

THE DECISION

Based on Article 104 Paragraph 1 and Paragraph 2, Article 105 Paragraph 1 and Article 108 of the Act of 14th June 1960 Code of Administrative Procedure (Journal of Laws of 2017, Item 1257 as amended), hereinafter called KPA, and Articles 389; 397 Paragraph 2; Article 400 of the Act of 20th July 2017 Water Law (Journal of Laws of 2017, Item 1566 as amended), hereinafter – Water Law, after conducting the proceedings initiated at the request of State Water Holding Polish Waters, represented by Mr. Jacek Drabiński – Deputy Director of Regional Water Management Authority in Wrocław State Water Holding Polish Waters at the time of submitting the Application, on the issue of Water Law Permit, in particular for construction of hydraulic structures, water related services, water engineering and formation of new natural watercourses, running bridges, pipelines, wires in pipe sleeves or culverts through surface water flowing within the river's boundary lines and through flood banks, in connection with the implementation of the Project: *WFS Widawa – the rebuilding of the flood management system of the communes and municipalities Czernica, Długoleka, Wisznia Mała and Wrocław.*

I. I hereby grant Water Law Permit to the State Water Holding Polish Waters, Grzybowska 80/82 Street, 00-844 Warsaw, for the following:

1. construction of hydraulic structures, i.e. flood banks along right and left banks of Widawa River, and including the engineering infrastructure for the following sections:

1.1. Section No. 1 (from km 0+000 to km 0+998) – right bank with a length of 998 m and the following parameters:

- hydraulic class of the embankment	Class I
- maximum flow	Q=360 m ³ /s
- minimum elevation of the top of the embankment above maximum flow	0.3 m

1.1.1. flood bank (section from km 0+000 to km 0+034) of the following parameters:

- width of the top of the levee	4.5m – 6.5 m
- slope of the water slope	1:3
- slope of the dry slope	1:2.5
- level of the top of the levee at section's beginning	119.60 m a.s.l.
- level of the top of the levee at section's end	119.60 m a.s.l.
- beginning of the structure (km 0+000)	X = 5666191.1 Y = 6441395.2
- end of the structure (km 0+034)	X = 5666168.2 Y = 6441420.6

1.1.2 S3 flood wall (section from 0+034 to km 0+360.1) of the following parameters:

- length of the flood wall	328 m
- level of the top of the wall at the beginning	119.70 m a.s.l.
- level of the top of the wall at the beginning	119.70 m a.s.l.
- beginning of the structure (km 0+034)	X = 5666166.5 Y = 6441418.6
- end of the structure (km 0+360,1)	X = 5666067.2 Y = 6441705.1

1.1.3. flood bank (section from km 0+360,1 to km 0+613,4) of the following parameters:

- width of the top of the levee	5.0 m
- slope of the water slope	1:3

- slope of the dry slope	1:2.5
- level of the top of the levee at section's beginning	119.60 m a.s.l.
- level of the top of the levee at section's end	119.60 m a.s.l.
- beginning of the structure (km 0+360.1)	X = 5666070.0 Y = 6441705.2
- end of the structure (km 0+613.4)	X = 5665964.8 Y = 6441879.4

1.1.4. S1 flood wall (section from 0+613.4 to km 0+961.8) of the following parameters:

- length of the flood wall	350 m
- level of the top of the wall at the beginning	119.70 m a.s.l.
- level of the top of the wall at the beginning	120.10 m a.s.l.
- beginning of the structure (km 0+613.4)	X = 5665962.1 Y = 6441878.6
- end of the structure (km 0+961.8)	X = 5665955.7 Y = 6442217.2

1.1.5. flood bank (section from km 0+961,8 to km 0+998) of the following parameters:

- width of the top of the levee	6.5 m
- slope of the water slope	1:3
- slope of the dry slope	1:2.5
- level of the top of the levee at section's beginning	120.00 m a.s.l.
- level of the top of the levee at section's end	120.24 m a.s.l.
- beginning of the structure (km 0+961.8)	X = 5665958.2 Y = 6442216.1
- end of the structure (km 0+998)	X = 5665962.5 Y = 6442252.5

1.2. Section No. 2 (from km 0+000 to km 2+250) – right bank with a length of 2,250 m and the following parameters:

- hydraulic class of the embankment	Class II
- base flow $p=1.0\%$	$Q_{1\%}=74.3 \text{ m}^3/\text{s}$
- control flow $p=0.3\%$	$Q_{0.3\%}=89.0 \text{ m}^3/\text{s}$
- minimal elevation of the top of the levee above base flow	1.0 m
- minimal elevation of the top of the levee above control flow	0.3 m
- width of the top of the levee	4.0 m – 4.5 m
- slope of the water slope	1:3
- slope of the dry slope	1:2.5
- level of the top of the levee at section's beginning	120.23 m a.s.l.
- level of the top of the levee at section's end	120.00 m a.s.l.
- beginning of the structure (km 0+000)	X = 5665962.5; Y = 6442252.5
- end of the structure (km 2+250)	X = 5665426.7; Y = 6444336.3

1.3. Section No. 3 (from km 0+000 to km 1+612) – right bank with a length of 1,612 m of the following parameters:

- hydraulic class of the embankment	Class II
- base flow $p=1.0\%$	$Q_{1\%}=74.3 \text{ m}^3/\text{s}$
- control flow $p=0.3\%$	$Q_{0.3\%}=89.0 \text{ m}^3/\text{s}$
- minimal elevation of the top of the levee above base flow	1.0 m
- minimal elevation of the top of the levee above control flow	0.3 m
- width of the top of the levee	4.0 m – 5.0m
- slope of the water slope	1:3
- slope of the dry slope	1:2.5
- level of the top of the levee at section's beginning	120.60 m a.s.l.
- level of the top of the levee at section's end	121.00 m a.s.l.

- beginning of the structure (km 0+000) X = 5665708.1; Y = 6444906.8
- end of the structure (km 1+612) X = 5664670.2; Y = 6445532.7

1.4. Section No. 4 (from km 0+000 to km 2+623) – left bank with a length of 2,623 m and the following parameters:

- hydraulic class of the embankment Class I
- maximum flow Q=360 m³/s
- minimal elevation of the top of the levee above maximum flow 0.3 m
- width of the top of the levee 5.0 m – 4.0 m
- slope of the water slope 1:3
- slope of the dry slope 1:2.5
- level of the top of the levee at section's beginning 119.45 m a.s.l.
- level of the top of the levee at section's end 120.07 m a.s.l.
- beginning of the structure (km 0+000) X = 5665591.1; Y = 6440177.7
- end of the structure (km 2+623) X = 5665346.2; Y = 6442413.2

1.5. Section No. 5 (from km 0+000 to km 2+690) – left bank with a length of 2,690 m and the following parameters:

- hydraulic class of the embankment Class II
- base flow p=1.0% Q_{1%}=74.3 m³/s
- control flow p=0.3% Q_{0,3%}=89.0 m³/s
- minimal elevation of the top of the levee above base flow 1.0 m
- minimal elevation of the top of the levee above control flow 0.3 m

1.5.1. flood bank (section from km 0+000 to km 0+010) of the following parameters:

- width of the top of the levee 6.5 m
- slope of the water slope 1:3
- slope of the dry slope 1:2.5
- level of the top of the levee at section's beginning 120.29 m a.s.l.
- level of the top of the levee at section's end 120.00 m a.s.l.
- beginning of the structure (km 0+000) X = 5665346.2; Y = 6442413.2
- end of the structure (km 0+010) X = 5665340.8; Y = 6442430.9

1.5.2. S2 flood wall (section from 0+019 to km 0+609) of the following parameters:

- length of the flood wall 594 m
- level of the top of the wall at the beginning 120.10 m a.s.l.
- level of the top of the wall at the end 120.20 m a.s.l.
- beginning of the structure (km 0+019) X = 5665338.6; Y = 6442429.8
- end of the structure (km 0+609) X = 5665240.0; Y = 6442985.9

1.5.3. flood bank (section from km 0+609 to km 2+644) of the following parameters:

