





Statement of the main sets of the working project		
Designation	Name	Notes
ПЗ	Explanatory note	
ТХ	Technological solutions	
АБ	Architectural and construction solutions	
ОВ	Heating and ventilation	
БК	Water supply and sewerage	
ЕТП	Electrotechnical solutions	
СПЗ	Fire protection system	
К	Estimate documentation	

List of working drawings of the main set of brand AR (completion)		
Sheet	Name	Notes
1	General data (beginning)	
2	General data (conclusion)	
3	First floor plan at elevation 0.000 (measured)	
4	Dismantling plan at elevation ±0.000, M 1:100	
5	Dismantling plan at elevation ±0.000, M 1:100	
6	Assembly plan at elevation ±0.000, Scale 1:100	
7	Schedule of openings for the installation of HVAC and water supply networks	
8	Marking plan at ±0.000 level, Scale 1:100	
9	Specification of infill elements for openings on the 1st floor	
10	Section 1-1 (after reconstruction), Scale 1:100	
11	Facade A-B (after reconstruction), Scale 1:100	
12	Facade V-A (after reconstruction), scale 1:100	
13	Facade 1-9 (after reconstruction), Scale 1:100	
14	Floor plan explanation	
15	Finishing of premises	
16	Accessibility plan for people with limited mobility	
17	Reinforcement of partitions, installation of lintels on the 1st floor	
18	Entrance group diagram No. 1	
19	Canopy Nv1, pit Pr1, specification	
20	Ramp Pn1, nodes, specification	
21	Entrance group scheme No. 2, section 3-3, specification	
22	Entrance group scheme No. 3, section 4-4, specification	
23	Entrance group scheme No. 4, section 5-5, specification	
24	Exit layout on the 2nd floor No. 1, section 1-1, specification	
25	Exit layout on the 2nd floor No. 2, section 2-2, specification	
26	Soffit 1, Soffit 2, Section 1-1, Specification	
27	Clamp Ob1, Clamp Ob2, section A-A, section B-B, specification	
28	Metal tie Mc1, node A, specification	
29	Clamp O83-O86, section A-A, B-B, C-C, D-D, specification	

							35/2304-25-AB
							Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast
Зм.	Кільк.	Аркушів	№ Док.	Підпис	Дата		
ГП		Мартиняк				Renovation	Стадія
Розробив		Колесник					РП
Перевірю		Мартиняк					1
							29
						General information (beginning)	UKRBUDPROEKT, LLC

The working project has been developed in accordance with current norms, rules, and standards.

Chief Project  Engineer Martynyuk O.

The project provides for the reconstruction of a non-residential building of Preschool Education Institution No. 4 'Dolphin' into specialized services for victims of domestic violence and/or gender-based violence at 8-a Korabelna Street in the city of Pervomaisk, Mykolaiv region.

- 1. Reconstruction is planned on the site.
- 2. The level of the clean floor of the first floor of the building is accepted as the conditional mark 0.000, which corresponds to the absolute mark in the Baltic coordinate system, determined according to the planned terrain.
- 3. The designed object belongs to the II southeastern region in the architectural and construction climatic zoning of the territory of Ukraine with the following characteristics:
  - the long-term minimum and maximum air temperatures are respectively  $-28^{\circ}\text{C}$  and  $+37^{\circ}\text{C}$ ;
  - the average annual air temperature is  $10.1^{\circ}\text{C}$ ;
  - the coldest month is January (air temperature of the coldest five-day period with a probability of 0.92 - minus  $23^{\circ}\text{C}$ );
  - the hottest month is July (air temperature of the warmest five-day period with a probability of 0.99 - plus  $25^{\circ}\text{C}$ );
  - relative air humidity in July - 64%;
- average relative humidity per year 73%;
- average wind speed in January - from 4 to 6 m/s;
- calculated outdoor air temperature for enclosing structures - minus  $18^{\circ}\text{C}$ ;
- prevailing winds from the north and northeast, speed up to 25 m/s;
- wind load -  $46 \text{ kg/m}^2$ , snow load -  $88 \text{ kg/m}^2$ ;
- average annual precipitation 461 mm;
- standard soil freezing depth 0.8 m;
- seismicity of the area - 7 points.
- 5. NUMBER OF FLOORS - 2 with basement and attic.
- 6. BUILDING FIRE RESISTANCE RATING - I.
- 7. RESPONSIBILITY CLASS - CC1.
- 8. CONSTRUCTION PHASING - in 2 stages


Architectural and construction solutions were developed to ensure the most convenient functioning of the facility, for which the division into functional zones is provided:

- 1st floor "Shelter for victims of domestic violence";
- 2nd floor "Day center for social and psychological assistance" and "Mobile team for social and psychological assistance for victims of domestic violence and gender-based violence".

During the development of the facility, certain changes occurred in the load-bearing structures, namely openings in load-bearing walls to widen the corridors. Therefore, these openings were reinforced with steel frames, as well as the relocated exterior door openings.

During measurements, a crack was discovered at the corner of the building between the first and second floor windows. Therefore, a decision was made to reinforce the corner of the building with steel ties.

The working project has been developed in accordance with current norms, rules, and standards.

Chief Project  Engineer Martynyuk O.

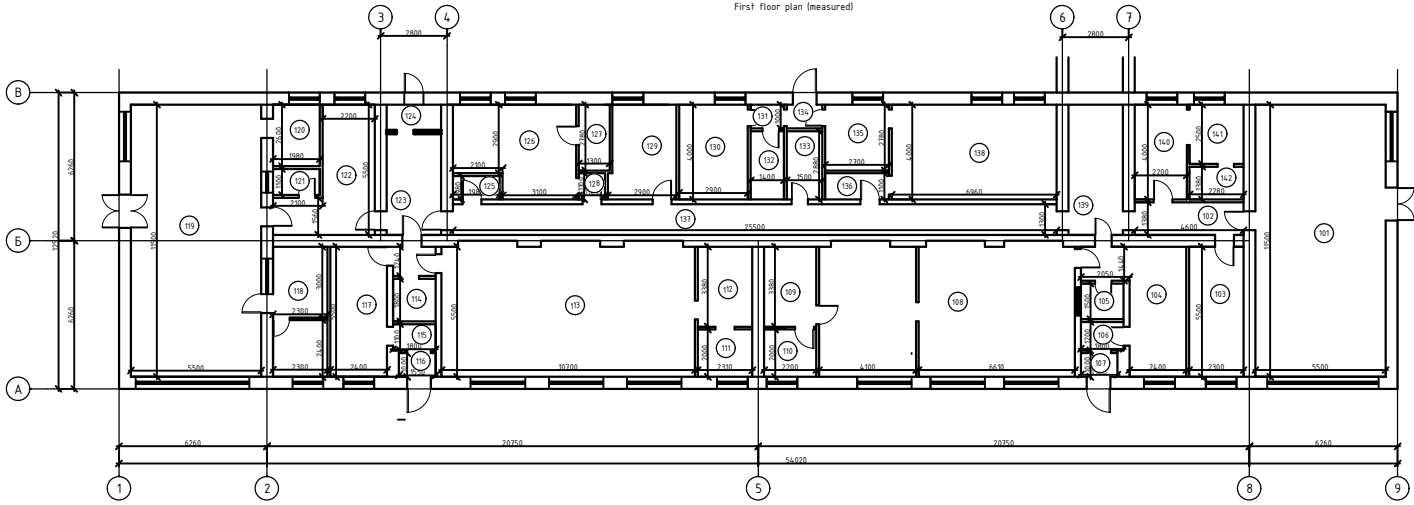
Engineer Martynyuk O.

№	Names of indicators	Units of measurement	I Phase	II Phase	Note
1	Number of floors	floor	2	2	
2	Conditional building height	m	7.50	7.50	
3	Building area	m <sup>2</sup>	1946.3	1946.3	
4	Total area	m <sup>2</sup>	538.73	537.78	
5	Usable area	m <sup>2</sup>	538.73	537.78	
6	Calculated area	m <sup>2</sup>	391.83	387.3	
7	Building volume, including:	m <sup>3</sup>	2 029.2	2 029.2	

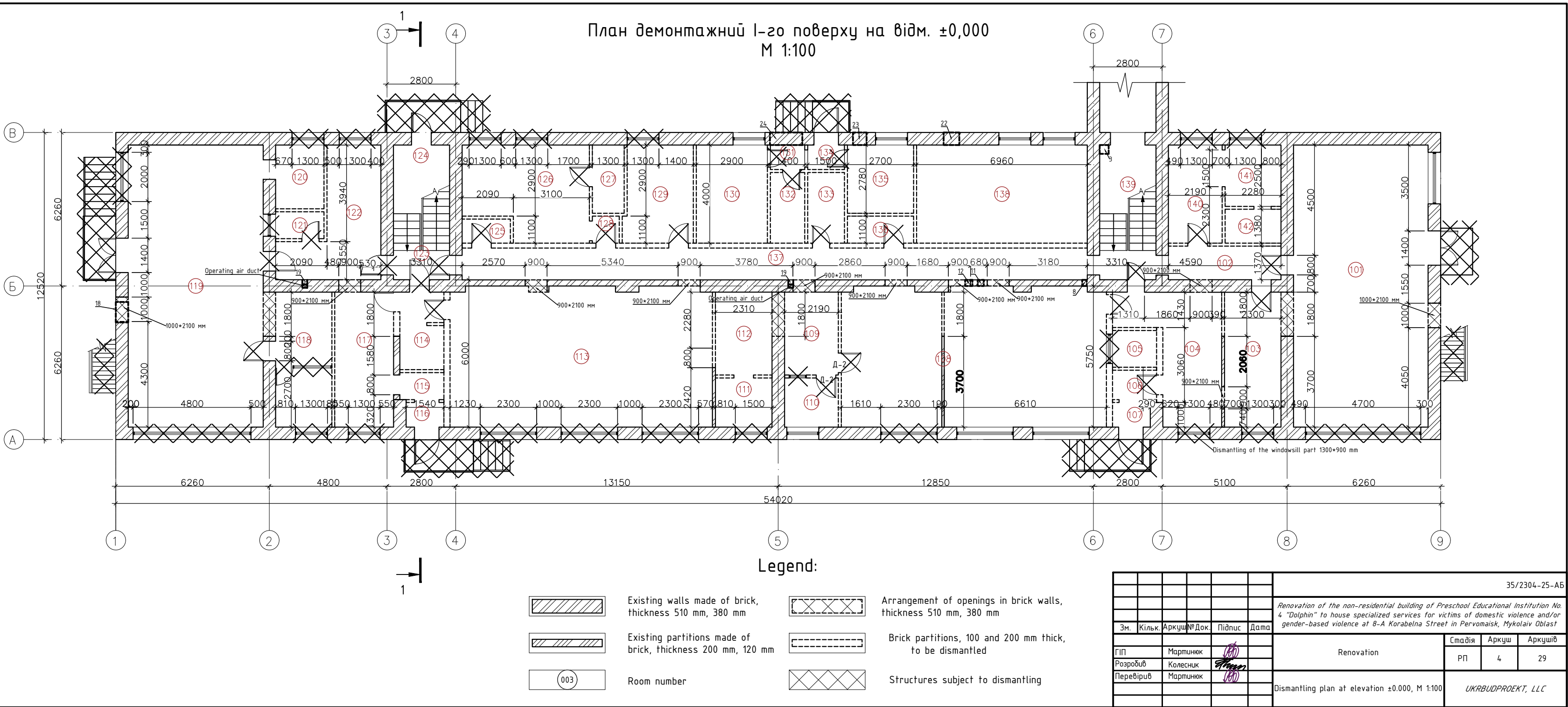
Designation	Designation	Notes
ДБН В.2.2-40:2018	"Inclusiveness of buildings and structures. Main provisions"	
ДБН В.1.1-7:2016	"Fire Safety of Construction Sites. General Requirements"	
ДБН В.2.2-9:2018	Public buildings and structures. Basic provisions	
ДБН В.2.2-40:2018	Inclusiveness of buildings and structures. Main provisions	
ДБН В.1.1-12:2014	"Construction in Seismic Areas of Ukraine"	
ДБН А.3.2-2:2009	Construction in Seismic Areas of Ukraine	

							35/2304-25-АБ
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Зм.	Кільк.	Аркушів	№ Док.	Підпис	Дата		
ГІП	Мартинюк	(п)				Renovation	Стадія
Розробиб	Колесник	(п)					РП
Перевіриб	Мартинюк	(п)					2
							Аркушіб
							29
						General data (ending)	UKRBUDDPROEKT, LLC

Room specification		
#	Name	Area, m <sup>2</sup>
100	Vestibule	4.48
101	Hall	38.54
102	Reception	3.80
103	Universal bathroom	3.80
104	Psychologist's office	19.22
105	Office of the shelter manager	31.84
106	Social worker's office	25.20
107	Stainwell	12.57
108	Corridor	10.65
109	Room for people with limited mobility	14.93
110	Bathroom with a shower for people with limited mobility	5.52
111	Room for people with limited mobility	16.44
112	Bathroom with a shower for people with limited mobility	5.52
113	Utility room	8.09
114	Room for a family with children	19.67
115	Bathroom with a shower	3.12
116	Room for a family with children	16.96
117	Bathroom with a shower	3.12
118	Room for elderly people	13.35
119	Bathroom with a shower	3.11
120	Room for elderly people	15.75
121	Bathroom with a shower	3.12
122	Room for a large family	28.28
123	Bathroom with a shower	3.24
124	Room for a mother with a child	20.09
125	Bathroom with a shower	3.08
126	Stainwell	12.57
127	Room for a large family	31.59
128	Bathroom with a shower	3.11
129	Dining room for 18 seats	23.30
130	Kitchen. Oven food preparation for 4 workstations	30.04
131	Laundry room	9.05
132	Laundry drying room	7.37
133	Children's room. Room for activities	24.63
134	Linen closet	5.42
Total		538.73

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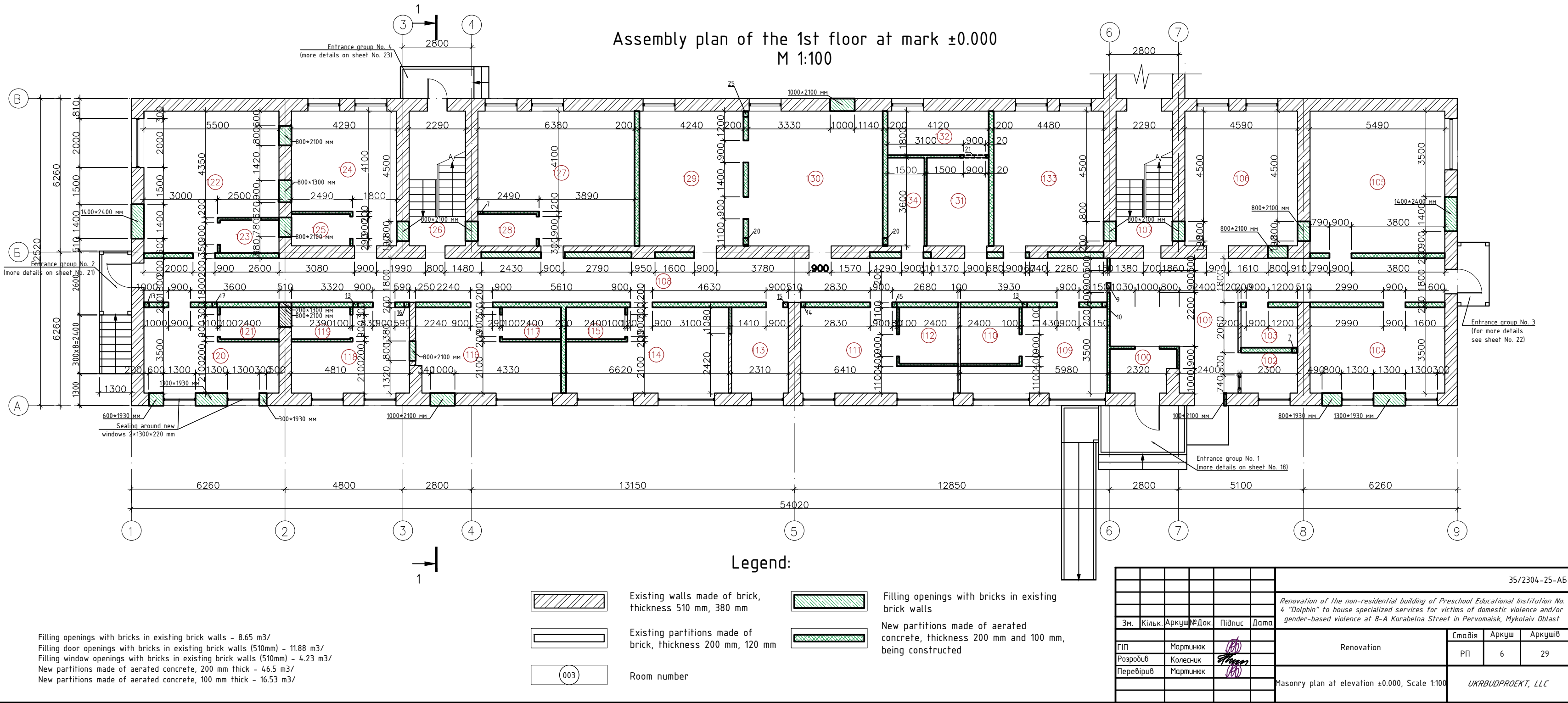
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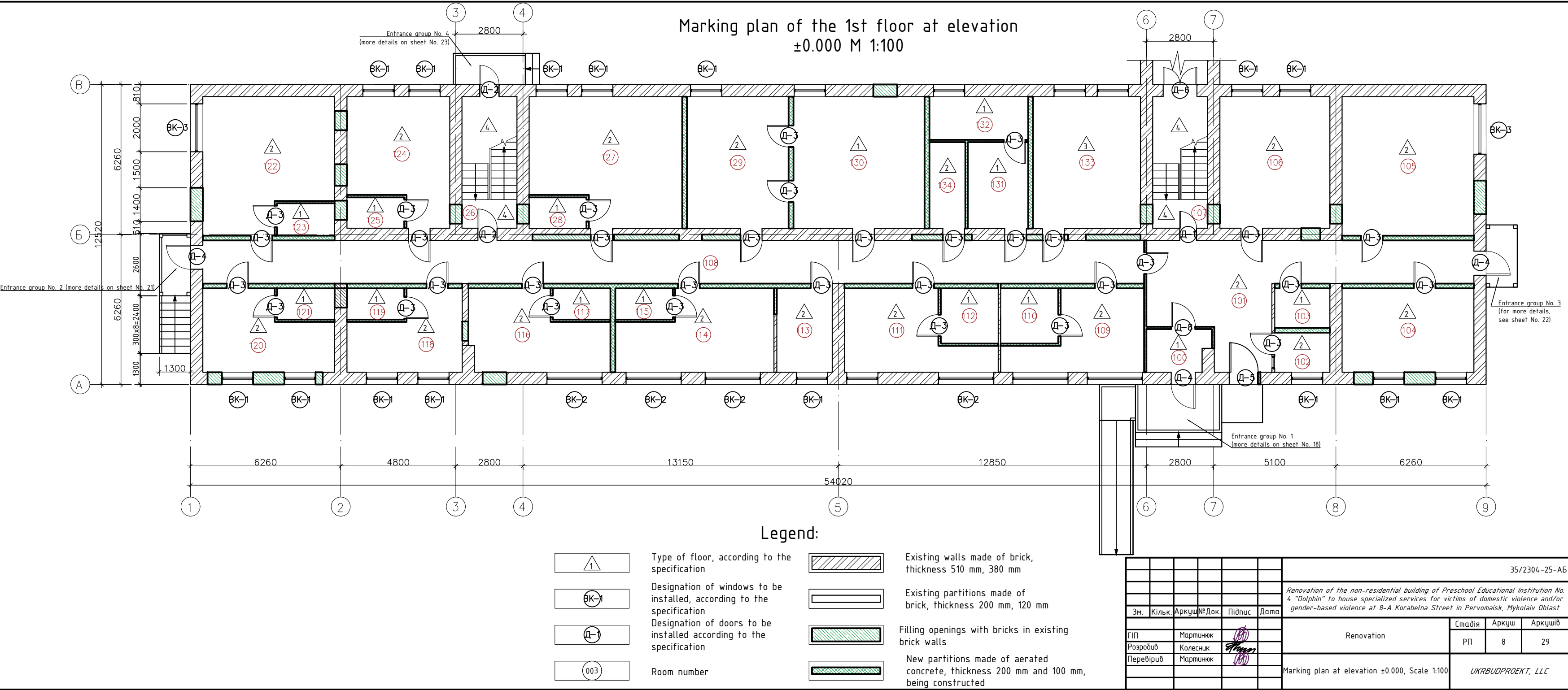
Volume of walls and partitions being dismantled on the 1st floor											
Material	Volume, m³										
120mm brickwork	30.92 m³										
Brickwork 200mm	15.3 m³										
Brickwork 250mm	12.45 m³										
Statement of finishing materials being dismantled on the first floor											
Type of interior element finishing		Notes									
Walls or partitions	Area, m²										
paint, putty, plaster	1347.0 m²										
tile, plaster	217.68 m²										
	1564.68m²										
Explanation of the floors to be dismantled on the first floor											
Name of floor elements				Area, m²							
tile, screed, layers of waterproofing, screed 100mm				106.7 m²							
linoleum (parquet 20%), wooden base, screed 100mm				435.16 m²							
				541.86 m²							
Arrangement of openings in a brick wall 900x2100x510 – 8.67 m3/ Arrangement of openings in a brick wall 1000x2100x510 – 2.14 m3/ Arrangement of openings in a brick wall 1800x2500x510 – 6.88 m3/											
Dismantling of the windowsill on the first floor: - Wooden windowsill – 38.5 linear meters											
Dismantling of the window sill part 1300x900x510 mm – 0.6 m3/ Dismantling of existing entrance groups see sheets 16,19,20,21 Dismantling of metal steps see sheets 22,23											
						35/2304-25-A5					
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast					
Зм.	Кільк.	Аркуш	№Док.	Підпис	Дата				Стадія	Аркуш	Аркушів
ГІП		Мартинюк				Renovation			РП	5	29
Розробив		Колесник									
Перевірів		Мартинюк				Specification of dismantling elements on the 1st floor			UKRBUDPROEKT, LLC		

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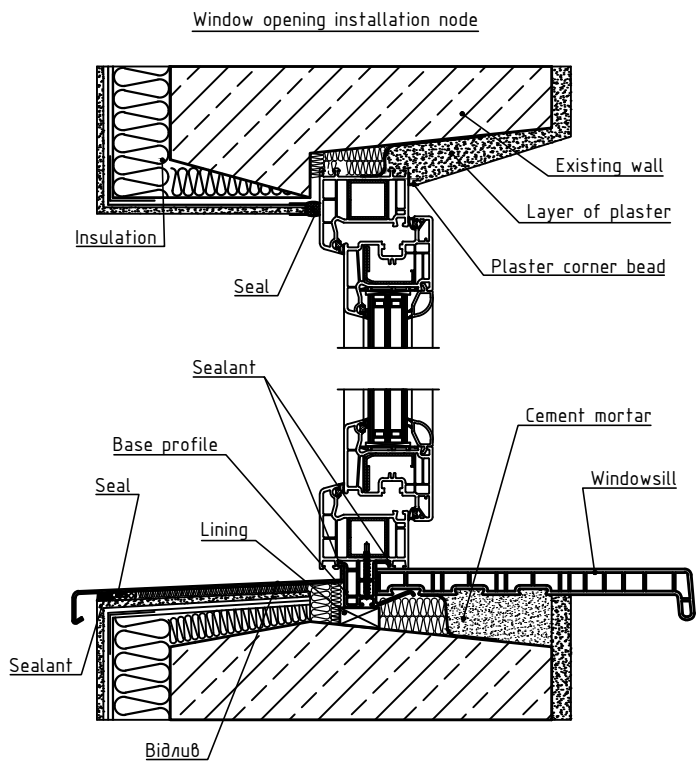
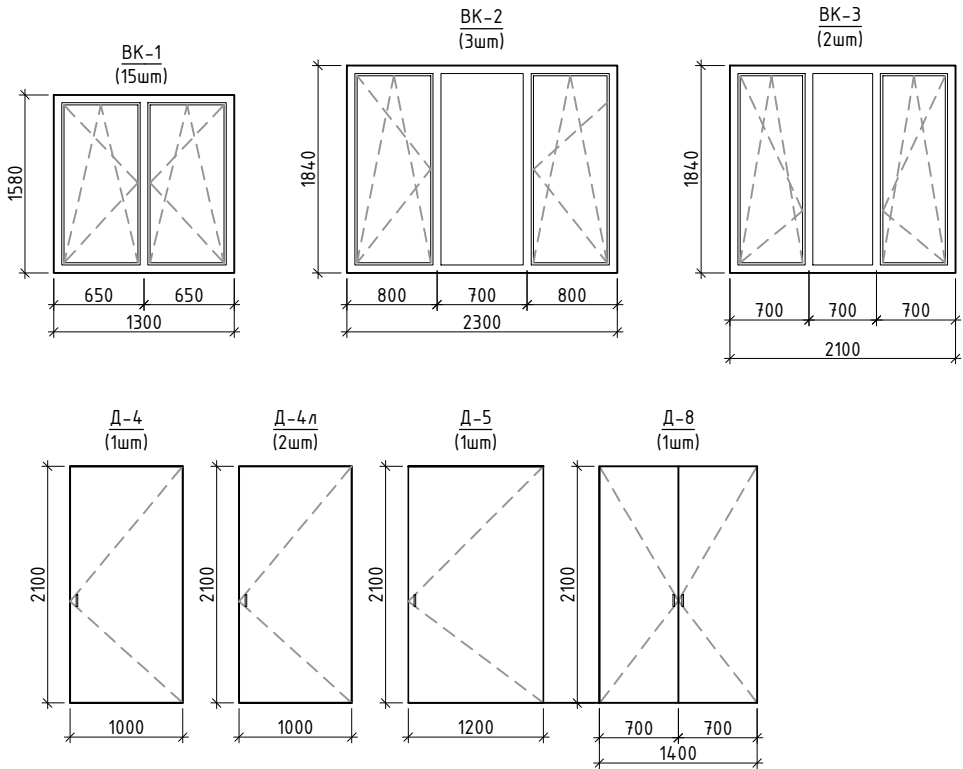
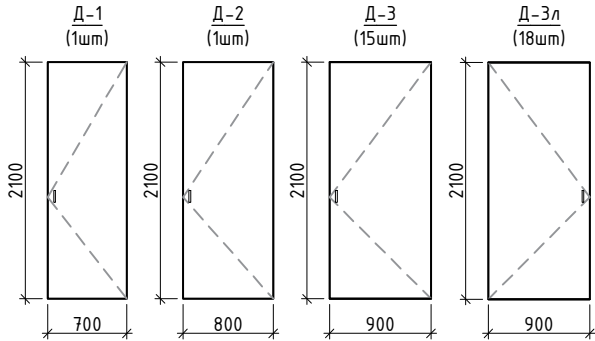
Schedule of openings for the installation of HVAC and plumbing networks										
№	Hole dimensions		Purpose of the hole		Mark of the bottom of the opening from the design zero, mm		Quantity		Notes	
1	300*150 mm		BK		+3,000		1		in the floor slab	
2	200*150 mm		BK		+3,000		3		in the floor slab	
3	360*360 mm		OB		-0,300		1		in the floor slab	
4	300*300 mm		OB		+3,000		1		in the floor slab	
5	100*140 mm (min)		OB		+3,000; +6,300		16		in the floor slab	
6	100*140 mm (min)		OB		+6,300		5		in the floor slab	
7	200*200 mm		OB		+2,290		2		in the partition being erected	
8	180*200 mm		OB		+2,650		1		in the existing wall	
9	230*230 mm		OB		+2,650		1		in the partition being constructed	
10	180*200 mm		OB		+2,800		1		in the partition being constructed	
11	260*260 mm		OB		+2,650		1		in the existing wall	
12	300*100 mm		OB		+2,800		1		in the existing wall	
13	190*200 mm		OB		+2,660		3		in the partition being constructed	
14	180*200 mm		OB		+2,660		1		in the partition being constructed	
15	180*200 mm		OB		+2,800		2		in the partition being constructed	
16	190*200 mm		OB		+2,800		1		in the partition being constructed	
17	190*170 mm		OB		+2,830		1		in the partition being constructed	
18	840*360 mm		OB		+2,580		1		in the existing wall	
19	100*140 mm		OB		+2,200		2		in the existing wall	
20	260*260 mm		OB		+2,670		2		in the partition being constructed	
21	1170*260 mm		OB		+2,670		1		in the partition being constructed	
22	630*260 mm		OB		+2,670		1		in the existing wall	
23	550*300 mm		OB		+2,650		1		in the existing wall	
24	1320*300 mm		OB		+2,650		1		in the existing wall	
25	210*260 mm		OB		+2,670		1		in the partition being constructed	
0.195 m³/ - openings in the ceilings;										
0.605 m³/ - openings in the walls of existing brick structures.										
						35/2304-25-AB				
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast				
Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата					
						Renovation		Смадія	Аркуш	Аркушіб
ГІП		Мартинюк						РП	7	29
Розробив		Колесник				Schedule of openings for the installation of HVAC and water supply networks		UKRBUDPROEKT, LLC		
Перевірів		Мартинюк								

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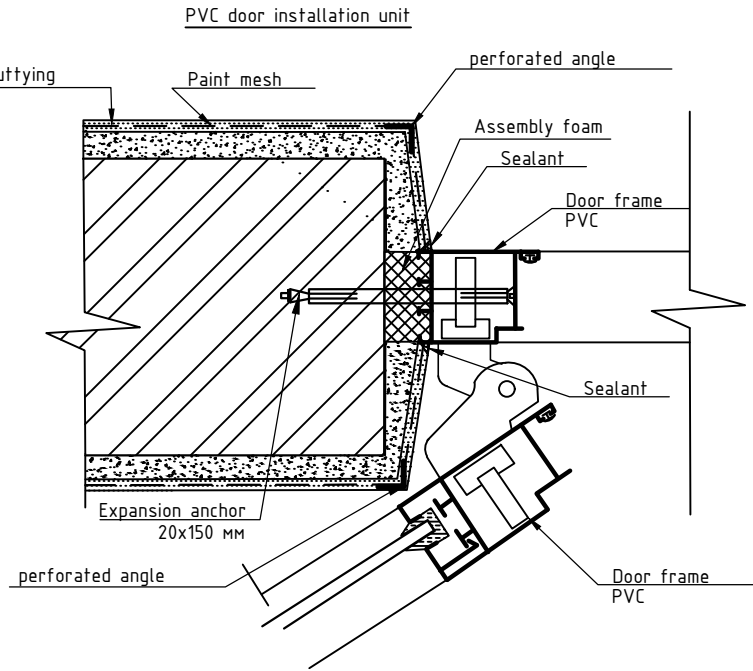


Consolidated specification of opening infill elements						
Des.	Designation	Name	Size (W×H), mm	Floor	Mass of unit, kg	Notes
				1		
Window openings						
BK-1	ДСТУ EN 14351-1:2020	metal-plastic, custom-made	1300x1580h	15		
BK-2	ДСТУ EN 14351-1:2020	metal-plastic, custom-made	2300x1840h	3		
BK-3	ДСТУ EN 14351-1:2020	metal-plastic, custom-made	2100x1840h	2		
BK-4	ДСТУ EN 14351-1:2020	metal-plastic, custom-made	800x1840h	-		
Всього				20		

Metal grille for first floor windows (1300x1600h) – 20 pcs  
Metal grille for first floor windows (2300x1840h) – 6 pcs  
Metal grille for first floor windows (2200x1840h) – 2 pcs  
Installation of new windowsill (250mm) – 30.6 m  
Window drip cap – 30.6 m  
Finishing of window slopes (interior) – 24.09 m<sup>2</sup>  
Finishing of door slopes (interior) – 51.4 m<sup>2</sup>



Consolidated specification of elements for filling internal door openings						
Des.	Designation	Name	Size (W×H), mm	Floor	Mass of unit, kg	Notes
				1		
D-1	ДСТУ EN 14351-1:2020	Metal-plastic, threshold-free, solid*	700x2100h	1		
D-1n	ДСТУ EN 14351-1:2020	Metal-plastic, without threshold, solid, left	700x2100h	-		
D-2	ДСТУ EN 14351-1:2020	Metal-plastic, threshold-free, solid	800x2100h	1		
D-2n	ДСТУ EN 14351-1:2020	Metal-plastic, without threshold, solid, left	800x2100h	-		
D-3	ДСТУ EN 14351-1:2020	Metal-plastic, threshold-free, solid	900x2100h	15		
D-3n	ДСТУ EN 14351-1:2020	Metal-plastic, without threshold, solid, left	900x2100h	18		
D-4	ДСТУ EN 14351-1:2020	Metal-plastic, without threshold, solid, left	1000x2100h	1		
D-4n	ДСТУ EN 14351-1:2020	Metal-plastic, without threshold, solid, left	1000x2100h	2		
D-5	ДСТУ EN 14351-1:2020	Metal-plastic, threshold-free, solid	1200x2100h	1		
D-6	ДСТУ EN 14351-1:2020	Metal-plastic, double-leaf, threshold-free, solid*	1400x2100h	1		
Total				40		

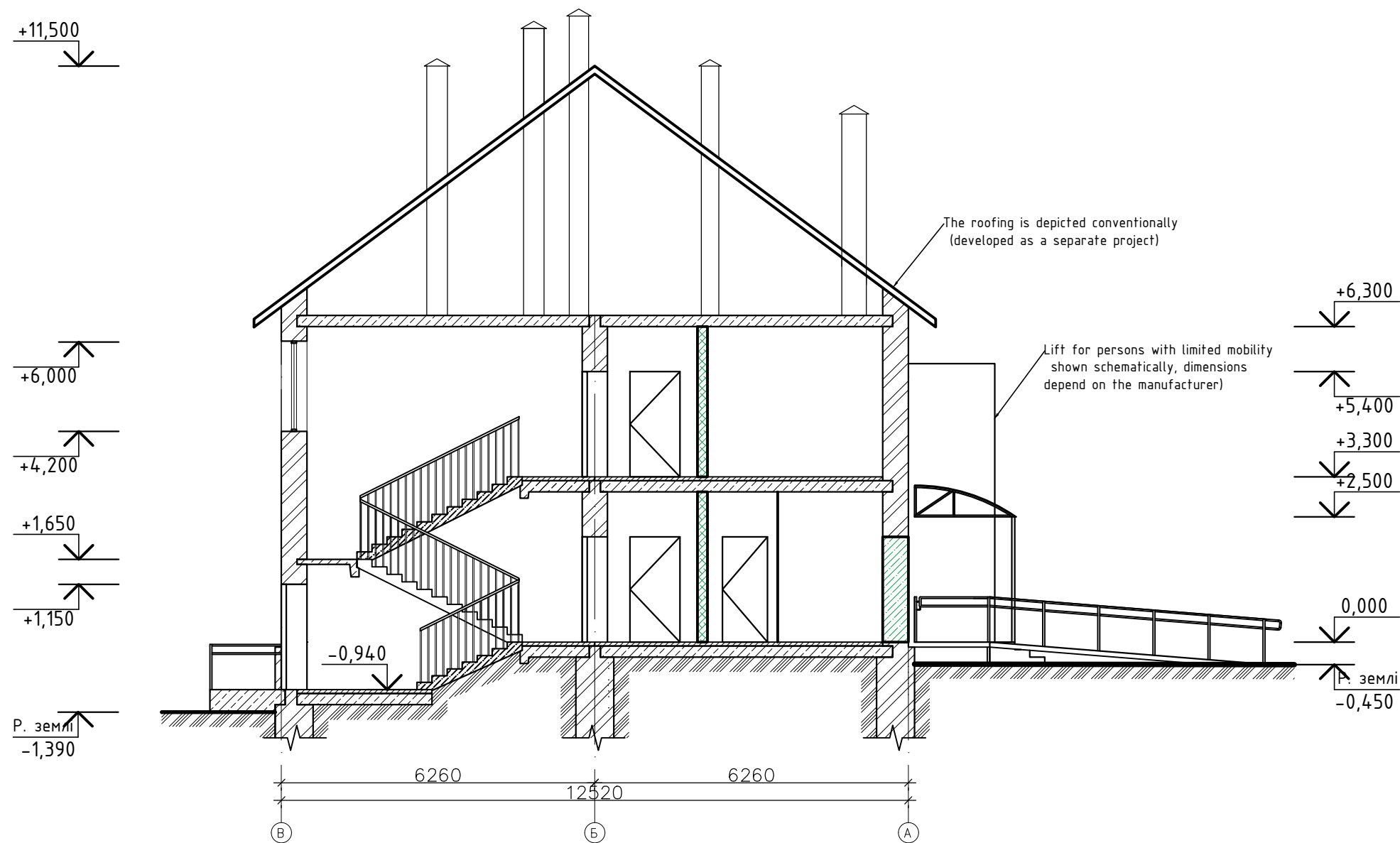





- General instructions**
- After dismantling the existing windows and doors, it is necessary to carry out a control measurement of the openings and compile a measurement sheet according to "Appendix D" of DSTU-N B V.2.6-146:2010.
  - Before installing windows and doors, it is necessary to ensure that the openings are free from chips, shells, mortar drips, and other damages with a height (depth) of more than 5 mm. Defective areas must be filled with moisture-resistant compounds. Oiled surfaces should be degreased. Loose and crumbling sections must be reinforced (glued with binding mixtures or special film materials).
  - Installation of windows and doors should be carried out in accordance with DSTU-N B V.2.6-146:2010 "Building Structures. Guidelines for the design and installation of windows and doors."
  - Window and door units must meet the minimum operational characteristics.
  - During the manufacture of window units, the manufacturer must be guided by the State Standards of Ukraine DSTU EN 14351-1:2020 "Windows and doors. Requirements. Part 1. Windows and external doors" (EN 14351-1:2006 + A2:2016, IDT) and the State Building Codes (DBN V.2.6-31:2021). Products must be accompanied by a "Product Passport" and a "Declaration of Conformity" in accordance with DSTU EN 14351-1:2020 "Windows and doors. Requirements. Part 1. Windows and external doors" (EN 14351-1:2006 + A2:2016, IDT).
  - All elements filling openings must have sanitary and fire certificates of Ukraine for use in public buildings. Certificates must be attached to the acceptance reports of completed works.

