# PROJEKT WYKONAWCZY
# **SYSTEMU INFORMACJI WIZUALNEJ**
# w przejściach podziemnych w Warszawie

INWESTOR:
ZDM Warszawa
ul. Chmielna 120
00-801 Warszawa

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PROJEKT WYKONAWCZY

BRANŻA:
SYSTEM INFORMACJI WIZUALNEJ

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REWIZJA:
01

Warszawa, 21 czerwca 2016 r.

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**PROJEKT WYKONAWCZY SYSTEMU INFORMACJI WIZUALNEJ DLA PRZEJŚĆ PODZIEMNYCH W WARSZAWIE**

Projektowany system stanowi integralną część obowiązującego w Warszawie Miejskiego Systemu Informacji (MSI). Adaptuje także obowiązujące w systemie komunikacji publicznej ZTM oznaczenia rodzajów środków komunikacji, wraz z kodem kolorystycznym.

**Format pola informacji**
Projektowane pola informacji mają wysokość 18 cm i długość zależnie od potrzeb: 100cm, 160 cm, 200 cm, 250 cm i 300 cm.

**Budowa i montaż nośnika**
Rama kasetonu zbudowana jest z profilu aluminiowego. Trzy boki ramy kasetonu zespawane są ze sobą. Profil dolny lub boczny montowany jest do zespawanego w.w. zespołu przy pomocy stalowych prowadnic wsuniętych w komory profili i zabezpieczonych śrubami ze stali nierdzewnej. Profile aluminiowe malowane są proszkowo na kolor biały półmatowy RAL 9010. Przed zamknięciem kasetonu w prowadnice wsunięte są dyfuzory z arkusza mlecznego tworzywa sztucznego (plexi) do podświetleń, na którym naniesiona jest grafika z plotowanej folii samoprzylepnej do podświetleń analogicznej do Oracal 8500.
Kasetony dwustronne montowane są do stropu betonowego przejścia podziemnego przy pomocy prętów gwintowanych. Odcinki prętów widoczne pomiędzy kasetonem a stropem betonowym lub pomiędzy kasetonem a sufitem podwieszanym zakryć rurkami stalowymi malowanymi na kolor biały półmat RAL 9010. Ilość i rodzaj podwiesi i kołków rozporowych w stropie betonowym należy dobrać odpowiednio do budowy stropu, ciężaru kasetonu oraz obowiązujących norm obciążenia. Kaseton naścienny zbudowany jest analogicznie z tych samych profili z obciętym jednym z jego „skrzydełek". Tylna ścianka kasetonu naściennego zasklepiona jest stalową blachą ocynkowaną przykręconą na śruby do ramy kasetonu.
Kasetony podświetlane są świetlówkami ledowymi HB-Led Tube (karta katalogowa w załączeniu).
Instalację wewnętrzną należy wykonać według umieszczonego w karcie katalogowej schematu. Kabel zasilający doprowadzony według oddzielnego opracowania należy wprowadzić do wnętrza kasetonu wiszącego przez rurkę osłonową podwiesia, a do kasetonu naściennego przez otwór w tylnej ścianie osłonowej.
**WSZYSTKIE WYMIARY SPRAWDZIĆ NA MIEJSCU.**

**Kolorystyka folii do podświetleń**
Oracal 8500 542 atramentowo niebieski – litery i piktogramy funkcji
Oracal 8500 030 ciemny czerwony – piktogram Tramwaju
Oracal 8500 403 jasny fioletowy – piktogram Autobusu
Oracal 8500 062 jasny zielony – piktogram Kolei Mazowieckich
Oracal 8500 068 trawiasty zielony – piktogram SKM
Oracal 8500 013 cynkowy żółty – piktogram Metra
Oracal 8500 031 czerwony – piktogram Metra

**Kodowanie symbolu nośnika**
W symbolu nośnika, np.: **22.01A.D3**, zawarte zostały podstawowe informacje dotyczące kolejno:
– wybranego przejścia podziemnego – **21** Rondo J. Waszyngtona, **22** Rondo R. Dmowskiego itd.;
– lokalizacji na planie – **01**, **02** itd.;
– określenia strony informacji w kasetonie dwustronnym **A** lub **B**;
– rodzaju nośnika – **D** - dwustronny, **N** - naścienny, jednostronny;
– długości nośnika – **3** - 300 cm, **25** - 250 cm, **2** - 200 cm, **16** - 160 cm, **1** - 100 cm.

**OZNAKOWANIE ZEWNĘTRZNE PRZEJŚĆ PODZIEMNYCH**
Oznakowanie zewnętrzne zejść do przejść podziemnych należy wykonać przy pomocy standardowo zbudowanych znaków drogowych D-35 o tarczy najmniejszej z dopuszczalnych. Rysunek w załączeniu. Znaki rozmieścić zgodnie z obowiązującymi przepisami drogowymi.

# 01

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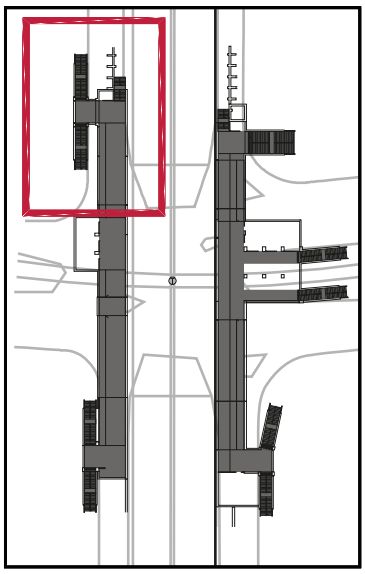

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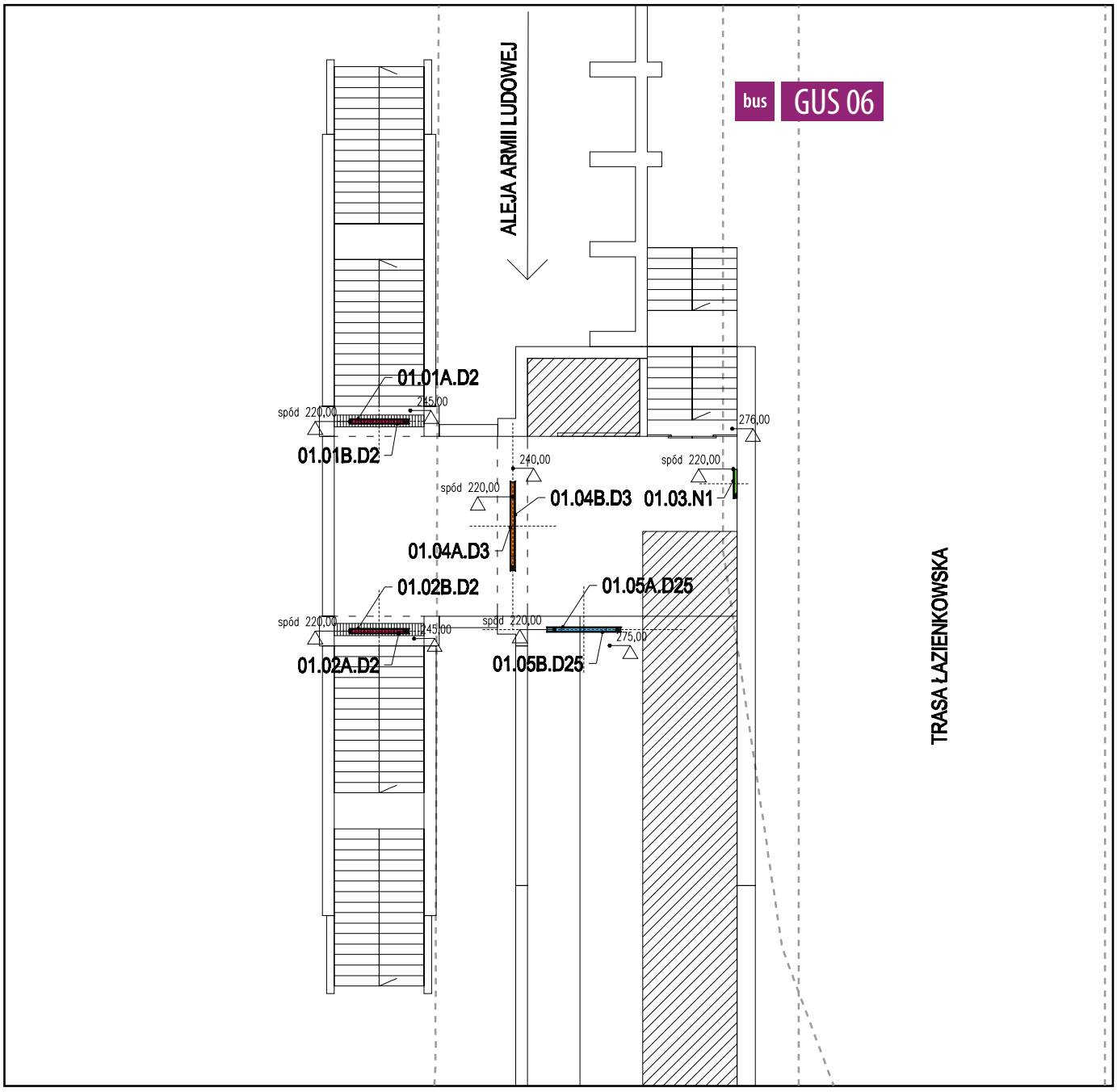
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276,00
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01.03.N1
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01.02B.D2
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TRASA ŁAZIENKOWSKA

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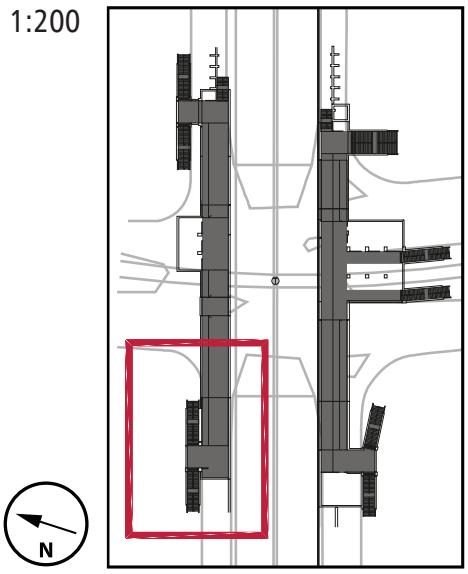
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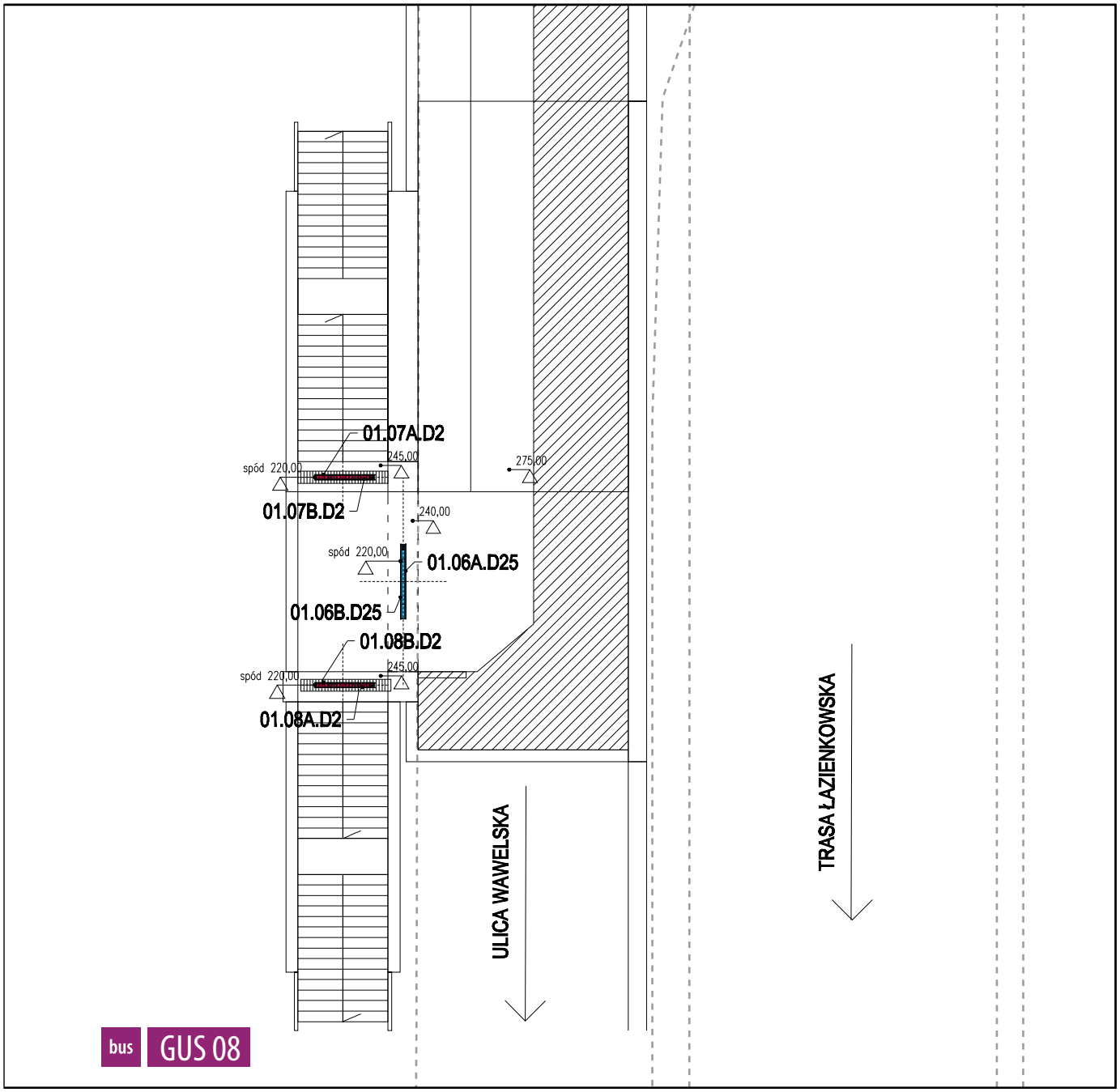
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01.06B.D25
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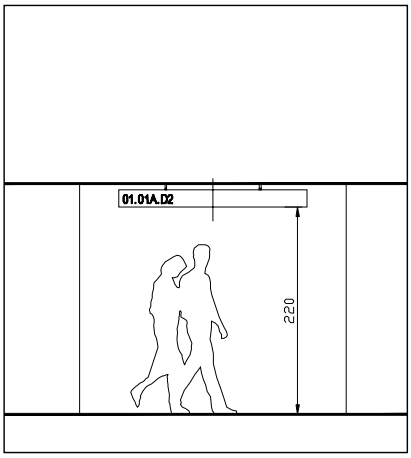
TRASA ŁAZIENKOWSKA
bus
GUS 08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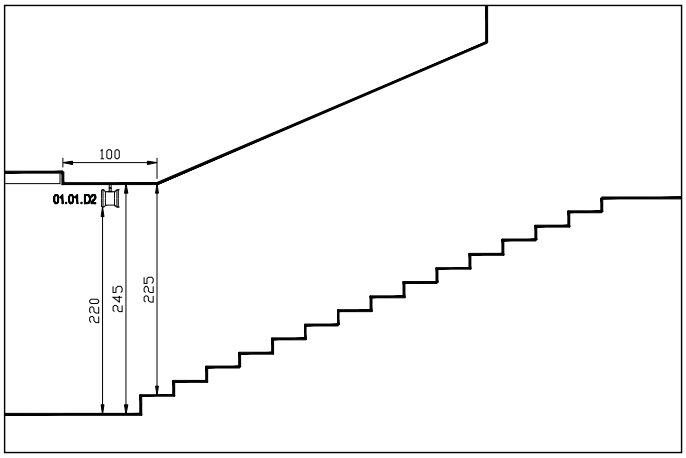
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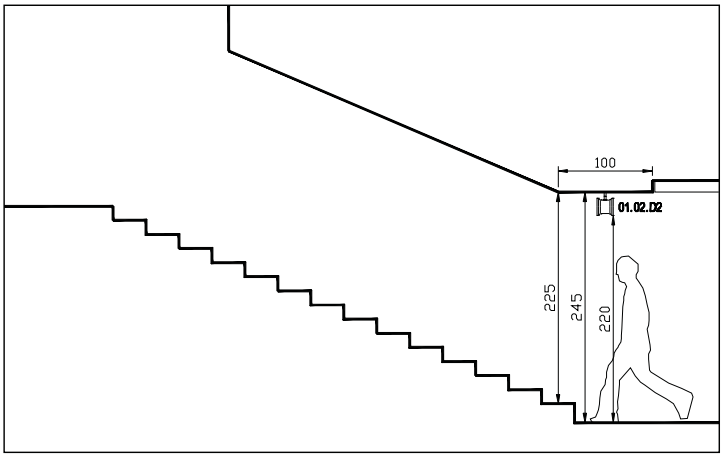
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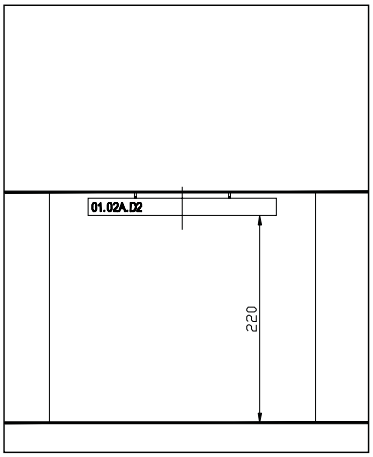
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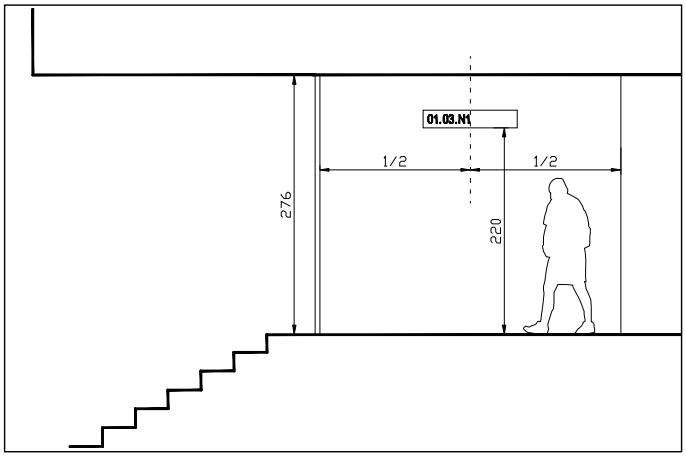
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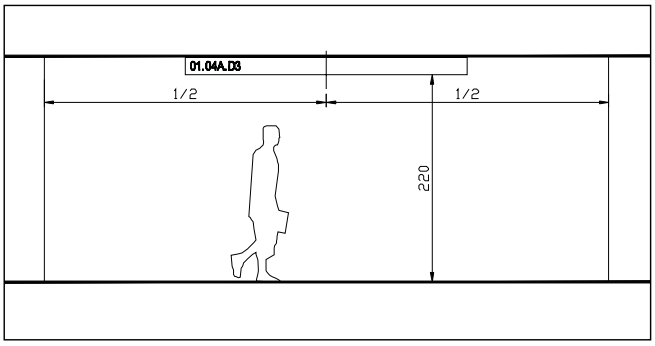
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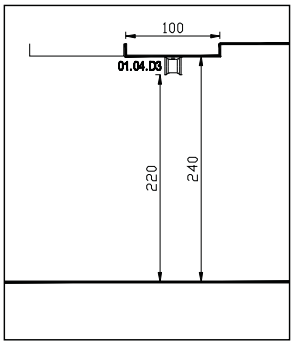
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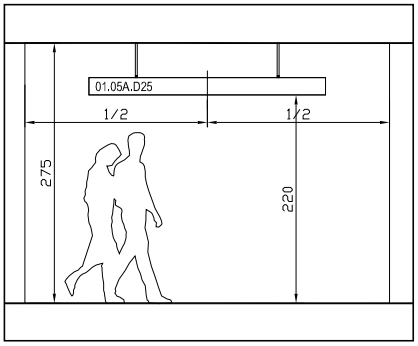
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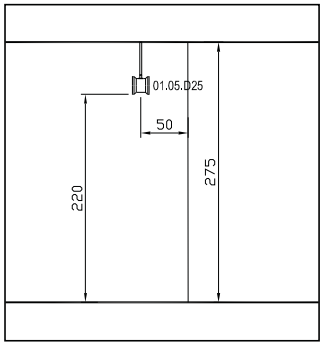
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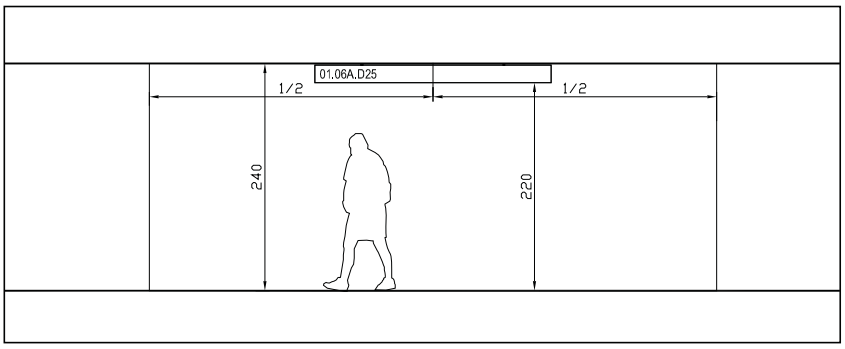
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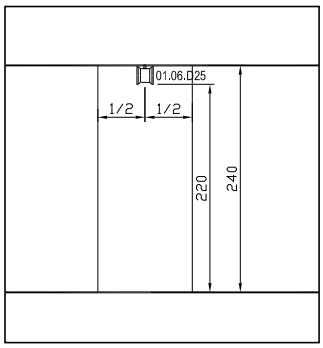
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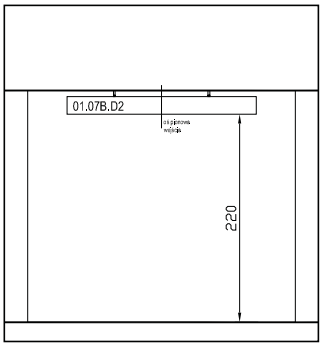
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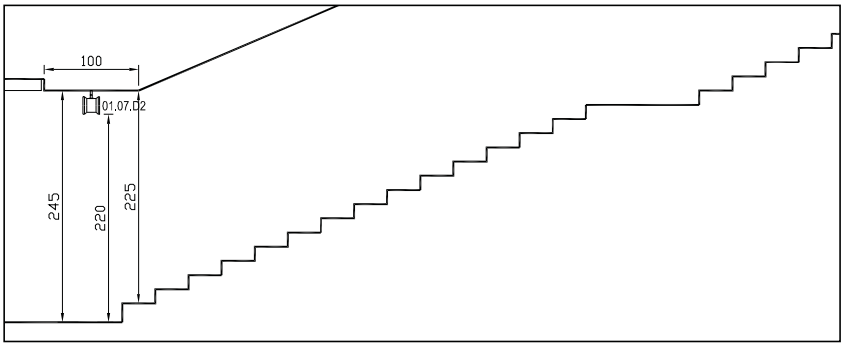
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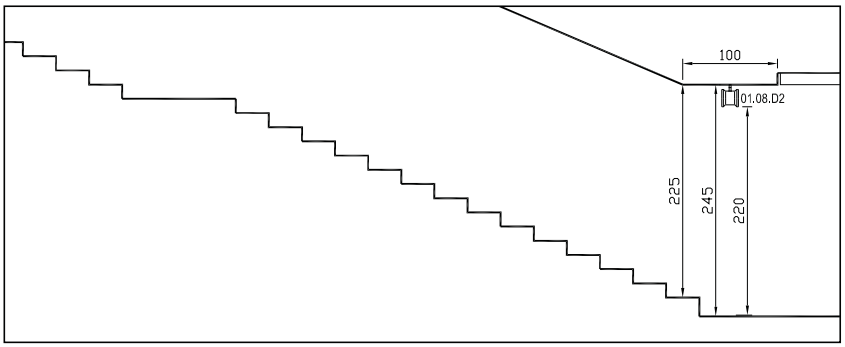
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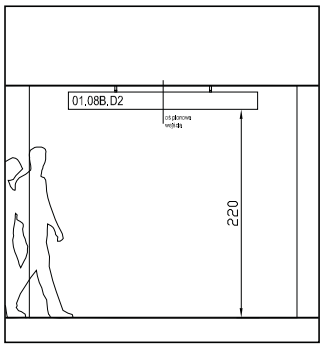
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01.02B.D2

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01.04B.D3

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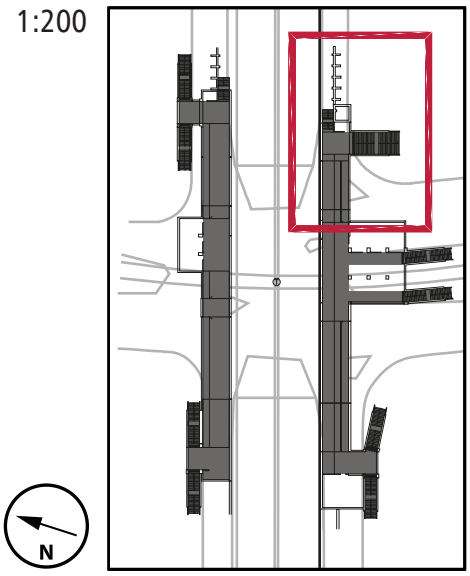

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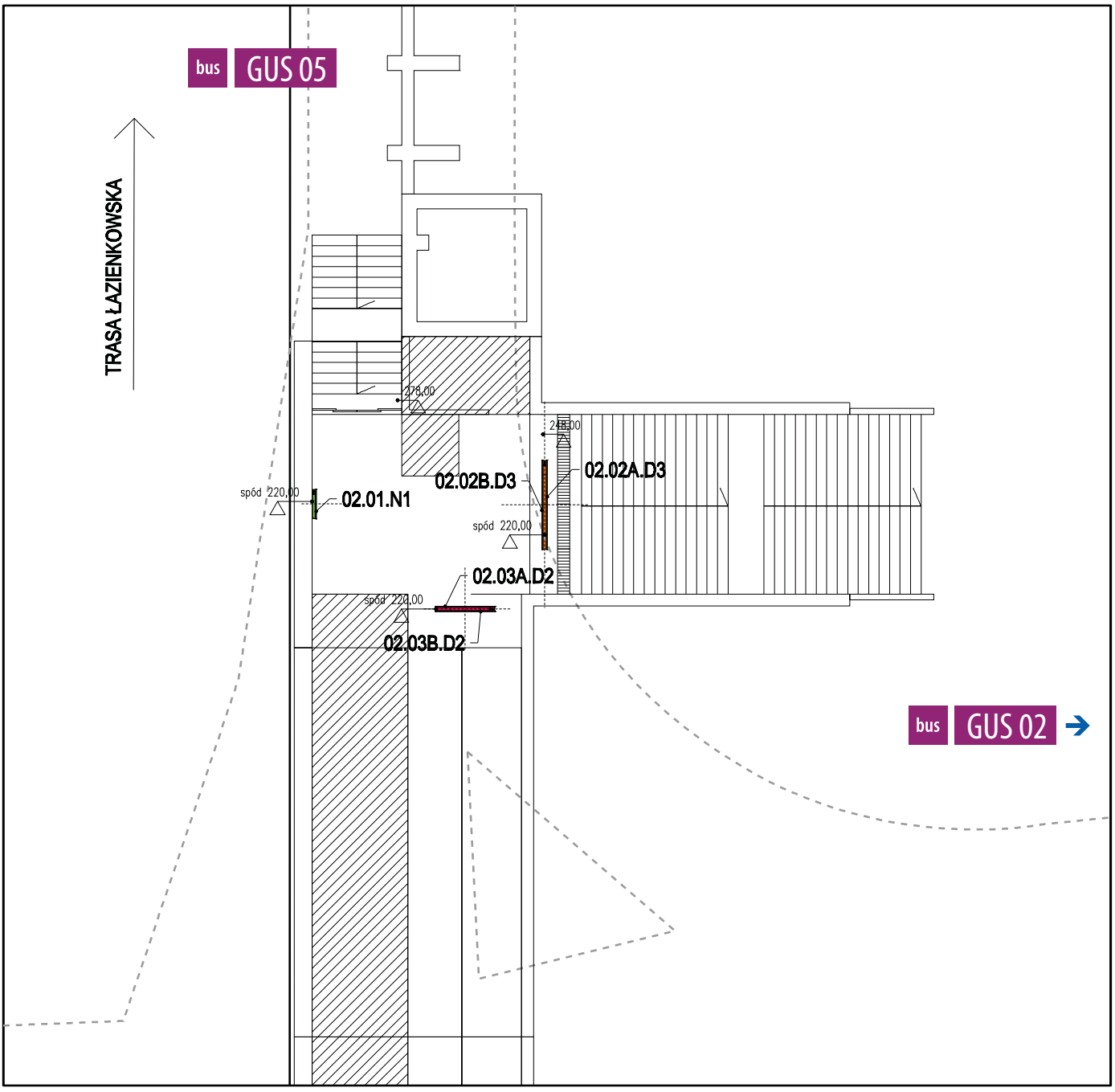
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# 02

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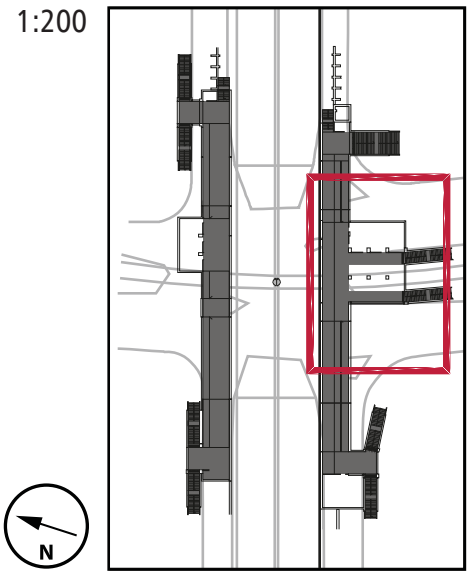
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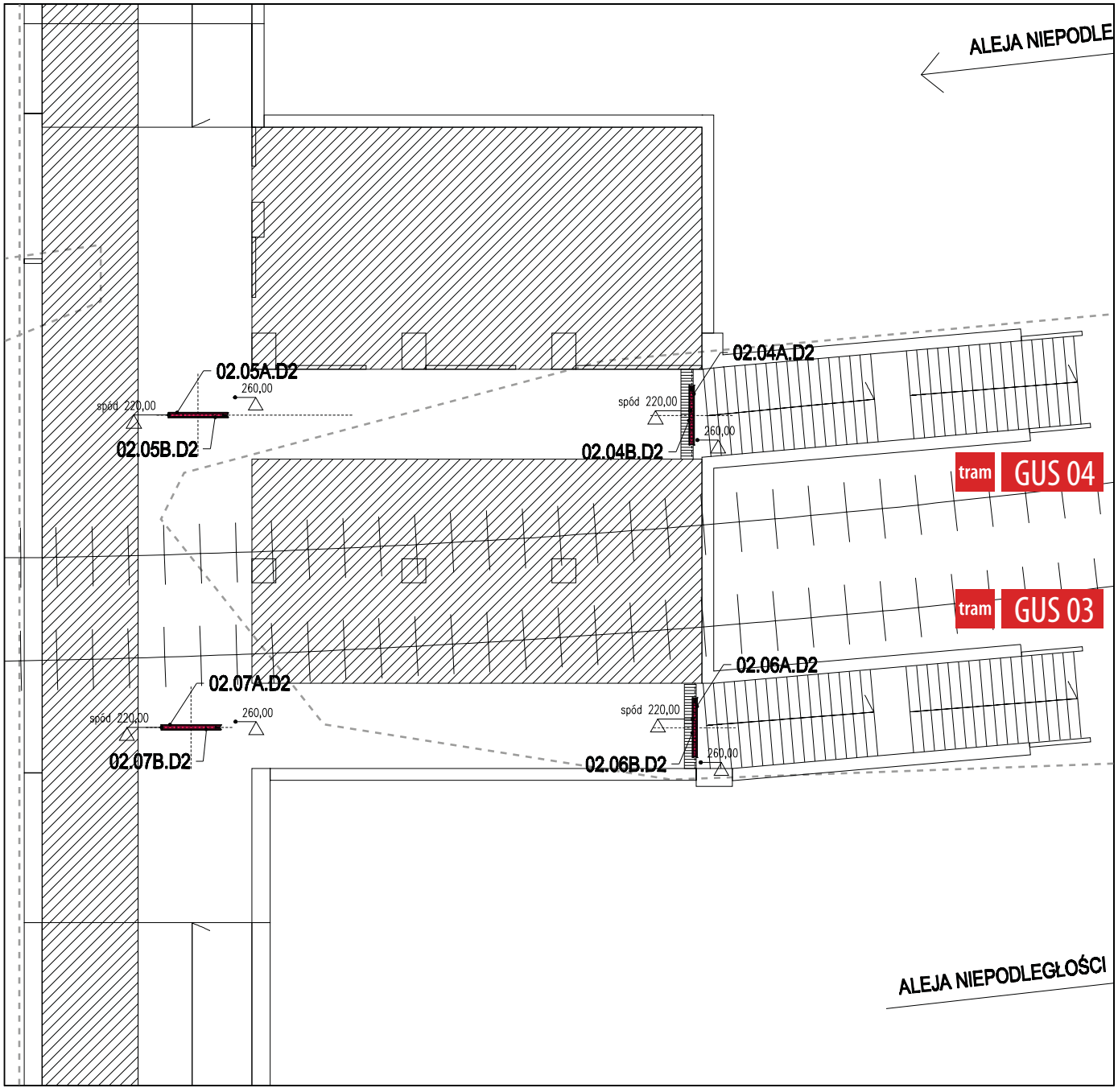
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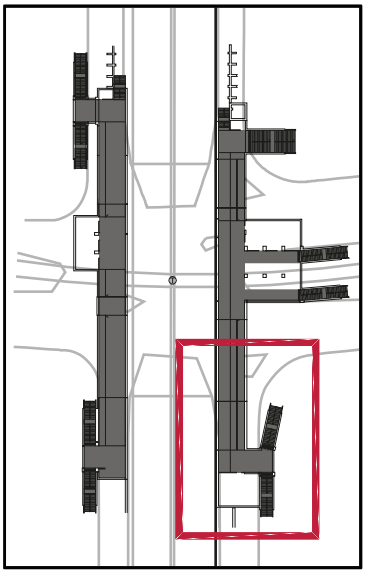

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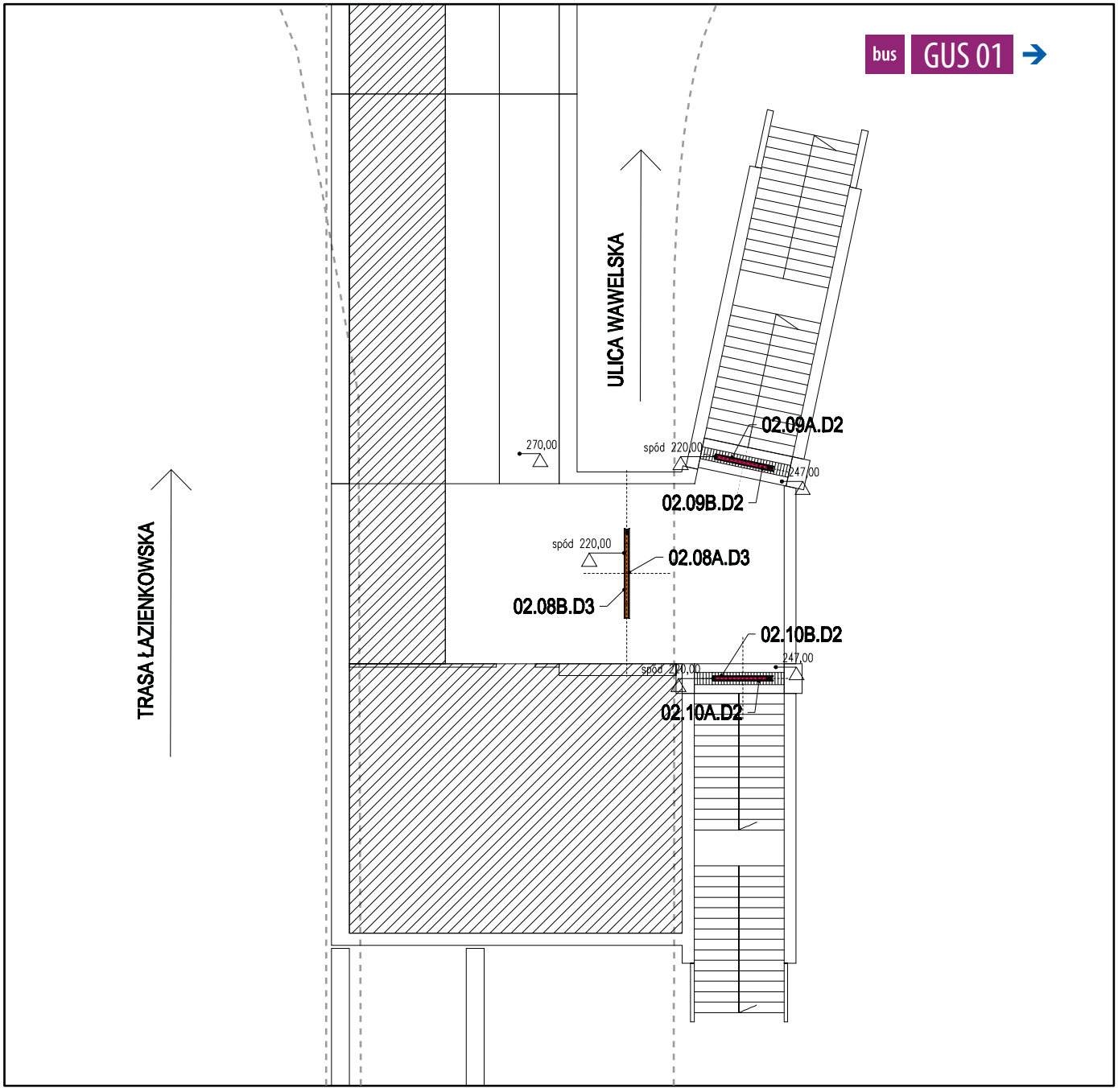
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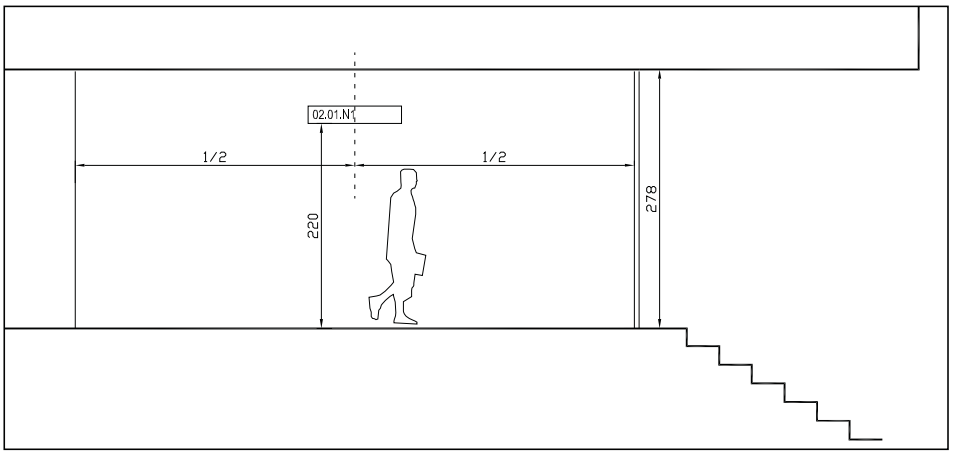
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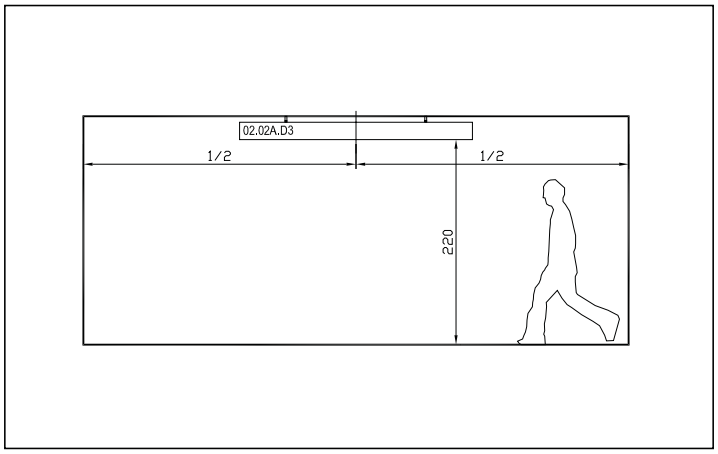
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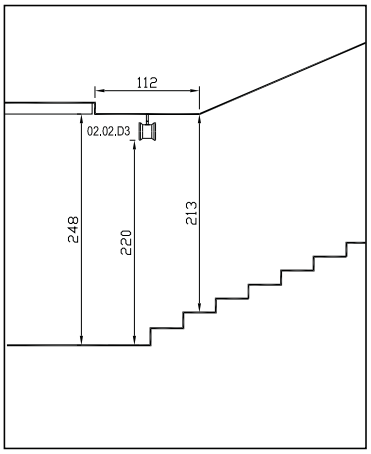
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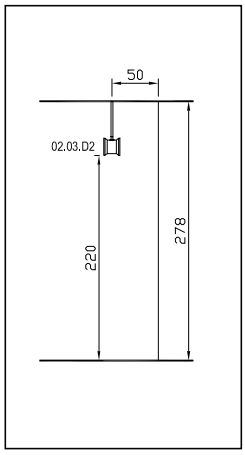
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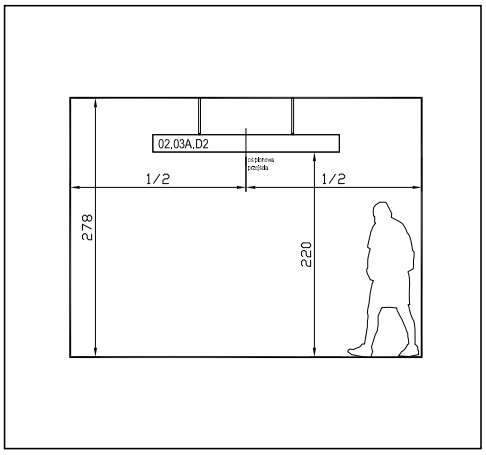
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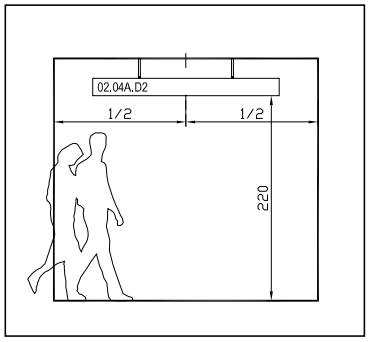
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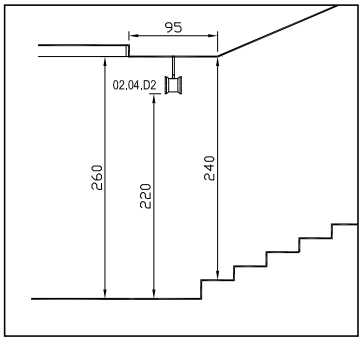
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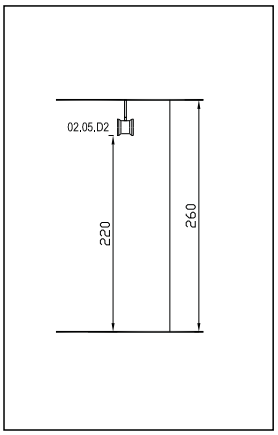
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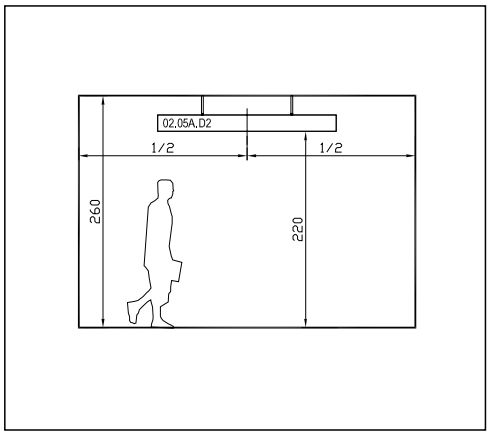
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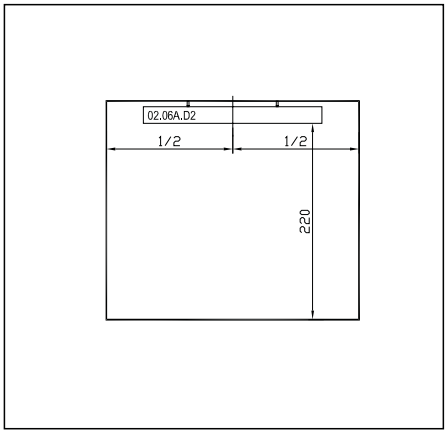
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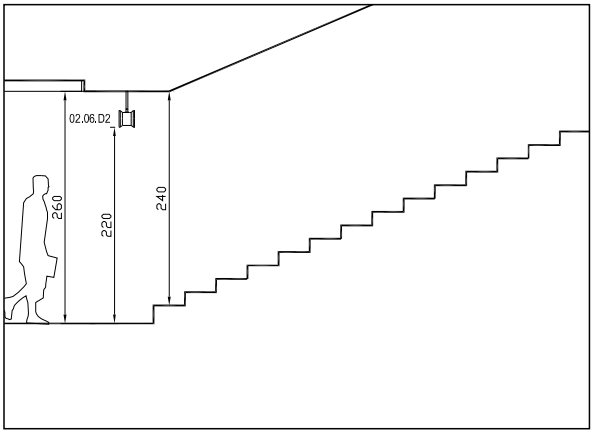
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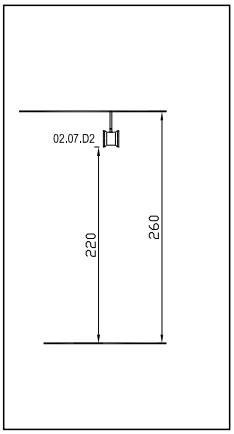
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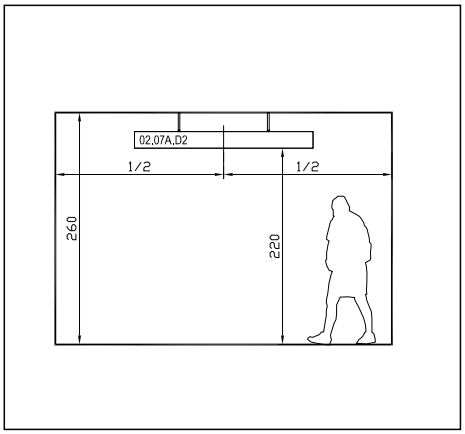
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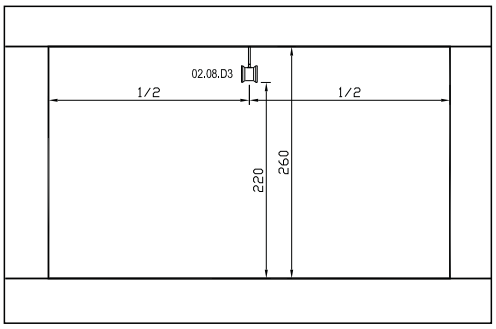
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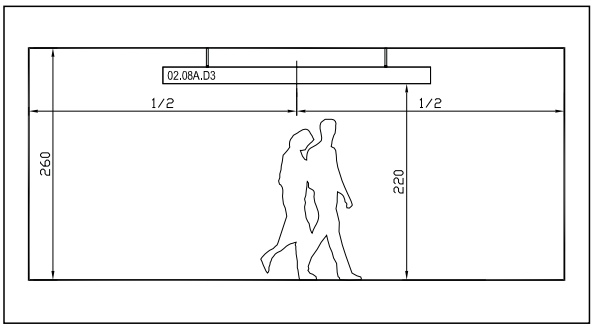
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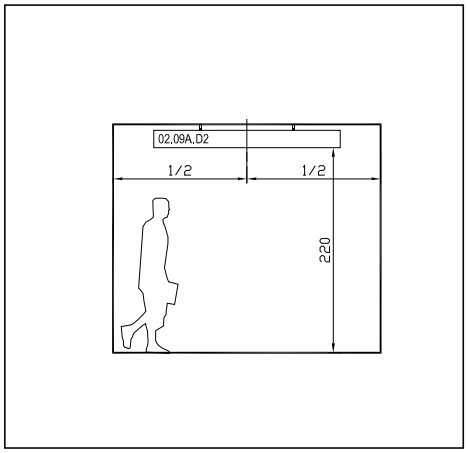
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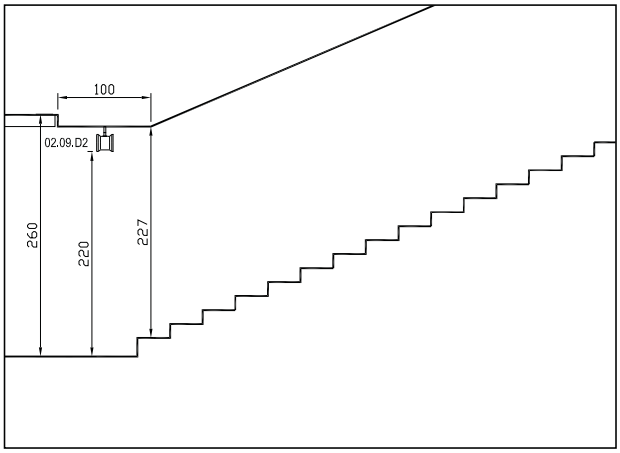
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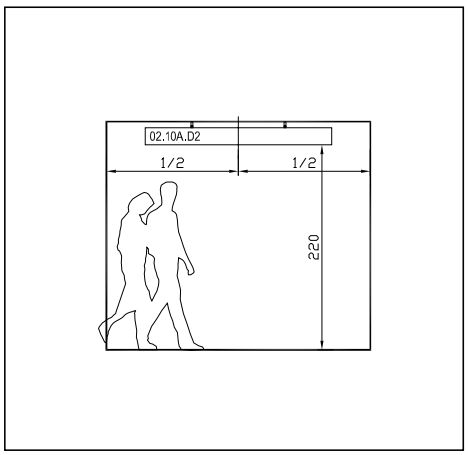
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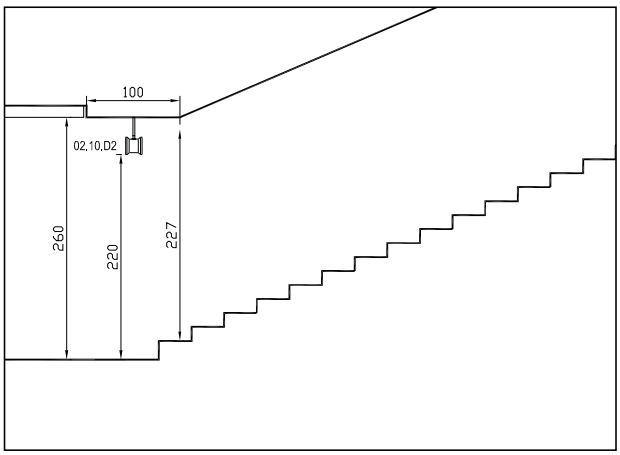
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02.02B.D3

02.03A.D2

02.03B.D2

02.04A.D2

02.04B.D2

02.05A.D2

02.05B.D2

02.06A.D2

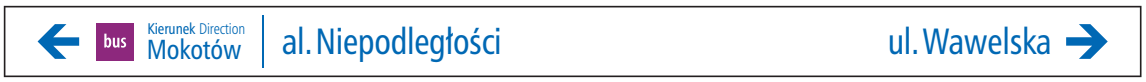
02.06B.D2

02.07A.D2

02.07B.D2

02.08A.D3

02.08B.D3

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02.09B.D2

02.10A.D2

02.10B.D2

**AKTUALNIE PRZEJŚCIE ZAMKNIĘTE.**
BRAK MOŻLIWOŚCI POMIARÓW. NA RYS. NIE UWZGLĘDNIONO POWIERZCHNI PAWILONÓW HANLOWYCH W STANIE OBECNYM. NA RYS. WIDNIEJĄ TYLKO PIERWOTNIE PROJEKTOWANE POW. HANDLOWE.
PROJEKT DOTYCZY SYTUACJI PO EW. OTWARCIU PRZEJŚCIA.