- width of the top of the levee 4.0 m – 3.5 m
- slope of the water slope 1:3
- slope of the dry slope 1:2.5
- level of the top of the levee at section's beginning 120.10 m a.s.l.
- level of the top of the levee at section's end 120.67 m a.s.l.
- beginning of the structure (km 0+609) X = 5665242.0; Y = 6442984.3
- end of the structure (km 2+644) X = 5664314.9; Y = 6444436.7

1.5.4. connecting link (section from km 2+644 to km 2+690) of the following parameters:

- width of the top of the levee	7.75 m – 6.90 m
- slope of the water slope	1:3
- slope of the dry slope	1:2.5
- level of the top of the levee at section's beginning	120.67 m a.s.l.
- level of the top of the levee at section's end	120.67 m a.s.l.
- beginning of the structure (km 2+644)	X = 5664314.9; Y = 6444436.7
- end of the structure (km 2+690)	X = 5664276.3; Y = 6444462.9

1.6. Section No. 7 (from km 0+000 to km 0+870) – left bank with a length of 870 m and the following parameters:

- hydraulic class of the embankment	Class II
- base flow $p=1,0\%$	$Q_{1\%}=74.3 \text{ m}^3/\text{s}$
- control flow $p=0,3\%$	$Q_{0,3\%}=89.0 \text{ m}^3/\text{s}$
- minimal elevation of the top of the levee above base flow	1.0 m
- minimal elevation of the top of the levee above control flow	0.3 m
- width of the top of the levee	4.0 m
- slope of the water slope	1:3
- slope of the dry slope	1:2.5
- left bank with a length of	121.51 m a.s.l.
- level of the top of the levee at section's end	121.70 m a.s.l.
- beginning of the structure (km 0+000)	X = 5663682.2; Y = 6446120.3
- end of the structure (km 0+870)	X = 5663217.3; Y = 6446731.2

2. construction of hydraulic structures, i.e. extension of the existing Widawa River „Przerowa L” left bank's flood bank including engineering infrastructure; refurbishment and demolition of a section of the structure, to meet the following parameters:

- hydraulic class of the embankment	Class II
- base flow $p=1.0\%$	$Q_{1\%}=74.3 \text{ m}^3/\text{s}$
- control flow $p=0.3\%$	$Q_{0,3\%}=89.0 \text{ m}^3/\text{s}$
- minimal elevation of the top of the levee above base flow	1.0m
- minimal elevation of the top of the levee above control flow	0.3m
- length of the embankment's section covered by the Permit	2,305.0m
- length of the embankment's section to be extended	2,000.0m
- length of the embankment's section to be demolished	305.0m
- parking place (at km 0+000)	1off
- width of the top of the levee – section K÷K1	4.50m
- width of the top of the levee – section K1÷L	4.00m
- slope of the water slope	~1:2
- slope of the dry slope	1:2.5
- level of the top of the levee of the flood bank at the beginning of the section (at km 0+000)	120.67 m a.s.l.

- level of the top of the levee of the flood bank at the end of the section (at km 2+000)	121.51 m a.s.l.
- width of the maintenance road on the top of levee (section K÷K1)	3.50m
- width of the maintenance road on the top of levee (section K1÷L)	3.00m
- beginning of the extended section (km 0+000)	X =5664276.3 Y= 6444462.9
- end of the extended section (km 2+000)	X =5663682.2 Y= 6446120.3
- beginning of the demolished section (km 2+000)	X =5663682.2 Y= 6446120.3
- end of the demolished section (km 2+305)	X =5663389.0 Y= 6446183.5

3. construction of hydraulic structures, i.e. refurbishment of Przerowa Weir to fulfill a role of flood gates:

- weir clearance	3.0 m
- damming height	2.0 m
- class of hydraulic structure	Class II
- type of gate	double gate valve, 3.0 m high
- level of the upper edge of the gate	120.36 m a.s.l.
- span of the weir	10.2 m
- length of weir's base plate	6.62 m
- level of weir's base plate	117,36 m a.s.l.
- level of weir's abutment	120.77 m a.s.l.
- weir's land survey coordinates	X = 5664297.7 ; Y = 6444448.4
- weir's flow capacity	$Q_m=7,6 \text{ m}^3/\text{s}$ $Q_k=13 \text{ m}^3/\text{s}$
- Maximum Damming Level	119.40 m a.s.l.
- bridge structure	r/c slab
- bridge length	3.0 m
- bridge width	3.5 m
- bridge clearance	2.85 m
- bridge capacity	3.5 t
- protection of slopes	stove paving and rip-rap
- land survey coordinates at start of the bridge	X = 5664296.7; Y = 6444444.4
- land survey coordinates at end of the bridge	X = 5664294.3; Y = 6444446.1

4. construction of hydraulic structures, i.e. improving flow of Widawa River in the vicinity of the bridge located in line of Rzeczna Street in Kielczówek, in particular:

- demolition of the remains of existing protection of Widawa River banks,	
- provision of embankment's protection on both sides of Widawa River, upstream, downstream and under the bridge,	
- provision of protection to the terrace surface, upstream, downstream and under the bridge,	
- demolition of the existing protection and provision of new road bank slope protections in the vicinity of bridge abutments,	
- improving flow of Widawa River in the area of proposed works, upstream, downstream and under the bridge,	
- length of the section covered by the Permit (river axis)	approx. 90.0 m
- slope of embankments	1:2
- beginning of the structure (km 24+040 of Widawa River)	X=5665904.5; Y=6442302.6
- end of the structure (km 23+948 of Widawa River)	X=5665905.2; Y=6442211.5

5. construction of hydraulic structures, i.e. improving flow of Widawa River in the vicinity of the bridge located in line of Wilczycka Street in Wilczycka, in particular:

- demolition of the remains of existing protection of Widawa River banks,
- provision of embankment's protection on both sides of Widawa River, upstream, downstream and under the bridge,
- provision of protection to the terrace surface, upstream, downstream and under the bridge,
- demolition of the existing protection and provision of new road bank slope protections in the vicinity of bridge abutments,
- improving flow of Widawa River in the area of proposed works, upstream, downstream and under the bridge,
- provision of an animal crossing under the bridge structure, creating migration passage,
- length of the section covered by the Permit (river axis) approx. 80.0 m
- slope of embankments 1:2
- beginning of the structure (km 22+140 of Widawa River) X=5665869.6; Y=6440576.7
- end of the structure (km 22+059 of Widawa River) X=5665814,1; Y=6440518,8

6. construction of hydraulic structures, i.e. protection of Widawa River banks and terrace area upstream and downstream of Kielczówek Weir, in particular:

- protection of slopes along both banks of Widawa River, upstream and downstream of Kielczówek Weir,
- provision of protection to the terrace surface, upstream and downstream of Kielczówek Weir,
- improving flow of Widawa River upstream and downstream of Kielczówek Weir,
- length of the section covered by the Permit (river axis) approx. 42.0 m
- two sections of 21.0 m
- slope of upstream riverbanks 1:2
- slope of downstream riverbanks 1:2
- beginning of the structure (km 25+665 of Widawa River) X=5665315.2; Y=6443702.3
- end of the structure X=5665331.8; Y=6443690.0
- beginning of the structure X=5665345.8; Y=6443677.9
- end of the structure (km 25+605 of Widawa River) X=5665361.5; Y=6443664.3

7. river engineering and shaping new channels for natural watercourses:

- execution of sectional regulation of riverbed for Mrówka Stream (Border Canal) including:
 - raising height of the right bank above the road bridge in line of Wilczycka Street,
 - demolition of a hydraulic structure, i.e. remains of a damming weir,
 - protection of the upper and renovation of the lower post of a road bridge in line of Wilczycka Street,
 - provision of riverbed protection;
- construction of estuary section of Mrówka Stream (Border Canal) riverbed, including:
 - provision of riverside protection;
 - closing off of a section of Mrówka Stream (Border Canal) riverbed at the clash with the proposed Project;
- construction of a hydraulic structure, i.e. bank's culvert at the intersection of estuary section of Mrówka Stream (Border Canal) with an axis of the proposed flood bank, including:
 - construction of a vehicle yard – provision of mobile pump station,
 - drainage of vehicle yards,
 - construction of a sheet pile wall,
 - site improvements in the vicinity of a culvert;
- construction of a hydraulic structure, i.e. dry flood retention reservoir, including:
 - construction of an exit ramp;
- demolition of an existing and construction of a new water intake, including renovation of an existing pipeline supplying water to RZD Swojec pumping station:
 - demolition of an existing water intake above a road bridge in line of Wilczycka Street;

to meet the following parameters:

7.1. Engineering works on Mrówka Stream (Border Canal) riverbed – M1, in accordance with the following parameters:

7.1.1. above the bridge

- length of the section 100.0 m

- riverbed width at the bottom	5.0 m
- slope of the embankments	1:1.5; 1:2
- longitudinal slope	0.1%
- land survey coordinates for start of the engineering works	X = 5665568.7; Y = 6440636.1
- land survey coordinates for end of engineering works	X = 5665611.6; Y = 6440538.0
- riverbed section	trapezoidal

7.1.2. below the bridge

- length of the section	30.0 m
- riverbed width at the bottom	~7.5m
- slope of the left bank	1:2
- slope of the right bank	existing
- longitudinal slope	0.1%
- land survey coordinates for start of the engineering works	X = 5665611.6; Y = 6440538.0
- land survey coordinates for end of engineering works	X = 5665634.5; Y = 6440519.1

7.2. Construction of estuary section of Mrówka Stream (Border Canal) riverbed – M2:

7.2.1. above PW4 culvert to meet the following parameters:

- length of the section	52.0 m
- riverbed width at the bottom	15.25 m
- slope of the right bank	1:2
- left bank	sheet pile wall
- land survey coordinates at the start	X = 5665634.5; Y = 6440519.1
- land survey coordinates at the end	X = 5665675.7; Y = 6440486.3
- riverbed section	trapezoidal

7.2.2. below PW4 culvert to meet the following parameters:

- length of the section	53.0 m
- riverbed width at the bottom	7.0 m
- slope of the riverbanks	1:2
- land survey coordinates at the start	X = 5665699.6; Y = 6440467.3
- land survey coordinates at the end	X = 5665740.2; Y = 6440435.0

7.3. Closing off of a section of Mrówka Stream (Border Canal) – M3:

- length of the closed off section	~55.0 m
- land survey coordinates at the start of closing off	X = 5665695.7; Y = 6440527.6
- land survey coordinates at the end of closing off	X = 5665735.7; Y = 6440488.3

7.4. Construction of dry flood retention reservoir – M4:

- level of the river bed at the bottom	116.50 m a.s.l.
- slope of the riverbanks	1:2.5 - 1:12
- land survey coordinates in the middle of the reservoir	X = 5665600.2; Y = 6440430.8

7.5. Demolition of an existing and construction of a new water intake – M6:

7.5.1. demolition of the existing water intake

- pipeline diameter	600mm
- inlet level	115.25m a.s.l.
- land survey coordinates	X = 5665596.2; Y = 6440560.2

7.5.2. proposed water intake

- pipeline diameter	600mm
- inlet level	115.25m a.s.l.
- land survey coordinates	X = 5665596.9; Y = 6440551.1.

8. refurbishment of the canal. i.e. Młynówka Kielczowska, including:

- construction of a new riverbed for Młynówka Kielczowska at km 0+500 including run off into Widawa River at km 22+500;
- provision of riverbank protection;
- construction of embankment's culverts on Młynówka Kielczowska at km 1+750, 2+060 and 3+000 including:
 - demolition of an existing bridge over Młynówka Kielczowska in line of Rzeczna Street,
 - construction of vehicle yards – provision of mobile pump station,
 - construction of sheet pile wall,
 - site improvements in the vicinity of the culvert,
 - protection of Młynówka Kielczowska riverbanks below and above the culverts;
- demolition of sections of Młynówka Kielczowska clashing with the Project at km 0+000 and 0+500,
- construction of a channel connecting Młynówka Kielczowska with a riverbed of Mrówka Stream (Border Canal);

to meet the following parameters:

8.1. Construction of a new riverbed for Młynówka Kielczowska at km 0+500 including run off into Widawa River – MK1:

- length of the section	213.8 m
- width at the bottom of the riverbed	4.0 m
- embankment's slope	1:2
- slope of the riverbed	0.44%
- initial level of the bottom of the river	116.47 m a.s.l.
- final level of the bottom of the river	115.53 m a.s.l.
- location of the run off into Widawa River	km 22+500
- land survey coordinates at the beginning	X = 5665623.7; Y = 6441016.7
- land survey coordinates at the end	X = 5665791.4; Y = 6440910.3

8.2. Demolition of sections of Młynówka Kielczowska clashing with the Project at km 0+000 and 0+500 – MK3, MK2:

8.2.1. section running through old mill outbuildings – MK2

- length of closed section	~ 140 m
- land survey coordinates at the beginning	X = 5665623.5; Y = 6441018.1
- land survey coordinates at the end	X = 5665658.4; Y = 6440883.9

8.2.2. estuary section – MK3

- length of closed section	~ 80 m
- land survey coordinates at the beginning	X = 5665726.9; Y = 6440564.9
- land survey coordinates at the beginning	X = 5665735.7; Y = 6440488.3

8.3. construction of a channel connecting Młynówka Kielczowska with a riverbed of Mrówka Stream – MK4:

- length of new section	40.1 m
- width at the bottom of the riverbed	4.0 m
- slope of the embankments	1:2
- initial level of the bottom of the river	115.40 m a.s.l.

- final level of the bottom of the river 115.25 m a.s.l.
- land survey coordinates at the beginning X = 5665721.2; Y = 6440557.5
- land survey coordinates at the end X = 5665695.7; Y = 6440527.5

8.4. leading of bridges, pipelines, wires in sleeve pipes or culverts through Młynówka Kielczowska in accordance with the Table:

Fitting	Location [watercourse km]	Length of drilling [m]	Pipeline	Drilling level at c/l of watercourse [m a.s.l.]	Land survey coordinates at the intersection of drill line with watercourse line
Water pipe W-2 (clash 5K1)	Młynówka Kielczowska 2+119	41.0	Dz160PE-HD	112.29	X=5665295.8 Y=6442473.2
Telecommunication network Orange Polska S.A. (clash 4K11)	Młynówka Kielczowska 2+008	82.0	2x HDPE110/6.3	115.67	X=5665319.1 Y=6442365.1
Telecommunication network DSS Operator S.A. (clash 4K12)	Młynówka Kielczowska 2+025	79.0	HDPE110/6.3	115.67	X=5665315.1 Y=6442383.7

8.5. demolition of hydraulic structures, i.e. engineering structures clashing with the Project's works:

8.5.1. bridge over Młynówka Kielczowska in line with Rzeczna Street – Stand No. 142, Map Sheet AM1, Kielczówek Precinct (PD29) of the following parameters:

- number of bridge spans 1
- horizontal clearance approx. 7.5 m
- total width of the span approx. 8.9 m
- level of the u/s of the structure 119.60 m a.s.l.
- km of intersection of bridge line with Młynówka River riverbed 2+060
- land survey coordinates of the intersection X = 5665309.8
- of bridge line with Młynówka Kielczowska line: Y = 6442415.7.