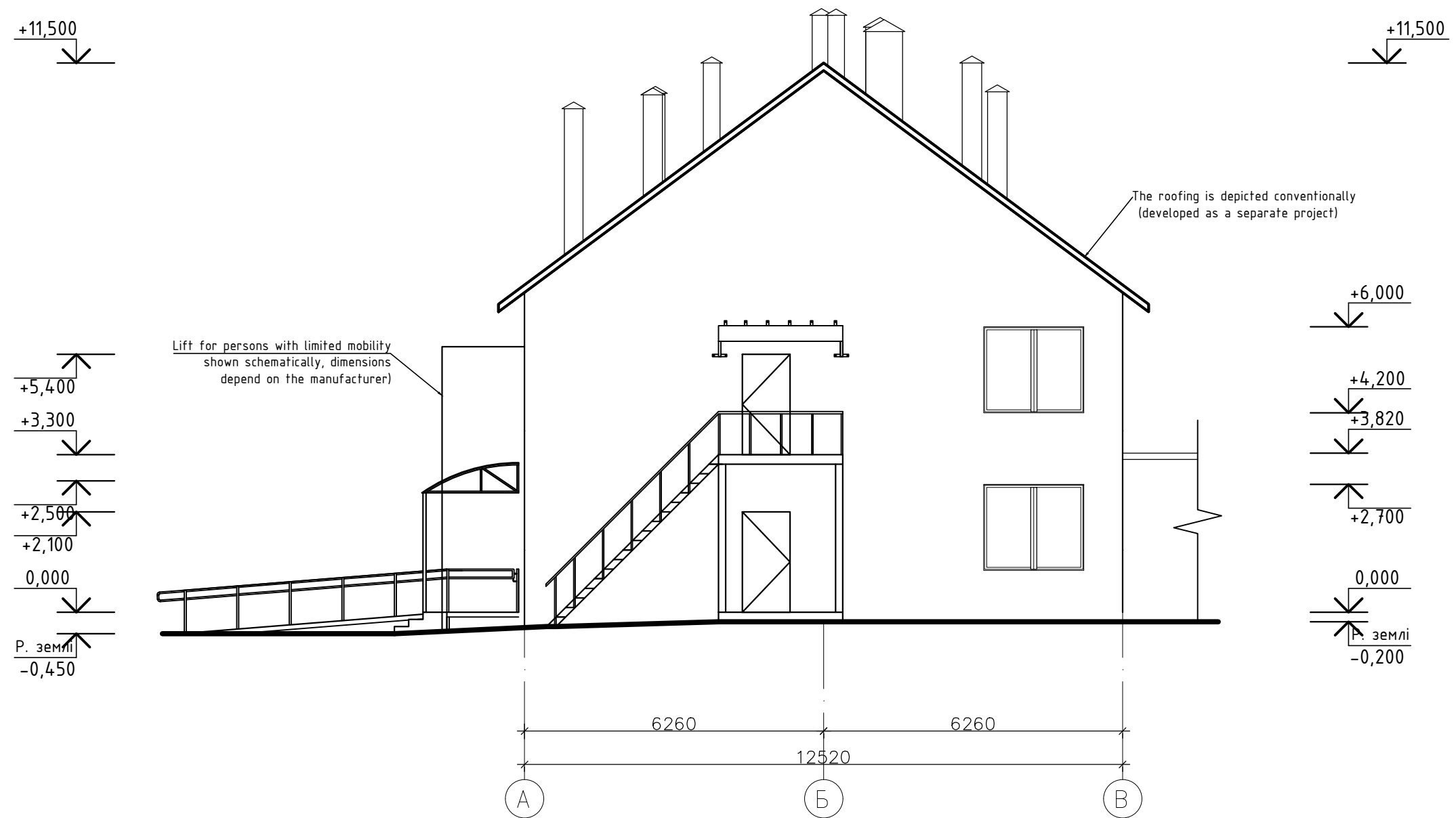
\*Provide for equipping D-1 type doors and D-6 type doors with a magnetic lock.

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ГІП		Мартичук					Renovation	Стадія	Аркуш
Розробив		Колесник						РП	9
Перевірів		Мартичук					Specification of the infill elements for openings on the 1st floor	UKRBUДPROEKT, LLC	

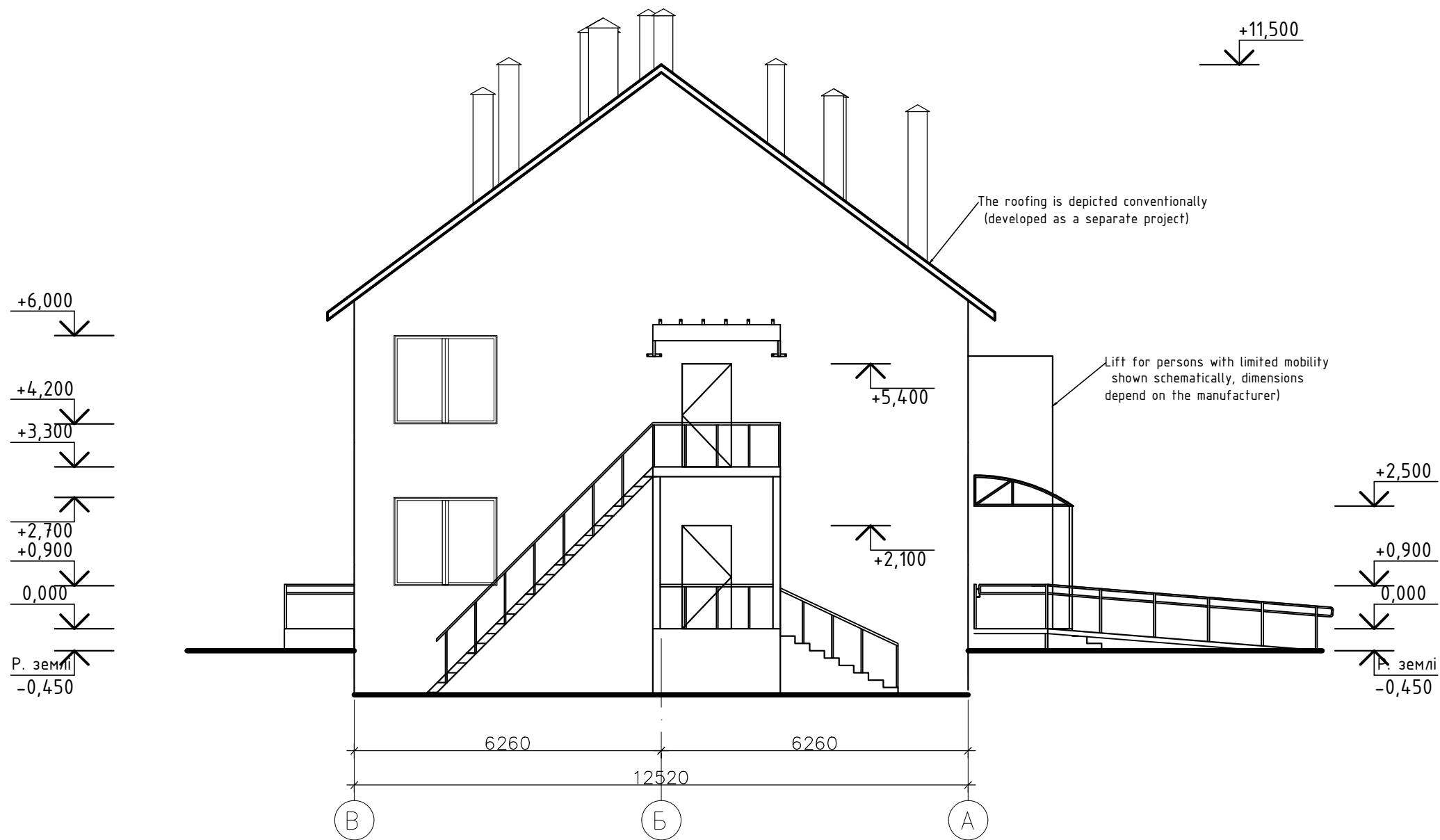




						35/2304-25-AB			
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast			
Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата	Renovation	Стадія	Аркуш	Аркушів
ГІП		Мартинюк					РП	10	29
Розробив		Колесник							
Перевірів		Мартинюк							
						Section 1-1 (after renovation), Scale 1:100	UKRBUDPROEKT, LLC		

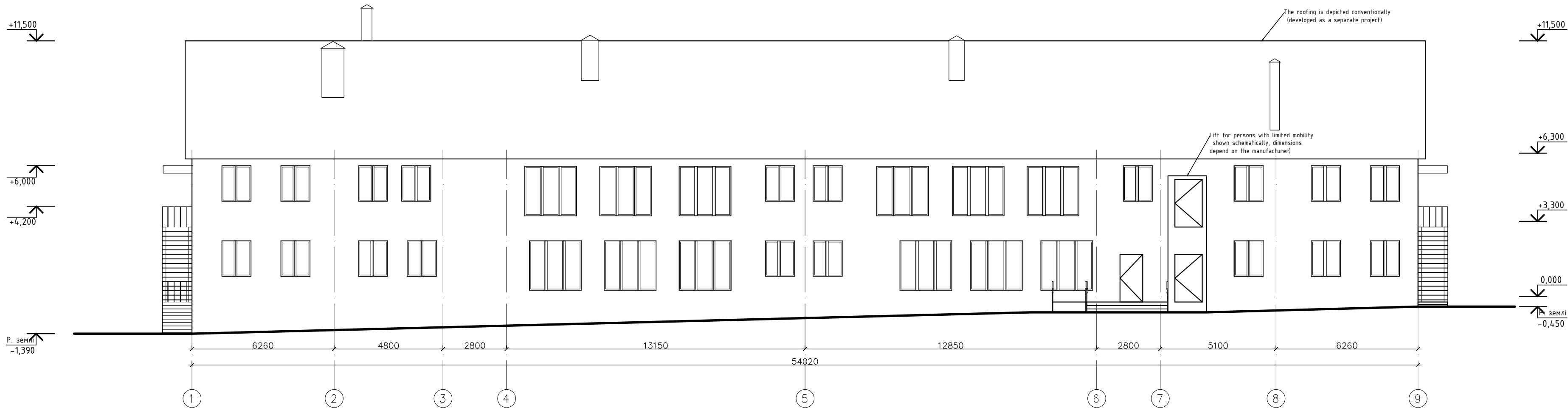


							35/2304-25-AB			
							Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast			
Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата			Стадія	Аркуш	Аркушів
ГІП		Мартинюк					Renovation	РП	11	29
Розробив		Колесник								
Перевірів		Мартинюк								
							Facade A-B (after renovation), Scale 1:100	UKRBUDPROEKT, LLC		

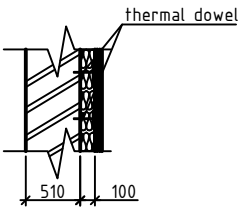


							35/2304-25-AB			
							Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast			
Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата					
ГІП		Мартинюк				Renovation		Стадія	Аркуш	Аркушів
Розробив		Колесник						РП	12	29
Перевірів		Мартинюк				Facade B-A (after renovation), scale 1:100		UKRBUDPROEKT, LLC		





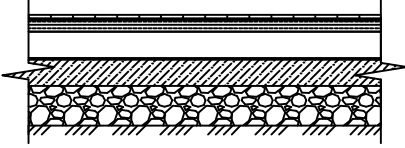
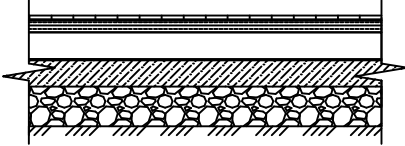
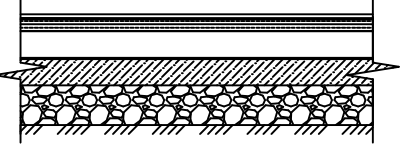
Facade decoration

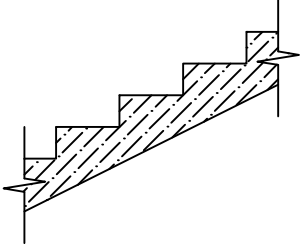


- brick 510mm
- ROCKMIN insulation b=100mm, ρ=26kg/m³
- facade painting mesh CM11
- cement adhesive mixture for external works

Finishing of window slopes (external) - 19.27 m²  
Facade finishing volume - 692.71 m³




						35/2304-25-A5			
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast			
Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата				
ГІП	Мартиняк					Renovation		Сторінка	Аркуш
Розробив	Колесник							РП	13
Перевірив	Мартиняк					Facade 1-9 (after renovation), Scale 1:100		UKRBUDPROEKT, LLC	

Floor plan explanation				
Room number	Type of floor	Floor plan or type by series	Floor element data (name, thickness, base, etc.), mm	Area m <sup>2</sup>
100,103,110,112,115,117,119,121,123,125,128,130,131,132	1		<ul style="list-style-type: none"><li>- ceramic tile</li><li>- cement-based adhesive</li><li>- 5 mm self-leveling screed</li><li>- reinforced cement-sand screed (mesh Ø4, 150x150 mm), 45 mm</li><li>- insulation (extruded polystyrene foam), 100 mm</li><li>- waterproofing (roofing felt in 2 layers)</li><li>- concrete base (B10), 100 mm</li><li>- compacted gravel soil (compacted gravel fraction 40-70), to a depth of 150 mm</li></ul>	87.68 m <sup>2</sup>
101,102,104,105,106,108,109,111,113,114,116,118,120,122,124,127,129,134	2		<ul style="list-style-type: none"><li>- linoleum</li><li>- dispersion acrylic adhesive</li><li>- self-leveling screed 5 mm</li><li>- cement-sand screed 45 mm</li><li>- insulation (extruded polystyrene foam) 100 mm</li><li>- waterproofing (roofing felt, 2 layers)</li><li>- concrete base (B10) 100 mm</li><li>- soil compacted with crushed stone (compacted crushed stone fraction 40-70) to a depth of 150 mm</li></ul>	403.12 m <sup>2</sup>
133	3		<ul style="list-style-type: none"><li>- Carpet (2-4 mm)</li><li>- Dispersion acrylic adhesive</li><li>- Self-leveling screed 5 mm</li><li>- Reinforced cement-sand screed (mesh Ø4, 150x150 mm), 45 mm</li><li>- Insulation (extruded polystyrene foam), 100 mm</li><li>- Waterproofing (roofing felt in 2 layers)</li><li>- Concrete base (B10), 100 mm</li><li>- Soil compacted with crushed stone (compacted crushed stone fraction 40-70), to a depth of 150 mm</li></ul>	24.63 m <sup>2</sup>

Floor plan explanation				
Room number	Type of floor	Floor plan or type by series	Floor element data (name, thickness, base, etc.), mm	Area m <sup>2</sup>
107,126,201,222	4		- олійне фарбування сходів і підсходів	48.44 m <sup>2</sup>

Floor of entrance group 1:  
ceramic tiles - 7.2 m<sup>2</sup>/  
Stairs of entrance group 1:  
ceramic tiles - 3.78 m<sup>2</sup>/  
Floor of entrance group 2:  
ceramic tiles - 3.38 m<sup>2</sup>/  
Stairs of entrance group 2:  
ceramic tiles - 4.87 m<sup>2</sup>/  
Floor of entrance group 3:  
ceramic tiles - 3.38 m<sup>2</sup>/  
Floor of entrance group 4:  
ceramic tiles - 3.9 m<sup>2</sup>/




PVC skirting board 15x56x2500 mm - 428.61 m

						35/2304-25-АБ				
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast				
Зм.	Кільк.	Аркуш	№Док.	Підпис	Дата	Renovation		Стадія	Аркуш	Аркушів
ГІП		Мартинюк						РП	14	29
Розробив		Колесник				Floor plan explanation		UKRBUDPROEKT, LLC		
Перевірів		Мартинюк								

Finishing schedule of the rooms on the 1st floor						
Name or number of the room	Name or number of the room	Type of interior finishing elements				Notes
		Ceiling	Square, m <sup>2</sup>	Walls or partitions	Square, m <sup>2</sup>	
100	Vestibule	Suspended ceiling 'Armstrong' type	4.5 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	22.8 m <sup>2</sup>	
101	Hall	Suspended ceiling 'Armstrong' type	38.54 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	97.26 m <sup>2</sup>	
102	Reception	Suspended ceiling 'Armstrong' type	3.79 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	23.7 m <sup>2</sup>	
103	Universal bathroom	Suspended ceiling made of drywall, puttying, painting	3.79 m <sup>2</sup>	Plaster mix, Adhesive mix Ceresit CM 12, Glazed ceramic tile	21.81 m <sup>2</sup>	
104	Psychologist's office	Suspended ceiling made of drywall, puttying, painting	19.22 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	47.94 m <sup>2</sup>	
105	Manager's Office	Suspended ceiling made of drywall, puttying, painting	31.84 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	61.98 m <sup>2</sup>	
106	Social Worker's Office	Suspended ceiling made of drywall, puttying, painting	25.2 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	54.45 m <sup>2</sup>	
107	Stairwell	Suspended ceiling 'Armstrong' type	12.93 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	42.27 m <sup>2</sup>	
108	Corridor	Suspended ceiling 'Armstrong' type	70.65 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	214.17 m <sup>2</sup>	
109	Room for persons with reduced mobility	Suspended ceiling made of drywall, puttying, painting	14.93 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	44.63 m <sup>2</sup>	
110	Bathroom with a shower for people with limited mobility	Suspended ceiling made of drywall, puttying, painting	5.52 m <sup>2</sup>	Plaster mix, Adhesive mix Ceresit CM 12, Glazed ceramic tile	26.31 m <sup>2</sup>	
111	Room for people with limited mobility	Suspended ceiling made of drywall, puttying, painting	16.44 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	49.39 m <sup>2</sup>	
112	Bathroom with a shower for people with limited mobility	Suspended ceiling made of drywall, puttying, painting	5.52 m <sup>2</sup>	Plaster mix, Adhesive mix Ceresit CM 12, Glazed ceramic tile	26.28 m <sup>2</sup>	
113	Utility room	Suspended ceiling made of drywall, puttying, painting	8.09 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	30.91 m <sup>2</sup>	
114	Room for a family with children	Suspended ceiling made of drywall, puttying, painting	19.67 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	50.36 m <sup>2</sup>	
115	Bathroom with a shower	Suspended ceiling made of drywall, puttying, painting	3.12 m <sup>2</sup>	Plaster mix, Adhesive mix Ceresit CM 12, Glazed ceramic tile	20.31 m <sup>2</sup>	
116	Room for a family with children	Suspended ceiling made of drywall, puttying, painting	16.97 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	48.53 m <sup>2</sup>	
117	Bathroom with a shower	Suspended ceiling made of drywall, puttying, painting	3.12 m <sup>2</sup>	Plaster mix, Adhesive mix Ceresit CM 12, Glazed ceramic tile	20.31 m <sup>2</sup>	
118	Room for elderly people	Suspended ceiling made of drywall, puttying, painting	13.35 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	41.97 m <sup>2</sup>	
119	Bathroom with a shower	Suspended ceiling made of drywall, puttying, painting	3.12 m <sup>2</sup>	Plaster mix, Adhesive mix Ceresit CM 12, Glazed ceramic tile	20.31 m <sup>2</sup>	
120	Room for elderly people	Suspended ceiling made of drywall, puttying, painting	15.75 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	46.11 m <sup>2</sup>	
121	Bathroom with a shower	Suspended ceiling made of drywall, puttying, painting	3.12 m <sup>2</sup>	Plaster mix, Adhesive mix Ceresit CM 12, Glazed ceramic tile	20.31 m <sup>2</sup>	
122	Room for a large family	Suspended ceiling made of drywall, puttying, painting	28.28 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	60.34 m <sup>2</sup>	
123	Bathroom with a shower	Suspended ceiling made of drywall, puttying, painting	3.24 m <sup>2</sup>	Plaster mix, Adhesive mix Ceresit CM 12, Glazed ceramic tile	20.61 m <sup>2</sup>	
124	Room for mother with child	Suspended ceiling made of drywall, puttying, painting	20.09 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	50.84 m <sup>2</sup>	
125	Bathroom with a shower	Suspended ceiling made of drywall, puttying, painting	3.08 m <sup>2</sup>	Plaster mix, Adhesive mix Ceresit CM 12, Glazed ceramic tile	20.19 m <sup>2</sup>	
126	Stairwell	Suspended ceiling 'Armstrong' type	10.37 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	43.32 m <sup>2</sup>	
127	Room for a large family	Suspended ceiling made of drywall, puttying, painting	31.59 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	63.39 m <sup>2</sup>	

Finishing schedule of the 1st floor premises						
Name or number of the room	Name or number of the room	Type of interior finishing elements				Notes
		Ceiling	Square, m <sup>2</sup>	Walls or partitions	Square, m <sup>2</sup>	
128	Bathroom with a shower	Suspended ceiling made of drywall, plastering, painting	3.11 m <sup>2</sup>	Plaster mix, Adhesive mix Ceresit CM 12, Glazed ceramic tile	20.25 m <sup>2</sup>	
129	Canteen with 18 seats	Suspended ceiling 'Armstrong' type	23.30 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	50.71 m <sup>2</sup>	
130	Kitchen. Authoritative food preparation for 4 workstations	Suspended ceiling 'Armstrong' type	30.04 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	54.17 m <sup>2</sup>	
131	Laundry rooms	Suspended ceiling made of drywall, puttying, painting	9.05 m <sup>2</sup>	Plaster mix, Adhesive mix Ceresit CM 12, Glazed ceramic tile	32.91 m <sup>2</sup>	
132	Laundry drying room	Suspended ceiling made of drywall, puttying, painting	7.37 m <sup>2</sup>	Plaster mix, Adhesive mix Ceresit CM 12, Glazed ceramic tile	31.57 m <sup>2</sup>	
133	Children's room. Room for activities	Suspended ceiling made of drywall, puttying, painting	24.63 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	53.88 m <sup>2</sup>	
134	Linen closet	Suspended ceiling 'Armstrong' type	5.42 m <sup>2</sup>	Plastering, puttying, water-based emulsion painting	28.71 m <sup>2</sup>	
			538.73 m <sup>2</sup>		1563 m <sup>2</sup>	

Wall of entrance group No. 1:  
- ceramic tiles - 2.07 m<sup>2</sup>  
Wall of entrance group No. 2:  
- ceramic tiles - 6.88 m<sup>2</sup>  
Wall of entrance group No. 3:  
- ceramic tiles - 1.04 m<sup>2</sup>  
Wall of entrance group No. 4:  
- ceramic tiles - 2.06 m<sup>2</sup>

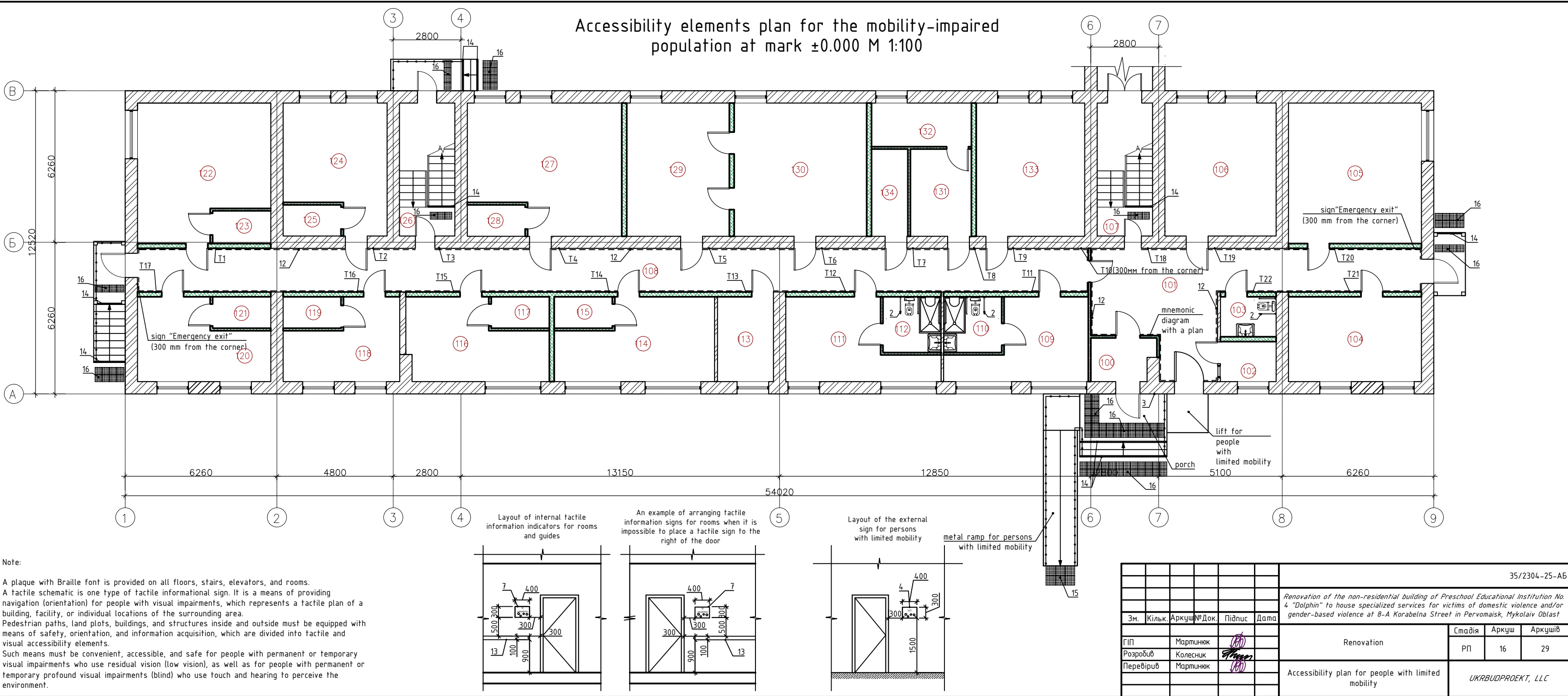
							35/2304-25-AB			
							Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast			
Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата					
ГІП		Мартинюк				Renovation		Смадія	Аркуш	АркушіВ
Розробив		Колесник						РП	15	29
Перевірів		Мартинюк								
						Finishing of premises		UKRBUDPROEKT, LLC		

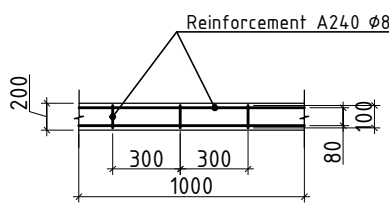
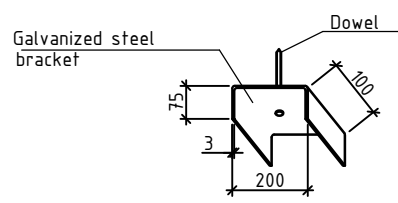
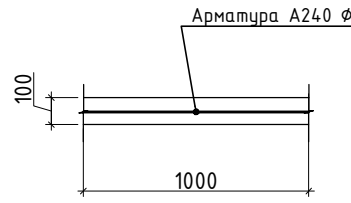
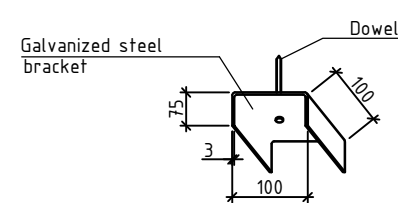
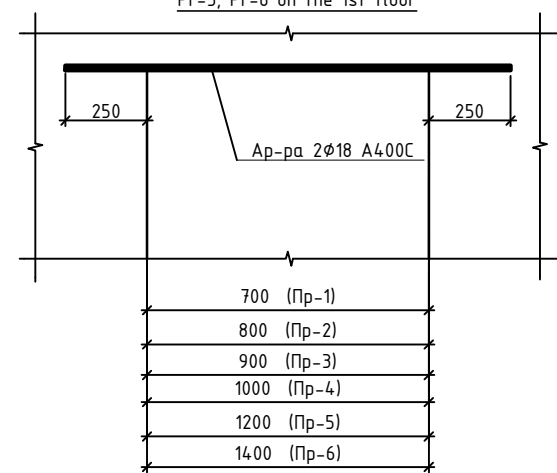
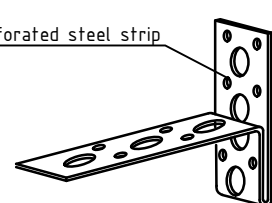
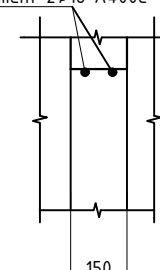
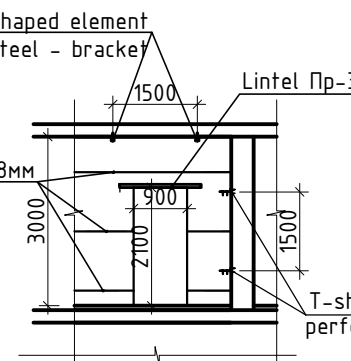
Explanation of tactile informational room indicators				
№	Name	Stamp	Table text	Room category
101	Hall	T10	To the hall	
103	Universal bathroom	T22	Universal bathroom	
104	Manager's Office	T21	Manager office	
105	Psychologist's office	T20	Psychologist's office	
106	Social Worker's Office	T19	Social Worker's Office	
107	Stairwell	T18	Stairwell	
109	Room for persons with reduced mobility	T11	"Room 1"	
111	Room for persons with reduced mobility	T12	"Room 2"	
113	Utility room	T13	Utility room	
114	Room for staying with children	T14	"Room 3"	
116	Room for staying with children	T15	"Room 4"	
118	Room for elderly residents	T16	"Room 5"	
120	Room for elderly residents	T17	"Room 6"	
122	Room for a large family	T1	"Room 7"	
124	Room for a mother with a child	T2	"Room 8"	
126	Stairwell	T3	Stairwell	
127	Room for a large family	T4	"Room 9"	
129	Dining room for 18 seats	T5	Dining room	
130	Kitchen for food preparation with 4 workstations	T6	Kitchen	
131	Laundry room	T8	Laundry room	
133	Children's room, study room	T9	Children's room	
134	Linen closet	T7	Linen closet	

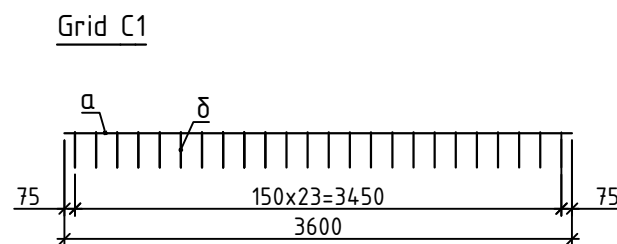
1. Wall-mounted foldable handrail near the toilet made of stainless steel  $\varnothing 32$ , L=700mm - 6 pcs.
2. Wall-mounted handrail near the sink made of stainless steel  $\varnothing 32$  - 3 pcs.
3. External sign with Braille font - 1 pc.
4. Sign with Braille font "Accessible Toilet" - 1 pc.
5. Signs with Braille font "Staff Call" - 1 pc.
6. Signs with Braille font "Room" - 18 pcs.
7. Signs with Braille font "Ramp" - 1 pc.
8. Signs with Braille font "Stairwell" - 2 pcs.
9. Signs with Braille font "Entrance" - 1 pc.
10. Signs with Braille font "Exit" - 1 pc.
11. Signs with Braille font "Emergency Exit" - 2 pcs.
12. Informational guidance strip (wooden) - 92.5 m
13. Tactile stickers on handrails - 6 pcs.
14. PT32 tactile tape - 15.3 m
15. Warning tactile surface (polyurethane 400x400mm, truncated cone type studs) - 6 pcs.
16. Warning tactile surface (polyurethane 300x300mm, truncated cone type studs) - 96 pcs.

Note:

A plaque with Braille font is provided on all floors, stairs, elevators, and rooms.  
A tactile schematic is one type of tactile informational sign. It is a means of providing navigation (orientation) for people with visual impairments, which represents a tactile plan of a building, facility, or individual locations of the surrounding area.  
Pedestrian paths, land plots, buildings, and structures inside and outside must be equipped with means of safety, orientation, and information acquisition, which are divided into tactile and visual accessibility elements.  
Such means must be convenient, accessible, and safe for people with permanent or temporary visual impairments who use residual vision (low vision), as well as for people with permanent or temporary profound visual impairments (blind) who use touch and hearing to perceive the environment.

