

### PRICED BILL OF QUANTITIES

Item	Description	Unit of Measure	NoU	Unit Price	Total
1	2	3	4	5	6

**1 Mark the water supply line** with all its elements (horizontal, vertical bends) and cross points with existing underground installations that should be dug out before the start of works. When introducing the Contractor to the works, the line shall be uncovered and destroyed points identified. Also, the spots provided for water supply manholes and overground hydrants shall be precisely marked.

Calculation: per meter of length of the marked pipeline	m	46.00		
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**2 Demolish the existing driveway structure** made of bituminous gravel (asphalt) d=8 cm, 1.0 meter wide, cutting both edges of the trench using asphalt cutter, transport the debris to a distance of up to 5 km designated by the Supervisor.

Calculation: per m2 of demolished asphalt	m <sup>2</sup>	6.00		
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**3 Make, transport and build in asphalt compound BNS32** in a 8-cm layer, after this layer build in a ware layer of asphalt concrete using limestone aggregate AB 8, layer thickness 4 cm. The complete asphalt mass (both layers) shall be built on a layer of buffer fraction d=0-30 mm, 50-cm thick.

Calculation: per m2 of built asphalt	m <sup>2</sup>	6.00		
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**4 Excavate trench and water supply connection manhole pits** mechanically in III category soil. During excavation remove the soil at least 1.0 m from the edge of the trench, and all excess soil load directly onto the transport vehicles. Sides shall be cut evenly. The works on the excavation and pipe installation shall be done up the grade level. The price shall include: excavation in dry and wet soil (with necessary pumping of the water out of the trench). Excavation shall be done entirely in accordance with attached drawings, technical regulations and Supervisor's instructions.

Calculation: per m3 of excavated soil

from 0 to 2 m	m <sup>3</sup>	51.81		
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**5 Manually excavate III category soil** on the spots provided for manholes (deepen and expand the trench sufficiently) and around existing underground installations (PTT, water supply, electrical installation, gas installation, rainwater installation...) disposing of the soil on the side, a minimum of 1.0 m away from the edge of the trench.

Calculation: per m3 of excavated soil	m <sup>3</sup>	2.00		
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**6 Manually level the trench bottom** with accuracy of +/-2 cm, in accordance with the designed grade level. The trench shall be levelled along the entire width, in order to provide base for sand bedding. All excess soil shall be disposed of at least 1.00 m away from the edge of the trench.

Calculation: per m2 of levelled surface	m <sup>2</sup>	36.80		
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7 **Double strut** the trench canal using planks d=5 cm of II class coniferous wood with metal struts or oak poles. The timbering shall be done so as to secure full safety of the workers throughout the works, as well as to prevent deformation of trench sides due to ground pressure. The volume and type of timbering shall be determined by the Contractor with consent of the Supervisor, and the Contractor shall be responsible for work safety. The timbering shall be removed in parallel with pipeline backfilling. Adhere to valid regulations and standards for this type of works.

Calculation: per m2 of strutted surface	m <sup>2</sup>	110.40		
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8 Purchase, transport and build in **sand** under, around and above the pipes as well as under the tank. The sand must be clear without organic impurities (rot, sludge,...). The sand shall be spread along the entire width of the trench, and the thickness of the layer under and above the pipe is given in the details of this design. First, the layer under the pipe shall be poured (bedding), and compacted to a 95% compaction level. After pouring, the sand shall be distributed along the entire pipe in specified layer and compacted in layers 10-20 cm thick (no backfilling of connections), so that compaction on the sides of the pipes is 95%. After testing the pipeline for impermeability, and upon approval of the Supervisor, the connections shall be backfilled and manually compacted up to the compaction level of 95%, and the rest of the trench up to 10 cm above the pipe top shall be compacted up to compaction level of 85-90%. The given compaction levels are defined in accordance with Proctor.