9. provision of hydraulic structures, as part of flood protection of Zielona Osada area (formerly Sielska Zagroda) in Wilczyce:

- construction of protection pier separating the protected area from Widawa River:
- construction of a flood protection wall,

to meet the following parameters:

9.1. Construction of S4 flood protection wall:

- length of the flood protection wall 83.8 m
- level of the top of the wall at the beginning 119.50 m a.s.l.
- level of the top of the wall at the end 119.50 m a.s.l.
- beginning of the structure (km 0+000) X = 5665803.0; Y = 6441851.3
- end of the structure (km 0+093.8) X = 5665768.2; Y = 6441776.2

10. leading of bridge structures, pipelines, wires in sleeve pipes or culverts through surface watercourses and flood banks, i.e. leading water pipes and telecommunication lines through watercourses, in accordance with the Table:

Fitting	Location [watercourse km]	Length of drilling [m]	Pipeline	Drilling level at c/l of watercourse [m a.s.l.]	Land survey coordinates at the intersection of drill line with watercourse line
Water pipe W-1 (clash 2K1)	Widawa River 24+014	112.0	Dz160PE-HD	110.72	X=5665909.1 Y=6442277.6

11. provision of hydraulic structures, i.e. sewage pipe outlets, in accordance with the Table:

Fitting	Outlet location	Outlet level [m n.p.m.]	Land survey coordinates of the outlet
Stormwater pipes KD-1, outlet WYL 1	Ditch R-D (R10)	116.95	X=5665944.0 Y=6441985.6
Stormwater pipes KD-2, outlet WYL 2	Widawa River km 23+983	117.51	X=5665882.4 Y=6442249.4
Stormwater pipes KD-3, outlet WYL 3	Widawa River km 24+005	117.51	X=5665884.7 Y=6442270.5
Stormwater pipes KD-4, outlet WYL 4	Młynówka Kielczowska km 2+037	117.37	X=5665316.3 Y=6442394.1
Stormwater pipes KD-5, outlet WYL 5	Młynówka Kielczowska km 2+035	117.64	X=5665309.4 Y=6442390.0

12. refurbishment of hydraulic structures, related to piping existing drainage ditches in accordance with the Table:

Ditch No.	Fitting	Section length [m]	Fall [%]	Parameter at the beginning of proposed section		Parameter at the end of proposed section	
				Level [m a.s.l.]	Land survey coordinates	Level [m a.s.l.]	Land survey coordinates
RDG1-2	KD-2 (clash 1K7)	47.8	0.15	117.75	X=5665735.6 Y=6442259.1	117.51	X=5665882.4 Y=6442249.4
RDG1-1	KD-3 (clash 2K8)	47.2	0.15	117.75	X=5665737.9 Y=6442275.1	117.51	X=5665884.7 Y=6442270.5
RDG1-2	KD-1.1 (clash 1K6)	26.0	0.11	118.72	X=5665995.4 Y=6442244.2	118.68	X=5665968.4 Y=6442245.3
RDG1-1	KD-1 (clash 2K6)	5.0	0.1	118.94	X=5665995.7 Y=6442256.1	118.91	X=5665992.2 Y=6442256.2

13. provision of hydraulic structures, i.e. water reservoirs for natural compensation in accordance with the Table:

13.1. Reservoir No. 1:

- Water surface area	3820 m ²
- Area of the reservoir along upper edge of the embankment	4520 m ²
- Maximum depth	~ 2.0 m ÷ 2.5 m
- Banks' slope	1:2, 1:5, 1:10 and 1:3
- Area of island	85 m ²
- Slope of island banks	1:5
- Land survey coordinates	X=5664260.1; Y=6444853.1

13.2. Reservoir No. 2:

- Water surface area	1095 m ²
- Area of the reservoir along upper edge of the embankment	1370 m ²
- Maximum depth	~ 2.0 m
- Banks' slope	1:2, 1:5 and 1:8
- Land survey coordinates	X=5664204.6; Y=6444817.8

13.3. Reservoir No. 3:

- Water surface area	925 m ²
- Area of the reservoir along upper edge of the embankment	1190 m ²
- Maximum depth	~ 1.5 m
- Banks' slope	1:2, 1:5, 1:10 and 1:3
- Land survey coordinates	X=5664232.3; Y=6444756.7

13.4. Reservoir No. 4:

- Water surface area	300 m ²
- Area of the reservoir along upper edge of the embankment	370 m ²
- Maximum depth	~1.5 m
- Banks' slope	1:2
- Land survey coordinates	X=5664196.7; Y=6444876.9

13.5. Reservoir No. 5:

- Water surface area	325 m ²
- Area of the reservoir along upper edge of the embankment	470 m ²
- Maximum depth	~1.5 m
- Banks' slope	1:2
- Land survey coordinates	X=5664226.9; Y=6444874.8

13.6. Reservoir No. 6:

- Water surface area	180 m ²
- Area of the reservoir along upper edge of the embankment	230 m ²
- Maximum depth	~ 1.5 m
- Banks' slope	1:2
- Land survey coordinates	X=5664242.6; Y=6444910.6

14. construction and refurbishment of hydraulic structures related to operation of proposed facilities:

14.1. construction of bank's culverts, as per Table:

Structure No.	Ditch	Location [section no.] [bank's km]	Pipe diameter [mm]	Length of culvert [m]	Inlet level [m a.s.l.]	Outlet level [m a.s.l.]	Pipe fall [%]	Level of top of the levee [m a.s.l.]	Land survey coordinates at culvert's c/l
PW1	Ditch R-D (R37)	1 720.1	1200	11.0	117.05	116.90	1.36	119.15	X = 5665936.5 Y = 6441982.3
PW2	Ditch R-H (R39)	2 221.0	1200	21.7	117.40	116.95	2.07	120.02	X = 5665957.3 Y = 6442472.7
PW3	Ditch R-K	2 836.3	1200	38.7	116.55	116.48	0.16	120.08	X = 5665711.4 Y = 6443003.5
PW4	Estuary section Mrówka watercourse	4 352.9	2x 2000x2000	2x 23.0	115.00	114.76	1.0	119.45	X = 5665691.7 Y = 6440473.6
PW5	Rów R-K8	3 399.2	1200	20.0	117.55	117.45	0.50	120.63	X = 5665367.4 Y = 6444790.7
PW8	Koryto Młynówki Kielczowskiej	4 2,339.1	2500x1500	25.0	116.89	116.84	0.20	119.84	X = 5665393.8 Y = 6442137.2
PW9	Koryto Młynówki Kielczowskiej	5 995.2	2500x1500	25.0	117.15	117.10	0.20	120.10	X = 5665186.2 Y = 6443316.1

14.2. refurbishment of bank's culverts, as per Table:

Structure No.	Ditch	Location [section no.] [bank's km]	Pipe diameter [mm]	Culvert's length [m]	Inlet level [m a.s.l.]	Outlet level [m a.s.l.]	Pipe fall [%]	Level of top of the levee [m a.s.l.]	Land survey coordinates at culvert's c/l
PW6	Ditch W-T	6 1845.0	1200	19.0	118.70	118.60	0.50	121.44	X = 5663779.6 Y = 6446002.3
PW7	Rów W-13	4 11.0	1200	26.7	114.95	114.93	1.01	119.45	X = 5665595.6 Y = 6440188.1

14.3. construction of road culverts / pipe culverts on drainage ditches, as per Table:

Structure No.	Ditch	Location [road no.]	Pipe diameter [mm]	Culvert's length [m]	Inlet level [m a.s.l.]	Outlet level [m a.s.l.]	Pipe fall [%]	Level of top of the levee [m a.s.l.]	Land survey coordinates at culvert's c/l
PD1	Ditch R2	P6	800	15.0	117.35	117.05	2.00	119.72	X = 5665695.9 Y = 6443229.0

Structure No.	Ditch	Location [road no.]	Pipe diameter [mm]	Culvert's length [m]	Inlet level [m a.s.l.]	Outlet level [m a.s.l.]	Pipe fall [%]	Level of top of the levee [m a.s.l.]	Land survey coordinates at culvert's c/l
PD2	Ditch R-K6	-	800	8.0	117.50	117.46	0.50	119.10	Y = 5665450.9 Y = 6444040.6
PD4	Ditch R31	-	800	8.0	117.50	117.46	0.50	119.10	X = 5665456.1 Y = 6444032.7
PD5	Ditch R-K8 (R33)	D13	800	15.0	117.65	117.63	0.20	119.97	X = 5665192.6 Y = 6444914.4
PD6	Ditch R5	P9	800	15.0	117.90	117.87	0.20	120.03	X = 5665184.1 Y = 6444880.8
PD8	Riverbed of Młynówka Kielczowska	DG3	2500x1500	25.0	116.95	116.90	0.20	120.00	X = 5665309.9 Y = 6442414.6
PD9	Ditch R8	P16	800	12.0	118.10	118.05	0.42	119.85	X = 5665172.8 Y = 6443302.6
PD11	Ditch R-G	D11	1200	20.0	116.41	116.37	0.20	118.52	X = 5665323.5 Y = 6441794.4
PD16	Ditch R3a	P7	800	15.0	118.25	118.12	0.85	119.85	X = 5665425.0 Y = 6443740.4
PD17	Ditch R22	-	1200	12.0	115.58	115.55	0.25	117.62	X = 5665384.8 Y = 6441151.6
PD18	Ditch R22	-	1200	12.0	115.82	115.79	0.25	117.68	X = 5665320.9 Y = 6441334.2
PD19	Ditch R22	-	1200	12.0	115.76	115.73	0.25	117.62	X = 5665330.4 Y = 6441298.9
PD23	Ditch R-G (R22)	DG2	1200	18.0	115.92	115.88	0.22	118.42	X = 5665323.5 Y = 6441383.4