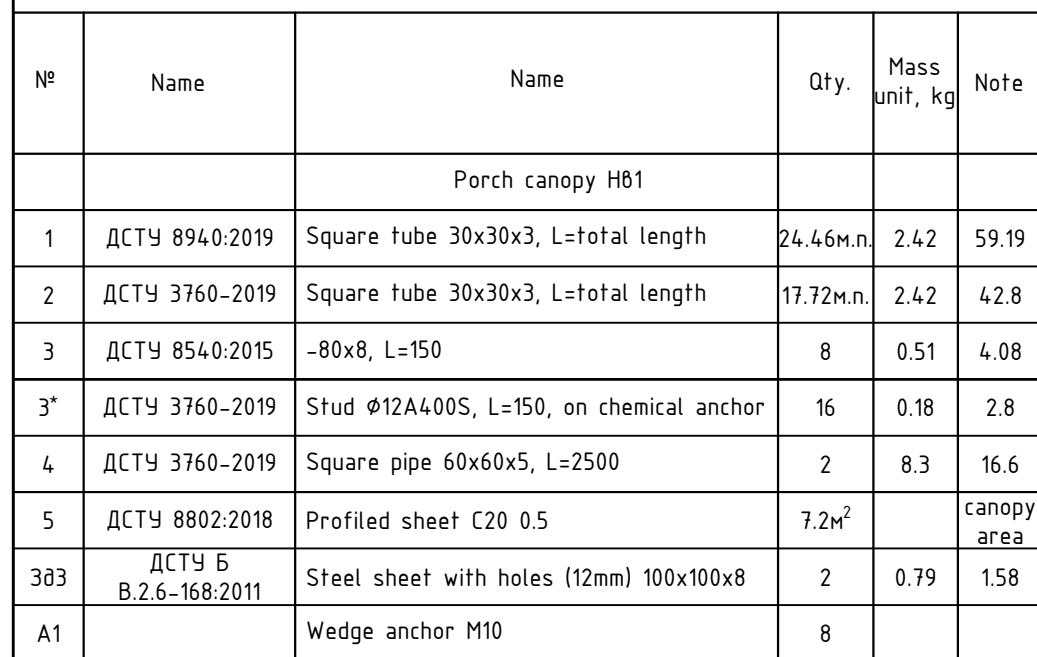
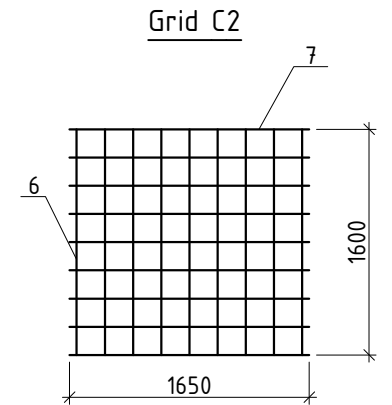


<p>Схема розташування арматурних сіток Ø8 мм на перегородках із газоблоку 200 мм (1.0 м.н.)</p>  <p>Reinforcement A240 Ø8</p>		<p>Clamp for partition (width 200mm)</p>  <p>Galvanized steel bracket</p> <p>Dowel</p> <p>Expenditure on U-shaped element Galvanized steel - bracket L=100 mm</p>		<p>Reinforcement of 200 mm partitions made of aerated concrete blocks with A240C reinforcement meshes Ø8mm (1.00 m = 0.395 kg) T-shaped element of perforated steel strip 36 pieces, inclusive of reinforcement meshes - 252.51 linear meters - 99.74 kg U-shaped element. Galvanized steel - clamp 59 pieces</p> <p>Reinforcement of 100 mm partitions made of aerated concrete blocks with A240C reinforcement meshes Ø8mm (1.00 m = 0.395 kg) T-shaped element of perforated steel strip 8 pieces, inclusive of reinforcement meshes - 48.0 linear meters - 18.96 kg U-shaped element. Galvanized steel - clamp 7 pieces</p>		Specification of material costs																																																																																			
<p>Layout diagram of reinforcement meshes Ø8 mm on partitions made of 100 mm aerated concrete blocks (1.0 linear m.)</p>  <p>Арматура A240 Ø8</p>		<p>Clamp for partition (width 100mm)</p>  <p>Galvanized steel bracket</p> <p>Dowel</p> <p>Expenditure on U-shaped element Galvanized steel - bracket L=100 mm</p>		<p>Installation of lintels Pr-1, Pr-2, Pr-3, Pr-4, Pr-5, Pr-6 on the 1st floor</p>  <p>Ар-ра 2Ø18 A400C</p> <p>700 (Пр-1) 800 (Пр-2) 900 (Пр-3) 1000 (Пр-4) 1200 (Пр-5) 1400 (Пр-6)</p>		<table><tr><th>№</th><th>Name</th><th>Name</th><th>Qty.</th><th>Mass unit, kg</th><th>Note</th></tr><tr><td></td><td></td><td>Reinforcement lintel Пр-1</td><td>9</td><td></td><td></td></tr><tr><td></td><td>ДСТУ 3760:2019</td><td>Ø 18A400C, L=1200</td><td>18</td><td>2.4</td><td>43.2</td></tr><tr><td></td><td></td><td>Reinforcement lintel Пр-2</td><td>2</td><td></td><td></td></tr><tr><td></td><td>ДСТУ 3760:2019</td><td>Ø 18A400C, L=1300</td><td>4</td><td>2.6</td><td>10.4</td></tr><tr><td></td><td></td><td>Reinforcement lintel Пр-3</td><td>22</td><td></td><td></td></tr><tr><td></td><td>ДСТУ 3760:2019</td><td>Ø 18A400C, L=1400</td><td>44</td><td>2.8</td><td>123.2</td></tr><tr><td></td><td></td><td>Reinforcement lintel Пр-4</td><td>4</td><td></td><td></td></tr><tr><td></td><td>ДСТУ 3760:2019</td><td>Ø 18A400C, L=1500</td><td>8</td><td>3.0</td><td>24.0</td></tr><tr><td></td><td></td><td>Reinforcement lintel Пр-5</td><td>1</td><td></td><td></td></tr><tr><td></td><td>ДСТУ 3760:2019</td><td>Ø 18A400C, L=1700</td><td>2</td><td>3.4</td><td>6.8</td></tr><tr><td></td><td></td><td>Reinforcement lintel Пр-6</td><td>1</td><td></td><td></td></tr><tr><td></td><td>ДСТУ 3760:2019</td><td>Ø 18A400C, L=1900</td><td>2</td><td>3.8</td><td>7.6</td></tr></table>						№	Name	Name	Qty.	Mass unit, kg	Note			Reinforcement lintel Пр-1	9				ДСТУ 3760:2019	Ø 18A400C, L=1200	18	2.4	43.2			Reinforcement lintel Пр-2	2				ДСТУ 3760:2019	Ø 18A400C, L=1300	4	2.6	10.4			Reinforcement lintel Пр-3	22				ДСТУ 3760:2019	Ø 18A400C, L=1400	44	2.8	123.2			Reinforcement lintel Пр-4	4				ДСТУ 3760:2019	Ø 18A400C, L=1500	8	3.0	24.0			Reinforcement lintel Пр-5	1				ДСТУ 3760:2019	Ø 18A400C, L=1700	2	3.4	6.8			Reinforcement lintel Пр-6	1				ДСТУ 3760:2019	Ø 18A400C, L=1900	2	3.8	7.6
№	Name	Name	Qty.	Mass unit, kg	Note																																																																																				
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	ДСТУ 3760:2019	Ø 18A400C, L=1300	4	2.6	10.4																																																																																				
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<p>T-shaped element</p>  <p>perforated steel strip</p> <p>Reinforcement 2Ø18 A400C</p>  <p>150</p>		<p>Layout of lintels and reinforcement of partitions</p>  <p>U-shaped element Galvanized steel - bracket</p> <p>Lintel Пр-3</p> <p>Reinforcement A240C Ø8мм</p> <p>T-shaped element perforated steel tape</p> <p>Connecting element made of galvanized steel bracket 50x120x2x70(h) according to GOST 41918-80</p> <p>Reinforcement A400 Ø18</p>		<p>Notes:</p> <p>Manufacturing of lintels Пр-1</p> <p>1. Preparation of rods of the appropriate length</p> <p>2. Creating grooves Ø20mm in aerated concrete blocks</p> <p>3. Gluing reinforcement rods into the prepared grooves</p> <p>4. Installing lintels Пр-1 into the design position</p> <p>Manufacturing of lintels Пр-2, Пр-3, Пр-4, Пр-5, Пр-6</p> <p>1. Preparation of rods of the appropriate length</p> <p>2. Installing lintels into the design position.</p>		<table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>35/2304-25-АБ</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast</td></tr><tr><td>Зм.</td><td>Кільк.</td><td>Аркуш</td><td>№Док.</td><td>Підпис</td><td>Дата</td><td></td><td></td></tr><tr><td>ГП</td><td></td><td>Мартинюк</td><td></td><td></td><td></td><td>Ренувейшн</td><td>Стадія</td></tr><tr><td>Розробив</td><td></td><td>Колесник</td><td></td><td></td><td></td><td>РП</td><td>Аркуш</td></tr><tr><td>Перевірів</td><td></td><td>Мартинюк</td><td></td><td></td><td></td><td></td><td>Аркуші</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>Reinforcement of partitions, installation of lintels on the 1st floor</td><td>UKRBUDPROEKT, LLC</td></tr></table>													35/2304-25-АБ								Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast	Зм.	Кільк.	Аркуш	№Док.	Підпис	Дата			ГП		Мартинюк				Ренувейшн	Стадія	Розробив		Колесник				РП	Аркуш	Перевірів		Мартинюк					Аркуші							Reinforcement of partitions, installation of lintels on the 1st floor	UKRBUDPROEKT, LLC																						
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						35/2304-25-A6				
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Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата			Стадія	Аркуш	Аркушів
ГІП	Мартинюк					Renovation		РП	18	29
Розробив	Колесник									
Перевірів	Мартинюк					Entrance group scheme No.1, section 1-1, specification		UKRBUDPROEKT, LLC		

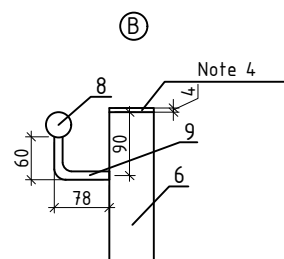
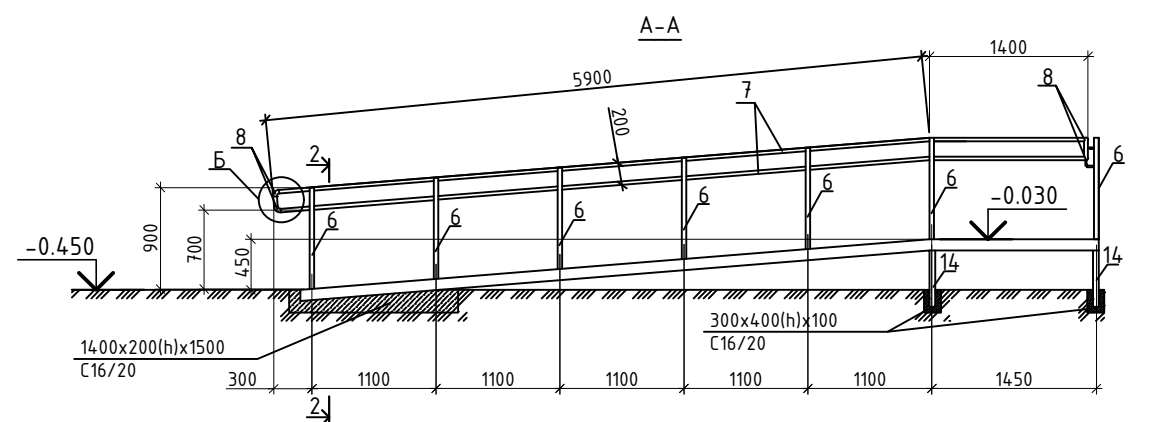
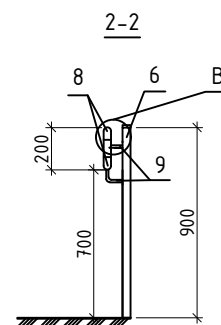
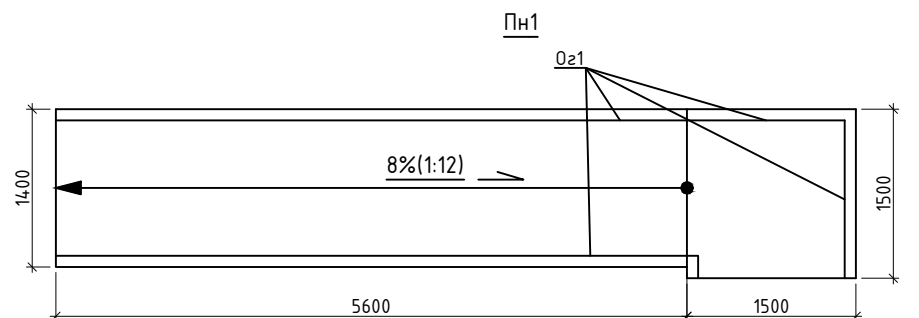
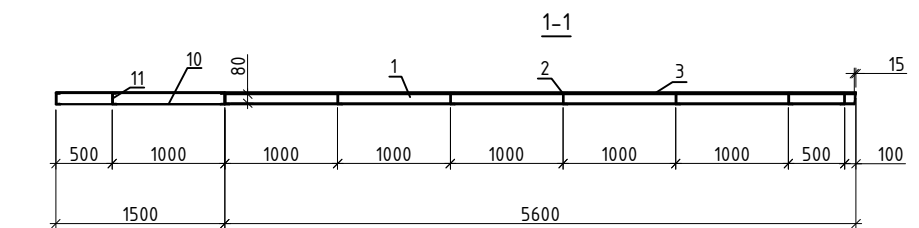
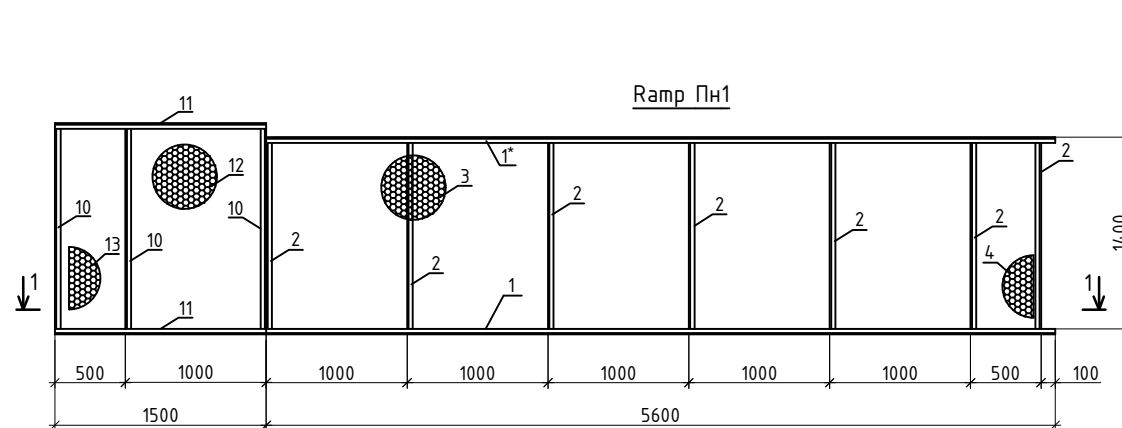




№	Name	Name	Qty.	Mass unit, kg	Note
		Pit foundation Фм1			
6	ДСТУ 3760-2019	Ø10A400C, L=1650	18	1.04	18.72
7	ДСТУ 3760-2019	Ø10A400C, L=1600	18	0.98	17.64
		Concrete C16/20	0.54м³		
		Medium fraction crushed stone (20-40mm)	0.27м³		
		Sand	0.27м³		
381	с. 1.400-15, 8.1	Embedded part MN164-6	2	30.7	61.4
382	с. 1.400-15, 8.1	Embedded part MN122-6	2	4.6	9.2
		Monolithic wall of the pit Прм1			
8	ДСТУ 3760-2019	Ø10A400C, L=total length	6.2мн	3.82	3.82
		Concrete C16/20	0.13м³		

1. Prime the canopy with GF-021 and paint with PF-115 enamel.

						35/2304-25-АБ			
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast			
Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата				
						Renovation		Смадія	Аркуш
ГІП		Мартинюк						РП	Аркушів
Розробив		Колесник						19	29
Перевірів		Мартинюк							
						Canopy Nv1, pit Pr1, specification		UKRBUDPROEKT, LLC	



1. Prime the structure with GF-021 and paint with PF-115 enamel.
2. Thickness of welded seams 4 mm.
3. Take a pipe  $\varnothing 32 \times 3$  with a 200 mm allowance for connecting the bends at the ends of the railings.
4. Weld a hole on the posts with a metal plate  $40 \times 40 \times 4$ .
5. Foundation for 4 posts (No. 14) –  $0.048 \text{ m}^3/$

№	Name	Name	Qty.	Mass unit, kg	Note
		Ramp ПН1	1		
1\1*	ДСТУ 3436-96	Channel beam №10, L=3800	1\1*	8.59	17.18
2	ДСТУ 3436-96	Channel beam №10, L=1320	5	8.59	42.95
3	ГОСТ: ДСТУ 8706-78	PVL 406 1400x1000	5	15.7	78.5
4	ГОСТ: ДСТУ 8706-78	PVL 406 1400x500	1	7.85	7.85
6	ДСТУ 8940:2019	Square tube 40x40x3, L=900	14	3.02	42.28
7	ДСТУ 8943:2019	Pipe Ø32x3, L=total length	14.9m.n.	2.15	32.03
8	ДСТУ 17375:2003	Elbow 90°, Ø32x3	6	0.2	1.2
9	ДСТУ 3760:2019	Ø12A240C, L=138	28	0.13	3.64
10	ДСТУ 3436-96	Channel beam №10, L=1500	3	12.88	38.64
11	ДСТУ 3436-96	Channel beam №10, L=1420	2	12.2	24.4
12	ГОСТ: ДСТУ 8706-78	PVL 406 1500x1000	1	23.55	23.55
13	ГОСТ: ДСТУ 8706-78	PVL 406 1500x500	1	11.7	11.7
		Ramp fastening element	1		
14	ДСТУ 8940:2019	Square pipe 50x50x3, L=1000	4	4.31	17.24
		Ramp foundation concrete C16/20	0.42 m <sup>3</sup>		
		Concrete C16\20	0.048 m <sup>3</sup>		

						35/2304-25-AB			
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaïsk, Mykolaiv Oblast			
Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата				
						Renovation	Сторінка	Аркуш	
ГІП	Мартинчук						РП	20	29
Розробив	Колесник								
Перевірив	Мартинчук								
						Ramp Pn1, nodes, specification	UKRBUDPROEKT, LLC		






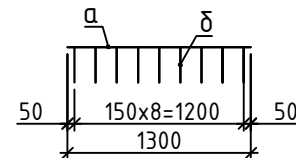
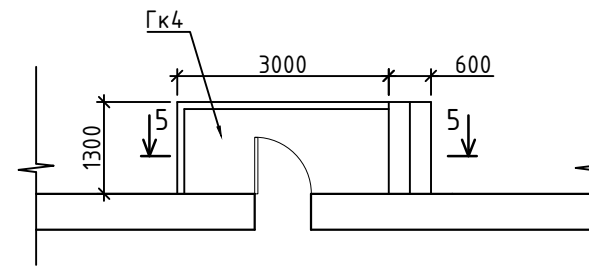


Technical drawing of a cross-section of a concrete slab (4-4). The slab is 2600 mm wide and 200 mm high. It features a top reinforcement layer with 11 bars (кр 600) and a bottom reinforcement layer with 10 bars (кр 200). The drawing also shows a 305 mm wide edge, a -0.200 elevation, and a 100 mm thick base layer.

1. Step marks are given taking into account the surface treatment on top with 30mm tiles
2. Dismantling of the existing entrance group:
  - concrete base - 0.41 m3
  - concrete porch - 0.6 m3
  - asphalt removal - 0.16 m3
3. Earthworks before arranging the entrance group - 0.67 m3
4. Restoration of the covering at the site of the old entrance group (1600x1300x300):
  - Gravel-sand mixture (250mm) - 2.08 m2
  - Asphalt concrete mixture "ASG.Dr.Sh.B.NP.I BND 50/70" (50mm) - 2.08 m2

№	Name	Name	Qty.	Mass unit, kg	Note
		Monolithic porch ГкЗ			
10	ДСТУ 3760-2019	Ø10A400C, L=заг. довж.	72м.п.	0.617	44.91
11	ДСТУ 3760-2019	Ø10A400C, L=заг. довж.	2.8м.п.	0.617	1.72
385	с. 1.400-15, 0.1	Embedded part MH105-1	4	1	
		Concrete C16/20	0.67м <sup>3</sup>		
		Medium-sized gravel (20-40mm)	0.33м <sup>3</sup>		
		Sand	0.33м <sup>3</sup>		

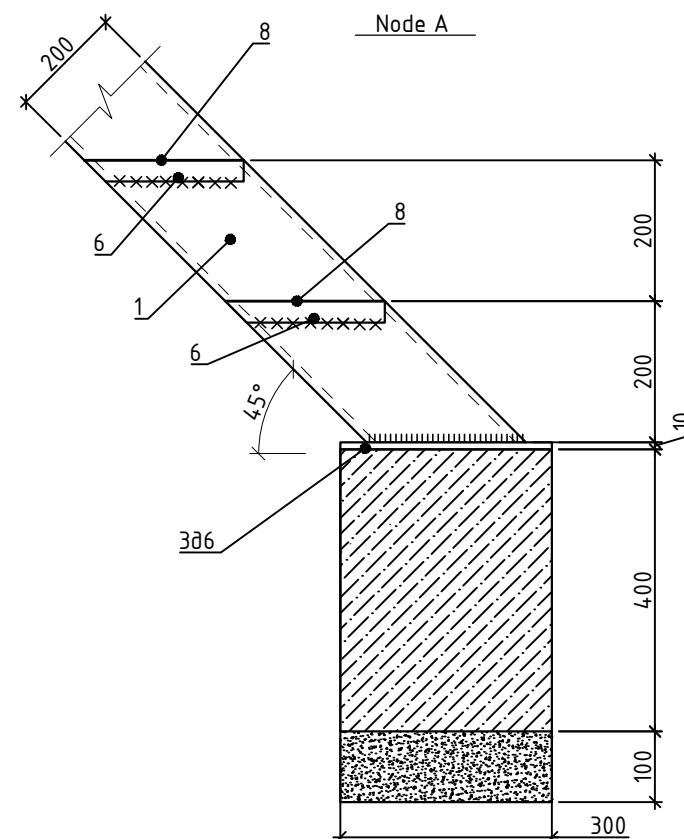
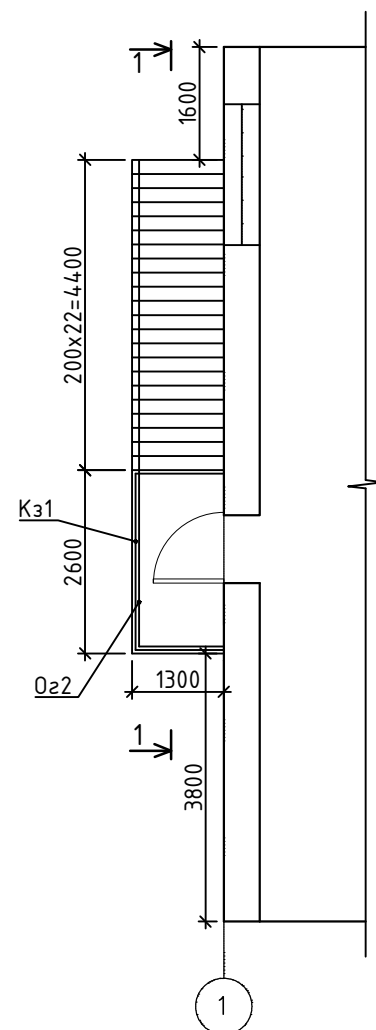
						35/2304-25-A6			
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast			
Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата		Стадія	Аркуш	Аркушів
ГІП	Мартинюк					Renovation	РП	22	29
Розробів	Колесник					Entrance group scheme No. 3, section 4-4, specification	UKRBUDPROEKT, LLC		
Перевірів	Мартинюк								



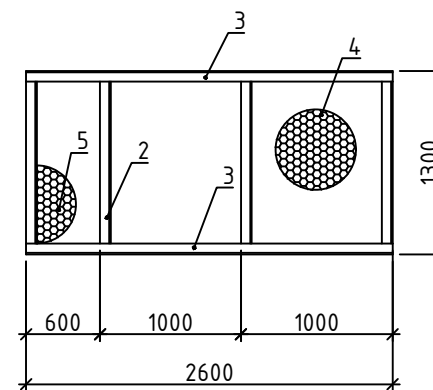
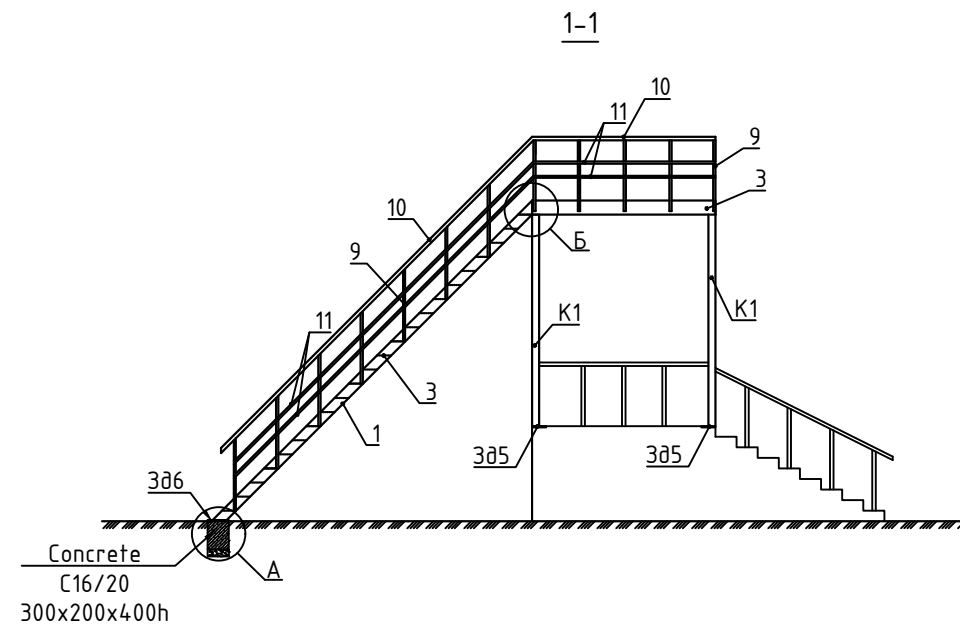
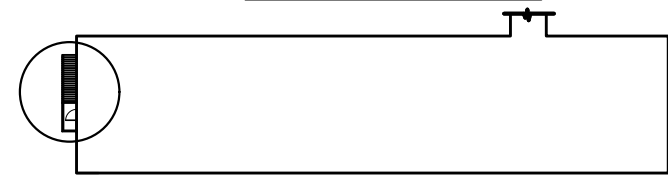
1. Dismantling of the existing entrance group:
  - concrete foundation - 1.04 m3/
  - concrete porch with stairs - 1.93 m3/
  - brick wall - 0.81 m3/
  - metal fence - 5.5 m; 14.85 kg
  - slate canopy - 4.05 m2/
  - metal fastening of the canopy - 10.3 m
2. Prime the metal structure with GF-021 and paint with PF-115 enamel.

						35/2304-25-АБ			
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast			
Зм.	Кільк.	Аркуш	№Док.	Підпис	Дата		Смадія	Аркуш	Аркушів
ГІП		Мартинюк				Renovation			
Розробив		Колесник					РП	23	29
Перевірів		Мартинюк				Entrance group scheme No. 4, section 5-5, specification	UKRBUDPROEKT, LLC		

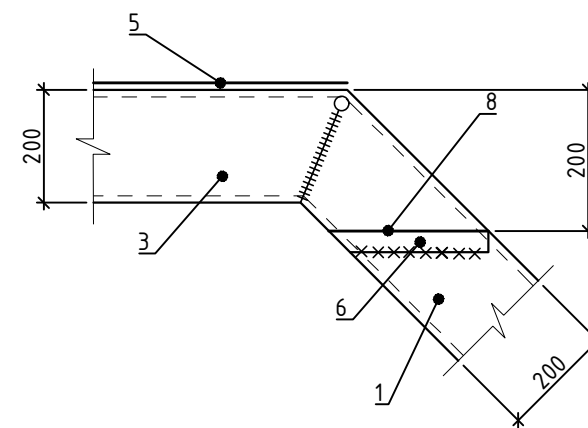
Exit plan  
on the 2nd floor No. 1



Building plan 2nd floor



Node B



1. Dismantling of existing stairs:  
- metal stairs - 54.7 m; 147.69 kg
2. Prime the metal structure with GF-021 and paint with PF-115 enamel.

№	Name	Name	Qty.	Mass unit, kg	Note
Metal stairs Cx1			1		
1	ДСТУ 3436-96	Channel beam №20, L=6200	2	114.08	228.16
2	ДСТУ 3436-96	Channel beam №20, L=1130	4	20.79	83.16
3	ДСТУ 3436-96	Channel beam №20, L=2600	2	47.84	95.68
4	ГОСТ: ДСТУ 8706-78	PVL 406, 1300x1000	2	15.7	31.4
5	ГОСТ: ДСТУ 8706-78	PVL 406, 1300x600	1	9.42	9.42
K1	ДСТУ 8940:2019	Pipe 100x100x5, L=total length	4	14.58	58.32
305	с. 1.400-15, 0.1	Embedded part MN111-6	4	1.6	6.4
306	с. 1.400-15, 0.1	Embedded part MN111-6	2	4.9	9.8
Concrete C16/20			0.04м³		
Medium fraction crushed stone (20-40mm)			0.012м³		
Stairs					
6	ДСТУ 2251:2018	Angle 50x32x4, L=200	44	0.48	21.12
7	ДСТУ 2251:2018	Angle 50x32x4, L=1300	44	3.12	137.28
8	ГОСТ: ДСТУ 8706-78	PVL 406, 1000x200	22	3.14	69.08
Metal fence Oz2			1		
9	ДСТУ 8940:2019	Pipe 50x50x3, L=total length	11.7м.п.	3.13	36.62
10	ДСТУ 8940:2019	Pipe 50x25x3, L=total length	8.8м.п.	4.31	37.92
11	ДСТУ 8940:2019	Pipe 30x30x3, L=total length	17.0м.п.	2.42	41.14

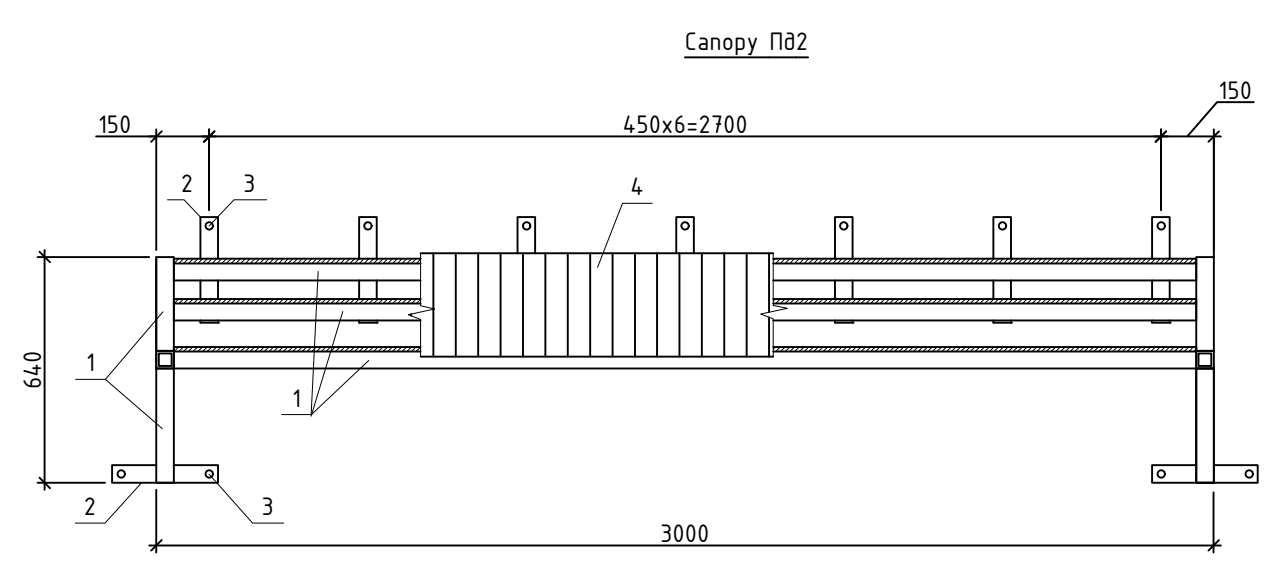
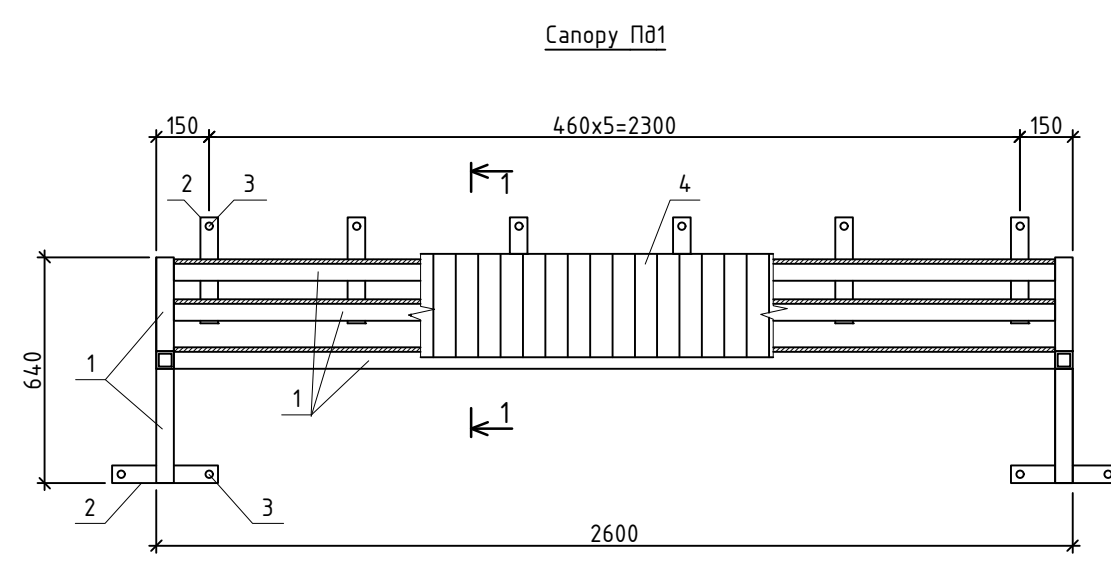
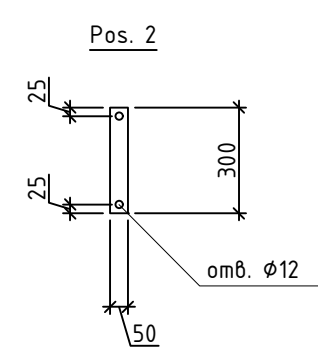
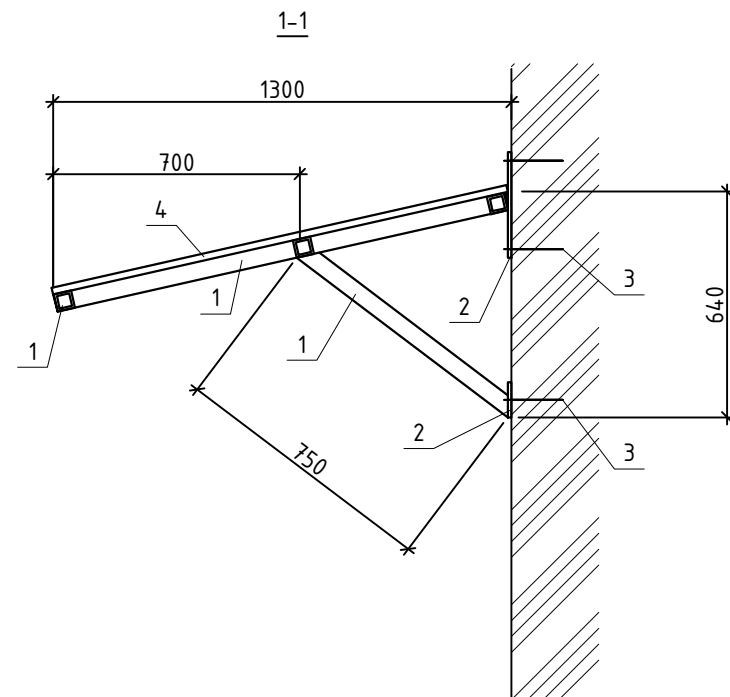
						35/2304-25-AB			
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast			
Зм.	Кільк.	Аркуш	№Док.	Підпис	Дата	Renovation	Стадія	Аркуш	Аркушів
ГІП		Мартинюк					РП	24	29
Розробив		Колесник							
Перевірів		Мартинюк				Exit layout on the 2nd floor No. 1, section 1-1, specification		UKRBUDPROEKT, LLC	

Technical drawing of a staircase section (Figure 9). The drawing shows a side view of a staircase with a landing. Key dimensions include a total height of 5700, a landing width of 1300, a landing depth of 2600, and a staircase width of 200 x 16 = 3200. The staircase has 16 steps. The drawing is labeled with '9' in a circle at the bottom left and '023' and 'K31' near the landing area.

Technical drawing of a staircase and its supporting structure. The drawing shows a staircase with a concrete base (A) and a metal railing system. The railing consists of a handrail (10), a balustrade (9), and a base rail (3). The staircase is supported by a concrete base (A) and a metal structure (K1). The drawing is labeled with various numbers and letters indicating different components and dimensions.

Technical drawing of a reinforced concrete column cross-section and its connection to a beam. The column is 300x300 mm, 4000 mm high, with a 100 mm crushed stone base. It features 306 reinforcement bars and a 45-degree diagonal crack. The beam is 200 mm wide and 200 mm high, with 8 reinforcement bars. The connection is labeled "Node A".

