Kalogerovouni Mountain", "Megali Rachi Mountain", "Movri Mountain", and "Thiamon (Petalas) Mountain". Moreover, this Landscape type appears in many cases between different Plains along the pipeline route.

The following figures show characteristic photo of a Hilly Natural Shrublands Landscape.





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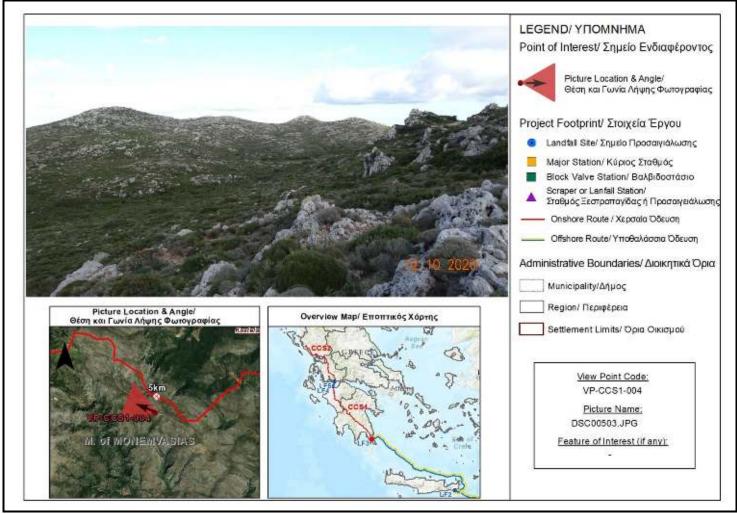


Figure C.4-42 Hilly Natural Shrublands Landscape – (CCS1, KP5, VP-CCS1-004)





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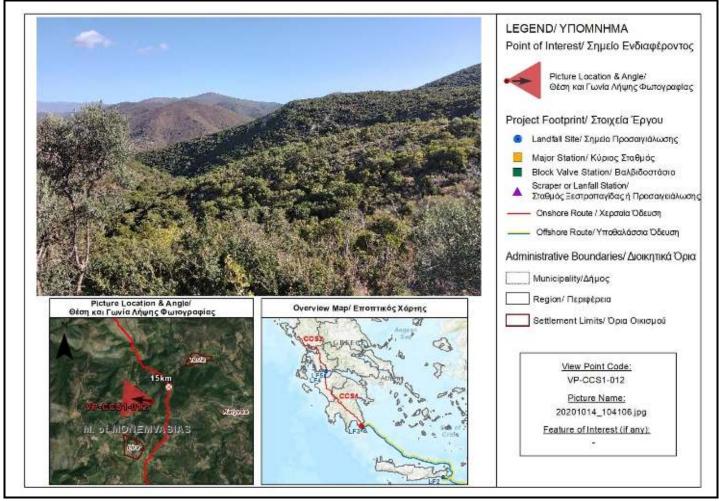


Figure C.4-43 Hilly Natural Shrublands Landscape — (CCS1, KP14, VP-CCS1-012)





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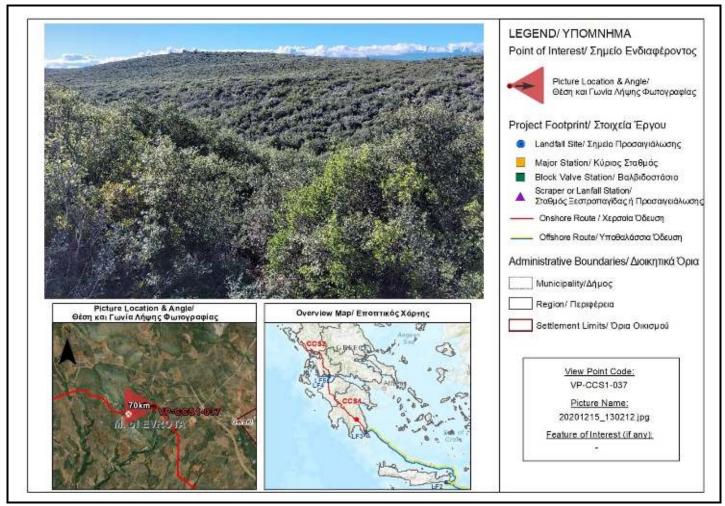


Figure C.4-44 Hilly Natural Shrublands Landscape – (CCS1, KP70, VP-CCS1-037)





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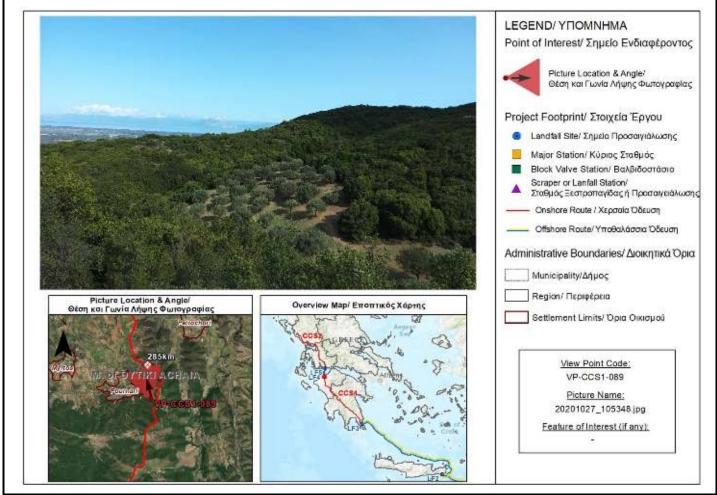


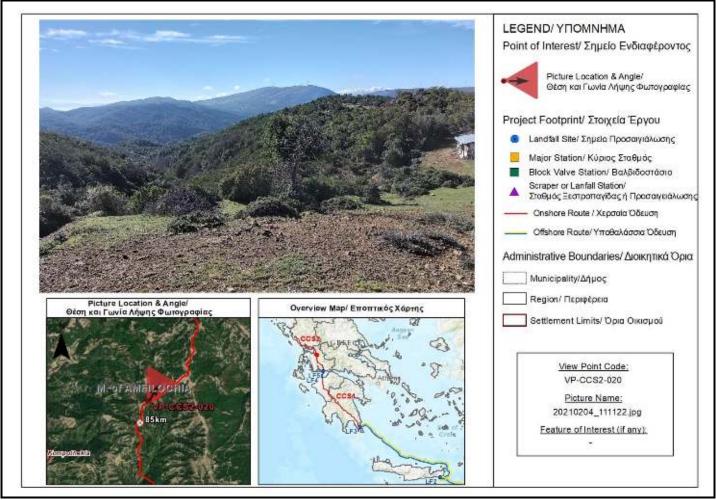
Figure C.4-45 Hilly Natural Shrublands Landscape – (CCS1, KP285, VP-CCS1-089)





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Figure C.4-46 Hilly Natural Shrublands Landscape – (CCS2, KP85.5, VP-CCS2-020)

Hilly Natural Forest Landscape appears at "Megalopolis Plateau" Foothills, "Alfios Valley", "Foloi Plateau", "Foloi Mountain", "Antroni Gorge" as well as in scattered locations along the pipeline route.

It is noteworthy that in this type of landscape, in the "Alfios Valley" section, is included the TIFK AT1011011 "Alfios tributaries". Natura site GR2330002 (Oropedio Folois) is also found in "Foloi Plataeau" section.

The following figures show characteristic photo of a Hilly Forest Landscape.





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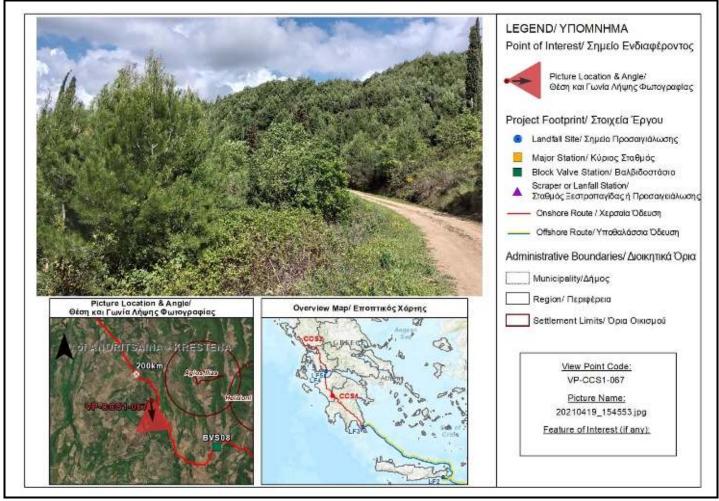


Figure C.4-47 Hilly Natural Forest Landscape – Alfios Valley, (CCS1, KP199.5, VP-CCS1-067)





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Figure C.4-48 Hilly Natural Forest Landscape, (CCS2, KP96.5, VP-CCS2-023)

MOUNTAINOUS NATURAL (FOREST OR SHRUBLANDS) LANDSCAPE

This type of landscape is characterized by forests and forested areas, often with dense vegetation, at high altitudes and often with intense morphology. Their predominant feature is natural vegetation in the absence of anthropogenic pressures in the mountains. Often these areas are protected by environmental legislation, belonging to a certain category (e.g. National Park, Wildlife Refuge, Natura site). The landscape offers views to the full colours and beautifully pure or mixed forests. The forests are mostly covered by oaks and tall pine trees, mixed with hornbeam, ashes, maples and shrublands. These are important locations for forest flora and fauna.





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This landscape appears, as it is obvious, in the mountainous sections, mainly in: "Kourkou Mountains", "Parnonas Mountains", "Tseperou Mountain", "Louka and Kastora Gorge", "Tetrazio Mountain", "Lykaio Mountains", "Mateseiko Mountain", "Minthi Mountain", "Skolis Mountain", "Karasova Mountain", "Arakynthos Mountain", "Makrinoros Mountain", "Thiamon (Petalas) Mountain", "Paramithia Mountain" and "Parga Mountain".

In this type of landscape, most of the involved Landscapes of Outstanding Natural Beauty appear in the wider project area. These landscapes are listed below:

- AT1011014 "Neda Gorge";
- AT1011067- "Andritsaina"; and
- AT2010026- "Mount Varasova".

The following figures show characteristic photo of this landscape type.





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Figure C.4-49 Mountainous Natural (Shrublands) Landscape- Lykaio Mt, (CCS1, KP171.5, VP-CCS1-059)





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Figure C.4-50 Mountainous Natural (Forest) Landscape- Minthi Mt, (CCS1, KP186, VP-CCS1-061)





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Figure C.4-51 Mountainous Natural Landscape- Arakynthos Mt, (CCS2, KP13, VP-CCS2-007).





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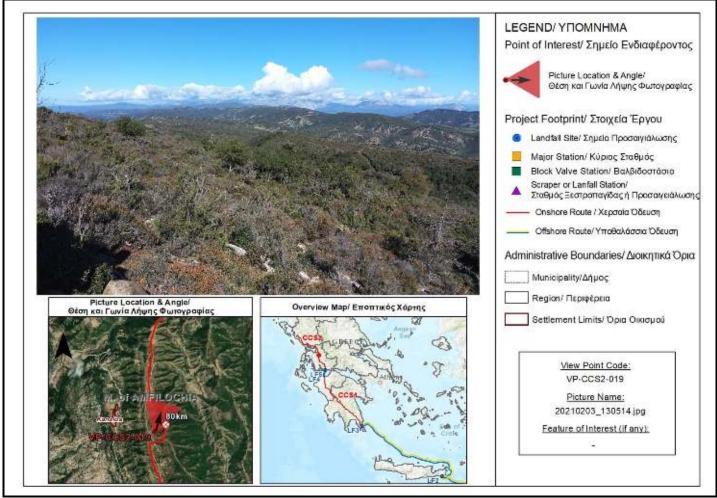


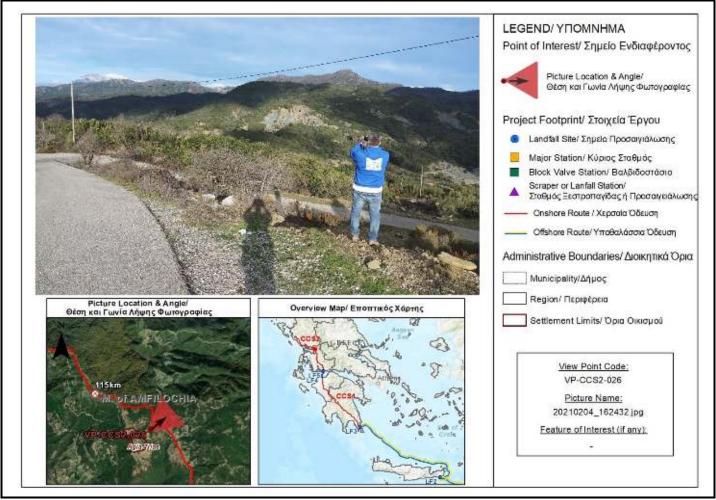
Figure C.4-52 Mountainous Natural Landscape, Thiamon Mt (CCS2, KP79, VP-CCS2-019)





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Figure C.4-53 Mountainous Natural Landscape, Makrinoros Mt (CCS2, KP113.5, VP-CCS2-026)

PHRYGANA LANDSCAPE

Crete Island reveals one of the most diverse systems of contrasting landscapes. However, within the study area, Phrygana Landscape is the most characteristic one. The term phrygana is used for an open dwarf scrub dominated by low, often cushion-shaped, spiny shrubs. These shrubs are extremely high temperature- and drought-tolerant and they grow at low altitudes. This vegetation type is characteristic of the Mediterranean ecosystems. Phrygana usually grow on poor and rocky limestone and siliceous substrates or at areas previously repeatedly burnt by fires.