Structure No.	Ditch	Location [road no.]	Pipe diameter [mm]	Culvert's length [m]	Inlet level [m a.s.l.]	Outlet level [m a.s.l.]	Pipe fall [%]	Level of top of the levee [m a.s.l.]	Land survey coordinates at culvert's c/l
PDG2	Ditch RDG2-1	-	800	11.0	116.66	116.61	0.50	118.19	X = 5665423.0 Y = 6441059.1

14.4. refurbishment of road culverts / pipe culverts on drainage ditches, as per Table:

Structure No.	Ditch	Location [road no.]	Pipe diameter [mm]	Culvert's length [m]	Inlet level [m a.s.l.]	Outlet level [m a.s.l.]	Pipe fall [%]	Level of top of the levee [m a.s.l.]	Land survey coordinates at culvert's c/l
PD15	Ditch R-K9	-	800	8.0	118.11	118.07	0.50	119.61	X = 5665221.8 Y = 6445029.3
PD20	Ditch R-H (R11)	-	800	12.0	116.15	115.55	5.00	118.00	X = 5665892.8 Y = 6442355.7
PD21	Ditch R-K9	-	800	8.0	118.03	117.99	0.50	119.45	X = 5665211.0 Y = 6444972.7
PD30	Przerowa watercourse	Widawska	2000x2000	8.0	119.50	119.30	0.25	121.10	X = 5663219.2 Y = 6446747.4
PD31	Rów R-K3	Forest road	1200	10.0	117.35	117.30	0.50	120.00	X = 5665483.2 Y = 6444575.9

14.5. construction of drainage ditches, as per Table:

Ditch No.	Length of a section [m]	Fall [%]	Parameters at the beginning of the section		Parameters at the end of the section	
			Level at the bottom [m a.s.l.]	Land survey coordinates	Level at the bottom [m a.s.l.]	Land survey coordinates
R2	504.7	0.1-0.2	117.80	X = 5665470.9 Y = 6443627.9	117.00	X = 5665714.6 Y = 6443193.0
R3a	352.6	0.2-0.25	118.35	X = 5665439.7 Y = 6443689.8	117.55	X = 5665436.7 Y = 6444038.9
R5	674.2	0.1	118.32	X = 5664852.4 Y = 6445093.9	117.44	X = 5665383.1 Y = 6444780.4

Ditch No.	Length of a section [m]	Fall [%]	Parameters at the beginning of the section		Parameters at the end of the section	
			Level at the bottom [m a.s.l.]	Land survey coordinates	Level at the bottom [m a.s.l.]	Land survey coordinates
R8	380.0	0.1-5.0	118.50	X = 5665093.8 Y = 6443630.3	117.10	X = 5665199.3 Y = 6443279.7
R13	270.0	0.2-2.1	117.50	X = 5665893.6 Y = 6442822.3	116.55	X = 5665723.7 Y = 6443022.5
R21	33.4	1.0	116.80	X = 5665480.3 Y = 6441337.4	116.50	X = 5665452.3 Y = 6441355.6
R22	818.0	0.1	116.42	X = 5665302.8 Y = 6441810.7	115.47	X = 5665396.9 Y = 6441075.7
R23	52.7	0.5	116.65	X = 5665294.3 Y = 6441756.7	116.41	X = 5665309.0 Y = 6441805.8
R31	35.2	3.0	118.05	X = 5665452.7 Y = 6444009.2	117.46	X = 5665460.7 Y = 6444041.7
R33	113.0	0.04-0.15	117.68	X = 5665119.8 Y = 6444916.4	117.60	X = 5665227.4 Y = 6444898.5
R37	37.9	1.0	117.08	X = 5665946.8 Y = 6441982.9	116.75	X = 5665910.7 Y = 6441974.9
R39	67.7	1.0-2.5	117.55	X = 5665987.1 Y = 6442472.9	116.45	X = 5665929.7 Y = 6442458.0
R40	41.5	0.5	117.55	X = 5665155.8 Y = 6443374.2	117.35	X = 5665176.9 Y = 6443344.2
RDG1-1	98.3	0.16	117.90	X = 5665643.0 Y = 6442297.9	117.75	X = 5665737.9 Y = 6442275.1
RDG1-2	101.9	0.16	117.90	X = 5665637.6 Y = 6442284.6	117.75	X = 5665735.6 Y = 6442259.1
RDG2-1	126.0	0.2-0.5	116.83	X = 5665460.3 Y = 6440976.5	116.56	X = 5665404.9 Y = 6441086.9

14.6. construction of drainage ditches outlets, as per Table:

Ditch	Outlet's location	Outlet's level [m a.s.l.]	Outlet's land survey coordinates	
R13	Ditch R-K (R12)	116.55	X=5665723.7	Y=6443022.5
R2	Ditch R-K (R12)	117.00	X=5665714.6	Y=6443193.0
R3a	Ditch R-K6 (R1)	117.55	X=5665436.7	Y=6444038.9
R3b	Ditch R-K6 (R1)	117.55	X=5665436.7	Y=6444038.9
R5	Ditch R-K8 (R4)	117.44	X=5665383.1	Y=6444780.4
R8	Młynówka Kiełczowska km 2+930	117.10	X=5665199.3	Y=6443279.7
R23	Ditch R-G	116.41	X=5665309.0	Y=6441805.8

Ditch	Outlet's location	Outlet's level [m a.s.l.]	Outlet's land survey coordinates	
	(R22)			
R-G (R22)	Ditch (R28)	115.47	X=5665396.9	Y=6441075.7
RDG2-1	Ditch R-G (R22)	116.56	X=5665404.9	Y=6441086.9
R21	Ditch R-G	116.50	X=5665452.3	Y=6441355.6
R-G1 (R25)	Ditch R-G (R22)	116.00	X=5665375.5	Y=6441431.9
R-40	Młynówka Kiełczowska km 2+993	117.35	X=5665176.9	Y=6443344.2

14.7. construction of drainage ditches, as per Table:

Structure No.	Pipe diameter [mm]	Drainage length [m]	Pipe fall [%]	Parameters at drainage beginning		Parameters at drainage end	
				Drainage level [m a.s.l.]	Land survey coordinates	Drainage level [m a.s.l.]	Land survey coordinates
RD1	300	75.0	0.3	117.55	X = 5665960.9 Y = 6441908.4	117.20	X = 5665942.5 Y = 6441980.8
RD2	300	215.0	0.3-3.0	117.95	X = 5665948.7 Y = 6442197.5	117.20	X = 5665941.9 Y = 6441985.3
RD3	300	389.5	0.2-2.0	118.80	X = 5665688.5 Y = 6444892.8	117.90	X = 5665357.6 Y = 6444800.2
RD4	300	217.5	0.15-1.3	117.15	X = 5665752.1 Y = 6440913.8	116.65	X = 5665656.8 Y = 6440890.7
RD5	300	355.0	0.3-1.0	117.85	X = 5666073.4 Y = 6441700.8	116.60	X = 5666168.7 Y = 6441388.0
DR.1	200	66.7	0.28	117.20	X = 5665497.9 Y = 6440927.0	117.03	X = 5665460.7 Y = 6440975.9
DR.2	200	469.8	0.2	117.13	X = 5665453.3 Y = 6441012.5	117.07	X = 5665334.8 Y = 6441340.4
DR.3	200	64.7	0.22	117.40	X = 5665300.6 Y = 6441445.4	117.25	X = 5665313.7 Y = 6441384.4

14.8. construction of drainage outlets, as per Table:

Drainage	Outlet's location	Outlet's level [m n.p.m.]	Outlet's land survey coordinates	
RD1	Ditch R-D (R10)	117.20	X=5665942.5	Y=6441980.8
RD2	Ditch R-D (R10)	117.20	X=5665941.9	Y=6441985.3