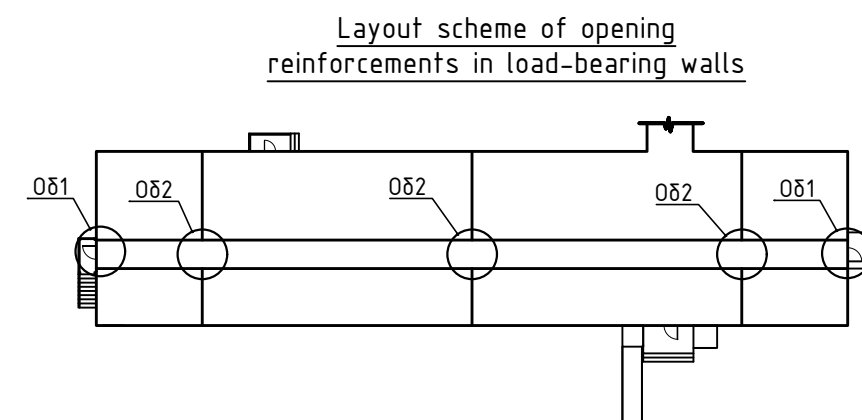
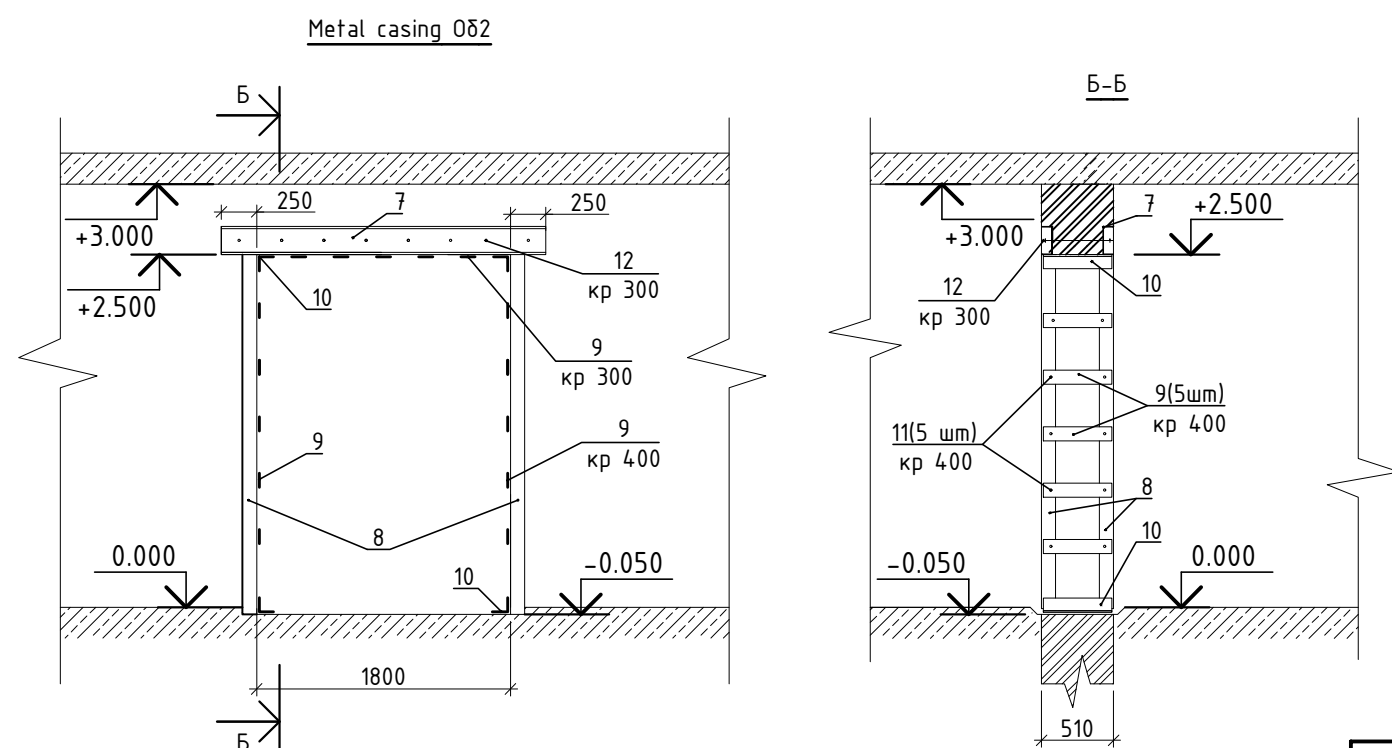
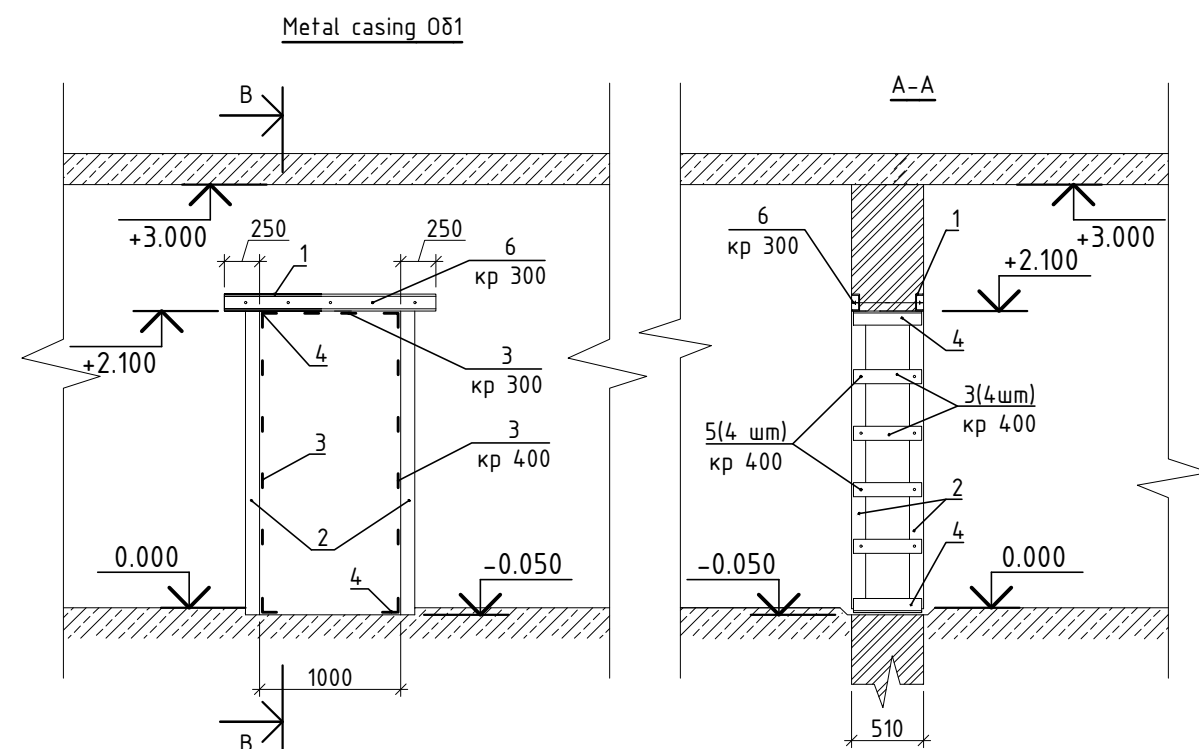
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|-----------|----------|-------|--------|--------|------|--|--|-------------------|-------|---------|
|           |          |       |        |        |      | 35/2304-25-A6  |  |                   |       |         |
|           |          |       |        |        |      | Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast |  |                   |       |         |
| Зм.       | Кільк.   | Аркуш | № Док. | Підпис | Дата |  |  | Стадія            | Аркуш | Аркушів |
| ГІП       | Мартинюк |       |        |        |      | Renovation   |  | РП                | 25    | 29      |
| Розробів  | Колесник |       |        |        |      |  |  |                   |       |         |
| Перевірів | Мартинюк |       |        |        |      | Exit layout on the 2nd floor No. 2, section 2-2, specification   |  | UKRBUDPROEKT, LLC |       |         |
|           |          |       |        |        |      |  |  |                   |       |         |



№	Name	Name	Qty.	Mass unit, kg	Note
		Canopy Пд1	2		
1	ДСТУ 8940:2019	Square tube 50x50x5, L=total length	9.68мп	7.06	68.34
2	ДСТУ 3760-2019	-50x8, L=300	8	0.94	7.52
3	ДСТУ 3760-2019	Stud Ø12A400S, L=200, on chemical anchor	16	0.18	2.88
4	ДСТУ 3760-2019	Profiled sheet C20 0.5	3.38м2		canopy area
		Canopy Пд2	1		
1	ДСТУ 8940:2019	Square tube 50x50x5, L=total length	10.8мп	7.06	76.24
2	ДСТУ 3760-2019	-50x8, L=300	9	0.94	8.46
3	ДСТУ 3760-2019	Stud Ø12A400S, L=200, on chemical anchor	18	0.18	3.24
4	ДСТУ 3760-2019	Profiled sheet C20 0.5	3.9м2		canopy area

1. Prime the visors with GF-021 and paint with PF-115 enamel.

							35/2304-25-AБ		
							Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaik, Mykolaiv Oblast		
Зм.	Кільк.	Аркуш	№Док.	Підпис	Дата				
ГІП		Мартинюк					Renovation		Стадія
Розробив		Колесник							РП
Перевірів		Мартинюк					Soffit 1, Soffit 2, section 1-1, specification		Аркуш
									Аркушів
							UKRBUDPROEKT, LLC		



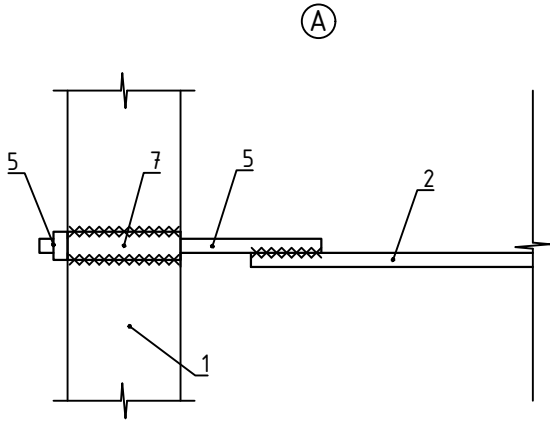
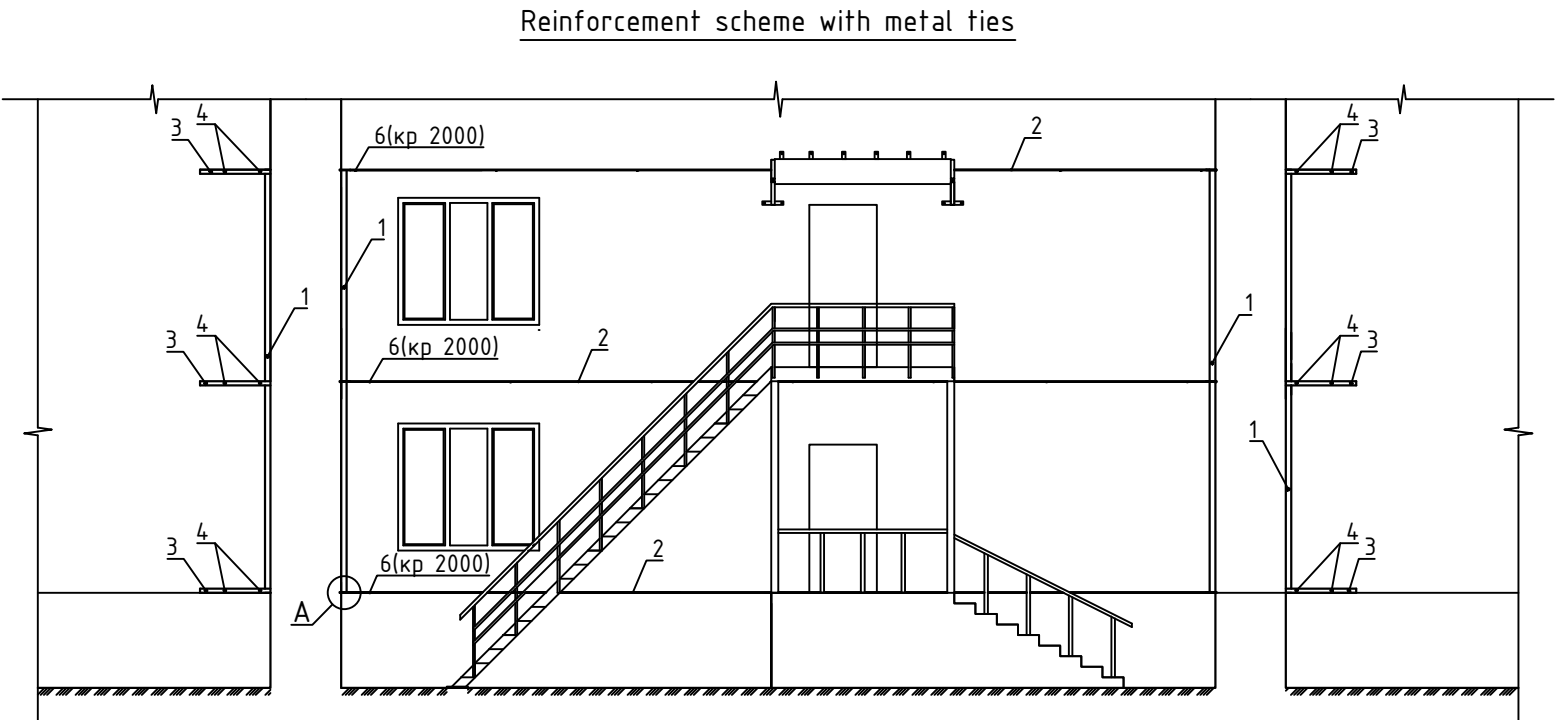
№	Name	Name	Qty.	Mass unit, kg	Note
		Metal casing Oδ1	2		
1	ДСТУ 3436-96	Channel beam №12, L=1500	2	15.6	31.2
2		Angle 80x80x6, L=2150	4	15.8	63.2
3	ДСТУ 8540:2015	-100x6, L=480	10	2.26	22.6
4	ДСТУ 2251:2018	Angle 80x80x6, L=480	4	3.53	14.12
5		Frame anchor 10x150	16		
6	ДСТУ 3760-2019	Tie bolt $\phi$ 12, L=500	5	0.26	1.3
		Metal casing Oδ2	3		
7	ДСТУ 3436-96	Channel beam №20, L=2300	2	42.32	84.64
8	ДСТУ 2251:2018	Angle 80x80x6, L=2550	4	18.76	75.04
9	ДСТУ 8540:2015	-100x6, L=480	15	2.26	33.9
10	ДСТУ 2251:2018	Angle 80x80x6, L=480	4	3.53	14.12
11		Frame anchor 10x150	16		
12	ДСТУ 3760-2019	Tie bolt $\phi$ 12, L=500	8	0.26	2.08

						35/2304-25-AБ		
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast		
Зм.	Кільк.	Аркуш	№Док.	Підпис	Дата		Стадія	Аркуш
ГІП		Мартинюк				Renovation	РП	27
Розробив		Колесник						29
Перевірів		Мартинюк				Clamp Ob1, Clamp Ob2, section A-A, section B-B, specification	UKRBUDPROEKT, LLC	

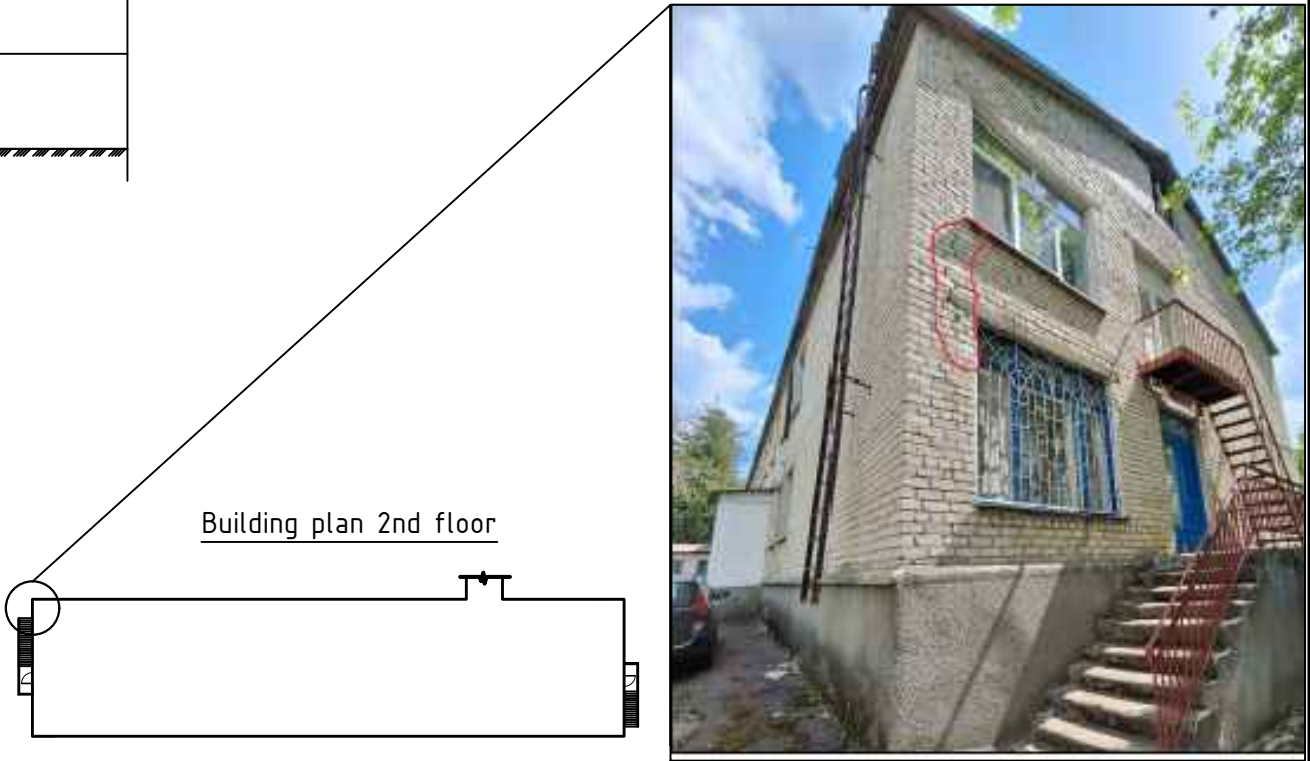











№	Name	Name	Qty.	Mass unit, kg	Note
Metal tie Mc1					
1	ДСТУ 2251:2018	Angle 80x80x6, L=3000	4	22.08	88.32
2	ДСТУ 3760-2019	Ø10A400C, L=total length.	37.2	0.617	22.95
3	ДСТУ 4747:2007	-60x5, L=1000	6	2.35	14.1
4		Wedge anchor M10	12		
5	ДСТУ 3760-2019	Tie bolt Ø12, L=150	6	0.13	0.78
6	ДСТУ 3760-2019	Ø8A400C, L=120.	18	0.047	0.84
7	ДСТУ 8943:2019	Pipe Ø15x1.5, L=80	6	0.04	0.24



						35/2304-25-AB			
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast			
Зм.	Кільк.	Аркуш	№Док.	Підпис	Дата	Renovation	Стадія	Аркуш	Аркушів
ГІП		Мартинюк					РП	29	29
Розробив		Колесник				Metal tie Mc1, node A, specification	UKRBUDPROEKT, LLC		
Перевірів		Мартинюк							

Погоджено

Зам.інв.№

Підпис і дата

інв.№ ор.

List of drawings for the basic set

Sheet	Drawing Titles	Notes
1	General Information	
2	First-floor plan showing utilities B1, T3, K1, and K13	
3	Diagram B1, T3	
4	Diagram K1, K13	

List of documents referenced and attached

Designation	Name	Notes
	<u>Documents referred to</u>	
ДБН В.2.5-64:2012	Interior plumbing and sewer system	
ДСТУ - Н.Б.В.2.5-40-2009	Design and installation of water supply systems and plastic pipe drainage systems	
ДБН В.2.2-9:2018	Buildings and structures. Public buildings and structures. Key provisions.	
ДБН В 1.1-7-2016	Fire Safety at Construction Sites	
	<u>Attached documents</u>	
35/2304-25-BK.C	Specifications for equipment, products, and materials	On 4 sheets
35/2304-25-BK	Design Assignment	App 1
35/2304-25-BK	Billing for Water Supply and Sewerage Systems	App 2

Key indicators for water supply and sewerage systems

Name of the system	Required pressure at the inlet of the water treatment plant	Design flow rate				Rated power of the electric motor,kW	Notes
		m <sup>3</sup> /day	m <sup>3</sup> /hour	l/sec.	In the event of a fire, l/sec.		
Water supply system (for domestic and drinking water)	20	4,05	1,70	0,93			
Sewer system		4,05	1,70	2,53			

GENERAL GUIDELINES

The working design for the building's water supply and sewerage systems has been developed based on the technical specifications, architectural drawings, and project brief, and in accordance with DBN V.2.5-64:2012.

The technical solutions adopted in the working drawings comply with the requirements of environmental, sanitary-hygienic, fire safety, and other applicable standards and regulations, and ensure the safe operation of the facility for human life and health, provided that the measures specified in the drawings are followed.

The building is designed to include:

- B1 - domestic and drinking water supply system;
- T3 - hot water supply system;
- K1 - domestic sewage system;
- K13 - Drainage system for air conditioners.

The water supply comes from the existing water distribution network. The water must comply with DSanPin 2.2.4-171-10, "Hygienic Requirements for Drinking Water Intended for Human Consumption."

To measure the amount of water consumed in the building, an existing water metering unit with a meter is provided at the water supply inlet.

The required pressure at the inlet is 20 m water column.

The domestic and drinking water supply system is designed using "KAN-therm" polypropylene pipes of type PN 16,  $\phi 25 \times 3.5$  -  $\phi 20 \times 2.8$  mm.

Hot water is supplied by electric water heaters.

The hot water supply system is designed using "KAN-therm" polypropylene pipes, type PN 20,  $\phi 20 \times 3.4$  mm.

Pipes should be laid with a 0.002 gradient toward drain outlets to ensure the system can be drained during installation and repair work.

A domestic sewage system (K1) is designed for the building.

The sewage system is designed using PVC pipes.

Wastewater is discharged via an internal gravity-fed system into the existing sewer system. The building's sewer lines are installed using polypropylene pipes compliant with DSTU B V.2.5-32:2007,  $\phi 50$  mm,  $\phi 110$  mm, which are concealed within the floor structure and partially covered with moisture-resistant drywall; exposed sewer risers are covered with moisture-resistant drywall.

For maintenance of the sewer system, cleaning ports and inspection chambers are provided.

Sealing of outlets in accordance with Complex 7373-3 "Sealing of Inlets and Outlets." Installation of water supply and sewerage systems shall be performed in accordance with DBN V.2.5-64:2012 and DSTU-N B V.2.5-40:2009.

- The design takes into account the requirements of current regulatory documents, including:
- DBN A.2.2-3-2014 "Composition and Content of Construction Project Documentation";
  - DBN V.2.5-74:2013 "Water Supply. External Networks and Structures. Basic Design Provisions";
  - DBN 2.5.-64-2012. "Internal Water Supply and Sewerage Systems";
  - DBN V.2.5-75:2013 "Sewerage. External Networks and Structures. Basic Design Provisions".

							35/2304-25-BK
							Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast
Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата		
ГІП		Мартинюк			06.25	Water Supply and Sewerage Phase 1	Стадія
Розробив		Попова			06.25		РП
Перевірів		Мартинюк			06.25		1
						General Information	Аркуш
							Аркушів
							4
							UKRBUDPROEKT, LLC
							Формат А3

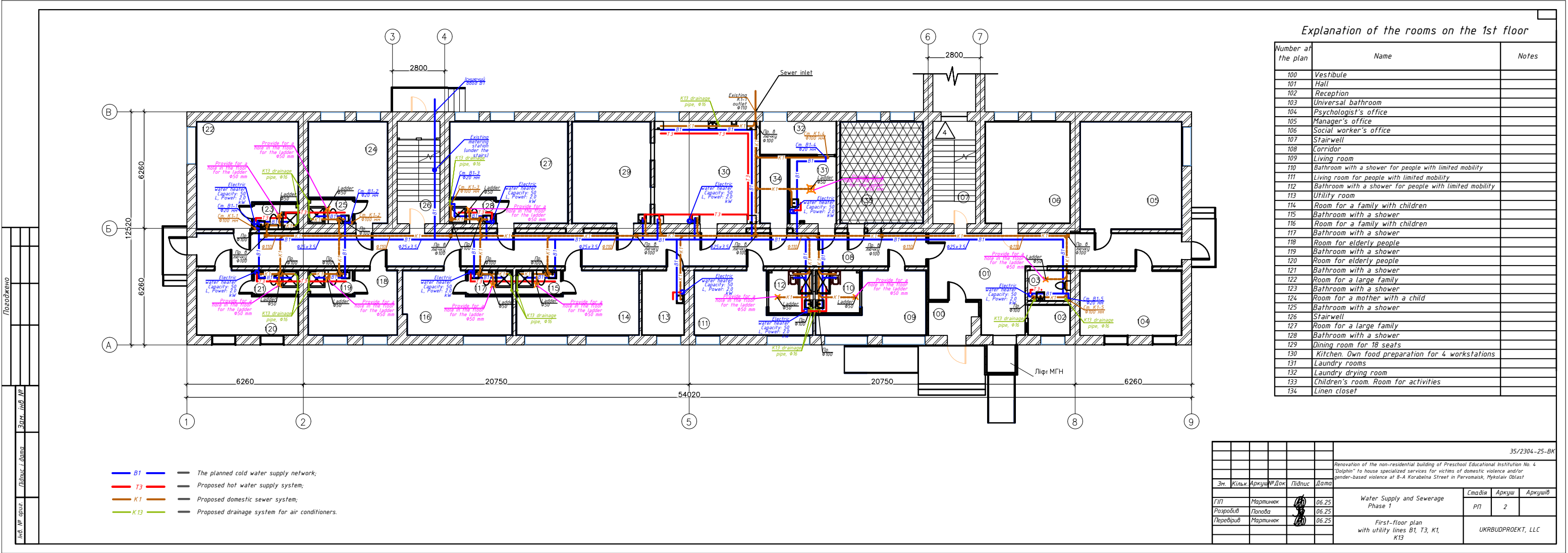
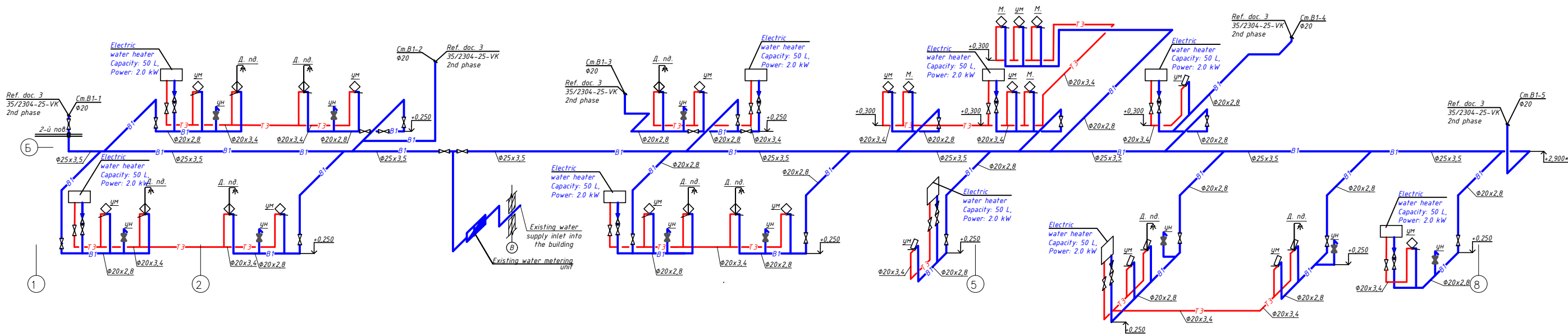


Diagram B1, T3



- Notes:
1. Install plumbing fixtures in accordance with the manufacturer's technical specifications.
  2. Pipes are laid both exposed and concealed within the floor structure, as well as at a specified distance from the wall.
  3. When installing polyethylene and polypropylene pipes through floor slabs, the working drawings specify the use of fire-resistant couplings.
  4. Clarify the pipeline routing markings on-site prior to installation, in coordination with other utility systems.

Legend:

— B1 — The planned cold water supply network;  
— T3 — Proposed hot water supply system;  
УМ — Sink;  
УН — Toilet;  
Д. нд. — Shower pan;  
М. — Kitchen sink




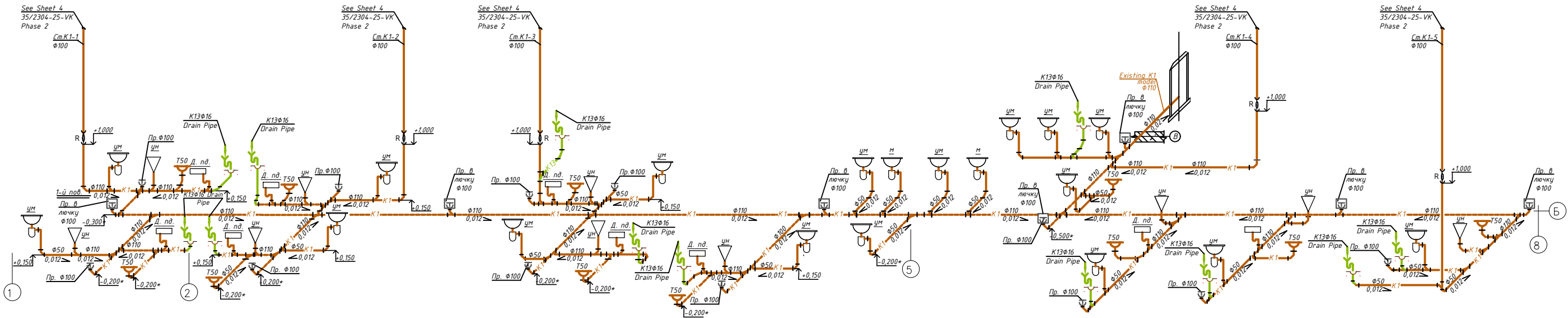
						35/2304-25-BK			
Эм.	Кільк.	Аркуш	№ Док.	Підпис	Дата				
Г/П	Мартинюк		06.25		06.25	Water Supply and Sewerage Phase 1	Стадія	Аркуш	Аркушів
Розробив	Попова		06.25				РП	3	
Перевірив	Мартинюк		06.25				Diagram B1, T3		

Diagram K1, K13



- Notes:
1. Install plumbing fixtures in accordance with the manufacturer's technical specifications.
  2. Pipes are installed both exposed and concealed within the floor structure.
  3. When installing polyethylene and polypropylene pipes through floor slabs, the working drawings specify the use of fire-resistant couplings.
  4. Connections from air conditioners as specified in the OB specifications.
  5. Clarify the pipeline routing markings on-site prior to installation, in coordination with other utility systems.

Legend:	
<span style="color: brown;">—</span> K1	Proposed domestic sewer system;
<span style="color: green;">—</span> K13	Proposed drainage sewer system;
<span style="color: blue;">—</span> УМ	Sink;
<span style="color: blue;">—</span> Т	Toilet;
<span style="color: blue;">—</span> Д. нд.	Shower pan;
<span style="color: blue;">—</span> М.	Kitchen sink

35/2304-25-BK					
Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast					
Эм.	Кільк.	Аркушів	Док.	Підпис	Дата
Г/П	Мартинюк	Розробив	Попова	06.25	06.25
Порядковий	Мартинюк	06.25			
Water Supply and Sewerage Phase 1				Стадія	Аркуш
Diagram K1, K13				РП	4
				Аркушів	
				UKRBUDPROJEKT, LLC	

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Погоджено				Position	Name and Technical Specifications	Type, brand, document code, questionnaire	Equipment code for products and materials	Manufacturing plant	Unit	Quantity	Unit weight, kg	Notes
				1	2	3	4	5	6	7	8	9
					Household sewage K1							
				1	PVC sewer pipe Ø50 mm and fittings	DSTU B V.2.5-32:2007			м	50,0		10% запас
				2	PVC sewer pipe Ø110 mm and fittings	DSTU B V.2.5-32:2007			м	70,0		10% запас
				3	Ladder Ø50				pc	11		
				4	Cleaning Ø50 mm with a plug				pc	5		
				5	Cleaning Ø110 mm in the hatch				pc	6		
				6	Cleaning Ø110 mm with a plug				pc	15		
				7	Revision Ø110 mm				pc	5		
Зам.інв.№				8	Plastic doors (size 250x400) for access to							
					Revision				pc	5		
				9	Exhaust seal	Complex 7373-3			place	1		
				10	Fire protection sleeve Ø110 mm				pc	5		
					Drainage sewer K13							
				1	PP-R polypropylene pipe (PN16) for water supply:							
					Ø20x2,8 mm			EKOPLASTIK	м	50,0		10% запас
				2	Hydraulic seal on pipe Ø20x2.8 mm				pc	12		
Підпис і дата				3	DN20 pipeline fittings				kg	2,5		
Інв.№ ориг.				Notes: Where the specifications or descriptions of systems and solutions contain references to a specific brand or manufacturer, or to a specific process characterizing the operations of a particular business entity, or to trademarks, patents, types, or a specific place of origin or method of production, the phrase "or equivalent"								

						35/2304-25-BK.C				Аркуш
										3
Зм.	Кільк.	Аркуш	№ док.	Підпис	Дата					








Інв. № ориг.	Зам. інв. №
Підпис і дата	













List of working drawings of the main set		
Sheet	Designation	Notes
1	General data	2 sheets
2	Input and distribution device VRP. Single-line schematic diagram	
3	Shield RSh1. Single-line electrical schematic diagram	
4	Shield ShViK1. Single-line schematic diagram	2 sheets
5	Shield SHCHEVP1. Single-line schematic diagram	
6	Shield SHCH1. Single-line electrical schematic diagram	
7	SHAO Shield. Single-line electrical schematic diagram	
8	Main and supplementary potential equalization system	
9	First floor socket network plan	
10	Lighting network plan of the first floor	
11	Layout of water heaters, air conditioning, and ventilation on the first floor	

Marking	Designation	Notes
	Documents referred to	
ПУЕ	Electrical Installation Rules	
ЄНП 3.05.06-85	Electrical engineering devices	
ДСТУ Б В.2.5-82-2016	Electrical safety in buildings and structures. Requirements for protective measures against electric shock	
ДБН В.2.5.-28-2018	Natural and artificial lighting	
ДБН А.3.2-2-2009	Occupational Safety and Industrial Safety in Construction	
ДБН В.2.5-23:2010	Design of electrical equipment for civil facilities	
НАПБ А.01.001-2014	Fire safety rules in Ukraine	
	Documents attached	
35/2304-25-ETP.C	Specification of equipment, products and materials.	

The working documentation has been prepared in accordance with current regulations, rules, instructions, and standards, and ensures the safe operation of the building provided that the measures specified in the project, as well as the norms and rules of operation, are followed.

						35/2304-25-ETP			
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast			
Змін.	Кільк.	Арк.	№ док.	Підпис	Дата	Electrical engineering solutions (Phase I)	Стадія	Аркуш	Аркушів
ГП		Мартинюк					РП	1	11
Розробив		Горбачевський				General information (beginning)	UKRBUDPROEKT, LLC		
Перевірів		Мартинюк							

Інв. № ориг.	Підпис і дата	Зам. інв. №

Legend						General Instructions	
Label	Designation					<p>1. The basis for developing this set of drawings is the drawings of the construction and technological parts of the project, as well as the tasks of the related sections of HVAC and plumbing.</p> <p>2. The working drawings have been developed in accordance with current norms, rules, and standards.</p> <p>3. Regarding the reliability of power supply, the facility belongs to category II with a designated category I of fire safety.</p> <p>4. Supply voltage ~380V/220V</p> <p>5. The main electrical parameters are shown in the single-line diagrams.</p> <p>6. Switching protection devices are manufactured by "EATON". Replacement with devices with similar characteristics from other manufacturers is possible without changing the adopted design solutions.</p> <p>7. The project provides for both operational and emergency lighting. Power supply for the operational lighting is provided from the ЩО panel. Power supply for the emergency lighting is provided from the ЩАО panel.</p> <p>8. The lighting calculation was performed using the specific power method in accordance with the requirements of DBN.2.5-28:2018 "Natural and Artificial Lighting." The types of luminaires and illumination levels were chosen considering the purpose of the room and are indicated on the plan. Illumination calculation was carried out using the DIALux program.</p> <p>9. Emergency (evacuation and safety) lighting is provided along the routes for evacuation of people. All evacuation routes are marked with "Exit" light indicators.</p> <p>10. Emergency lighting fixtures are distinguished from the working lighting fixtures and marked with a conditional symbol.</p> <p>11. "Exit" light indicators should be installed above doors (see the fire alarm/security project).</p> <p>12. The project provides for lighting control with local switches. Lighting switches are to be installed at a height of 1.0 m from the floor.</p> <p>13. Cables for all electrical receivers are selected according to the permissible current, checked for voltage drop, and ensure automatic disconnection of the fault section in the event of a short circuit.</p> <p>14. Distribution and group networks of the working power are made with VVGng-LS cable, emergency power with VVGng-FRLS cable of the calculated cross-section.</p> <p>15. All metal parts of electrical equipment are normally not energized and must be grounded in accordance with the Electrical Installation Regulations (PUE).</p> <p>16. All installation work should be carried out in accordance with the requirements of the PUE and SNiP 3.05.06-85.</p> <p>17. Passages through walls should be made in sections of pipes, ducts, or openings. The routing of an independent protective conductor should begin from the group electrical panel. The neutral protective conductor must be connected to the protective contacts of plug sockets and equipment. When powering several plug sockets from a single group line, the branching of the protective conductor to each plug socket must be carried out at the branching points in distribution boxes and in boxes for socket installation using one of the accepted methods (soldering, welding, crimping, special clamps, terminals, etc.).</p> <p>18. Sequential connection of the protective contacts of sockets to the protective conductor is not allowed. Connecting the neutral working and protective conductors to a common contact protective clamp at the group panel is prohibited. According to PUE, clause 2.1.31, the wiring should allow easy identification of conductors along their entire length by colors:</p> <ul style="list-style-type: none"><li>- Blue color - for designating the neutral working conductor of the electrical network;</li><li>- Two-color combination of yellow and green - for designating the protective or neutral protective conductor;</li><li>- Black, brown, red, violet, gray, pink, white, orange, pink colors - for designating the phase conductor.</li></ul> <p>19. Electrical equipment and materials used during installation must have certificates of conformity to Ukrainian standards, and cable products and PVC pipes additionally require a fire safety certificate according to NAPB A. 01.001-2014.</p> <p>20. The equipotential bonding system connects the following conductive parts together:</p> <ul style="list-style-type: none"><li>- protective conductor (PEN) of the power line;</li><li>- grounding conductor that is connected to the grounding system;</li><li>- metal communication pipes entering the building (hot and cold water supply pipes, heating, etc.).</li></ul> <p>21. The connecting part of the equipotential bonding system is made using PV3 wire with a cross-section of 6 sq. mm.</p> <p>22. The 40x4 busbar should be installed at a height of 0.3 m from the floor along the entire perimeter of the switchgear and generator rooms. Connect the 40x4 busbar to the existing grounding system (material accounted for).</p>	
	Work lighting panel						
	Emergency lighting panel						
	Distribution board						
	2-pole socket with protective contact IP44 for outdoor installation						
	2-pole socket with protective contact IP20 for indoor installation						
	IP44 external installation switch						
	IP20 indoor switch						
	Box with differential switch for connecting a water heater						
	Working power line in a corrugated pipe						
	Emergency power line in a corrugated pipe						
	Cable in the box						
	Cable in a corrugated pipe						
						<div>35/2304-25-ETP</div>	
Змін.	Кільк.	Арк.	№ док.	Підпис	Дата		

						Архув
						1.2



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Інв. № ориг.	Підпис і дата	Зам. інв. №

Power supply data							
Busway, distribution point	Designation, type, I nom, A, breaker or fuse link, A						
	Type, voltage, cross-section (busbar), rated current, A, installed power, kW						
Device of the departing line	Designation, type, I nom, A, circuit breaker or fuse link, A						
Brand and cross-section of the conductor							
Marking and length of the network section							
		<div><div><div>показок на попередньому аркуші</div><div><div><div>L1</div><div><div>QF16</div><div>16A</div><div>1P C</div></div></div><div><div>Л1</div><div>ВВГнг-LS 3x2,5, L=38м, КК-30м, ГТ20-8м</div></div></div><div><div>L2</div><div><div>QF17</div><div>16A</div><div>1P C</div></div></div><div><div>Л2</div><div>ВВГнг-LS 3x2,5, L=36м, КК-28м, ГТ20-8м</div></div></div><div><div>L3</div><div><div>QF18</div><div>16A</div><div>1P C</div></div></div><div><div>Л3</div><div>ВВГнг-LS 3x2,5, L=13м, КК-5м, ГТ20-8м</div></div></div>					
Electrical appliance	Legend on the plan		-	-	-		
	Number according to the plan		ПВ1	ПВ2	ПВ3		
	Tun		-	-	-		
	Py/Pp, кВт		2,3	1,5	1,5		
	Un, В		230	220	230		
	Ip/In, А		10,0	6,52	6,52		
	Name of the mechanism according to the plan		Supply and exhaust ventilation unit	Supply and exhaust ventilation unit	Supply and exhaust ventilation unit		

						35/2304-25-ETP	Аркуш
Змін.	Кільк.	Арк.	№ док.	Підпис	Дата		4.2



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Інв. № ориг.

