



# Supervision and Environmental Monitoring of River Training and Dredging Works on Critical Sectors on the Danube River

THIRD STAKEHOLDERS' FORUM MEETING – 21st of September 2018

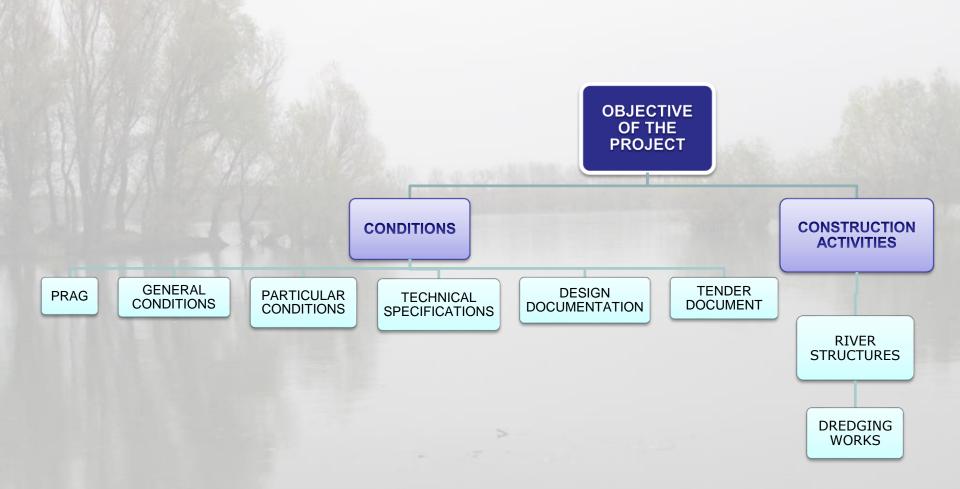
Republic of Serbia
Ministry of Construction,
Transport and Infrastructure



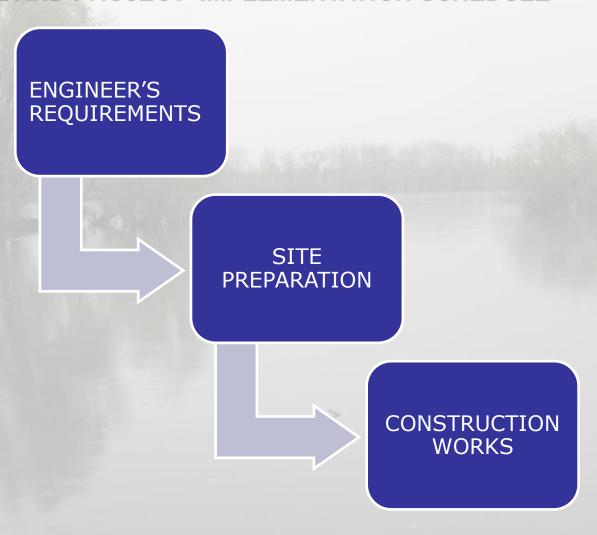


□ River Training and Dredging Works Programme





## PROGRAMME AND PROJECT IMPLEMENTATION SCHEDULE





# **ENGINEER'S REQUIREMENTS**



- 1) Principle office
- 2) Floating office
- 3) Vessel
- 4) Hydrographic survey equipment
- 5) ADCP equipment
- 6) Geodetic equipment
- 7) Installation of six Gauging Stations
- 7) Installation of IP cameras
- 8) Transportation on site



# SITE PREPARATION - CRITICAL SECTOR FUTOG

# Materials

- Geotextile
- Stone
- Laboratory
- Loading/unloading point

# Plant and personal

- Geotextile placing equipment
- Self unloading barge
- Rock placing plant
- Tugboat
- Engineers and Workers
- Vessel for survey