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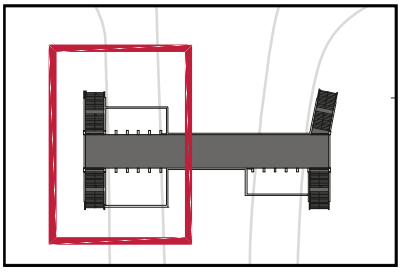


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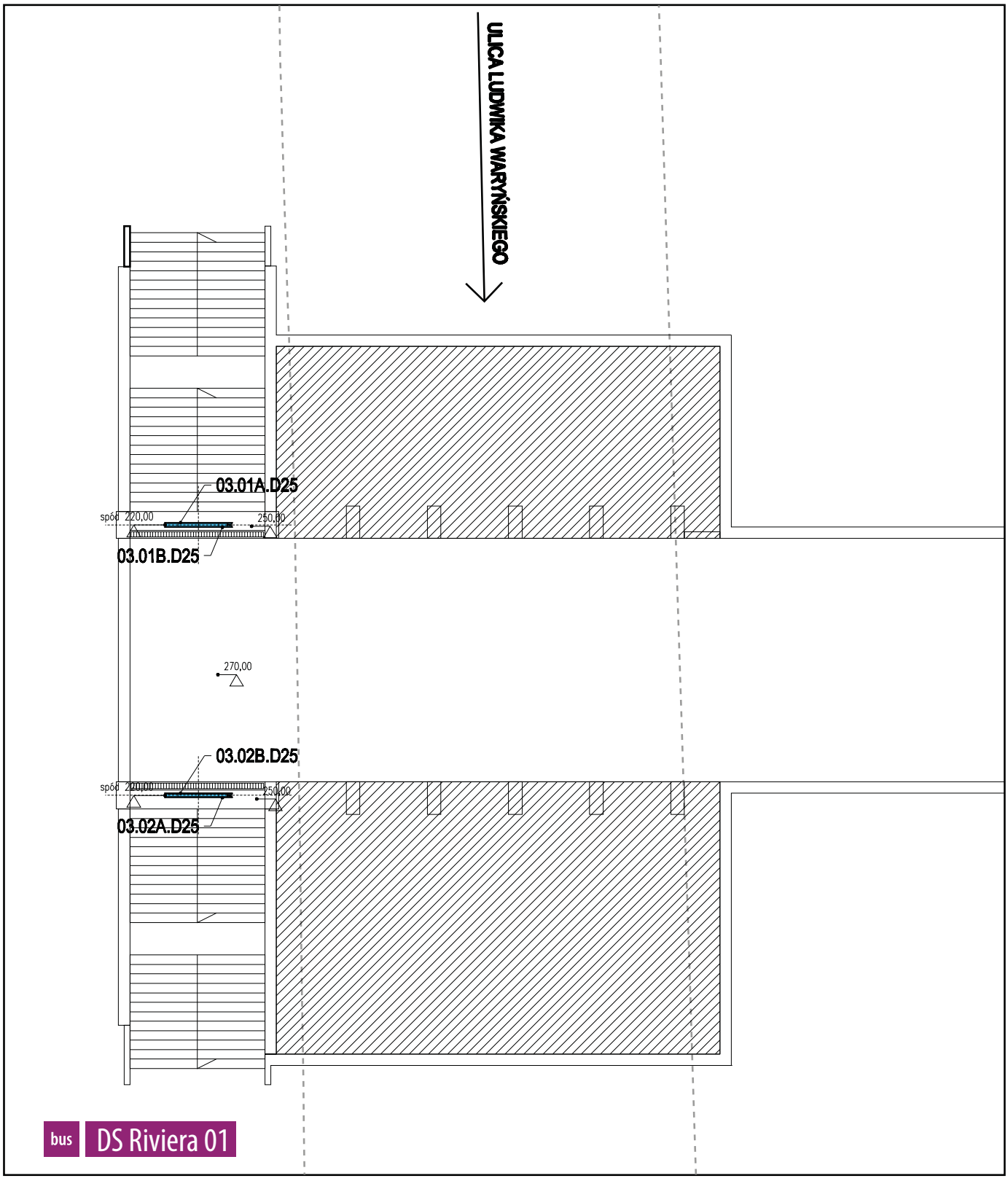

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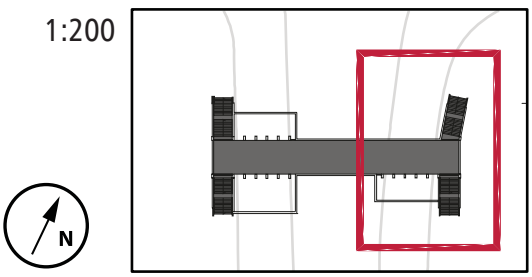
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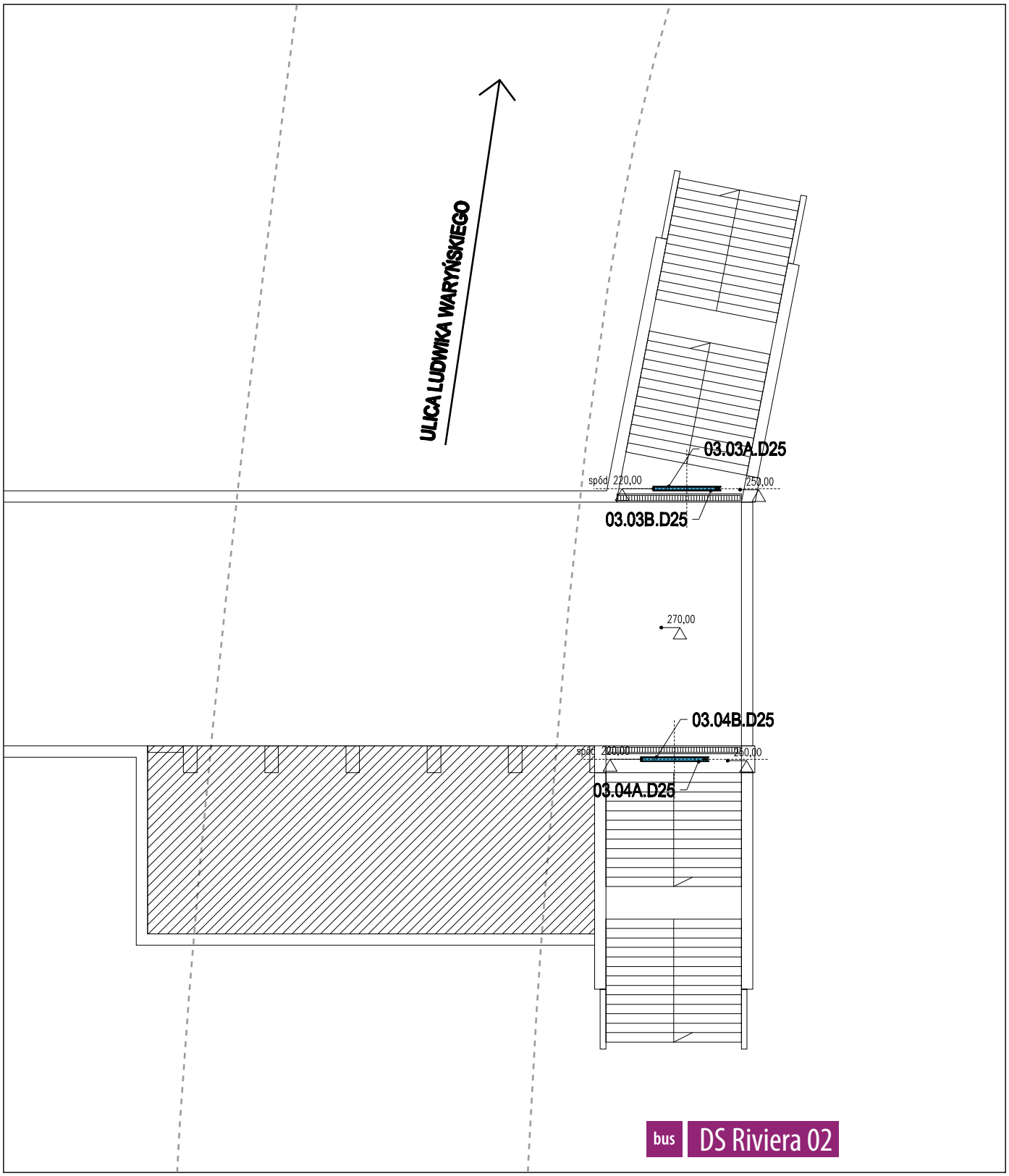
ULICA LUDWIKA WARYŃSKIEGO
03.03A.D25
spód 270,00
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03.03B.D25
270,00
03.04B.D25
03.04A.D25
bus
DS Riviera 02

# 03

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270
03.02.D25
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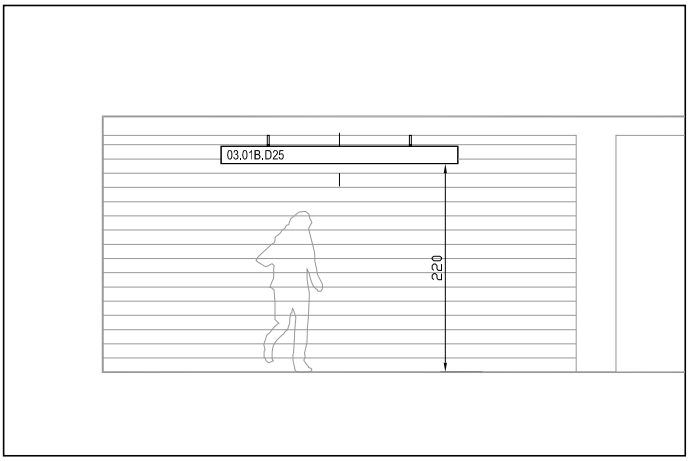
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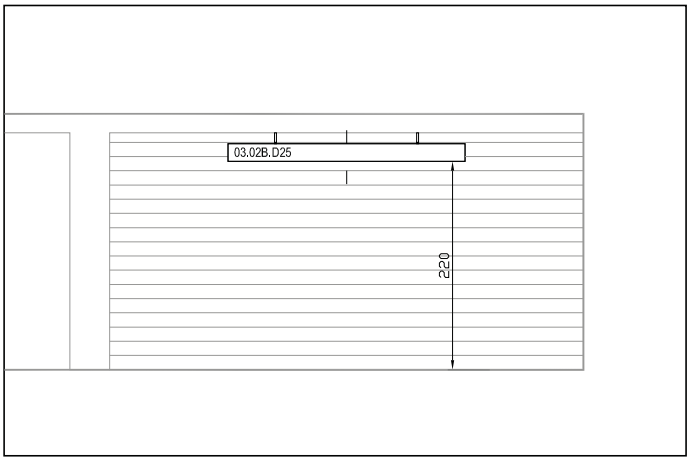
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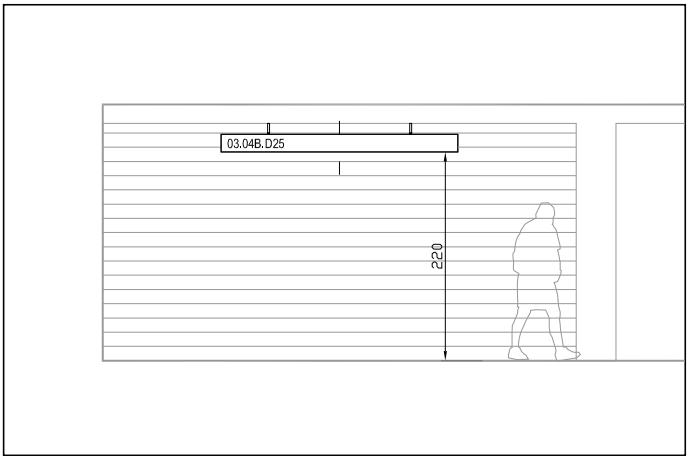
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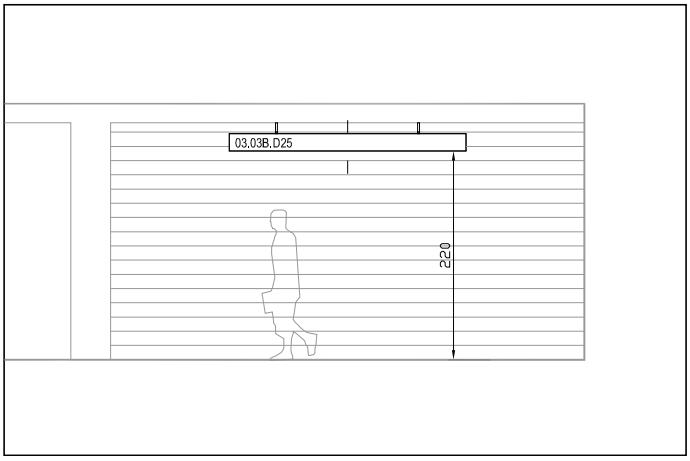
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03.02B.D25

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03.03B.D25

03.04A.D25

03.04B.D25

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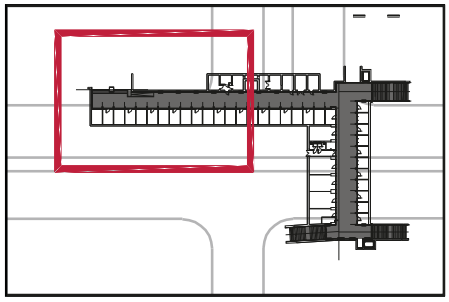

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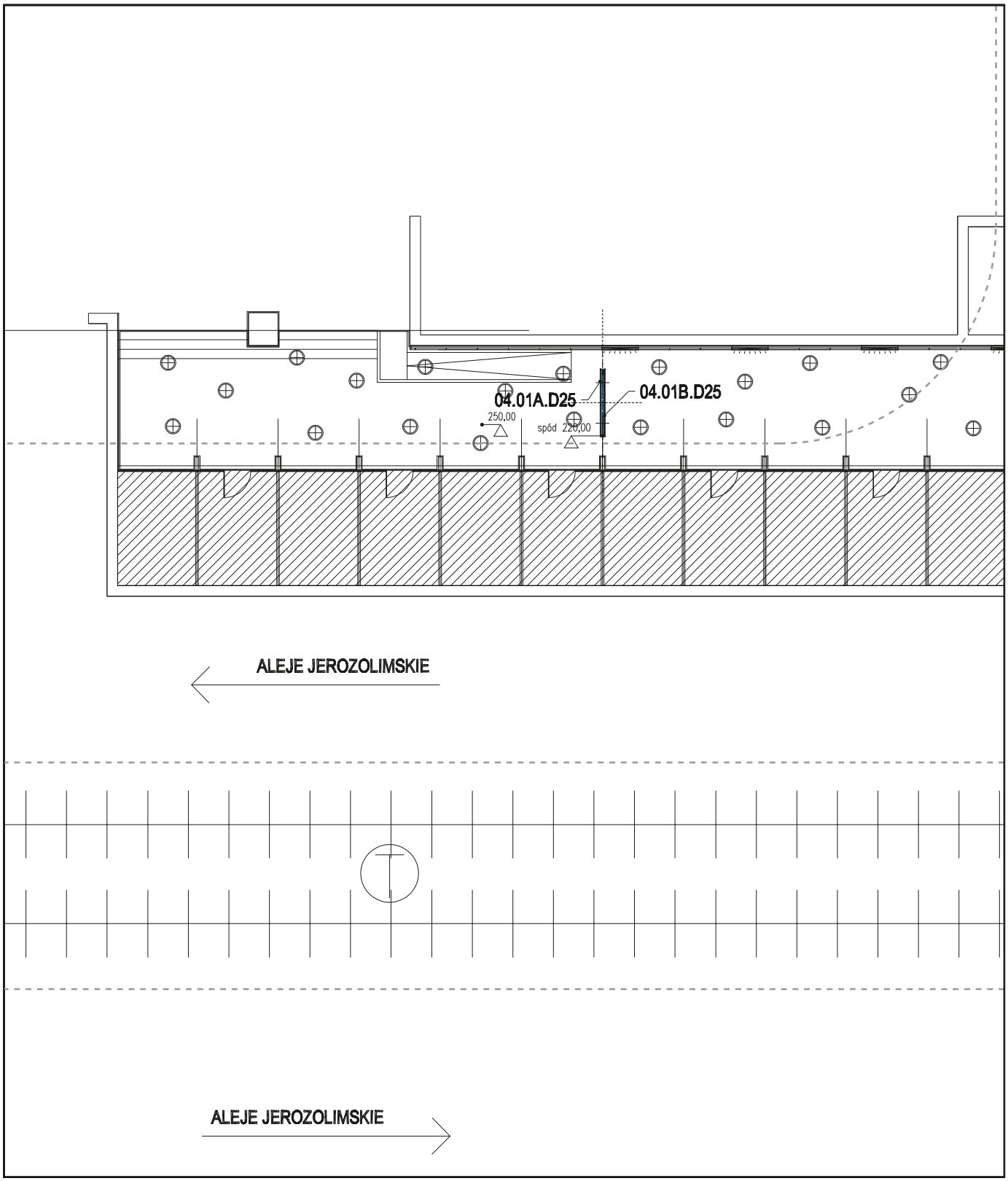
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ALEJE JEROZOLIMSKIE
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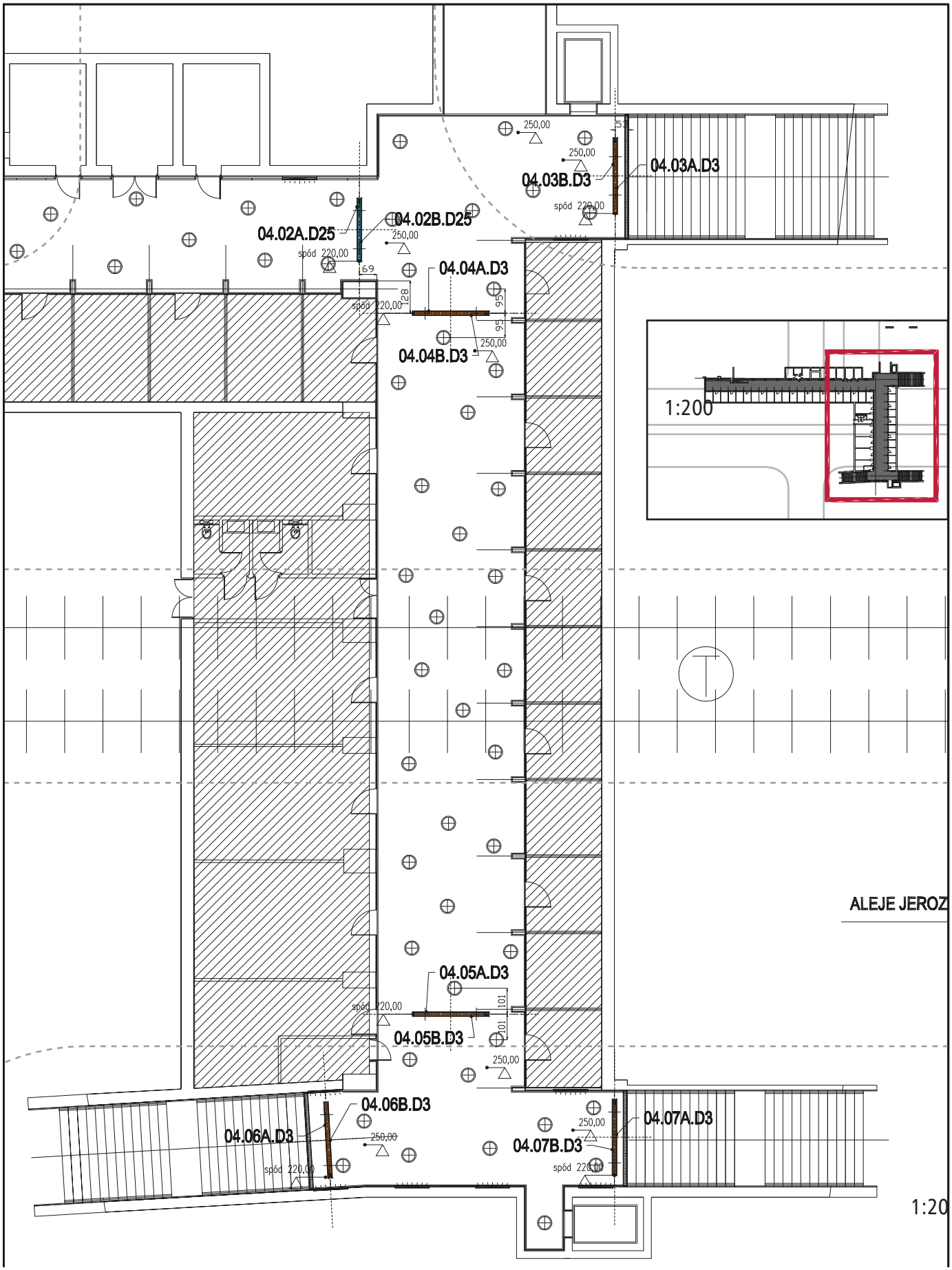
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04.04B.D3
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ALEJE JEROZ
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04.06B.D3
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spód 220,00
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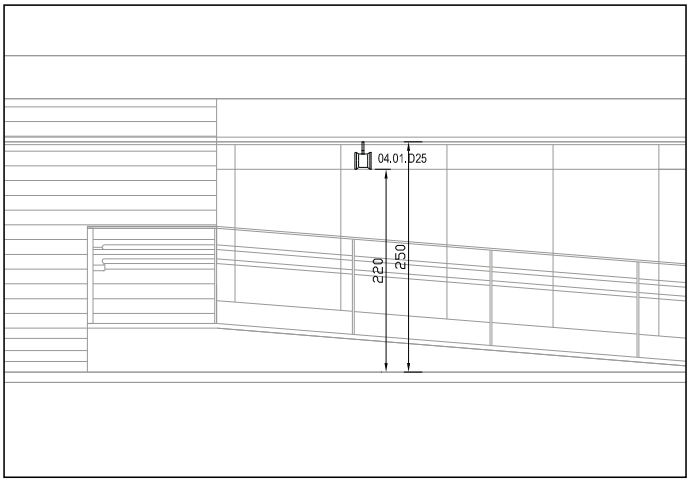
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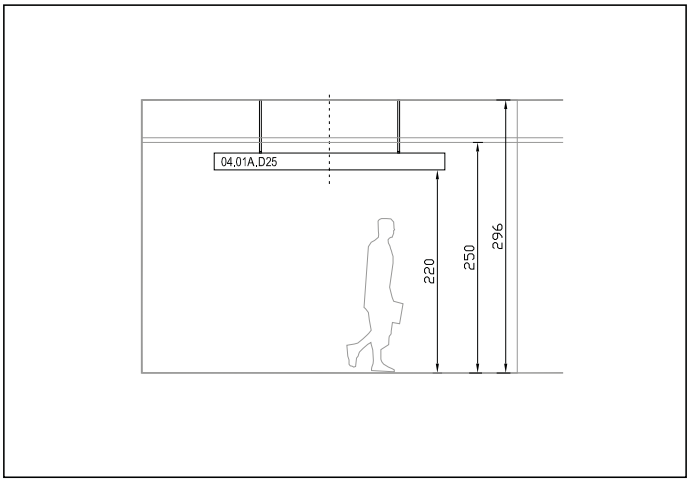
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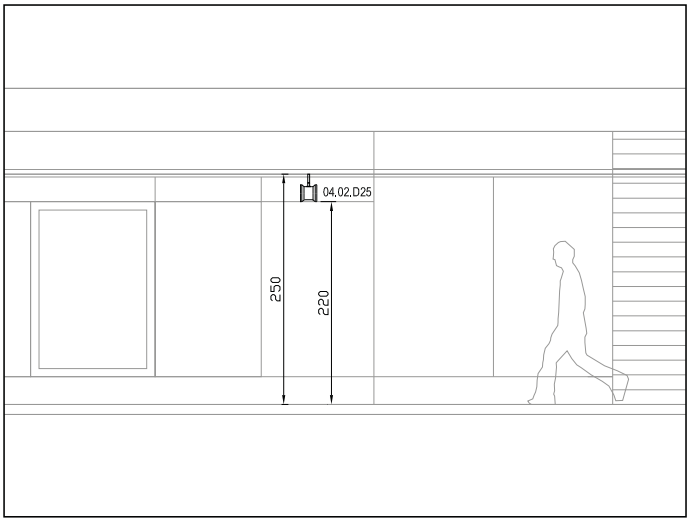
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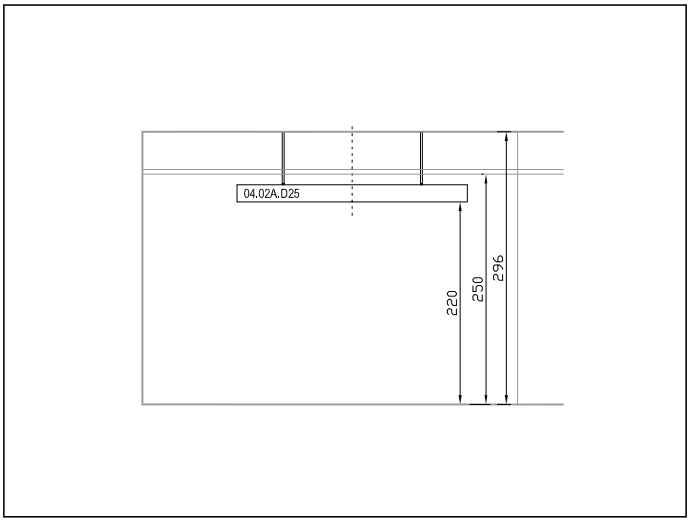
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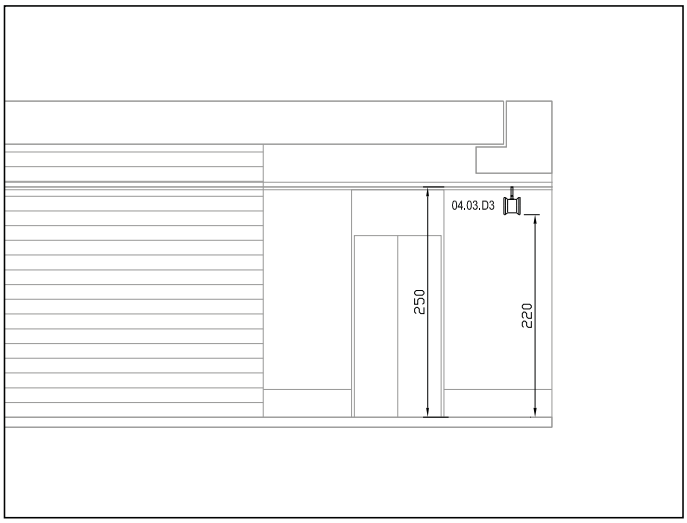
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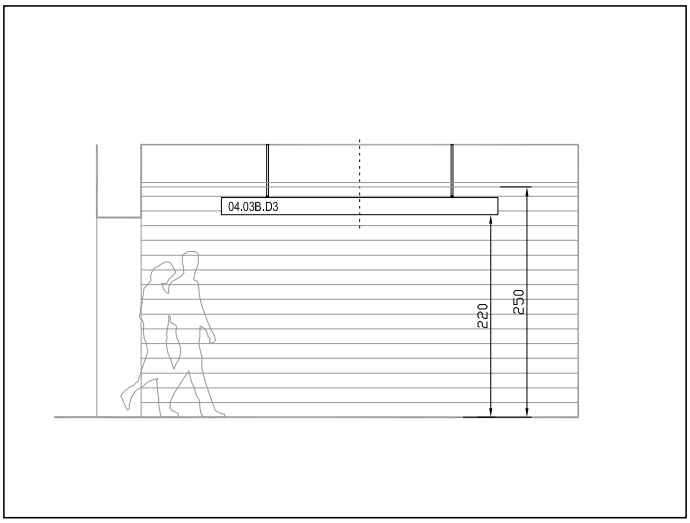
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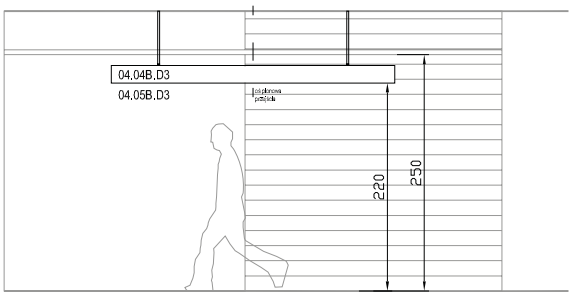


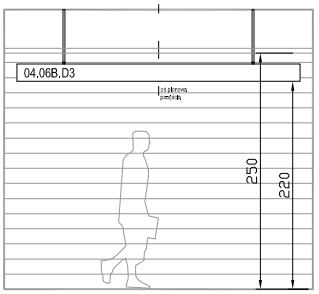


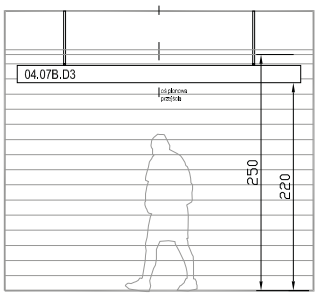


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04.01B.D25

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04.02B.D25

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04.03B.D3

04.04A.D3

04.04B.D3

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04.05B.D3

04.06A.D3

04.06B.D3

04.07A.D3

04.07B.D3

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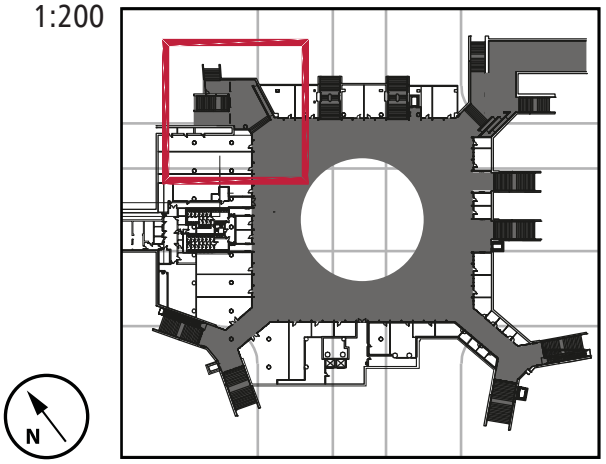

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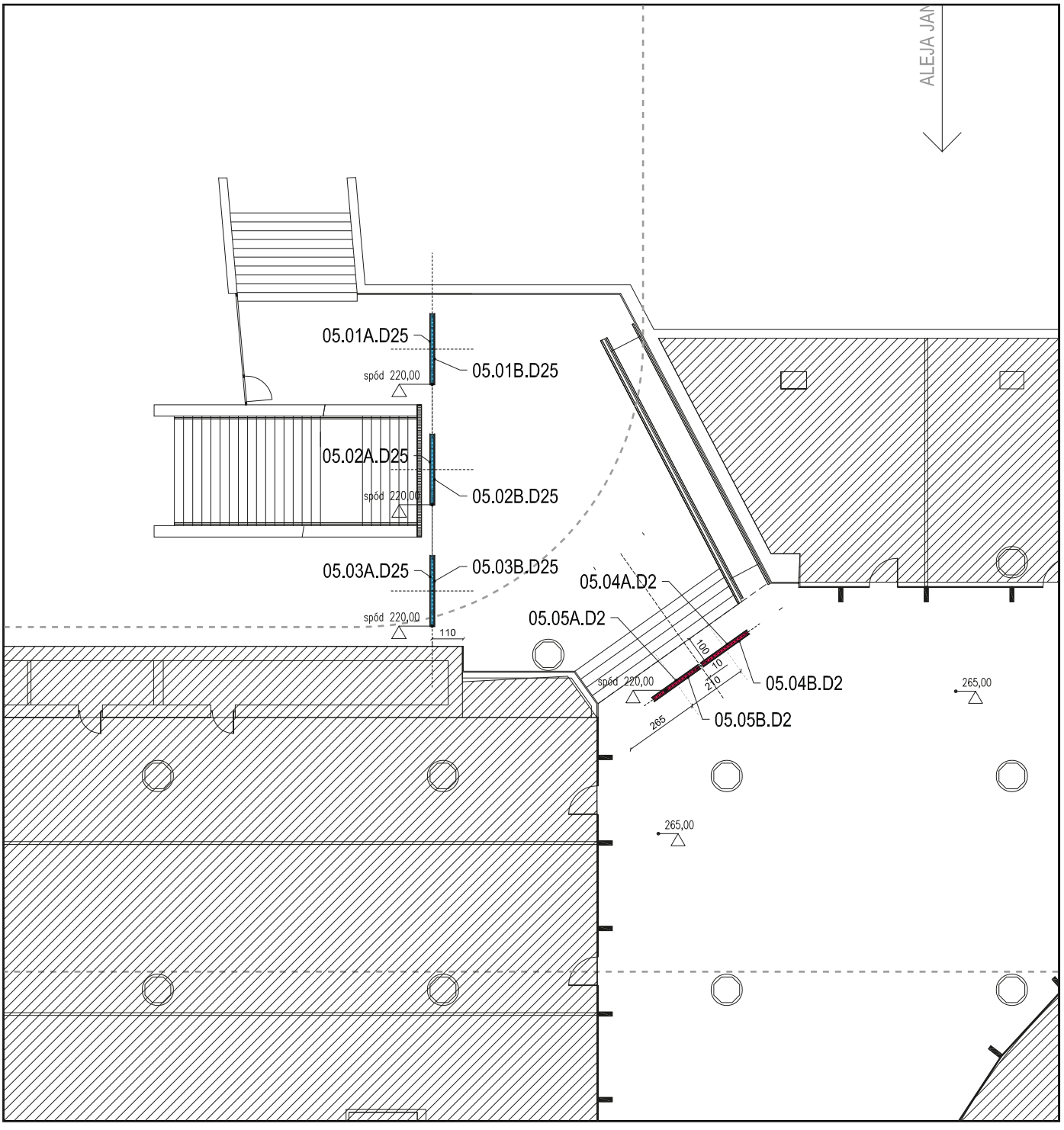
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spód 220,00
05.02A.D25
05.02B.D25
spód 220,00
05.03A.D25
05.03B.D25
spód 220,00
110
05.04A.D2
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05.05B.D2
265,00
265,00

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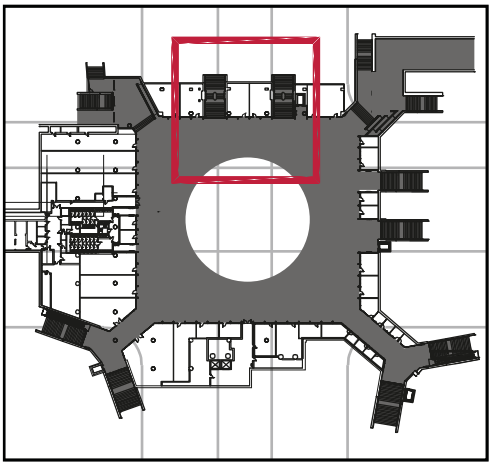

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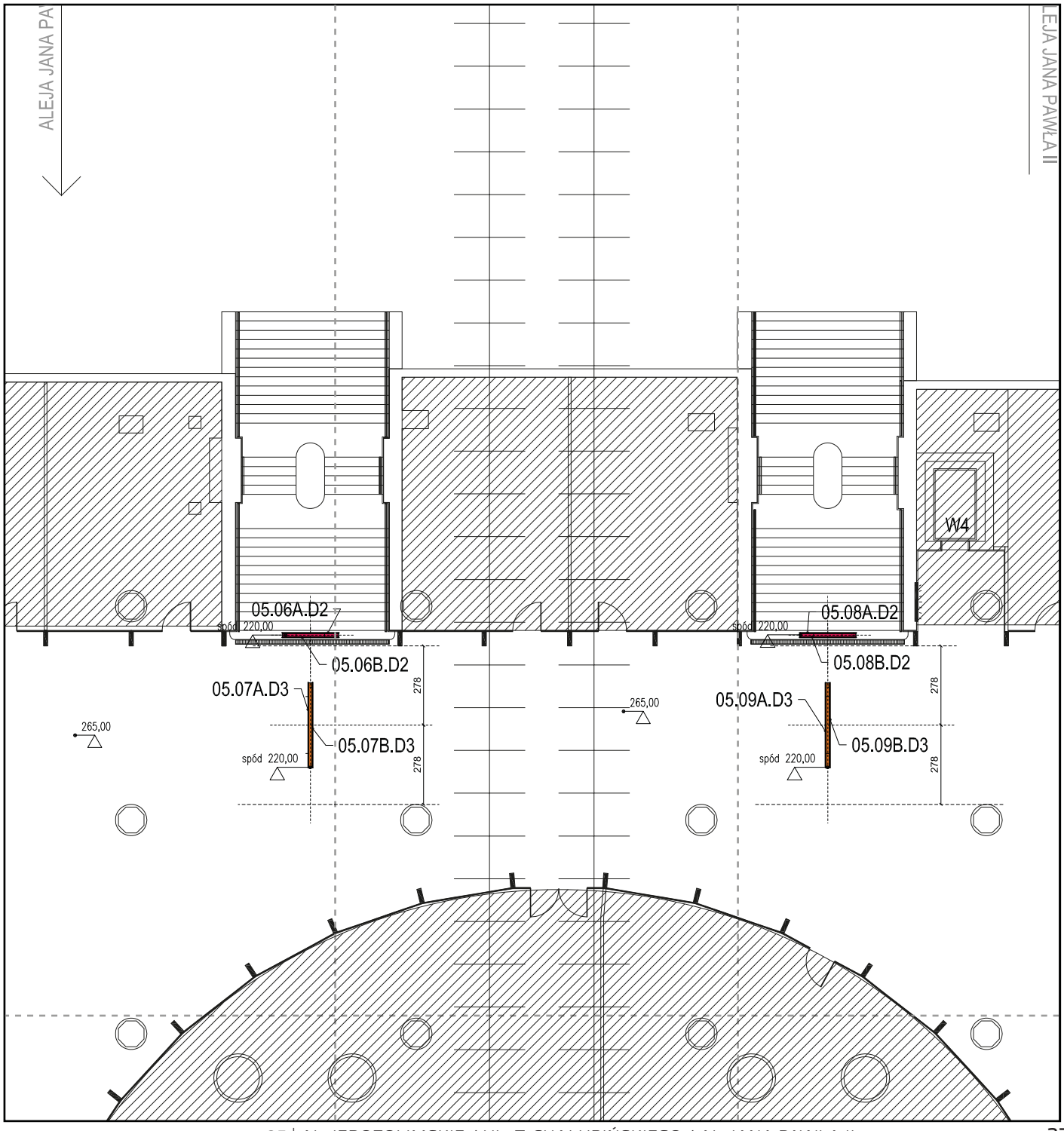
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LEJA JANA PAWŁA II
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05.06B.D2
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05.07B.D3
spód 220,00
278
278
265,00
265,00
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05.08B.D2
05.09A.D3
05.09B.D3
spód 220,00
278
278

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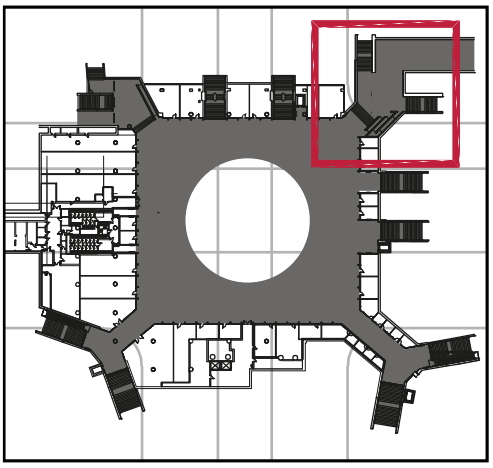

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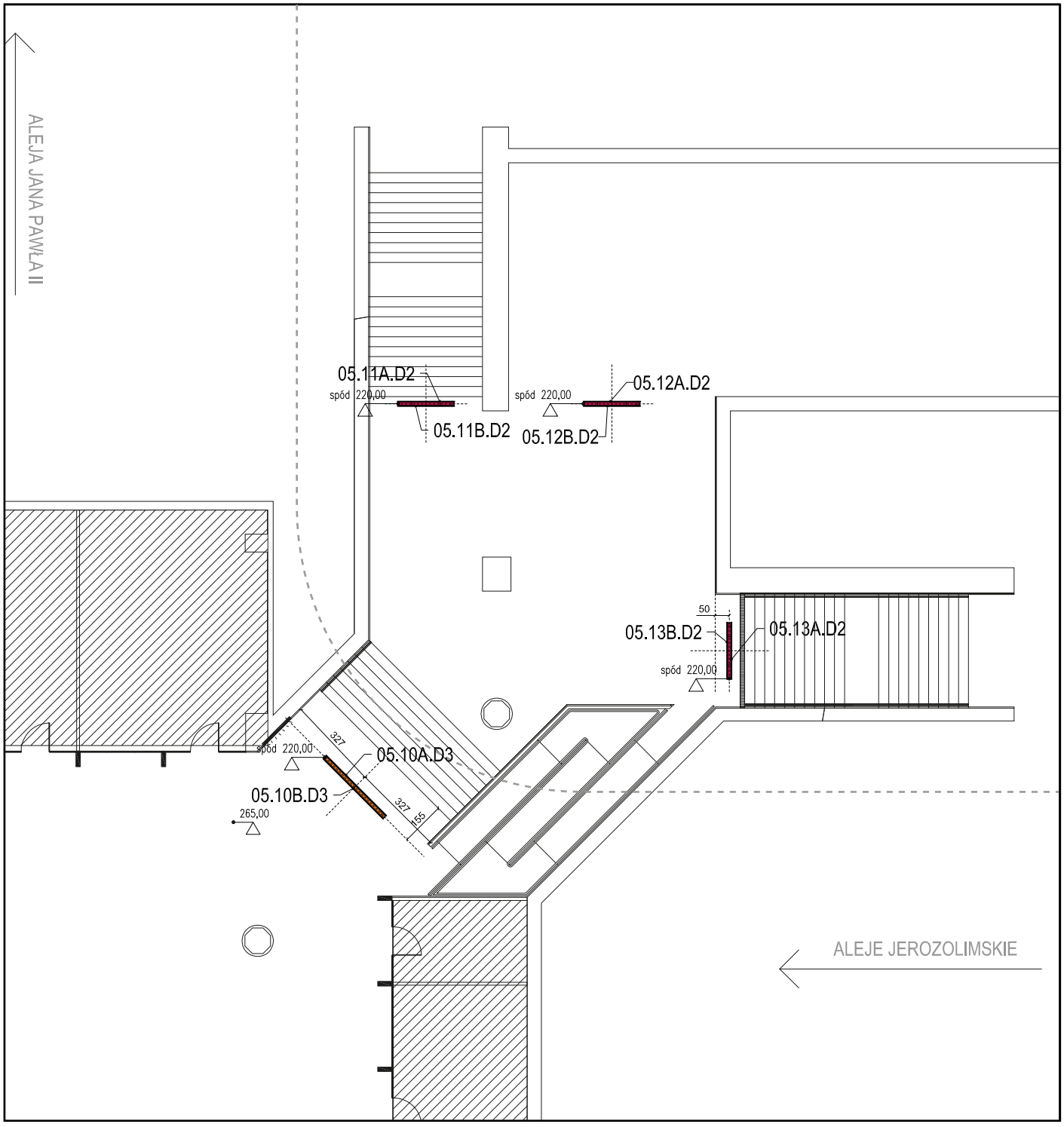
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155
ALEJE JEROZOLIMSKIE

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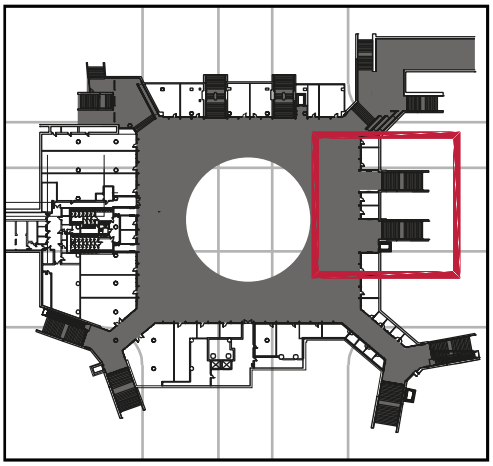