Calculation: per m3 of built in sand	m <sup>3</sup>	11.04		
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9 Purchase, transport and backfill the trench and tank pit using **gravel or machine buffer** up to driveway bedding, terrain level in layers 20-30 cm compacting up to 90% compaction level according to Proctor. Up to the level of 1.0 m above pipe top, compacting shall be done only manually. Above 1.0 m above pipe top, compacting can also be done using machines, according to instructions and recommendations of pipe producers. The largest grain size (piece) of backfilling material must not be over 30mm grading. Start trench backfilling only after approval by the Supervisor.

Calculation: per m3 of built in buffer	m <sup>3</sup>	25.77		
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8 **Transport excess material from excavation**, left over after trench backfilling, to a landfill. The price shall include transport of soil with loading, unloading and rough levelling on the landfill at a distance of up to 5.00 km.

Calculation: per m3 of transported and levelled uncultivated soil	m <sup>3</sup>	53.8		
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- 9 Purchase, transport and install **water supply pipes PE 100 SDR 17 S8**. The pipes shall be butt-welded together, according to producer's manual. Pipe connections with cast iron fittings shall be done using BE adapters free flanges. The pipes shall be carefully laid on a previously prepared sand bedding and adjusted longitudinally and by finish grade (elevation point) according to the design. The price shall include the entire material with distribution, moving the pipes along the trench, inspection of each pipe and connections for faults, connecting and laying the pipes. The works shall be performed entirely in accordance with the project, technical regulations and instructions of the Supervisor.

Calculation: per meter of length of installed pipes

<b>PE D 110 mm</b>	m	42.00		
<b>PE D 25 mm</b>	m	43.00		

- 10 Purchase, transport and install **polyethylene connection fittings (T fittings, bends, adapters) PE 100 SDR 17 S8**. Pipes shall be butt-welded together, in accordance with producer's manual, using cast iron fittings over the flange. The works shall be performed entirely in accordance with the design, technical regulations and Supervisor's instructions.

Calculation: per piece of built in fitting

<b>PE adapter D 110 mm</b>	pcs	7		
<b>PE adapter D 90 mm</b>	pcs	1		
<b>PE reduction D 110/90 mm</b>	pcs	1		

- 11 Purchase, transport and install **cast iron fittings (GGG 40, suitable to EN 545; DIN 28643 standard)** for installation of manhole nodes, shutters, branches and similar. The connection between the fittings and with the pipes shall be done over flanges, in accordance with the product manual (the connection of fittings with PE pipes shall be done over BE adaptor). The price shall include all the material, transport to installation site, inspection of each element for fault, mounting and fixing the connections before concreting anchored elements.

Calculation: per kg of element weight

<b>Q Ø 100 mm (EN 545; DIN 28643)</b>	pcs	6		
<b>T Ø 100/100 mm (EN 545; DIN 28643)</b>	pcs	2		
<b>T Ø 100/65 mm (EN 545; DIN 28643)</b>	pcs	1		
<b>T Ø 100/50 mm (EN 545; DIN 28643)</b>	pcs	1		
<b>FFR Ø 100/80 mm (EN 545; DIN 28643)</b>	pcs	2		
<b>FF Ø 100/300 mm (EN 545; DIN 28643)</b>	pcs	2		
<b>FF Ø 80/400 mm (EN 545; DIN 28643)</b>	pcs	2		
<b>X Ø 65/2 1/2" (EN 545; DIN 28643)</b>	pcs	1		
<b>X Ø 50/3/4" (EN 545; DIN 28643)</b>	pcs	1		
<b>N 90° Ø 80 (EN 545; DIN 28643)</b>	pcs	3		

- 12 Purchase, transport and install **water supply system reinforcement** to be built in the spaces provided in the design. The price shall include all the material, transport to installation site, inspection of each element for fault, mounting and fixing the connections before concreting anchored elements.