Drainage	Outlet's location	Outlet's level [m n.p.m.]	Outlet's land survey coordinates	
RD3	Ditch R-K8 (R4)	117.90	X=5665357.6	Y=6444800.2
RD4	Młynówka Kielczowska km 0+355	116.65	X=5665656.8	Y=6440890.7
RD5	Ditch R-C1	116.60	X=5666168.7	Y=6441388.0
DR.1	Ditch RDG2-1	117.03	X=5665460.7	Y=6440975.9
DR.2 (DR2-2)	Ditch R-G (R22)	116.87	X=5665406.6	Y=6441099.1
DR.2 (DR2-3)	Ditch R-G (R22)	116.68	X=5665374.9	Y=6441185.7
DR.2 (DR2-4)	Ditch R-G (R22)	116.84	X=5665346.7	Y=6441261.7
DR.3	Ditch R-G (R22)	117.25	X=5665313.7	Y=6441384.4

14.9. construction of embankment's roads, as per Table:

Structure No.	Location [section] [bank's km]	Land survey coordinates of road's c/l and bank's c/l	Width of the road [m]	Longitudinal fall on terrace side [%]	Longitudinal fall on dry side [%]	Level of top of the levee [m a.s.l.]
P1	4 2009.50	X = 5665366.3 Y = 6441809.5	5.5	4.0	2.3	119.60
P3	1 946.7-995.6	From: X = 5665949.3 Y = 6442204.2 To: X = 5665962.3 Y = 6442249.6	5.5	-	7.0	120.10-120.24
P4	2 3.0-49.5	From: X = 5665962.7 Y = 6442255.1 To: X = 5665958.3 Y = 6442301.0	5.5	-	7.0	120.23-120.00
P5	2 549.00	X = 5665899.6 Y = 6442791.0	5.5	5.8	4.8	120.05
P6	2 1062.4	X = 5665685.9 Y = 6443226.5	5.5	5.7	4.5	120.11
P7	2 1647.7	X = 5665414.5 Y = 6443738.2	5.5	5.6	5.1	120.30

Structure No.	Location [section] [bank's km]	Land survey coordinates of road's c/l and bank's c/l	Width of the road [m]	Longitudinal fall on terrace side [%]	Longitudinal fall on dry side [%]	Level of top of the levee [m a.s.l.]
P8	2 2185.0- 2250.0	From: X = 5665440.6 Y = 6444273.1 To: X = 5665426.7 Y = 6444336.3	5.5	5.5	5.5	120.0-120.50
P9	3 617.3	X = 5665188.2 Y = 6444897.0	5.5	4.1	4.2	120.65
P10	3 1153.6	X = 5664759.0 Y = 6445092.9	5.5	4.0	4.0	120.70
P11	4 163.7-195.5	From: X = 5665574.1 Y = 6440325.4 To: X = 5665593.8 Y = 6440350.4	5.5	5.0	8.5	119.45
P12	4 1089.6- 1138.3	From: X = 5665517.0 Y = 6440984.9 To: X = 5665494.5 Y = 6440993.7	5.5	6.0	5.0	119.51
P13	4 1553.0	X = 5665351.4 Y = 6441371.4	5.5	-	7.0	119.55
P14	4 2553.6- 2605.2	From: X = 5665362.2 Y = 6442345.5 To: X = 5665350.2 Y = 6442396.2	5-5.5	4.0	15.0	120.00
P15	5 621.0	X = 5665249.2 Y = 6442993.9	5.5	3.9	2.3	120.10
P16	5 997.0	X = 5665184.6 Y = 6443316.9	5.5	4.0	1.5	120.10
P17	5 1400.0	X = 5665097.6 Y = 6443698.5	5.5	6.0	5.1	120.36
P18	5 1620.5	X = 5665020.3 Y = 6443902.7	5.5	4.2	3.3	120.50
P19	5 2261.9	X = 5664574.0 Y = 6444340.1	5.5	5.7	4.7	120.60
P22	5 2630.4- 2644.0	X = 5664327.4 Y = 6444432.9	5.0	-	4.0	120.67

14.10. refurbishment of bank's roads, as per Table:

Structure No.	Location [section no.] [bank's km]	Land survey coordinates of road's c/l and bank's c/l	Width of the road [m]	Longitudinal fall on terrace side [%]	Longitudinal fall on dry side [%]	Level of top of the levee [m a.s.l.]
P2	6 1946.0	X = 5663719.8 Y = 6446084.2	5.5	7.3	5.7	121.50
P20	6 607.0	X = 5664214.9 Y = 6444953.9	5.5	2.3	3.3	120.78

15. demolition (closing off) of existing hydraulic structures:

15.1. demolition (closing off) of existing culverts, as per Table:

Structure No.	Ditch	Location [road no.]	Pipe diameter [mm]	Culvert's length [m]	Land survey coordinates for culvert's c/l
PD3	Ditch (no ID)	-	600	5.0	X = 5665446.4 Y = 6444023.5
PD7	Ditch R-K8	D13	600	10.0	X = 5665196.3 Y = 6444929.6
PD10	Ditch R-G	-	600	8.0	X = 5665336.2 Y = 6441785.4
PD12	Ditch R-K8 (R4)	-	600	6.0	X = 5664979.2 Y = 6445009.7
PD13	Ditch (no ID)	-	600	9.0	X = 5665433.8 Y = 6441101.1
PD14	Ditch R-K6	-	500	10.0	X = 5665414.7 Y = 6444036.4
PD22	Ditch R-H	-	600	10.0	X = 5665932.8 Y = 6442465.4
PD24	Ditch (no ID)	Near road no. P4	600	8.0	X = 5665971.4 Y = 6442258.8
PD25	Ditch (no ID)	P3	600	9.0	X = 5665962.0 Y = 6442245.5
PD26	Ditch (no ID)	Near road no. DG1	600	10.0	X = 5665831.2 Y = 6442258.8
PD27	Ditch (no ID)	Near road no. DG1	800	16.0	X = 5665746.1 Y = 6442258.7
PD28	Ditch (no ID)	Near road no. DG1	600	11.0	X = 5665744.9 Y = 6442273.0

15.2. backfill of sections of existing drainage ditches, as per Table:

Ditch	Section's length [m]	Land survey coordinates for section's beginning	Land survey coordinates for sections end
R1 (ditch R- K6)	22.6	X = 5665410.9 Y = 6444035.9	X 5665433.4 Y 6444038.5
R6	27.1	X = 5664223.8 Y = 6444971.7	X 5664203.3 Y 6444954.6
R9 (ditch R-K6)	62.9	X = 5665006.2 Y = 6444876.6	X 5665065.6 Y 6444897.3
R14	36.7	X = 5664750.5 Y = 6445098.1	X 5664780.8 Y 6445118.8
R17	20.7	X = 5665066.8 Y = 6444873.9	X 5665062.1 Y 6444894.1
R18	47.3	X = 5664601.6 Y = 6444306.9	X 5664555.0 Y 6444299.0
R19	25.3	X = 5664420.6 Y = 6444492.1	X 5664424.5 Y 6444467.1
R20 (ditch R-G)	Section 1 62.3 Section 2 51.4	Odc. 1 X = 5665326.4 Y = 6441791.9 Odc. 2 X = 5665520.4 Y = 6441008.9	Odc. 1 X = 5665378.8 Y = 6441758.1 Odc. 2 X = 5665511.0 Y = 6440960.3
R24	46.0	X = 5665294.4 Y = 6441756.8	X = 5665329.6 Y = 6441786.6
R26 (ditch R-G1)	42.3	X = 5665378.8 Y = 6441430.6	X = 5665419.5 Y = 6441419.1
R27 (ditch R-K8)	125.8	X = 5665120.7 Y = 6444916.7	X = 5665226.5 Y = 6444898.4
R28	50.1	X = 5665436.8 Y = 6441103.3	X = 5665395.7 Y = 6441074.8
R30	28.2	X = 5665452.0 Y = 6444010.4	X = 5665443.9 Y = 6444037.0
R32	160.6	X = 5665644.2 Y = 6440952.4	X = 5665790.0 Y = 6440907.3
R34 (including piped section)	Section 1: 54.5 Piped section: 19.5	Section 1 X = 5665259.3 Y = 6443283.9 Piped section: X = 5665236.1 Y = 6443247.5	Section 1 X = 5665236.1 Y = 6443247.5 Piped section: X = 5665216.7 Y = 6443246.7