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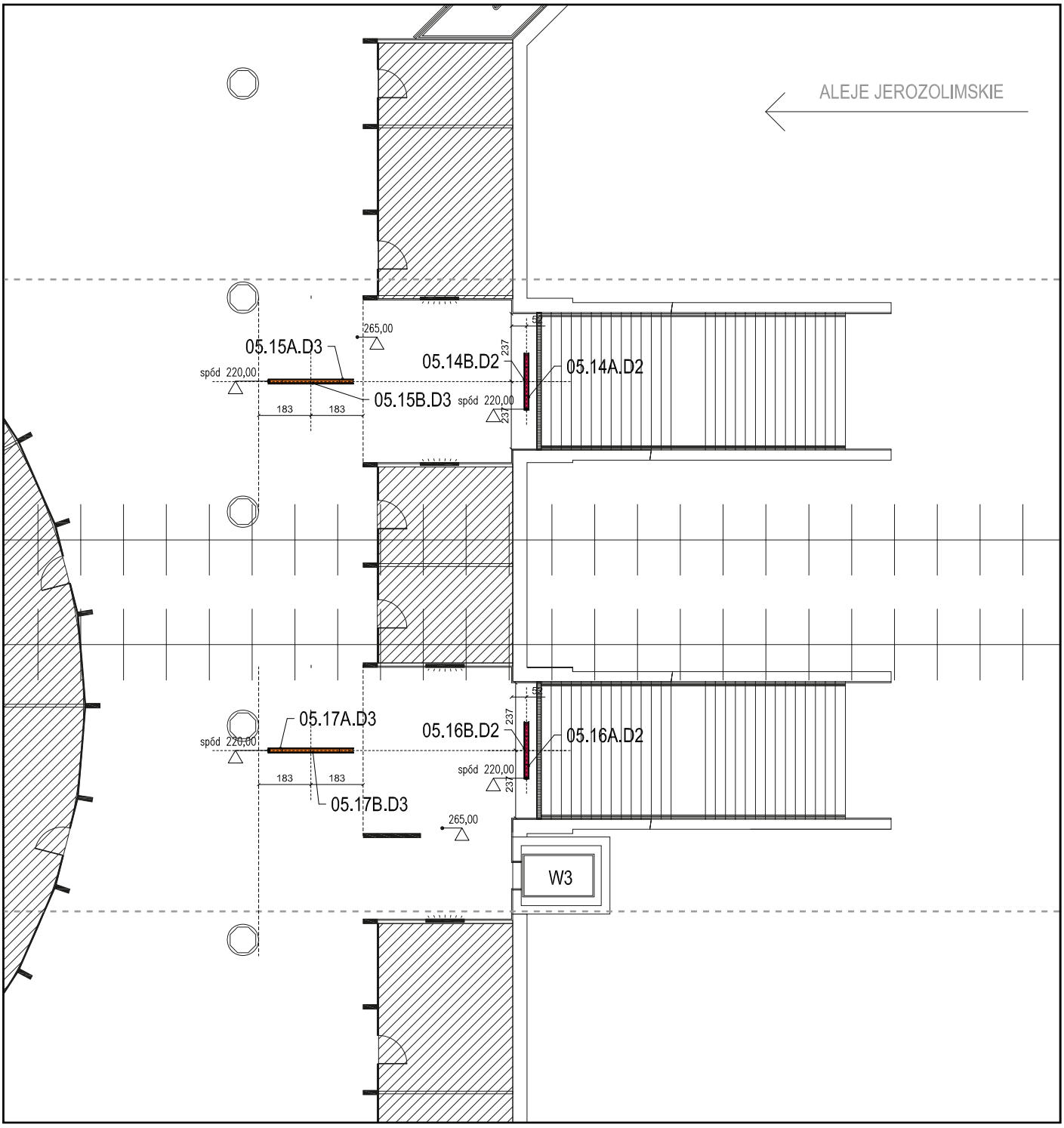
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265,00
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237
05.14A.D2
05.15B.D3
spód 220,00
237
05.17A.D3
spód 220,00
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spód 220,00
237
W3

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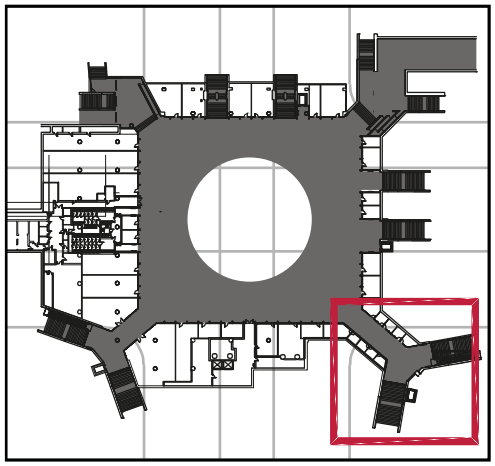

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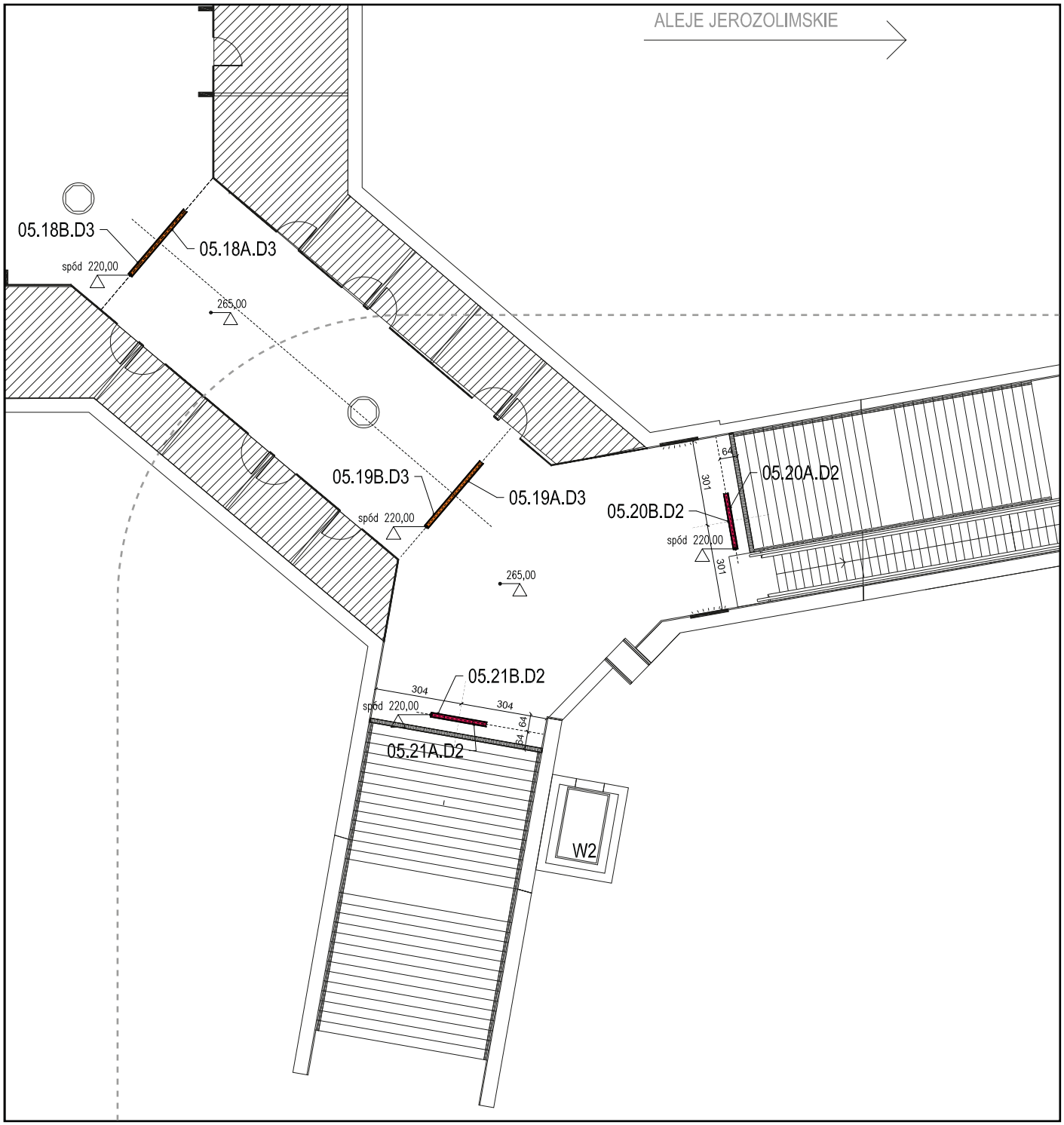
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05.20A.D2
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W2

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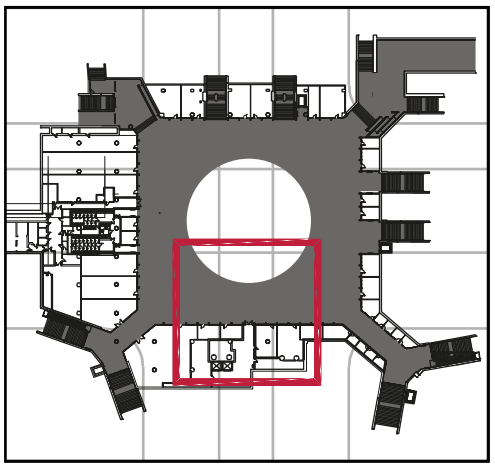

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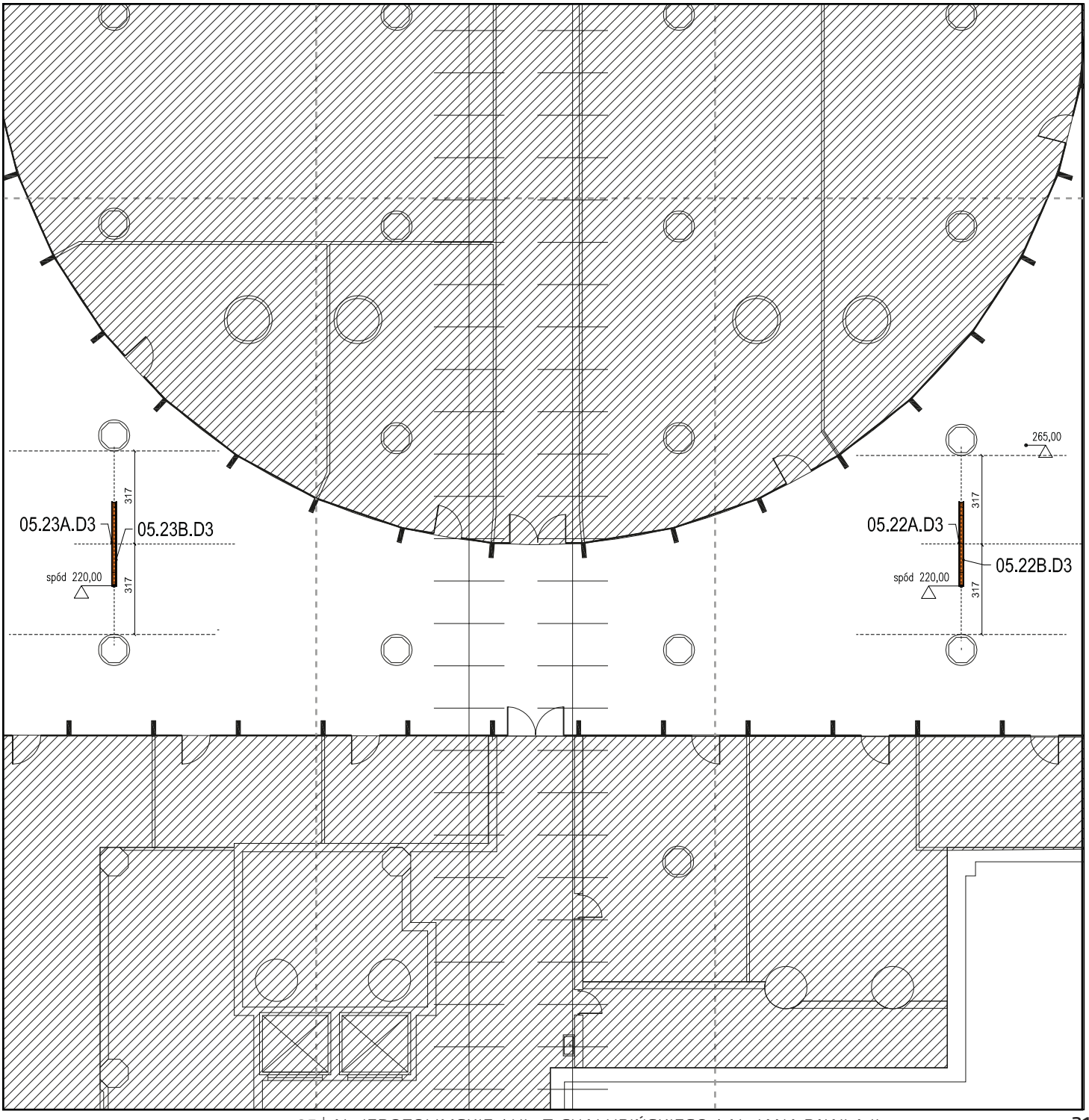
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spód 220,00

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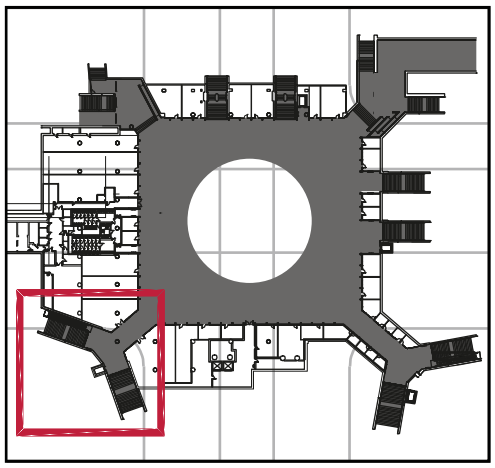

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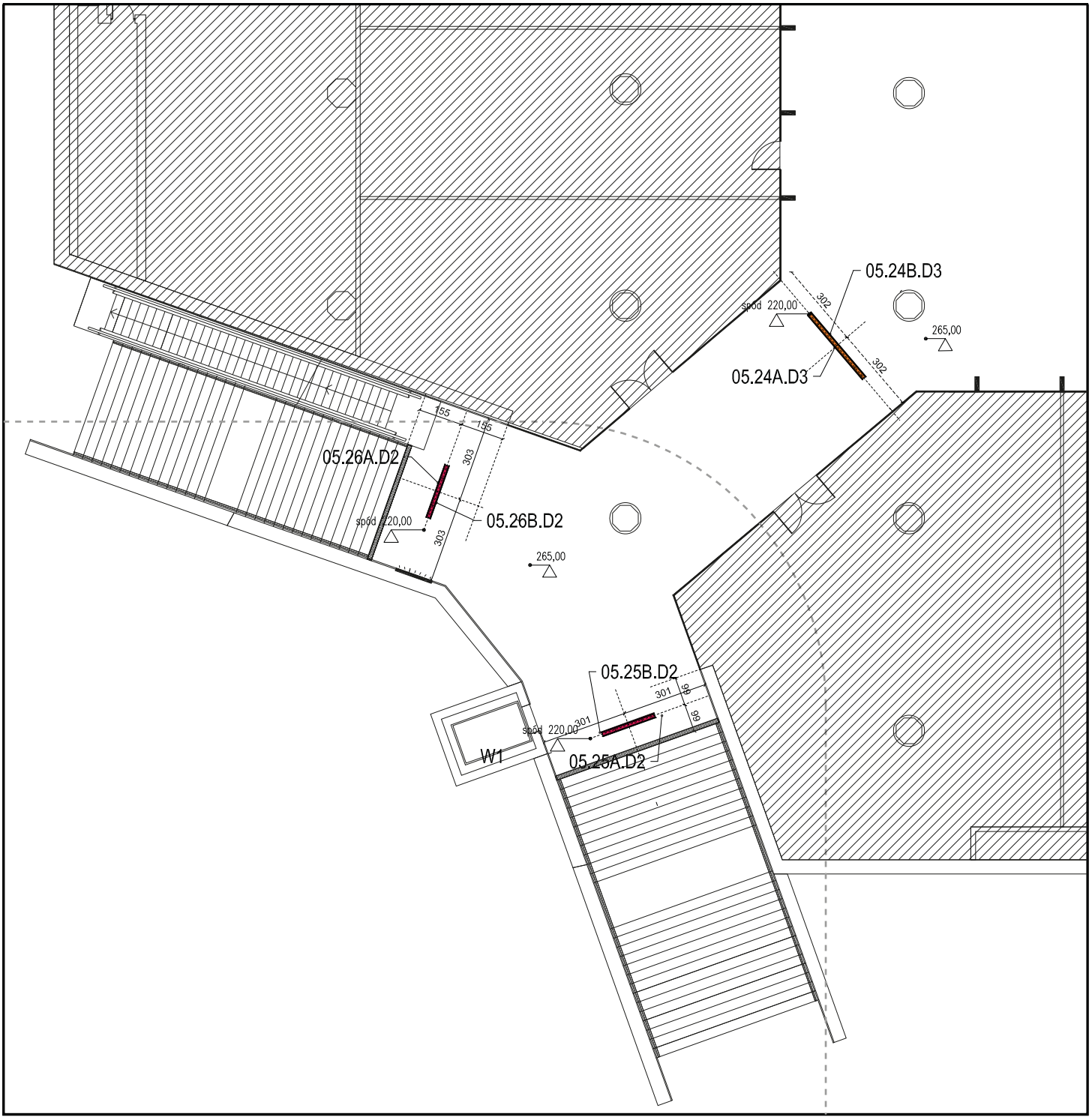
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05.26B.D2
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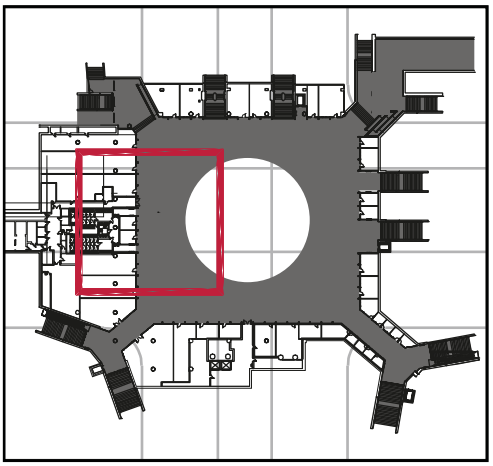
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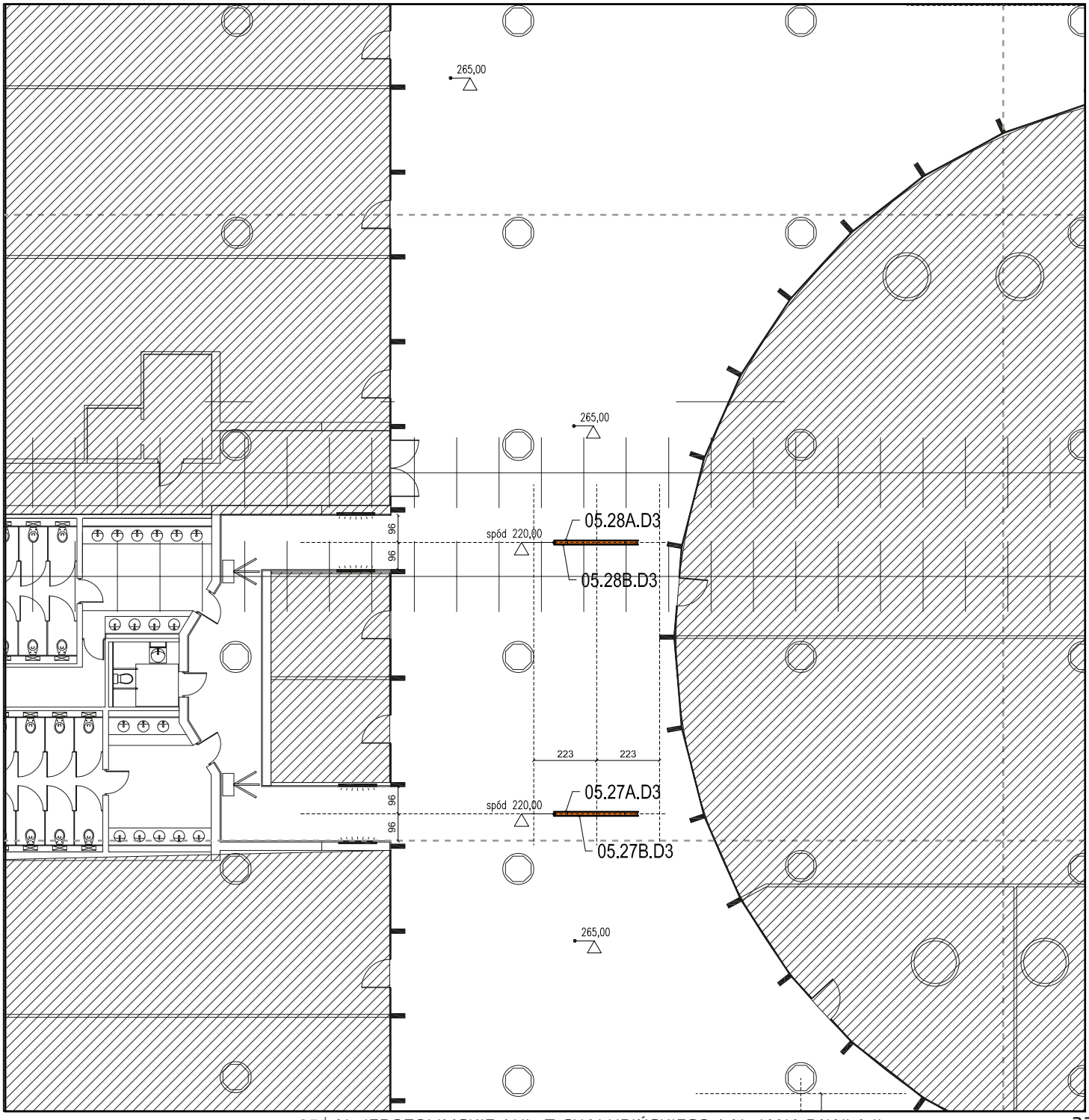
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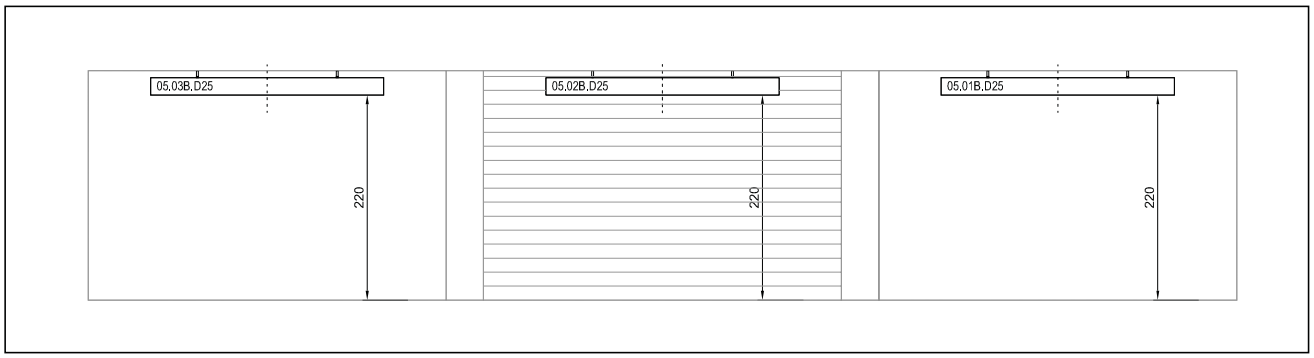
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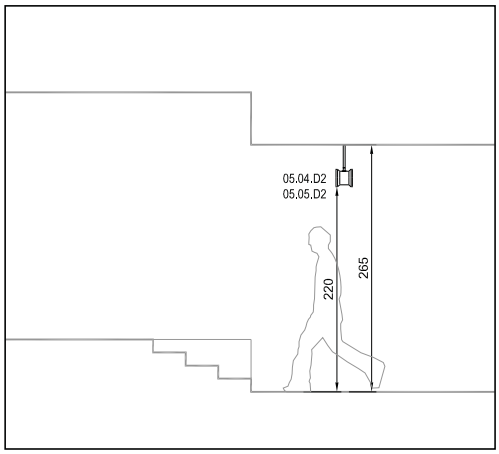
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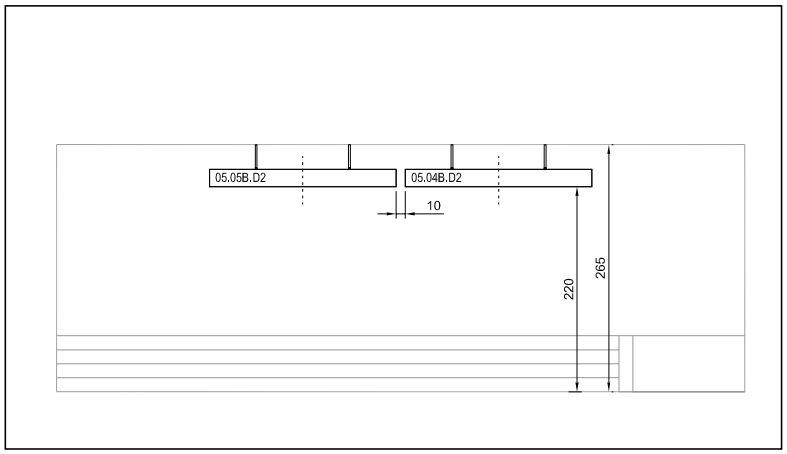
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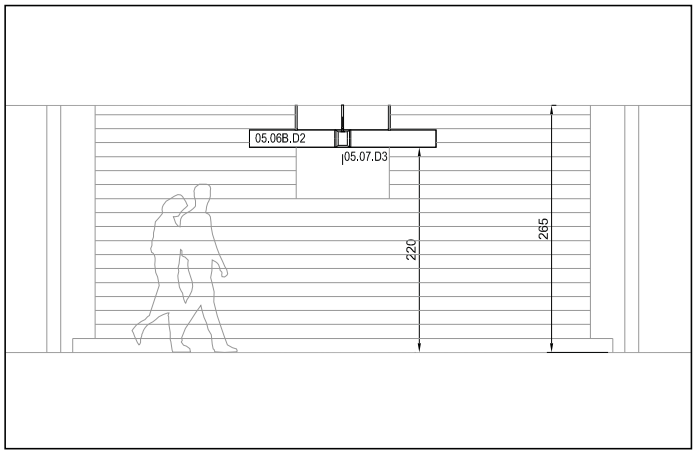
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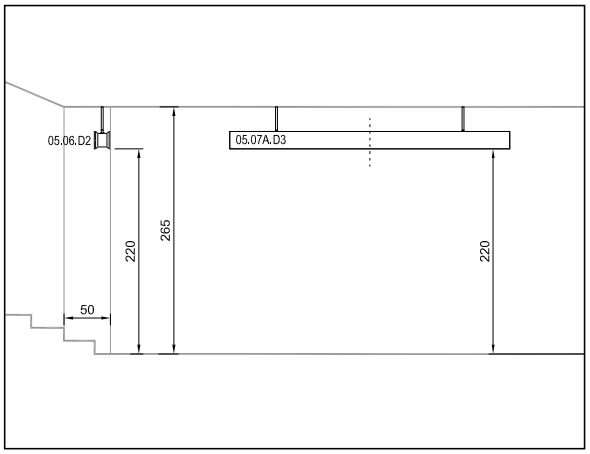
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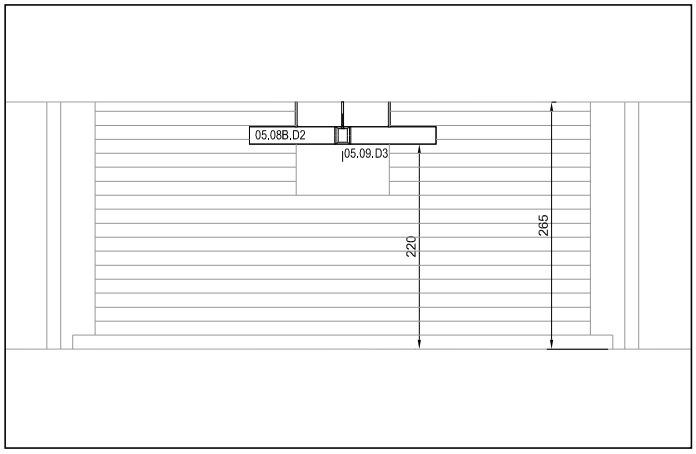
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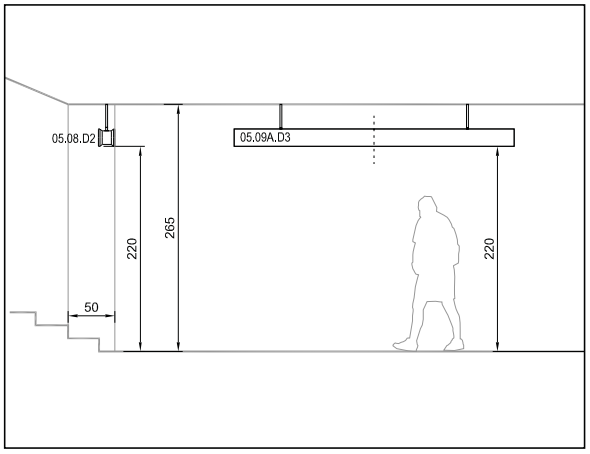
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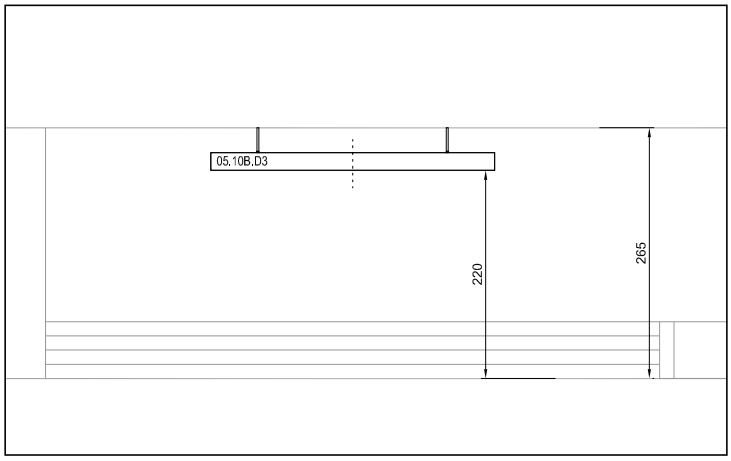
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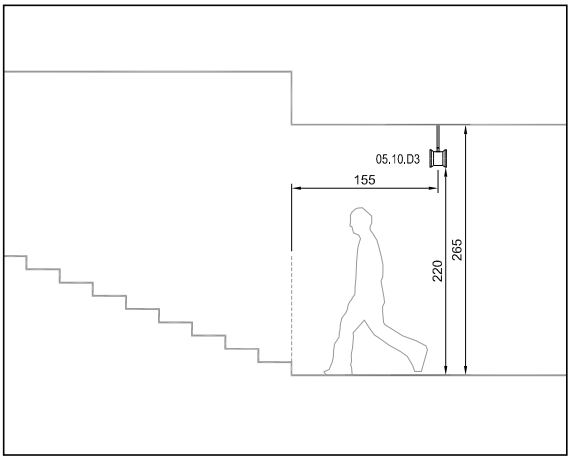
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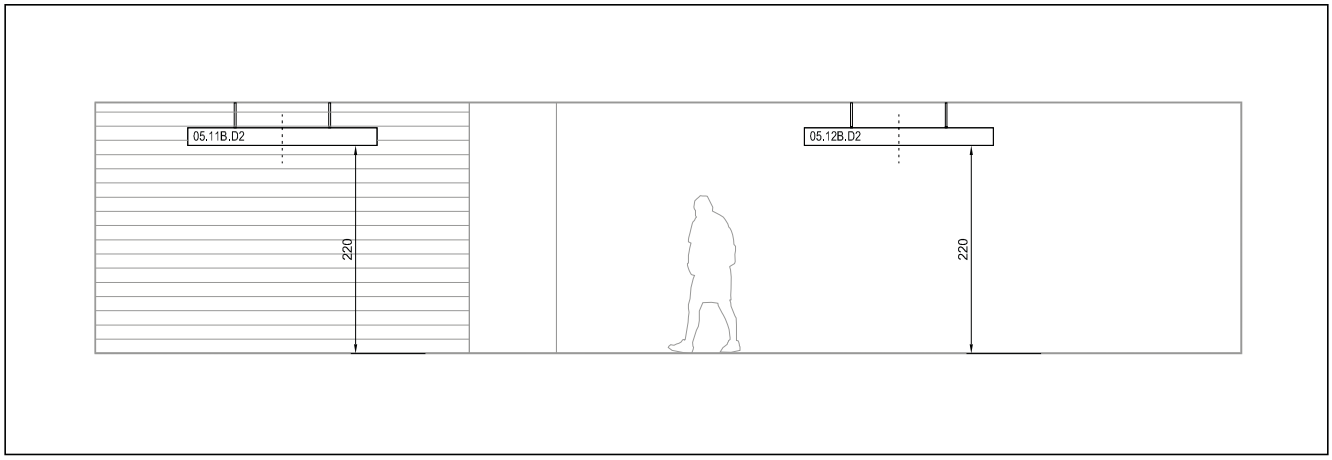
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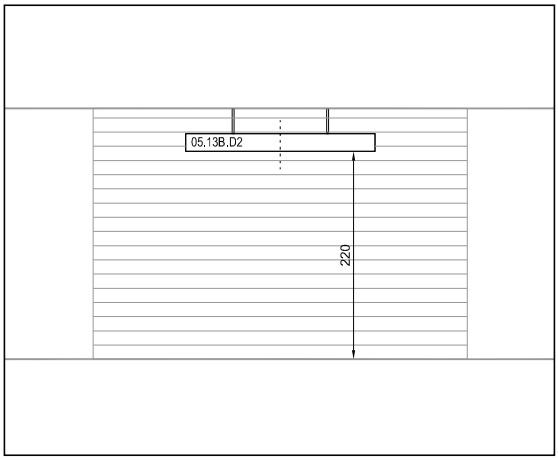
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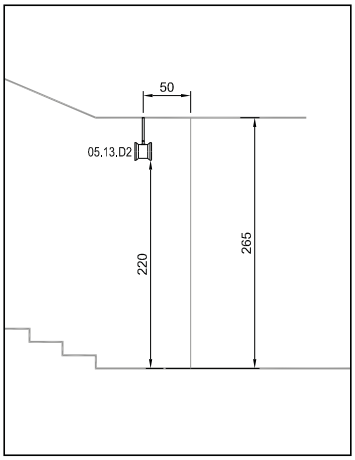
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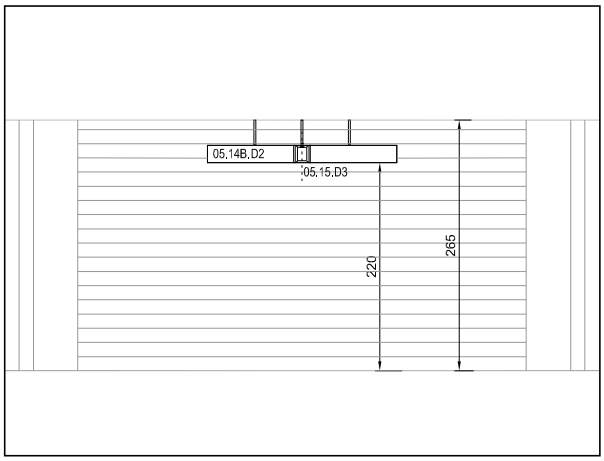
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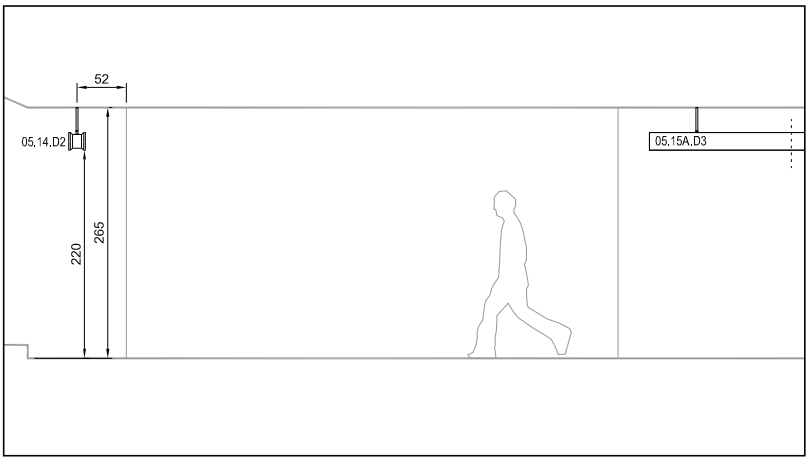
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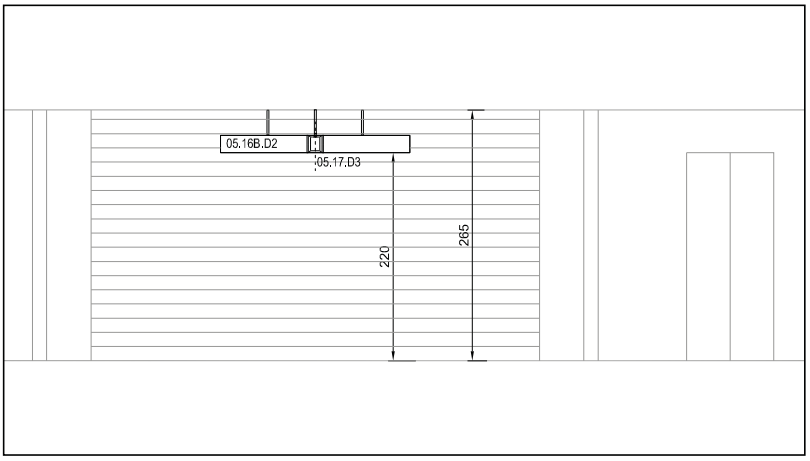
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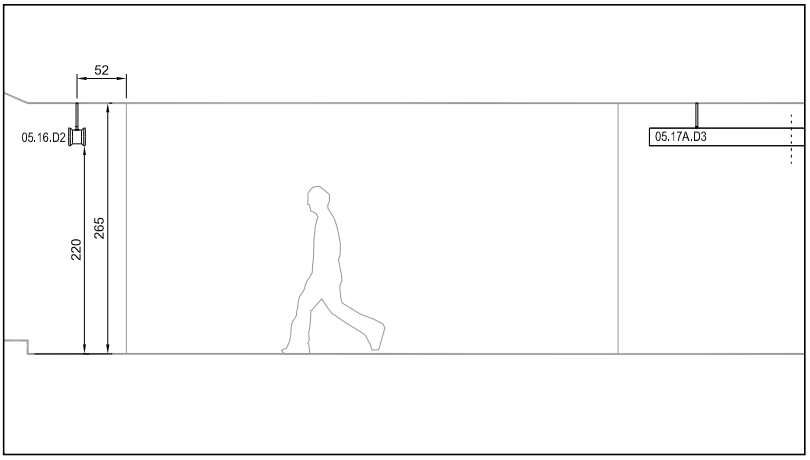
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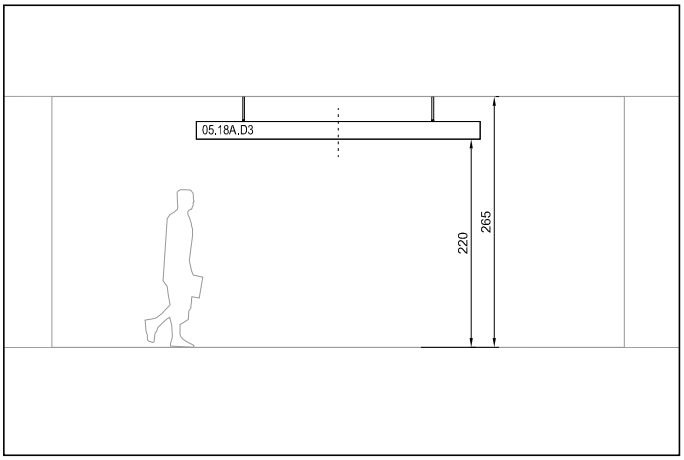
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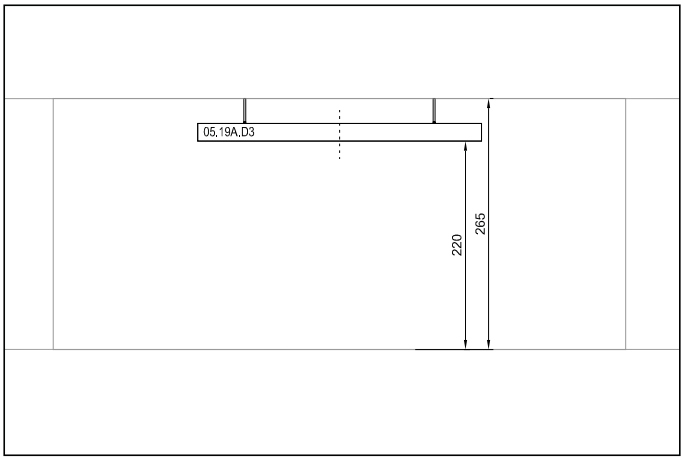
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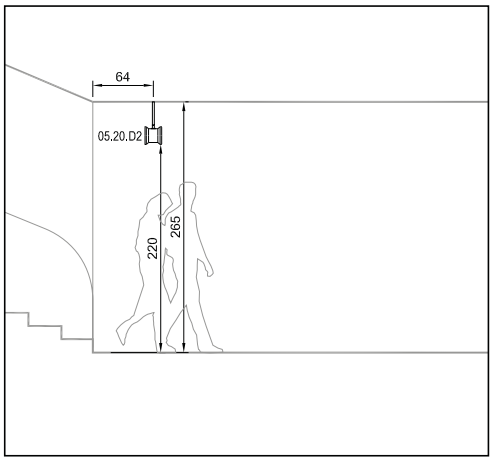
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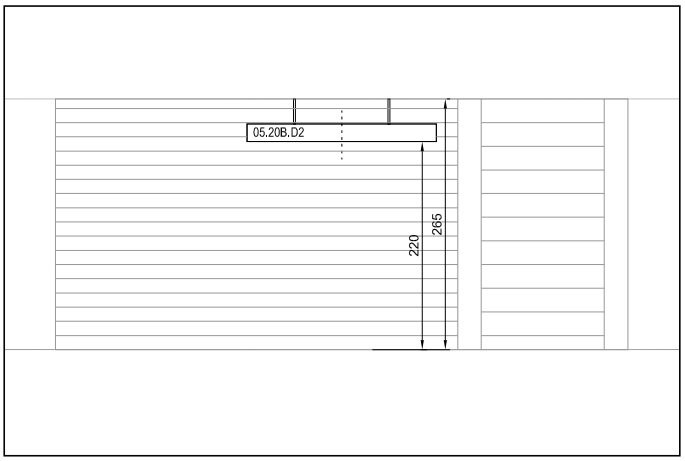
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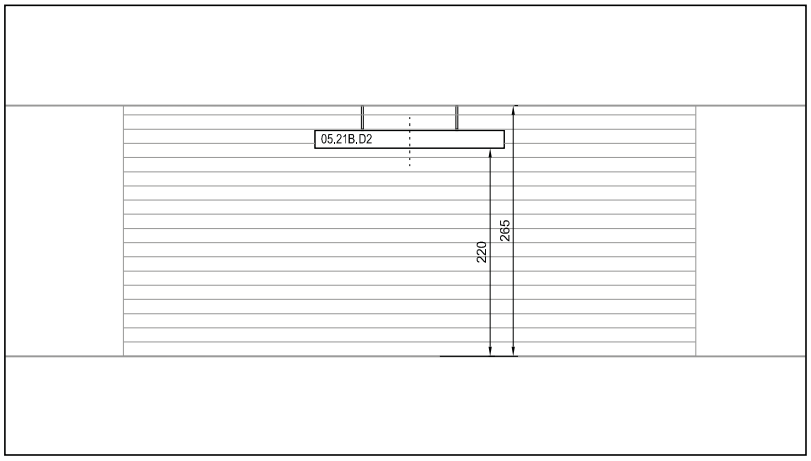
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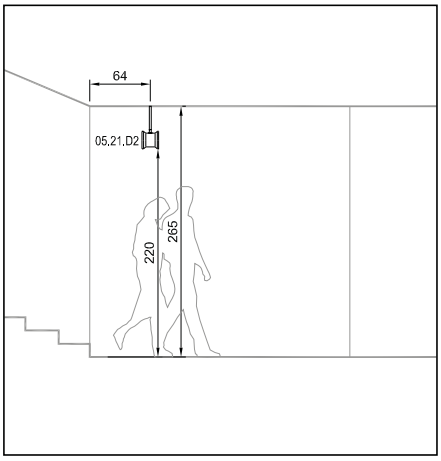
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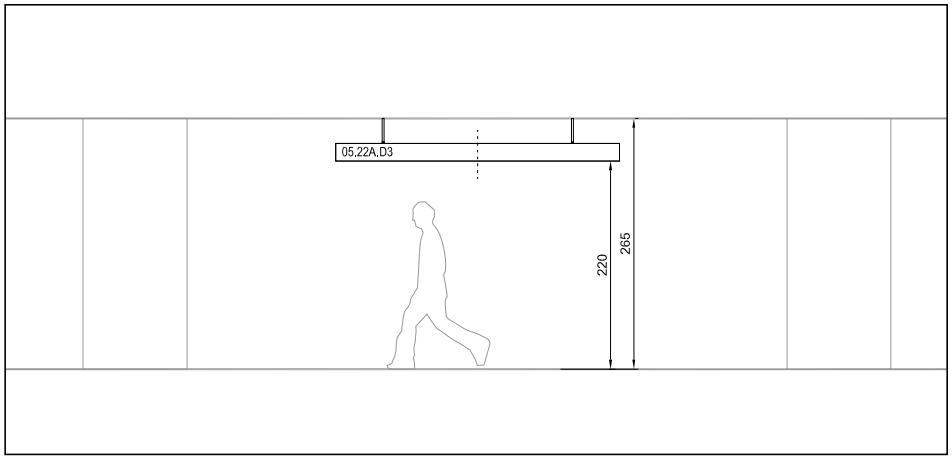
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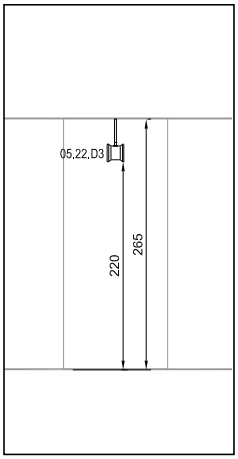
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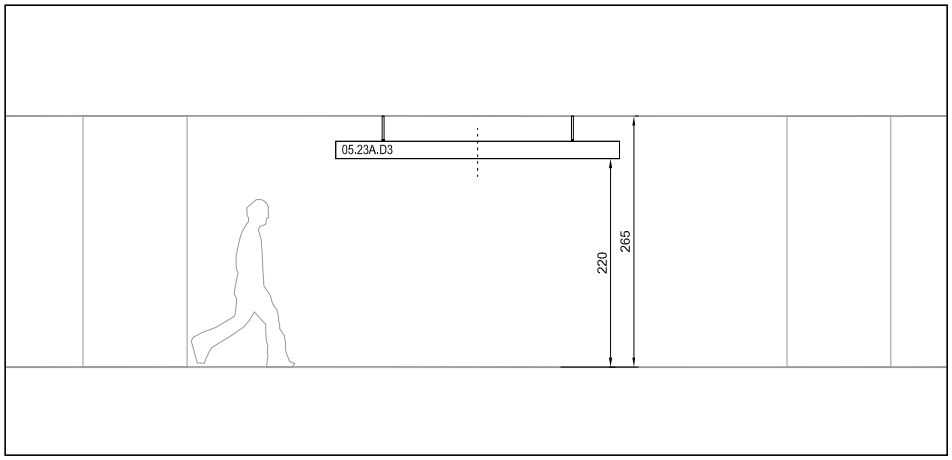
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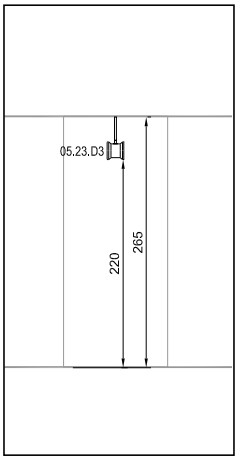
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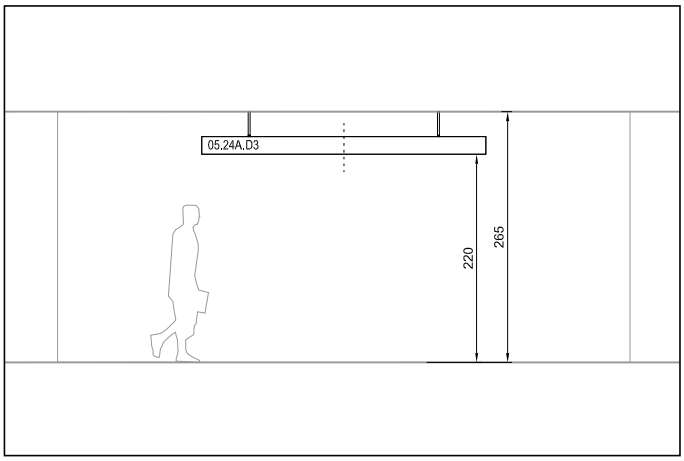
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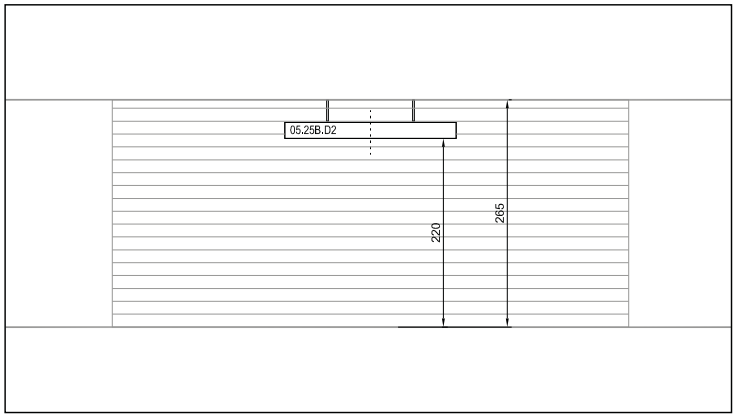
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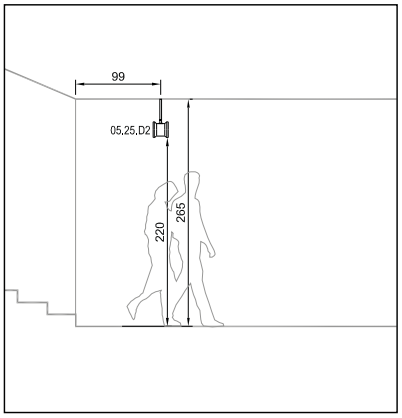
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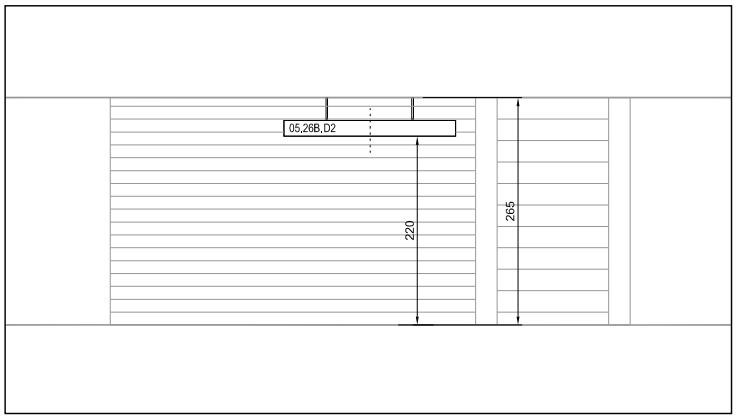
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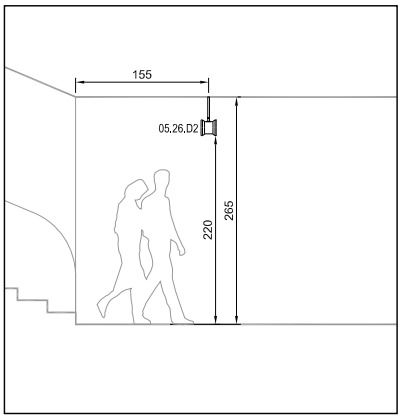
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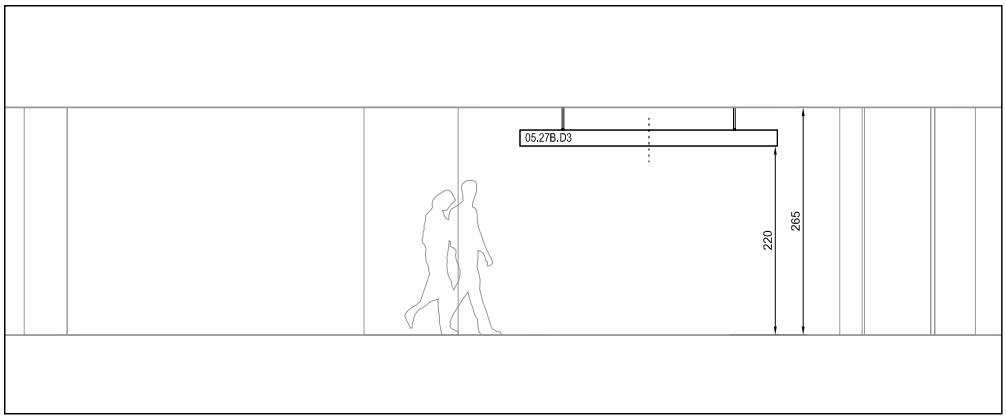
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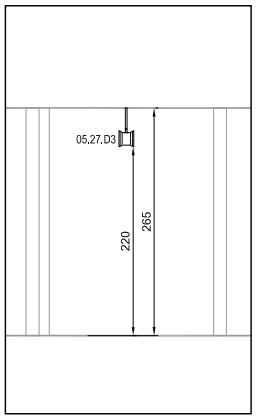
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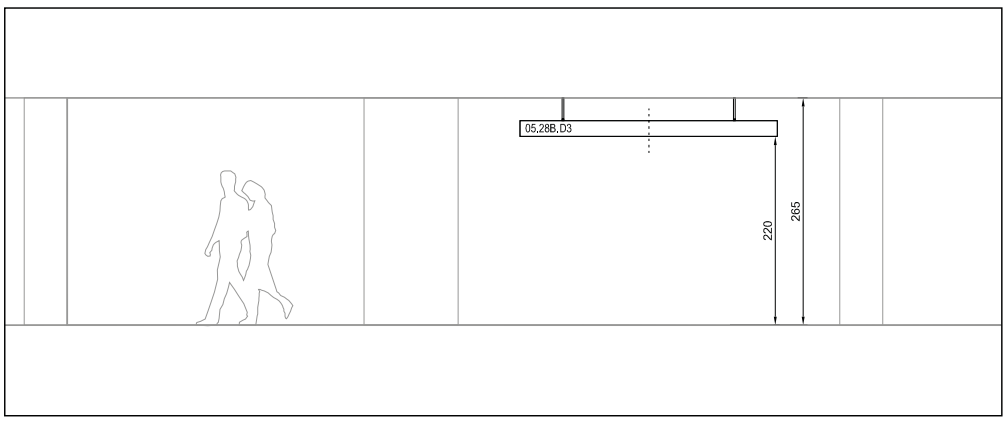
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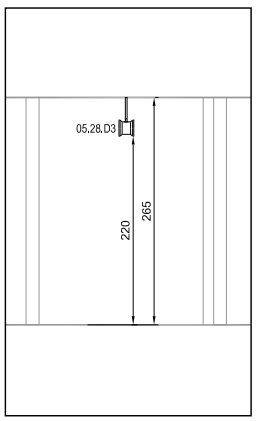
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05.02B.D25