# Survey

- Calibration of the equipment
- Survey





	Nº		e of critical sector	Тур	e of works	Chainage from	to
X	18	Susek		Dredgi	ng A	1285+000	1283+950
				Dredgi	ng B	1282+650	1282+050
19 Euto	g.						1265+000
			Detached gro	<u>yne</u>	1263+350		
NOV1	21	Arankina	Ada	Dredgi	ng	1246+600	1245+300
Max Adie un	22	Čortanov	/ci	Dredgi	ng	1240+300	1239+350
1				Sill nº	1	1237+700	
				Sill nº	2	1237+150	
(12)				Sill nº	3a	1236+150	
				Sill nº	3b	1236+000	
$\sim (19)$	23	Beška		Dredgi	ng	1229+600	1227+400
	24	Preliv		Chrevo	n nº 1	1200+600	
				Chrevo	n nº 2	1199+800	
Sumika Nijisaica						24)	Preliv



# COMMENCEMENT OF WORKS - CRITICAL SECTOR 19

Rock material tests size 6-15 cm

Bathymetric survey – structures 19.1 / 19.2

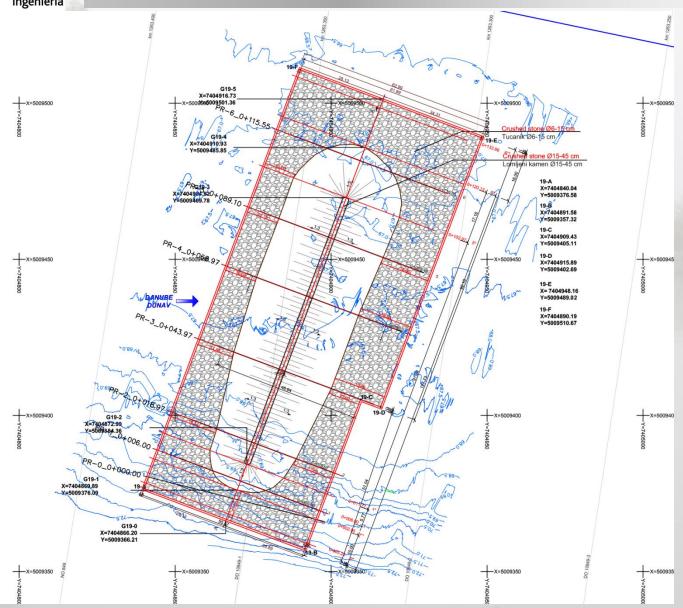
Geotextile material tests

Engineer's approvals

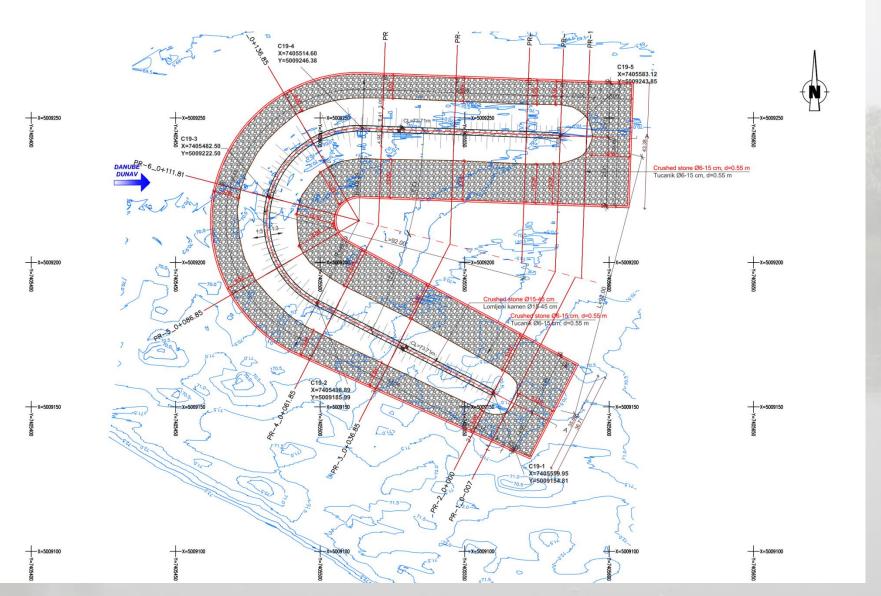
Method statement

NOTICE OF APPROVAL OF COMMENCEMENT OF WORKS (21st OF AUGUST 2018) -SECTOR FUTOG

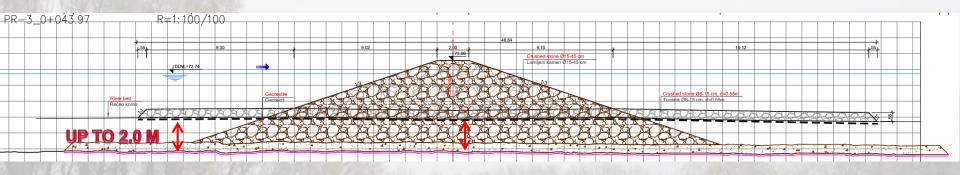