Phrygana Landscape is limited in south-eastern Crete in Atherinolakkos, around LF2 and CS2/MS2-CS2/MS2N.

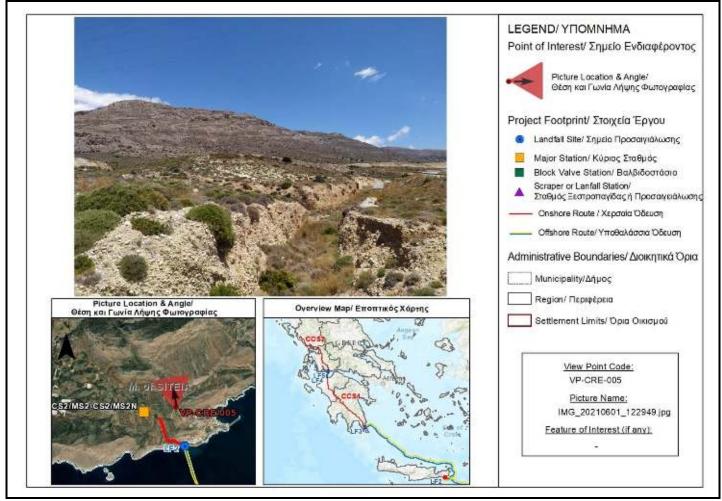




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The following figure shows characteristic photo of this landscape type.



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Figure C.4-54 Phrygana Landscape-Crete, (LF2, VP-CRE-005)

COASTAL NATURAL LANDSCAPE

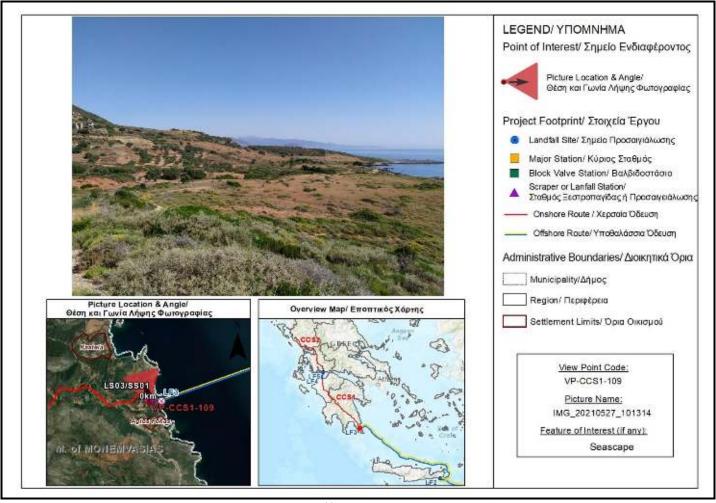
This type of Natural Landscape appears next to coastal areas. The Landscape in these locations includes mainly shrubs and grasslands. The difference to other natural landscape types is that the type of vegetation present is affected by the coastal characteristics.





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Figure C.4-55 Coastal Natural Landscape-Seascape near LF3, (CCS1, KP0, VP-CCS1-109)

RIPARIAN NATURAL LANDSCAPE

This type of Natural Landscape appears along river banks. The Natural Landscape in these areas is affected by the water element so the type of natural vegetation that grows is affected accordingly.





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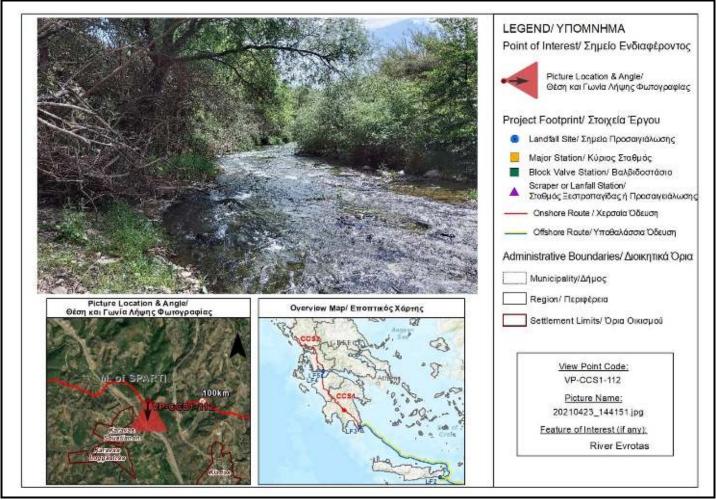


Figure C.4-56 Riparian Natural Landscape-Evrotas River, (CCS1, KP101, VP-CCS1-112)





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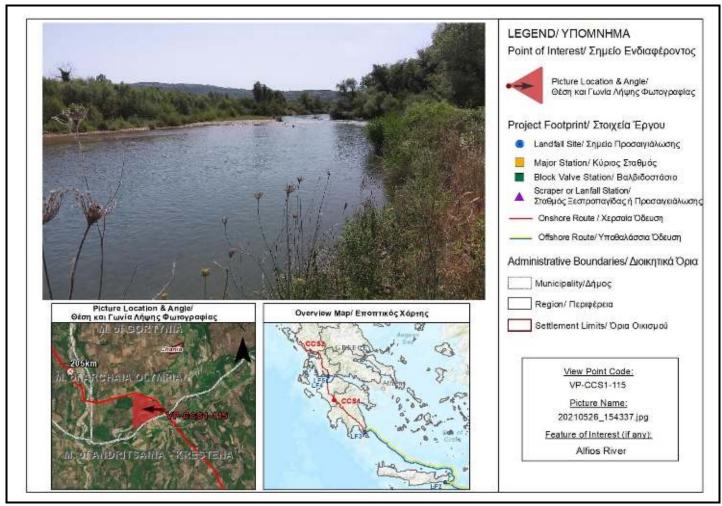


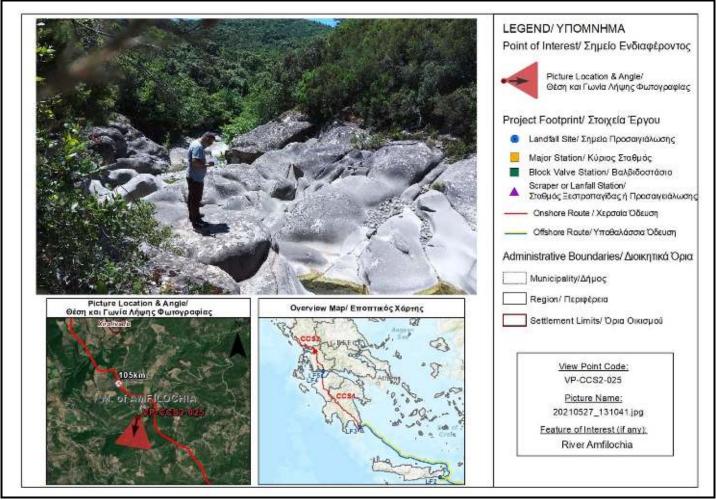
Figure C.4-57 Riparian Natural Landscape-Alfios River, (CCS1, KP202.5, VP-CCS1-115)





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Figure C.4-58 Riparian Natural Landscape-Amfilochia River, (CCS2, KP104, VP-CCS2-025)

9 C.4.3.4 Mosaic of Agricultural and Natural (Shrublands) Landscape

This type of landscape is characterized by a mix of natural mostly scrub and grassland area that is interrupted by agricultural land. Their predominant feature is the alternation of textures, styles and colours that create this mosaic. The landscape consists of parcels that interrupt the natural land at a density so that both (natural and agricultural) landscapes coexist harmoniously. An additional characteristic is the hilly morphology of the terrain, without intense relief but differentiated from low or mountainous morphologies.





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This type of landscape is usually a transitional landscape before entering natural forests or farmlands. This landscape appears mainly in the areas between "Mountain Megali Rachi" and "Vrontamas - Geraki Plain", between "Evrotas Valley" and "Taygetos Mountain", between "Tseperou Mountain" and "Megalopoli Plateau", "Alfios Valley", "Foloi Plateau", "Goumero Gorge", "Pinios Plain", between "Evinochori Plain" and "Arakynthos Mountain", between "Thiamon Mountain" and "Amfilochia Plain" and between "Louros-Preveza Plain" and "Acherontas Plain".

The following figures show characteristic photos of this landscape type.

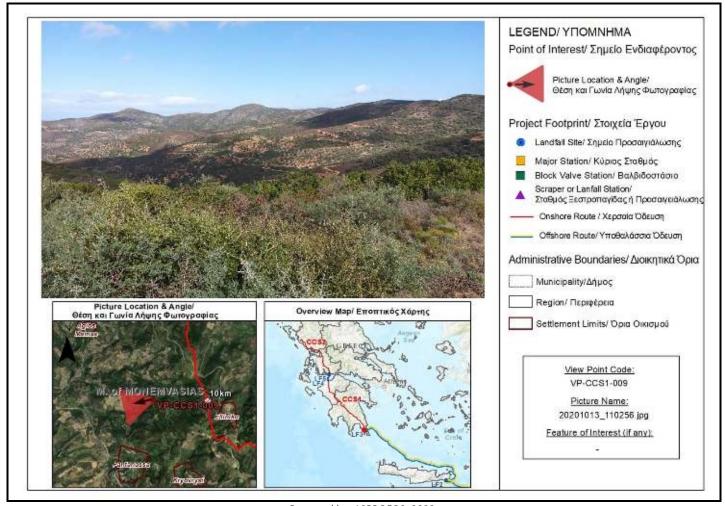


Figure C.4-59 Mosaic of Agricultural and Natural (Shrublands) Landscape, (CCS1, KP11, VP-CCS1-009).