Ditch	Section's length [m]	Land survey coordinates for section's beginning	Land survey coordinates for sections end
R35	24.6	X = 5665364.7 Y = 6443727.8	X = 5665368.4 Y = 6443704.0
R36 (ditch R-D)	37.7	X = 5665946.7 Y = 6441983.0	X = 5665911.1 Y = 6441975.2
R38 (ditch R-H)	71.2	X = 5665990.1 Y = 6442473.2	X = 5665929.7 Y = 6442457.9
R41	45.8	X = 5665155.8 Y = 6443373.9	X = 5665174.5 Y = 6443343.7
R42	105.7	X = 5665391.2 Y = 6442120.0	X = 5665365.5 Y = 6442020.0

16. backfill of existing ponds/reservoirs:

16.1. backfill of a pond OW1 of the following parameters:

- location of a pond Stand No. 349/2, AM2, Kielczów Precinct
- area of backfill 386 m²
- land survey coordinates X = 5665931.2; Y = 6441995.9

16.2. backfill of ponds OW2 of the following parameters:

- location of ponds Stand No. 34/1, 143, 106/1, AM1, Kielczówek Precinct
- total area of backfill 1221 m²
- land survey coordinates X = 5665295.9; Y = 6443132.9

16.3. backfill of a pond OW3 of the following parameters:

- location of a pond Stand No.106/1, 150, AM1, Kielczówek Precinct
Stand No. 264, AM2, Śliwice Precinct
- area of backfill 1659 m²
- land survey coordinates X = 5665251.8; Y = 6443278.4

16.4. backfill of a pond OW4 of the following parameters:

- location of a pond Stand No.106/1, AM1, Kielczówek Precinct
- area of backfill 137 m²
- land survey coordinates X = 5665285.3; Y = 6443240.1

16.5. backfill of a pond OW5 of the following parameters:

- location of a pond Stand No. 536, AM1, Wilczyce Precinct
- area of backfill 444 m²
- land survey coordinates X = 5665778.1; Y = 6441822.3

17. demolition of a section of hydraulic structure, i.e. end section of flood bank „Przerowa L”, of the following parameters:

- section's length ~ 305 m
- section's end X = 5663682.2; Y = 6446120.3
- section's beginning X = 5663389.0; Y = 6446183.5

18. demolition of a section of hydraulic structure, i.e. engineering structures clashing with the Project:

18.1. demolition of a concrete pedestrian bridge and abutments – Stand No. 332/1, map sheet AM1, Wilczyce Precinct, of the following parameters:

- bridge width 5 m
- land survey coordinates X = 5665653.1; Y = 6440953.0

18.2. demolition of a retaining wall located along left bank of R32 ditch proposed for backfill, section with a length of 30.0 m - Stand No. 332/1, map sheet AM1, Wilczyce Precinct, of the following parameters:

- length of demolished protection 30 m
- land survey coordinates at the start of demolition X = 5665655.2; Y = 6440951.1
- land survey coordinates at the end of demolition X = 5665683.2; Y = 6440945.0

18.3. demolition of the remains of damming weir on Mrówka Stream (Border Canal) above road bridge in line with Wilczycka Street – Stand No. 1, map sheet AM5, Swojczyce Precinct, of the following parameters:

- weir's length 5 m
- land survey coordinates X = 5665603.4; Y = 6440558,8
- level of right abutment 117.27 m a.s.l.
- level of left abutment 117.30 m a.s.l.

18.4. demolition of storm water outlet kd200, of the following parameters:

- outlet's diameter 200 cm
- outlet's level 116.63 m a.s.l.
- outlet's location km 23+786 of Widawa River
- land survey coordinates of the outlet X = 5665914.4; Y = 6442042.8

II. I hereby grant State Water Holding Polish Waters, Grzybowska 80/82 Street, 00-844 Warsaw, Water Law Permit to make use of water as part of water services in the scope of:

1. discharge into watercourses or hydraulic structures – of storm water or meltwater through the following outlets:

(design rainfall $p = 20\%$, $t = 15$ min, $q = 130$ l/sha)

1.1. Outlet No. 1 discharging storm water and meltwater from Sielska Street (area of approx. 0.2 ha) and draining ditches in Rieczna Street (area of approx. 4.5 and 0.5 ha) in the following quantities:

$$\begin{aligned} Q &= 161.9 \text{ dm}^3/\text{s} \\ Q_{\text{srđ}} &= 191.88 \text{ m}^3/\text{d} \\ Q_{\text{maxh}} &= 7.99 \text{ m}^3/\text{h} \\ Q_{\text{maxr}} &= 30700.8 \text{ m}^3/\text{r}, \end{aligned}$$

1.2. Outlets No. 2 and 3 discharging storm water and meltwater from drainage of renovated road (area of approx. 0.1 ha) and draining ditches in Rieczna Street (area of approx. 2.5 and 0.5 ha), total quantity $Q = 80.5 \text{ dm}^3/\text{s}$, in the following quantities:

$$\begin{aligned}
 Q &= 40.25 \text{ dm}^3/\text{s} \\
 Q_{\text{śrd}} &= 51.66 \text{ m}^3/\text{d} \\
 Q_{\text{maxh}} &= 2.15 \text{ m}^3/\text{h} \\
 Q_{\text{maxr}} &= 8256.6 \text{ m}^3/\text{r},
 \end{aligned}$$

1.3. Outlet No. 4 discharging storm water and meltwater from Topolowa Street (area of approx. 0.15 ha in the following quantities:

$$\begin{aligned}
 Q &= 16 \text{ dm}^3/\text{s} \\
 Q_{\text{śrd}} &= 5.5 \text{ m}^3/\text{d} \\
 Q_{\text{maxh}} &= 0.23 \text{ m}^3/\text{h} \\
 Q_{\text{maxr}} &= 885.6 \text{ m}^3/\text{r},
 \end{aligned}$$

1.4. Outlet No. 5 discharging storm water and meltwater from Rieczna Street (area of approx. 0.2 ha) in the following quantities:

$$\begin{aligned}
 Q &= 21 \text{ dm}^3/\text{s} \\
 Q_{\text{śrd}} &= 7.38 \text{ m}^3/\text{d} \\
 Q_{\text{maxh}} &= 0.31 \text{ m}^3/\text{h} \\
 Q_{\text{maxr}} &= 1180.8 \text{ m}^3/\text{r};
 \end{aligned}$$

at maximum concentration of pollutants not exceeding:

- general suspension = 100 mg/dm³
- petroleum hydrocarbons = 15 mg/dm³

2. discharge into water or hydraulic structures – through drainage outlets:

Outlet	Real area [ha]	Reduced area [ha]	qmax (max second) [dm ³ /s]	Qśr (annual average) [dm ³ /s]
RD1	0.67	0.07	2	0.025
RD2	6.11	1.21	37.2	0.232
RD3	3.45	0.42	12.8	0.131
RD4	2.48	0.64	19.5	0.094
RD5	10.44	0.83	25.6	0.397
DR.1_A	0.31	0.09	2.6	0.012
DR.1_B	0.11	0.04	1.1	0.004
DR.1_C	0.22	0.07	2	0.008
DR.2	0.1	0.06	1.7	0.004
DR.3	0.39	0.06	1.8	0.015

III. Water Law Permit is granted in the scope described in Point II. 1. and Point II. 2. of this Decision until **30th June 2038.**

IV. I hereby oblige the authorized person described in Point I, II and III of The Decision to:

1. Construction of the hydraulic structures in accordance with the design and this Decision on Water Law Permit.
2. Conducting construction works in a manner ensuring protection of groundwater against pollution and clearing the area after completion of works.
3. Cover any loss and repair damages caused by the execution of works covered by this permit.

4. Register water discharged through outlets described in this Decision.
 5. Maintain hydraulic structures described in this Decision in a good technical condition, in particular by carrying out periodic inspections and maintenance works.
- V. I am discontinuing the proceedings on liquidation of the function of the hydraulic structures, i.e. existing flood banks.
- VI. I am posing immediate enforcement of this decision.
- VII. This Water Law Permit does not give right to the property or hydraulic structures necessary for its implementation, and does not infringe on the property rights and right of third parties to this properties and structures.

