Contract 1B.5/2 Reconstruction of the bridge to ensure minimum clearance - road bridge in km 2.45 of the Warta River in Kostrzyn nad Odrą

Attachment 8 – Requirements in the scope of restoration of natural habitats

This attachment to the Environmental Management Plan for Contract 1B.5/2: Reconstruction of the bridge to ensure minimum clearance - road bridge in km 2.45 of the Warta River in Kostrzyn nad Odrą", presents the scope, method and schedule of measures aimed at restoring natural habitats.

RESTORING THE DESTROYED PART OF THE OXBOW



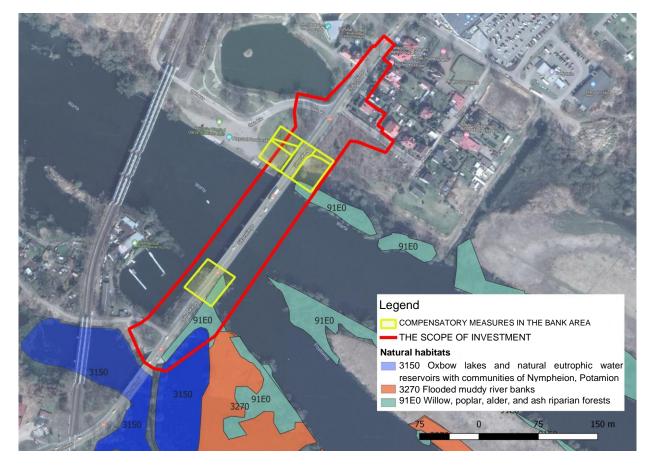
Environmental Management Plan

Contract 1B.5/2 Reconstruction of the bridge to ensure minimum clearance - road bridge in km 2.45 of the Warta River in Kostrzyn nad Odrą

Site of measures:	Plot no. 2/3, precinct Stare Miasto
Plot owner:	State Treasury, perpetual usufructuary: Warta Mouth National Park, Osada 1, 69-113 Górzyca Chyrzyno.
Plot area:	Total area of plot no. $2/3$ is approx. 42.7 ha, while the compensation measures will be implemented on a section of that plot having an area of around 1760 m^2 , within the boundaries of the project.
Scope:	The measure should consist in removing the soil of the road embankment leading to the provisional bridge, deepening a part of the riverbed, and introducing a vegetation cover. We recommend collecting the same plant material or another plant material that neighbours the oxbow.
Method of implementation:	 Removing the soil of the road embankment leading to the provisional bridge and transporting it out for disposal.
	 Shaping slopes inclined by 5–8° to crate shallow areas of 10–50 cm; other areas should be deepened to around 1.5 m.
	 To restore stable habitats quicker, it is required to use such measures as the displacement of rhizomes and the mud being a source of seeds and organisms, as well as the replanting of sedges.
	 On the banks, several to less than twenty metres from the edges of the restored w section, create hiding places for amphibians, such as stones or tree boughs.
Schedule:	The plant material should be moved after the growing season, preferably in the second half of October until mid-November (depending on the weather). The area of rhizome implanting must be flooded with water to protect it against frosting.
	We estimate that the habitat should be reinstated approximately 5 years after digging out and moving the plants.

Contract 1B.5/2 Reconstruction of the bridge to ensure minimum clearance - road bridge in km 2.45 of the Warta River in Kostrzyn nad Odrg

RECLAMATION OF THE LAND UNDER BRIDGE FLYOVERS (bank area)



Site of measures:	of	Plots no.:
		- left bank : 2/1, 2/3, 64, precinct Stare Miasto
		- right bank: 268/2, 346/11, 394/57, 345/1, 345/3, 394/42, precinct Śródmieście
Plot owner:		No. 2/1, 2/3, 64, precinct Stare Miasto: State Treasury, permanent management by Regional Water Management Authority in Poznań, ul. Chlebowa 4/8, 61-003 Poznań
		No. 268/2, precinct Śródmieście: State Treasury, permanent management by the General Directorate for National Roads and Motorways, ul. Żelazna 59, 00-848 Warsaw
		No. 346/11, precinct Śródmieście: Municipality of Kostrzyn nad Odrą, ul. Graniczna 2; 66-470 Kostrzyn nad Odrą
		No. 394/57, precinct Śródmieście: Municipality of Kostrzyn nad Odrą, ul. Graniczna 2; 66-470 Kostrzyn nad Odrą
		3

Attachment 8 – Requirements for the restoration of natural habitats

Environmental Management Plan

Contract 1B.5/2 Reconstruction of the bridge to ensure minimum clearance - road bridge in km 2.45 of the
Warta River in Kostrzyn nad Odrą

No. 345/1, precinct Śródmieście: Municipality of Kostrzyn nad Odrą, ul. Graniczna 2;
66-470 Kostrzyn nad Odrą

No. 345/3, 394/42, precinct Śródmieście: Municipality of Kostrzyn nad Odrą, ul. Graniczna 2; 66-470 Kostrzyn nad Odrą

Plot area: Total area of the plots intended for the said measures:

- 2/1: 61.0123 ha, including approx. 764 m² for the measures;

- 2/3: 42.6481 ha, including approx. 485 m² for the measures;
- 64: 0.5770 ha, including approx. 683 m² for the measures;
- 268: 1.8510 ha, including approx. 828 m² for the measures;
- 346/11: 0.7133 ha, including approx. 840 m² for the measures;
- 394/57: 10.3128ha, including approx. 1237 m² for the measures;
- 345/1: 0.2071 ha, including approx. 466 m² for the measures;
- 345/3: 0.0275 ha, including approx. 269 m² for the measures;
- 394/42: 0.1665 ha, including approx. 128 m² for the measures;

Scope: Reclamation of the land on both banks under the flyovers. The planned measures will cover the bank area being approx. 30 m wide and approx. 75 m long.

Method	of	-	Land levelling and placing a soil layer.
implementatio	on:	-	To avoid the growth of ruderal plants, it is required to sew a mixture of meadow grasses adequate to flood meadows.
Schedule:		The	preferable sowing time is April and May.