Підпис і дата

Зам. інв. №

Power supply data

Busway, distribution point

Designation, type, I nom, A, breaker or fuse link, A

Type, voltage, cross-section (busbar), rated current, A, installed power, kW

Device of the departing line

Designation, type, I nom, A, circuit breaker or fuse link, A

Brand and cross-section of the conductor

Marking and length of the network section

Electrical appliance

Legend on the plan													
Number according to the plan	Гр.0.1	Гр.0.2	Гр.0.3	Гр.0.4	Гр.0.5	Гр.0.6	Гр.0.7	Гр.0.8	Гр.0.9	Гр.0.10			
Tun	-	-	-	-	-	-	-	-	-	-			
Py/Pp, кВт	0,39	0,26	0,39	0,36	0,36	0,3	0,39	0,26	0,26	0,36			
Un, В	230	230	230	230	230	230	230	230	230	230			
I <sub>p</sub> /I <sub>n</sub> , А	1,7	1,13	1,7	1,56	1,56	1,28	1,7	1,13	1,13	1,56			
Name of the mechanism according to the plan	Lighting rooms 122-125	Lighting rooms 118-121	Lighting rooms 127-129	Lighting rooms 114-117	Lighting rooms 130-134	Lighting rooms 109-112	Lighting rooms 105-106	Lighting rooms 102-104	Lighting room 108 (left wing)	Lighting rooms 100, 101, 108 (right wing)	Reserve	Reserve	

ЩО1-Н1; від ВРП

~380/220  
L1,L2,L3  
N  
PE

QF1  
10A  
1P C

QF2  
10A  
1P C

QF3  
10A  
1P C

QF4  
10A  
1P C

QF5  
10A  
1P C

QF6  
10A  
1P C

QF7  
10A  
1P C

QF8  
10A  
1P C

QF9  
10A  
1P C

QF10  
10A  
1P C

QF11  
10A  
1P C

QF8  
10A  
1P C

Py = 3,33 кВт

Pp = 2,77 кВт

I<sub>p</sub> = 12,04 А

Гр.01, ВВГнг2-LS 3x1,5, L=102м, КК-50м, ГТ20-52

Гр.02, ВВГнг2-LS 3x1,5, L=94м, КК-50м, ГТ20-44м

Гр.03, ВВГнг2-LS 3x1,5, L=81м, КК-30м, ГТ20-51м

Гр.04, ВВГнг2-LS 3x1,5, L=78м, КК-30м, ГТ20-48м

Гр.05, ВВГнг2-LS 3x1,5, L=91м, КК-20м, ГТ20-71м

Гр.06, ВВГнг2-LS 3x1,5, L=63м, КК-19м, ГТ20-44м

Гр.07, ВВГнг2-LS 3x1,5, L=61м, КК-16м, ГТ20-45м

Гр.08, ВВГнг2-LS 3x1,5, L=53м, КК-18м, ГТ20-35м

Гр.09, ВВГнг2-LS 3x1,5, L=63м, КК-50м, ГТ20-13м

Гр.010, ВВГнг2-LS 3x1,5, L=58м, КК-35м, ГТ20-23м

1. This drawing serves as the basis for ordering and manufacturing the SHCH panel.

2. The devices of the firm "EATON" are accepted for installation. Replacement with devices of other manufacturers with similar characteristics is possible, without changing the adopted design solutions.

3. The panel should provide 20% reserve space for possible additional device installation.

4. The degree of protection of the panel is not lower than IP31.

5. Cable entry from the top.

6. Built-in panel installation.

Material specification

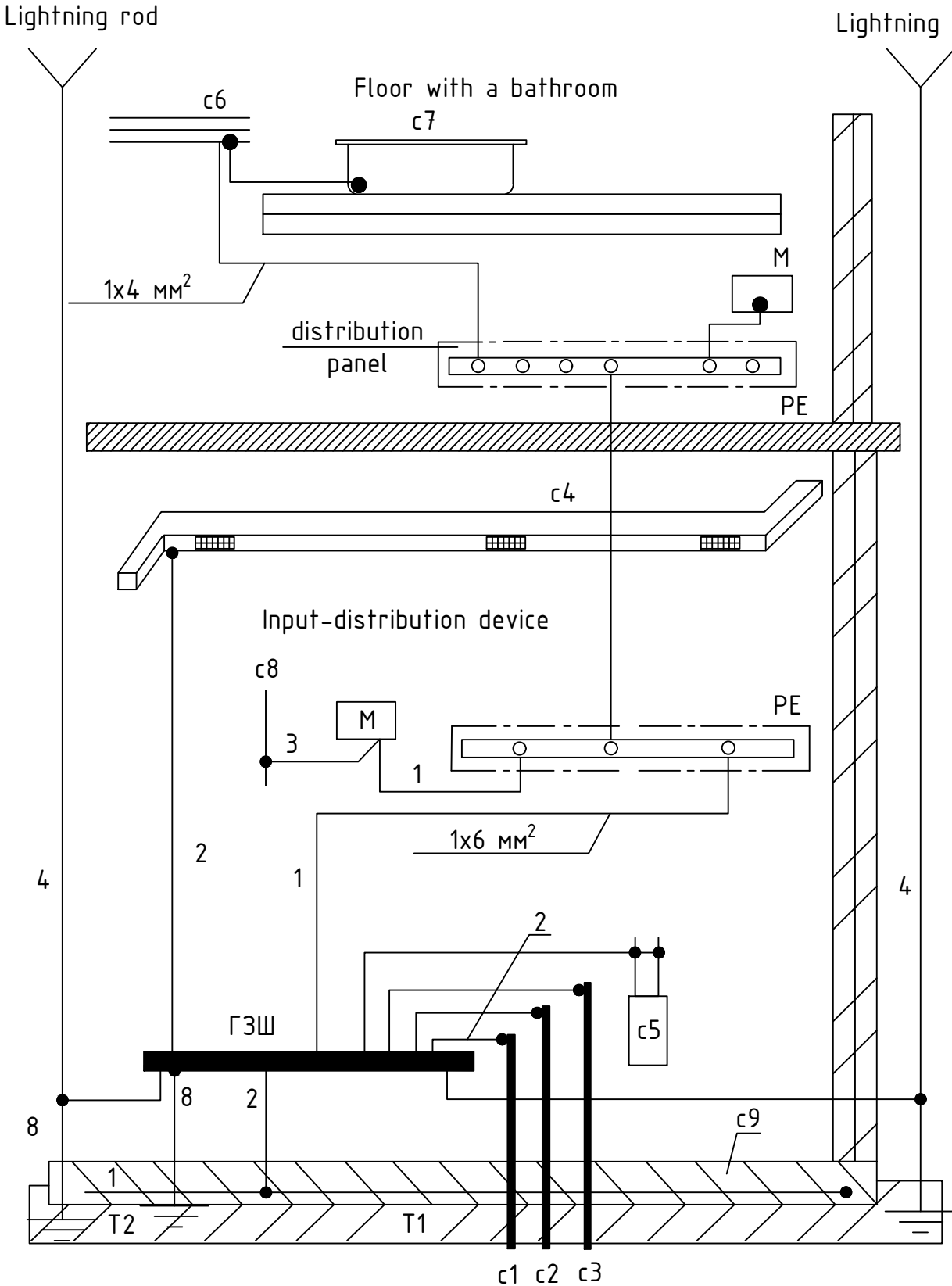
ВВГнг2-LS	3x1,5	- 744м
ГТ	Φ20	- 426м

							35/2304-25-ETP		
							Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast		
Змін.	Кільк.	Арк.	№док.	Підпис	Дата		Electrical engineering solutions (Phase I)		
ГІП		Мартинюк					Стадія	Аркуш	Аркушів
Розробив		Горбачевський					РП	6	
Перевірів		Мартинюк					Shield SHCH1. Single-line electrical schematic diagram		
							UKRBUDPROEKT, LLC		

Формат А3

[illegible]

Погоджено					
Зам. інв. №					
Підпис і дата					
Інв. № ориг.					



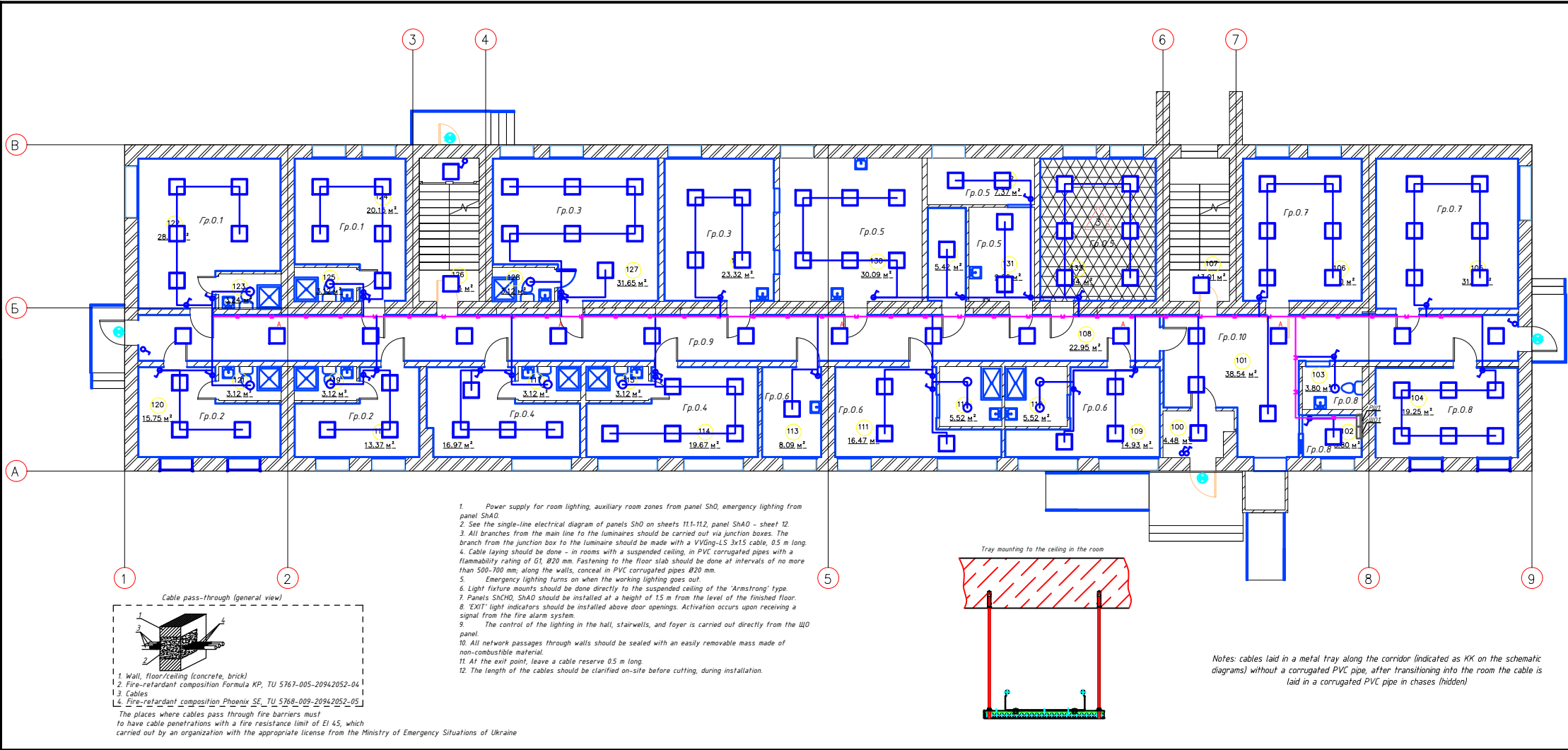
According to PUE edition 7, 2017, paragraph 1.7.82, for connection to the main equipotential bonding system, all the mentioned parts must be connected to the main grounding bus (MGB) using equipotential bonding system conductors.

- m* - exposed conductive part
- c1* - metal water pipes entering the building
- c2* - metal sewage pipes entering the building
- c3* - metal gas pipes entering the building
- c4* - ventilation and air conditioning ducts
- c5* - heating system
- c6* - metal water pipes in the bathroom
- c7* - cast-iron bathtub
- c8* - extraneous conductive part within reach
- c9* - reinforced concrete fittings
- T1* - natural ground
- T2* - lightning protection grounding
- 1* - protective neutral conductor
- 2* - main equipotential bonding conductor
- 3* - supplementary equipotential bonding conductor
- 4* - lightning protection down conductor
- 8* - grounding conductor

						35/2304-25-ETP		
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast		
Змін.	Кільк.	Арк.	№ док.	Підпис	Дата			
ГІП		Мартинюк				Electrical engineering solutions (Phase I)	Стадія	Аркуш
Розробив		Горбачевський				Main and supplementary potential equalization system	РП	8
Перевірив		Мартинюк					UKRBUDPROEKT, LLC	






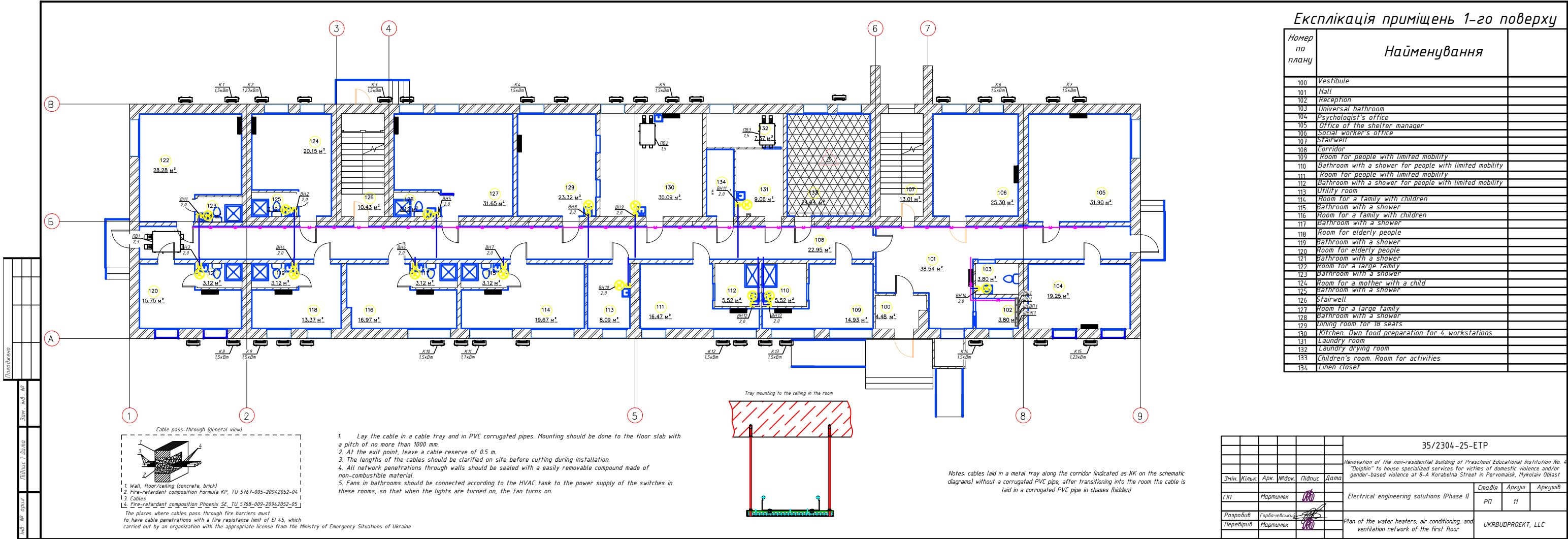







Explanation of the rooms on the 1st floor

Plan number	Name	
100	Vestibule	
101	Hall	
102	Reception	
103	Universal bathroom	
104	Psychologist's office	
105	Office of the shelter manager	
106	Social worker's office	
107	Stairwell	
108	Corridor	
109	Room for people with limited mobility	
110	Bathroom with a shower for people with limited mobility	
111	Room for people with limited mobility	
112	Bathroom with a shower for people with limited mobility	
113	Utility room	
114	Room for a family with children	
115	Bathroom with a shower	
116	Room for a family with children	
117	Bathroom with a shower	
118	Room for elderly people	
119	Bathroom with a shower	
120	Room for elderly people	
121	Bathroom with a shower	
122	Room for a large family	
123	Bathroom with a shower	
124	Room for a mother with a child	
125	Bathroom with a shower	
126	Stairwell	
127	Room for a large family	
128	Bathroom with a shower	
129	Dining room for 16 seats	
130	Kitchen. Own food preparation for 4 workstations	
131	Laundry room	
132	Laundry drying room	
133	Children's room. Room for activities	
134	Linen closet	

						35/2304-25-ETP		
						Renovation of the non-residential building of Preschool Educational Institution No. "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaïsk, Mykolaiv Oblast		
Змін.	Кільк.	Арк.	Міток.	Підпис	Дата			
Г/П	Мартинюк					Electrical engineering solutions (Phase II)		
						Стаття	Аркуш	Аркушів
						РП	10	
Розробив	Горбачевський					First floor lighting network plan		
Перевірив	Мартинюк							
						UKRBUDPROEKT, LLC		



		Position	Name and technical specification	Name and technical specification	Code of equipment, product, material	Factory - manufacturer	Unit of measurement	Quantity	Unit mass, kg	Notes					
		1	2	3	4	5	6	7	8	9					
Зам. інв. №	Підпис і дата		Specification of equipment and materials for the first floor												
			Shield equipment												
		БПН	Built-in distribution panel, in the configuration:												
			metal case with mounting panel 581x975x160			4XP160 2-6	ETI	pc	1						
			Circuit breaker 160A, 3 poles, breaking capacity 50kA			EATON NZMN1-A160	Eaton	pc	3						
			ATS device 4p, 160A,			e.industrial.ats.4.160	E.next	pc	1						
			Surge arrester In=25kA Im=50k 4p,			SPBT12-280/4	Eaton	pc	1						
			Automatic circuit breaker 3P, Un=380V, characteristic C, 25kA, In=100A			PLHT-C100/3	Eaton	pc	1						
			Automatic circuit breaker 3P, Un=380V, characteristic C, 6kA, In=63A			PL6-C63/3	Eaton	pc	2						
			Automatic circuit breaker 3P, Un=380V, characteristic C, 6kA, In=50A			PL6-C50/3	Eaton	pc	2						
			Automatic circuit breaker 3P, Un=380V, characteristic C, 6kA, In=40A			PL6-C40/3	Eaton	pc	2						
			Automatic circuit breaker 3P, Un=380V, type C, 6kA, In=32A			PL6-C32/3	Eaton	pc	1						
			Automatic circuit breaker 1P, Un=220V, type C, 6kA, In=32A			PL6-C32/1	Eaton	pc	2						
			Automatic circuit breaker 1P, Un=220V, type C, 6kA, In=16A			PL6-C16/1	Eaton	pc	2						
			Automatic circuit breaker 1P, Un=220V, type C, 6kA, In=10A			PL6-C10/1	Eaton	pc	4						
			Copper wire, flexible, cross-section 50 sq.mm			ПВ3 1x50	Южкабель	м	3						
			Copper wire, flexible, cross-section 25 sq.mm			ПВ3 1x25	Южкабель	м	5						
			Провід мідний, гнучкий, перерізом 16 sq.mm, перерізом 16 кв.мм			ПВ3 1x16	Южкабель	м	5						
			DIN rail, for circuit breakers					м	1,5						
			Independent release device ZP-ASA/230			ZP-ASA/230	EATON	pc	2						
			Three-phase comb for ETI circuit breakers, 1 meter, IZ 16/3F/54 3p			IZ 16/3F/54	EATON	pc	1						
			ДБЖ	Uninterruptible power supply			LPY-W-PSW-5000VA	LogicPower	pc	1					
			АКБ	Rechargeable battery АКБ LPM-MG 12V - 200 Ah			LPM-MG 12V - 200 Ah	LogicPower	pc	1					
Інв. № орг.		The project allows for the replacement of products and materials with similar ones that have equivalent characteristics and specifications from other manufacturers.													
						35/2304-25-ETP.C									
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast									
						Змін.	Кільк.	Арк.	№ док.	Підпис	Дата				
						ГП		Мартинюк			Electrical engineering solutions (Phase I)		Стадія	Аркуш	Аркушів
						Розробив		Горбачевський			Специфікація обладнання, виробів та матеріалів		UKRBUDPROEKT, LLC		
						Перевірів		Мартинюк							



		Position	Name and technical specification	Name and technical specification	Code of equipment, product, material	Factory - manufacturer	Unit of measurement	Quantity	Unit mass, kg	Notes
		1	2	3	4	5	6	7	8	9
Зам. інв. №	Підпис і дата	РЩ1	Built-in Volta VU48UA panel for 48 (56) modules with PE and N busbars	Volta VU48UA		Hager	pc	1		
			Automatic circuit breaker 3P, Un=380V, characteristic C, 6kA, In=80A	PLHT-C80/3		Eaton	pc	1		
			differential automatic circuit breaker 1P + N 16A C, 30 mA	PFL6-16/1N/C/003		Eaton	pc	13		
			differential automatic circuit breaker 1P + N 40A C, 30 mA	PFL6-40/1N/C/003		Eaton	pc	4		
			Copper wire, flexible, cross-section 10 sq.mm	ПБЗ 1x10		Южкабель	м	6		
		ЩБіК1	Built-in Volta VU24UA panel for 24 (28) modules with PE and N busbars	Volta VU24UA		Hager	pc	1		
			circuit breaker 3P, Un=380V, characteristic C, 6kA, In=40A	PL6-C40/3	248039	EATON	pc	1		
			circuit breaker 1P, Un=220V, characteristic C, 6kA, In=10A	PL6-C16/1	286531	EATON	pc	18		
			Copper wire, flexible, cross-section 6 sq.mm	ПБЗ 1x6		Южкабель	м	4		
			ЩЕВП1	Built-in Volta VU36UA panel for 36 (42) modules with PE and N busbars	Volta VU36UA		Hager	pc	1	
		Automatic circuit breaker 3P, Un=380V, type C, 6kA, In=50A		PL6-C50/3		Eaton	pc	1		
		differential automatic circuit breaker 1P + N 16A C, 30 mA		PFL6-16/1N/C/003		Eaton	pc	14		
		Copper wire, flexible, cross-section 10 sq.mm		ПБЗ 1x10		Южкабель	м	6		
		Щ01		Built-in Volta VU24UA panel for 24 (28) modules with PE and N busbars	Volta VU24UA		Hager	pc	1	
			Automatic circuit breaker 3P, Un=380V, characteristic C, 6kA, In=32A	PL6-C32/3		Eaton	pc	1		
			Automatic circuit breaker 1P, Un=220V, characteristic C, 6kA, In=10A	PL6-C10/1		Eaton	pc	12		
			Copper wire, flexible, cross-section 6 sq.mm	ПБЗ 1x6		Южкабель	м	4		
			ЩА0	Built-in Volta VU12UA panel for 12 (14) modules with PE and N busbars	Volta VU12UA		Hager	pc	1	
		automatic circuit breaker 1P, Un=220V, type C, 4.5kA, In=16A		PL4,5-C16/1	293124	EATON	pc	1		
		circuit breaker 1P, Un=220V, characteristic C, 6kA, In=10A		PL6-C10/1	286531	EATON	pc	5		
differential automatic circuit breaker 2P 25A C, 30 mA	PF6 6kAAC 2P 25A 30mA	286492		EATON	pc	1				
Copper wire, flexible, cross-section 4 sq.mm	ПБЗ 1x4			Южкабель	м	4				
Інв. № орг.		The project allows for the replacement of products and materials with similar ones that have equivalent characteristics and specifications from other manufacturers.								
					35/2304-25-ETP.C					Sheet
										2
					Змін.	Кільк.	Арк.	№ док.	Підпис	Дата

		Position	Name and technical specification	Name and technical specification	Code of equipment, product, material	Factory - manufacturer	Unit of measurement	Quantity	Unit mass, kg	Notes			
		1	2	3	4	5	6	7	8	9			
Інв. № опуб.	Зам. інв. №	Підпис і дата	Outdoor unit of the air conditioning system										
			Cable with copper conductors in PVC insulation, in a PVC sheath,	ВВГнг-LS		ЗАТ "Захід							
			that does not propagate burning, for a voltage of 1 kV, with conductor cross-section:	-2x1,5 мм²		"Південькабель"	м	110					
				-3x1,5 мм²			м	1000					
				-3x2,5 мм²			м	2100					
				-3x6 мм²			м	150					
				-5x6 мм²			м	40					
				-5x10 мм²			м	25					
				-5x16 мм²			м	20					
				-5x25 мм²			м	10					
			Cable with copper conductors in PVC insulation, in a PVC sheath,	ВВГнг-FRLS		ЗАТ "Захід							
			fire-resistant E90, with a voltage of 1 kV, conductor cross-section:			"Південькабель"							
				-3x6 мм²			м	15					
				-3x2,5 мм²			м	10					
				-2x1,5 мм²			м	20					
			Cable with copper conductors in PVC insulation, in a PVC sheath,	ВВГнг-FRLS		ЗАТ "Захід							
			fire-resistant E90, with a voltage of 1 kV, conductor cross-section:			"Південькабель"							
				-3x1,5 мм²			м	130					
			PV3 wire 1x4 мм² for grounding (potential equalization)				м	60					
			External protective grounding contour										
			Deep grounding rod for driven coupling, l=1500 mm, diameter 16				NE1202	DKC	pc	12			
			Deep grounding rod tip				NE1402	DKC	pc	6			
			Connection of the grounding rod				NE1302	DKC	pc	6			
			Connecting sleeve, drive-in				NE1304	DKC	pc	6			
			Strip 40x4				NC2444	DKC	m	25			
			The project allows for the replacement of products and materials with similar ones that have equivalent characteristics and specifications from other manufacturers.										
									35/2304-25-ETP.C				Sheet
													3
									Змін.	Кільк.	Арк.	№ док.	Підпис

		Position	Name and technical specification	Name and technical specification	Code of equipment, product, material	Factory - manufacturer	Unit of measurement	Quantity	Unit mass, kg	Notes				
		1	2	3	4	5	6	7	8	9				
Інв. № опуб. Зам. інв. № Підпис і дата			<u>Electrical installation products</u>											
			Single-pole switch, 10A			Торгова мережа	pc	35						
			Single indoor socket with grounding and shutters, IP 20, 16A			Торгова мережа	pc	58						
			Single socket with cover and "shutters", IP 44, 16A			Торгова мережа	pc	9						
			Double socket with grounding and shutters with frame, IP 20, 16A			Торгова мережа	pc	23						
			Single-phase power socket 40A			Торгова мережа	pc	4						
			Junction box distribution diameter 100			Торгова мережа	pc	75						
			Junction box assembled set (socket box) diameter 65			Торгова мережа	pc	140						
			<u>Materials</u>											
			PVC corrugated pipe with pull wire Ø20mm black		71720	«ДКС Україна»	м	1500						
			PVC pipe holder with latch Ø20mm		51020	«ДКС Україна»	pc	1000						
			PVC corrugated pipe with pull wire Ø32mm black		71732	«ДКС Україна»	м	40						
			PVC pipe holder with latch Ø32mm		51032	«ДКС Україна»	pc	25						
			Fire-resistant cushion DKS 120*300*35			«ДКС Україна»	pc	3						
			Fireproof sealant DS1202 120 min - 300 ml				pc	3						
			Fire foam					3						
			Perforated tray 300x80 L3000 with cover IP54			«ДКС Україна»	м	69						
			Mounting profile T18: C-shaped, 27x18x1.2mm			«ДКС Україна»	м	27						
			Stud M8 x 2000mm, DIN 975			«ДКС Україна»	pc	25						
			Brass drive anchor EL M8x30			«ДКС Україна»	pc	120						
			Flanged serrated nut M8, DIN 6923			«ДКС Україна»	pc	240						
			Washer for rivets DIN9021 M8			«ДКС Україна»	pc	240						
			Screw M6x10 with semi-cylindrical universal head with flange, DIN 967			«ДКС Україна»	pc	300						
			M6 Serrated Flange Nut DIN 6923			«ДКС Україна»	pc	300						
		The project allows for the replacement of products and materials with similar ones that have equivalent characteristics and specifications from other manufacturers.												
								35/2304-25-ETPC				Sheet		
												4		
		Змін.	Кільк.	Арк.	№ док.	Підпис	Дата							

Інв. № орг.	Підпис і дата	Зам. інв. №

Змін.	Кільк.	Арк.	№ док.	Підпис	Дата

Sheet

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5

Погоджено

Заміна №

Підписана

Інв. № об.

List of working drawings of the main HVAC set

Sheet	Name	Note
1	General information (beginning)	
2	General information (conclusion). List of ventilation and electrical equipment. Layout diagram of ventilation systems.	
3	Ventilation. First floor plan.	
4	Ventilation. Isometric diagrams of PV1, PV2, PV3, V1–V5 systems.	
5	Ventilation. Isometric diagrams of systems B 6 – B 21.	
6	Heating. First floor plan. View A.	
7	Isometric heating diagram of the 1st floor. Nodes 1, 2 radiator installation.	
8	Air conditioning. First floor plan.	

List of documents referred to and those attached

Designation	Name	Note
BEHTCEPBIC	Ventilation equipment	
	Attached documents	
OB.C1	Specification of equipment, products, and materials (1st floor)	на 9 арк

Key indicators for HVAC drawings

Name of the house	Volume, m³	Period of the year at t outside, °C	Heat consumption, kW				Cold consum., kW	Installed power of electric motors, kW
			for heating	for ventilation	for hot water supply...	Total		
Building		–20	23,8	5,37	–	29,17	29	0,77
Total			23,8	5,37	–	29,17	29	0,77

Annual heat consumption 64.14 Gcal

General instructions

The project is carried out in accordance with the customer's assignment, architectural drawings, and compliance with the requirements of the following regulatory documents:

- DBN V.2.2-18-2007 "Social Protection Institutions"
- DBN V.2.5-67:2013 "Heating, Ventilation, and Air Conditioning"
- DSTU-N B V.1.1-27:2010 "Building Climatology"
- DBN V.2.6-31:2021 "Thermal Insulation and Energy Efficiency of Buildings"
- DBN V.2.2-9-2018 "Buildings and Structures. Public Buildings and Structures. Basic Provisions"
- DBN A.2.2-3-2014 "Composition and Content of Design Documentation for Construction"

Calculated parameters of outdoor air according to DSTU-N-B V 1.1-27:2010, DBN V.2.5-67:2013:

- calculated parameters of outdoor air in the cold period of the year for heating systems: t\_outside -20°C,
- average temperature of outdoor air over the heating period: 1.1°C;

Calculated parameters of indoor air in the cold period of the year:

- residential rooms +20-25°C;
- technological rooms +18-20°C;

The working section of the project develops the reconstruction of the ventilation and heating of the premises of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" into specialized services for persons affected by domestic violence and/or gender-based violence at 8-a Korabelna Street in the city of Pervomaisk, Mykolaiv region.

The Environmental Impact section provides for:

- the installation of supply and exhaust ventilation for the premises on the 1st floor of the building;
- the installation of mechanical exhaust ventilation for sanitary facilities on the 1st and 2nd floors of the building;
- the design of heating for the 1st and 2nd floors of the building;
- air conditioning of the premises on the 1st and 2nd floors according to the customer's requirements.

Ventilation.

The project provides for mechanical ventilation of temporary accommodation rooms for people with disabilities, the elderly, and the children's room; for this purpose, a supply and exhaust unit with heat recovery PV1 is designed. The heating of outside air from -20°C is carried out to a temperature of +20°C of indoor air. For the ventilation of the kitchen and dining room, the project provides for the installation of a supply and exhaust unit with heat recovery PV2. For the ventilation of the laundry and drying rooms, the project provides for the installation of a supply and exhaust unit with heat recovery PV3. The removal of air from household kitchen exhausts is also provided according to the assignment in the TX section. The ventilation air intake is located at a distance of no less than 10 m from the exhaust ventilation discharges. The air intake is made at a height of more than 2.0 m to the bottom of the air intake grille from ground level. The exhaust air ducts are designed to be 0.5 m above the roof level.

Heating.

Source of heat supply - existing heating networks. Heat carrier - water with parameters 80-60°C. The heating system is accepted as a two-pipe system. The heating system is floor-based horizontal with the installation of a distribution manifold for 5 circuits on each floor. On each of the circuits, regulating and shut-off valves are installed. Steel plate radiators with bottom connection and built-in regulating valve are accepted as heating devices. For the possibility of regulating the room temperature, the installation of a thermostatic head is provided on each radiator, except for the radiators in the stairwells.