JUSTIFICATION

In a letter dated 7th February 2018 State Water Holding Polish Waters, represented by Mr. Jacek Drabiński – Deputy Director of Regional Water Management Authority in Wrocław State Water Holding Polish Waters at the time of submitting the Application, applied for a Water Law Permit for the Project *WFS Widawa – the rebuilding of the flood management system of the communes and municipalities Czernica, Długoleka, Wisznia Mała and Wrocław*.

The documents and studies, in particular Report on Water and Law Matters, as required in Article 407 of Water Law Act have been attached to the Application.

Based on the Article 397 Paragraph 2 of the Water Law of 2017, if Polish Waters are the Applicant, the Minister responsible for water management is the authority competent to issue Water Law Permits.

After verification of the documents submitted in the water-legal proceedings with respect to the requirements of Article 407 of the Water Law, on 16th March 2018, based on Article 61 Paragraph 4 of the KPA, the parties were notified about the commencement of proceedings on the issue of Water Law Permit, in particular for construction of hydraulic structures, water related services, water engineering and formation of new natural watercourses, running bridges, pipelines, wires in pipe sleeves or culverts through surface water flowing within the rivers boundary lines and through flood banks, in connection with the implementation of the Project: *WFS Widawa – the rebuilding of the flood management system of the communes and municipalities Czernica, Długoleka, Wisznia Mała and Wrocław*, and the possibility of making statements and demands in the case in question. No comments or conclusions regarding the Project were received during the proceedings. In the letter dated 9th May 2018 the Applicant informed of another representative.

The Applicant already obtained for this Project the Decision of the Regional Director for the Environment Protection in Wrocław, dated 29th December 2017, Ref. No. WOOŚ.4233.2.2017.ŁCK on environmental conditions of Permit for implementation of the Project: *WFS Widawa – the rebuilding of the flood management system of the communes and municipalities Czernica, Długoleka, Wisznia Mała and Wrocław*.

The proposed Project will be implemented in the area of surface water bodies (Code No.: USWB: PLRW60001913659, PLRW60001913679, PLRW600023136769, PLRW600019136699) and on a boundary of ground water bodies (Code No. GW600096). The Project will have no impact on chemical condition or quantity of water; therefore it will not affect achievement of the environmental goals set for USWBd and USWB. This has been confirmed by issue of the Decision on environmental conditions by the Regional Director for the Environment Protection in Wrocław.

In addition, the Project complies with the conditions for use of water from the water region set out in the Regulation No. 9/2016 of the Regional Director for Water Management Board in Wrocław, dated 14th July 2016 on setting the conditions for use of water in Central Odra River Water Region. The Project complies with the requirements regarding water condition, as it was confirmed in the Decision on Environmental Conditions issued by the Regional Director for the Environment Protection in Wrocław. In addition it meets the requirements in terms of water needs and use of water. The proposed Project does not involve drawing of water, discharge of polluted sewage into water or ground, nor does it entail any change in the morphological continuity of Widawa River.

The verification of the submitted Application and the case file indicates also the compliance of the

Water Law Permit with other Acts stated in Article 396 of the Water Law.

According to Article 400 Paragraph 1 of the Water Law, the Water Law Permit for water services is issued in form of a decision, for a specific period of time, not longer than 20 years, calculated from the day when the Decision becomes final.

According to Article 414 Paragraph 1 Point 3, the Water Law Permit expires in Point I of the Decision, if the entity does not commence construction of specified hydraulic structures within three years from the date, when the Water Law Permit for its construction becomes final.

In Point V of this Decision, the procedure for the liquidation of the functions of water facilities, i.e. existing flood banks, was discontinued, since Water Law does not contain material and legal grounds for granting the abovementioned permit.

The Decision obtained immediate enforcement status, in accordance with Article 108 Paragraph 1 KPA. The premise for the application of this provision is justified due to the danger to human life and health caused by flood risk of residents of Communes of Czernica (Dobrzykowice, Krzyków Nadolice Wielki vilages), Długoleka (Wilczyce, Śliwice, Kielczów, Kielczówek vilages) and Wrocław (suburbs of Strachocin and Wojnów), and because of the danger of irreparable material damage in the event of delays in the implementation of this task.

The task: *WFS Widawa – the rebuilding of the flood management system of the communes and municipalities Czernica, Długoleka, Wisznia Mała and Wrocław* indicated in the Application will be implemented within the Project of Modernization of Wrocław Floodway System (WFS) which is part of a wider project's objective, which is protection against flooding of the Odra River Valley, taking into account the construction of Racibórz dam. The implementation of the material scope covered by the Application will allow achieving the Project's objective of obtaining flood protection of the city of Wrocław against water with a probability of occurrence resulting from the requirements of the applicable regulations. The number of people covered in this Project by flood protection amounts to 265,000 people, while the flood areas is 14,000 ha, including the highly urbanized areas of the city of Wrocław. The maximum floodwater flow in accordance with the Project amounting to 3,100 m³/s is divided into a safe flow of 2,800 m³/s through facilities of the City of Wrocław, while the remaining flow of 300 m³/s is directed by a transfer weir and the Odra-Widawa Canal to the Widawa River Valley. The proposed Project will enable the transfer of significant amounts of flood water from the Odra River through the transfer canal to the Widawa River, which will allow the flood waters to bypass the central suburbs of Wrocław from the north.

Failure to complete the task *WFS Widawa – the rebuilding of the flood management system of the communes and municipalities Czernica, Długoleka, Wisznia Mała and Wrocław* may lead to potential losses caused by the dynamic backflow, in case of the absence of additional flood protection above km 21 + 500 of Widawa River: the number of buildings flooded with 90 m³/s water dump into the Odra-Widawa Canal is 629, number of buildings in the flood zone caused by 300 m³/s water dump into the Odra-Widawa Canal is 1480, the size of residential areas is approx. 131 ha. Property damage resulting from the flooding of these areas is estimated at over PLN 700 million.

Another argument for urgent execution of works covered by the *WFS Widawa – the rebuilding of the flood management system of the communes and municipalities Czernica, Długoleka, Wisznia Mała and Wrocław* task is the expiring deadline, resulting from the currently binding loan agreement granted to the Polish Government by the World Bank for the implementation of the Odra River Valley Flood Protection Project (ORFPP). Failure to perform this task under the ORFPP Project will result in the loss of financial resources and the need to finance the costs of this task from the state budget later.

After verification of the documentation submitted for the water-law investigation and conducting the proceedings, it was considered that the said Permit may be granted under conditions set out in the operative part of the decision.

In this factual and legal state, this Permit has been granted under the terms and conditions set out in the operative part of the decision.

INSTRUCTION

An appeal can not be made against the Decision. However, the party dissatisfied with the Decision may request the Minister of Maritime Economy and Inland Navigation to reconsider the matter within 14 days from the date of delivery of the Decision.

During the course of the period for submitting an application for reconsideration, the party may waive the right to submit such an application. On the day of submitting to the Minister of Maritime Economy and Inland Navigation a statement on the waiver of the right to submit an application for reconsideration by the last party, the decision becomes final and legally binding. It is not possible to effectively withdraw the statement of waiver of the right to submit a request for reconsideration.

In addition, if a party does not want to exercise the right to request a reconsideration of the case, he / she may submit a complaint against the decision to the Provincial Administrative Court in Warsaw within 30 days of delivery of the Decision to the party. The complaint is lodged through the Minister of Maritime Economy and Inland Navigation. The entry fee in the complaint is PLN 300. The party also has the right to apply for exemption from costs or to grant the right to assistance.

[Round stamp of the Minister Maritime Economy and Inland Navigation]
Maria Pelda-Sypuła, Minister's Council, on behalf of the Minister

For:

1. Mr. Mateusz Surowski – the Proxy
State Water Holding Polish Waters
Regional Water Management Authority in Wrocław
2. Other parties to the proceedings, in accordance with Article 49 KPA
3. For the record.

Cc:

1. State Water Holding Polish Waters
Regional Water Management Authority in Wrocław
Department of Information System for Water Management