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05.03B.D25

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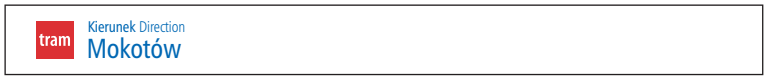
05.04B.D2

05.05A.D2

05.05B.D2

05.06A.D2

05.06B.D2



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05.08B.D2

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05.09B.D3

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05.10B.D3

05.11A.D2

05.11B.D2

05.12A.D2

05.12B.D2

05.13A.D2

05.13B.D2

05.14A.D2

05.14B.D2

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05.15B.D3

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05.16B.D2

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05.17B.D3

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05.18B.D3

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05.24B.D3

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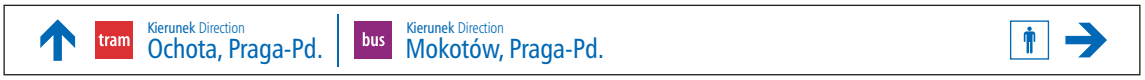


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# 06

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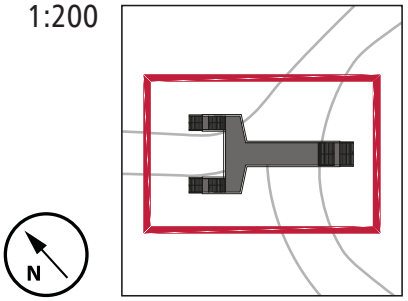



1:20

ULICA KOSZYKOWA

PLAC NA ROZDROŻU

ALEJA WYZWOLENIA

06.01A.D3

06.01B.D3

spód 225,00

245,00

06.03A.D3

06.03B.D3

246,00

spód 225,00

246,00

06.04A.D3

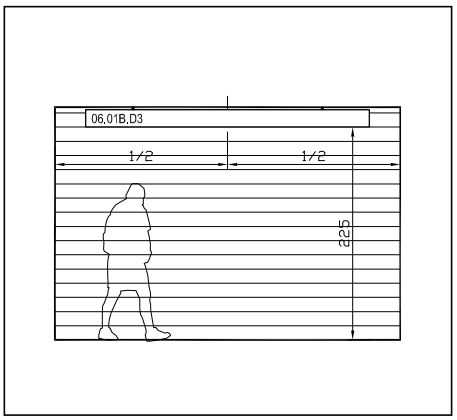
06.04B.D3

245,00

06.02A.D3

06.02B.D3

spód 225,00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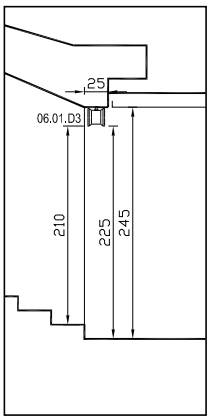
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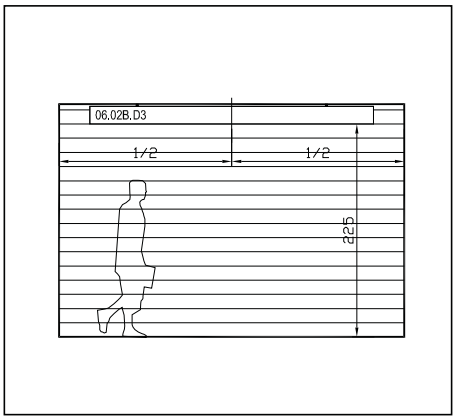
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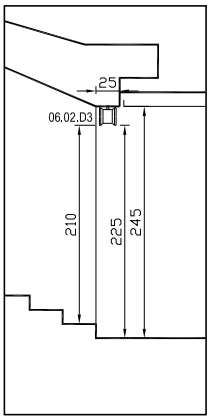
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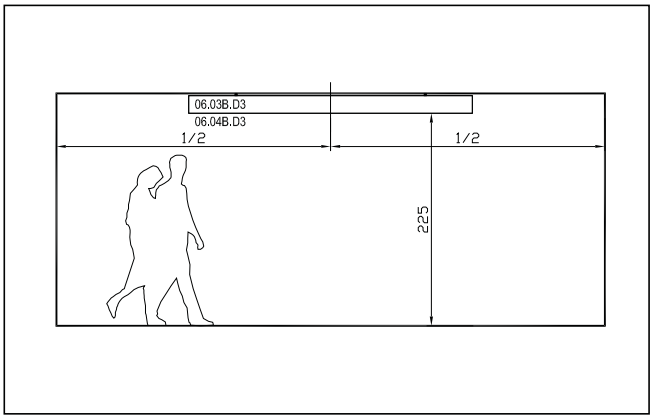
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06.04B.D3
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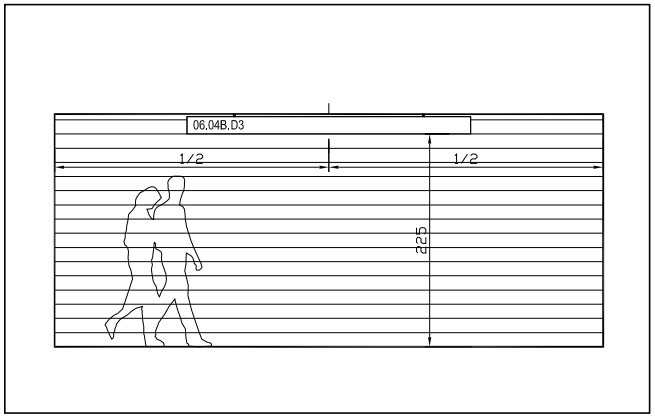
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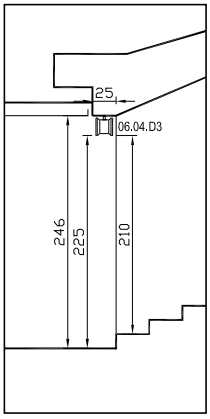
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06.01A.D3

06.01B.D3

06.02A.D3

06.02B.D3

06.03A.D3

06.03B.D3

06.04A.D3

06.04B.D3

# 07

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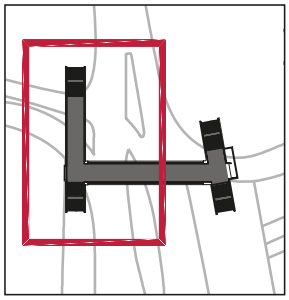

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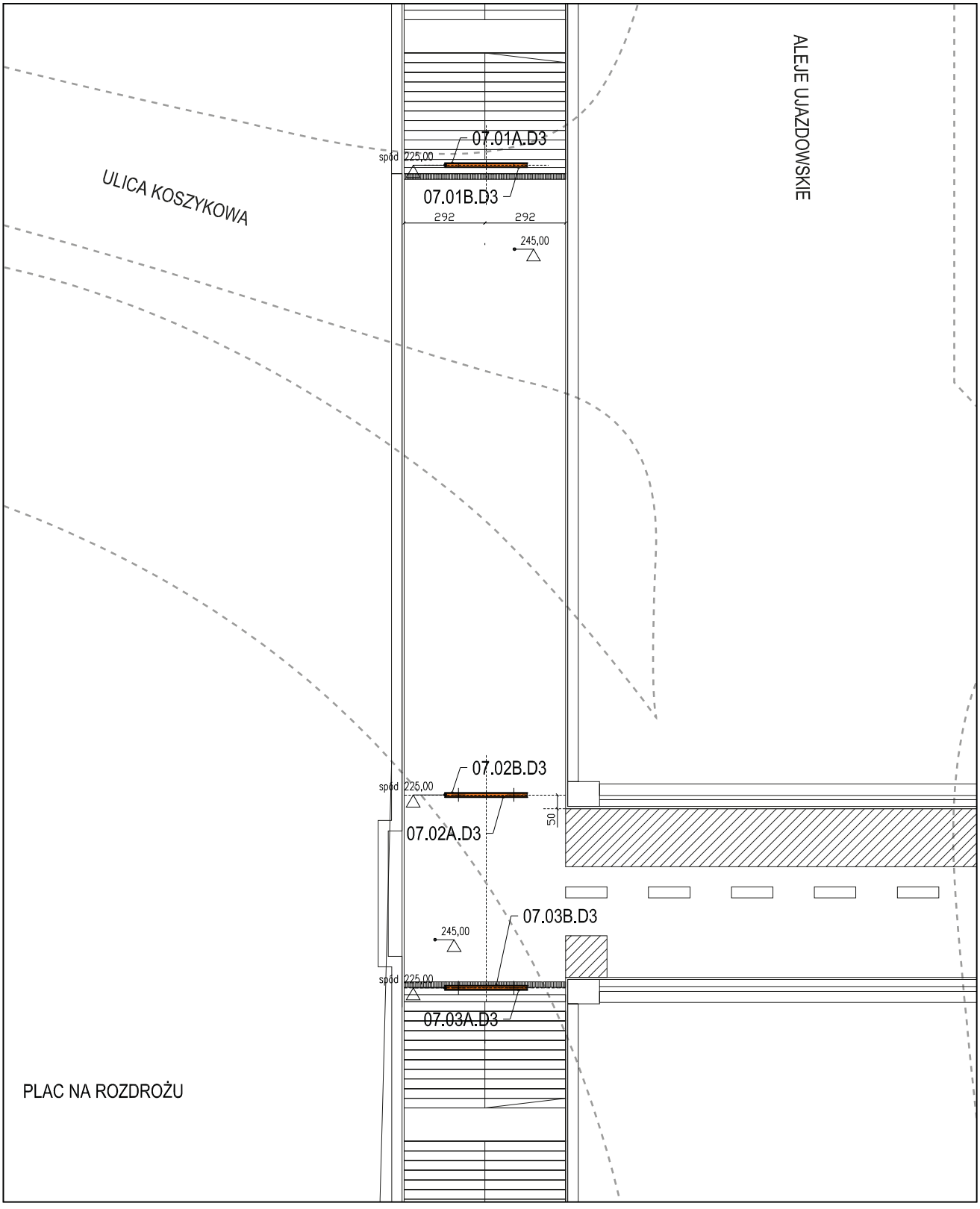
ULICA KOSZYKOWA
ALEJE UJAZDOWSKIE
07.01A.D3
spód 225,00
07.01B.D3
292
292
245,00
07.02B.D3
spód 225,00
50
07.02A.D3
07.03B.D3
245,00
spód 225,00
07.03A.D3
PLAC NA ROZDROŻU

# 07

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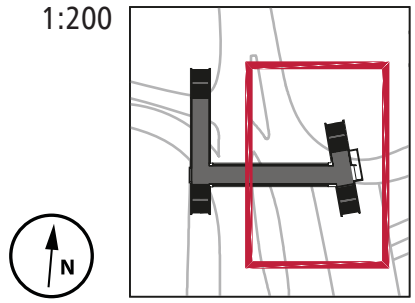


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ALEJE UJAZDOWSKIE

07.04A.D3

spód 225,00

07.04B.D3

290

290

245,00

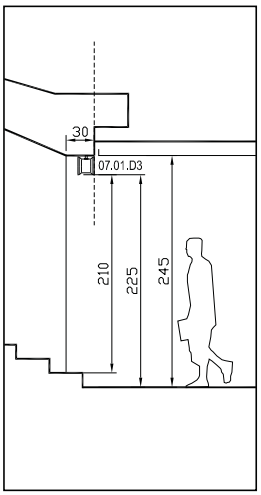
245,00

07.05B.D3

spód 225,00

07.05A.D3

bus Pl. Na Rozdrożu 02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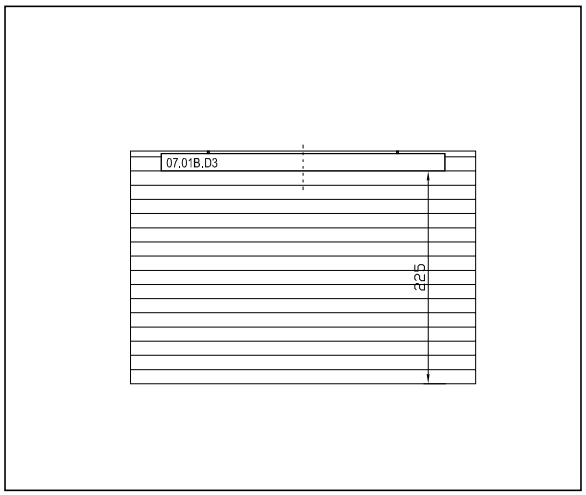
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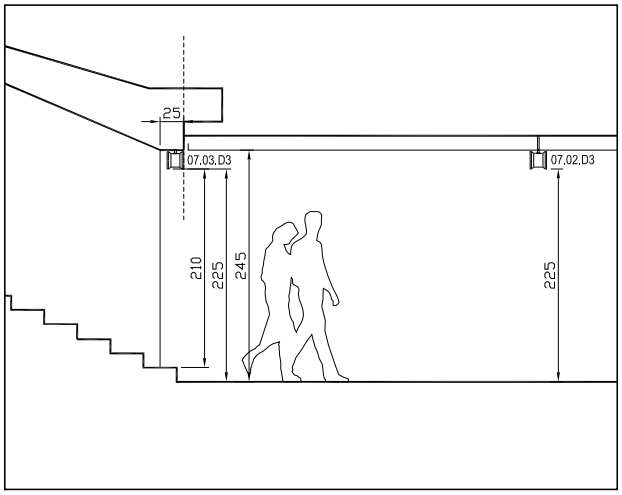
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07.02.D3
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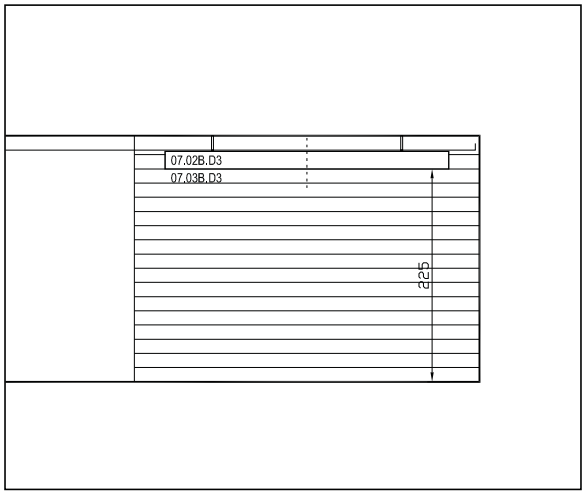
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07.03B.D3
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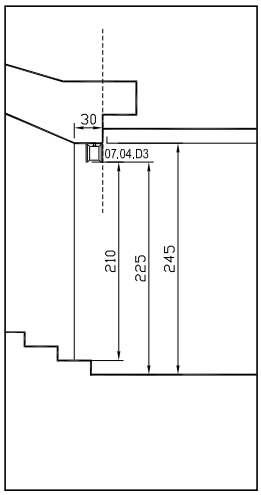
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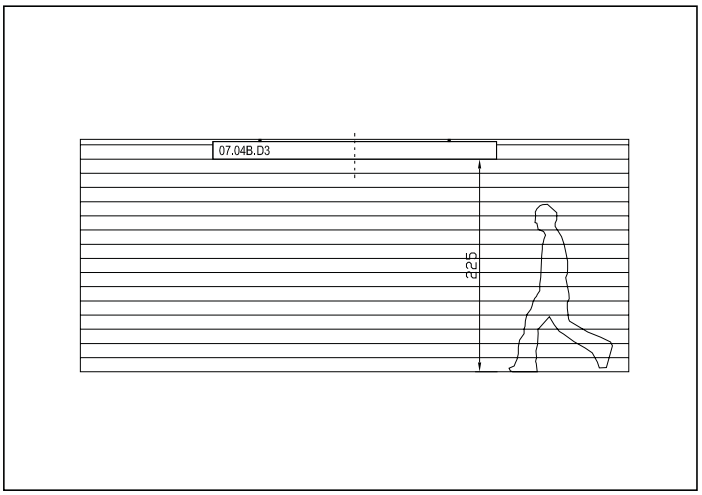
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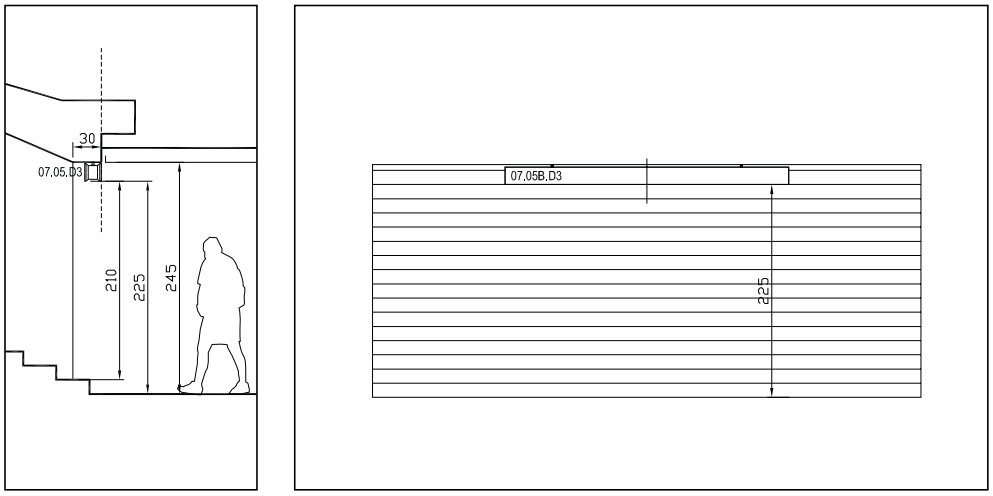


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07.01A.D3

07.01B.D3

07.02A.D3

07.02B.D3

07.03A.D3

07.03B.D3

07.04A.D3

07.04B.D3

07.05A.D3

07.05B.D3

**AKTUALNIE PRZEJŚCIE WYNAJĘTE.**
INSTALOWANIE NOŚNIKÓW INFORMACJI NIE JEST REKOMENDOWANE.
W POBLIŻU ZNAJDUJE SIĘ NAZIEMNE PRZEJŚCIE DLA PIESZYCH.

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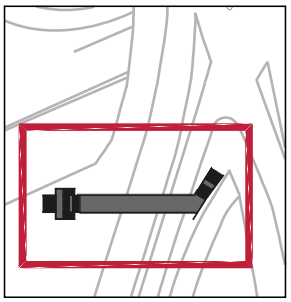

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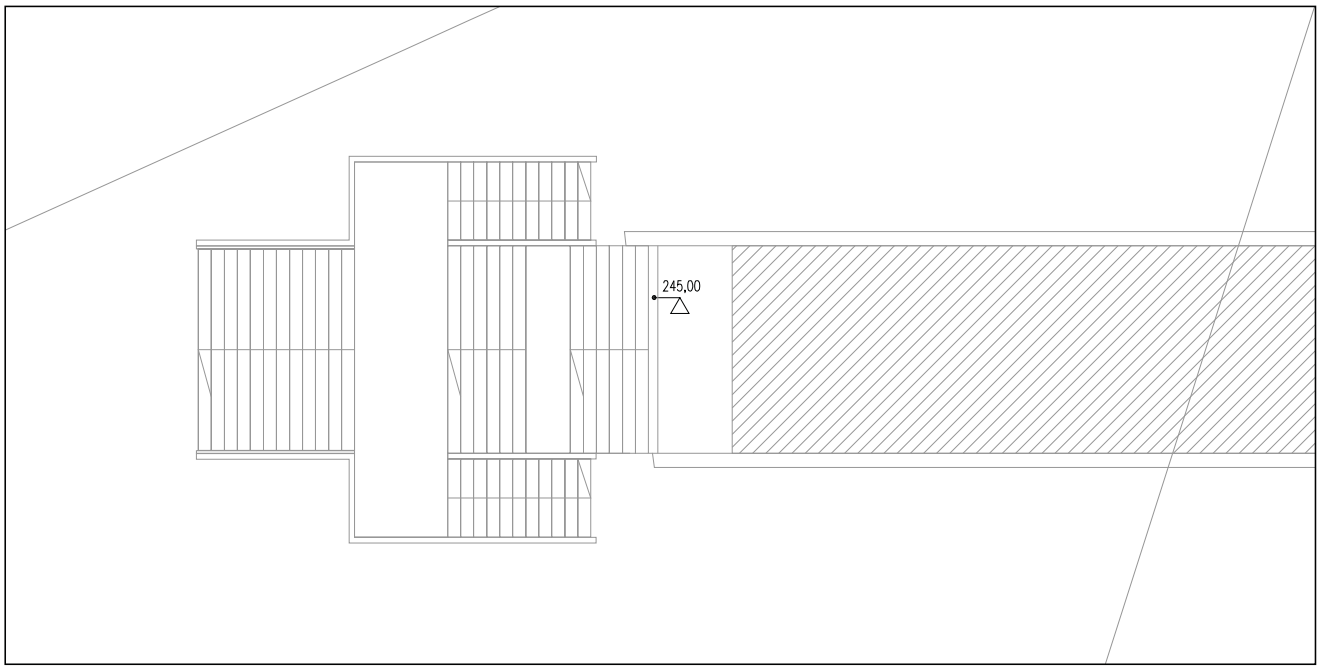


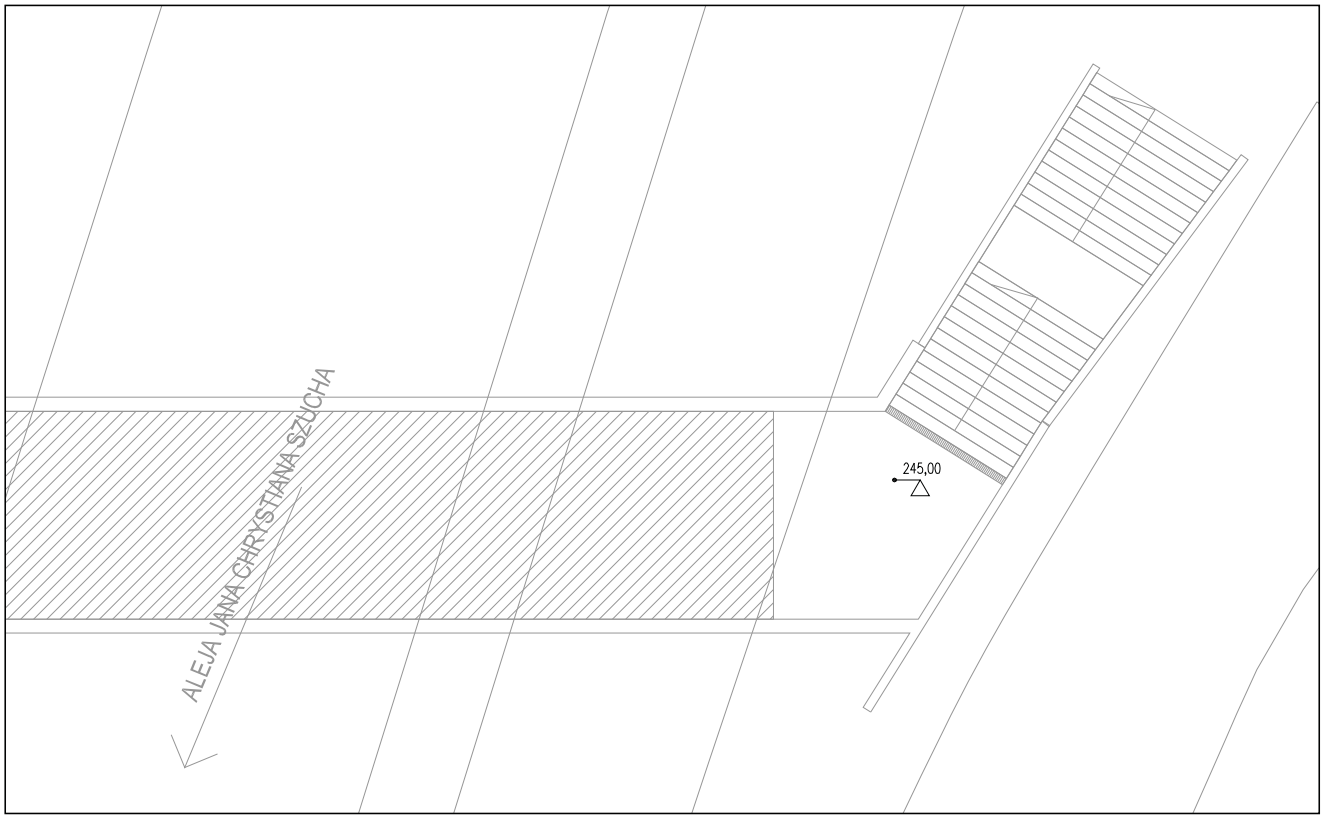

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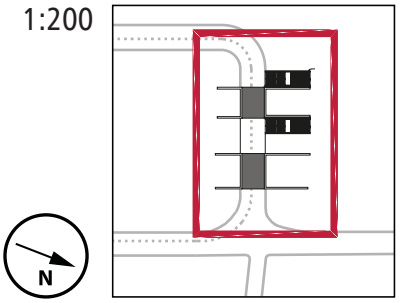


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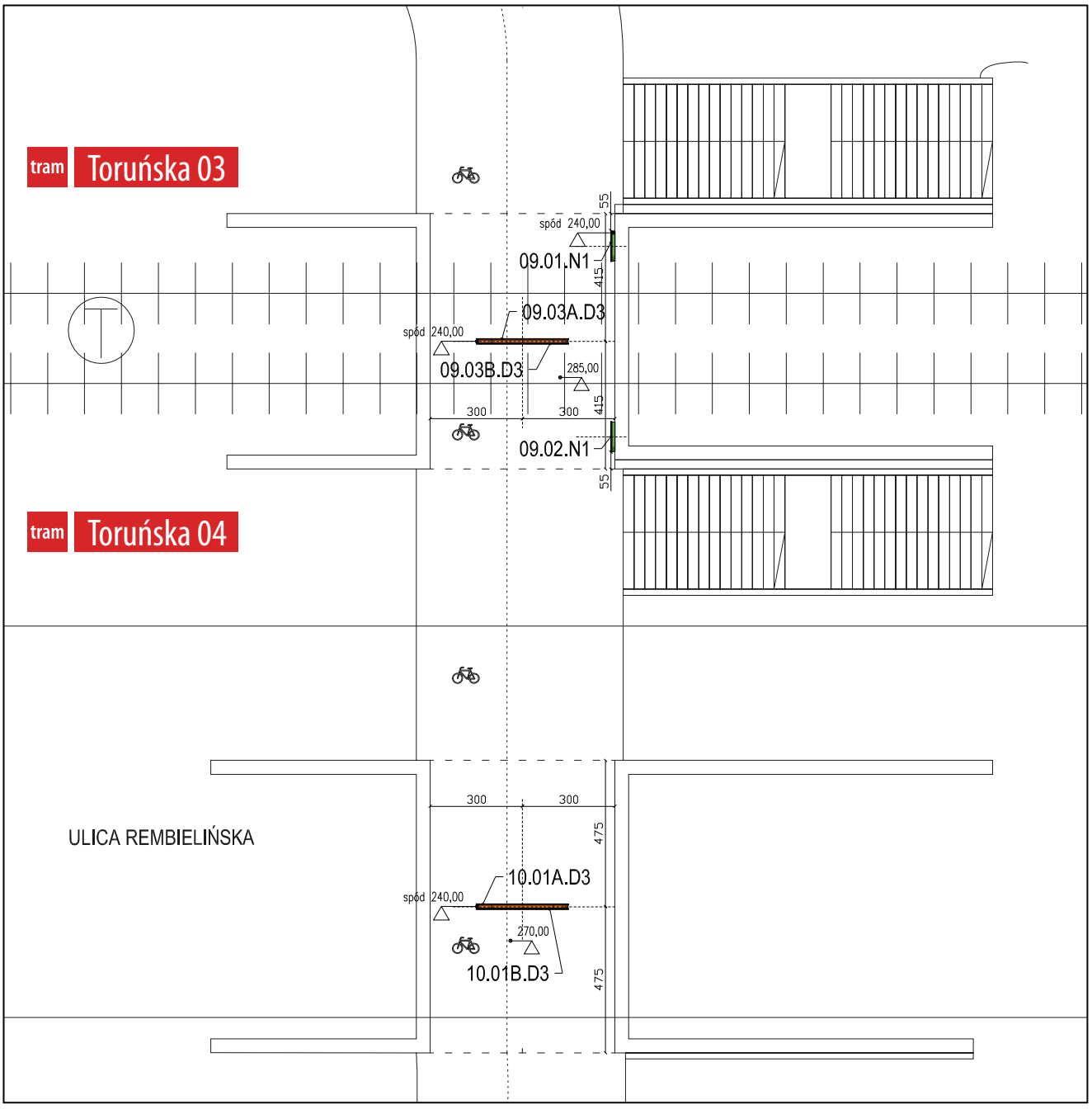

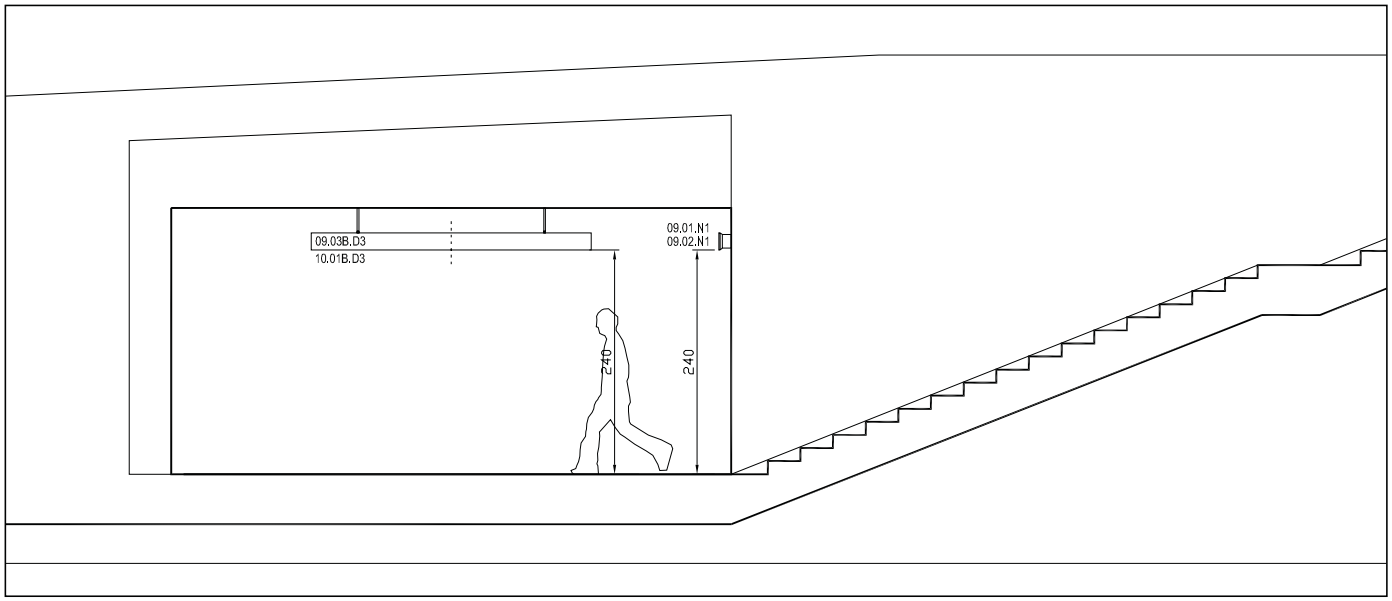
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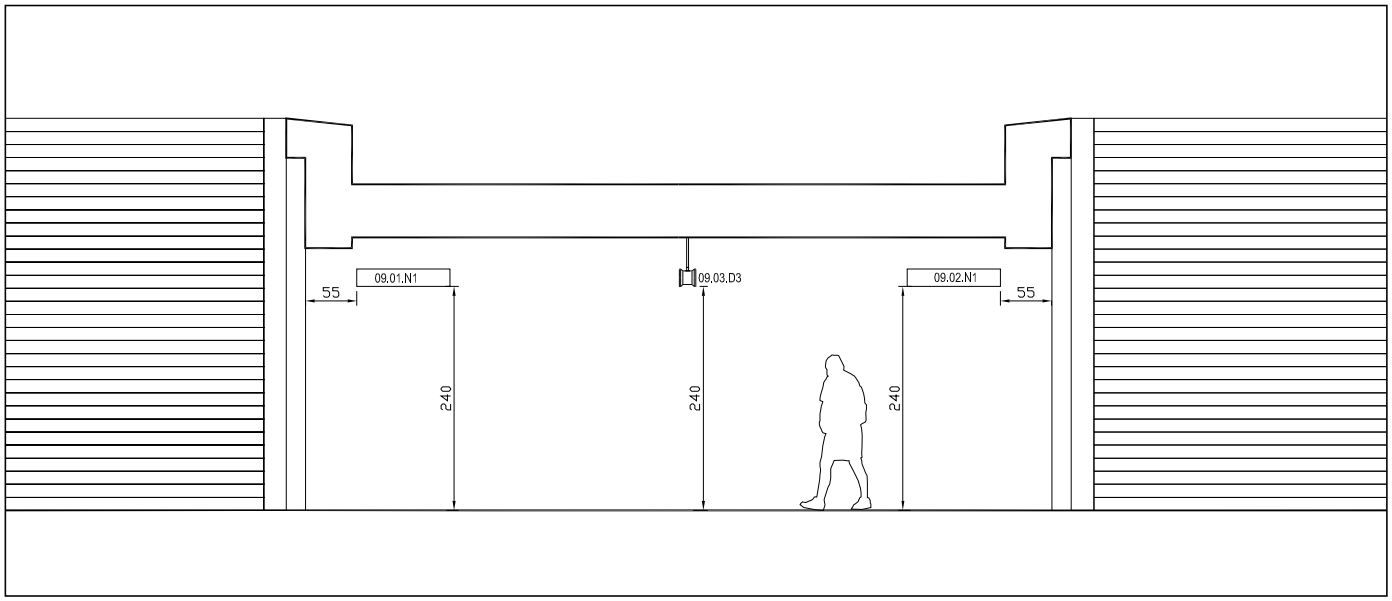
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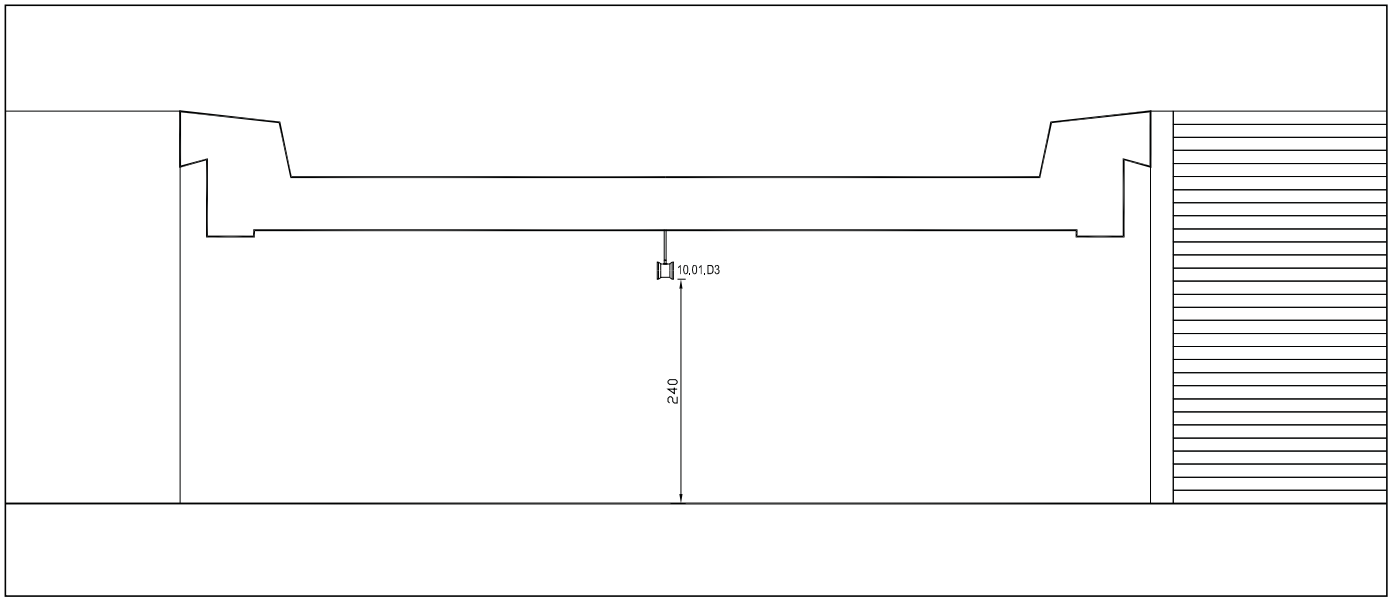
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09.01.N1

09.02.N1

09.03A.D3

09.03B.D3

10.01A.D3

10.01B.D3

# 11

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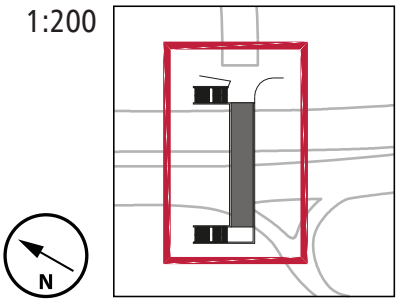


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bus Kryniczna 02

11.02A.D2

spód 220,00

100

11.02B.D2

297 297

243,00

WAŁ MIEDZESZYŃSKI

WAŁ MIEDZESZYŃSKI

bus Kryniczna 01

297 297

247,00

11.01B.D2

spód 220,00

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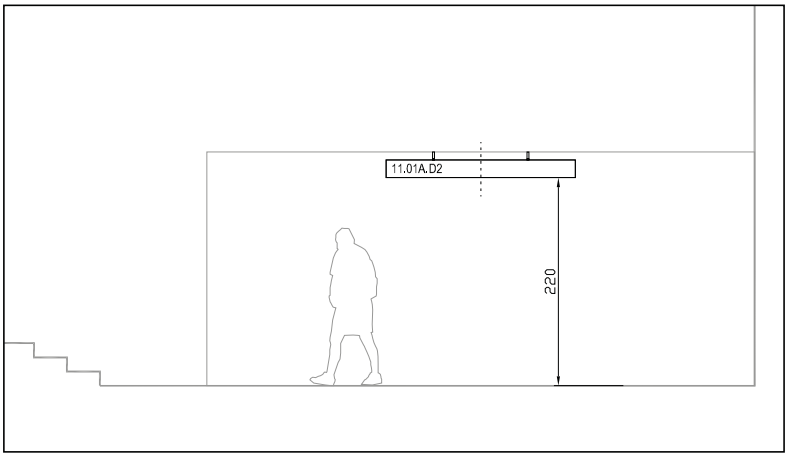
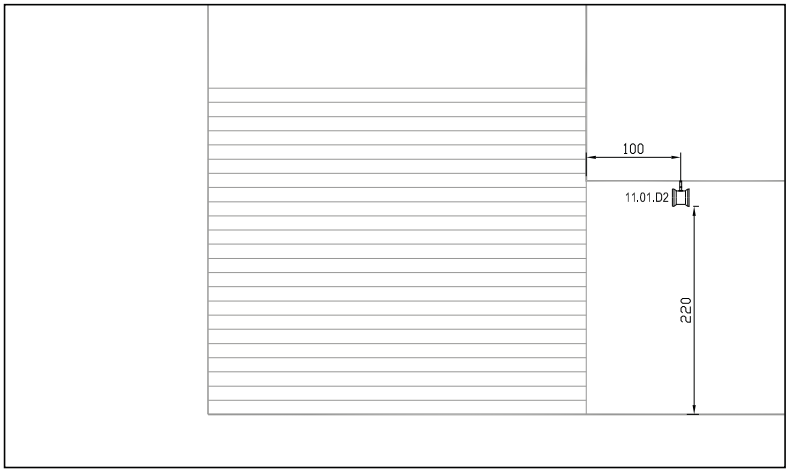
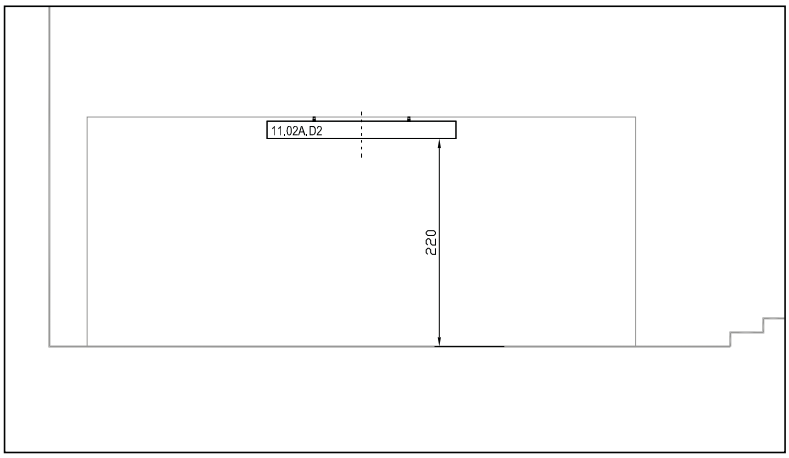
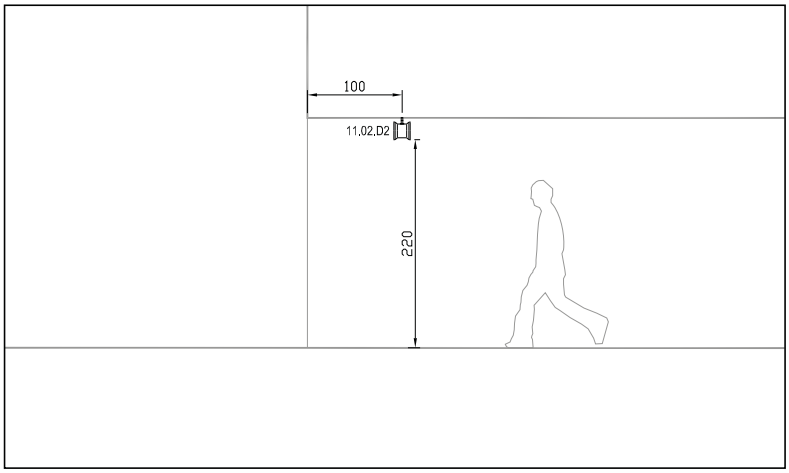
11.01A.D2