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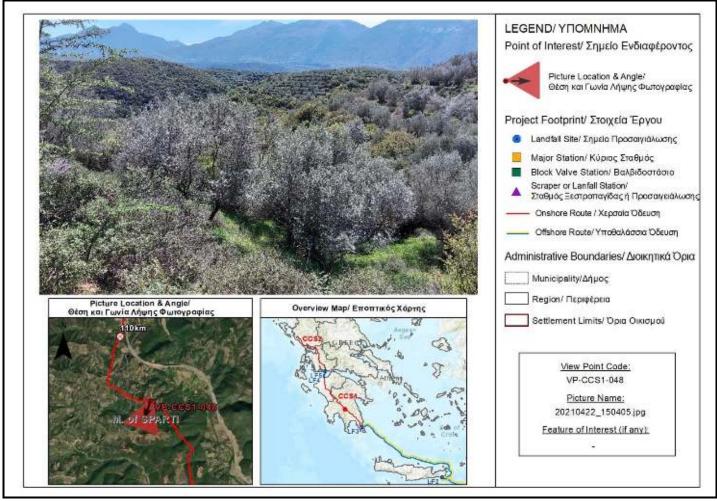


Figure C.4-60 Mosaic of Agricultural and Natural (Shrublands) Landscape, (CCS1, KP108, VP-CCS1-048)





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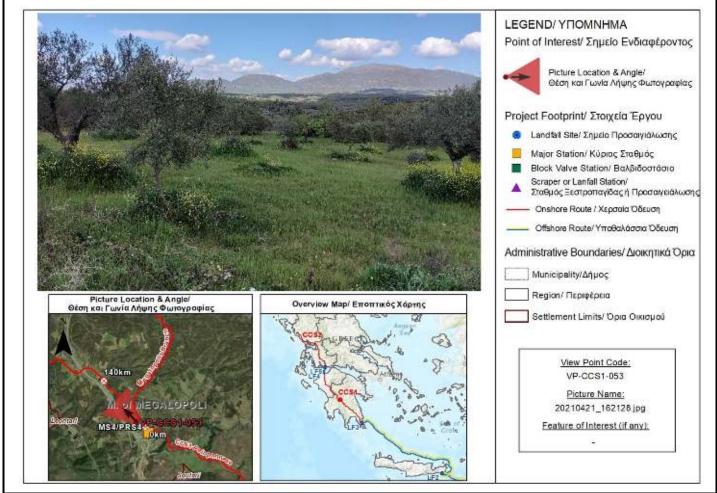


Figure C.4-61 Mosaic of Agricultural and Natural (Shrublands) Landscape, (CCS1, KP138.5, VP-CCS1-053)





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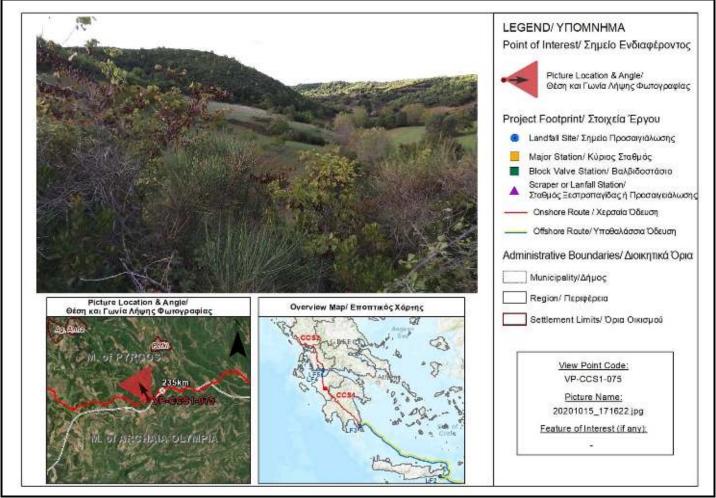


Figure C.4-62 Mosaic of Agricultural and Natural (Shrublands) Landscape, (CCS1, KP235.5, VP-CCS1-075)





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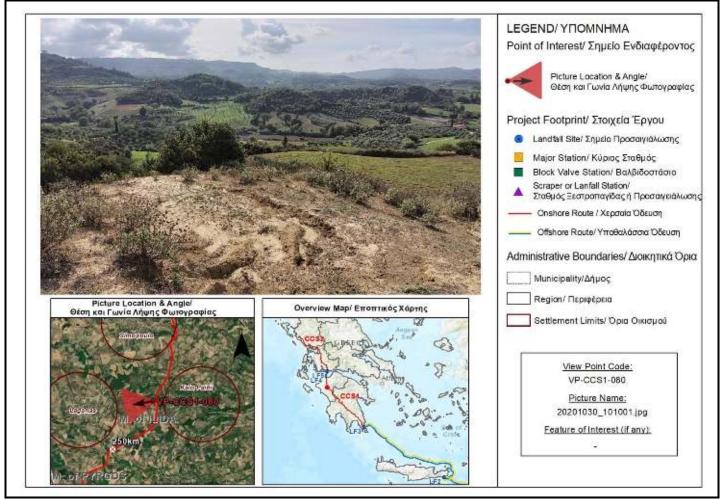


Figure C.4-63 Mosaic of Agricultural and Natural (Shrublands) Landscape, (CCS1, KP251.5, VP-CCS1-080)





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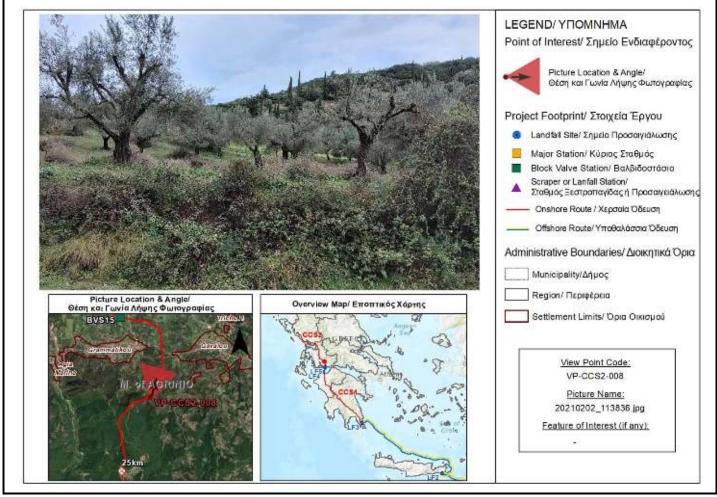


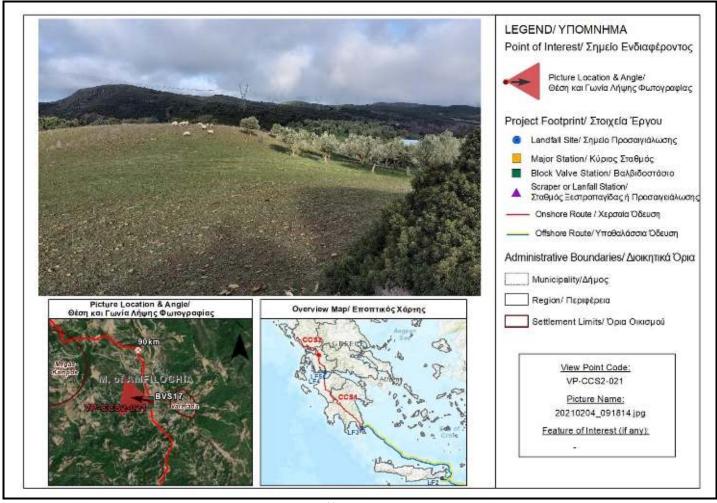
Figure C.4-64 Mosaic of Agricultural and Natural (Shrublands) Landscape, (CCS2, KP27, VP-CCS2-008)





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Figure C.4-65 Mosaic of Agricultural and Natural (Shrublands) Landscape, (CCS2, KP88.8, VP-CCS2-021)

COASTAL MOSAIC OF AGRICULTURAL AND NATURAL LANDSCAPE

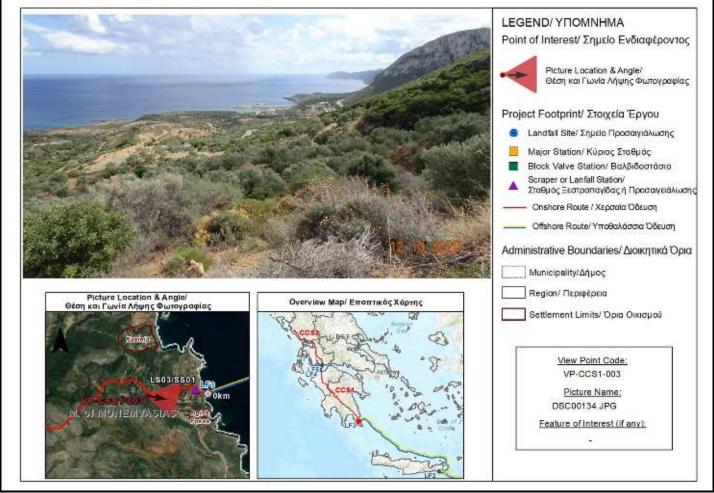
This type of Coastal Landscape is consisted of parcels that interrupt the natural land and as a result the natural and agricultural landscapes coexist harmoniously with the seascape.





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Figure C.4-66 Coastal Mosaic of Agricultural and Natural (Shrublands) Landscape-Near LF3 (CCS1, KP1.5, VP-CCS1-003).

9 C.4.3.5 Marshlands

A Marshland is a wetland that is dominated by herbaceous rather than woody plant species. Marshlands can often be found at the edges of lakes and streams, where they form a transition between the aquatic and terrestrial ecosystems. They are often dominated by grasses, rushes or reeds. If woody plants are present they tend to be low-growing shrubs. This form of vegetation is what differentiates marshes from other types of wetland.

Marshlands provide habitats for many kinds of invertebrates, fish, amphibians, waterfowl and aquatic mammals. This biological productivity means that marshlands contain 0.1% of global sequestered





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terrestrial carbon. Moreover, they have an outsized influence on climate resilience of coastal areas and waterways absorbing high tides and other water changes due to extreme weather. Though some marshlands are expected to migrate upland, most natural marshlands will be threatened by sea level rise and associated erosion.

Inside the study area of the project and particularly at Western Continental Greece (CCS2) the following Marshlands are detected:

- "Marshland of Ammoudia". This area is located in the study area of CCS2 at KP197, north of Acherontas River at the area of "Acherontas Plain" and especially at the estuaries of Acherontas River. It has to be mentioned that it includes a group of protected areas such as Natura sites, Wildlife refuges and IBAs. The site is located approx. 3 km to the West of the project footprint.
- "Marshland of Kalodiki". This Marshland is located in the study area of CCS2, approximately at KP212, among Parga, Morfi, Eleftheri, Pyrgi and Kalodiki Settlements. It constitutes a significant habitat as it includes a group of protected areas such as Natura sites, Wildlife refuges and IBAs. This Marshland is also characterized as an Area of Outstanding Beauty (AT3011025- Kalodiki Marsh). The site is located approx. 200 m to the South of the project footprint.
- "Marshland of Margariti". This Marshland is located in the study area of CCS2 approximately at KP215, between Katavothra and Margariti Settlements at the foot of the section "Parga Mountain". It constitutes a significant habitat as it includes a group of protected areas such as Natura sites, and IBAs. The site is located approx. 600 m to the West of the project footprint; and
- "Marshland of Karteri". This Marshland is located in the study area of CCS2 approximately at KP220, between Karteri and Palaiokastro Settlements. It constitutes a significant habitat as it includes a group of protected areas such as Natura sites, and IBAs. The pipeline passes through the borders of this area for approx. 1.9 km (from KP219 to KP224). The marshland itself (i.e. the water body) is not crossed.





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Figure C.4-67 Marshland of Margariti (CCS2, KP215, VP-CCS2-042).

9 C.4.3.6 Wetlands

This type of landscape is characterized by lakes, streams and other bodies of water. The landscape is dominated by the aquatic element, without excluding the presence of other features such as farmlands or forest landscapes. This landscape is usually integrated into other landscapes, but due to the particular nature and the water element, it has been considered appropriate to be referred separately.

In the study area, this landscape appears mainly in agricultural section, and in particular:





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- Wetland of Artificial Lake of Pinios. This Wetland is located in the wider study area of CCS1 approximately at KP262, along with the Artificial Lake of Pinios and Ladon River. The site is located approx. 1.2 km to the West of the project footprint.
- Wetland of Evinos Estuary. This Wetland is located in the wider study area of LF5. It is part of the National Park of Messolonghi – Etoliko Lagoons. The site is located approx. 1.8 km to the West of the project footprint.
- Wetlands of Trichonida and of Lysimachia Lakes. These Wetlands are located in the wider study area of CCS2 approximately from KP 35 to KP 45, and include Trichonida Lake (approx. 500 m to the East), Lysimachia Lake (approx. 600 m to the West) and the channel connecting the two lakes (crossed by the pipeline);
- Wetland of Artificial Lake of Stratos. This Wetland is located in the wider study area of CCS2, approximately at KP 65. The site is located approx. 2 km to the East of the project footprint; and
- Amvrakikos Gulf. Amvrakikos gulf is located in the wider study area of CCS2, from KP 100 to KP 198. It is part of the National Park of Amvrakikos Gulf, a complex of environmental protected areas including Natura2000 sites, Wildlife Refuges, TIFKs, Ramsar sites, etc. within the Amvrakikos complex, the Wetlands of Koprainia Lagoon, of Logarou Lagoon and of Rodia's Lagoon are located. Pipeline keeps significant distance (approx. 1 km on average) for the site, but crosses some of the rivers (e.g. R. Dipotamos, R. Aracthos, and R. Louros).