Calculation: per piece

<b>Oval gate valve Ø 100 mm (EN 12266; DIN 3230)</b>	pcs	2		
<b>Oval gate valve Ø 80 mm (EN 12266; DIN 3230)</b>	pcs	2		
<b>Oval gate valve Ø 65 mm (EN 12266; DIN 3230)</b>	pcs	1		
<b>Check valve Ø 100 mm (EN 12266; DIN 3230)</b>	pcs	1		
<b>Overground fire hydrant DN 80 mm</b>	pcs	1		
<b>Wall fire hydrant DN 52 mm</b>	pcs	2		
<b>Stop valve with drain Ø 20 mm</b>	pcs	1		
<b>Combined water meter DN 80/20 mm</b>	pcs	1		

13 Purchase, transport and mount **tin cabinet for overground fire hydrant DN 80 mm**. The cabinet shall contain the following equipment:

- Trevira hose Ø 52, length 15 m with couplings x 3 pcs
- Nozzle Ø 52 Al with valve x 2 pcs
- Key for couplings ABC x 2 pcs
- Key for overground hydrant x 1 pcs

Calculation: per piece

<b>Cabinet for overground fire hydrant DN 80 mm</b>	pcs	1		
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14 Purchase, transport and install **galvanized steel water supply system pipes**. The pipes and piping material shall correspond to **SRPS EN 10240:2011** standard. Pipes shall be cut together using suitable fittings. The pipes must be fixed to the walls and ceilings using double clamps spaced at 1.5 – 2.0 meters. Pipe breaches through the walls shall be insulated using Dekorodal tape or felt, so as to avoid any contact of pipes with mortar. The entire water supply installation must be tested against 12 bar pressure, in accordance with the valid regulations. If the pipes are laid in trench, they must be insulated using Poliken tape and laid and backfilled with sand in a layer 10-cm thick below and above the pipe. The price shall include all the material, transport to installation location, inspection of each element for faults, installation and fixing connections before concreting of anchored elements and finishing works.

Calculation: per meter of length of installed pipe

<b>FeZn Ø 2 1/2" (Ø 65 mm)</b>	m	8.00		
<b>FeZn Ø 2" (Ø 50 mm)</b>	m	18.00		

15 Make on-site **reinforced concrete top slab** for manholes: axb= in accordance with the design, d= 20 cm, using MB30 concrete, with installed cast iron frame for cover. The slab shall be cast in double formwork on previously built reinforced concrete walls of the water supply manhole.

Calculation: per m3 of built-in concrete	m <sup>3</sup>	2.00		
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16 Make on-site **reinforced concrete bottom slab and walls** for water supply manholes: dimensions in accordance with the design, bottom slab d= 20 cm, using MB30 concrete. The slab and the walls shall be cast in two-sided formwork.

Calculation: per m3 of built-in concrete	m <sup>3</sup>	6.89		
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17 Make on-site **reinforced concrete anchor block** for anchoring water supply reinforcement, N elements as well as PE bends.

Calculation: per m3 of built-in concrete for all anchor blocks	m <sup>3</sup>	1.00		
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18 Purchase, transport and install **construction iron** for water supply manholes. The price shall include all the material, transport to the installation location, installation and fixing the reinforcement before concreting.

Calculation: per kg of weight of installed reinforcement

<b>MA 500/600</b>				
MAQ - 131	kg	520.00		
MAQ - 424	kg	520.00		
<b>GA 240/360</b>				
Ø 8 mm	kg	10.00		

- 19 Purchase, transport and install **cast iron covers** for water supply shafts. The covers shall be rectangular with opening size 600 x 600 mm. The installation of the cover shall be done in accordance with the Supervisor's instructions.

Calculation: per piece

<b>A 15 (50 kN) EN - 124 SRPS C.J1.600</b>	pcs	1		
<b>C 250 (250 kN) EN - 124 SRPS C.J1.600</b>	pcs	1		

- 20 Purchase, transport and mount **pump station**. Hydro pressure booster in hydrant network Grundfos, type Hydro MPC-S 2 CR32-3:

Q = 10.0 l/s;

H = 30.0 m

P = 5.5 kW.