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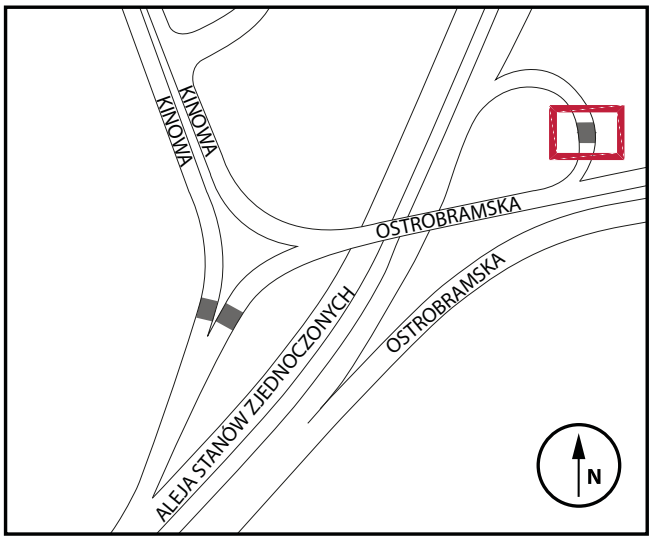
11.02B.D2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KINOWA
OSTROBRAMSKA
OSTROBRAMSKA
ALEJA STANÓW ZJEDNOCZONYCH
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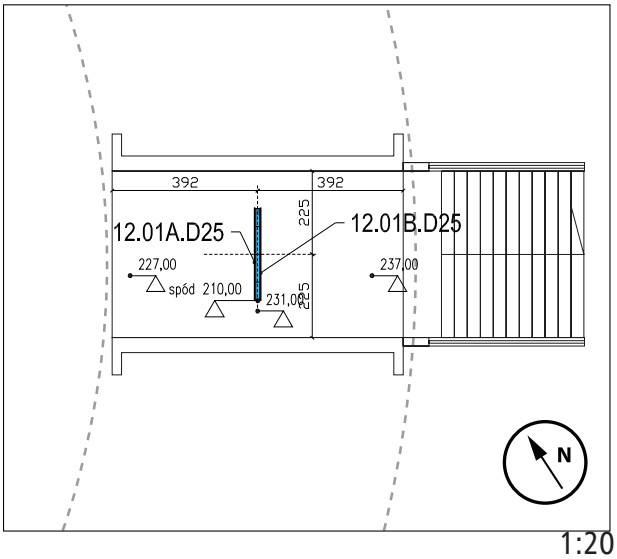
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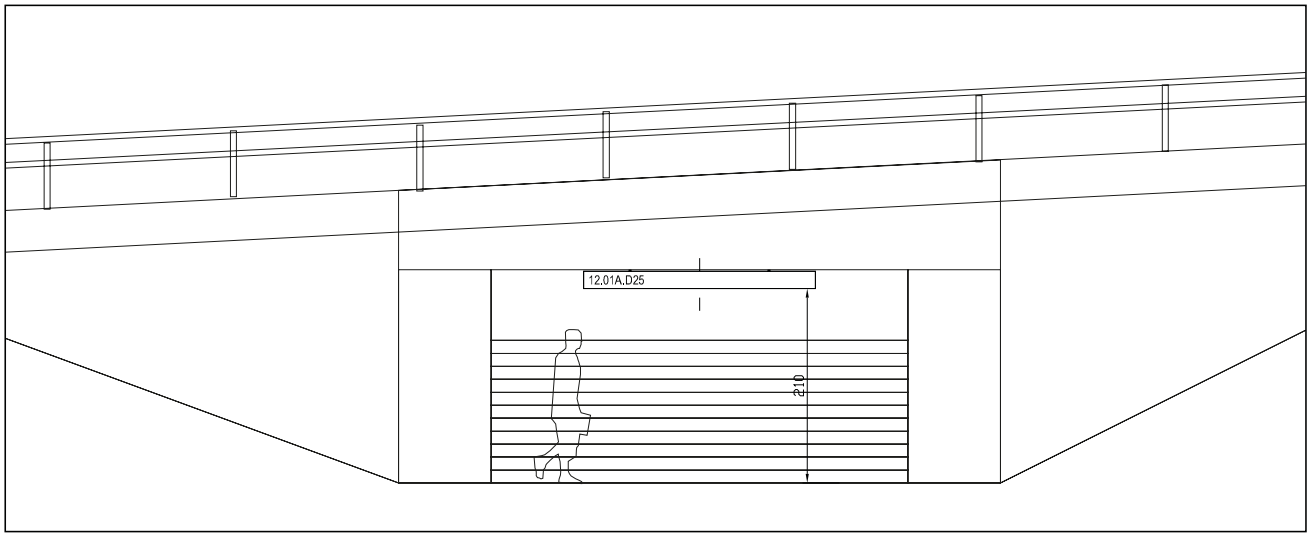
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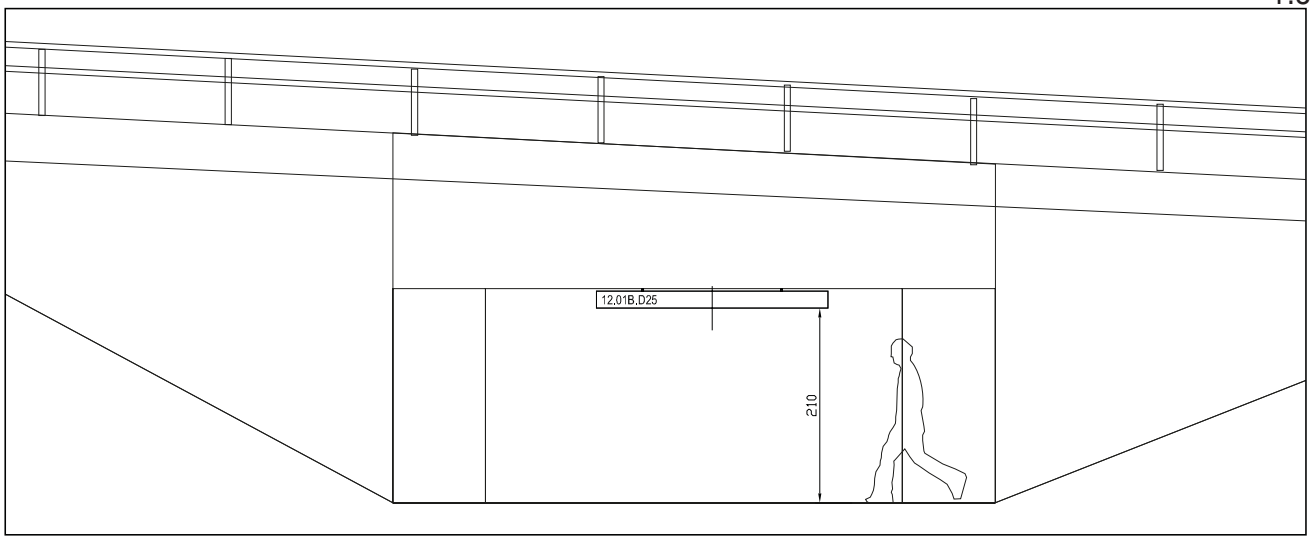
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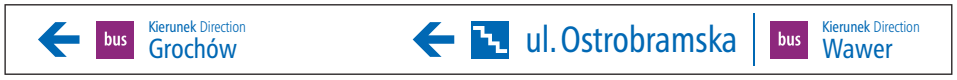
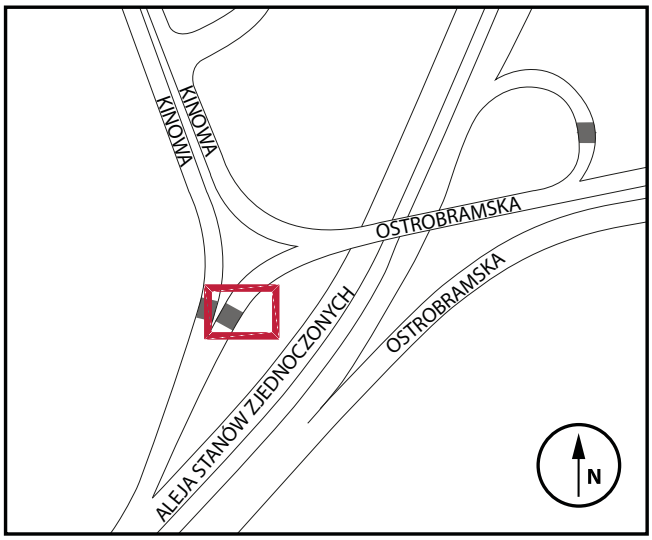
12.01B.D25

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ALEJA STANÓW ZJEDNOCZONYCH
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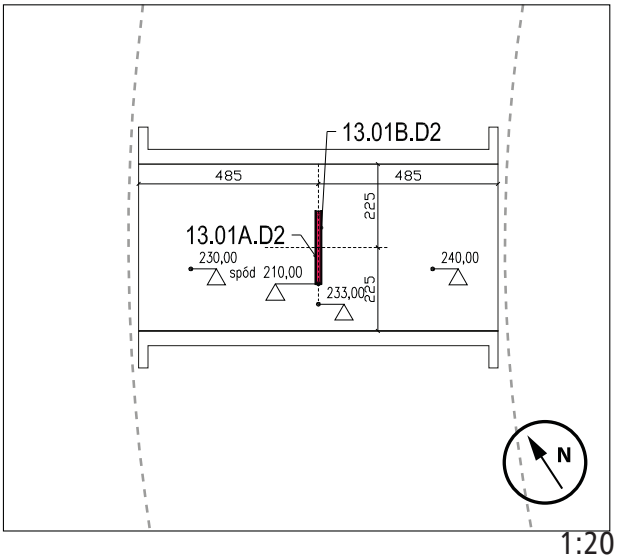
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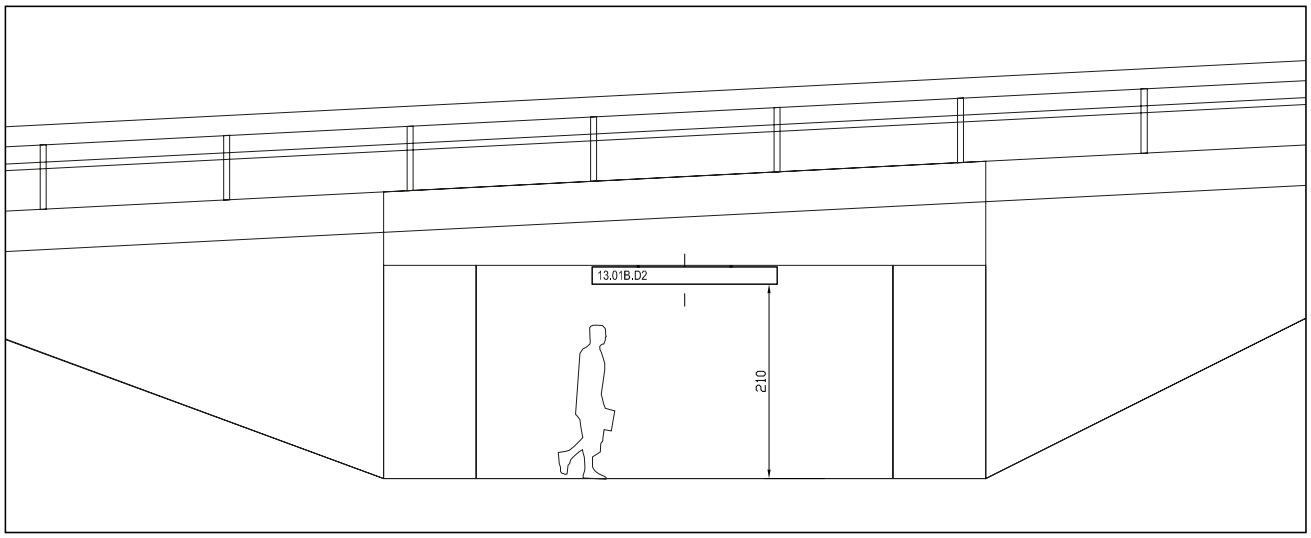
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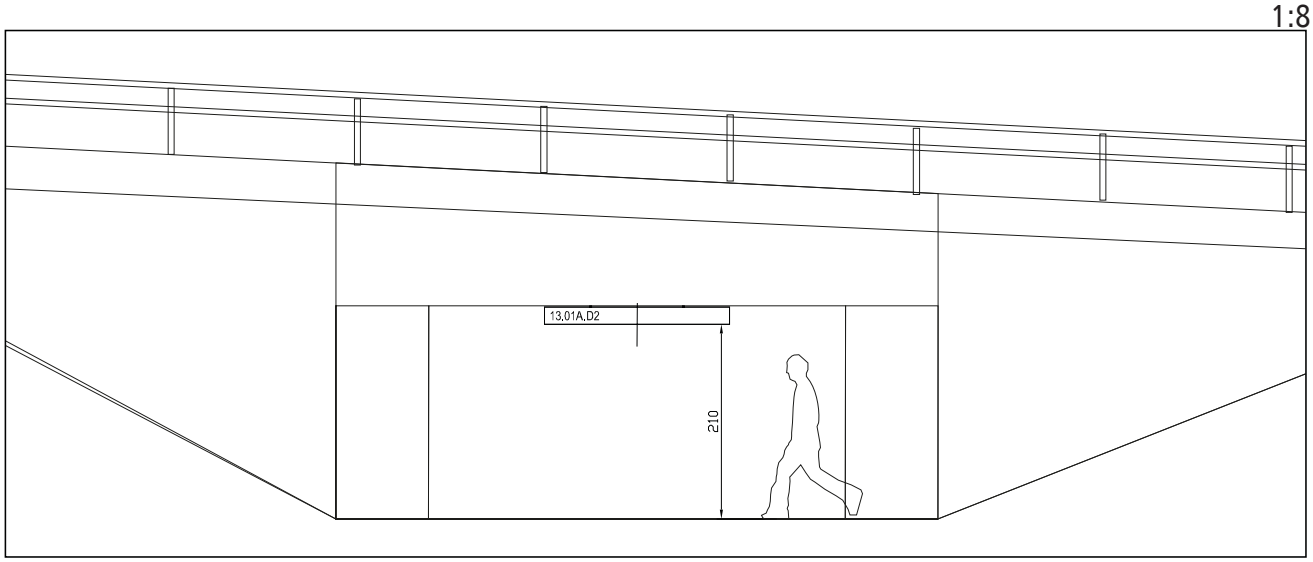
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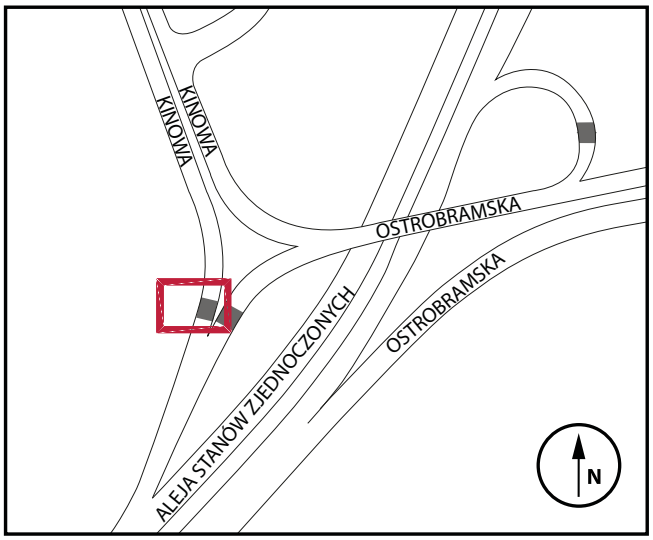
13.01A.D2

13.01B.D2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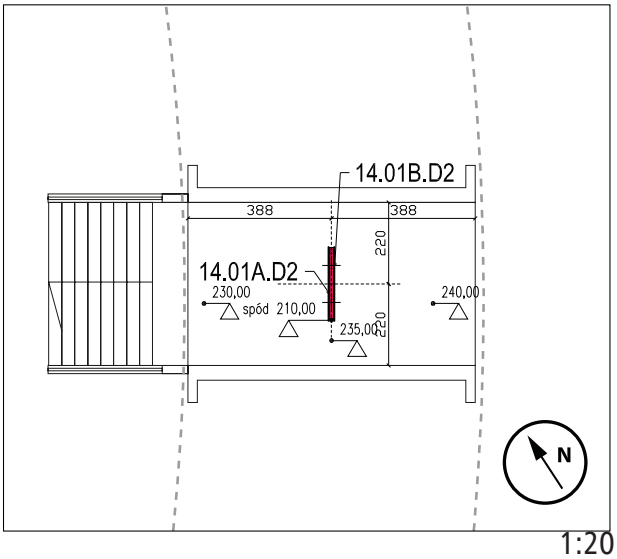
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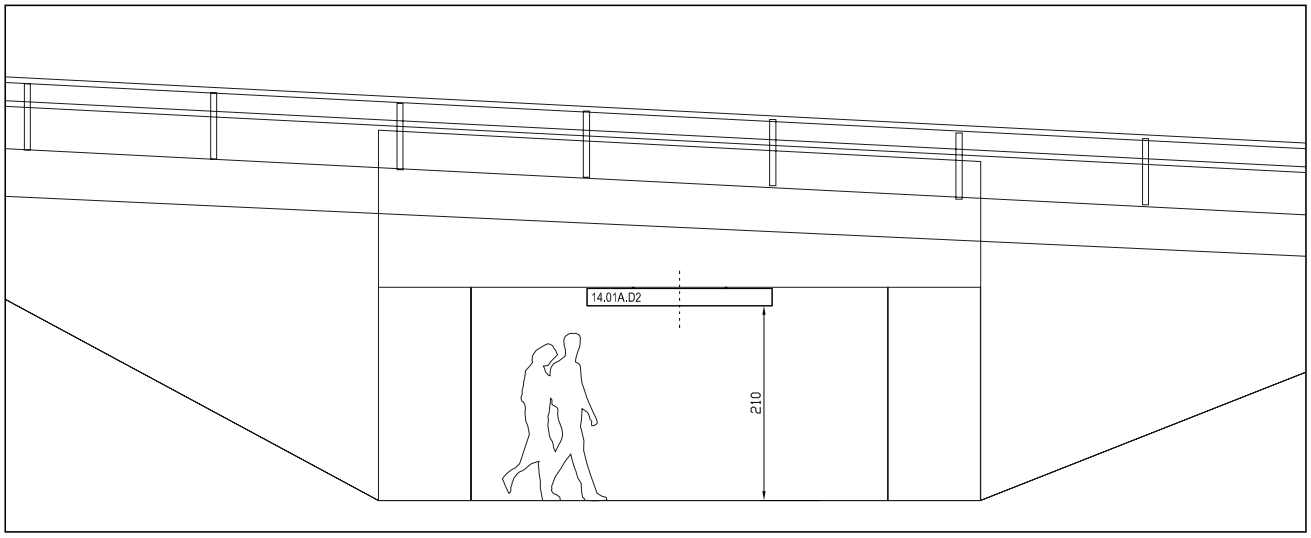
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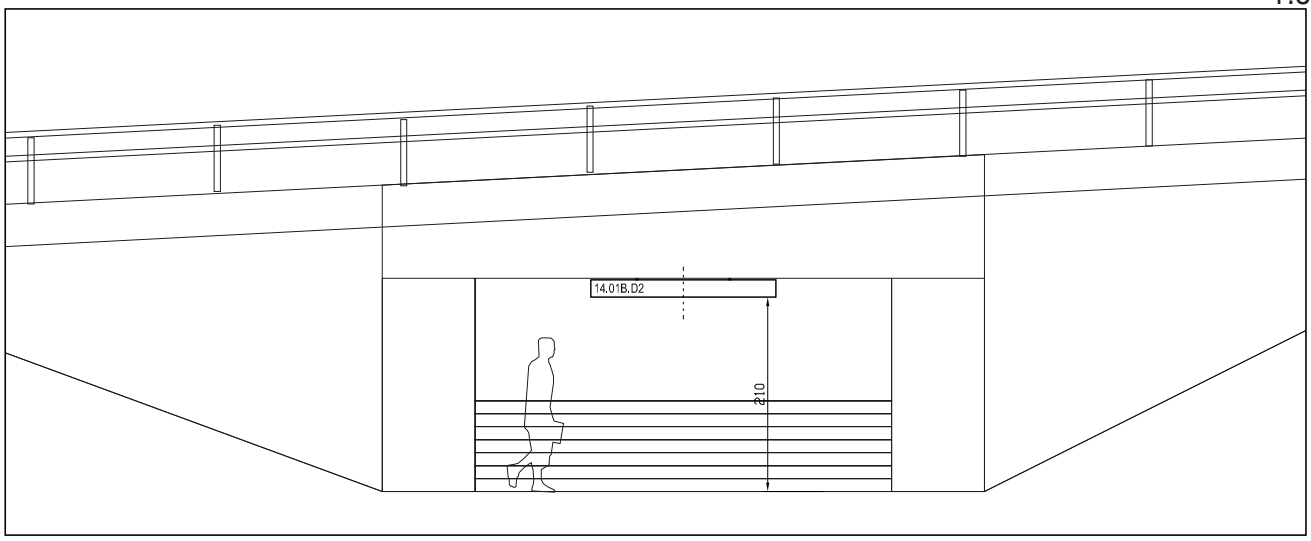
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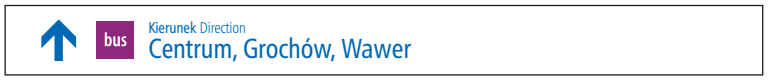


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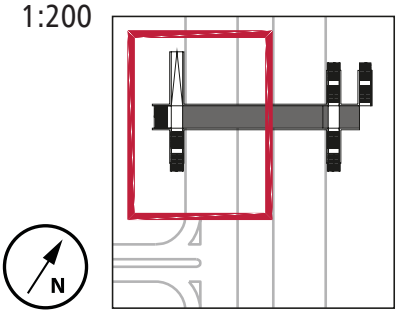
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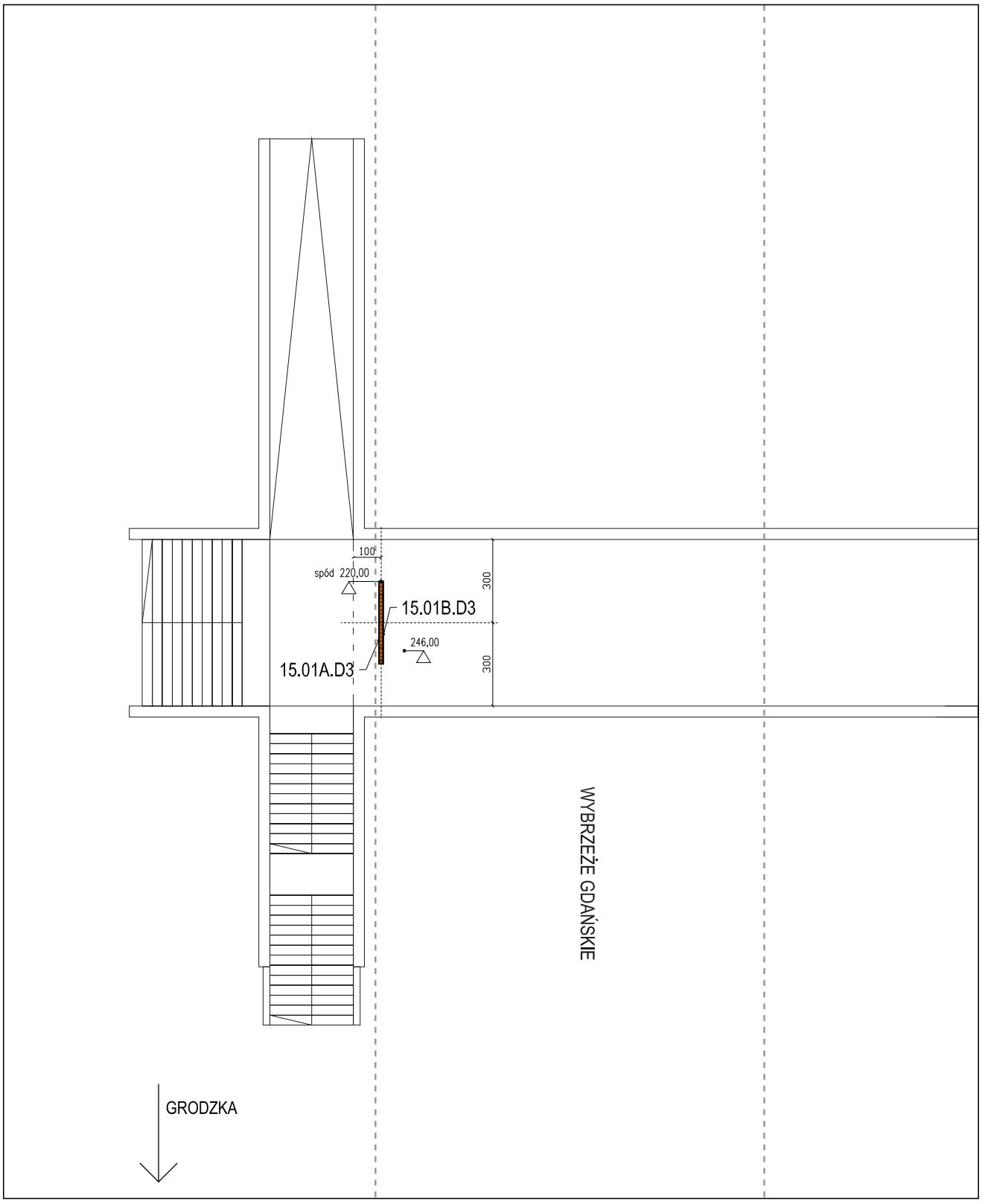
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246,00
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300
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GRODZKA

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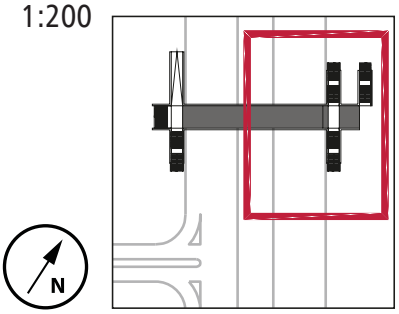


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300

300

spód 220,00

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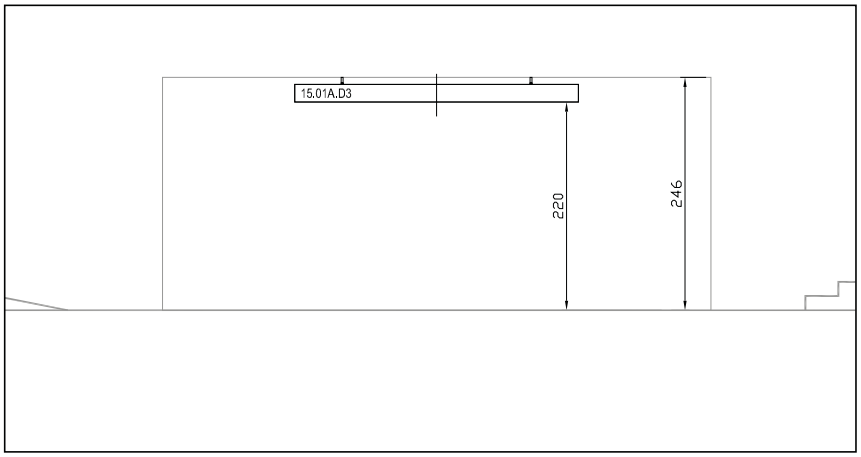
15.02B.D3

222,00

246,00

253,00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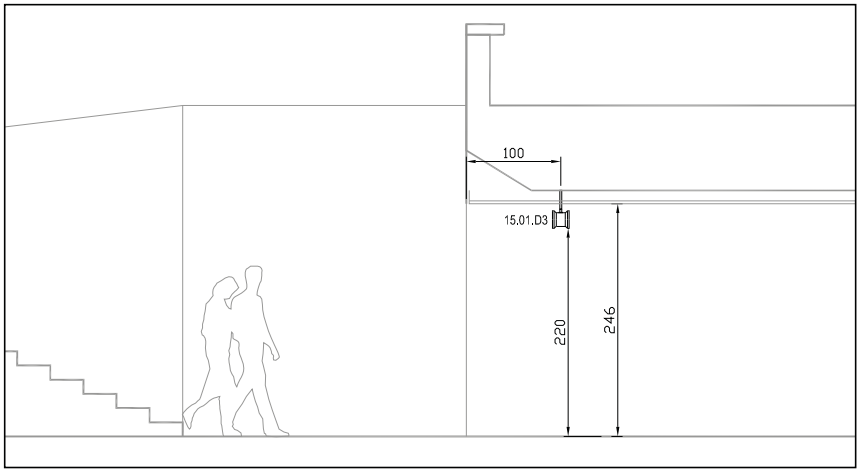
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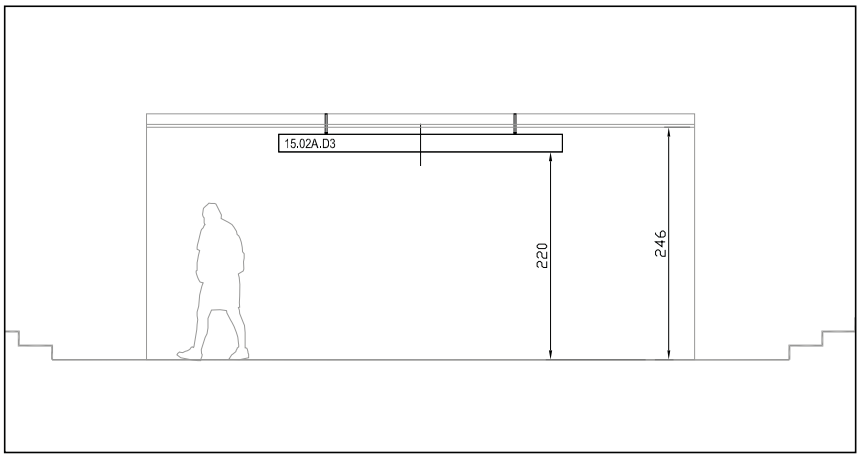
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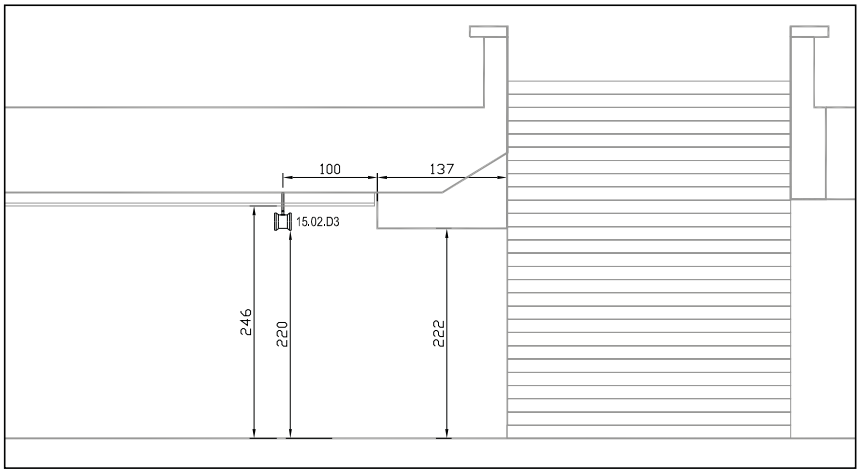
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15.01B.D3

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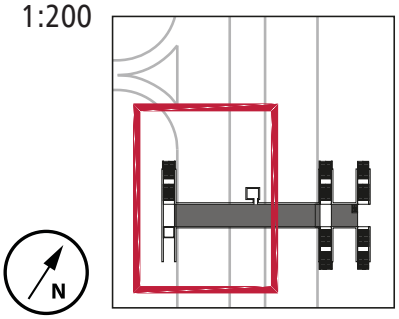
15.02B.D3

1:200



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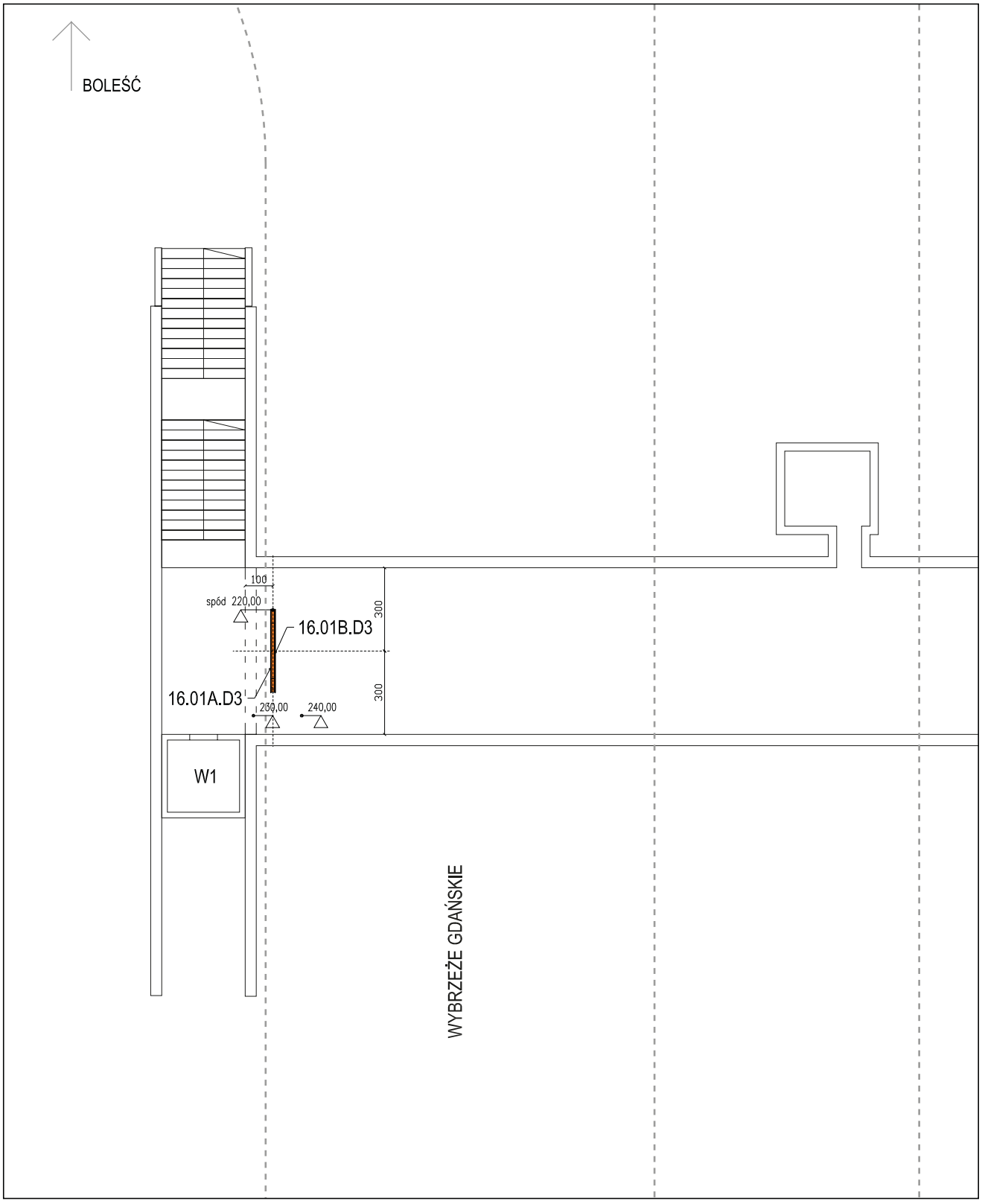
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240,00
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W1
WYBRZEŻE GDAŃSKIE

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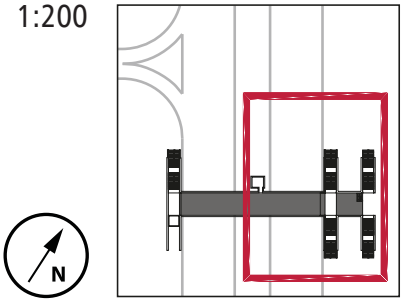


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WYBRZEŻE GDAŃSKIE

BULWAR JANA KARSKIEGO

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300

300

spód 220,00

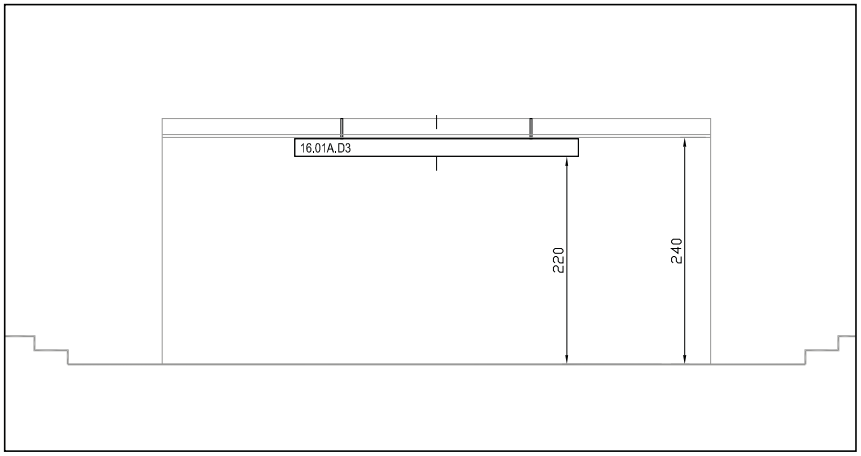
16.02A.D3

16.02B.D3

238,00

225,00

240,00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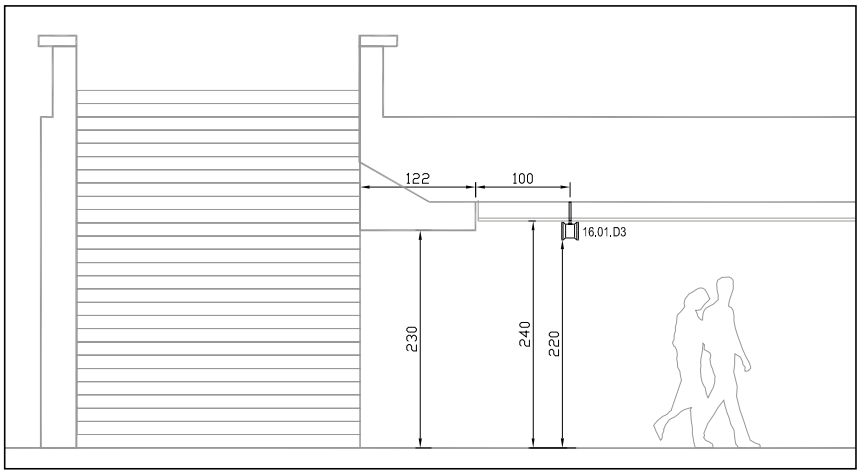
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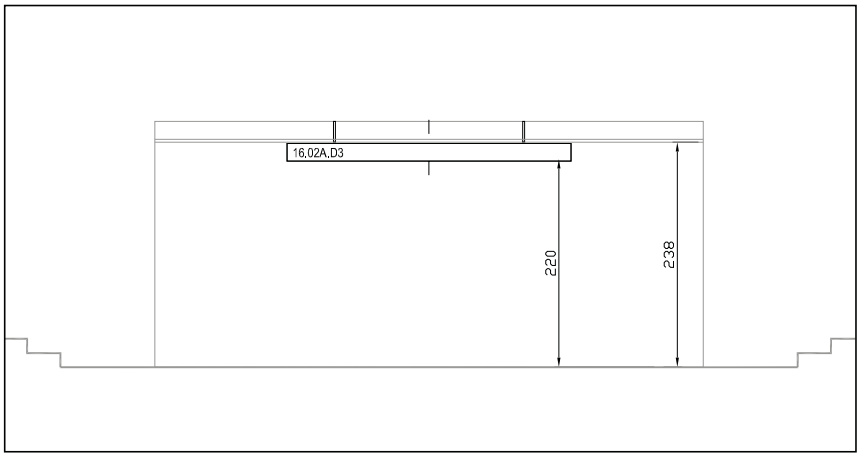
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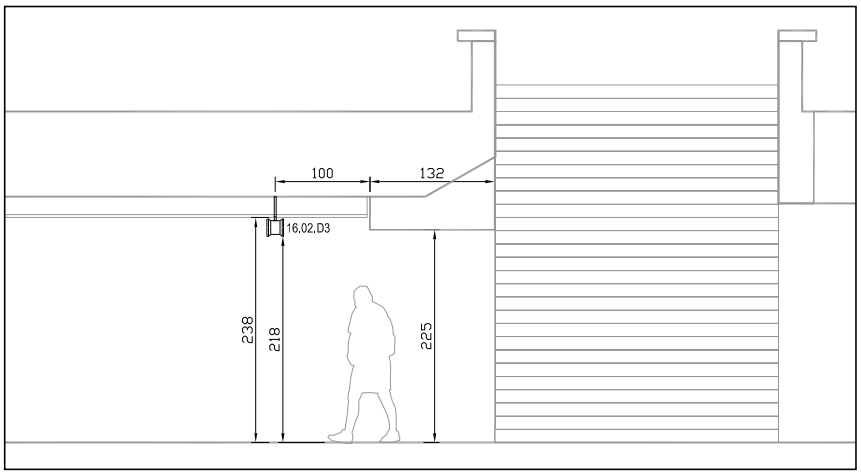
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16.02.D3
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1:8

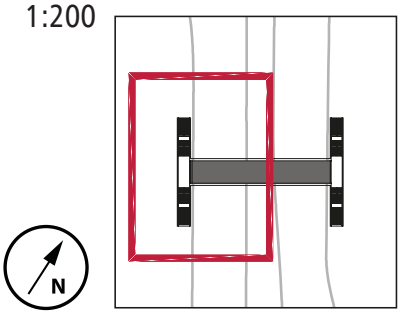
16.01A.D3

16.01B.D3

16.02A.D3

16.02B.D3

1:200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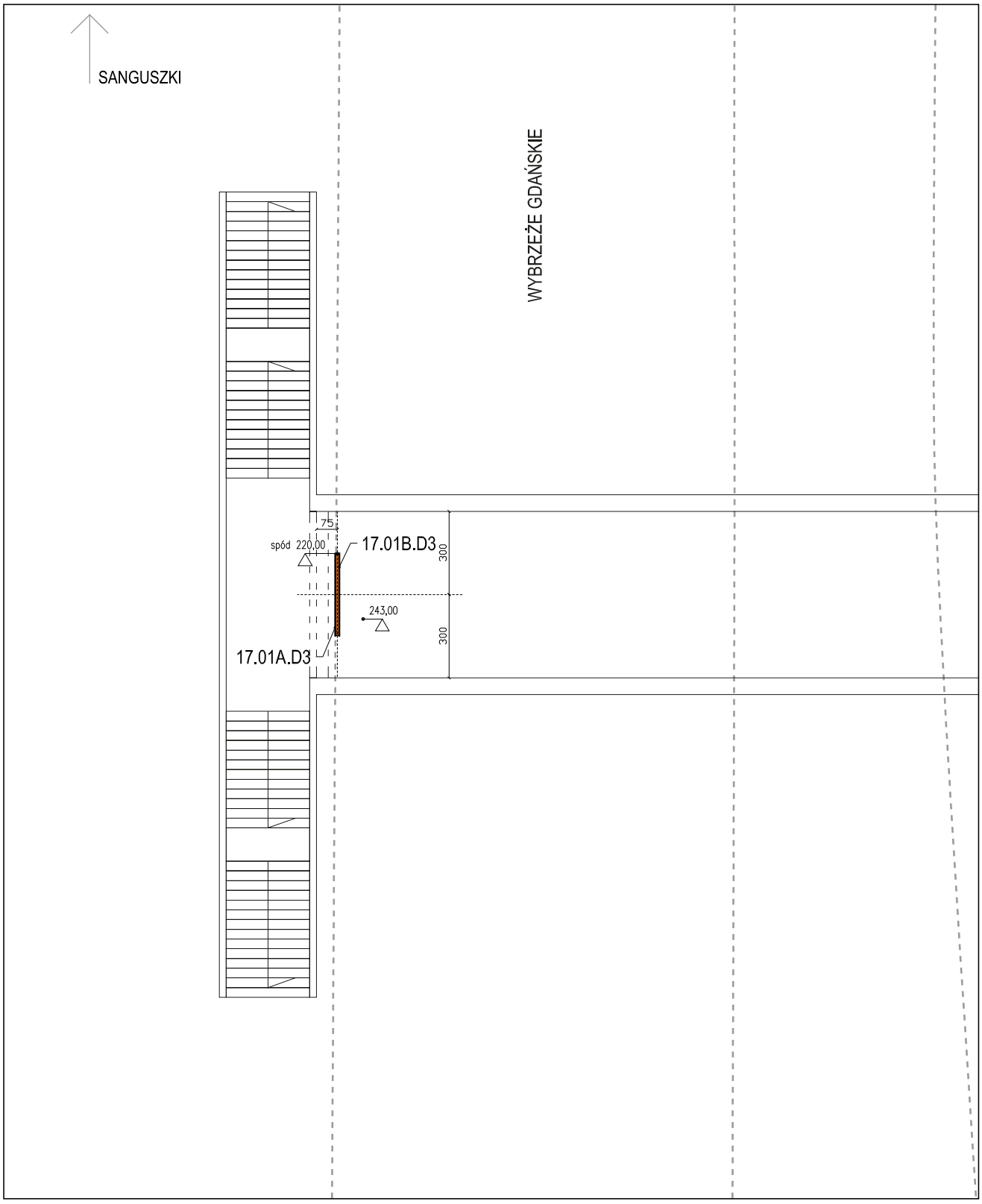
SANGUSZKI
WYBRZEŻE GDAŃSKIE
75
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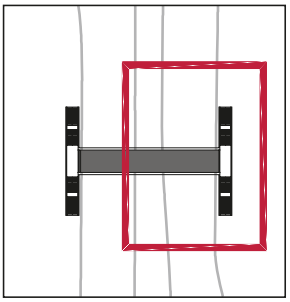
243,00
300
17.01A.D3