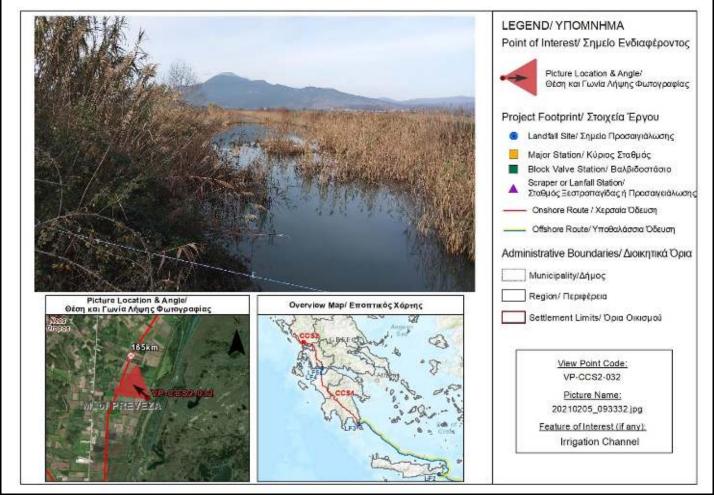
The following figure shows characteristic photos of the particular type of landscape.





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Figure C.4-68 Wetland of Rodia's Lagoon (CCS2, KP166, VP-CCS2-032).

9 C.4.3.7 Nearshore Seascape

Seascape is defined as a combination of adjacent land, coastline and sea within an area, defined by a mix of land-sea inter-visibility and coastal areas⁹, with a view towards the sea.

This type of landscape is characterized by the dominant presence of the sea and her view. The landscape is dominated by an open horizon, including only the sea and the sky; all other elements are excluded, apart of course from the coastline and the occasional view of ships (passesnger ships,

⁹ "Guide to best practice in seascape assessment" (Marine Institute, Ireland, 2001).





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such as ferry boars) or boatst (recreational small fishing boats). This landscape is clearly distinctive from the terrestrial landscapes, but coastal landscapes (i.e. coastal agricultural, natural or even rural landscapes) do include seascapes to some extent. Due to the particular nature, the water element and mainly short-term presence of the landfall construction sites at the transitional area of the shoreline, it has been considered appropriate to be refer to the nearshore seascape separately.

This landscape appears in the landfall areas, and in particular:

- LF2, at Atherinolakkos, SE Crete. The coastal area is a phryganic area next to the industrial zone of Atherinolakkos Power Plant. The seascape towards the Cretan Sea is open but for the break in the horizon by the small Koufonisi island.
- LF3, at Agios Fokas, SE Peloponnese. The coastal area is a mosaic of agricultural and natural landscape surrounded by shrublands of noteworthy landscape quality; nevertheless, the absorption capacity of the landscape is increased mainly by (i) the presence of low sclerophyllous vegetation with large sections of phryganic associations and or unvegetated marks and (ii) existing artificial areas, i.e. mostly existing road network, asphalt and dirt roads, and to a lesser extend residential buildings of the small settlement of Agios Fokas. The seascape encompass the entire viewshed of the Myrtoan Sea (South Aegean Sea), without any obstacle. It is noted that the site is visible from Monemvasia UNESCO site; visibility is mimimum due to the long distance (approx. 5 km) but still, it exists.
- LF4, at Lakopetra, NW Peloponnese. The coastal area is an agricultural landscape dominated by
 plain cultivations and scattered buildings and structures; nevertheless, close proximity to
 significant touristic development on both sides (closer one is to the East) has been identified.
 Seascape encompass, unobstractly, the entire width of Patraikos Gulf till LF5 in the SW coasts of
 Aetoloakarnania.
- LF5, at Evinochori, SW Aetoloakarnania. Just 17 km opposite of LF4, coastal area of LF5 is similar to LF4, dominated by plain cultivations; the difference lays that almost no building has been identified in the area. The seascape is identical to LF4.

The following figures show characteristic photos of the particular landscape.





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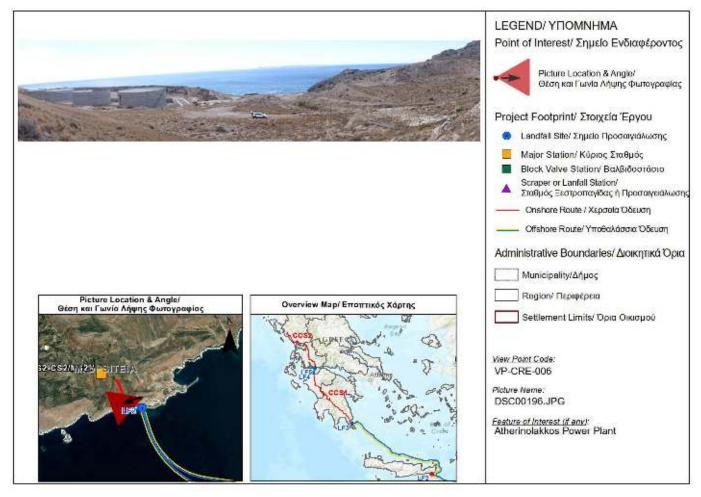


Figure C.4-69 Seascape of LF2, (CRE, LF2, VP-CRE-006).





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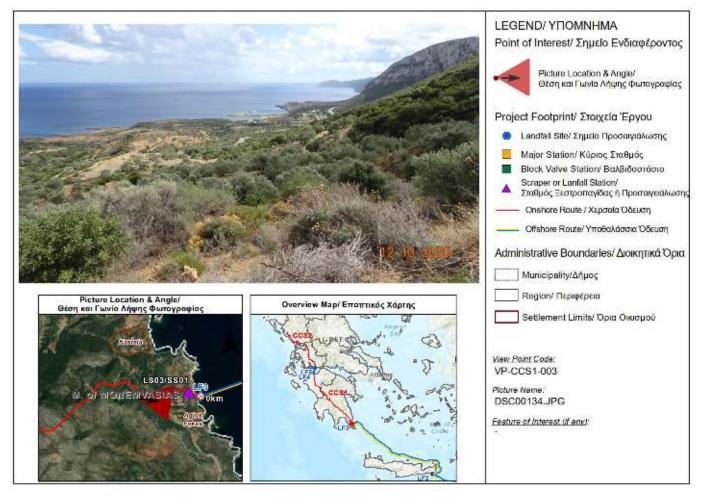


Figure C.4-70 Seascape of LF3, (CCS1, LF3, VP-CCS1-003).





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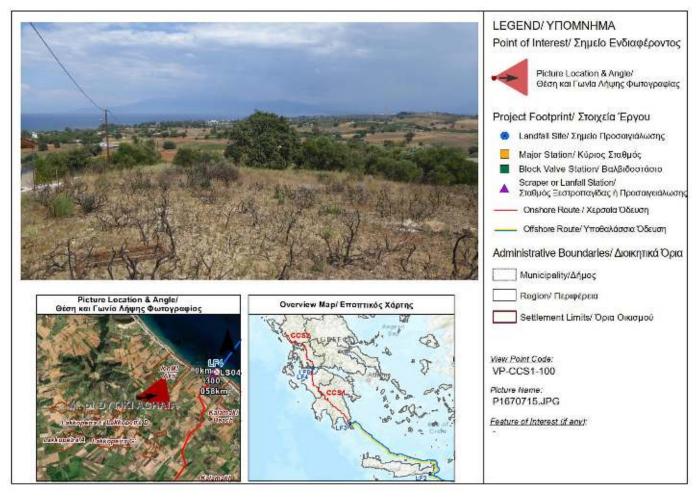


Figure C.4-71 Seascape of LF4, (CCS1, LF4, VP-CCS1-100).





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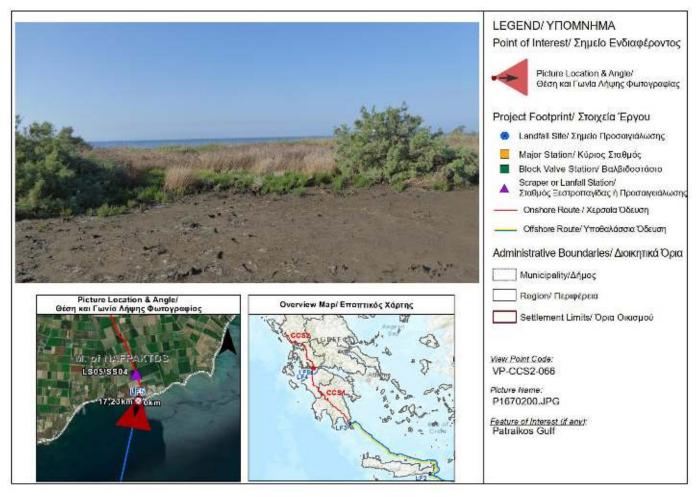


Figure C.4-72 Seascape of LF5, (CCS3, LF5, VP-CCS2-066).





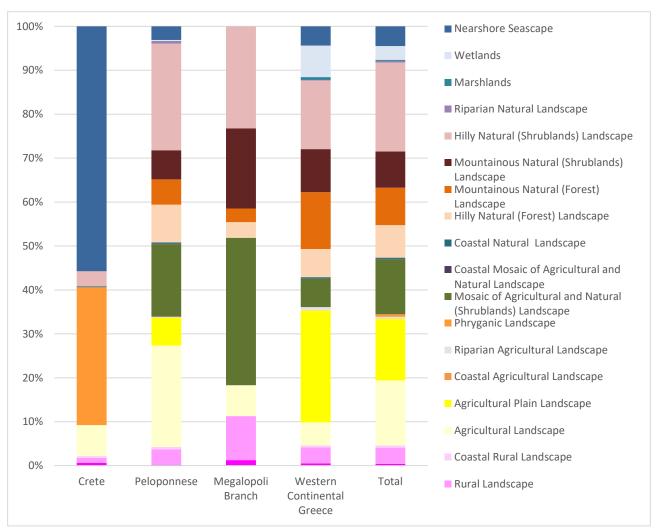
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9 C.4.4. Characteristic Landscape Types within the Study Area

In the wider Study Area of the Project (5 km on either side of the pipeline axis and the centroid of any aerial compound), the typical landscape types presented in Figure C.4-73 (Table C.4-4 is also relevant).

Within the Study Area, the most prominent landscape type is the Hilly Natural (Shrublands) Landscape followed by Agricultural Landscapes (either Agricultural Landscapes of mixed mainly perennial but also annual crops or Agricultural Plain Landscape dominated by annual crops) (Figure C.4-75). These categories cover almost half of the landscape within the entire study area (Figure C.4-74).







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Figure C.4-73 Typical landscape types per study area.

Table C.4-4 Characteristic landscape types per study area (in km²).

	Crete	Peloponnese	Western Continental Greece	Megalopoli Branch	Total
Agricultural Landscape	6.66	631.78	114.10	11.73	764.26
Agricultural Plain Landscape	0.00	174.27	546.40	0.00	720.67
Built Landscape	0.55	5.45	10.81	2.12	18.92
Coastal Agricultural Landscape	0.00	1.09	0.44	0.00	1.53
Coastal Mosaic of Agricultural and Natural Landscape	0.00	3.31	0.78	0.00	4.10
Coastal Natural Landscape	0.19	7.39	7.22	0.00	14.81
Coastal Rural Landscape	0.37	14.07	8.40	0.00	22.84
Hilly Natural (Forest) Landscape	0.00	235.77	137.50	5.94	379.21
Hilly Natural (Shrublands) Landscape	3.22	663.79	335.26	38.66	1040.94
Marshlands	0.00	0.00	13.50	0.00	13.50
Mosaic of Agricultural and Natural (Shrublands) Landscape	0.00	451.20	138.29	55.90	645.38
Mountainous Natural (Forest) Landscape	0.00	157.20	277.63	5.18	440.01
Mountainous Natural (Shrublands) Landscape	0.00	181.95	210.97	30.43	423.36
Nearshore Seascape	52.45	84.44	94.27	0.00	231.16
Phryganic Landscape	29.53	0.00	0.00	0.00	29.53
Riparian Agricultural Landscape	0.00	4.72	16.50	0.00	21.23
Riparian Natural Landscape	0.00	16.62	2.79	0.00	19.41
Rural Landscape	1.12	96.18	78.66	16.66	192.62
Wetlands	0.00	6.20	154.05	0.00	160.25
Total	94.09	2735.42	2147.59	166.62	5143.72

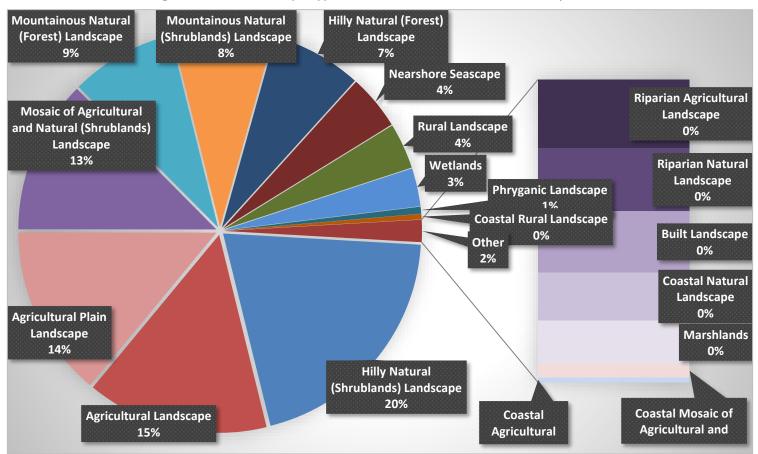


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Figure C.4-74 Landscape types distribution within the total study area.