Calculation: per piece

Pump station	pcs	1		
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- 23 Purchase, transport and install hex head bolts (class B, JUS M.B1.051)

M16 / 90	pcs	120		
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- 24 Purchase, transport and install hex head nuts (JUS M.B1.601)

M16 / 90	pcs	120		
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- 25 Purchase, transport and install Pertunan rubber panel, reinforced d=5mm

	m <sup>2</sup>	1.0		
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- 26 **Test the built water supply installation** for impermeability according to relevant instructions. All faulty pipeline parts shall be removed and replaced with new pipes, in the presence of the Supervisor. No pipeline repairs are allowed in the trench (gluing, sealing using additional material, etc.). The work on pipeline replacement shall not be calculated and shall be at the expense of the Contractor.

Calculation: per meter of length of tested installation	m	111.00		
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- 27 **Wash and disinfect** the built water supply installation, until proper sample is obtained according to drinking water criteria. The quality of the sample shall be confirmed by the competent Health Protection Institute.

Calculation: per meter of length of the installation	m	111.00		
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<b>TOTAL:</b>				

**PRICED BILL OF QUANTITIES**

Item	Description	Unit of Measure	No. of Unit:	Unit Price	Total
1	2	3	4	5	6

**1 Mark the sewer line** with all its elements (horizontal, vertical bends) and cross points with existing underground installations that shall be dug out before the start of works. When introducing the Contractor to the works, the line shall be uncovered and destroyed points identified. Also, the spots provided for sewer manholes shall be precisely marked.

Calculation: per meter of length of the marked pipeline	m	44.00	.	.
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**2 Excavate trench mechanically** in III category soil. During excavation remove the soil at least 1.0 m from the edge of the trench, and all excess soil load directly onto the transport vehicles. Sides shall be cut evenly. The works on the excavation and pipe installation shall be done up the grade level. The price shall include: excavation in dry and wet soil (with necessary pumping of the water out of the trench). Excavation shall be done entirely in accordance with attached drawings, technical regulations and Supervisor's instructions.

Calculation: per m3 of excavated soil

**from 0 to 2 m**

Calculation: per m3 of excavated soil	m <sup>3</sup>	52.80	.	.
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**3 Manually level the trench bottom** with accuracy of +/-2 cm, in accordance with the designed grade level. The trench shall be levelled along the entire width, in order to provide base for sand bedding. All excess soil shall be disposed of at least 1.00 m away from the edge of the trench.

Calculation: per m2 of levelled surface	m <sup>2</sup>	35.20	.	.
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**4 Double strut** the trench canal using planks d=5 cm of II class coniferous wood with metal struts or oak poles. The timbering shall be done so as to secure full safety of the workers throughout the works, as well as to prevent deformation of trench sides due to ground pressure. The volume and type of timbering shall be determined by the Contractor with consent of the Supervisor, and the Contractor will be responsible for work safety. The timbering shall be removed in parallel with pipeline backfilling. Adhere to valid regulations and standards for this type of works.

Calculation: per m2 of strutted surface	m <sup>2</sup>	132.00	.	.
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5 Purchase, transport and pour sand under, around and above the pipes. The sand must be clean without organic impurities (rot, sludge, ...). The sand shall be spread along the entire width of the trench, and the thickness of the layer under and above the pipe is given in the details of this design. First, the layer under the pipe shall be poured (bedding), which shall be compacted to a 95% compaction level. After pouring, the sand shall be distributed along the entire pipe length in specified layer and manually compacted in layers 10-20 cm thick (no backfilling of connections), so that on the sides of the pipes compaction of 95% is achieved. After testing the pipeline for impermeability, and upon approval of the Supervisor, the connections shall be backfilled and also manually compacted up to the compaction level of 95%, and the rest of the trench up to 10 cm above the pipe top shall be compacted up to compaction level of 85-90%. The given compaction levels are defined in accordance with Proctor.