# 17

1:200



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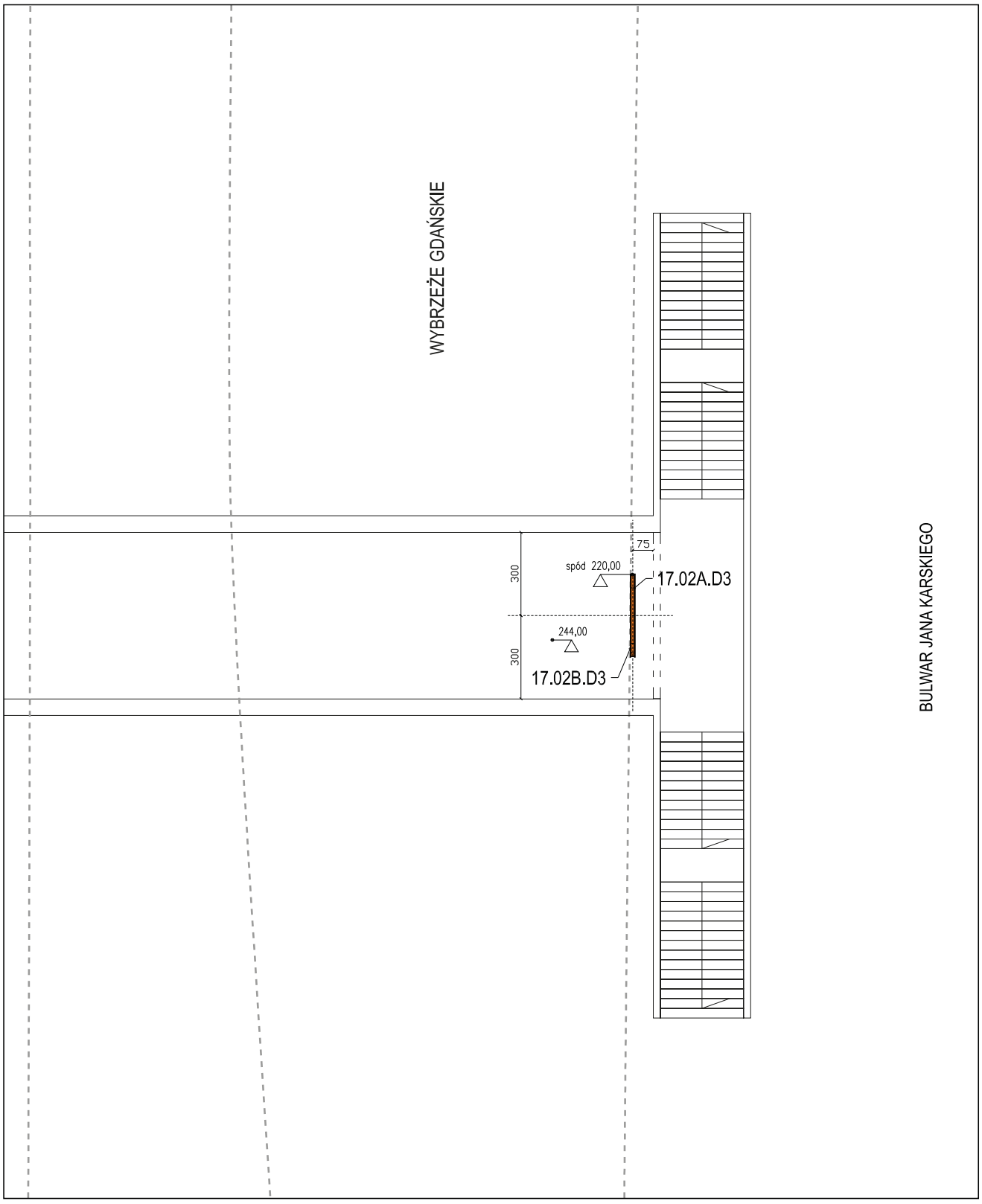
WYBRZEŻE GDAŃSKIE
BULWAR JANA KARSKIEGO
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300
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17.02A.D3
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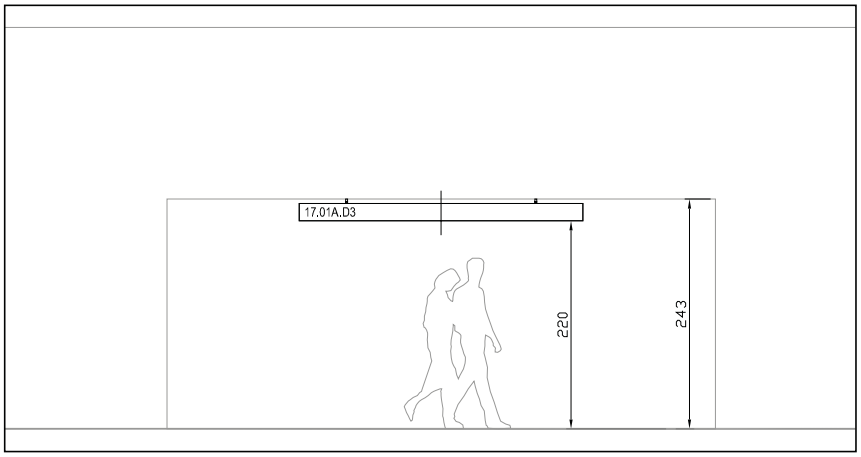
17.02B.D3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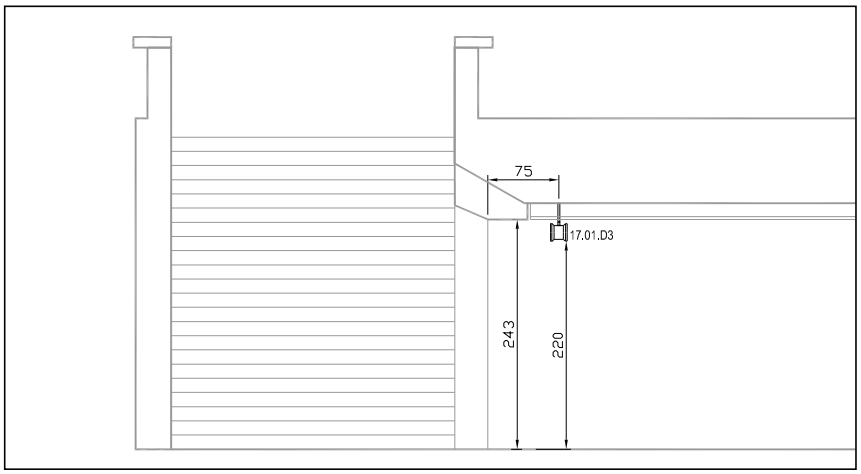
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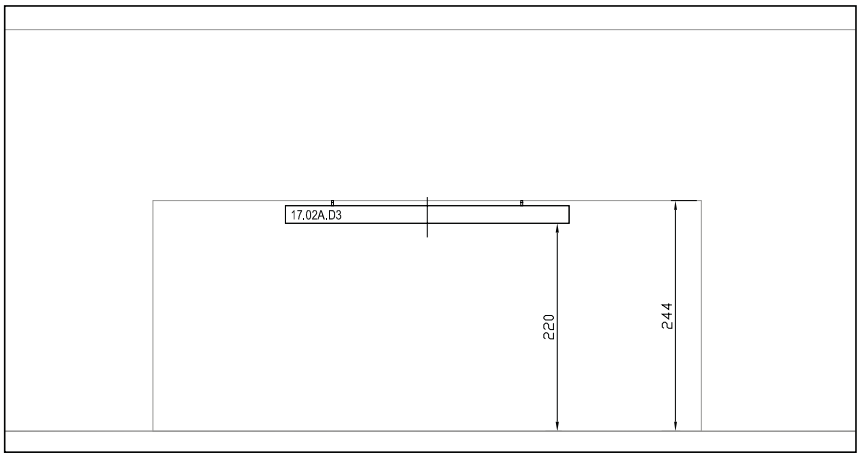
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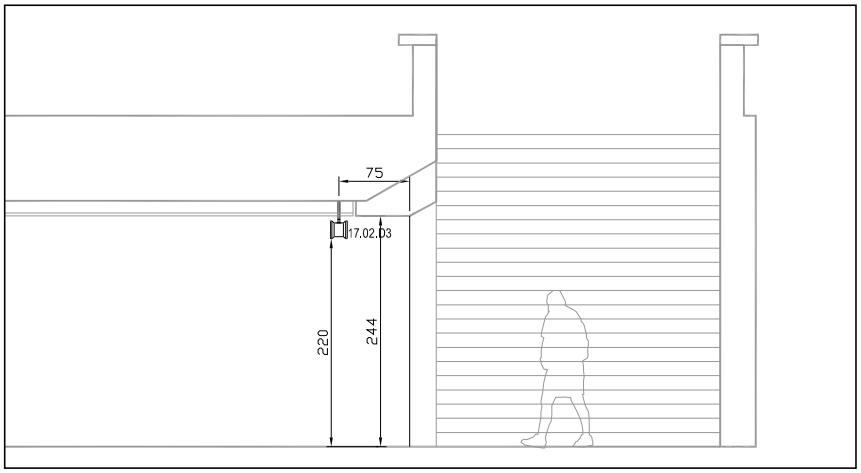
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17.01B.D3

17.02A.D3

17.02B.D3

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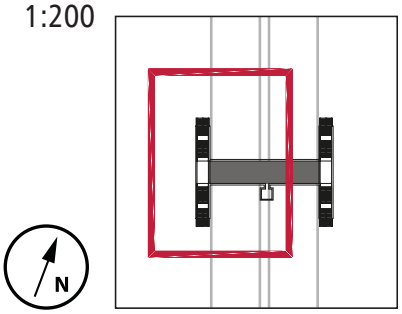

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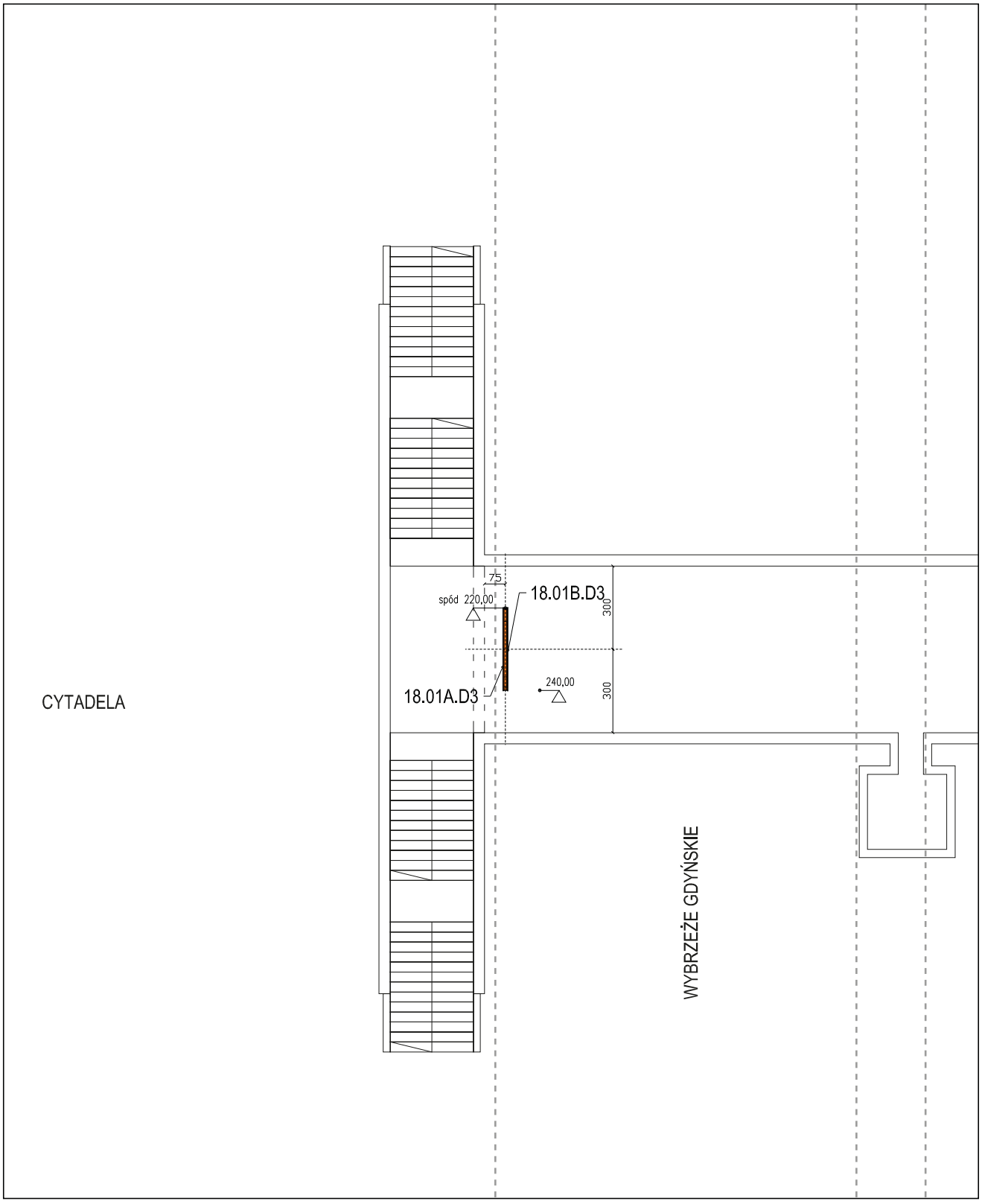
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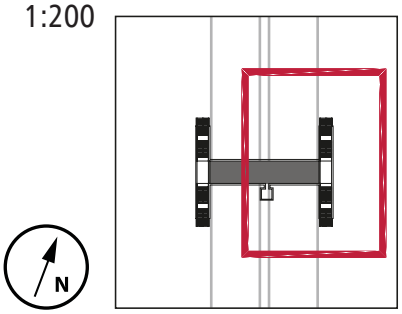
1:200



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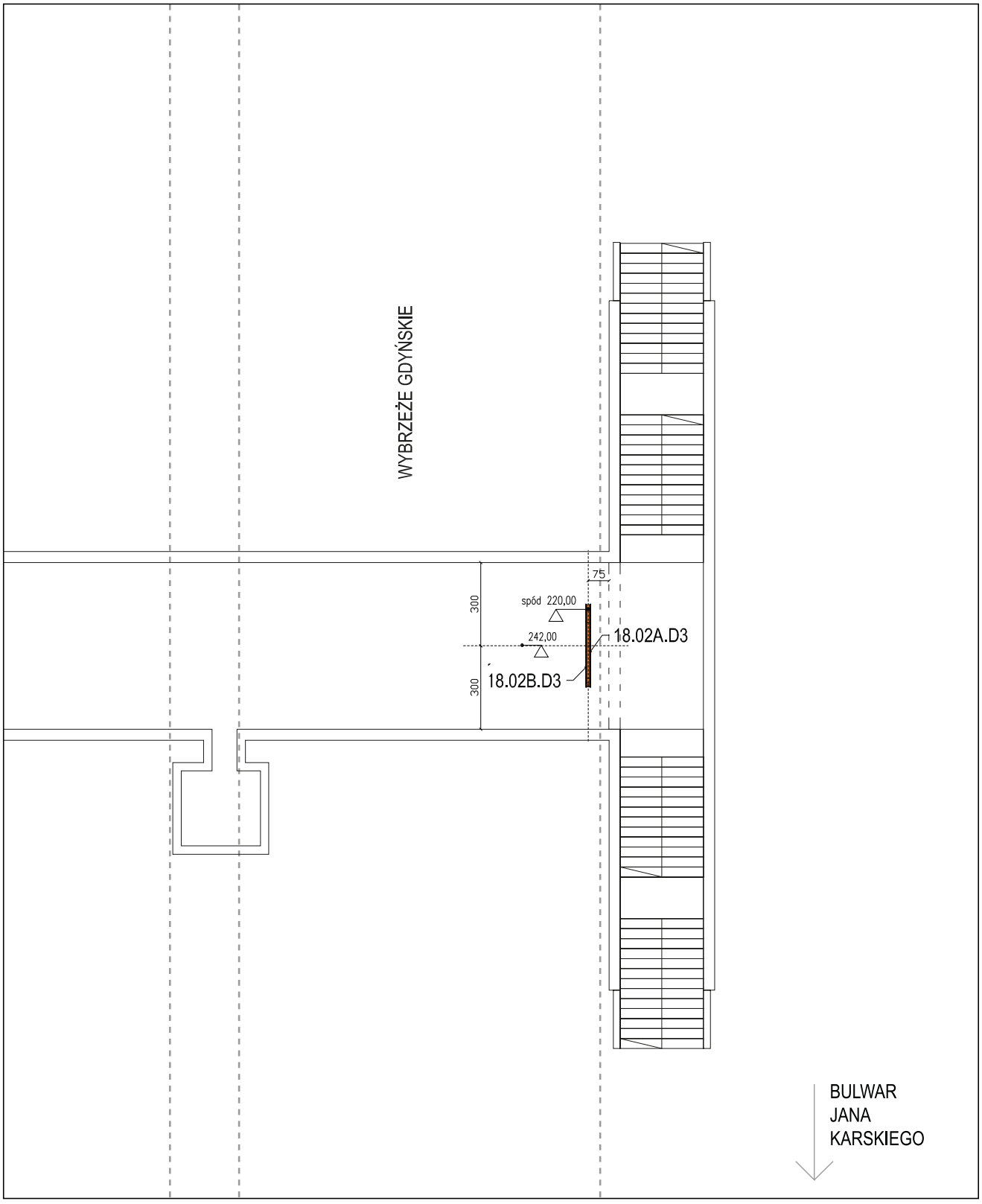
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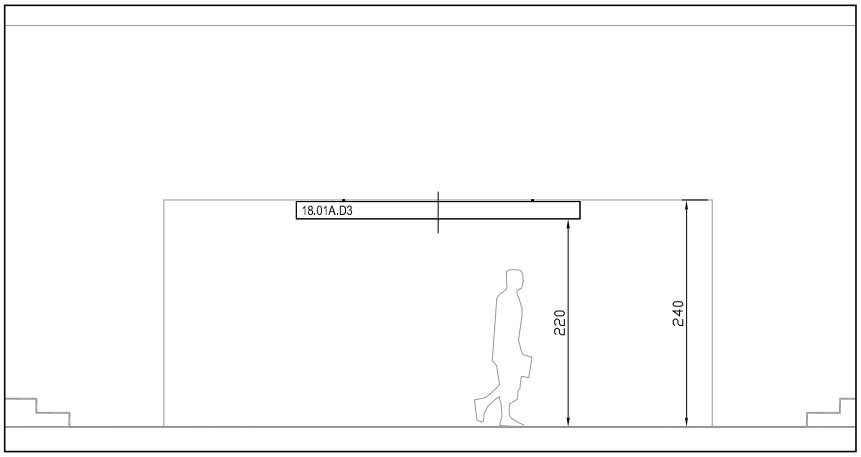
18.02B.D3
BULWAR
JANA
KARSKIEGO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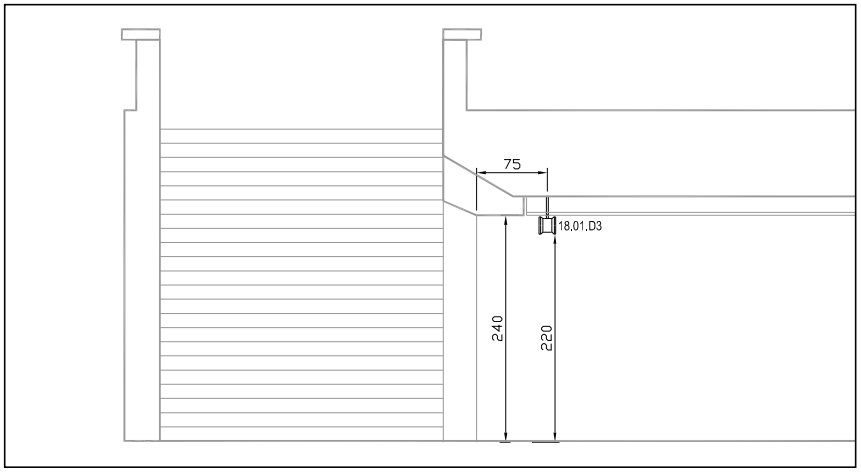
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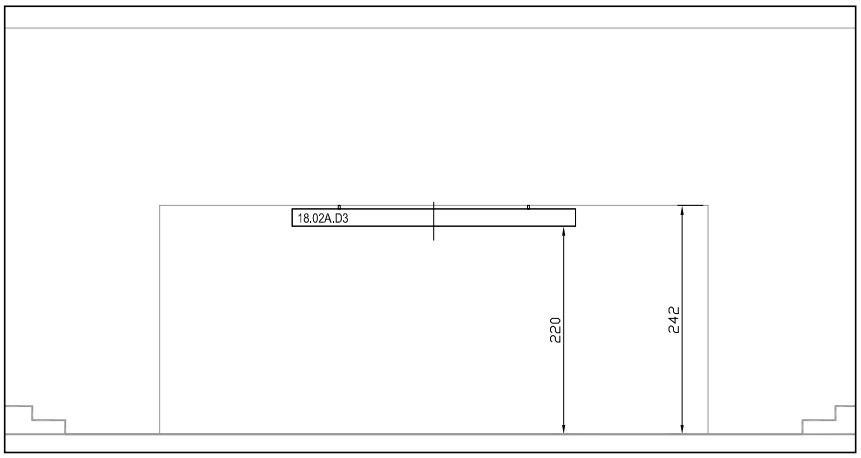
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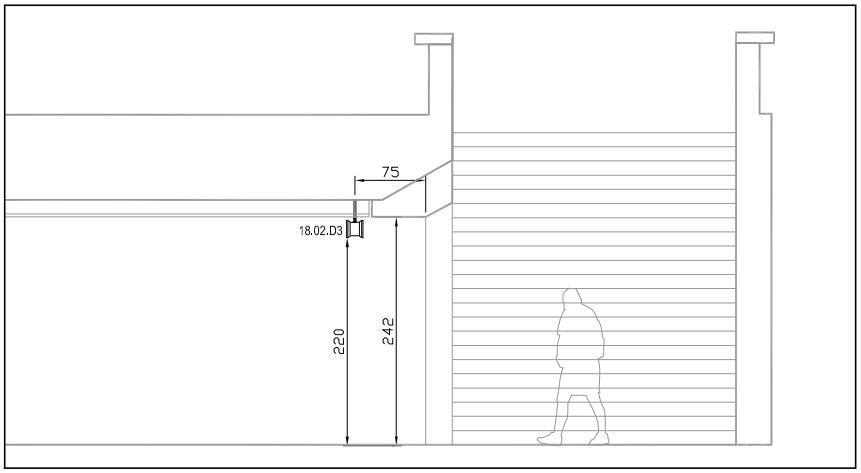
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18.02.D3
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242

1:8

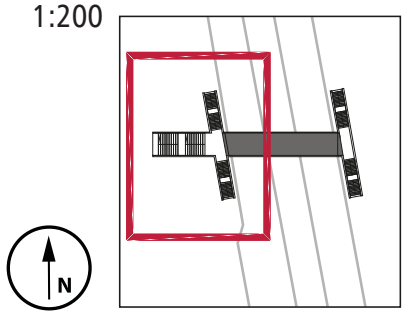
18.01A.D3

18.01B.D3

18.02A.D3

18.02B.D3

1:200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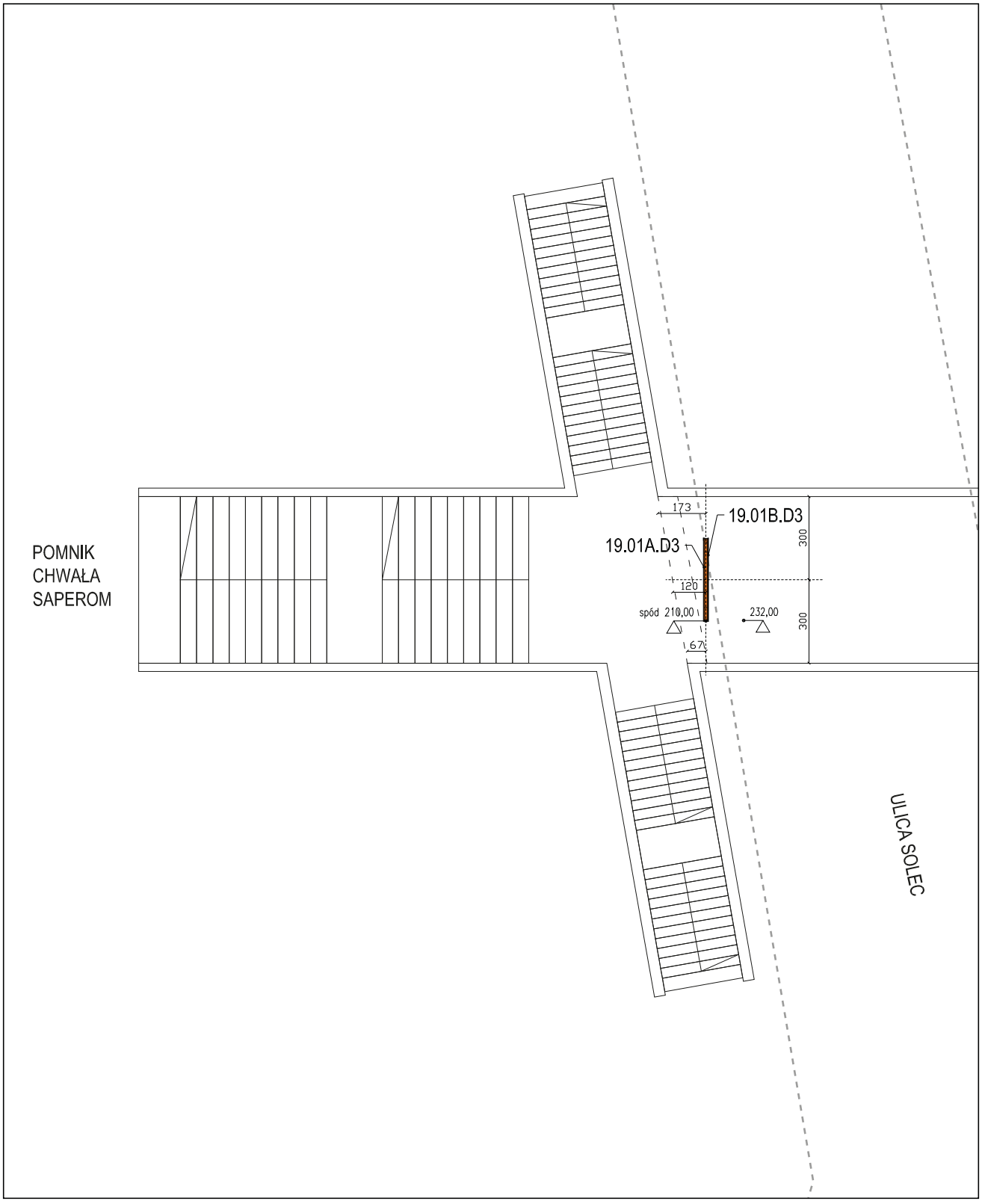
POMNIK
CHWAŁA
SAPEROM
173
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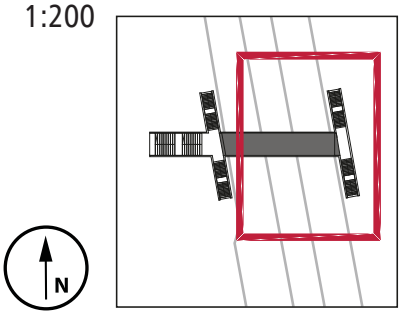
19.01A.D3
300
120
spód 210,00
232,00
300
67
ULICA SOLEC

1:200



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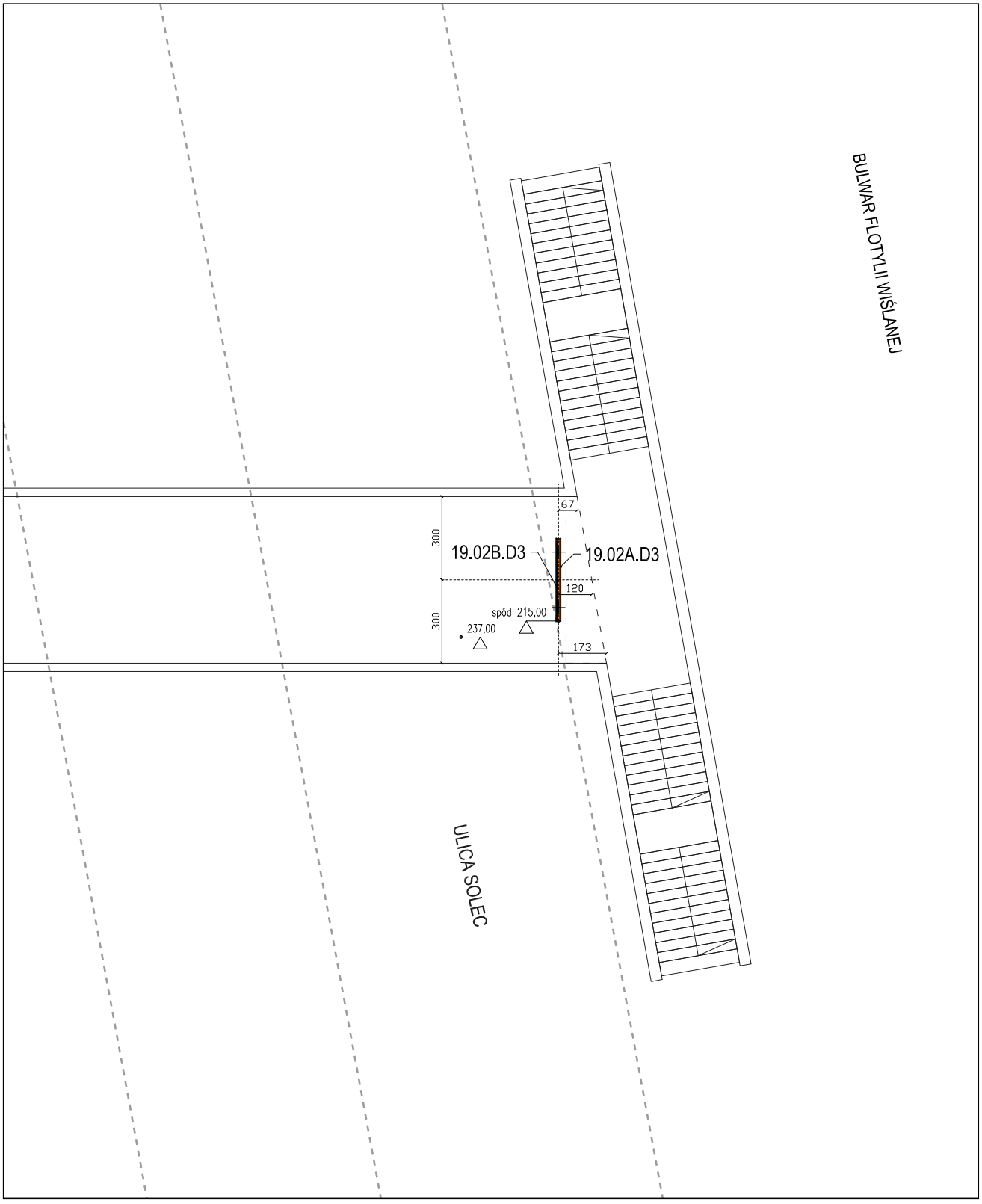
BULWAR FLOTYLII WIŚLANEJ
ULICA SOLEC
19.02B.D3
19.02A.D3
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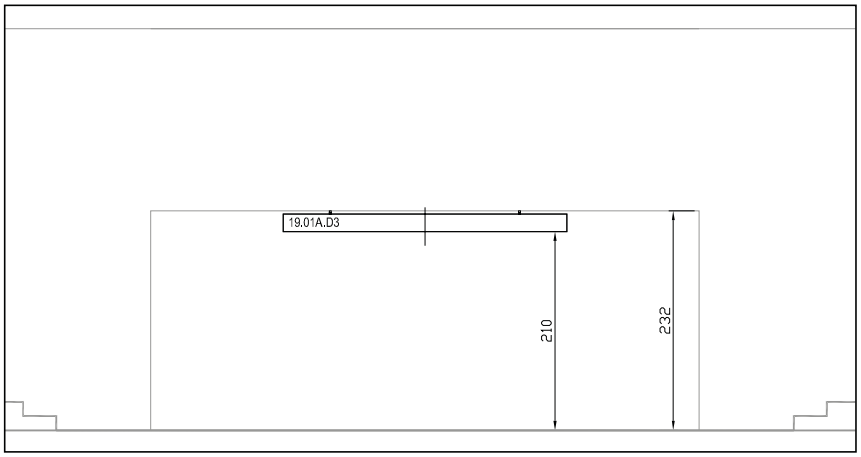
300
300
120
spód 215,00
237,00
173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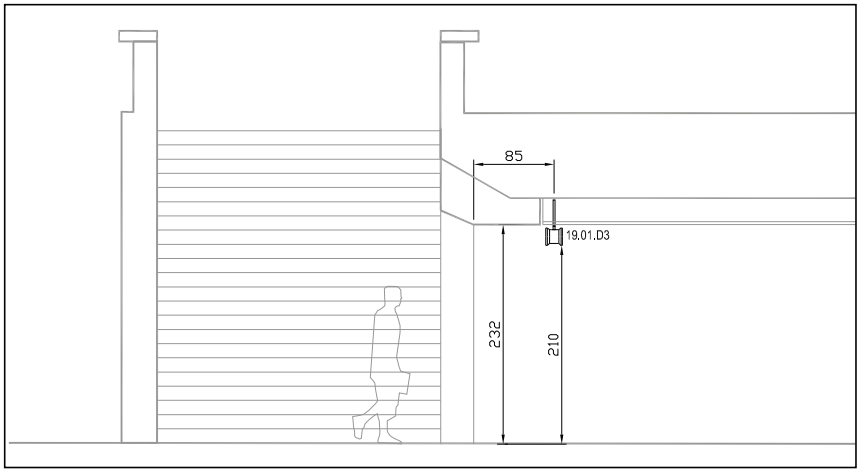
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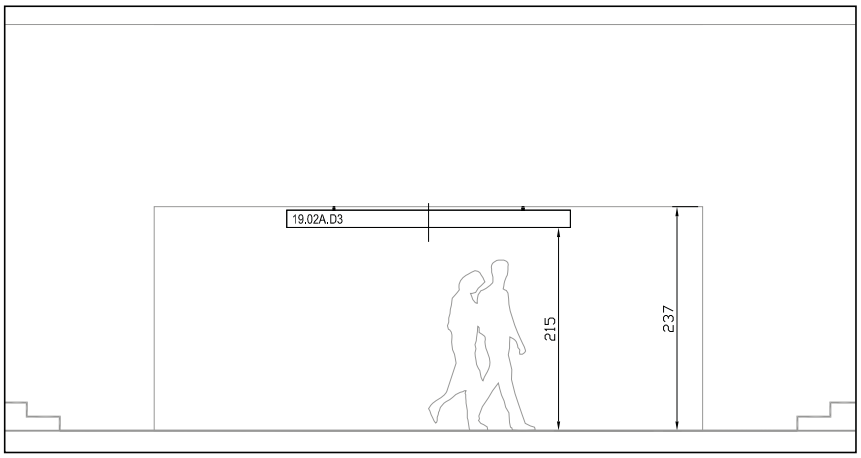
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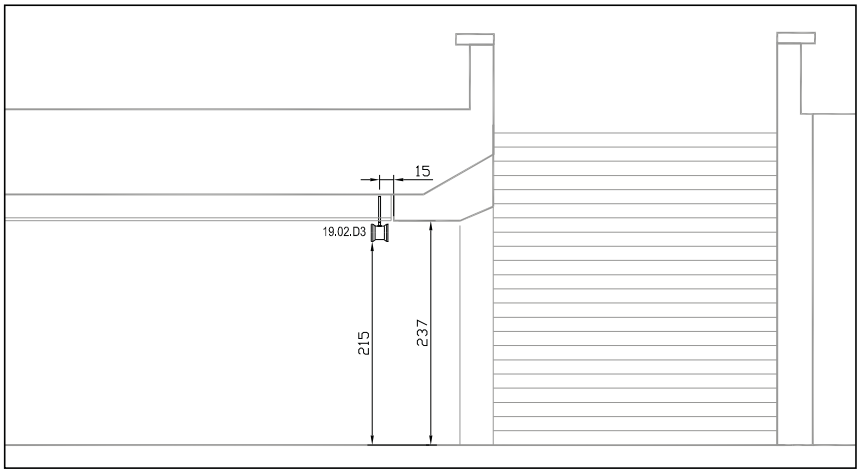
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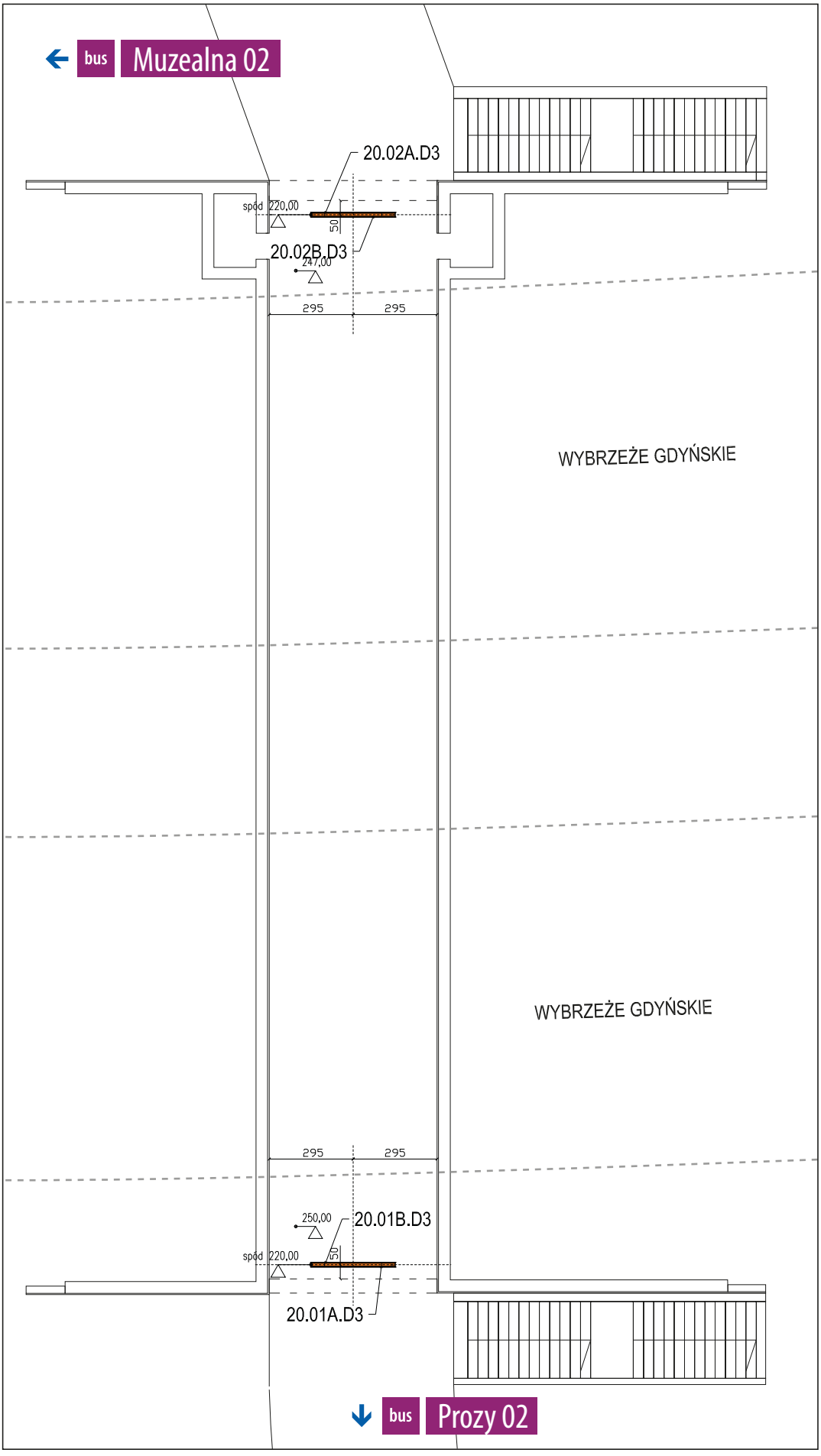
19.01B.D3

19.02A.D3

19.02B.D3


bus
Muzealna 02
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spód 220,00
50
20.02B.D3
247,00
295
295
WYBRZEŻE GDYŃSKIE
WYBRZEŻE GDYŃSKIE
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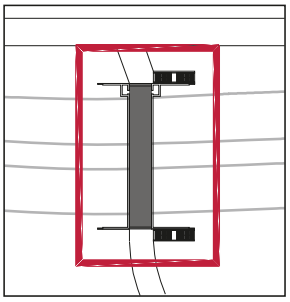
295
250,00
20.01B.D3
spód 220,00
50
20.01A.D3
bus
Prozy 02

1:20



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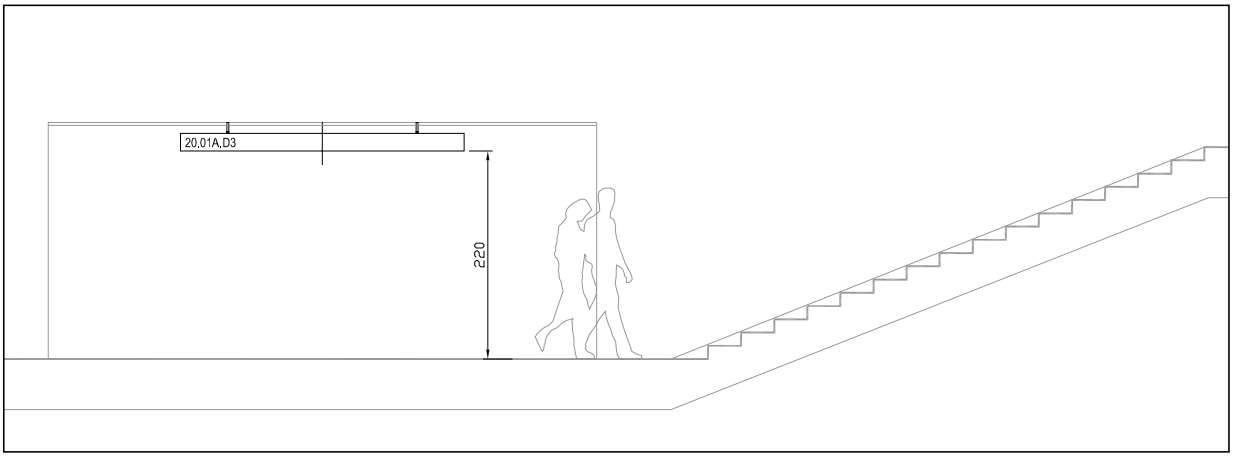


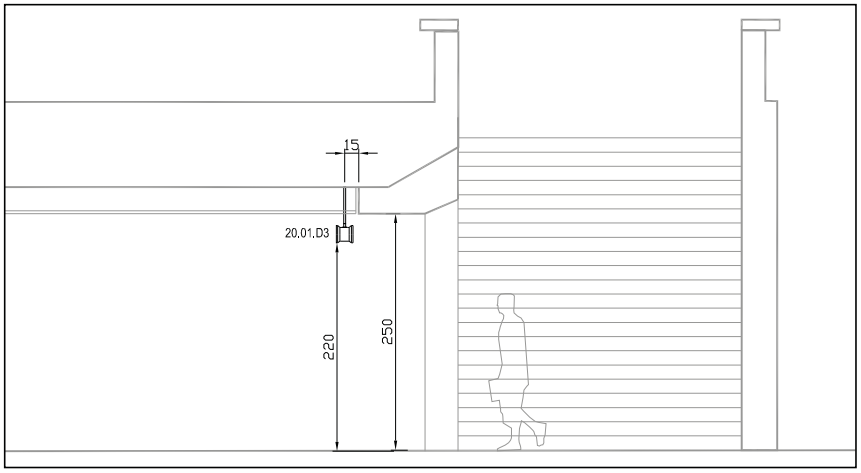


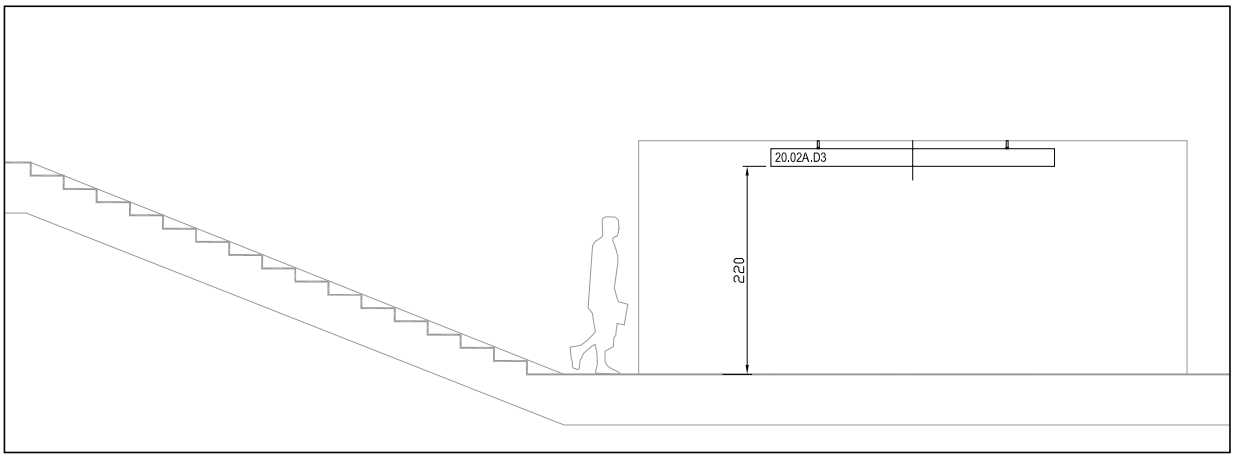


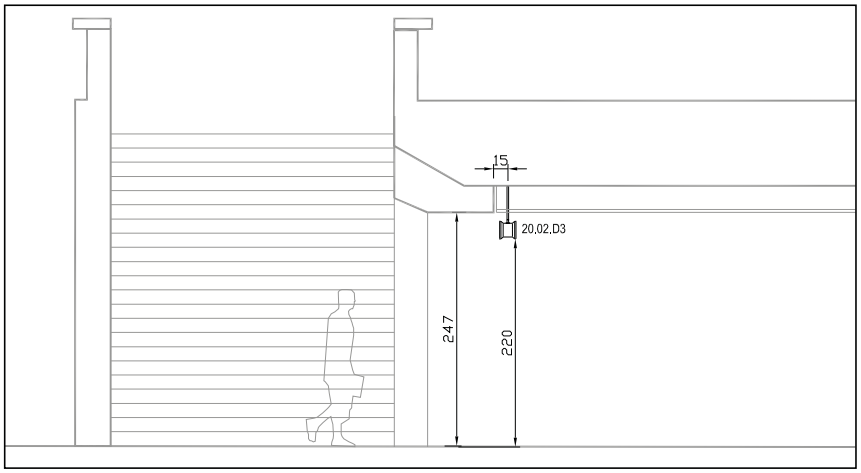


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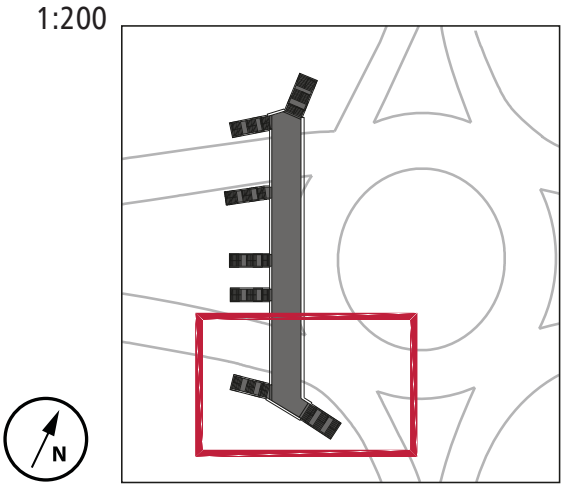
20.01A.D3