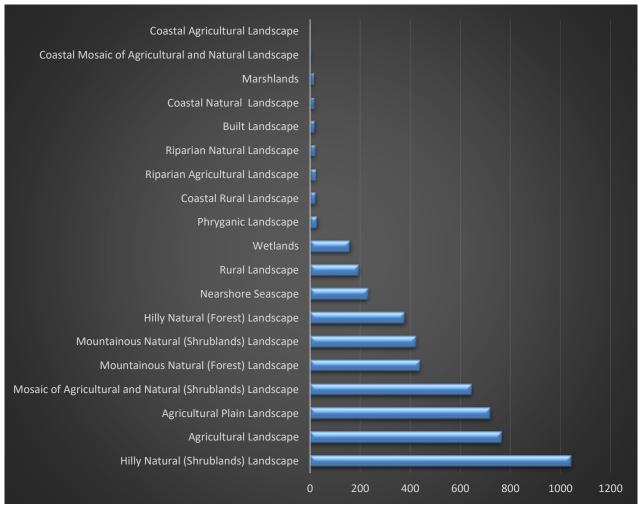


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Figure C.4-75 Landscape types bar chart within the total study area (in km²).



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9 C.4.5. Characteristic Landscape Types along the Pipeline route

Corresponding to the landscape types within the study area, landscape types crossed by the pipeline route include mainly Hilly Natural (Shrublands) Landscape followed by Agricultural Plain Landscapes (mainly of annual crops) (Figure C.4-76 and Figure C.4-77).

Table C.4-5 brings together the typical landscape types from which the proposed route passes.





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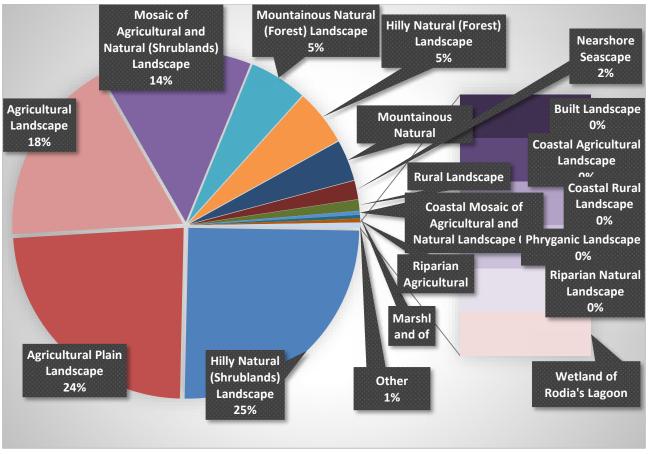


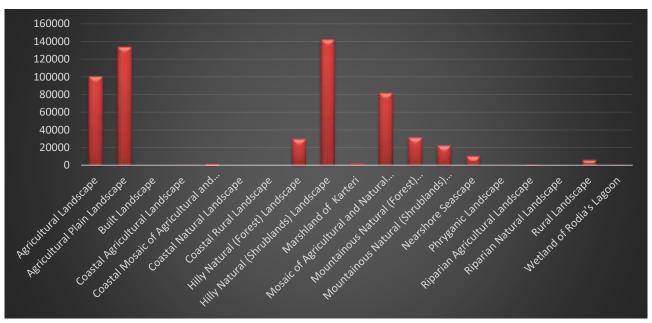
Figure C.4-76 Landscape types crossed by the pipeline route.





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Prepared by: ASPROFOS, 2022.

Figure C.4-77 Bar chart with landscape types crossed by the pipeline route (in km)

Table C.4-5 Characteristic landscape types along the route.

Characteristic landscape type	From KP	То КР	Distance (m)
Project Component: CCS1 - Peloponnese			
Coastal Mosaic of Agricultural and Natural Landscape	0+000	1+217	1.217
Hilly Natural (Shrublands) Landscape	1+217	1+263	0.047
Coastal Mosaic of Agricultural and Natural Landscape	1+263	2+192	0.929
Hilly Natural (Shrublands) Landscape	2+192	7+637	5.445
Hilly Natural (Forest) Landscape	7+637	8+856	1.218
Mosaic of Agricultural and Natural (Shrublands) Landscape	8+856	9+553	0.697
Hilly Natural (Forest) Landscape	9+553	10+541	0.989
Mosaic of Agricultural and Natural (Shrublands) Landscape	10+541	11+204	0.663
Hilly Natural (Forest) Landscape	11+204	13+388	2.184
Agricultural Landscape	13+388	14+498	1.110
Hilly Natural (Shrublands) Landscape	14+498	15+521	1.023
Agricultural Landscape	15+521	15+609	0.088
Hilly Natural (Shrublands) Landscape	15+609	15+864	0.254





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Characteristic landscape type	From KP	То КР	Distance (m)
Mosaic of Agricultural and Natural (Shrublands) Landscape	15+864	16+019	0.155
Hilly Natural (Shrublands) Landscape	16+019	19+079	3.060
Agricultural Landscape	19+079	23+380	4.301
Hilly Natural (Shrublands) Landscape	23+380	26+203	2.822
Mosaic of Agricultural and Natural (Shrublands) Landscape	26+203	26+873	0.670
Hilly Natural (Shrublands) Landscape	26+873	28+257	1.385
Agricultural Plain Landscape	28+257	28+618	0.361
Hilly Natural (Shrublands) Landscape	28+618	28+708	0.090
Agricultural Plain Landscape	28+708	39+907	11.199
Hilly Natural (Shrublands) Landscape	39+907	45+085	5.177
Mosaic of Agricultural and Natural (Shrublands) Landscape	45+085	45+612	0.528
Hilly Natural (Shrublands) Landscape	45+612	46+792	1.179
Agricultural Landscape	46+792	47+084	0.293
Hilly Natural (Shrublands) Landscape	47+084	47+090	0.006
Agricultural Landscape	47+090	48+683	1.593
Hilly Natural (Shrublands) Landscape	48+683	49+159	0.476
Agricultural Landscape	49+159	50+784	1.625
Hilly Natural (Shrublands) Landscape	50+784	59+267	8.483
Agricultural Landscape	59+267	59+639	0.372
Mosaic of Agricultural and Natural (Shrublands) Landscape	59+639	60+180	0.541
Agricultural Landscape	60+180	69+322	9.142
Hilly Natural (Shrublands) Landscape	69+322	69+997	0.675
Mosaic of Agricultural and Natural (Shrublands) Landscape	69+997	70+708	0.710
Hilly Natural (Shrublands) Landscape	70+708	71+301	0.593
Agricultural Landscape	71+301	73+269	1.968
Hilly Natural (Shrublands) Landscape	73+269	73+427	0.158
Agricultural Landscape	73+427	74+218	0.791
Hilly Natural (Shrublands) Landscape	74+218	75+186	0.968
Agricultural Landscape	75+186	78+222	3.035
Hilly Natural (Shrublands) Landscape	78+222	79+362	1.140
Agricultural Landscape	79+362	79+574	0.212
Hilly Natural (Shrublands) Landscape	79+574	79+995	0.421





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Characteristic landscape type	From KP	То КР	Distance (m)
Agricultural Landscape	79+995	80+551	0.556
Hilly Natural (Shrublands) Landscape	80+551	81+436	0.885
Agricultural Landscape	81+436	81+962	0.526
Hilly Natural (Shrublands) Landscape	81+962	87+501	5.539
Mosaic of Agricultural and Natural (Shrublands) Landscape	87+501	92+113	4.612
Hilly Natural (Shrublands) Landscape	92+113	93+038	0.925
Mosaic of Agricultural and Natural (Shrublands) Landscape	93+038	93+692	0.655
Hilly Natural (Shrublands) Landscape	93+692	95+176	1.483
Agricultural Landscape	95+176	95+653	0.477
Hilly Natural (Shrublands) Landscape	95+653	95+882	0.230
Agricultural Landscape	95+882	100+564	4.682
Mosaic of Agricultural and Natural (Shrublands) Landscape	100+564	100+673	0.109
Hilly Natural (Shrublands) Landscape	100+673	102+350	1.677
Mosaic of Agricultural and Natural (Shrublands) Landscape	102+350	102+481	0.131
Agricultural Landscape	102+481	103+664	1.183
Hilly Natural (Forest) Landscape	103+664	107+542	3.879
Mosaic of Agricultural and Natural (Shrublands) Landscape	107+542	109+676	2.134
Hilly Natural (Forest) Landscape	109+676	109+949	0.273
Mosaic of Agricultural and Natural (Shrublands) Landscape	109+949	111+927	1.978
Agricultural Landscape	111+927	117+358	5.431
Mosaic of Agricultural and Natural (Shrublands) Landscape	117+358	128+940	11.582
Hilly Natural (Shrublands) Landscape	128+940	138+184	9.244
Mosaic of Agricultural and Natural (Shrublands) Landscape	138+184	139+358	1.174
Hilly Natural (Shrublands) Landscape	139+358	139+794	0.436
Mosaic of Agricultural and Natural (Shrublands) Landscape	139+794	139+797	0.004
Hilly Natural (Shrublands) Landscape	139+797	140+089	0.292
Mosaic of Agricultural and Natural (Shrublands) Landscape	140+089	141+302	1.213
Hilly Natural (Shrublands) Landscape	141+302	141+604	0.302
Mosaic of Agricultural and Natural (Shrublands) Landscape	141+604	143+210	1.606
Agricultural Landscape	143+210	145+542	2.332
Mosaic of Agricultural and Natural (Shrublands) Landscape	145+542	146+070	0.528
Agricultural Landscape	146+070	146+366	0.295





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Characteristic landscape type	From KP	То КР	Distance (m)
Hilly Natural (Forest) Landscape	146+366	146+532	0.166
Agricultural Landscape	146+532	146+796	0.264
Hilly Natural (Forest) Landscape	146+796	148+850	2.054
Agricultural Landscape	148+850	151+317	2.467
Mountainous Natural (Forest) Landscape	151+317	156+428	5.112
Agricultural Landscape	156+428	156+995	0.567
Hilly Natural (Forest) Landscape	156+995	158+602	1.607
Rural Landscape	158+602	159+778	1.176
Hilly Natural (Forest) Landscape	159+778	159+946	0.168
Hilly Natural (Shrublands) Landscape	159+946	160+089	0.142
Hilly Natural (Forest) Landscape	160+089	160+219	0.130
Hilly Natural (Shrublands) Landscape	160+219	163+370	3.152
Rural Landscape	163+370	163+582	0.211
Hilly Natural (Shrublands) Landscape	163+582	164+577	0.995
Rural Landscape	164+577	165+697	1.121
Agricultural Landscape	165+697	166+707	1.009
Hilly Natural (Shrublands) Landscape	166+707	169+165	2.458
Hilly Natural (Forest) Landscape	169+165	169+976	0.811
Hilly Natural (Shrublands) Landscape	169+976	170+403	0.427
Mountainous Natural (Shrublands) Landscape	170+403	171+003	0.600
Hilly Natural (Shrublands) Landscape	171+003	171+635	0.632
Mountainous Natural (Shrublands) Landscape	171+635	171+955	0.320
Hilly Natural (Shrublands) Landscape	171+955	176+589	4.635
Mountainous Natural (Shrublands) Landscape	176+589	177+020	0.431
Hilly Natural (Shrublands) Landscape	177+020	178+919	1.899
Mountainous Natural (Shrublands) Landscape	178+919	179+690	0.771
Hilly Natural (Shrublands) Landscape	179+690	181+030	1.339
Mountainous Natural (Shrublands) Landscape	181+030	181+405	0.375
Hilly Natural (Shrublands) Landscape	181+405	182+643	1.239
Hilly Natural (Forest) Landscape	182+643	183+141	0.497
Mountainous Natural (Forest) Landscape	183+141	190+165	7.024
Hilly Natural (Forest) Landscape	190+165	191+621	1.455