Materials	Unit	Quantity-19.1 (calculated in the Final Design)	Quantity-19.1 (calculated from new survey)
Geotextile	m²	5.632,00	7.785,00
Base layer (6/15 cm)	m³	3.098,00	4.237,00
Core of the structure (15/45 cm)	m³	4.732,00	8.786,00



# Construction method

Cleaning the riverbed



Laying the geotextile



Putting the stone material on the geotextile

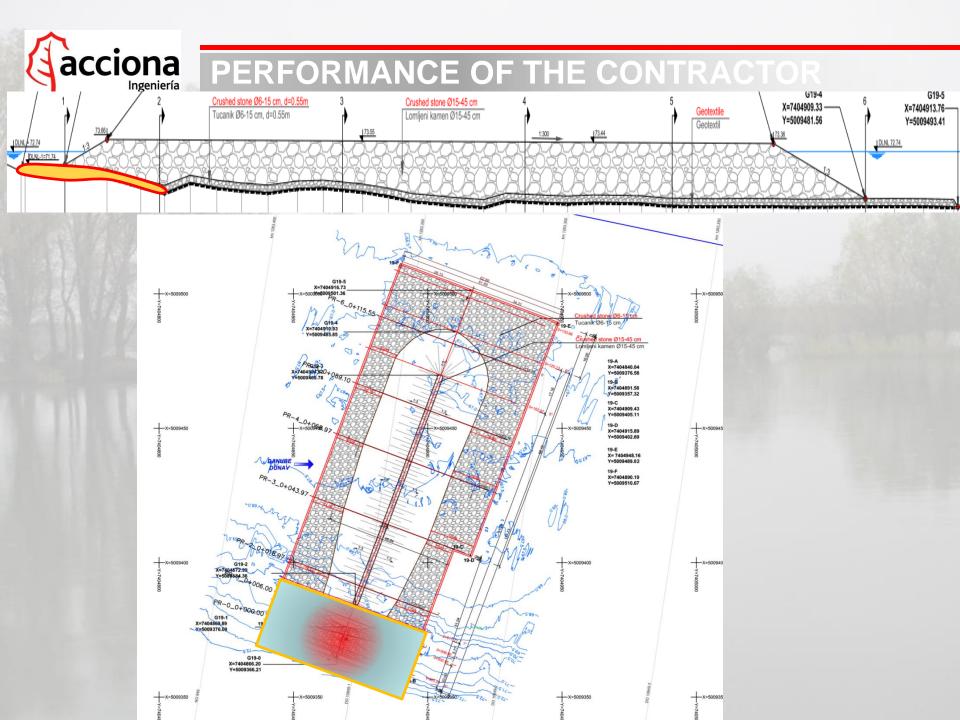




# acciona PERFORMANCE OF THE CONTRACTOR

Item	Activity	Planning date	Starting date
1	Handover and commissioning of all Engineer's Requirements	02.07.2018	Completed in due time
2	Start Construction Works of the first structure (detached groyne 19.1)	16.07.2018	21.08.2018
3	Start Construction Works of the structure (Chevron 24.1)	05.08.2018	Not started

No.	Equipment	Quantity
1	Geotextile placing equipment-roller	1
2	Rock placing plant with integrated excavator	1
3	Tugboat	1
4	Self unloading barge	1
5	Transportation barge	1



# Thank you for your attention

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