20.01B.D3

20.02A.D3

20.02B.D3

1:200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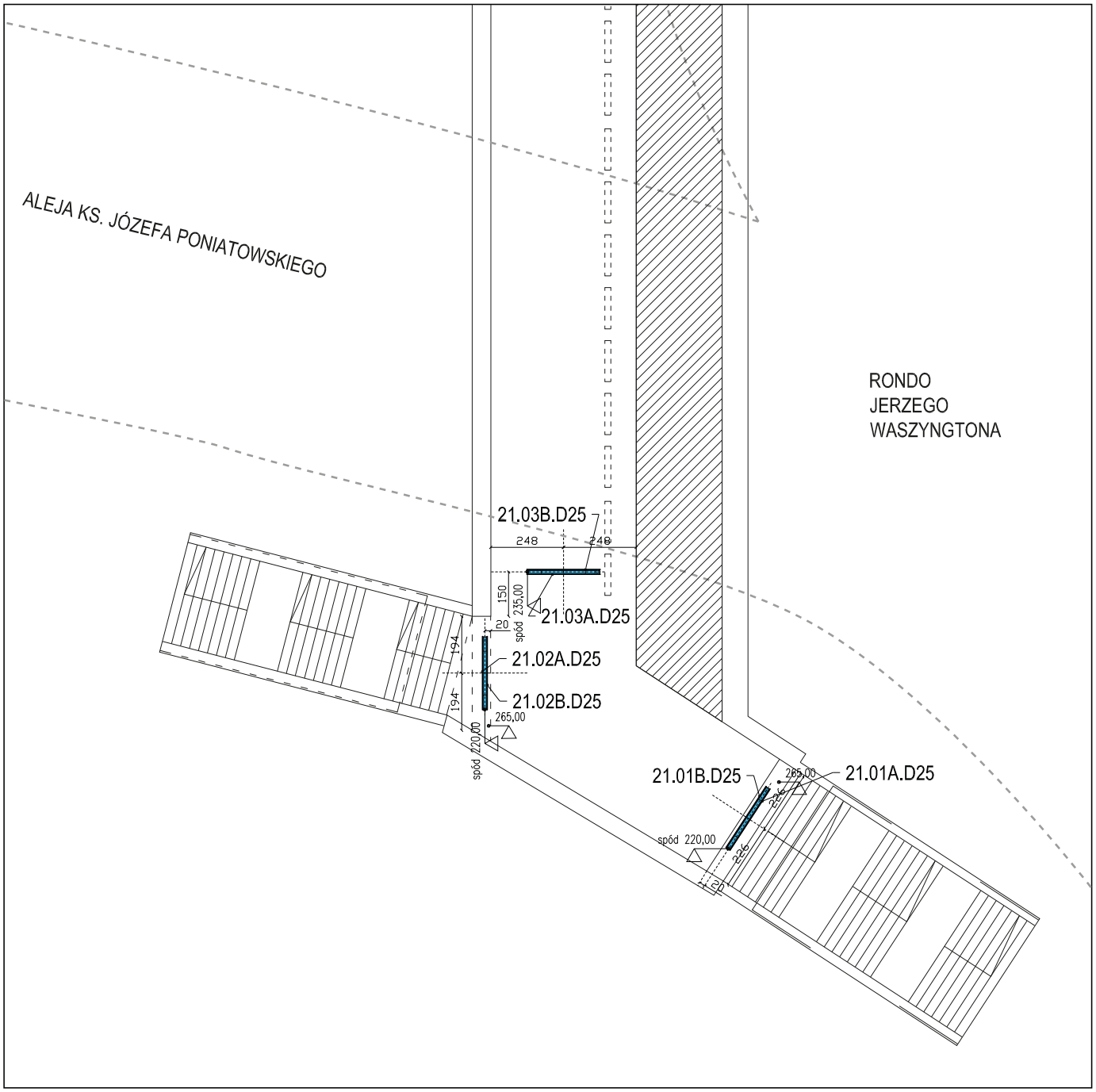
ALEJA KS. JÓZEFA PONIATOWSKIEGO
RONDO
JERZEGO
WASZYNGTONA
21.03B.D25
248
240
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235,00
spód
21.03A.D25
20
194
21.02A.D25
194
21.02B.D25
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spód
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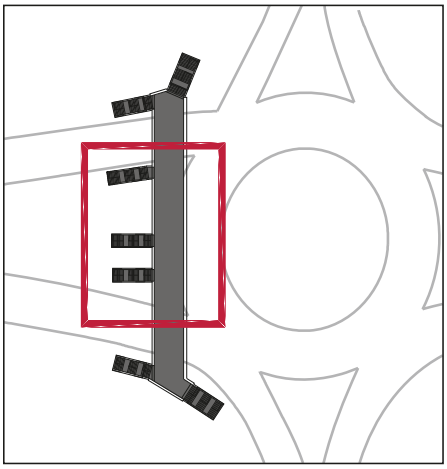
265,00
21.01A.D25
spód 220,00
226
20

1:200



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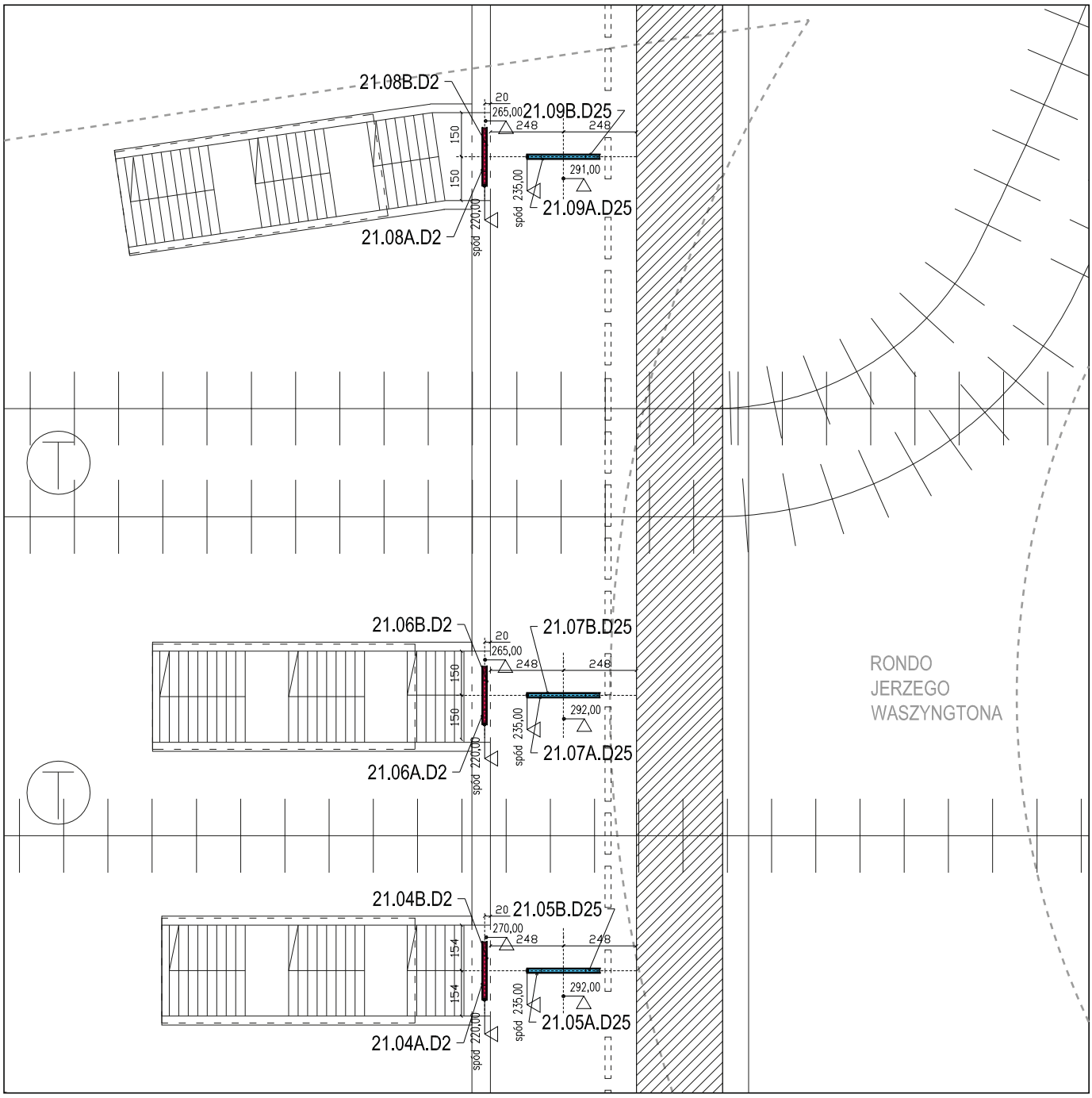
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291,00
spód 235,00
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21.08A.D2
spód 220,00
21.06B.D2
20
265,00
21.07B.D25
248
248
150
150
292,00
spód 235,00
21.07A.D25
21.06A.D2
spód 220,00
RONDO
JERZEGO
WASZYNGTONA
21.04B.D2
20
21.05B.D25
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292,00
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21.04A.D2
spód 220,00

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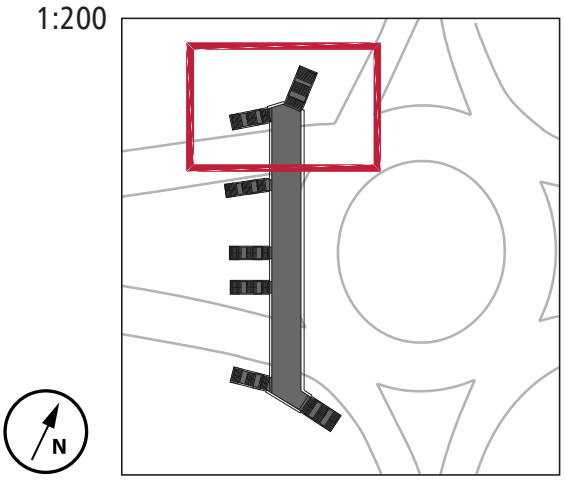
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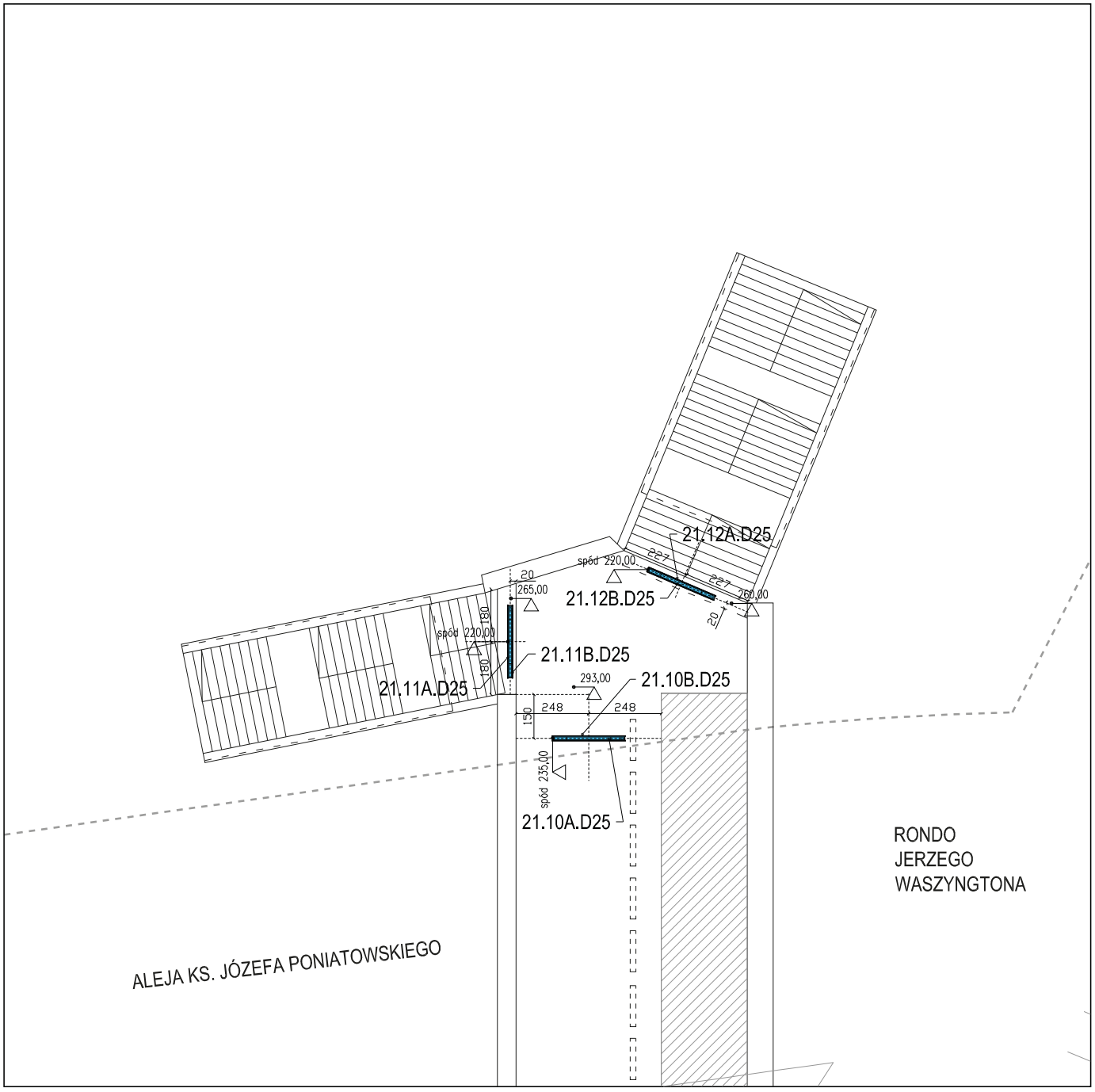
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21.11B.D25
21.11A.D25
293,00
21.10B.D25
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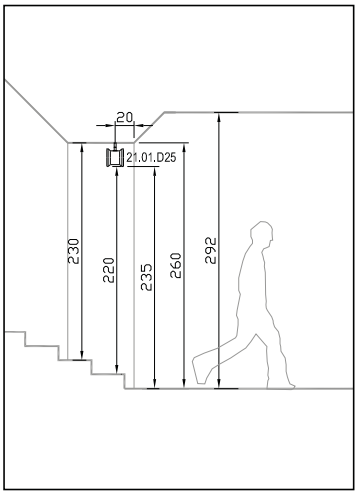
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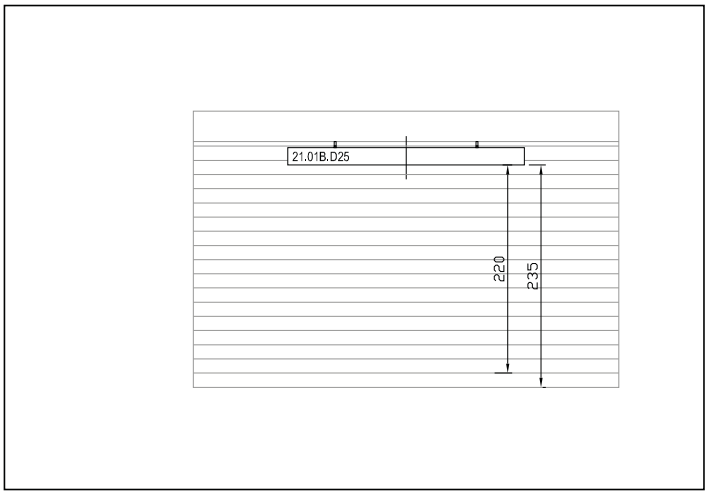
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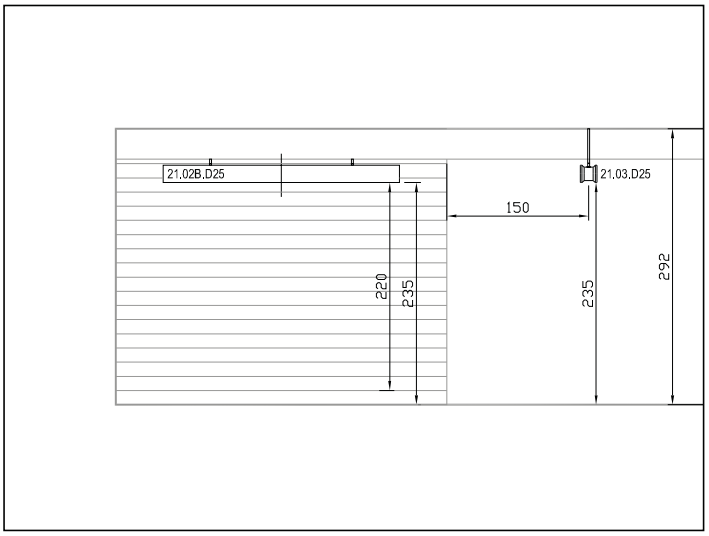
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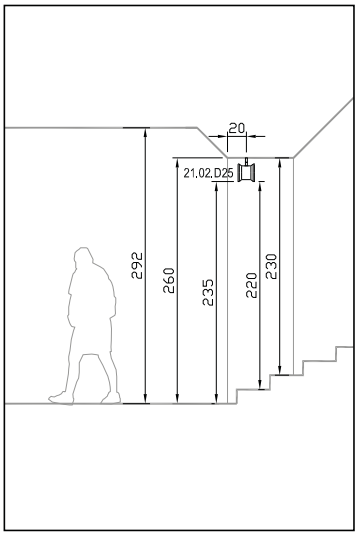
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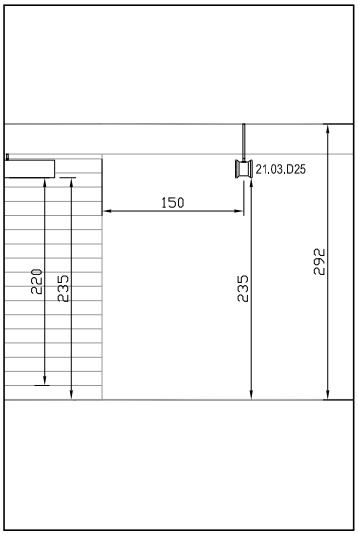
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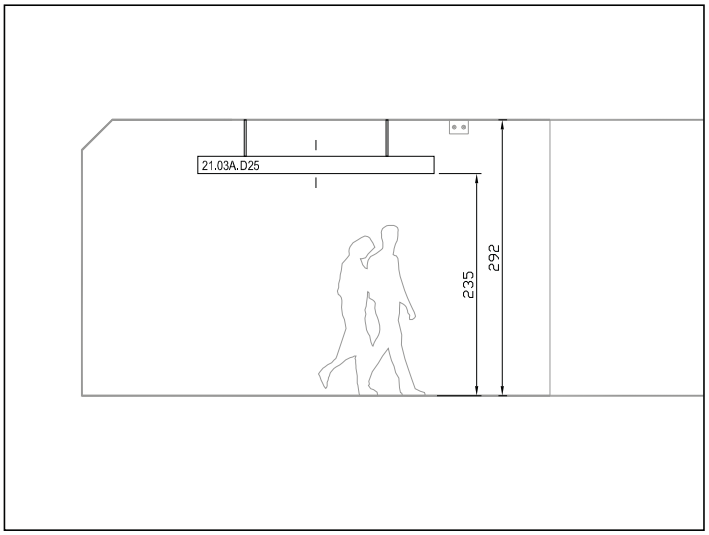
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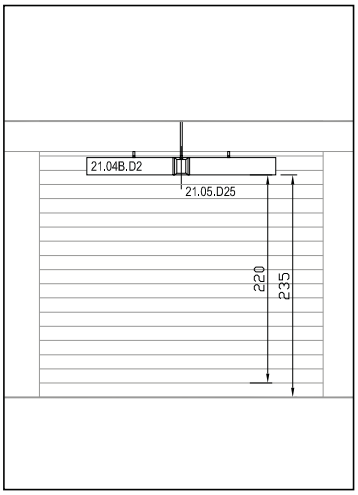
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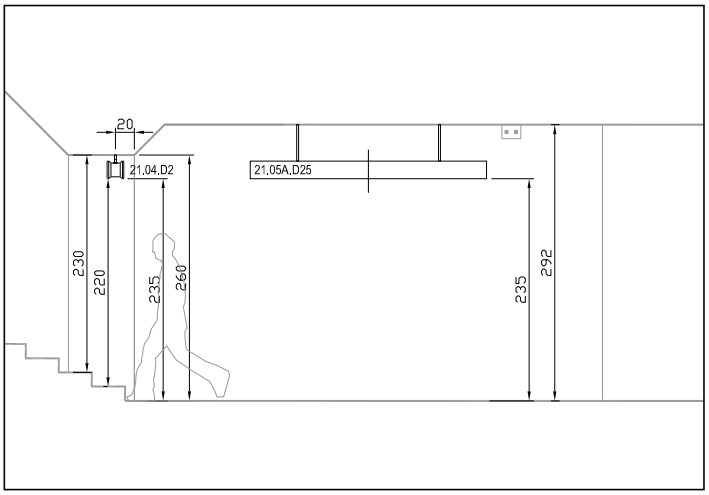
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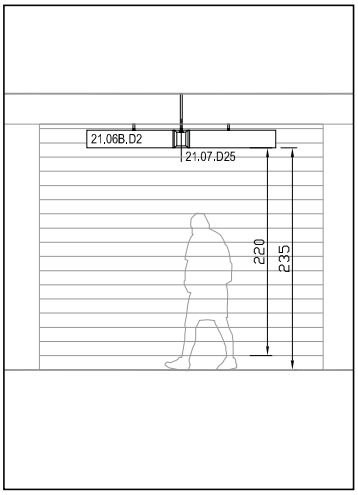
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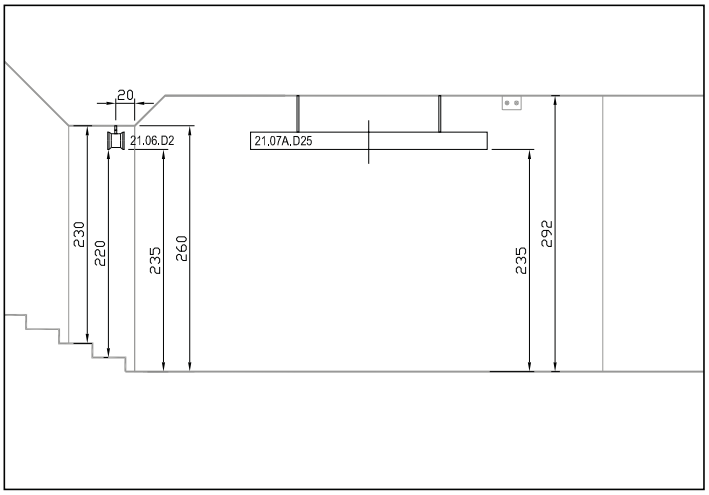
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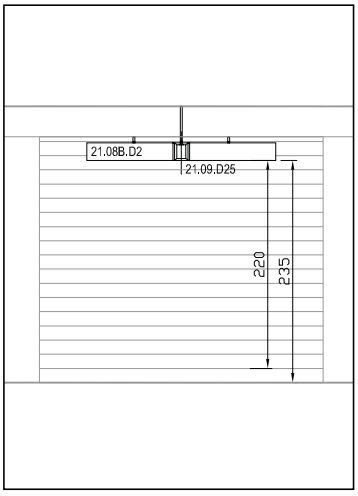
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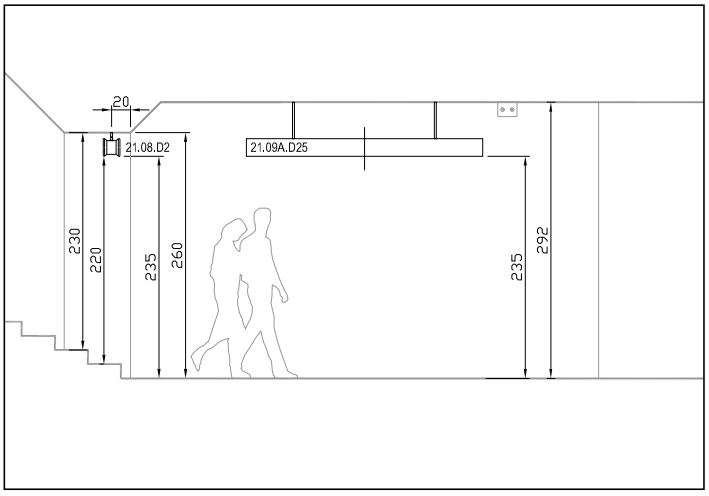
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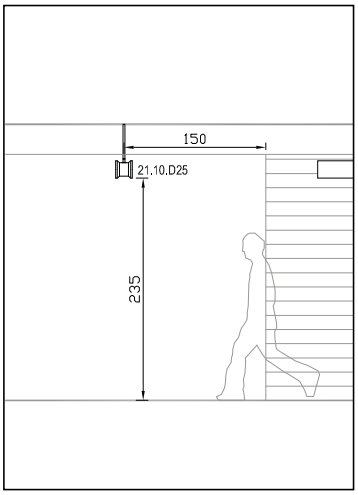
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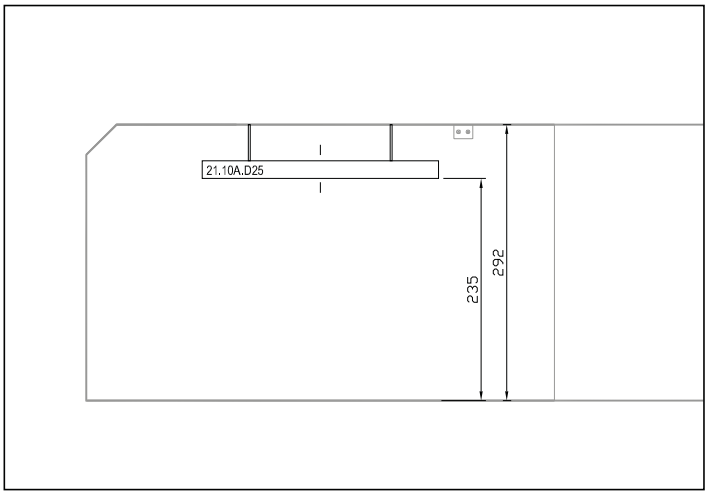
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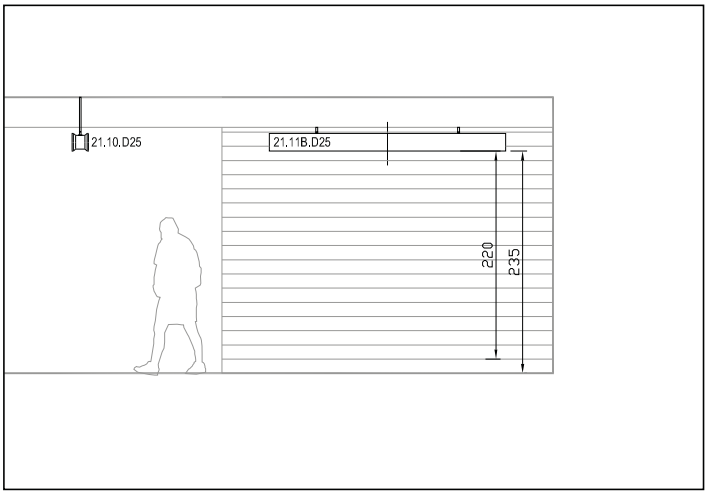
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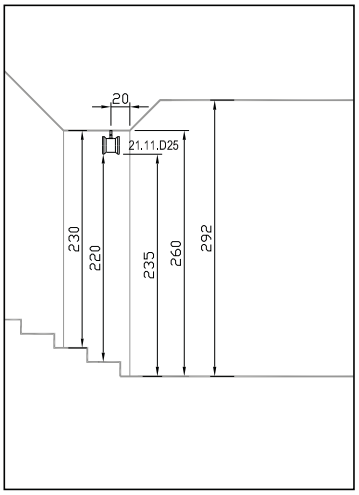
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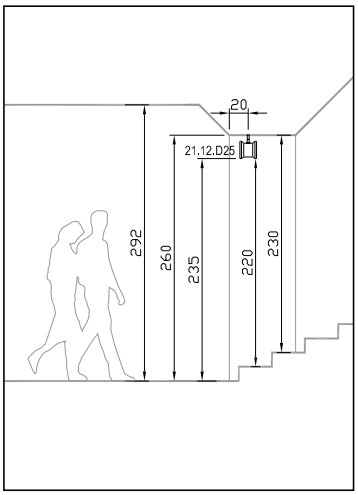
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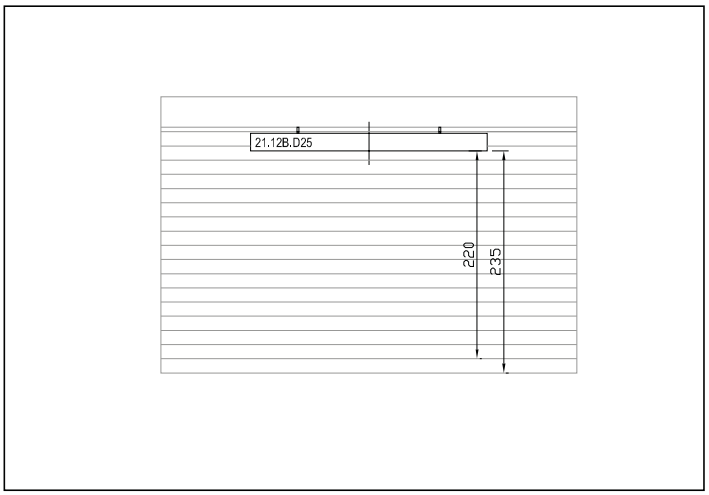
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21.01B.D25

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21.02B.D25

21.03A.D25

21.03B.D25

21.04A.D2

21.04B.D2

21.05A.D25

21.05B.D25

21.06A.D2

21.06B.D2

21.07A.D25

21.07B.D25

21.08A.D2

21.08B.D2

21.09A.D25

21.09B.D25

21.10A.D25

21.10B.D25

21.11A.D25

21.11B.D25

21.12A.D25

21.12B.D25

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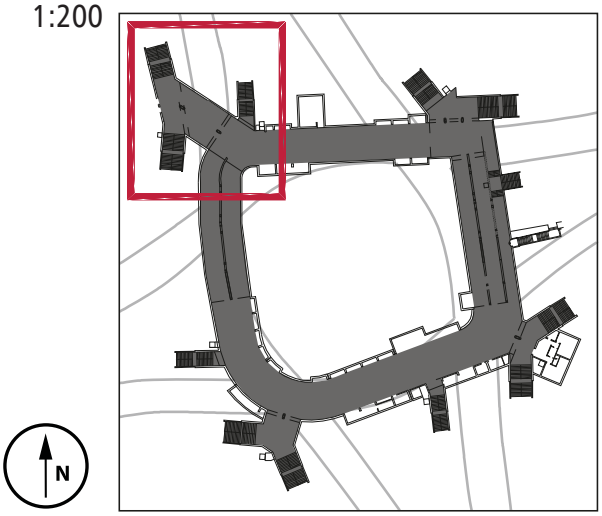

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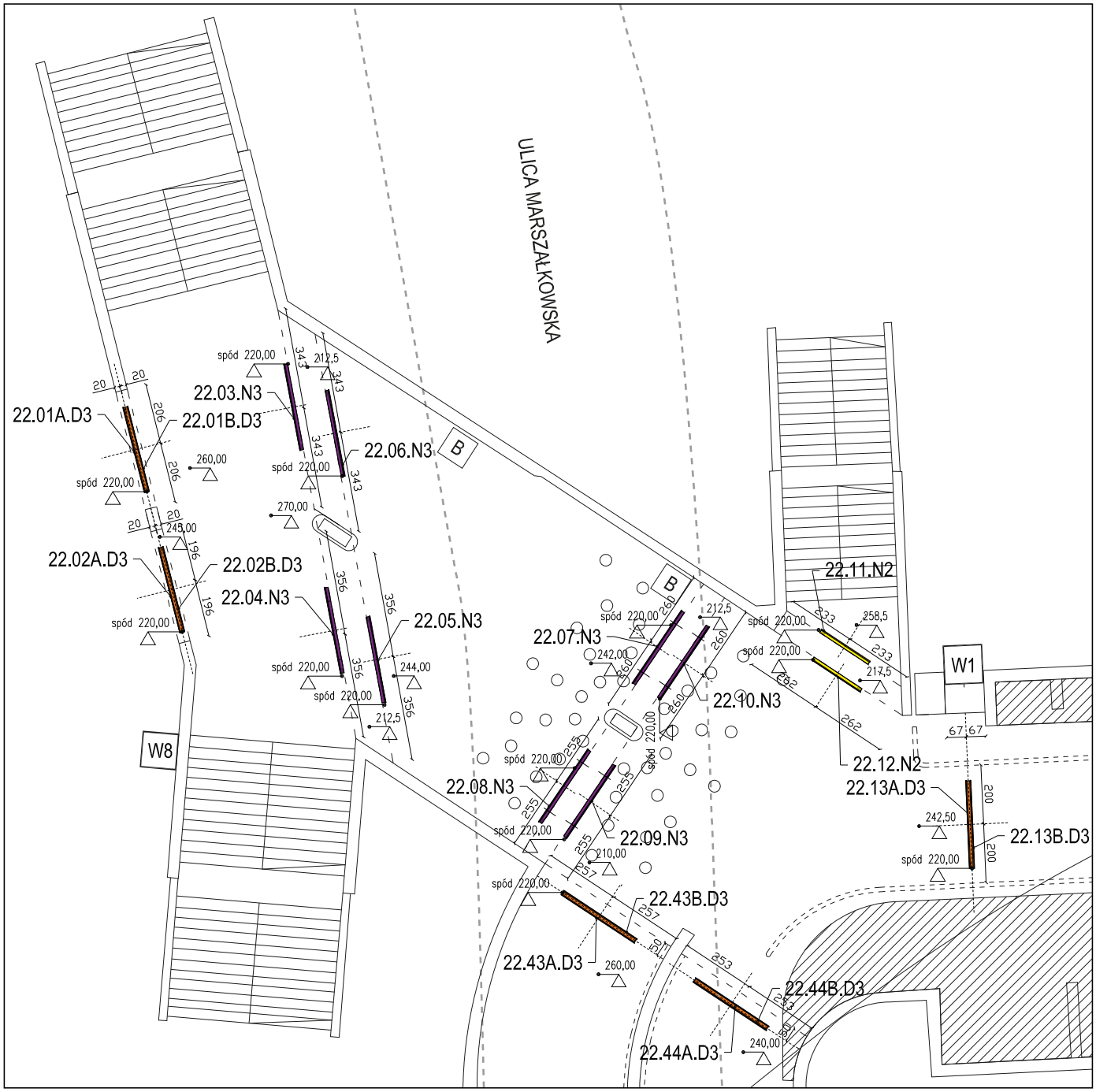
ULICA MARSZAŁKOWSKA
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22.01B.D3
22.02A.D3
22.02B.D3
22.03.N3
22.04.N3
22.05.N3
22.06.N3
22.07.N3
22.08.N3
22.09.N3
22.10.N3
22.11.N2
22.12.N2
22.13A.D3
22.13B.D3
22.43A.D3
22.43B.D3
22.44A.D3
22.44B.D3
W1
W8
B
spód 220,00
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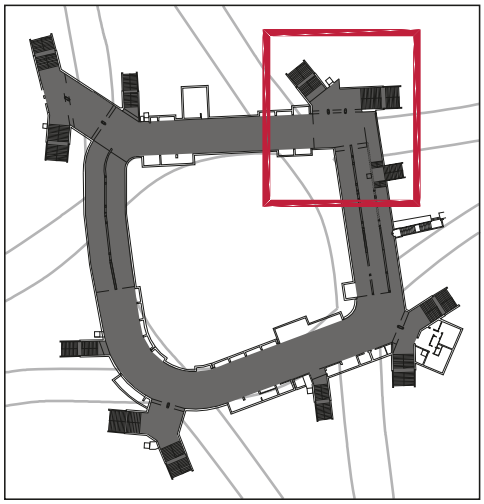
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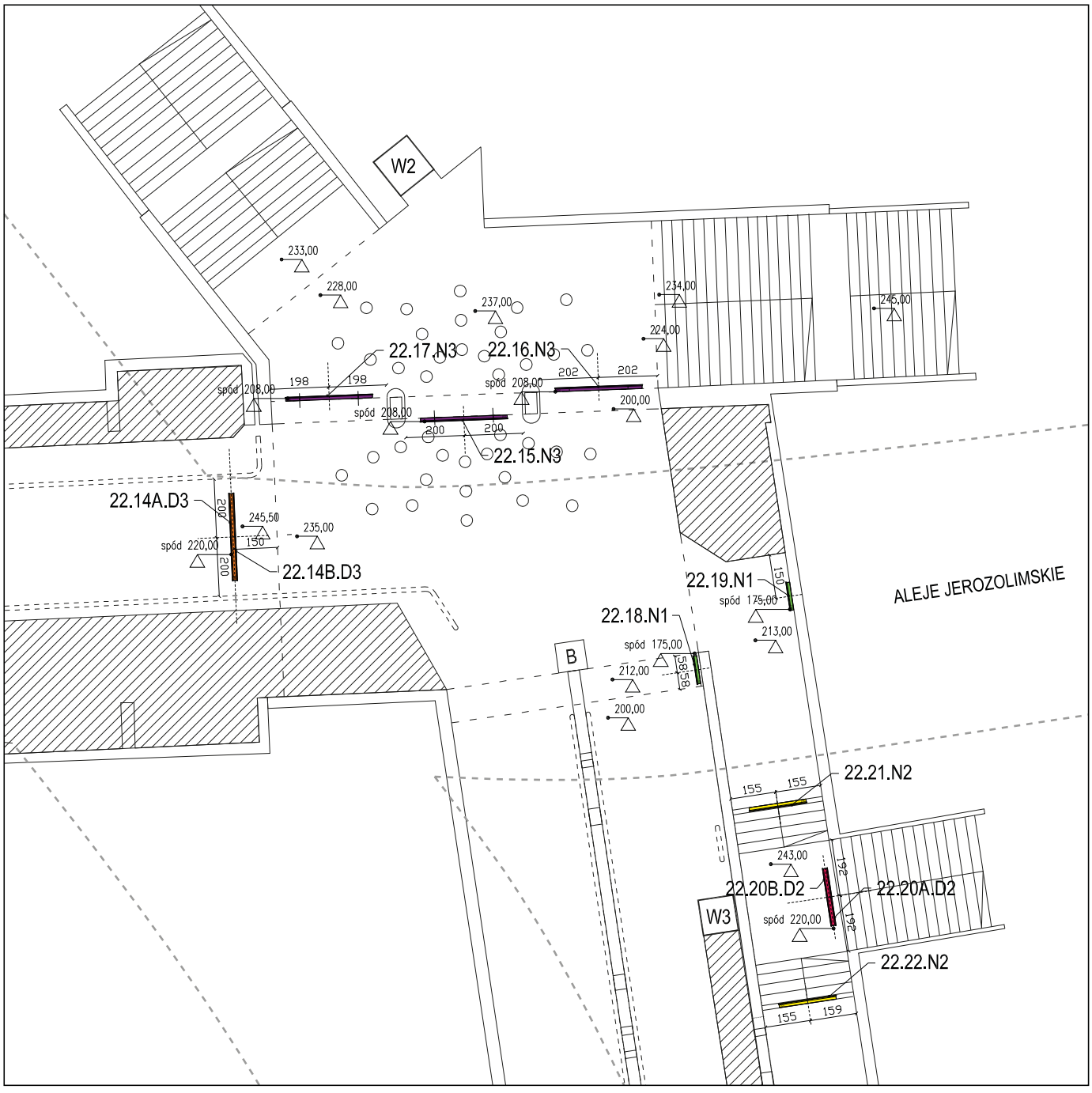
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198
202
202
spód 208,00
200,00
spód 208,00
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22.15.N3
22.14A.D3
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245,50
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spód 220,00
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22.14B.D3
22.19.N1
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213,00
ALEJE JEROZOLIMSKIE
22.18.N1
spód 175,00
B
212,00
585
200,00
22.21.N2
155
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22.20A.D2
192
192
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159

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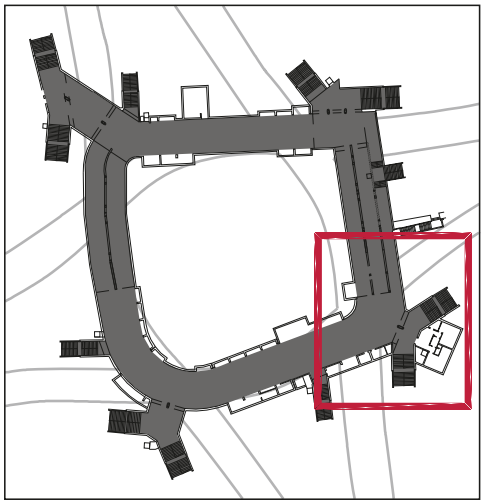

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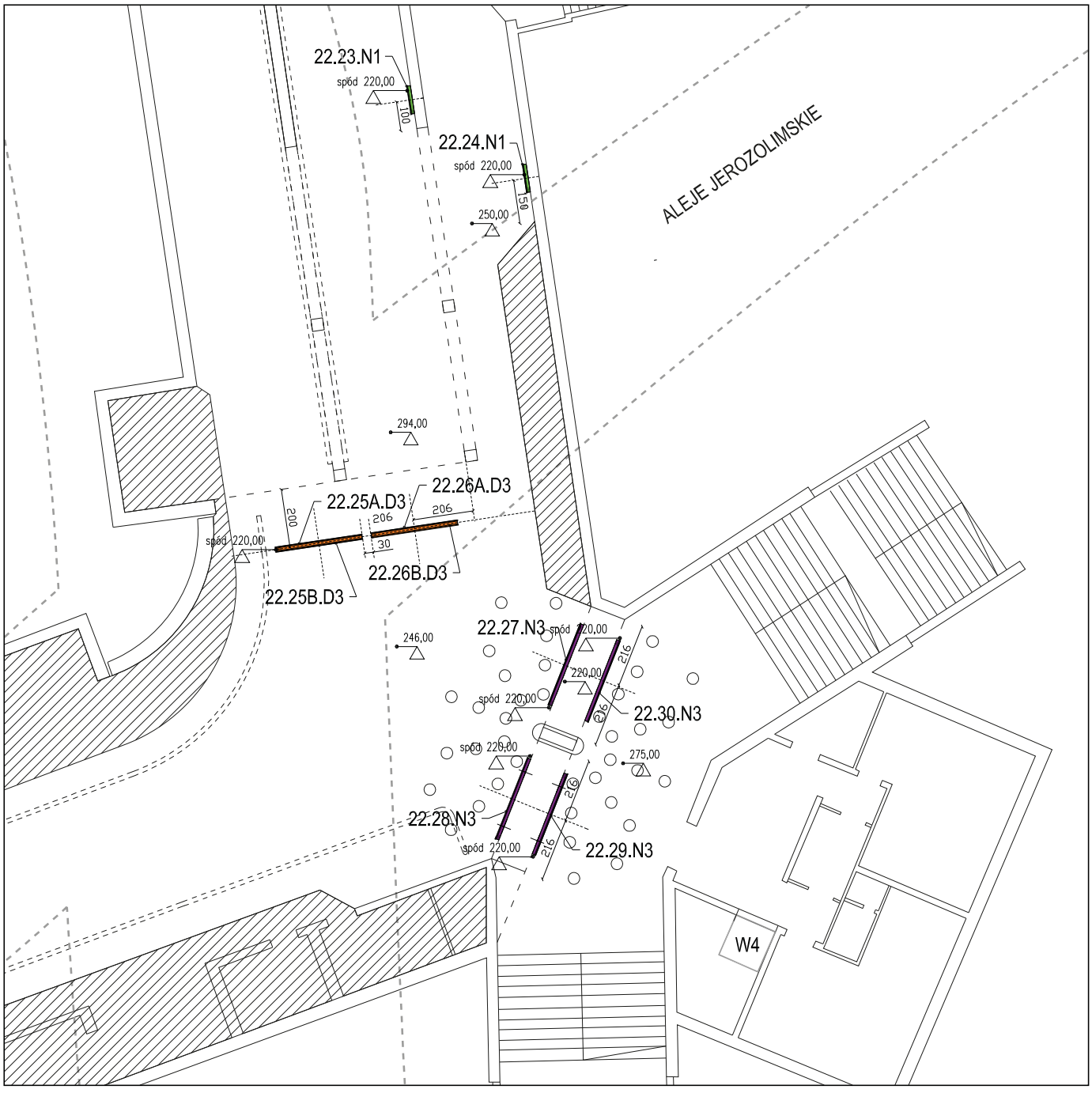
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ALEJE JEROZOLIMSKIE
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22.26A.D3
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206
206
30
spód 220,00
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22.25B.D3
246,00
22.27.N3
spód 220,00
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220,00
spód 220,00
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22.29.N3
W4

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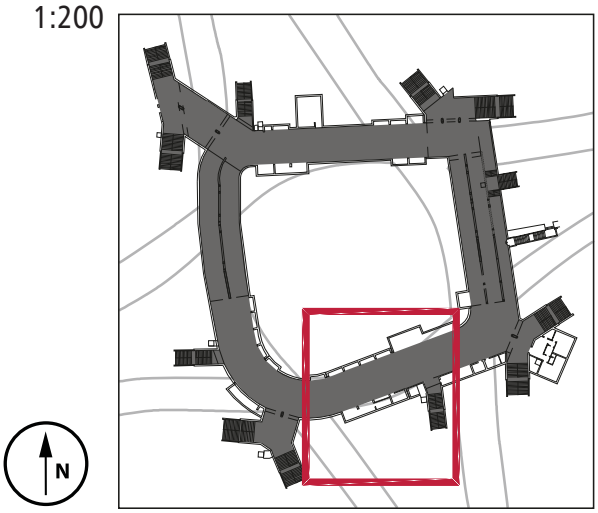

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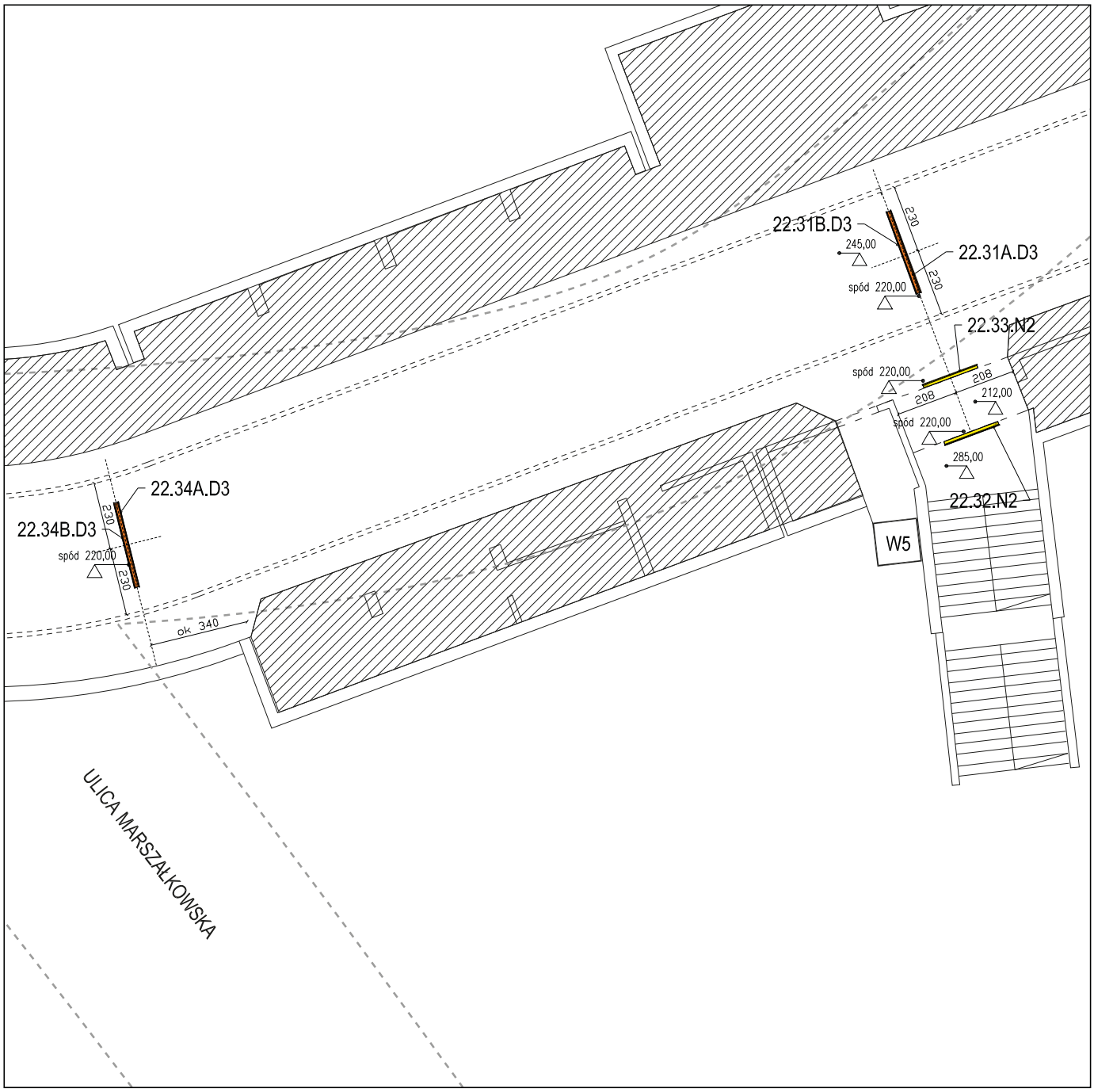
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212,00
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285,00
22.32.N2
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ULICA MARSZAŁKOWSKA