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Characteristic landscape type	From KP	То КР	Distance (m)
Mosaic of Agricultural and Natural (Shrublands) Landscape	191+621	193+456	1.835
Hilly Natural (Forest) Landscape	193+456	193+558	0.102
Mosaic of Agricultural and Natural (Shrublands) Landscape	193+558	193+808	0.250
Hilly Natural (Forest) Landscape	193+808	194+072	0.264
Mosaic of Agricultural and Natural (Shrublands) Landscape	194+072	195+054	0.982
Agricultural Landscape	195+054	195+348	0.295
Hilly Natural (Forest) Landscape	195+348	195+500	0.151
Agricultural Landscape	195+500	195+723	0.224
Hilly Natural (Forest) Landscape	195+723	195+817	0.094
Agricultural Landscape	195+817	196+171	0.353
Hilly Natural (Forest) Landscape	196+171	196+390	0.219
Agricultural Landscape	196+390	197+346	0.956
Mosaic of Agricultural and Natural (Shrublands) Landscape	197+346	197+648	0.302
Agricultural Landscape	197+648	199+184	1.536
Hilly Natural (Forest) Landscape	199+184	199+369	0.186
Agricultural Landscape	199+369	199+751	0.381
Hilly Natural (Forest) Landscape	199+751	199+797	0.046
Agricultural Landscape	199+797	200+090	0.293
Hilly Natural (Forest) Landscape	200+090	200+151	0.061
Agricultural Landscape	200+151	202+269	2.118
Riparian Natural Landscape	202+269	202+409	0.140
Agricultural Landscape	202+409	204+082	1.672
Riparian Natural Landscape	204+082	204+225	0.143
Agricultural Landscape	204+225	205+117	0.892
Mosaic of Agricultural and Natural (Shrublands) Landscape	205+117	207+873	2.756
Hilly Natural (Forest) Landscape	207+873	207+899	0.026
Mosaic of Agricultural and Natural (Shrublands) Landscape	207+899	209+270	1.372
Hilly Natural (Forest) Landscape	209+270	209+647	0.376
Mosaic of Agricultural and Natural (Shrublands) Landscape	209+647	209+881	0.234
Hilly Natural (Forest) Landscape	209+881	210+332	0.451
Agricultural Landscape	210+332	210+537	0.206
Hilly Natural (Forest) Landscape	210+537	210+632	0.094





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Characteristic landscape type	From KP	То КР	Distance (m)
Mosaic of Agricultural and Natural (Shrublands) Landscape	210+632	210+762	0.130
Agricultural Landscape	210+762	211+305	0.543
Mosaic of Agricultural and Natural (Shrublands) Landscape	211+305	211+938	0.633
Agricultural Landscape	211+938	212+400	0.462
Hilly Natural (Forest) Landscape	212+400	212+564	0.164
Agricultural Landscape	212+564	213+032	0.467
Hilly Natural (Forest) Landscape	213+032	213+225	0.193
Agricultural Landscape	213+225	213+614	0.389
Hilly Natural (Forest) Landscape	213+614	213+838	0.224
Agricultural Landscape	213+838	215+850	2.012
Mosaic of Agricultural and Natural (Shrublands) Landscape	215+850	215+939	0.089
Agricultural Landscape	215+939	216+082	0.143
Mosaic of Agricultural and Natural (Shrublands) Landscape	216+082	216+539	0.457
Hilly Natural (Forest) Landscape	216+539	216+572	0.033
Mosaic of Agricultural and Natural (Shrublands) Landscape	216+572	216+983	0.411
Hilly Natural (Forest) Landscape	216+983	217+079	0.096
Mosaic of Agricultural and Natural (Shrublands) Landscape	217+079	218+442	1.363
Agricultural Landscape	218+442	220+265	1.823
Hilly Natural (Forest) Landscape	220+265	220+540	0.275
Agricultural Landscape	220+540	226+754	6.214
Hilly Natural (Forest) Landscape	226+754	227+072	0.318
Mosaic of Agricultural and Natural (Shrublands) Landscape	227+072	228+383	1.311
Hilly Natural (Forest) Landscape	228+383	228+631	0.248
Mosaic of Agricultural and Natural (Shrublands) Landscape	228+631	228+994	0.363
Hilly Natural (Forest) Landscape	228+994	229+192	0.198
Mosaic of Agricultural and Natural (Shrublands) Landscape	229+192	231+304	2.111
Hilly Natural (Forest) Landscape	231+304	231+426	0.122
Hilly Natural (Shrublands) Landscape	231+426	231+571	0.145
Hilly Natural (Forest) Landscape	231+571	231+754	0.183
Hilly Natural (Shrublands) Landscape	231+754	232+142	0.388
Mosaic of Agricultural and Natural (Shrublands) Landscape	232+142	232+540	0.398
Hilly Natural (Shrublands) Landscape	232+540	233+099	0.559





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Characteristic landscape type	From KP	То КР	Distance (m)
Mosaic of Agricultural and Natural (Shrublands) Landscape	233+099	233+574	0.475
Hilly Natural (Shrublands) Landscape	233+574	233+738	0.164
Mosaic of Agricultural and Natural (Shrublands) Landscape	233+738	234+028	0.290
Hilly Natural (Shrublands) Landscape	234+028	234+256	0.229
Mosaic of Agricultural and Natural (Shrublands) Landscape	234+256	234+333	0.077
Hilly Natural (Shrublands) Landscape	234+333	234+765	0.432
Mosaic of Agricultural and Natural (Shrublands) Landscape	234+765	236+751	1.986
Agricultural Landscape	236+751	236+826	0.075
Mosaic of Agricultural and Natural (Shrublands) Landscape	236+826	237+738	0.912
Agricultural Landscape	237+738	239+180	1.443
Mosaic of Agricultural and Natural (Shrublands) Landscape	239+180	239+678	0.497
Agricultural Landscape	239+678	241+002	1.325
Mosaic of Agricultural and Natural (Shrublands) Landscape	241+002	241+215	0.213
Agricultural Landscape	241+215	243+173	1.958
Mosaic of Agricultural and Natural (Shrublands) Landscape	243+173	243+598	0.425
Agricultural Landscape	243+598	243+921	0.323
Mosaic of Agricultural and Natural (Shrublands) Landscape	243+921	244+069	0.148
Agricultural Landscape	244+069	247+372	3.304
Riparian Natural Landscape	247+372	247+477	0.105
Agricultural Landscape	247+477	250+770	3.293
Mosaic of Agricultural and Natural (Shrublands) Landscape	250+770	251+024	0.253
Agricultural Landscape	251+024	251+282	0.258
Mosaic of Agricultural and Natural (Shrublands) Landscape	251+282	252+098	0.816
Agricultural Plain Landscape	252+098	255+088	2.990
Mosaic of Agricultural and Natural (Shrublands) Landscape	255+088	255+368	0.280
Agricultural Landscape	255+368	256+428	1.059
Mosaic of Agricultural and Natural (Shrublands) Landscape	256+428	258+005	1.577
Agricultural Landscape	258+005	259+702	1.698
Hilly Natural (Shrublands) Landscape	259+702	260+893	1.191
Agricultural Landscape	260+893	261+119	0.226
Hilly Natural (Shrublands) Landscape	261+119	261+271	0.152
Agricultural Landscape	261+271	261+371	0.100





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Characteristic landscape type	From KP	То КР	Distance (m)
Hilly Natural (Shrublands) Landscape	261+371	261+641	0.270
Agricultural Landscape	261+641	263+298	1.657
Riparian Agricultural Landscape	263+298	263+422	0.123
Agricultural Landscape	263+422	264+296	0.875
Hilly Natural (Shrublands) Landscape	264+296	265+080	0.783
Agricultural Landscape	265+080	266+446	1.367
Hilly Natural (Shrublands) Landscape	266+446	269+570	3.124
Agricultural Landscape	269+570	270+184	0.614
Hilly Natural (Shrublands) Landscape	270+184	278+050	7.866
Hilly Natural (Forest) Landscape	278+050	278+322	0.272
Hilly Natural (Shrublands) Landscape	278+322	278+945	0.623
Hilly Natural (Forest) Landscape	278+945	280+097	1.152
Hilly Natural (Shrublands) Landscape	280+097	280+976	0.879
Hilly Natural (Forest) Landscape	280+976	281+042	0.066
Hilly Natural (Shrublands) Landscape	281+042	284+018	2.976
Rural Landscape	284+018	284+311	0.293
Hilly Natural (Shrublands) Landscape	284+311	285+068	0.757
Agricultural Landscape	285+068	285+223	0.155
Hilly Natural (Shrublands) Landscape	285+223	285+340	0.117
Agricultural Landscape	285+340	288+063	2.723
Rural Landscape	288+063	288+537	0.474
Agricultural Plain Landscape	288+537	289+814	1.278
Rural Landscape	289+814	290+763	0.949
Agricultural Plain Landscape	290+763	295+781	5.018
Rural Landscape	295+781	296+286	0.504
Agricultural Plain Landscape	296+286	300+026	3.741
Coastal Rural Landscape	300+026	300+044	0.018
Nearshore Seascape	300+044	300+058	0.014
Project Component: Megalopoli Branch			
Mosaic of Agricultural and Natural (Shrublands) Landscape	0+000	0+911	0.911
Hilly Natural (Shrublands) Landscape	0+911	1+648	0.737
Mosaic of Agricultural and Natural (Shrublands) Landscape	1+648	1+826	0.178





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Characteristic landscape type	From KP	То КР	Distance (m)
Hilly Natural (Shrublands) Landscape	1+826	4+662	2.836
Mosaic of Agricultural and Natural (Shrublands) Landscape	4+662	8+286	3.623
Rural Landscape	8+286	9+893	1.607
Project Component: CCS2 – Western Continental Greece			
Nearshore Seascape	0+000	0+023	0.023
Coastal Agricultural Landscape	0+023	0+309	0.287
Agricultural Plain Landscape	0+309	8+575	8.266
Riparian Agricultural Landscape	8+575	9+002	0.427
Agricultural Plain Landscape	9+002	9+269	0.267
Mosaic of Agricultural and Natural (Shrublands) Landscape	9+269	9+590	0.321
Mountainous Natural (Forest) Landscape	9+590	9+795	0.205
Hilly Natural (Shrublands) Landscape	9+795	9+906	0.111
Mountainous Natural (Forest) Landscape	9+906	10+067	0.161
Hilly Natural (Shrublands) Landscape	10+067	13+119	3.052
Mountainous Natural (Forest) Landscape	13+119	26+942	13.823
Mosaic of Agricultural and Natural (Shrublands) Landscape	26+942	28+032	1.090
Agricultural Plain Landscape	28+032	56+532	28.500
Agricultural Landscape	56+532	56+781	0.249
Riparian Agricultural Landscape	56+781	57+862	1.081
Agricultural Plain Landscape	57+862	60+681	2.819
Rural Landscape	60+681	60+769	0.088
Agricultural Plain Landscape	60+769	64+303	3.534
Hilly Natural (Shrublands) Landscape	64+303	64+401	0.098
Agricultural Plain Landscape	64+401	65+173	0.772
Hilly Natural (Shrublands) Landscape	65+173	73+083	7.909
Agricultural Landscape	73+083	73+422	0.339
Hilly Natural (Shrublands) Landscape	73+422	84+890	11.468
Hilly Natural (Forest) Landscape	84+890	84+897	0.007
Hilly Natural (Shrublands) Landscape	84+897	85+318	0.421
Hilly Natural (Forest) Landscape	85+318	85+754	0.436
Hilly Natural (Shrublands) Landscape	85+754	88+024	2.271
Hilly Natural (Forest) Landscape	88+024	88+046	0.022