							35/2304–25 OB		
							Renovation of the non-residential building of Preschool Educational Institution No. 4 “Dolphin” to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast		
Зм	Кільк	Арк	№ док	Пігнус	Дата		Смагія	Аркуш	Аркушіб
						Renovation		1	8
ГІП		Мартинюк							
Розробив		Луканцова							
Перевірів		Мартинюк				General information (beginning)			UKRBUDPROEKT, LLC

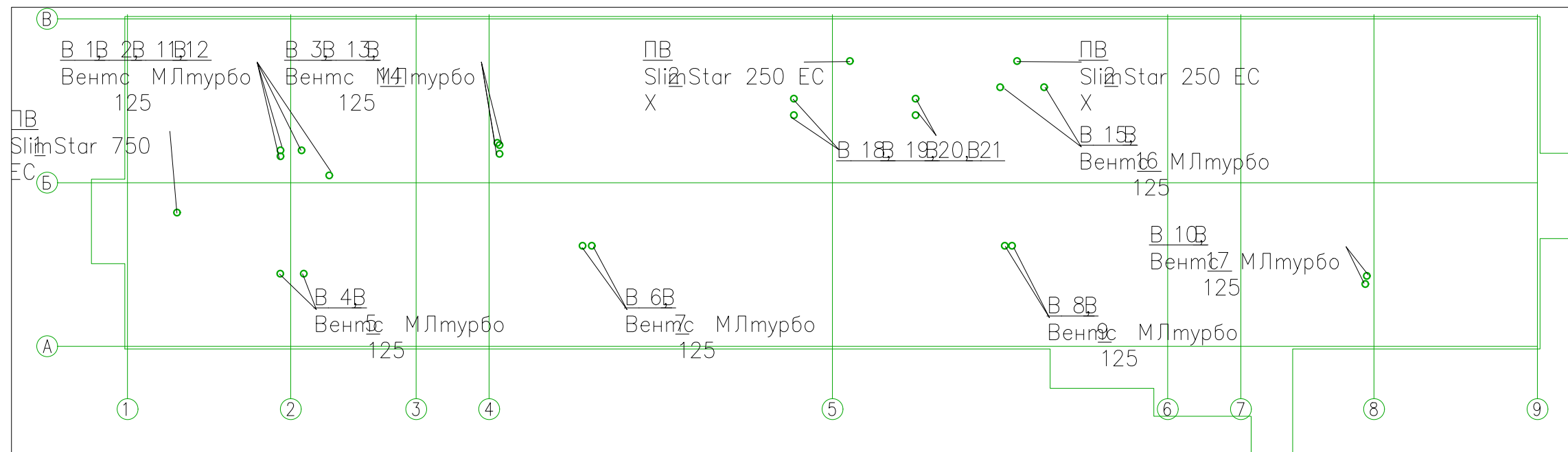
## Schedule of ventilation and electrical equipment

[illegible]

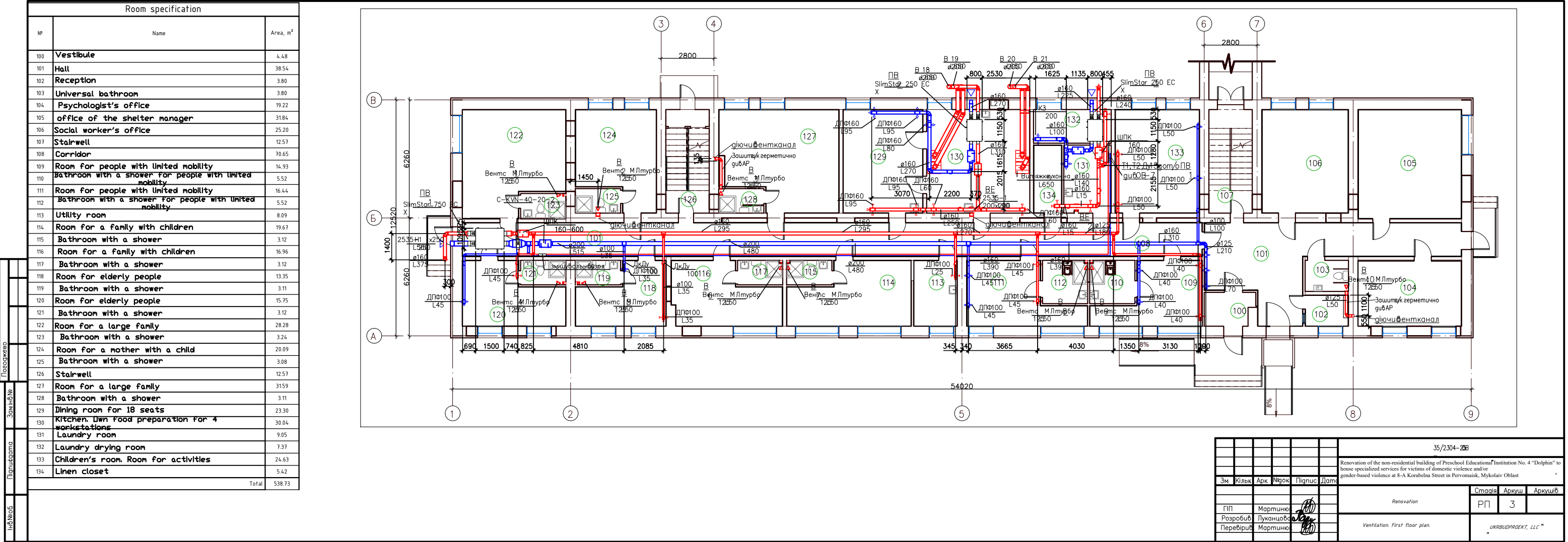
## Local exhausts from technological equipment

Technological equipment			Characteristics of harmful substances emitted	Hood capacity, m <sup>3</sup> /h		Characteristics of the local extractor		System designation	Notes
Mark	Name	Quantity		per pos	total	Mark	Applicable documents		
34, 56	Tabletop electric stove with 2 burners Kitchen hood capacity 650 m <sup>3</sup> /h	4 4	warm air / smells	650	2600		technological task	B B 18–21	

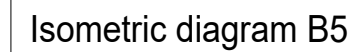
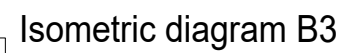
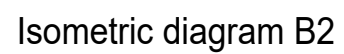
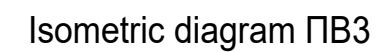
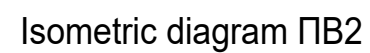
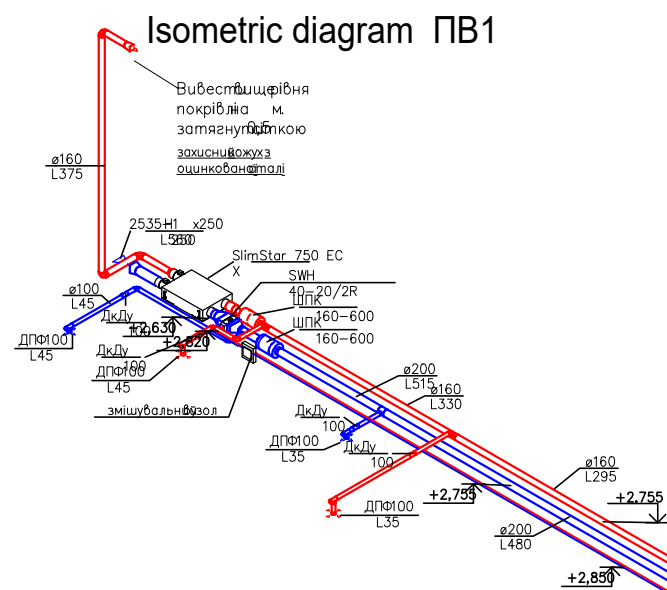
## Схема



						35/2304-258				
						Renovation of the non-residential building of Preschool Educational Institution No. 4 “Dolphin” of house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast				
Зм	Кільк	Арк	№ док	Пігнус	Датум					
						Renovation		Смагія	Аркуш	Аркушів
ГП		Мартинюк						РП	2	
Розробив		Луканцова				General information (ending)		UKRBUDPROEKT, LLC		
Перевірів		Мартинюк								

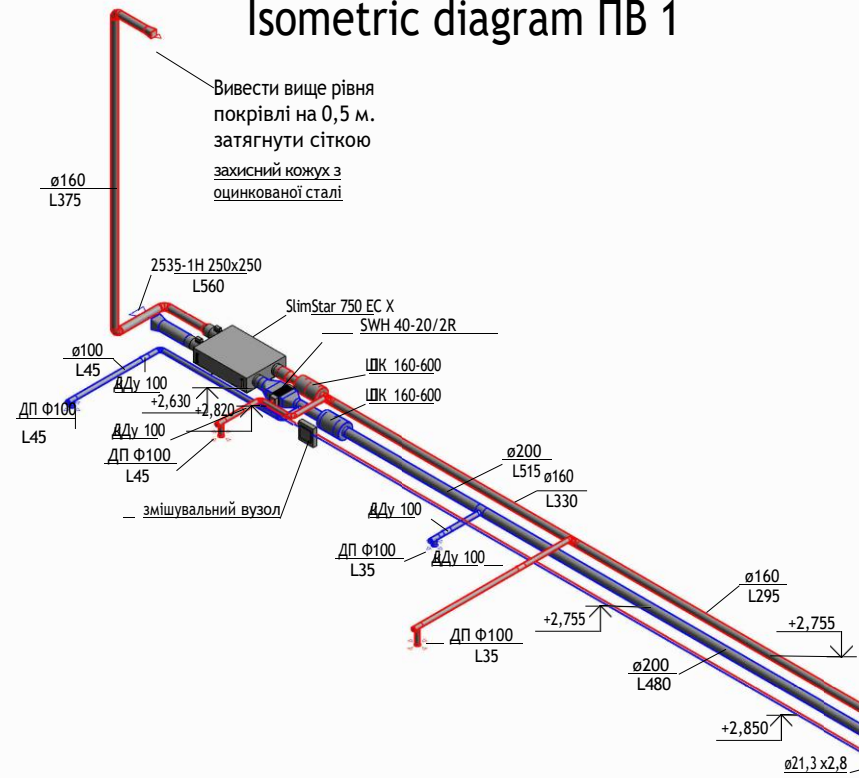




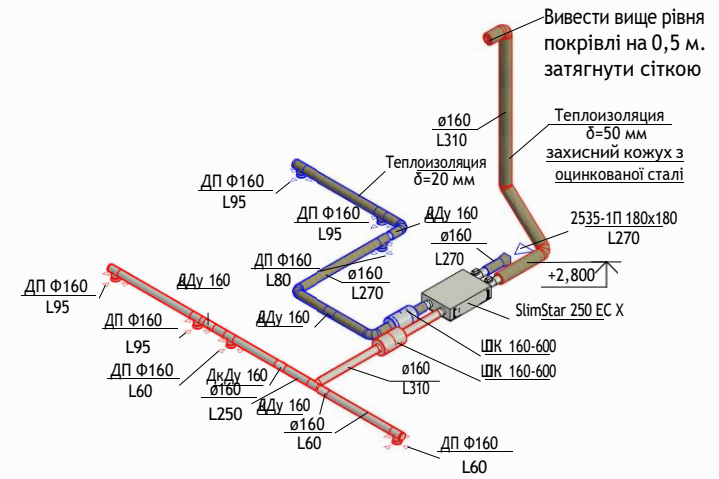
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Підпис і дата	
Інв. № об.	

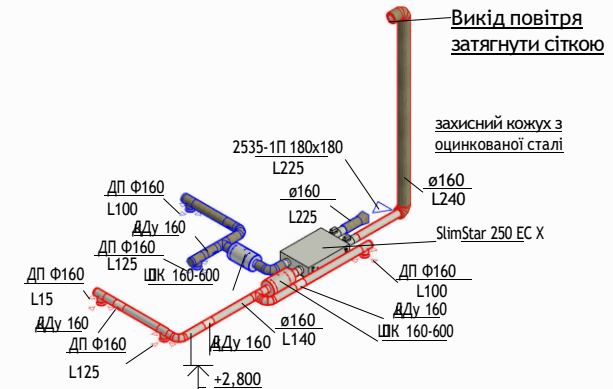
Isometric diagram ПВ 1



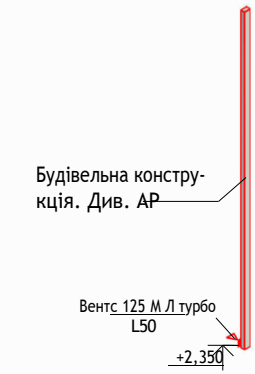
Isometric diagram ПВ 2



Isometric diagram ПВ 3



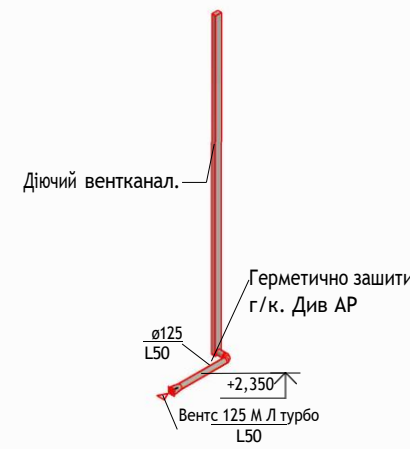
Isometric diagram В 1, В 4,



Isometric diagram 2



Isometric diagram

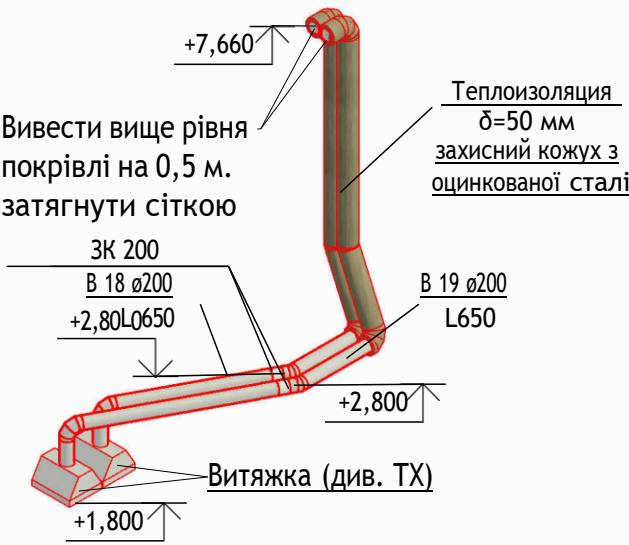


Isometric diagram В 5

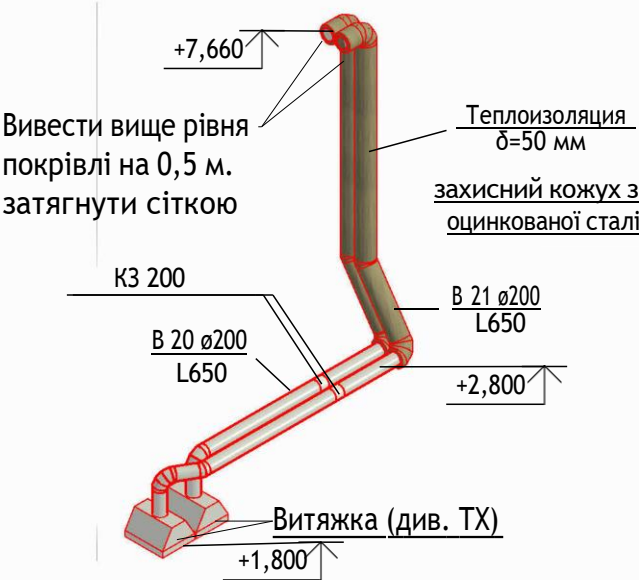


35/2304-25 - ОБ					
Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast					
Зм.	Кільк.	Арк.	Недок.	Підпис	Дата
РП				5	
UKRBUDPROEKT LLC					

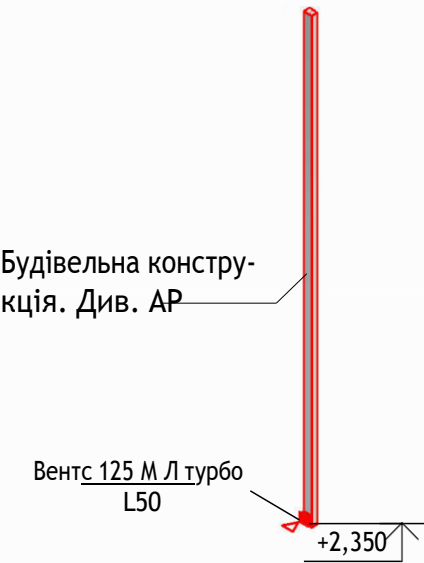
Isometric diagram B 18, B 19



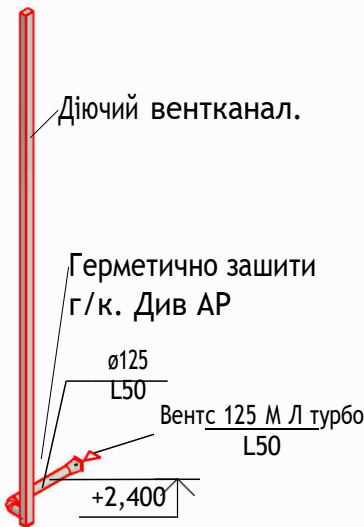
Isometric diagram B 20, B 21



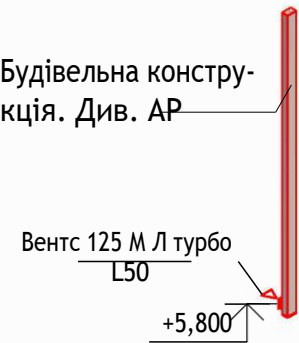
Isometric diagram B 6, B 7, B8, B 9






Isometric diagram B 10



Isometric diagram B 11, B 16, B 17, B 12 - B 15



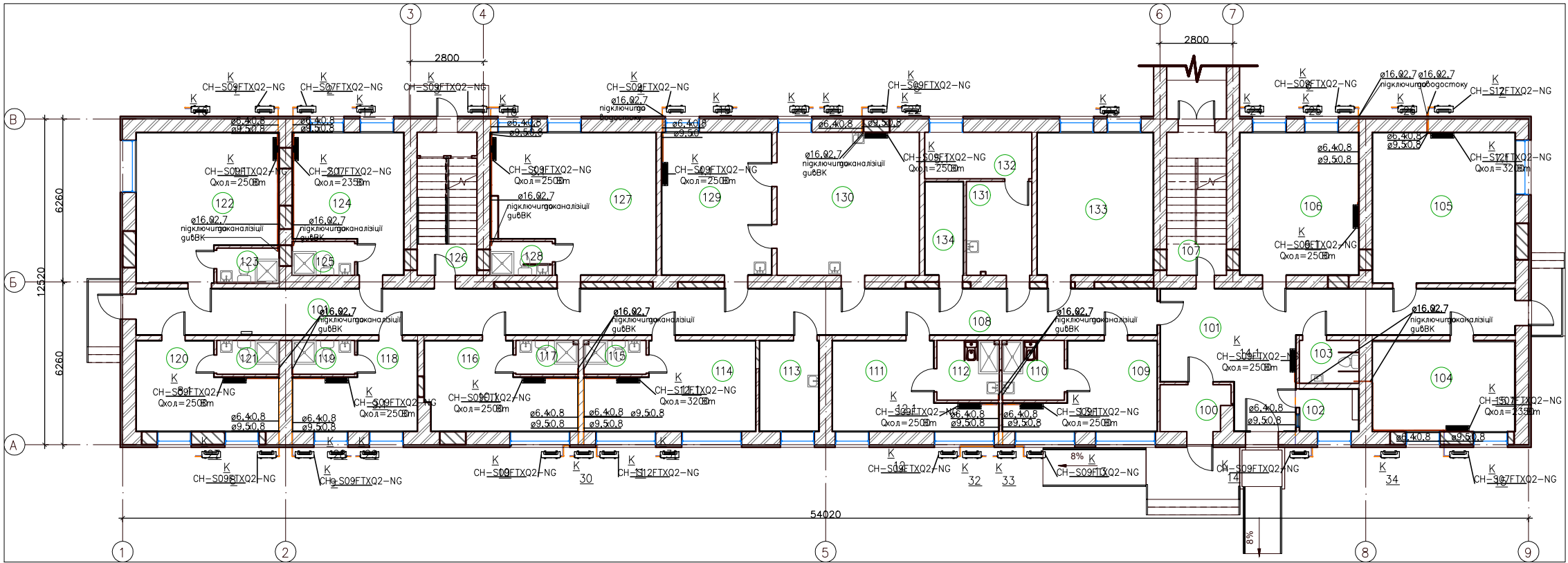
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Зам. інв. №					
Підпис і дата					
Інв. № об.					

						35/2304-25 - OB			
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaik, Mykolaiv Oblast			
Зм.	Кільк.	Арк.	№ док.	Підпис	Дата				
						Renovation.	Стадія	Аркуш	Аркушів
ГІП		Мартинюк					РП	6	
Розробив		Луканцова					ТОВ "УКРБУДПРОЕКТ"		
Перевірив		Мартинюк				Ventilation. Isometric diagrams of systems B 6 - B 21.			



Room specification		
№	Name	Area, m <sup>2</sup>
100	Vestibule	4.48
101	Hall	38.54
102	Reception	3.80
103	Universal bathroom	3.80
104	Psychologist's office	19.22
105	office of the shelter manager	31.84
106	Social worker's office	25.20
107	Stairwell	12.57
108	Corridor	70.65
109	Room for people with limited mobility	14.93
110	Bathroom with a shower for people with limited mobility	5.52
111	Room for people with limited mobility	16.44
112	Bathroom with a shower for people with limited mobility	5.52
113	Utility room	8.09
114	Room for a family with children	19.67
115	Bathroom with a shower	3.12
116	Room for a family with children	16.96
117	Bathroom with a shower	3.12
118	Room for elderly people	13.35
119	Bathroom with a shower	3.11
120	Room for elderly people	15.75
121	Bathroom with a shower	3.12
122	Room for a large family	28.28
123	Bathroom with a shower	3.24
124	Room for a mother with a child	20.09
125	Bathroom with a shower	3.08
126	Stairwell	12.57
127	Room for a large family	31.59
128	Bathroom with a shower	3.11
129	Dining room for 18 seats	23.30
130	Kitchen. Own food preparation for 4 workstations	30.04
131	Laundry room	9.05
132	Laundry drying room	7.37
133	Children's room. Room for activities	24.63
134	Linen closet	5.42
Total		538.73

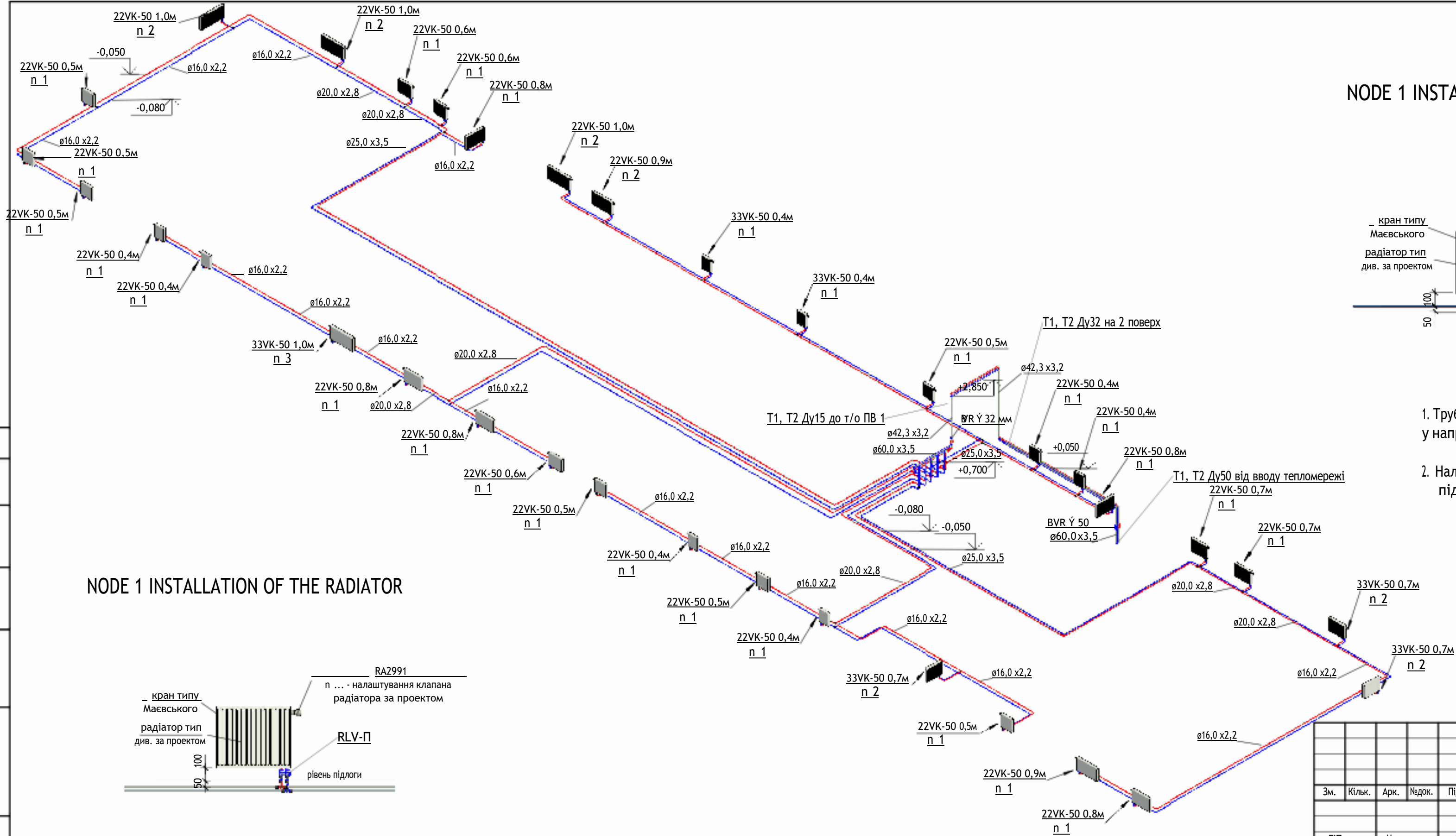
Позначено	
Знайдено	
Планувана	
Вибачте	



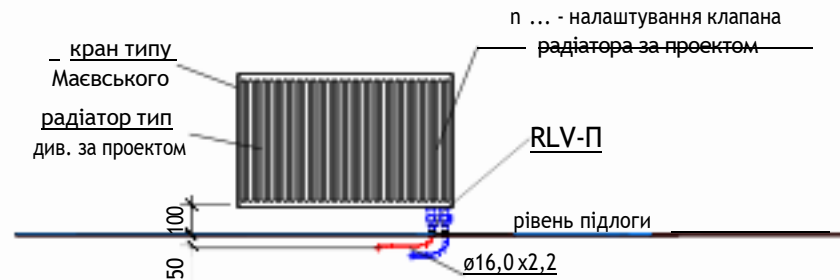
						35/2304-23B		
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolynka" house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaik, Mykolaiv Oblast		
						Renovation	Статус	Архив
						РП	8	
						ГП	Мартинюк	
						Розробив	Лукашук	
						Перевірів	Мартинюк	
						Heating. Second floor plan. View B.		
						UKRBUDPROJEKT, LLC		



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Зам. інв. №	
Підпис і дата	
Інв. № об.	

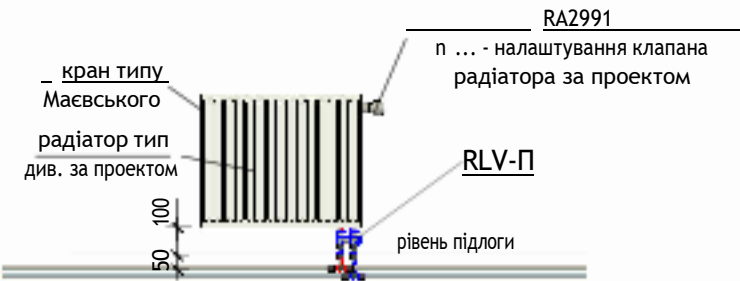


## NODE 1 INSTALLATION OF THE RADIATOR



1. Трубопроводи опалення прокладаються в підлозі з укліном 0,002 у напрямку гребінки.
2. Налаштування п клапана опалюванного прилада вказано під назвою.

## NODE 1 INSTALLATION OF THE RADIATOR



						35/2304-25 - 0В				
						Реконструкція нежитлової будівлі закладу дошкільної освіти №4 "Дельфін" під спеціалізовані служби для осіб постраждалих від домашнього насильства та/або насильства за ознакою статі по вулиці Корабельна, будинок 8-а в місті Первомайськ, Миколаївської області				
Зм.	Кільк.	Арк.	Недок.	Підпис	Дата	Реконструкція.	Стадія	Аркуш	Аркушів	
							РП	9		
ГІП		Мартинюк					Ізометрична схема опалення 1 поверху. Вузли 1, 2 встановлення радіатора.	ТОВ "УКРБУДПРОЕКТ"		
Розробив		Луканцева								
Перевірив		Мартинюк								

Інв. №	Взам. інв. №	Пігнус і дата	Pos	Name and technical specification	Type, brand, designation of the document, questionnaire	Equipment, product, material code	Manufacturer plant	Unit of measurement	Quantity	Unit mass, kg	Notes					
			1	2	3	4	5	6	7	8	9					
				Heating												
				1 floor												
				Radiator with bottom connection to the heating system with built-in												
				valve height H = 500 мм	RADIK 22VK-50											
				L=0,400 м	22-50-0,400		KORADO	pc	6							
				L=0,500 м	22-50-0,500		KORADO	pc	7							
				L=0.600 м	22-50-0,600		KORADO	pc	4							
				L=0.700 м	22-50-0,700		KORADO	pc	2							
				L=0.800 м	22-50-0,800		KORADO	pc	4							
				L=0.900 м	22-50-0,900		KORADO	pc	2							
				L=1,000 м	22-50-1,000		KORADO	pc	3							
				L=0,400 м	RADIK 33VK-50-0,400		KORADO	pc	2							
				L=0,700 м	RADIK 33VK-50-0,700		KORADO	pc	3							
				L=1,000 м	RADIK 33VK-50-1,000		KORADO	pc	1							
				Shut-off and measuring valve Ду 15	ASV-I		Danfoss	pc	2							
				Shut-off and measuring valve Ду 20	ASV-I		Danfoss	pc	3							
				Pressure differential regulator Ду 15	ASV-PV 25		Danfoss	pc	5							
				Ball valve Ду 15	BVR		Danfoss	pc	3							
				Ball valve Ду 20	BVR		Danfoss	pc	12							
				Ball valve Ду 50	BVR		Danfoss	pc	2							
				Radiator valve with drain	RLV		Danfoss	pc	34							
				Thermostatic element	RA 2991		Danfoss	pc	32							
				Filter Ду 32	Y222		Danfoss	pc	1							
				Ball valve Ду 32	BVR		Danfoss	pc	2							
			Інв. №	спр.	Пігнус і дата	Взам. інв. №										
				35/2304-25- ОБ. С1												
				Ізм.	Кіл.уч.	Аркуш	Недок.	Підпис	Дата					Смагил	Аркуш	АркушіВ
				Розробив		Луканцова		[Signature]						РП	1	9
				ГІП		Мартинюк		[Signature]						LLC 'UKRBUDPROECT'		



Інв. №	№	Пігнус і гата	Взам. інв.	№	Ізм.	Кіл.уч.	Аркул.	Негок.	Пігнус.	Датум	35/2304-25- ОБ. С1	Аркул.
Pos	Name and technical specification	Type, brand, designation of the document, questionnaire	Equipment, product, material code	Manufacturer plant	Unit of measurement	Quantity	Unit mass, kg	Notes				
1	2	3	4	5	6	7	8	9				
	Air vent	Airvent			pc	2						
	Shut-off valve with drain Ø25				pc	3						
	Polypropylene pipe, type S 3.2 (PN16) 16x2.2	EKOPL 16		EKOPLASTIK	m	220						
	Polypropylene pipe, type S 3.2 (PN16) 20x2.8	EKOPL 16		EKOPLASTIK	m	118						
	Polypropylene pipe, type S 3.2 (PN16) 25x3.5	EKOPL 16		EKOPLASTIK	m	115						
	COUPLING NR 16x2.2				pc	64						
	RAZB SLED VR 20x2.8				pc	4						
	RAZB SLED NR 25x3.5				pc	4						
	ARC 90 16x2.2/16x2.2				pc	94						
	ARC 90 20x2.8/20x2.8				pc	14,0						
	ARC 90 25x3.5/25x3.5				pc	20						
	TRANSITION COUPLING 20x2.8/16x2.2				pc	24						
	TRANSITION COUPLING 25x3.5/20x2.8				pc	8						
	TEE 16x2.2/16x2.2/16x2.2				pc	32						
	TEE 20x2.8/16x2.2/20x2.8				pc	16						
	TEE 20x2.8/20x2.8/20x2.8				pc	4						
	TEE 25x3.5/20x2.8/20x2.8				pc	2						
	TEE 25x3.5/25x3.5/25x3.5				pc	4						
	Steel water and gas pipe Ø21.3x2.8 (DN 15)	ДСТУ 3262-75*			m	3						
	Steel water and gas pipe Ø26x2.8 (DN 20)	ДСТУ 3262-75*			m	9						
	Steel water and gas pipe Ø42.3x3.2 (DN 32)	ДСТУ 3262-75*			m	15						
	Steel water and gas pipe Ø60x3.5 (DN 50)	ДСТУ 3262-75*			m	4,5						
	Steel elbow Ø32				pc	6						
	Steel reducer Ø32-Ø50				pc	2						
	Steel plug Ø50				pc	2						



Pos	Name and technical specification	Type, brand, designation of the document, questionnaire	Equipment, product, material code	Manufacturer plant	Unit of measurement	Quantity	Unit mass, kg	Notes
	VENTILATION							
	ПВ 1							
	Supply and exhaust unit with heat recovery L= $\frac{560}{375}$	SlimStar 750 EC X		Ventservice	set	1		
	м³/год, H=250/ 250 Па з м/о E-SUMX25-0,4-(APE-25-8)							
	with a set of automation and a mixing unit							
	Valve	RDES 250-220		Ventservice	pc	1		
	Valve	RDE 250-220		Ventservice	pc	2		
	Flexible insert	RFI 250		Ventservice	pc	4		
	Silencer ø160 – 600mm	ШПК 160-600			pc	2		
	Throttle valve ø100	ДК Ду100			pc	11		
	Throttle valve ø125	ДК Ду125			pc	1		
	External grate 250x250	P3 250x250			pc	1		
	Diffuser ø100	ДП ø100		Vents	pc	20		
	Air duct made of galvanized steel ø100				м	52,0		
	Air duct made of galvanized steel ø125				м	6,5		
	Air duct made of galvanized steel ø160				м	50,0		
	Air duct made of galvanized steel ø200				м	23,0		
	Air duct made of galvanized steel ø250				м	2,0		
	Air duct made of galvanized steel 400x200				м	0,8		
	Duct fastener				kg	45		

№ Інв. № Пігнус і гата Взам. інв. спр. № спр.	Pos	Name and technical specification	Type, brand, designation of the document, questionnaire	Equipment, product, material code	Manufacturer plant	Unit of measurement	Quantity	Unit mass, kg	Notes
	1	2	3	4	5	6	7	8	9
		Bend from carbon steel 90° Ø100				pc	7		
		Bend from carbon steel 45° Ø100				pc	6		
		Bend from carbon steel 90° Ø125				pc	2		
		Bend from carbon steel 45° Ø125				pc	1		
		Bend from carbon steel 90° Ø160				pc	3		
		Galvanized steel cap Ø100				pc	11		
		Cap made of galvanized steel Ø125				pc	1		
		Cap made of galvanized steel Ø125 ...				pc	17		
		Tee fitting made of galvanized steel Ø125–Ø125–Ø100				pc	3		
		Tee fitting made of galvanized steel Ø160–Ø160–Ø100				pc	6		
		Tee fitting made of galvanized steel Ø200–Ø200–Ø100				pc	4		
		Transition from carbon steel Ø100–Ø125				pc	1		
		Transition from carbon steel Ø160–Ø125				pc	2		
		Transition from carbon steel Ø200–Ø160				pc	1		
		Transition from carbon steel Ø250–Ø160				pc	1		
		Transition from carbon steel Ø250–400x200				pc	2		
		Heat supply of water thermal/oil installation PV 1							
		Ball valve DN 15	BVR			pc	2		
		Steel water and gas pipe Ø21.3x2.8 (DN 15)	ДСТУ 3262–75*			м	76		
		Steel reducer Ø25–Ø15				pc	2		
		Steel reducer Ø32–Ø15				pc	2		
		Steel elbow 90° Ø15				pc	10		
		Thermal insulation of steel pipes – mineral wool cylinders b=20mm for DN 21				м	78		

Інв. № спр. Пігнус і дама Взам. інв. №	Pos	Name and technical specification	Type, brand, designation of the document, questionnaire	Equipment, product, material code	Manufacturer plant	Unit of measurement	Quantity	Unit mass, kg	Notes
		Thermal insulation made of stone wool with a one-sided covering of	PAROC Hvac Lamella Mat			м²	41,1		
		reinforced aluminum foil b=20mm	AluCoat						
		Thermal insulation made of stone wool with a one-sided covering of	PAROC Hvac Lamella Mat			м²	9,8		
		reinforced aluminum foil b=50mm	AluCoat						
		Protective casing of the external air duct made of galvanized steel				м²	10		
		б=0,8 мм							
		ПВ 2							
		Supply and exhaust unit with heat recovery L=270/310	SlimStar 250 EC X		Ventservice	set	1		
		м³/h, H=250/250 Pa with a set of automation							
		Valve	RDE 160–220		Ventservice	pc	1		
		Flexible insert	RFI 160		Ventservice	pc	4		
		Silencer ø160 – 600mm	ШПК 160–600			pc	2		
		Throttle valve ø160	ДК Ду160			pc	5		
		External grille 180x180	P3 180x180			pc	1		
		Diffuser ø160	ДП ø160		Vents	pc	7		
		Air duct made of galvanized steel ø160				м	30		
		Bend from carbon steel 90° ø160				pc	5		
		Bend from carbon steel 45° ø160				pc	1		
		Cap made of galvanized steel ø160				pc	3		
		Tee fitting made of galvanized steel ø160–ø160–ø160				pc	8		
		Duct fastener				kg	20		
						35/2304-25– ОВ. С1			Архив
Ізм. Кіл.уч.Архив.Негод.Пігнус.Дата									6



Pos	Name and technical specification	Type, brand, designation of the document, questionnaire	Equipment, product, material code						
			Equipment, product, material code	Manufacturer plant	Unit of measurement	Quantity	Unit of measurement	Notes	
1	2	3	4	5	6	7	8	9	
	<u>B 1, B 2, B 4 – B 9</u>								
	Exhaust fan L=50 m³/h, H=100 Pa	Vents 125 М Л turbo		Vents	pc	8			
	<u>B 3, B 10</u>								
	Exhaust fan L=50 m³/h, H=100 Pa	Vents 125 М Л turbo		Vents	pc	2			
	Air duct made of galvanized steel ø125				м	4			
	Bend from carbon steel 90° ø125				pc	2			
	<u>B 18, B 19</u>								
	Check valve ø200				pc	2			
	Air duct made of galvanized steel ø200				м	21			
	Bend from carbon steel 90° ø200				pc	6			
	Bend from carbon steel 30° ø200				pc	2			
	Bend from carbon steel 20° ø200				pc	2			
	Thermal insulation made of stone wool with a one-sided covering of	PAROC Hvac Lamella Mat AluCoat			м²	11,2			
	reinforced aluminum foil b=50mm								
	Protective casing of the external air duct made of galvanized steel				м²	11,5			
	б=0,8 мм								
	<u>B 20, B 21</u>								
	Air duct made of galvanized steel ø200				м	18			
	Check valve ø200				pc	2			
	Bend made of carbon steel 90° ø200				pc	6			
	Bend from carbon steel 30° ø200				pc	3			
	Thermal insulation made of stone wool with a one-sided covering of	PAROC Hvac Lamella Mat AluCoat			м²	11,6			
	reinforced aluminum foil b=50mm								
	Protective casing of the external air duct made of galvanized steel				м²	12			
	б=0,8 мм								
	Duct fastener				кз	10			
Інв. № спр.							35/2304-25– ОВ. С1		Аркул.
									8
Інв. №	Взам. інв.	Пігнус і дама	№						
				Ізм.	Кіл.уч.	Аркул.	Негод.	Пігнус	Дата







General instructions

Fire Alarm System.