Calculation: per m3 of built-in sand	m <sup>3</sup>	14.08	.	.
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8 Purchase, transport and backfill the trench using **machine buffer** up to driveway bedding in 20-30 cm layers compacting up to 90% compaction level according to Proctor. Up to the level of 1.0 m above pipe top, compacting shall be done only manually. Above 1.0 m above pipe top, compacting can also be done using machines, according to instructions and recommendations of pipe producers. The largest grain size (piece) of backfilling material must not be over 30mm grading. Start trench backfilling only upon approval by the Supervisor.

Calculation: per m3 of built in buffer	m <sup>3</sup>	38.72	.	.
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9 **Transport excess material** from excavation, left over after trench backfilling, to a landfill. The price shall include transport of soil with loading, unloading and rough levelling on the landfill at a distance of up to 5.00 km.

Calculation: per m3 of transported and levelled uncultivated soil	m <sup>3</sup>	33.32	.	.
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10 Purchase, transport and install **sewer** PVC pipes with one coupling, class S-20 (JUS G. C6. 502; DIN 8061). The pipes shall be connected in such a way that the flat end of one pipe shall be inserted in the coupling of the other pipe, and sealed using a suitable rubber ring, according to product manual. The pipes shall be carefully laid on a previously prepared sand bedding and adjusted longitudinally and by grade level according to the design. The price shall include the entire material with distribution, moving the pipes along the trench, inspection of each pipe and rubber ring seals for faults, connecting and laying the pipes. The works shall be performed entirely in accordance with the project, technical regulations and instructions of the Supervisor.

Calculation: per meter of length of built-in pipe

Ø 110 mm	m	44.00	.	.
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11 Purchase, transport and install **prefabricated reinforced concrete ring Ø 1000/750** with reinforced bottom slab, 12-cm thick with finished channel pipe. The ring shall have inlets and outlets for pipe installation. The ring shall be installed on a previously prepared gravel bedding, 10-cm thick, according to designed grade level.

Calculation: per piece of built-in ring	pcs	3	.	.
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12 Purchase, transport and install **prefabricated reinforced concrete rings** for inspection chambers **Ø 1000/500**. After installation of the reinforced concrete ring on the manhole bottom with finished channel pipe, the rest of the manhole shall be made of reinforced concrete rings **Ø 1000/500**, with built in cast iron steps (DIN V 19555) spaced 30 cm apart, to the upper slab bottom level. The rings shall be connected using cement mortar 1:1.

Calculation: per meter of length of the hole from the terrain level to the bottom edge of the manhole	m	2	.	.
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13 Purchase, transport and install prefabricated **reinforced concrete top slab**: axb= 120x120 cm, d= 20 cm, made of MB30 concrete, with installed cast iron frame for cover. The slab shall be placed on previously levelled ring height, if necessary bracing and levelling shall be done using radial brick that needs to be plastered on the inside and outside and skimmed to achieve "black gloss".

	pcs	3	.	.
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14 Purchase, transport and install **cast iron covers** for inspection chambers. The covers shall be round, with 600 mm opening. The installation of the covers shall be done in accordance with design details and instructions by the Supervisor.

Calculation: per piece

<b>A 15 (50 kN) EN - 124 SRPS C.J1.600</b>	pcs	1	.	.
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15 **Make the connection to existing septic tank.** The item shall include making an opening in the tank wall, building in PVC pipe DN 100 mm, sealing the breach and repairing/plastering the excess demolished tank wall.

Calculation: per piece	pcs	1	.	.
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16 **Wash and test the built-in water sewer installation** for impermeability according to attached instructions. All faulty pipeline parts shall be removed and replaced with new pipes, in the presence of the Supervisor. No pipeline repairs are allowed in the trench (gluing, sealing using additional material, etc.). The work on pipeline replacement shall not be calculated and shall be at the expense of the Contractor. The price shall also include pipe washing. The item shall also include washing of the sewer installation after impermeability testing.