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Characteristic landscape type	From KP	То КР	Distance (m)
Mosaic of Agricultural and Natural (Shrublands) Landscape	88+046	89+988	1.942
Hilly Natural (Shrublands) Landscape	89+988	90+162	0.174
Mosaic of Agricultural and Natural (Shrublands) Landscape	90+162	90+379	0.217
Hilly Natural (Shrublands) Landscape	90+379	90+865	0.486
Mosaic of Agricultural and Natural (Shrublands) Landscape	90+865	91+097	0.232
Hilly Natural (Shrublands) Landscape	91+097	91+213	0.116
Mosaic of Agricultural and Natural (Shrublands) Landscape	91+213	91+322	0.109
Hilly Natural (Shrublands) Landscape	91+322	92+141	0.819
Mosaic of Agricultural and Natural (Shrublands) Landscape	92+141	92+355	0.214
Hilly Natural (Shrublands) Landscape	92+355	93+856	1.501
Mosaic of Agricultural and Natural (Shrublands) Landscape	93+856	94+081	0.225
Hilly Natural (Shrublands) Landscape	94+081	94+129	0.048
Mosaic of Agricultural and Natural (Shrublands) Landscape	94+129	95+933	1.804
Hilly Natural (Forest) Landscape	95+933	96+176	0.243
Mosaic of Agricultural and Natural (Shrublands) Landscape	96+176	96+376	0.200
Hilly Natural (Forest) Landscape	96+376	96+945	0.569
Mosaic of Agricultural and Natural (Shrublands) Landscape	96+945	97+401	0.456
Hilly Natural (Shrublands) Landscape	97+401	97+832	0.431
Mosaic of Agricultural and Natural (Shrublands) Landscape	97+832	98+145	0.313
Hilly Natural (Shrublands) Landscape	98+145	98+551	0.406
Mosaic of Agricultural and Natural (Shrublands) Landscape	98+551	98+879	0.328
Hilly Natural (Shrublands) Landscape	98+879	99+454	0.575
Mosaic of Agricultural and Natural (Shrublands) Landscape	99+454	99+685	0.231
Hilly Natural (Shrublands) Landscape	99+685	101+130	1.445
Hilly Natural (Forest) Landscape	101+130	101+332	0.202
Hilly Natural (Shrublands) Landscape	101+332	101+605	0.273
Hilly Natural (Forest) Landscape	101+605	101+872	0.267
Hilly Natural (Shrublands) Landscape	101+872	102+480	0.608
Mosaic of Agricultural and Natural (Shrublands) Landscape	102+480	102+943	0.463
Hilly Natural (Shrublands) Landscape	102+943	104+015	1.072
Mosaic of Agricultural and Natural (Shrublands) Landscape	104+015	104+362	0.346
Hilly Natural (Shrublands) Landscape	104+362	105+343	0.981





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Characteristic landscape type	From KP	То КР	Distance (m)
Mosaic of Agricultural and Natural (Shrublands) Landscape	105+343	107+724	2.380
Hilly Natural (Shrublands) Landscape	107+724	109+100	1.377
Mosaic of Agricultural and Natural (Shrublands) Landscape	109+100	109+796	0.696
Hilly Natural (Shrublands) Landscape	109+796	110+144	0.348
Hilly Natural (Forest) Landscape	110+144	111+545	1.401
Mountainous Natural (Shrublands) Landscape	111+545	113+458	1.913
Mountainous Natural (Forest) Landscape	113+458	116+463	3.005
Hilly Natural (Forest) Landscape	116+463	119+238	2.775
Mosaic of Agricultural and Natural (Shrublands) Landscape	119+238	119+365	0.126
Hilly Natural (Forest) Landscape	119+365	120+794	1.430
Rural Landscape	120+794	120+916	0.122
Mountainous Natural (Forest) Landscape	120+916	121+030	0.114
Rural Landscape	121+030	121+181	0.151
Mountainous Natural (Forest) Landscape	121+181	121+822	0.641
Agricultural Landscape	121+822	122+072	0.250
Mountainous Natural (Forest) Landscape	122+072	123+060	0.988
Mosaic of Agricultural and Natural (Shrublands) Landscape	123+060	127+220	4.160
Agricultural Plain Landscape	127+220	134+850	7.630
Riparian Agricultural Landscape	134+850	134+942	0.092
Agricultural Plain Landscape	134+942	135+830	0.888
Rural Landscape	135+830	135+953	0.123
Agricultural Plain Landscape	135+953	159+590	23.636
Wetland of Rodia's Lagoon	159+590	160+032	0.442
Agricultural Plain Landscape	160+032	175+388	15.355
Mountainous Natural (Shrublands) Landscape	175+388	175+623	0.235
Agricultural Plain Landscape	175+623	176+897	1.275
Hilly Natural (Forest) Landscape	176+897	177+193	0.296
Agricultural Plain Landscape	177+193	177+291	0.098
Hilly Natural (Forest) Landscape	177+291	177+347	0.055
Agricultural Plain Landscape	177+347	178+428	1.081
Mosaic of Agricultural and Natural (Shrublands) Landscape	178+428	179+086	0.658
Agricultural Landscape	179+086	180+730	1.644





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Characteristic landscape type	From KP	То КР	Distance (m)
Mosaic of Agricultural and Natural (Shrublands) Landscape	180+730	180+877	0.146
Mountainous Natural (Shrublands) Landscape	180+877	181+083	0.207
Mosaic of Agricultural and Natural (Shrublands) Landscape	181+083	181+884	0.801
Hilly Natural (Shrublands) Landscape	181+884	182+050	0.165
Mosaic of Agricultural and Natural (Shrublands) Landscape	182+050	182+294	0.244
Hilly Natural (Shrublands) Landscape	182+294	184+469	2.175
Agricultural Landscape	184+469	186+159	1.689
Hilly Natural (Forest) Landscape	186+159	186+323	0.164
Agricultural Landscape	186+323	187+058	0.735
Hilly Natural (Forest) Landscape	187+058	187+293	0.235
Agricultural Landscape	187+293	187+468	0.175
Hilly Natural (Forest) Landscape	187+468	187+675	0.206
Mosaic of Agricultural and Natural (Shrublands) Landscape	187+675	188+108	0.433
Hilly Natural (Shrublands) Landscape	188+108	188+469	0.362
Mosaic of Agricultural and Natural (Shrublands) Landscape	188+469	188+675	0.206
Hilly Natural (Shrublands) Landscape	188+675	188+894	0.218
Mosaic of Agricultural and Natural (Shrublands) Landscape	188+894	188+990	0.097
Hilly Natural (Shrublands) Landscape	188+990	189+725	0.735
Mosaic of Agricultural and Natural (Shrublands) Landscape	189+725	190+245	0.520
Hilly Natural (Shrublands) Landscape	190+245	193+123	2.878
Agricultural Plain Landscape	193+123	201+399	8.276
Agricultural Landscape	201+399	202+853	1.455
Mountainous Natural (Shrublands) Landscape	202+853	203+315	0.462
Agricultural Landscape	203+315	205+442	2.127
Hilly Natural (Shrublands) Landscape	205+442	206+209	0.767
Agricultural Landscape	206+209	208+250	2.041
Mountainous Natural (Shrublands) Landscape	208+250	215+479	7.229
Mosaic of Agricultural and Natural (Shrublands) Landscape	215+479	216+448	0.969
Agricultural Plain Landscape	216+448	218+980	2.532
Marshland of Karteri	218+980	219+306	0.326
Agricultural Plain Landscape	219+306	219+722	0.416
Marshland of Karteri	219+722	219+897	0.175





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Characteristic landscape type	From KP	То КР	Distance (m)
Agricultural Plain Landscape	219+897	220+483	0.586
Marshland of Karteri	220+483	221+899	1.416
Agricultural Plain Landscape	221+899	222+163	0.264
Mountainous Natural (Shrublands) Landscape	222+163	222+970	0.807
Agricultural Plain Landscape	222+970	223+392	0.422
Mountainous Natural (Shrublands) Landscape	223+392	224+838	1.446
Agricultural Plain Landscape	224+838	226+215	1.377
Hilly Natural (Shrublands) Landscape	226+215	227+001	0.786
Agricultural Plain Landscape	227+001	228+006	1.005
Mosaic of Agricultural and Natural (Shrublands) Landscape	228+006	228+409	0.403
Hilly Natural (Shrublands) Landscape	228+409	233+127	4.718



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9 C.4.6. Characteristic Landscape Types at Project's Main Stations

The location of the line valve stations, and mainly of the Main Stations, i.e. Crete Facilities (CS2/MS2-CS2/MS2 & CS2/MS2-CS2/MS2N), CS3 and MS4/PRS4 & Heating Station, which are the main permanent facilities of the project - has been selected so as to have easy access and to reduce any possible negative impacts, according to the criteria imposed by the relevant legislation and have been adopted by the engineer of the project.

Compressor facilities (in Crete and in Achaia) are located within Agricultural Landscapes, whilst the Megalopoli facilities within an area characterized as a Mosaic of Agricultural and Natural (Shrublands) Landscape (Table C.4-7). Most of the line valve stations are located within agricultural landscapes (either Agricultural Landscapes of mixed mainly perennial but also annual crops or Agricultural Plain Landscape dominataed by annual crops) (Table C.4-6).

Table C.4-6 brings together the typical landscape types of the blockvalve stations' sites while Table C.4-7 of the main permanent facilities of the project.

Table C.4-6 Characterictic types of landscape at the valve-stations.

STATION No.	STATION TYPE	Landscape Type
LS03/SS01	Land Fall Station / Scraper Station	Coastal Mosaic of Agricultural and Natural Landscape
BVS02	Block Valve Station	Hilly Natural (Shrublands) Landscape
BVS03	Block Valve Station	Hilly Natural (Shrublands) Landscape
BVS04	Block Valve Station	Hilly Natural (Shrublands) Landscape
BVS05	Block Valve Station	Agricultural Landscape
SS Perivolia	Scraper Station	Rural Landscape
BVS07	Block Valve Station	Hilly Natural (Shrublands) Landscape
BVS08	Block Valve Station	Agricultural Landscape
BVS09	Block Valve Station	Agricultural Landscape
BVS10	Block Valve Station	Agricultural Landscape
BVS12	Block Valve Station	Agricultural Landscape
LS04	Land Fall Station	Agricultural Plain Landscape
LS05/SS04	Land Fall Station / Scraper Station	Agricultural Plain Landscape
BVS15	Block Valve Station	Agricultural Plain Landscape
BVS16	Block Valve Station	Agricultural Plain Landscape
BVS17	Block Valve Station	Mosaic of Agricultural and Natural (Shrublands) Landscape





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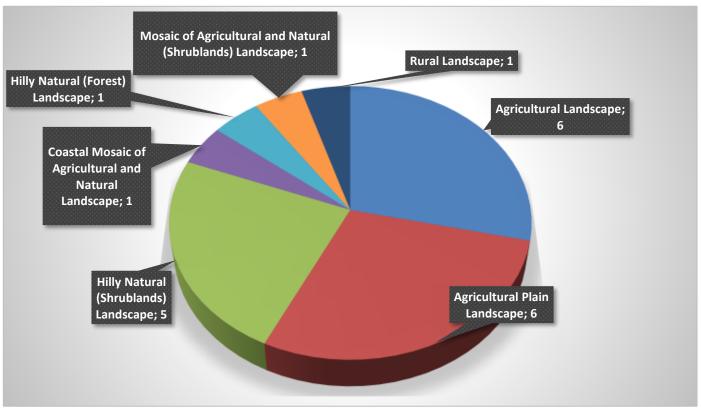
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STATION No.	STATION TYPE	Landscape Type
SS05	Scraper Station	Hilly Natural (Forest) Landscape
BVS19	Block Valve Station	Agricultural Plain Landscape
BVS20	Block Valve Station	Agricultural Plain Landscape
BVS21	Block Valve Station	Agricultural Landscape
SS06	Scraper Station	Hilly Natural (Shrublands) Landscape

it is noted that:

- LS02 is located within Crete Facilities
- BVS06 and SS02 are located within MS/PRS4 & Heating Station
- BVS11 and SS03 are located within CS3
- BVS13 corresponds to LS04
- BVS14 corresponds to LS05
- BVS18 corresponds to SS05

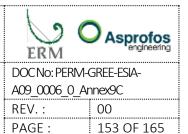
Prepared by: ASPROFOS, 2022.



Prepared by: ASPROFOS, 2022. Labels include landscape type and number of Line Valve Stations located within each landscape type.

Figure C.4-78 Landscape types within which Line Valve Stations are located.