This project provides for the reconstruction of a non-residential building of Preschool Education Institution No. 4 'Dolphin' into specialized services for individuals affected by domestic violence and/or gender-based violence at 8-a Korabelna Street in the city of Pervomaisk, Mykolaiv region. As the main base control and signaling device of the fire alarm system, a Tiras-16P type control panel with a built-in MCA-GSM communicator for sending alarm notifications is designed.

The main SPS device – the fire alarm control panel (FACP) "Tiras-16P" – should be installed in service room No. 102 (reception) on the 1st floor of the building. The devices should be mounted on the wall of the room at a height of no more than 1.7 m from the finished floor level. The fire alarm control panel is intended for:

- receiving and processing information from automatic fire detectors;
- receiving signals from fire detectors connected to the system;
- determining the conformity of received signals to the fire alarm mode;
- indicating any fire alarm status via sound and visual means;
- indicating the location of the fire;
- monitoring the correct functioning of the system and issuing notifications via sound and visual signals in case of any malfunction (short circuit, line break, or power source failure);
- transmitting the fire signal to the centralized fire monitoring system.

The power supply of the fire alarm system device should be from an alternating current network with a voltage of ~220 V, 50 Hz, from the distribution board on site. Backup power is provided from direct current sources (batteries) with a voltage of 12 V and a capacity of 18 Ah.

The device ensures automatic switching to battery power in case of a drop or loss of voltage in the AC network and automatic switching back when the AC network is restored, without sending false messages to the centralized fire monitoring system.

For the timely detection of fire in the protected premises of the facility, it is planned to install automatic fire detectors of the automatic fire alarm system. The following detectors are designed: smoke fire detectors of the "SPD-3" type, heat fire detectors of the "TPT-3" type, and manual fire detectors of the "SPR-Tiras" type.

The principle of operation of the smoke fire detector of the "SPD-3" type is based on monitoring the optical density of the medium.

The "TPT-3" type detector generates a "Fire" signal when the ambient air temperature at its installation site exceeds the threshold value of 54-65 °C.

The manual fire detector of the "SPR-Tiras" type is intended to transmit a "Fire" signal manually to the fire alarm control panel. Activation of the "Fire" mode is performed by the user by pressing the corresponding button.

The installation of detectors should be carried out taking into account the location of the luminaires, at a distance of at least 0.5 m from them, in places specified by the project, while observing the technical characteristics of fire detectors. Detectors should be installed on the ceiling, taking into account structural features and the placement of plumbing equipment. Manual fire detectors should be installed on the wall at a height of no more than 1.5 m from the finished floor level.

For issuing light and sound signals, an external type light and sound alarm of the "Dzml-1" type is designed, which is located on the facade of the hotel building. Alarms should be installed on the wall at a height of at least 2.5 m from the ground level. A voice notification system is designed to alert people about a fire. For managing the evacuation of people from the premises of the facility, light alarms with the inscription "EXIT" of the "OS-1" type and "Movement Direction Arrow" of the "OS-6.4" type are used. The "OS-6.4" and "OS-1" alarms should be installed on the walls of the protected rooms at a height of at least 2.5 m from the finished floor level.

In the event of a fire, it is planned to activate light-sound and light devices, as well as the voice alert system, by triggering the corresponding relay of the relay line module type "M-OUT8R" upon receiving the appropriate commands from the base fire alarm control panel of the FACP type "Tiras-16P." Fire and SPS fault signals are transmitted from the base FACP through the digital autodial module type "MCA-GSM" to the centralized fire monitoring console via GSM communication.

The power circuits of the fire alarm system device must be made with separate wires and cables. Their routing through fire-hazardous zones is not allowed. The detachable connection of the fire alarm station power wire must be excluded. The joint routing of fire alarm system loop wires and circuits with a voltage above 60 V is not allowed.

Fire alarm system networks from control and fire alarm devices should be made with signaling wires of type "PSVV ng" with a cross-section of 4x0.4 mm, hidden in PVC corrugated pipes behind the suspended ceiling and open along walls and ceilings of protected rooms in PVC plastic ducts.

Power lines for light and sound-light devices should be made with fire-resistant halogen-free cable of type "JE-H(St)H...Bd FE180/E30" with a cross-section of 1x2x0.8 mm in PVC corrugated pipes behind the suspended ceiling and open along walls and ceilings of protected rooms in PVC plastic ducts.

						35/2304-25-СПЗ			
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast			
Зм.	Кільк.	Аркуш	№Док.	Підпис	Дата				
ГІП		Мартинюк				Reconcstruction	Стадія	Аркуш	Аркушів
Розробив		Кирюшко					РП	2	16
Перевірів		Мартинюк							
						General data		UKRBUDPROEKT, LLC	

Формат А3 297х420	Копіював	Погоджено		
		Кирюшко		
		Розробив		
Інв. N підп.	Підпис і дата	Зам. інв N		

5.ELECTRICITY SUPPLY

The power supply of fire alarm installations, as well as the system for controlling the evacuation of people, belongs to the 1st category of reliability according to the requirements of the Electrical Installation Regulations (PUE). The FACP "Tiras-16P" is connected to an AC network with a voltage of 220 V and is powered through a dedicated single-pole automatic circuit breaker, which must interrupt the phase conductor. The power supply for the fire alarm system FACP should be carried out from an AC network with a voltage of ~220 V, 50 Hz - from the distribution board on site.

In the event of an emergency power outage, all equipment is powered by autonomous power sources, direct current (batteries) with a voltage of 12V, 18 Ah, installed in the complexes. The calculation of the required battery capacity is provided in the design documentation of this project. The batteries ensure the operation of the fire alarm control panel in standby mode for 30 hours and in 'Fire' and 'Alarm' modes for at least 0.5 hours. The power lines of the fire alarm control panel are laid with FLAME-X 950 (N)HXH FE180/E30 3x1.5 cables, concealed in PVC corrugated pipes above suspended ceilings and in cable trays, or in corrugation along the walls and ceilings of protected premises.

6.GROUNDING.

To ensure the safety of people, all electrical equipment of fire alarm systems, fire notification systems, and evacuation control systems must be reliably grounded in accordance with the requirements of the PUE. The installation of grounding devices should be carried out in accordance with the requirements of SNiP 3.05.06-85 'Electrical Devices'. The resistance of the grounding device used for grounding electrical equipment must not exceed 4 ohms.

7.EVACUATION MANAGEMENT SYSTEM

The evacuation management system is designed to alert people inside the building (structure) about the occurrence of a fire in order to create conditions for their timely evacuation. In accordance with paragraph 7.6 of DBN B.2.2-18:2007 Buildings and Structures. Social Protection Institutions (as amended by No. 1 and No. 2) and paragraph 18 of Appendix B of DBN B.2.5-56:2014 (as amended by No. 1), this project provides for equipping a non-residential building of preschool educational institution No. 4 "Dolphin," which is intended for specialized services for individuals affected by domestic violence and/or gender-based violence, located at 8-a Korabelna Street, Pervomaisk, Mykolaiv region, with a type 3 fire alarm and evacuation management system.

According to Table B2 of DBN V.2.5-56:2014, for the 3rd type of notification system:  
- method of notification - voice announcements with the installation of light indicators "Exit" and "Direction of movement" at evacuation exits;  
- order of notification - first the service personnel, then everyone else according to the established queue,

The voice notification system transmits voice signals in rooms in automatic mode when fire factors are detected by the fire alarm system, as well as in manual mode when a fire is detected by personnel;  
As input-control equipment for the voice notification system for rooms for the non-residential building of Preschool Education Institution No. 4 "Dolphin" to be used for specialized services for individuals affected by domestic violence and/or gender-based violence, a notification system manufactured by NVP "Elektroprylad" (Lviv) VELLEZn-120-200 was used. The "VELLEZ" device is to be installed in office room No. 102 (reception) on the 1st floor of the building.  
Desktop-type monoblocks of the VELLEZn-120-200 model are supplied with the following equipment:  
- Speech notification unit (SNU);  
- Power supply unit (PSU) with rechargeable batteries (RB);  
Open-type switching cabinet.

The power supply of the alert system device should be made from AC mains with a voltage of ~220 V, 50 Hz - from the distribution board at the location. Backup power is provided by DC sources (batteries) with a voltage of 12 V and a capacity of 18 Ah.

To ensure step-by-step practical fire alerting, the area is divided into 6 alert zones. Activation of the PA system is provided by a signal from the fire alarm system (FAS). The voice alert system provides continuous broadcasting of a recording about the occurrence of a fire and instructions on further evacuation of people.

In manual control mode, the system allows the operator to transmit operational information via a microphone to all or selected groups of alert zones. All signals transmitted by the system have the appropriate level of priority, with the highest priority level assigned to the manual control mode for evacuating people.

- Zone 1 - service rooms on the 1st floor.  
Zone 2 - utility rooms and living quarters on the 1st floor.  
Zone 3 - utility rooms and living quarters on the 1st floor.  
Zone 4 - service rooms on the 2nd floor.  
Zone 5 - service rooms on the 2nd floor.  
Zone 6 - utility rooms and living quarters on the 2nd floor

Notification sequence: Zones 1, 4, 5; Zones 2, 3, 6.

When notifying about a fire, text broadcasting by zones is provided:  
for zones 1, 4, 5:  
"Attention! Fire! For the safe evacuation of patients and to prevent panic, evacuate patients in an organized manner, in groups, according to the evacuation plan. Technical staff must ensure free passage through primary and emergency evacuation exits. During evacuation, move towards the 'Exit' light indicators and directional signs!"  
for zones 2, 3, 6:

Attention! Fire! Patients accompanied by staff must urgently leave the premises, strictly follow the teachers' instructions, exit the building in groups according to the evacuation plan. During evacuation, move towards the 'Exit' signs and directional indicators!

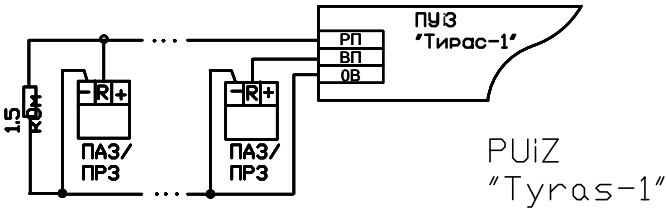
As technical means for fire notification in hospital premises, wall-mounted loudspeakers of the ЗАС100Пн-2 series with a power of 1.3 W, produced by NPP 'Elektroprylad,' are used accordingly.

Loudspeakers should be installed in rooms occupied by people. The power of the loudspeakers is selected depending on the area of the room. Acoustic systems should be mounted on walls so that the distance between the lower part of the notifier and the floor level is at least 2.2 m, and the distance between the upper part of the notifier and the ceiling level is at least 0.15 m.

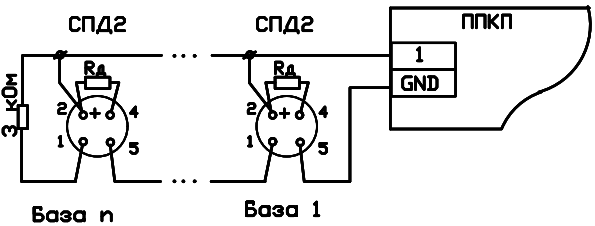
To ensure the functions of checking the operability of the complex and its elements, monitoring of the transmission line for short circuits or breaks is provided. In case of damage to the transmission line, visual indication occurs with a specification of the nature of the malfunction and the number of the damaged line.

						35/2304-25-СПЗ					
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast					
Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата						
						Reconcstruction		Смадія	Аркуш	Аркушіб	
ГІП		Мартинюк						РП	3	16	
Розробив		Кирюшко									
Перевірів		Мартинюк				General data		UKRBUDPROEKT, LLC			

Connection of manual start devices (MSD) and emergency stop devices (ESD) to the 'RP' and 'VP' inputs of the Tiras-1 control and protection unit

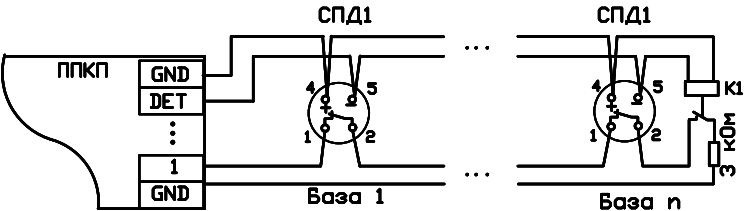


Connecting 2 wired detectors



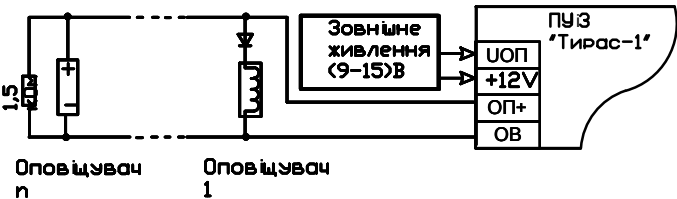
The resistor R<sub>d</sub> value in the range of 0.27 - 0.5 kΩ is chosen depending on the type of detector.

Connection of 4-wire detectors from an internal power source

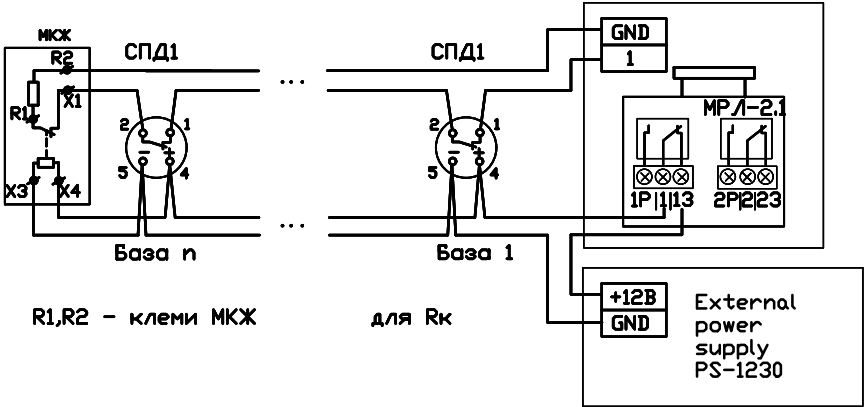


K1 - a relay with a rated voltage of 12V and a normally open contact, a shunt resistor of 2.2 kΩ is installed between contacts 1 and 2 of the detector.

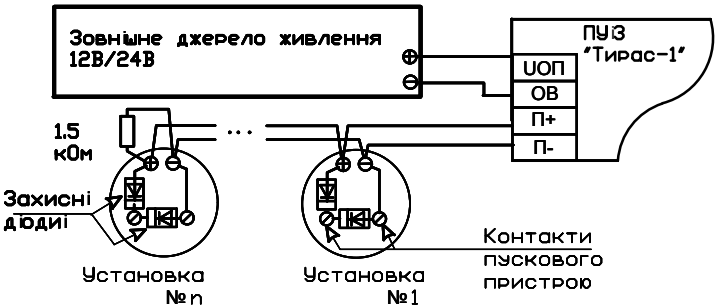
Connecting annunciators. Load current of the output I = 5A






Connection of 4-wire detectors from an external power source



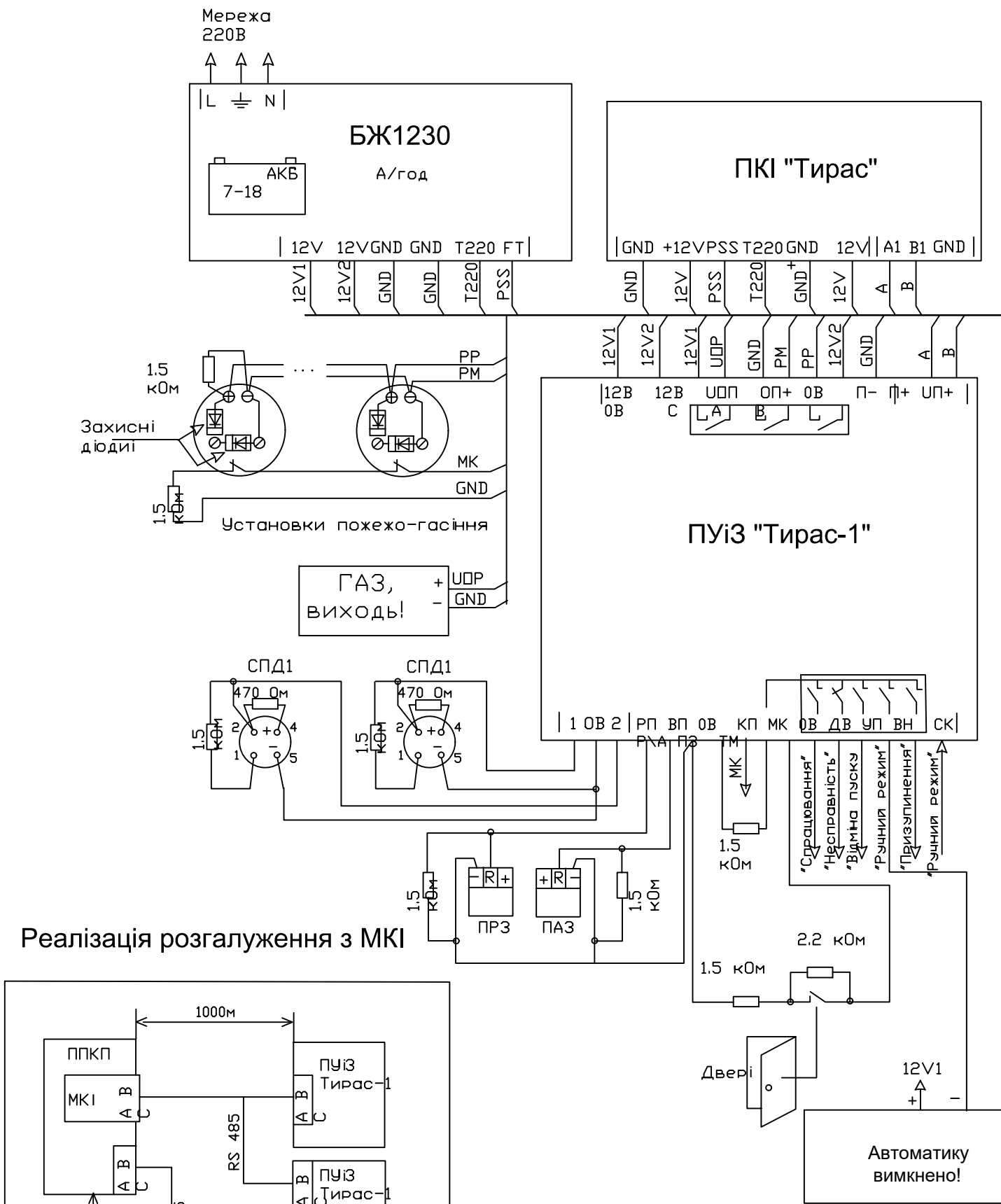
Connection of fire suppression system starting devices



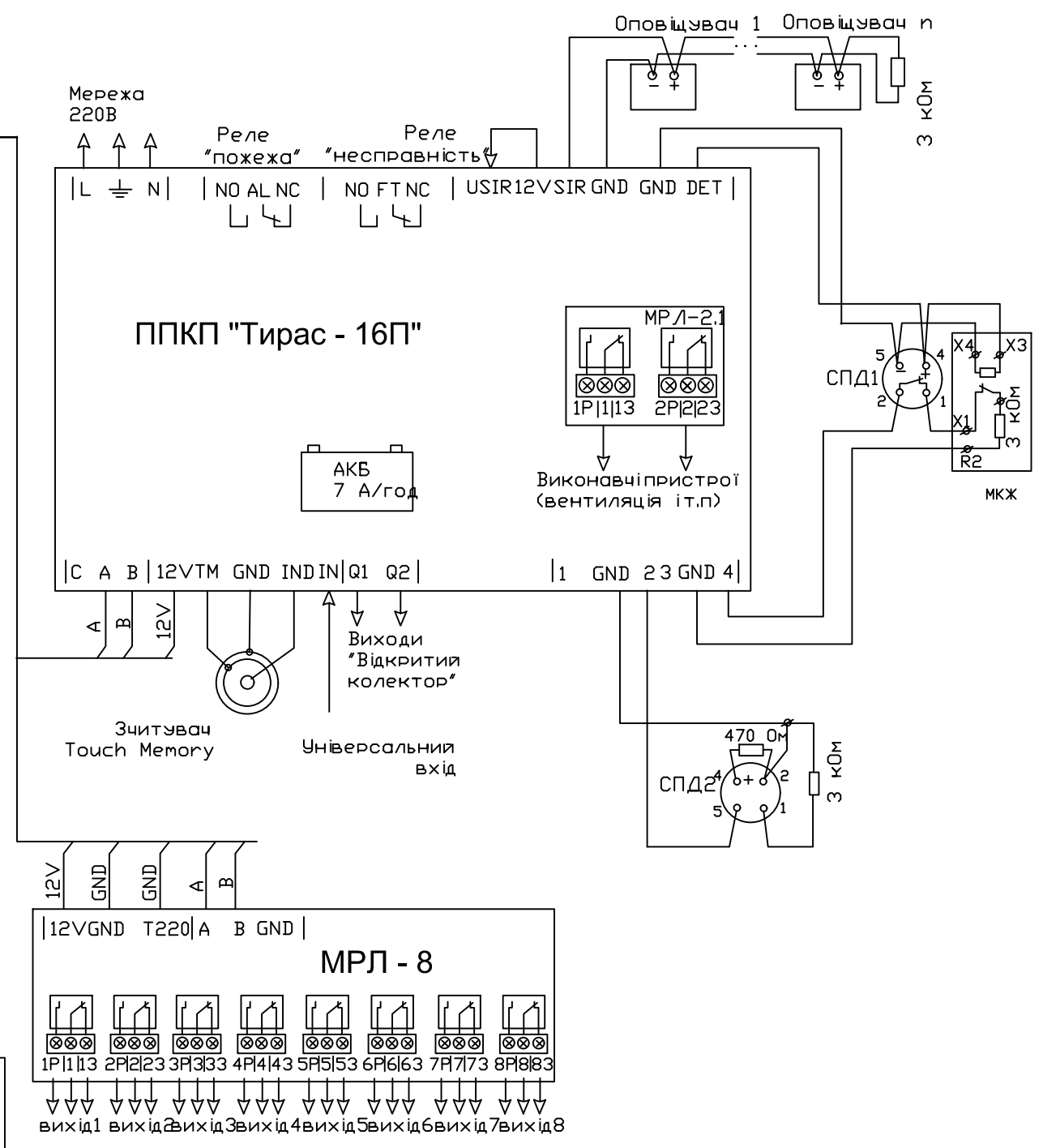
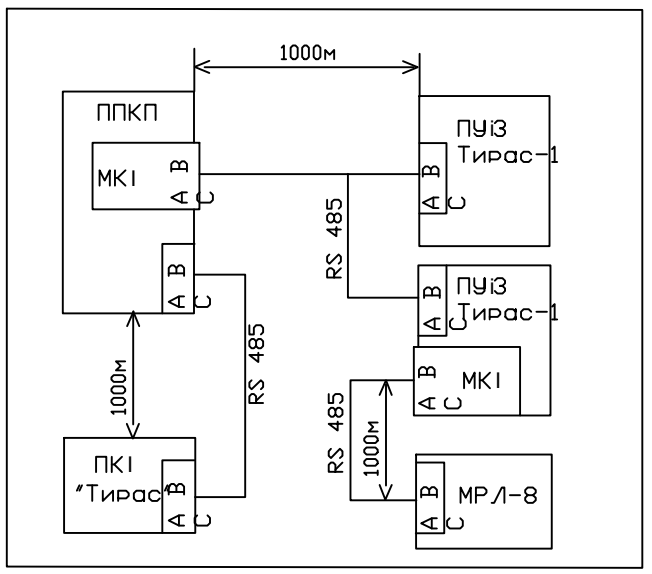
Fire extinguishing systems

						35/2304-25-СПЗ				
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaïsk, Mykolaiv Oblast				
Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата	Reconcstruction	Стадія	Аркуш	Аркушіб	
ГІП		Мартинюк					РП	4	16	
Розробив		Кирюшко					UKRBUDPROEKT, LLC			
Перевірів		Мартинюк				Fire alarm detector wiring diagram				





Реалізація розгалуження з МКІ

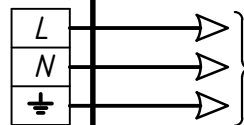


						35/2304-25-СПЗ			
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaïsk, Mykolaiv Oblast			
Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата	Reconstruction	Стадія	Аркуш	Аркушів
ГІП		Мартинюк					РП	6	16
Розробив		Киришко							
Перевірів		Мартинюк				"Tyras-16P" fire alarm connection diagram	UKRBUDPROEKT, LLC		

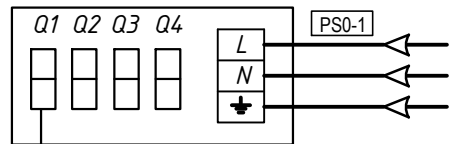


ППКП "Тирас-16П"

3XP5  
МЦА-GSM  
ARK1



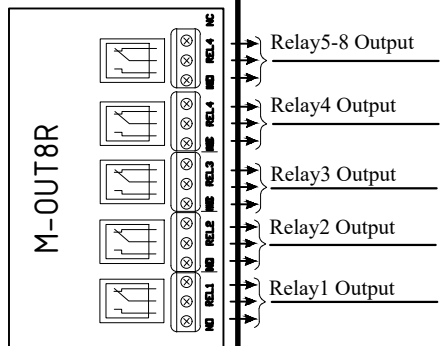
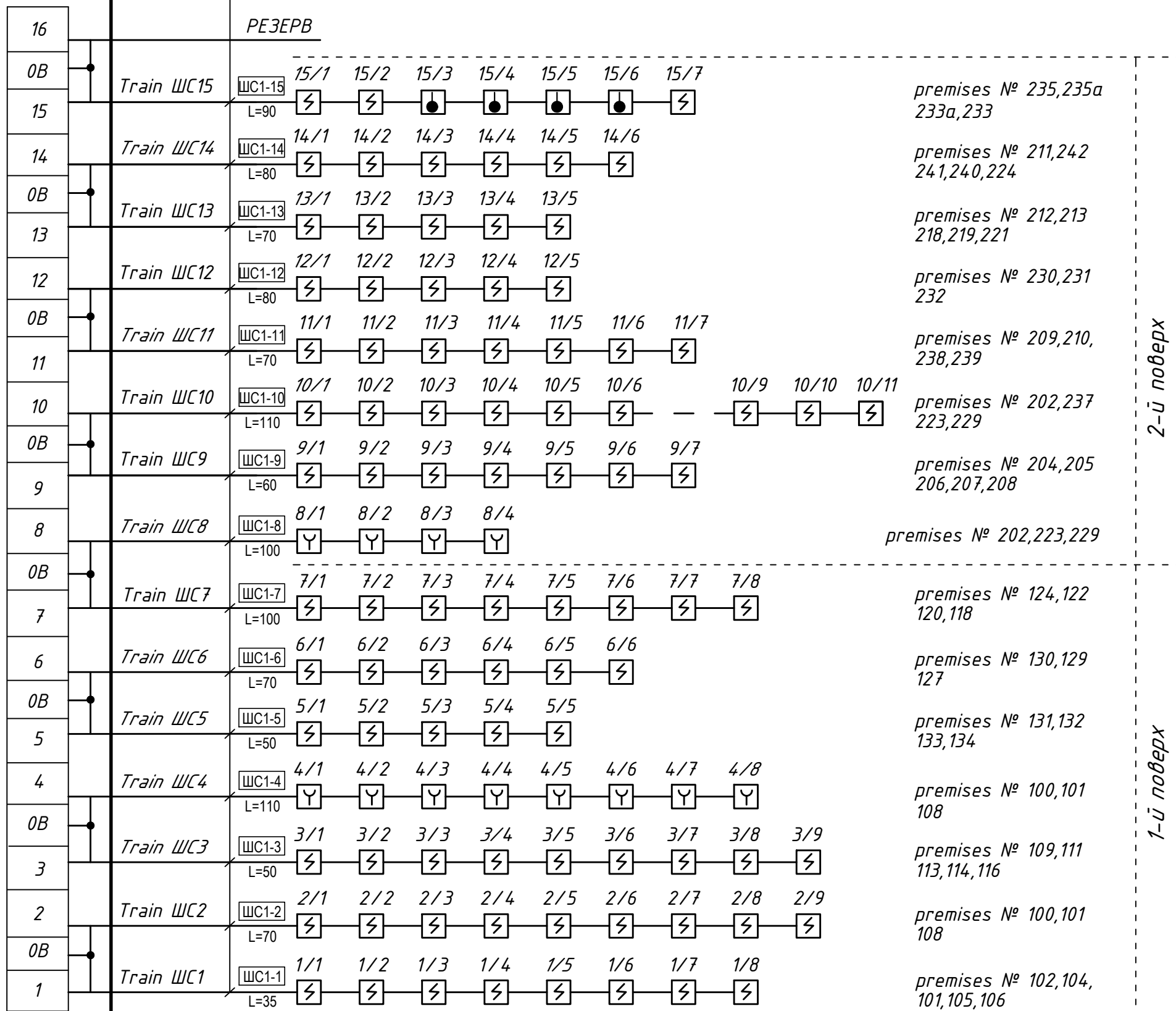
Distribution board ЩС-1



Power supply ~220V  
FLAME-X 950 (N)HXH FE180/E30 3x1.5 ЩС  
room 1 (see the electrical part of the project)

Outputting the signal to the console  
centralized fire monitoring

Кабель ПСВВнг 4\*0,4



Аккумуляторна  
батарея 18А\*4

1. Executive devices - ventilation shutdown diagram  
see the electrical part of the project (Output - SS1-1 L=30  
Relay № 5)
2. WELLEZsh 120-200 notification system (Output - Relay No.1 - No.4)  
(See voice notification system Sheet 13)

Fire-resistant cable  
JE-H(St)H...BdFE180/E30 2\*2\*0,8

Fire-resistant cable  
JE-H(St)H...BdFE180/E30 2\*2\*0,8

35/2304-25-СПЗ					
Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast					
Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата
ГІП	Мартинюк				
Розробив	Киришко				
Перевірів	Мартинюк				
Reconstruction				Смадія	Аркуш
				РП	7
Structural diagram of the fire alarm and light-sound notification system of the PPKP 'Tiras-16P' No.1				Аркушів	16
UKRBUDPROEKT, LLC					



Формат А3 297х420	Копіював		Погоджено		
	Інв. N підп.	Підпис і дата	Зам. інв N	Розробив	Кирюшко

РРКР 'Tiras-16P'

3XP5  
MЦA-GSM

ARK1

L  
N  
⏚

Uon  
OP+  
  
OB  
+12B

Uon  
OP+  
  
OB  
+12B

+  
-  
Аккумуляторна  
батарея 18A\*4

Distribution board ЩС-1

Q1 Q2 Q3 Q4  
L  
N  
⏚

PS0-1

Power supply ~220V  
FLAME-X 950 (N)HXH FE180/E30 3x1.5 ЩС  
room 1 (see the electrical part of the project)

PS1-1  
L=2

PS1-3  
L=2

AC

Emergency light

Outputting the signal to the console  
centralized fire monitoring

Legend

	Fire alarm control panel
	Light indicator "Exit"
	Traffic sign
	Light and sound alarm 'Bumblebee'
	Fireproof junction box
	Emergency light

"KBP-01-30"  
FS1-2  
L=120

HL2.1 "Exit"

HL2.2 "Exit"

HL2.3  
"Arrow"

HL2.4 "Exit"

HL2.5 "Exit"

HL2.6 "Exit"

HL2.7 "Exit"

FS1-1  
L=110

HL1.1 "Exit"

HLA1.2  
"Bumblebee"

HL1.3 "Exit"

HL1.5 "Exit"

HL1.6  
"Arrow"

HL1.7  
"Arrow"

HL1.9  
"Arrow"

HL1.10 "Exit"

HL1.4 "Exit"

HL1.8 "Exit"

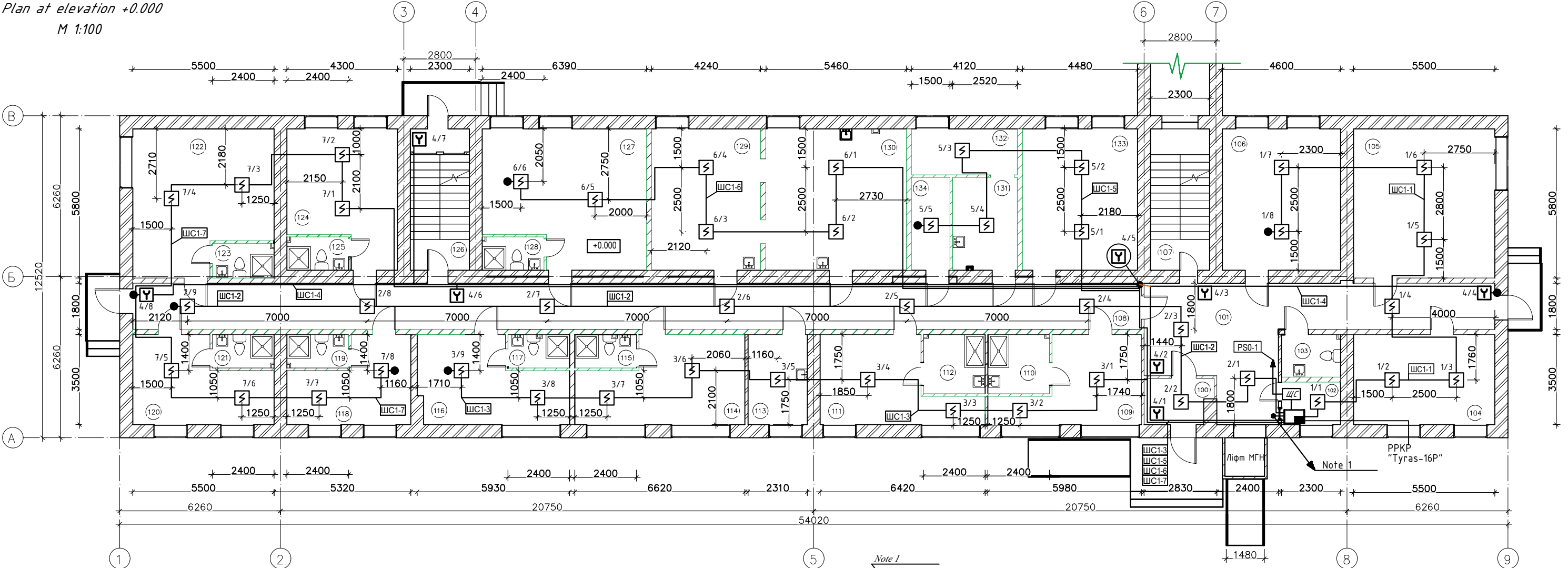
fire-resistant cable  
JE-H(S+)H...BdFE180/E30 1\*2\*0,8

2nd floor

1st floor

						35/2304-25-СПЗ			
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast			
Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата	Reconstruction	Стадія	Аркуш	Аркушів
ГІП		Мартинюк					РП	8	16
Розробив		Кирюшко							
Перевірів		Мартинюк				Block diagram of the fire alarm and audiovisual notification system of the Tiras-16P PPKP No. 2		UKRBUDPROEKT, LLC	

Plan at elevation +0.000  
M 1:100



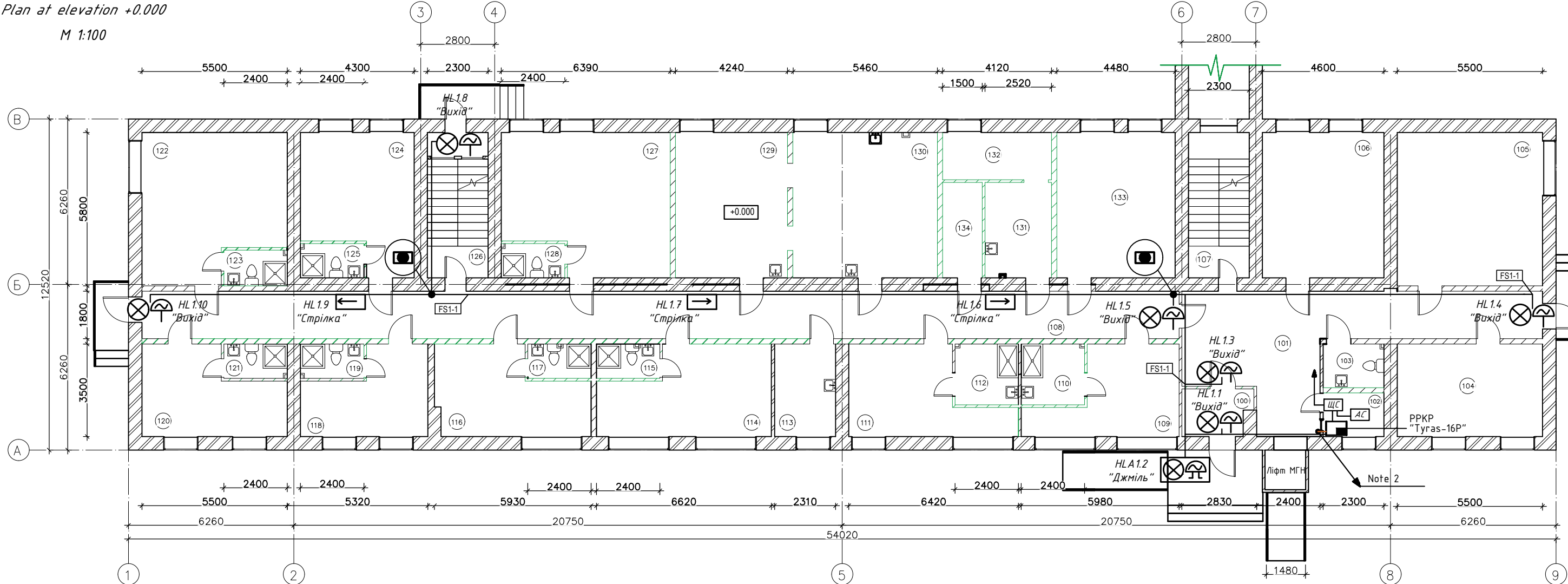
Note:  
1. The laying of fire alarm system networks in the premises of the building with a ceiling void should be performed concealed in PVC corrugated pipes.  
2. Cable routes and drops along the walls of the fire alarm system networks in the premises of the building without a ceiling void should be performed openly in PVC plastic ducts.  
3. The laying of cable routes and the placement of fire detectors should be specified during installation, coordinating with the facility management, considering the existing lighting network, ventilation, and air conditioning systems.  
4. The distance between detectors and from detectors to walls should not exceed the values specified in tables A1 of DSTU-N CEN/TS 54-14:2009.