Calculation: per meter of length of tested sewer	m	44.0	.	.
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<b>TOTAL:</b>	<b>RSD</b>			
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**PRICED BILL OF QUANTITIES**  
**INTERIOR WATER SUPPLY AND SEWER INSTALLATION**

Item	TYPE OF WORKS	UoM	No. of U.	UNIT PRICE	TOTAL
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**I CONSTRUCTION WORKS**

- 1 Make **holes in concrete structure** for the passage of water supply and sewer pipeline verticals. The price shall include the adequate sealing of the spaces between hole walls and installations, after mounting the installation.

Calculation per hole	pcs	20		
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**I Total CONSTRUCTION WORKS**

**II SEWER (sanitary)**

- 2 Purchase, transport and install **PVC pipes** for sanitary sewer installation. The pipes shall be fastened under each muff using iron clamps. The pipe shall be hung from the ceiling around each sleeve using hoop iron stirrup 3/40 mm. All the necessary chiselling and penetrating through brick and concrete walls shall not be charged separately, but shall be included in the price of the pipe length meter. Unfinished parts of the network, connections to verticals or sanitary ware shall be closed with temporary wooden plugs of suitable diameter until their installation. The installed pipes shall be washed and tested for impermeability in the presence of the Supervisor.

Calculation per meter of length, installed and approved pipe

PVC DN 110 mm	m	6.0		
PVC DN 75 mm	m	5.0		
PVC DN 50 mm	m	18.0		

- 3 Purchase, transport and install **PVC floor drains** with nickel plated grill.

Calculation per installed drain.

DN 50 mm	pcs	5		
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- 4 Purchase, transport and install **sewer ventilation grills and heads** in places defined in the design.

Calculation per installed head

DN 75 mm	pcs	1		
HL 905 DN 50 mm	pcs	1		

- 5 **Connect the building to the exterior sewer network.**

Penetrate the wall, install the pipes and patch (seal) the breach in the manhole.

Calculation per installed connection	pcs	2		
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- 6 Perform **hydraulic tests** of the installed sewer network for impermeability

Calculation per meter of length of the tested pipe	m	29		
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**II Total SEWER**

### III WATER SUPPLY SYSTEM (interior hydrant and sanitary water supply system)

- 7 Purchase, transport and install **water supply pipes PP-R**, for operating pressure of **10 bar**, for embedded distribution of interior hydrant installation as well as the installation of sanitary water supply system. Imported pipes must be in accordance with SRPS, i.e. must have certificate of technical functionality. The pipes shall be butt-welded entirely in accordance with the recommendations of pipe producer. The pipes shall be mostly installed hidden in walls (within sanitation blocks) and partly visible in the area of suspended ceilings and installation corridors. The pipes shall be insulated using felt to prevent condensation. The entire water supply installation shall be tested for 12 bar pressure, in accordance with valid regulations, before closing the grooves and plastering.

Calculation per m of installed and approved pipe

D 25 mm (Ø 3/4")	m	14.0		
D 20 mm (Ø 1/2")	m	22.0		

- 8 Purchase, transport and install **flat brass stop valves with butterfly handle**. The valves must be in accordance with JUS.M.C5.260 standard.

Calculation per piece of installed valve

Ø 20 mm (Ø 3/4")	pcs	2		
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- 9 Purchase, transport and install **concealed valves** in places marked in the design graphic attachments. The valves shall correspond to PE/PP-R pipes.

Calculation per piece of installed valve

Ø 13 mm (Ø 1/2")	pcs	9		
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- 10 Purchase, transport and mount **EK valve with chrome-plated cap**. The valves shall correspond to PE/PP-R pipes.

Calculation per piece of installed valve.