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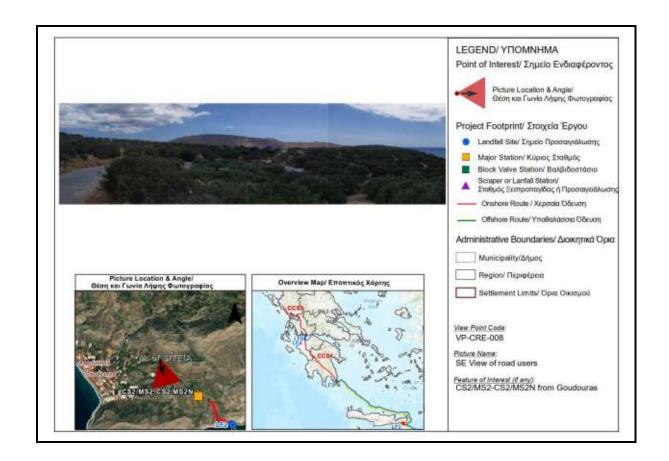
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Table C.4-7 Characterictic landscape types at the site locations of the project.

Code	Name	Characteristic Landscape Type
CS2/MS2-CS2/MS2N	Crete Facilities (Compressor and Metering Station for South Line and Compressor and Metering Station for the North Line)	Agricultural Landscape. It is noted that according to the mapping, a negligible area (of 4%) is classified as Hilly Natural (Shrublands) Landscape but cannot change the landscape character of the facilities.
CS3	Compressor Station at Achaia	Agricultural Landscape.
MS4/PRS4 & Heating Station	Metering and Pressure Regulating Station and Heating Station	Mosaic of Agricultural and Natural (Shrublands) Landscape

Prepared by: ASPROFOS, 2022.

In particular, for the locations of the main permanent facilities of the Project, the following photographs were taken¹⁰ to record landscape baseline.



¹⁰ Details on the selection of the ViewPoints (e.g. location, date, source, etc) are provided in Annex 9J





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Prepared by: ASPROFOS, 2022.

Figure C.4-79 Crete Facilities – SE View of Road Users (CS2/MS2-CS2/MS2N, VP-CRE-008)

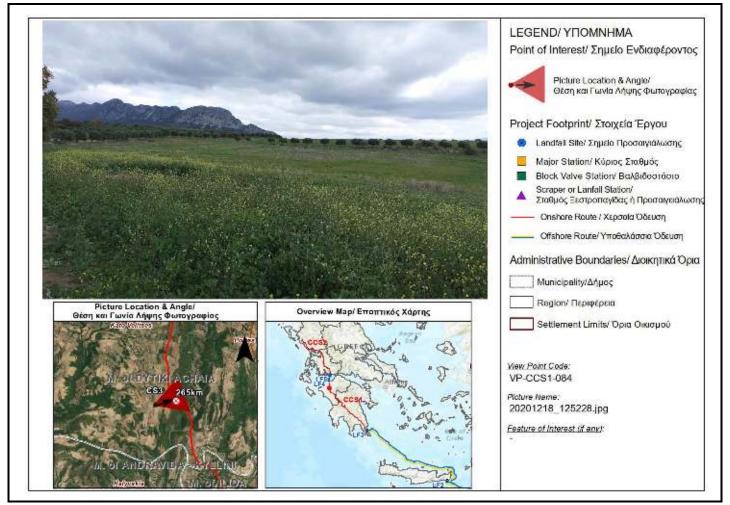


Figure C.4-80 Achaia Facilities – SW View of Road Users (CS3, VP-CCS1-084)





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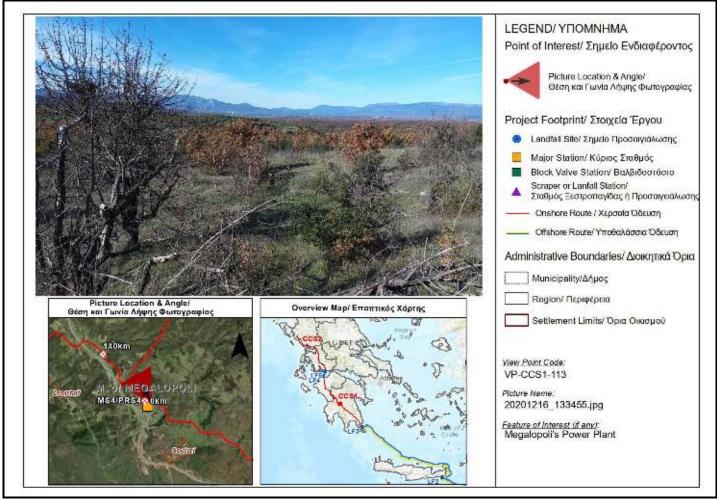


Figure C.4-81 Megalopoli Facilities – NW View of Road Users (MS4/PRS4 & Heating Station, VP-CCS1-113)





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9 C.5. LANDSCAPE SENSITIVITY

Based on the descriptions of the typical types of landscapes identified in the wider project area of the project as well as the analysis of the methodology presented in Section 9 C.3, Table C.5-1 has been compiled summarizing the typical landscape types which the pipeline crosses, the estimated sensitivity and their value and the intensity of the change they are expected to undergo.



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Table C.5-1 Estimation of the intensity of the change, based on landscape's sensitivity and value.

Landscape character types (sections crossed)	Sections	Total length in landscape type (m)	Sensitivity of landscape	Value of landscape	Intensity of change
Agricultural Landscape (47)	CCS1-PeloponneseCCS2-West GreeceCR-Inlet Short OnshoreMegalopolis Branch	100116	Low	Low	Low
Agricultural Plain Landscape (25)	CCS1-PeloponneseCCS2-West Greece	133585	Low	Low	Low
Built Landscape (2)	CR-Inlet Short Onshore	59	Low	Low	Low
Coastal Agricultural Landscape(1)	CCS2-West Greece	287	Low	Moderate	Low
Coastal Mosaic of Agricultural and Natural Landscape (1)	CCS1-Peloponnese	2145	Moderate	Moderate	Moderate
Coastal Rural Landscape (1)	• CCS1-Peloponnese	18	Low	High	Moderate
Hilly Natural (Forest) Landscape (33)	CCS1-PeloponneseCCS2-West GreeceMegalopolis Branch	29419	High	High	High
Hilly Natural (Shrublands) Landscape (38)	CCS1-PeloponneseCCS2-West GreeceMegalopolis Branch	142173	Moderate	High	High
Marshland of Karteri (1)	CCS2-West Greece	1917	Moderate	Moderate	Moderate



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Landscape character types (sections crossed)	Sections	Total length in landscape type (m)	Sensitivity of landscape	Value of landscape	Intensity of change
Mosaic of Agricultural and Natural (Shrublands) Landscape (46)	CCS1-PeloponneseCCS2-West GreeceMegalopolis Branch	81346	Moderate	Moderate	Moderate
Mountainous Natural (Forest) Landscape (10)	CCS1-PeloponneseCCS2-West Greece	31074	High	High	High
Mountainous Natural (Shrublands) Landscape (7)	CCS1-PeloponneseCCS2-West Greece	22013	High	High	High
Nearshore Seascape (6)	CCS1-PeloponneseCCS2-West GreeceCR-Inlet Short Onshore	10097	High	High	High
Phryganic Landscape (2)	CR-Inlet Short Onshore	525	Low	Moderate	Low
Riparian Agricultural Landscape (5)	CCS1-PeloponneseCCS2-West Greece	1723	Moderate	Moderate	Moderate
Riparian Natural Landscape (3)	CCS1-PeloponneseCCS2-West Greece	388	High	Moderate	High
Rural Landscape (7)	CCS1-PeloponneseCCS2-West GreeceCR-Inlet Short Onshore	6016	Low	Low	Low
Wetland of Rodia's Lagoon (1)	CCS2-West Greece	442	Moderate	Moderate	Moderate





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9 C.6. PHOTOREALISTICS AND OPTICAL DESIGNATION ZONE OF THE MAIN ENVIRONMENTAL INSTALLATIONS

9 C.6.1. Generally

For the purposes of the present study, it was opted to prepare photorealistics/ photomontages and to calculate the Zone of Visual Impact (ZOE) for the main onshore facilities of the project, namely:

- Crete Facilities, including Compressor and Metering Stations for Southern and Northern Lines
- Megalopoli Facilities, including Metering, Pressure Regulating and Heating Station
- Compression Station at Achaia's area

The rest of the facilities (Line Valve Stations) were not considered large enough to interact with the landscape.

9 C.6.2. Photorealistics/ Photomontages

9 C.6.2.1 Introduction

Photorealism is the three-dimensional representation of buildings or other design objects by means of a computer, with faithful representation of materials, colors and lighting based on the two-dimensional drawings of the object.

Its purpose is to simulate the new landscape conditions that will be created due to the installation of the project in the specific area as realistically as possible.

During the fieldwork a visit was made to specific locations that are directly visible to the location of the installation of the project component in question. The points were selected so that they are representative for use in the photomontage that will show how the installation of the project will appear when it starts functioning.

The Location of each photo was accurately recorded by GPS as well as the picture angle. Due to software constraints, sometimes the picture angle was approximated when editing the photos.

Herebelow, the photorealistics of the Main Stations are presented.

9 C.6.2.2 Photorealistic of Crete Facilities

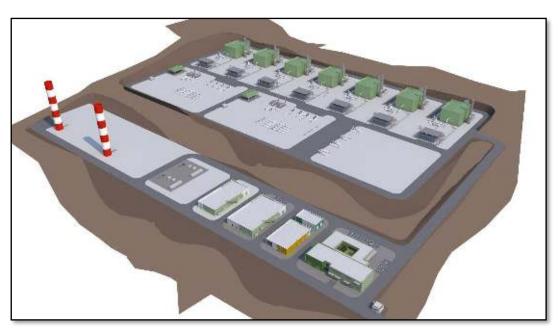




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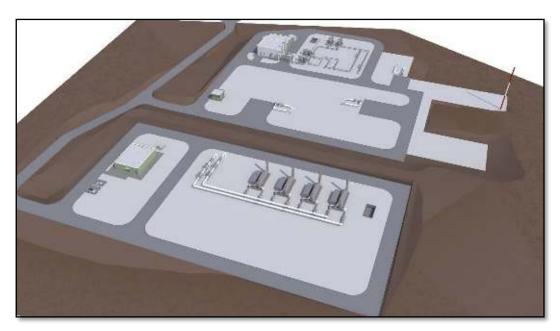
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Source: IGI Poseidon, 2022.

Figure C.6-1 Typical arrangement of Compressor and Metering Stations for Southern and Northern Lines at Crete (CS2/MS2-CS2/MS2N).

9 C.6.2.3 Photorealistic of Megalopoli Facilities



Source: IGI Poseidon, 2022.





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Figure C.6-2 Typical arrangement of Metering, Pressure Regulating and Heating Station in Megalopoli (MS4/PRS4 & Heating Station).

9 C.6.2.4 Photorealistic of Achaia Facilities



Source: IGI Poseidon, 2022.

Figure C.6-3 Typical arrangement of Compression Station at Achaia (CS3).

9 C.6.3. Zone of Visual Impact

The view of the project (through its representative element) by sensitive recipients of the area was assessed by calculating the Zone of Visual Impact (ZOE) for each facility.

The planned stations, CS2/MS2-CS2/MS2N at Atherinolakkos of Crete, MS/PRS4 & Heating Station near Soulari of Megalopoli, and CS3 near Kato Velitses of Achaia, are the largest facilities included in the Project. For this reason, the extent to which these facilities would be theoretically visible was assessed. Using the GIS application, the Zone of Visual Impact (ZVI) was identified and the theoretical area from which the installations will be visible was mapped.

ZVI is depicted in a map format, digitally calculated based on local topography and height of construction, without taking into account any obstruction to viewing provided by existing or future vegetation, buildings, etc.





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ZVI is considered theoretical as the area is computed digitally and is based on local topography without taking into account any obstacles from standing objects (e.g. vegetation, buildings, etc.). ZVI is depicted in a map format by covering a radius of 10 km from the center of the proposed compression stations.

Location and height for the highest point in the facility were used as input data. Specifically, in order to be more specific on location, a central point where each facility would be constructed was chosen. A 40-m vent stack chimney as the highest point was chosen for the Compressor Stations (i.e. CS2, CS2N, CS3) and a 10-m high radiocommunication antenna for the facilities at Megalopoli (MS4/PRS4 and Heationg Station), being the highest visible elements.

Below the Zone of Visual Impact maps for each installation.