Legend	
	Fire alarm control panel
	Manual fire alarm
	Smoke fire detector
	Heat fire detector

Note 1  
ШС 1-8 / ШС 1-9 / ШС 1-10 / ШС 1-11 / ШС 1-12 / ШС 1-13 / ШС 1-14 / ШС 1-15  
8 pcs of cables ПСВВнг 4\*0,4  
from the PPKP 'Tyras-16P', located on the 1st floor of the building (room 102), to the SPS on the 2nd floor

35/2304-25-СПЗ					
Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaik, Mykolaiv Oblast					
Зм.	Кільк.	Аркуш	РДок.	Підпис	Дата
ГІП	Мартиняк				
Розробив	Киришко				
Перевірив	Мартиняк				
Reconstruction				Стадія	Аркуш
Fire alarm system diagram of the 1st floor of the building				РП	9
				Аркушів	16
UKRBUDPROEKT, LLC					

Plan at elevation +0.000  
M 1:100



Note:  
1. Laying the networks of the light-and-sound notification system in the rooms of the building with a ceiling void should be done hidden in PVC corrugated pipes.  
2. Cable routes, descents along the walls of the light-and-sound notification system networks in rooms of the building without a ceiling void should be done openly in PVC plastic ducts.  
3. The laying of cable routes and the placement of fire detectors for the light-and-sound notification system should be clarified during installation, in agreement with the facility management, considering the existing lighting network, ventilation, and air conditioning systems.

Legend	
	Fire alarm control panel
	Light indicator 'Exit'
	Traffic sign
	Light and sound alarm 'Bumblebee'
	Fireproof junction box
	Emergency light

Примітка 2

Fire alarm line FS1-2  
fire-resistant cable  
JE-H(ST)H...BdFE180/E30 1\*2\*0.8  
from the PPKP 'Tyras-16P', located on the  
1st floor of the building (room 102), to the  
fire alarm line on the 2nd floor

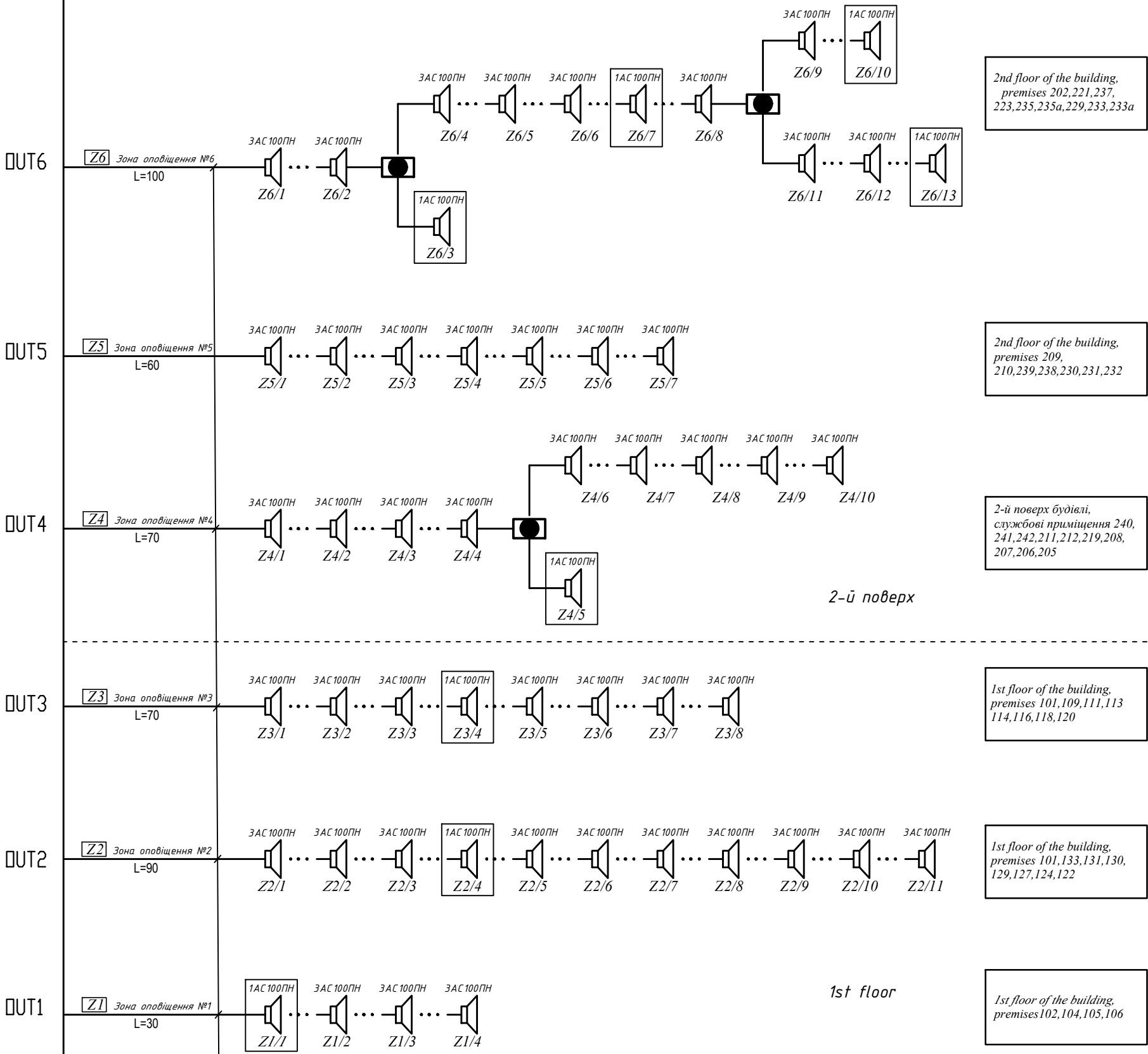
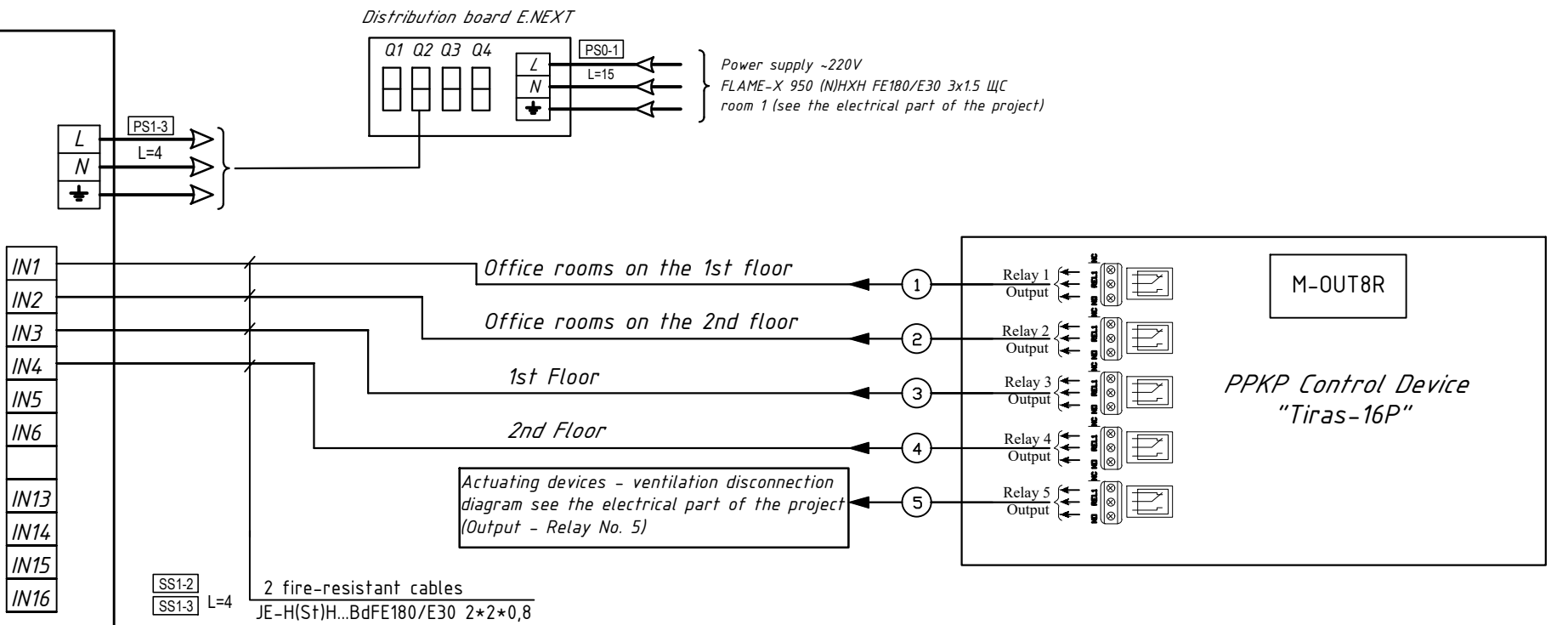
35/2304-25-СПЗ					
Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaik, Mykolaiv Oblast					
Зм.	Кільк.	Аркуш	РДок.	Підпис	Дата
ГІП	Мартиняк				
Розробив	Киришко				
Перевірив	Мартиняк				
Reconstruction				Стадія	Аркуш
Diagram of the light-sound alert system of the 1st floor of the building				РП	10
				Аркушів	16
UKRBUDPROEKT, LLC					

VELLEZn 120-200 alerting system

Microphone console

БРХ02-24/12




БКИ-02М



кабель вогнетривкий  
JE-H(St)H...BdFE180/E30 1\*2\*1,5

Legend	
	Wall-mounted loudspeaker 1AC100PN 1W;
	Wall-mounted loudspeaker 3AC100PN 3W;
	Fireproof junction box

PS Devices - PPKC 'Tiras - 16P'  
and VELLEZn120-200 alerting system  
located in room №102 (Reception) on the 1st floor of  
the building





						35/2304-25-СПЗ				
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast				
Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата	Reconstruction		Стадія	Аркуш	Аркуші
ГІП		Мартинюк						РП	11	16
Розробив		Киришко								
Перевірів		Мартинюк								
						Structural diagram of the language notification system		UKRBUDPROEKT, LLC		




*M 1:100*



*Fire alarm language line Z4, Z5, Z6*  
*3 pcs. fire-resistant cables*  
*JE-H(ST)H...BdFE180/E30 1\*2\*1,5*  
*from the VELLEZ device, located in room*  
*No. 102 (Reception) on the 1st floor of*  
*the building, to the public address*  
*system on the 2nd floor*

1. The laying of fire alarm system networks in the premises of the building with a ceiling void should be performed concealed in PVC corrugated pipes.
2. Cable routes and drops along the walls of the fire alarm system networks in the premises of the building without a ceiling void should be performed openly in PVC plastic ducts.
3. The laying of cable routes and the placement of fire detectors should be specified during installation, coordinated with the facility management, considering the existing lighting network, ventilation, and air conditioning systems.
4. The distance between detectors and from detectors to walls should not exceed the values indicated in tables A1 of DSTU-N CEN/TS 54-14:2009.

Legend	
	Fire alarm control panel
	VAllenZn-120-200 language announcement device
	Wall-mounted loudspeaker AC100PN;
	Fireproof junction box

						35/2304-25-СПЗ				
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast				
Зм.	Кільк.	Аркушів	№ Док.	Підпис	Дата			Стадія	Аркуш	Аркушів
ГІП		Мартинюк				Reconstruction		РП	12	16
Розробив		Кирилюка				Diagram of the language notification system on the 1st floor of the building		UKRBUDDPROEKT, LLC		
Перевірив		Мартинюк								

Формат АЗ 297х420	Коплюва	Погоджено
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Формат АЗ



				Tails ЧПС						TailsCOYE																					
				Number of reporters			Resistors			Number of reporters																					
				Smoke	Manual	Thermal	Roз., κΟМ	Ruu., κΟМ	Rκ., κΟМ	"Emergency light"	"Exit"	"Bumblebee"																			
Position	Designation of the receiving control device	Zone designation		4	5	6	7	8	9	10	11	12	Brand	Length, м	Total																
1	2	3																													
1	PPKP "Tiras-16P"	Line COYE №1 FS1-1								3	6	1	E30 1*2*0,8	110	230																
2		Line COYE №2 FS2-1								1	6	-		120																	
3		Ventilation shut-off line SSI-1												E30 2*2*0,8	30	30															
4		Power line PS 1-1												E30 3*1,5	2	4															
1	Power line PS 1-3												2																		
2	Power line PS 0-1												Look at the ETR in the Project section																		
TOTAL										4	12	1																			
TOTAL by system				89	12	4				4	12	1																			

				Position	Designation of the receiving control device	Zone designation	Speech notification trail			Cable		TOTAL Length, м													
							1 AC 100ПН	3 AC 100ПН	6 AC 100ПН	Brand	Length, м														
				1	2	3	4	5	6	7	8	9													
				1	VELLEZn 120-200	Zone №1 Z1	1	3	-	E30 1*2*1,5	30	420													
				2		Zone №2 Z2	1	10	-		90														
				Not		Zone №3 Z3	1	7	-		70														
				4		Zone №4 Z4	1	9	-		70														
				5		Zone №5 Z5		7	-		60														
				6		Zone №6 Z6	4	9	-		100														
				1		Control line of the VELLEZn120-200 language announcement system SS1-2					E30 2*2*0,8		4	8											
				2	Control line of the VELLEZn120-200 language announcement system SS1-3				4																
				3	Power line PS 1-2				E30 3*1,5	4	4														
				TOTAL			8	45	-																



# Explanation of the rooms on the 1st floor

Number according to the plan	Name	Note
100	Vestibule	
101	Hall	
102	Reception	
103	Universal bathroom	
104	Psychologist's office	
105	Office of the shelter manager	
106	Social worker's office	
107	Stairwell	
108	Corridor	
109	Room for people with limited mobility	
110	Bathroom with a shower for people with limited mobility	
111	Room for people with limited mobility	
112	Bathroom with a shower for people with limited mobility	
113	Utility room	
114	Room for a family with children	
115	Bathroom with a shower	
116	Room for a family with children	
117	Bathroom with a shower	
118	Room for elderly people	
119	Bathroom with a shower	
120	Room for elderly people	
121	Bathroom with a shower	
122	Room for a large family	
123	Bathroom with a shower	
124	Room for a mother with a child	
125	Bathroom with a shower	
126	Stairwell	
127	Room for a large family	
128	Bathroom with a shower	
129	Dining room for 18 seats	
130	Kitchen. Own food preparation for 4 workstations	
131	Laundry room	
132	Laundry drying room	
133	Children's room. Room for activities	
134	Linen closet	

Погоджено		
	Киришко	
	Розродив	
Зам. інв. N		

Копія вдав		
	Підпис і дата	
	Інв. N підп.	

							35/2304-25-СПЗ		
							Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast		
Зм.	Кільк.	Аркуш	№ Док.	Підпис	Дата				
ГІП		Мартинюк					Reconstruction	Стадія	Аркуш
Розродив		Киришко						РП	16
Перевіри		Мартинюк					Room layout explanation of the building	UKRBUDPROEKT, LLC	

Position		Name and technical specification		Type, brand, designation of the document, questionnaire		Code of equipment, of product, of material		Manufacturer plant		Unit of measurem.		Quantity		Unit mass		Note	
1		2		3		4		5		6		7		8		9	
		<u>Equipment and materials</u>															
		Fire alarm control panel		"Tiras - 16P"				LLC "Tiras-12" Vinnytsia				1		pc.			
		Digital autodial module		M ЦА- GSM				LLC "Tiras-12" Vinnytsia				1		pc.			
		8-relay expansion module		M-OUT8R				LLC "Tiras-12" Vinnytsia				1		pc.			
		12V, 18 Ah rechargeable battery						Retail network				1		pc.			
		Smoke fire detector		СПД 3				PE "ARTON" Chernivtsi				45		pc.		+5- reserve	
		Manual fire alarm		SPR-Tiras				LLC "Tiras-12" Vinnytsia				8		pc.		+1- reserve	
		External type light and sound notifier		Bumblebee-1				LLC "Tiras-12" Vinnytsia				1		pc.			
		12V Light Alarm, 80 dB, IP21C		OS "Exit"				LLC "Tiras-12" Vinnytsia				6		pc.			
		Light indicator (12/24 V) "Arrow. Direction of movement"		OC-6.4				LLC "Tiras-12" Vinnytsia				3		pc.			
		Emergency LED light		SFT-LED-30-01 rechargeable								1		pc.			

				</					



1

General instructions

Video surveillance system

This project provides for the installation of a video surveillance system (VSS) in the premises of the non-residential building of Preschool Education Institution No. 4 'Dolphin' for specialized services for individuals affected by domestic violence and/or gender-based violence at 8-a Korabelna Street, in the city of Pervomaisk, Mykolaiv region.

As the main device of the video surveillance system, a network video recorder IP Dahua 16-channel DH-NVR5216-EI is designed to be installed in the service room No. 102 (Reception). The digital video recorder is intended for viewing, recording, and playback of images from DAHUA IP cameras, as well as other manufacturers, thanks to the support of the universal compatibility protocol ONVIF. The DAHUA DH-NVR5216-EI network video recorder supports simultaneous connection to 16 IP cameras, the maximum resolution of which should not exceed 32MPix.

IP cameras are connected to the recorder using a Dahua DH-CS4218-16ET-135 switch – this is a 16-channel PoE switch. Switch #1 is installed near the recorder. For storing video data, up to 2 SATA hard drives can be installed inside the video recorder, 3.5-inch format, with a maximum capacity of up to 16 TB each (up to 32 TB of archive in total). Recording can be configured in one of three modes: continuous 24/7 recording, scheduled recording at certain time intervals, or recording triggered by a motion sensor when moving objects are detected in the camera's field of view.

To control the video recorder, view cameras online, and access the recording archive, a monitor can be connected to it via a VGA or HDMI cable. There is also an audio input and output for sound transmission, an RJ45 connector (for connection to a local network), and four USB ports for connecting a mouse and flash drive (2USB 2.0, 2USB 3.0). The power supply of the video surveillance system device should be from an AC network with a voltage of ~220 V, 50 Hz – from the distribution panel on site. The following video cameras are used:

- Dahua DH-IPC-HFW2449S-S-IL (3.6 mm) video camera, cylindrical IP camera with a 4 MP sensor. Fixed lens with a 3.6 mm focus and a viewing angle of 78 degrees. Built-in microphone available..
- Dahua DH-IPC-HDW2449T-S-IL – dome camera with a set of smart functions and a 4 MP sensor. It has small dimensions and a high level of protection, which allows it to be installed both indoors and outdoors. It is equipped with a fixed lens with a viewing angle of 78° and a focal length of 3.6 mm. Equipped with a built-in microphone.

Installation of the video surveillance system should be carried out with twisted pair cable KPVong-HF-VP (350) with a cross-section of 4\*2\*0.51 mm in PVC plastic ducts.

The laying of video surveillance systems should be carried out taking into account the placement of HVAC, plumbing, and electrical systems.

The brand of cable systems and video cameras may be changed by the customer to an equivalent one in terms of parameters without agreement with the design organization.

When laying in parallel, the distance from wires and cables to pipelines should be at least 100 mm, and to pipelines with flammable or easily combustible liquids and gases – at least 400 mm.

Electrical connections should be made in accordance with the technical documentation for the installed equipment.

List of working drawings of the main set of video surveillance

Sheet	Name	Notes
1	General data	
2	Structural diagram of the building's indoor video surveillance system	
3	Video surveillance system diagram of the 1st floor of the building	
4	Cable log of the video surveillance system	
5	Room layout explanation of the building	
6		

List of forwarded and attached documents

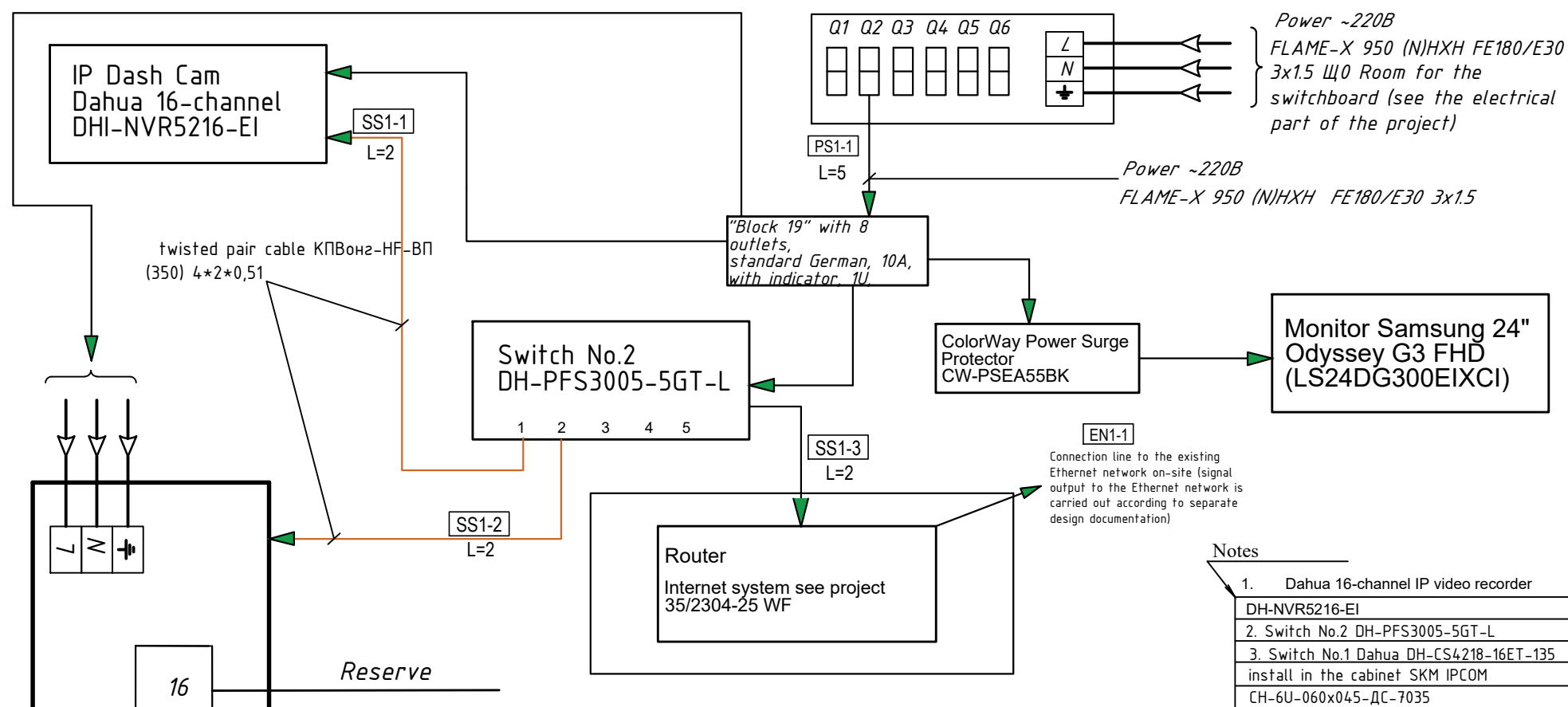
Designation	Name
ДБН А.2.2-3-2014	Composition and content of design documentation for construction
ВБН В.2.5-78.11.01-2003	"Security alarm systems".
ДБН В. 2.2-9-2009	Public buildings and structures
ДБН В.2.5-23-2010	Engineering equipment of buildings and structures. Design of electrical equipment for civil facilities;
ПЧЕ	Rules for the arrangement of electrical installations
НПАОП 40.1-132-01	Rules for the construction of electrical installations. Electrical equipment of special installations. Fire safety rules in Ukraine
ДСТУ Б В .1.1-36:2016	Determination of the category of premises, buildings, and external installations according to explosive and fire hazard
СНуп 3.05.06-85	Electronic devices
НПАОП 40.1-1.21-98	Rules for the safe operation of consumer electrical installations;
	Attached documents
35/2304-25-CB.C1	Specification of equipment, products, and video surveillance materials (1st phase)
35/2304-25-CB.C2	Specification of equipment, products, and video surveillance materials (2st phase)

35/2304-25-B

Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast




Зм.	Кільк.	Аркуш	№Док.	Підпис	Дата	Стадія	Аркуш	АркушіВ	
ГІП	Мартинюк					Renovation	РП	1	5
Розробив	Киришко								
Перевірів	Мартинюк								
General information							UKRBUDPROEKT, LLC		

Формат А3



№	Video Surveillance №	Distance L, m	Diagram	Location
15	Video Surveillance №15	L=64		Premises № 229
14	Video Surveillance №14	L=54		Premises № 223
13	Video Surveillance №13	L=44		Premises № 237
12	Video Surveillance №12	L=34		Premises № 202
11	Video Surveillance №11	L=22		
10	Video Surveillance №10	L=70		
9	Video Surveillance №9	L=68		On the outside, on the left side of the building
8	Video Surveillance №8	L=62		On the exterior of the building
7	Video Surveillance №7	L=48		Premises № 108
6	Video Surveillance №6	L=42		Outside at the back of the building
5	Video Surveillance №5	L=40		
4	Video Surveillance №4	L=22		
3	Video Surveillance №3	L=45		Premises № 108
2	Video Surveillance №2	L=20		Outside, the matter is on the side of the building
1	Video Surveillance №1	L=10		Premises № 101

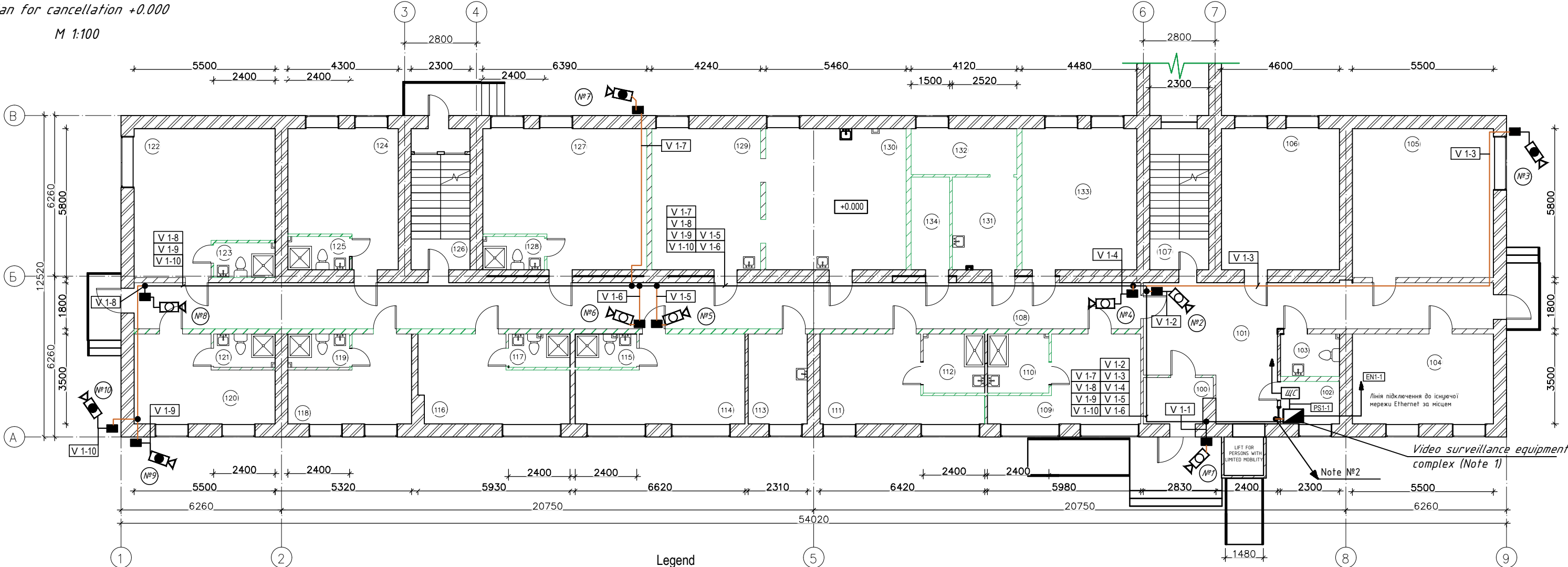
кабель вита пара КРВонг-НФ-ВП  
(350) 4\*2\*0 51

Legend	
	Dahua surveillance camera, IP Technology, Dome type housing
	Dahua surveillance camera, IP technology, Cylinder type housing
	Dahua PFA Junction Box

						35/2304-25-B				
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast				
Зм.	Кільк.	Аркуш	№Док.	Підпис	Дата					
						Renovation		Смадія	Аркуш	Аркушіб
ГІП		Мартинюк						РП	2	5
Розробив		Кирюшко				Structural diagram of the building's indoor video surveillance system		UKRBUDPROEKT, LLC		
Перевірів		Мартинюк								



Plan for cancellation +0.000  
M 1:100



Note:  
1. The laying of the video surveillance system network in the premises of the building with a ceiling space should be carried out hidden in PVC corrugated pipes.  
2. Cable routes, descents along the walls of the video surveillance system networks in the premises of the building without ceiling space should be carried out openly in PVC plastic.  
3. The laying of cable routes and the placement of elements of the video surveillance system should be specified during installation, coordinating with the facility management, taking into account the existing lighting network, ventilation, and air conditioning systems.  
4. It is allowed to lay trunk and distribution routes of the video surveillance, internet, and fire alarm systems in the same tray or box.

Legend	
	Video surveillance equipment complex
	Dahua surveillance camera, IP Technology, Dome type housing
	Dahua surveillance camera, IP technology, Cylinder type housing
	Dahua PFA Junction Box
	Twisted pair cable KPVong-HF-VP (350) 4*2*0.51

Note 1  
1. Dahua IP Dash Cam 16-channel  
DH-NVR5216-EI  
2. Switch №2 DH-PFS3005-5GT-L  
3. Switch №1 Dahua DH-CS4218-16ET-135  
install in the cabinet SCM IPCOM  
CH-6U-060x045-DC-7035

35/2304-25-B					
Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaïsk, Mykolaiv Oblast					
Зм.	Кільк.	Аркуш	№Док.	Підпис	Дата
ГІП	Мартиняк				
Розробив	Киришко				
Перевірю	Мартиняк				
Renovation				Стадія	Аркуш
Diagram of the light-sound alert system of the 1st floor of the building				РП	3
				Аркушів	5
UKRBUDPROEKT, LLC					

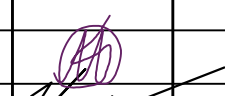

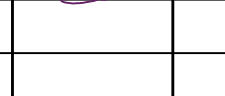


				5												
				Cable designation	Track					Cable according to the project						
					Beginning	End	inside the building and outside			stamp		Number of cables, number and cross-section of cores, voltage	Length, m.	Total cables		
							Corrugation	PVC box	Metal Tray							
				V 1-1	Switch Dahua №1 DH-CS4218-16ET-135	Surveillance camera №1	8	2	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	10	645			
				V 1-2	Switch Dahua №1	Surveillance camera №2	18	2	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	20				
				V 1-3	Switch Dahua №1	Surveillance camera №3	43	2	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	45				
				V 1-4	Switch Dahua №1	Surveillance camera №4	20	2	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	22				
				V 1-5	Switch Dahua №1	Surveillance camera №5	38	2	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	40				
				V 1-6	Switch Dahua №1	Surveillance camera №6	40	2	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	42				
				V 1-7	Switch Dahua №1	Surveillance camera №7	46	2	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	48				
				V 1-8	Switch Dahua №1	Surveillance camera №8	60	2	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	62				
				V 1-9	Switch Dahua №1	Surveillance camera №9	66	2	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	68				
				V 1-10	Switch Dahua №1	Surveillance camera №10	68	2	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	70				
				V 1-11	Switch Dahua №1	Surveillance camera №11	16	6	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	22				
				V 1-12	Switch Dahua №1	Surveillance camera №12	28	6	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	34				
				V 1-13	Switch Dahua №1	Surveillance camera №13	38	6	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	44				
				V 1-14	Switch Dahua №1	Surveillance camera №14	48	6	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	54				
				V 1-15	Switch Dahua №1	Surveillance camera №15	58	6	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	64				
				PS 1-1	Power Shield ShS-1	'Block 19' with 8 sockets	-	5	-	FLAME-X 950 (N)HXH FE180/E30	3x1.5 мм	5	5			
				SS 1-1	Switch Dahua №1	Dashcam IP Dahua DHI-NVR5216-EI	-	2	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	2	6			
				SS 1-2	Switch №2 DH-PFS3005-5GT-L	Switch №1 Dahua DH-CS4218-16ET-135	-	2	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	2				
				SS 1-3	Switch №2 DH-PFS3005-5GT-L	Router (see 35/2304-25 WF)	-	2	-	Twisted pair cable КПВонг-НФ-ВП	4x2x0,51 мм	2				

Explanation of the rooms on the 1st floor

<i>Number according to the plan</i>	<i>Name</i>	<i>Area, sq.m</i>
100	Vestibule	4
101	Hall	39
102	Reception	4
103	Universal bathroom	4
104	Psychologist's office	19
105	Office of the shelter manager	32
106	Social worker's office	25
107	Stairwell	13
108	Corridor	71
109	Room for people with limited mobility	15
110	Bathroom with a shower for people with limited mobility	6
111	Room for people with limited mobility	16
112	Bathroom with a shower for people with limited mobility	6
113	Utility room	8
114	Room for a family with children	20
115	Bathroom with a shower	3
116	Room for a family with children	17
117	Bathroom with a shower	3
118	Room for elderly people	13
119	Bathroom with a shower	3
120	Room for elderly people	16
121	Bathroom with a shower	3
122	Room for a large family	28
123	Bathroom with a shower	3
124	Room for a mother with a child	20
125	Bathroom with a shower	3
126	Stairwell	10
127	Room for a large family	32
128	Bathroom with a shower	3
129	Dining room for 18 seats	23
130	Kitchen. Own food preparation for 4 workstations	30
131	Laundry room	9
132	Laundry drying room	7
133	Children's room. Room for activities	25
134	Linen closet	5
	In total on the 1st floor	539 sq.m

Погоджено			
	Кирюшко		
	Розробив		
Копіював	Зам. інв N		
	Підпис і дата		
	Інв. N підп.		

						35/2304-25-B			
						Renovation of the non-residential building of Preschool Educational Institution No. 4 "Dolphin" to house specialized services for victims of domestic violence and/or gender-based violence at 8-A Korabelna Street in Pervomaisk, Mykolaiv Oblast			
Зм.	Кільк.	Аркуш	№Док.	Підпис	Дата		Смадія	Аркуш	Аркушіб
ГІП		Мартинюк				Renovation	РП	5	5
Розробив		Кирюшко							
Перевірів		Мартинюк							
						Room layout explanation of the building	UKRBUDPROEKT, LLC		