Ø 13 mm (Ø 1/2")	pcs	14		
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- 11 **Test** installed water supply installation **for impermeability** in accordance with valid regulations. The water necessary for the tests shall be supplied by the Contractor.

Calculation per length meter of tested pipe

Calculation per length meter of tested pipe	m	36.00		
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- 12 **Disinfect** installed and tested **water supply network** in the building in accordance with valid regulations.

Calculation per meter of length of the pipeline.

Calculation per meter of length of the pipeline.	m	36.00		
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- 13 **Test water quality** in the newly installed network, after disinfection.

Calculation per number of samples

Calculation per number of samples	pcs	1		
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### III Total WATER SUPPLY SYSTEM

#### IV SANITARY WARE AND ACCESSORIES

14 Purchase and mount **toilet bowl**:

- a) faience toilet bowl white, with rubber mat between the toilet and the floor, the toilet must correspond to JUS.U.Nr.120 standard
- b) toilet seat with full plastic lid, with at least three rubber buffers on the bottom
- c) pvc pipe inserted between the cast toilet bowl outlet and the sewer pipe in the wall
- d) low-mount flushing tank connected with the toilet bowl through a plastic pipe Ø 32 mm with clamps and rubber seals; flushing tank lever shall have a lead

Calculation per installed toilet bowl

Type Simphon	pcs	3		
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15 Purchase and install **chrome plated toilet paper roll holder**.

Calculation per installed holder	pcs	3		
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16 Purchase and install a set of **faience washbasins**, 550-mm wide, corresponding to JUS.U.N5.110. The basins shall have outlet hole, overflow and plug for the outlet hole. Under the washbasin install chrome plated siphon corresponding to the standard JUS.M.C5.810 and connect it to the sewer pipe in the wall over a rubber seal. The connection shall be covered with a nickel plated fixing bracket. The basin shall be mounted using clips and screws, and previously built-in plastic anchors.

Calculation per installed washbasin	pcs	5		
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17 Purchase and install **nickel plated tap for washbasin**.

Calculation per installed tap

Standalone - for hot and cold water	pcs	5		
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18 Purchase and mount **mirrors** 60/40 cm, installed above the wash basins.

Calculation per installed mirror.	pcs	5		
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19 Purchase and install **shelves** above the wash basins.

Calculation per installed shelf	pcs	5		
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20 Purchase and install **nickel plated paper towel holder** next to the wash basin.

Calculation per installed holder.	pcs	5		
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21 Purchase and install complete **faience urinals**, corresponding to JUS.U.N5.110 standard. The urinal shall have outlet hole. It shall be connected with the sewer pipe in the wall over a rubber seal. The connection shall be covered with a nickel plated fixing bracket. The urinal shall be mounted using clips and screws, and previously built-in plastic anchors.

Calculation per installed urinal	pcs	1		
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22 Purchase and install **nickel plated urinal valve**.

Calculation per installed valve.

Urinal valve	pcs	1		
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23 Purchase and mount **wall hose cock D 3/4"**.

Calculation per installed hose cock.	pcs	1		
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24 Purchase and mount **electric water heater**, connect it to the water supply and power supply installation. Unlike instantaneous water heaters, storage water heaters must also have safety valves. Use nickel plated copper pipes with nickel plated bolts and rubber seals for connection to the water supply installation.

Calculation per installed water heater

V=50 lit.	pcs	1		
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**VI Total SANITARY WARE AND ACCESSORIES**

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**SUMMARY**

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**I Total CONSTRUCTION WORKS**

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**II Total SEWER**

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**III Total WATER SUPPLY SYSTEM**

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**IV Total SANITARY WARE AND ACCESSORIES**

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<b>TOTAL:</b>				
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**SUMMARY**

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**I Total EXTERIOR WATER SUPPLY SYSTEM**

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**II Total EXTERIOR SEWER**

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**III Total INTERIOR WS INSTALLATION**

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**Total: RSD**