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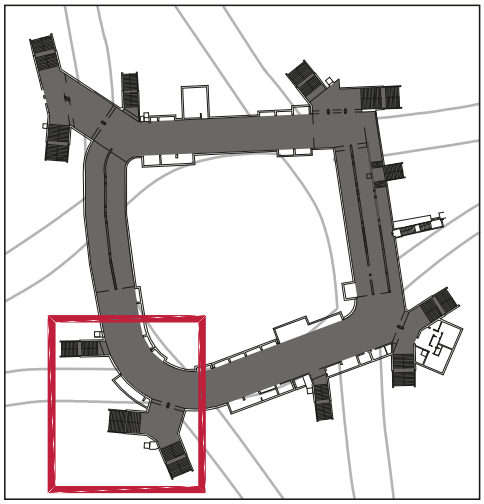

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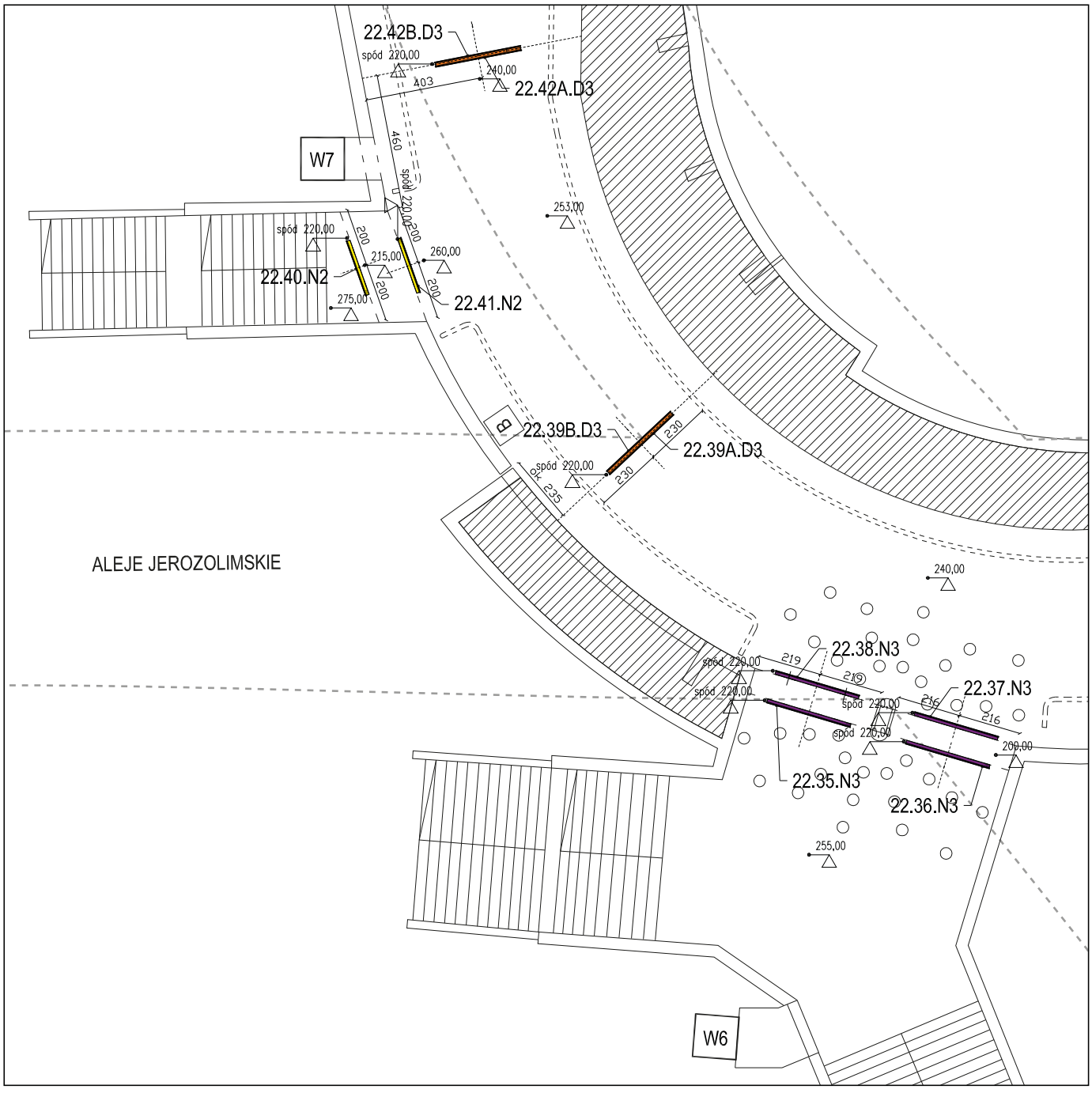
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W7
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spód 220,00
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215,00
260,00
22.40.N2
275,00
200
200
22.41.N2
253,00
B
22.39B.D3
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22.39A.D3
spód 220,00
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235
ALEJE JEROZOLIMSKIE
240,00
22.38.N3
219
spód 220,00
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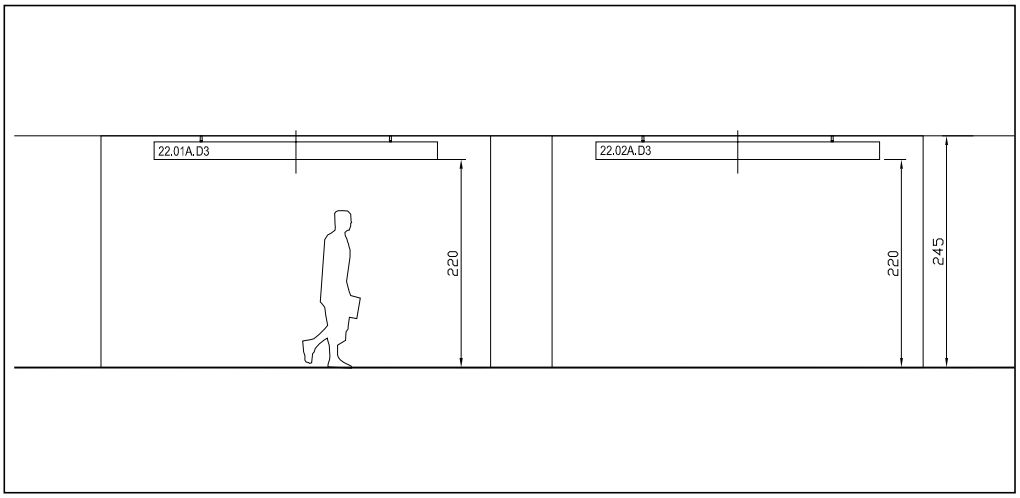
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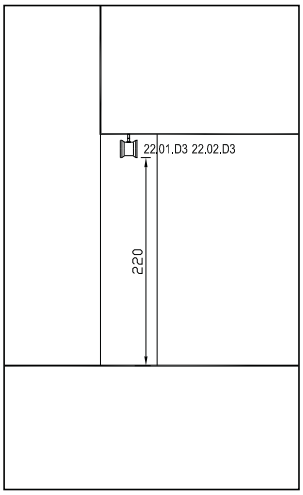
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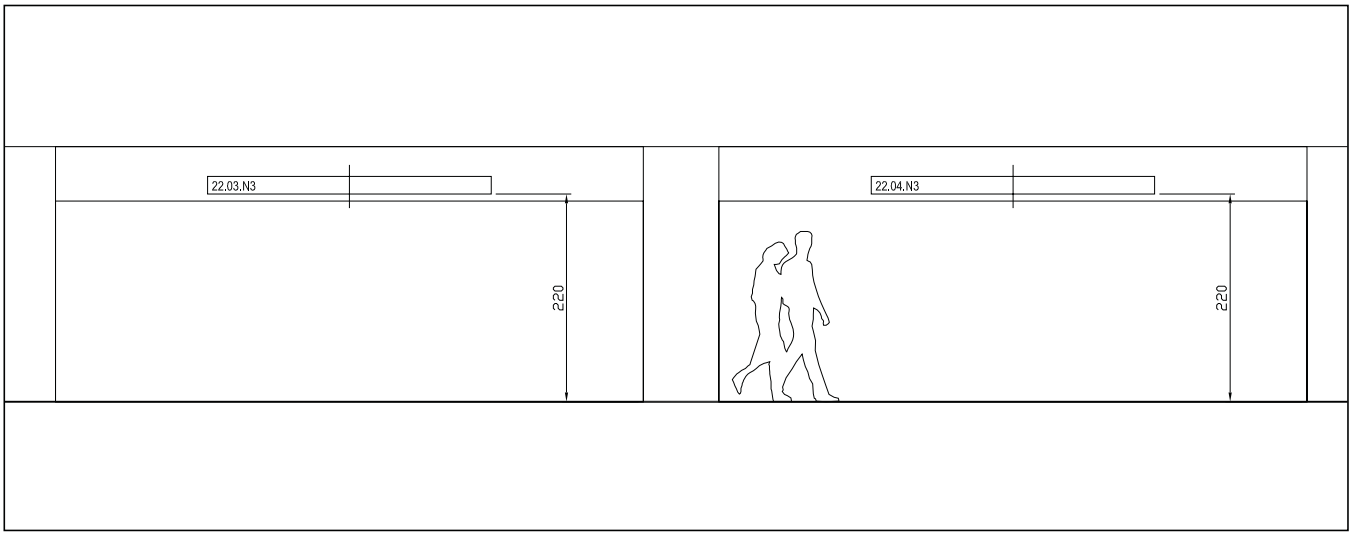
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22.04.N3
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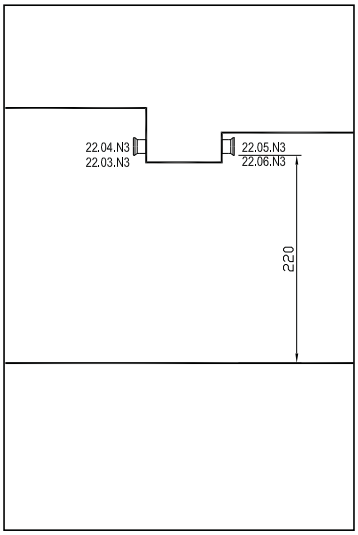
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22.03.N3
22.05.N3
22.06.N3
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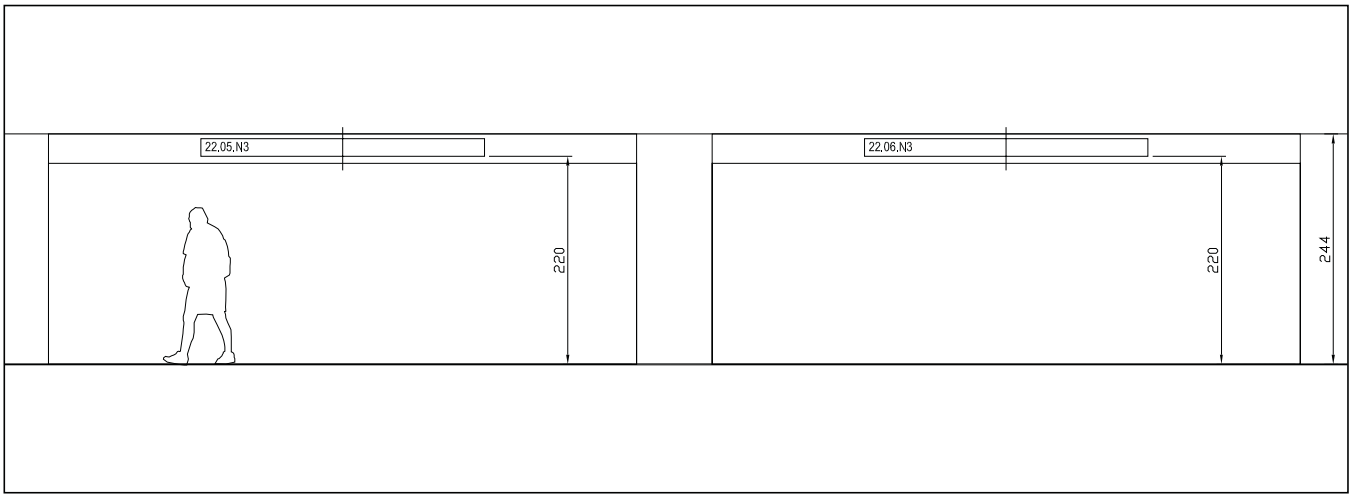
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22.06.N3
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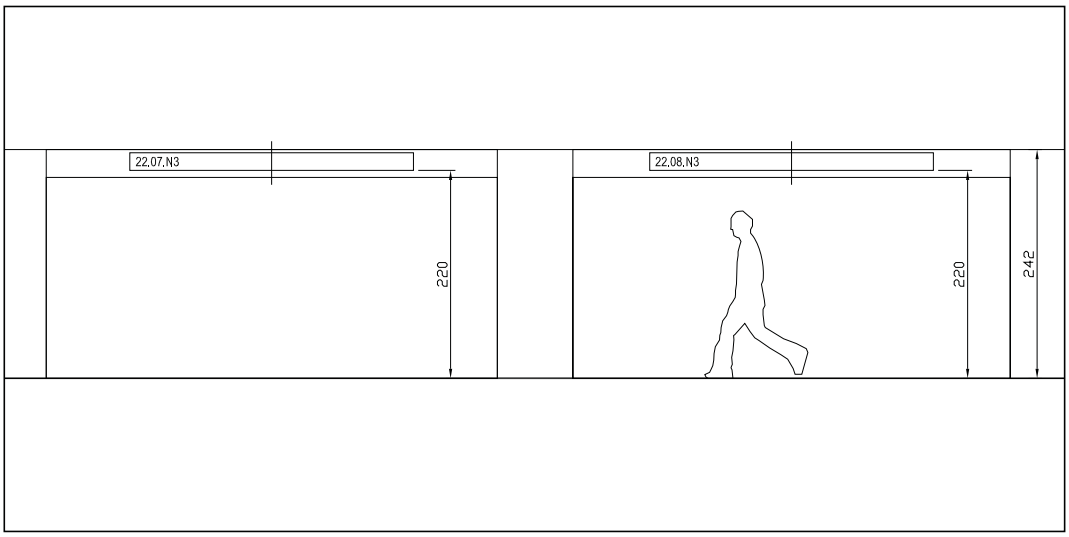
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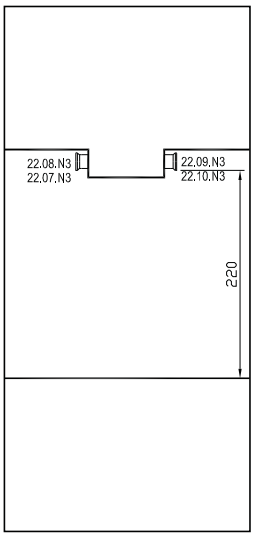
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22.09.N3
22.10.N3
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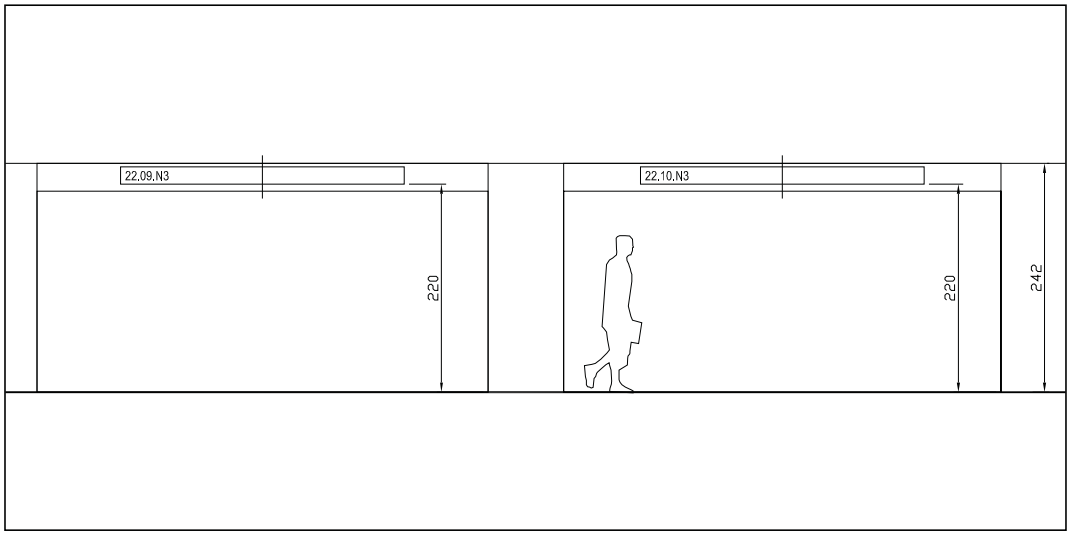
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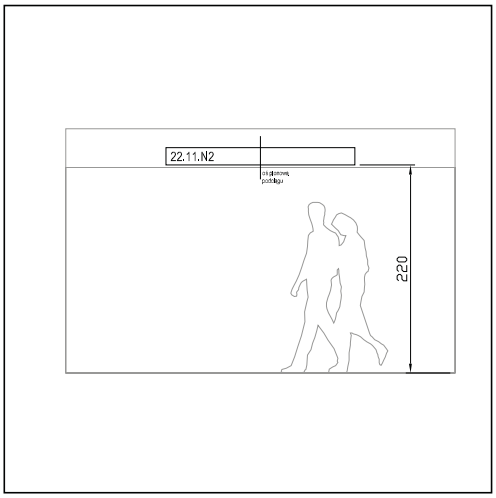
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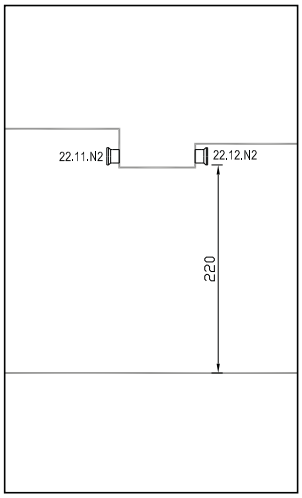
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22.12.N2
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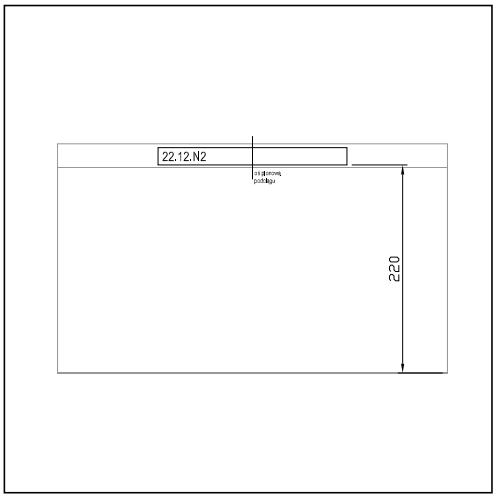
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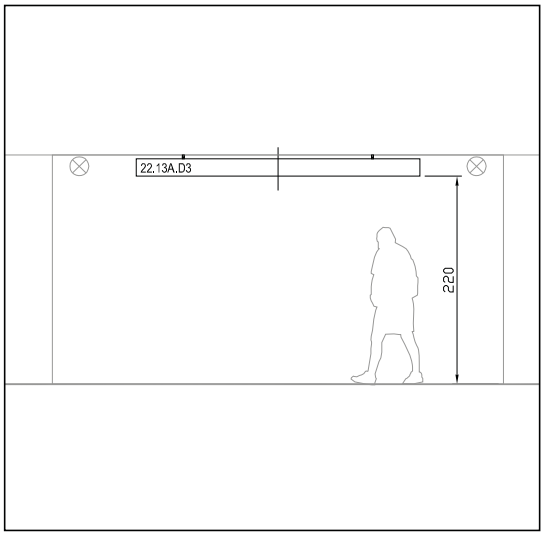
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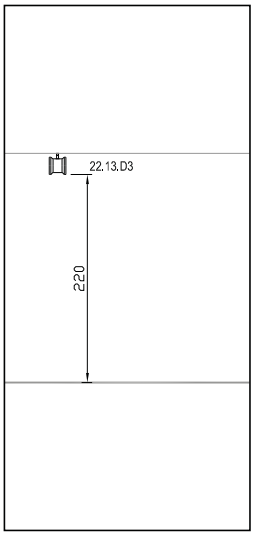
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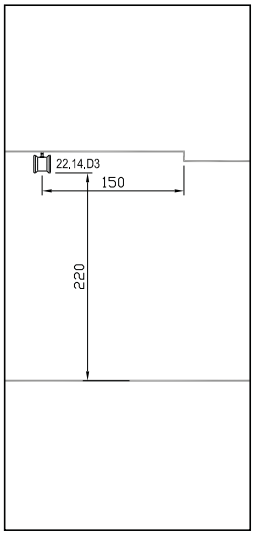
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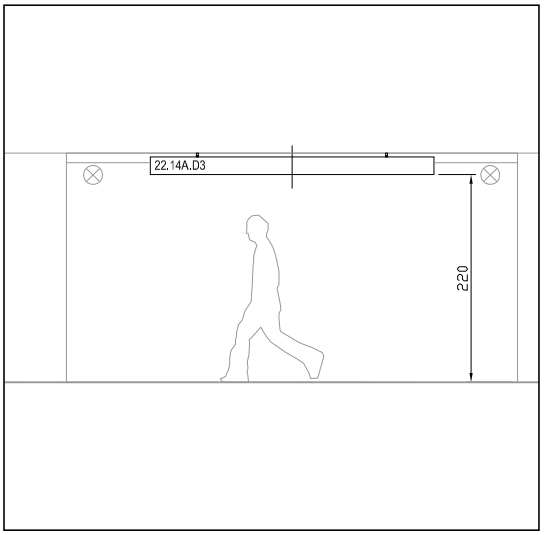
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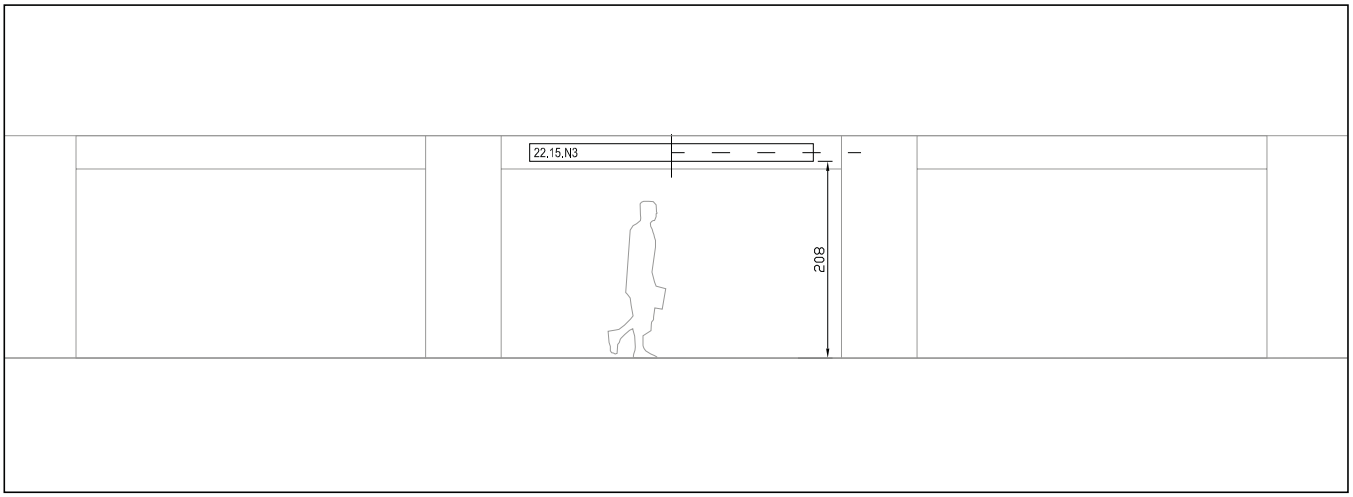


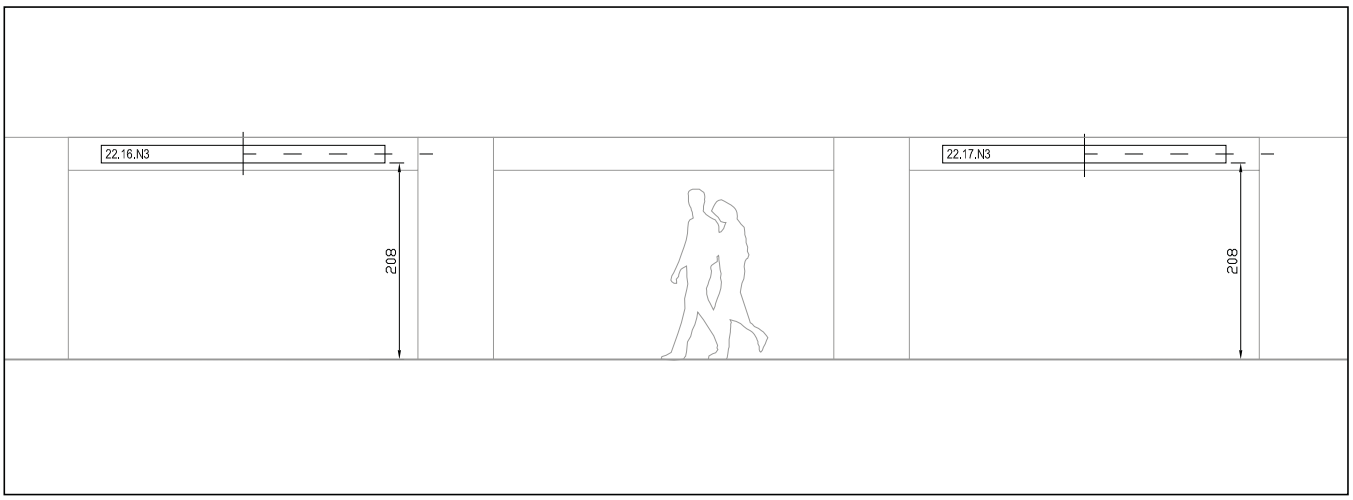


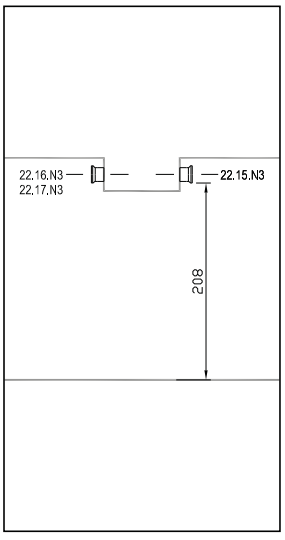


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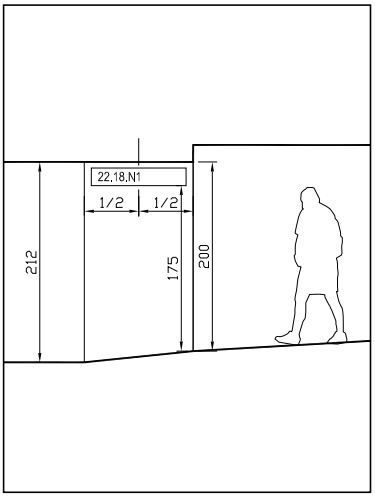
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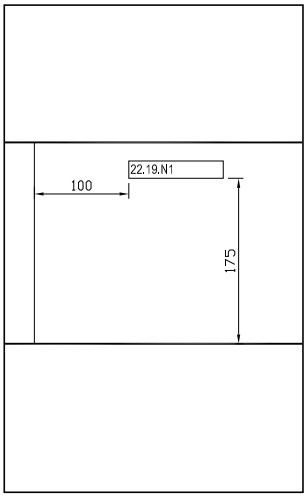
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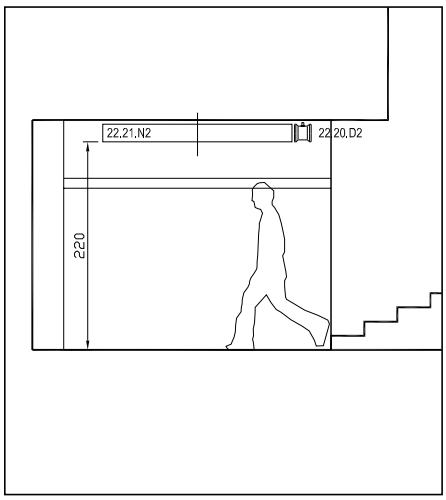
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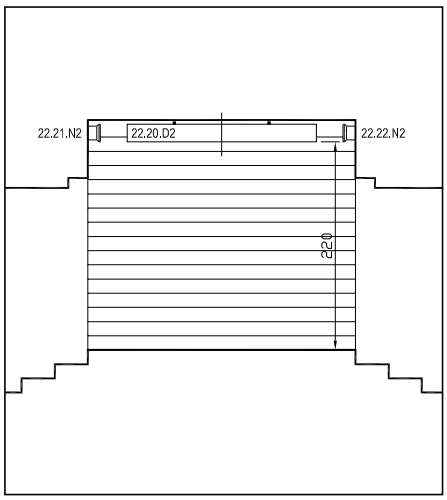
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22.22.N2
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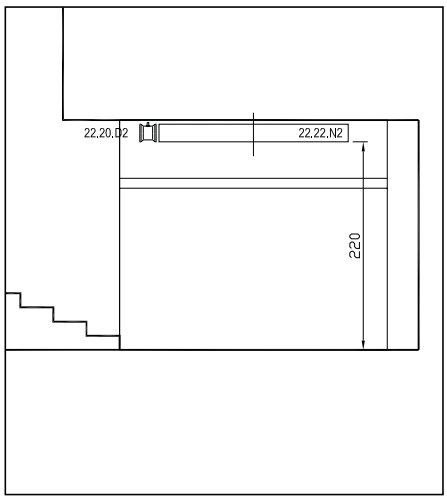
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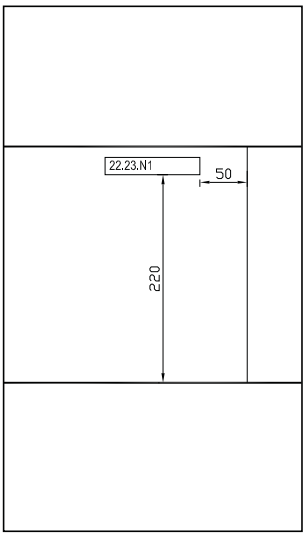
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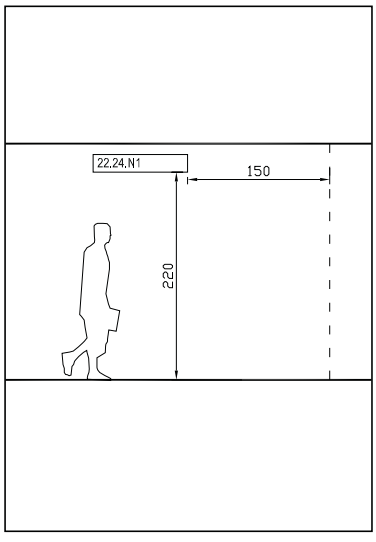
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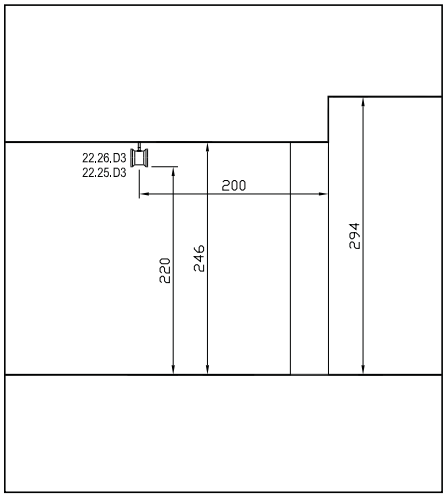
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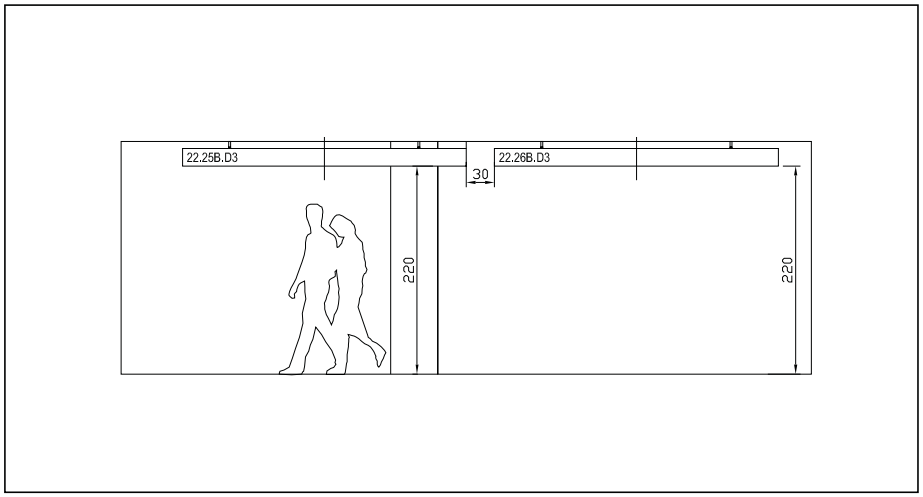
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22.26B.D3
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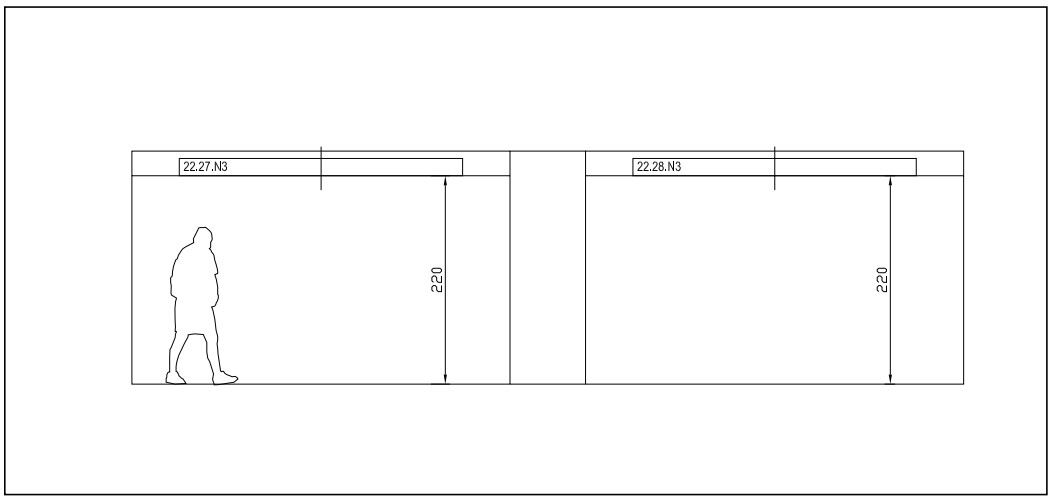
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22.28.N3
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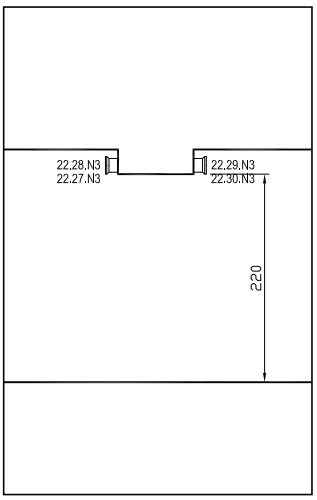
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22.27.N3
22.29.N3
22.30.N3
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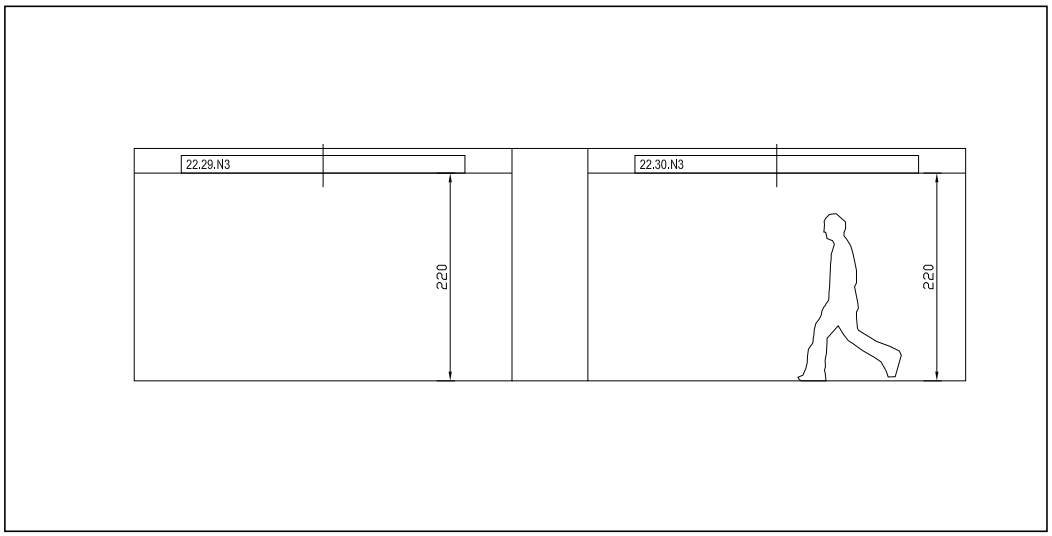
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22.30.N3
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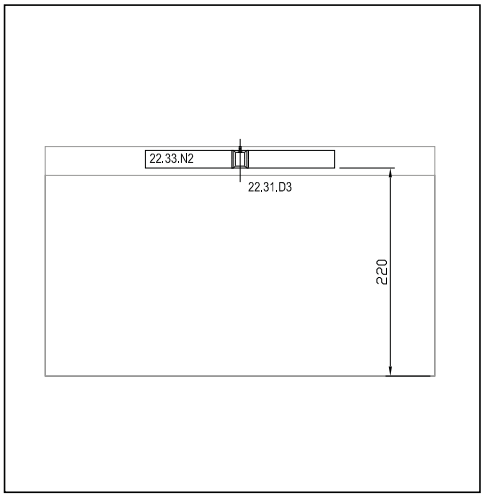
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22.31.D3
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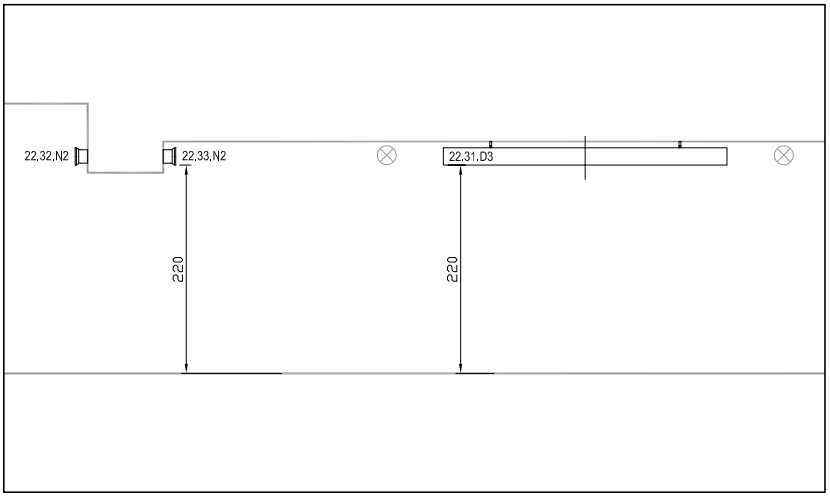
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22.33.N2
22.31.D3
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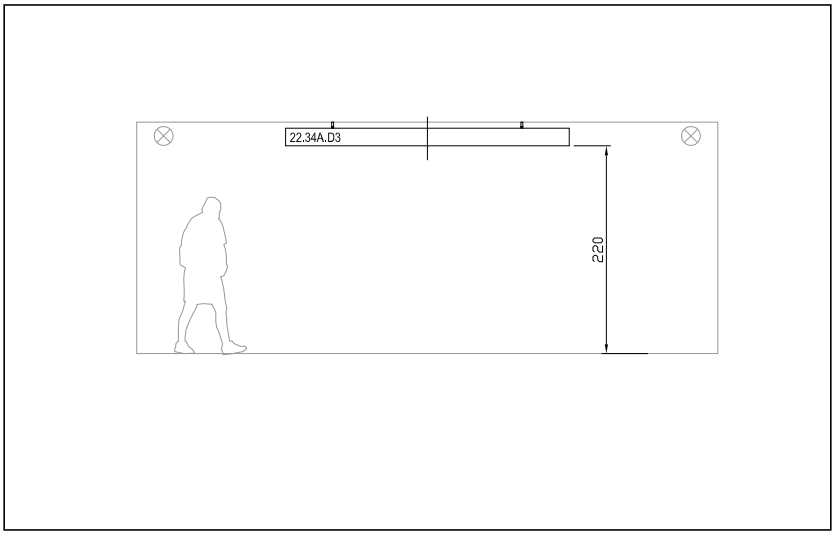
220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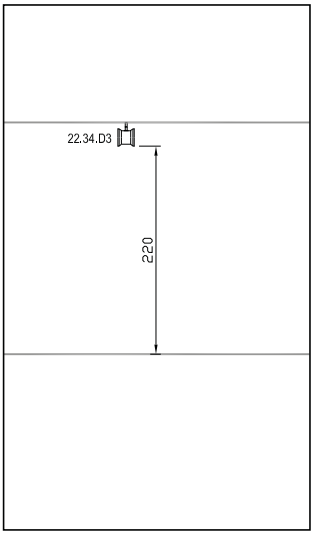
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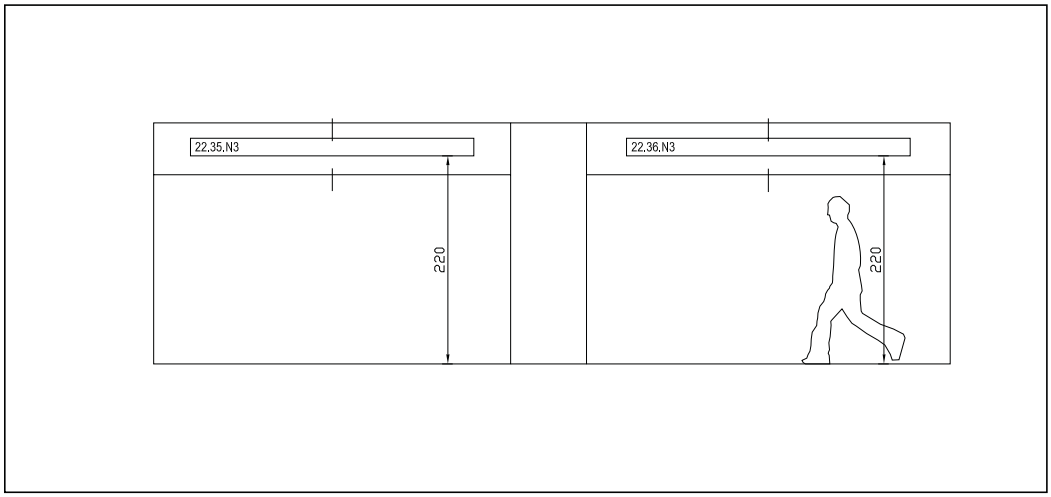
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22.36.N3
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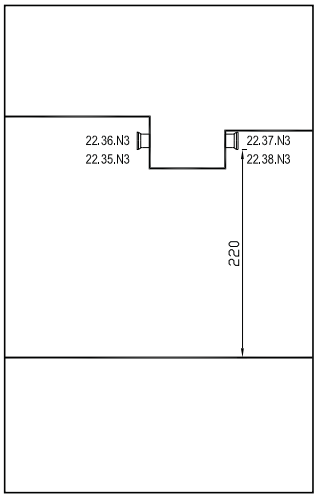
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22.35.N3
22.37.N3
22.38.N3
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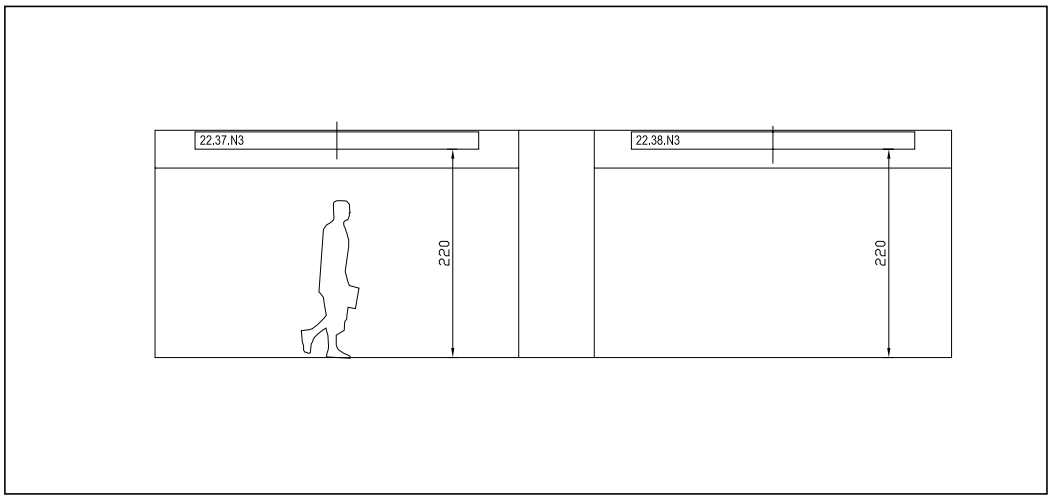
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22.38.N3
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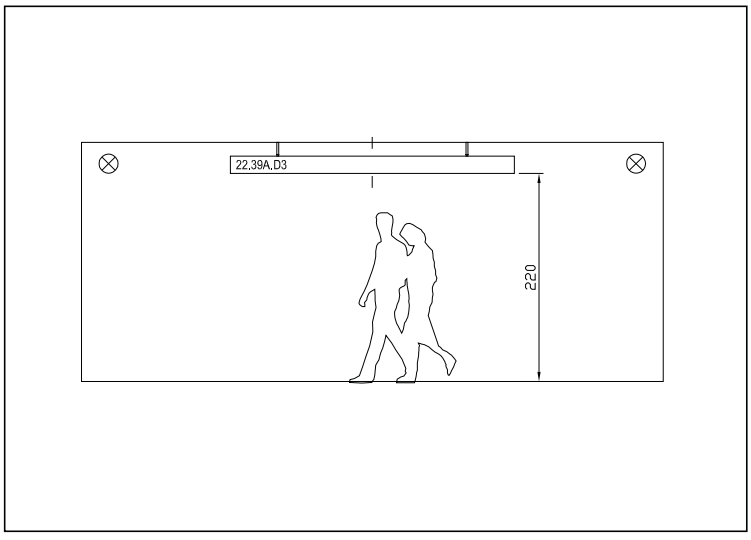
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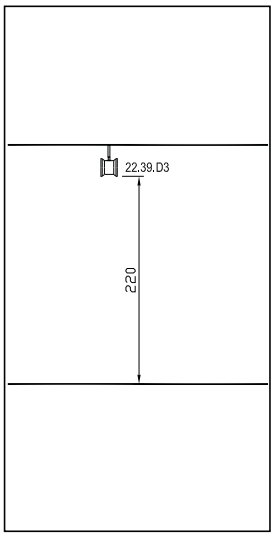
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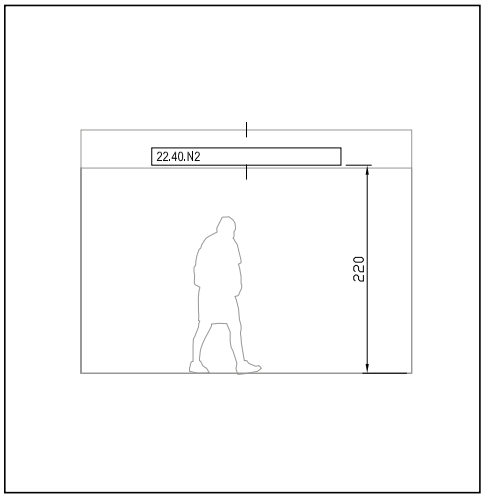
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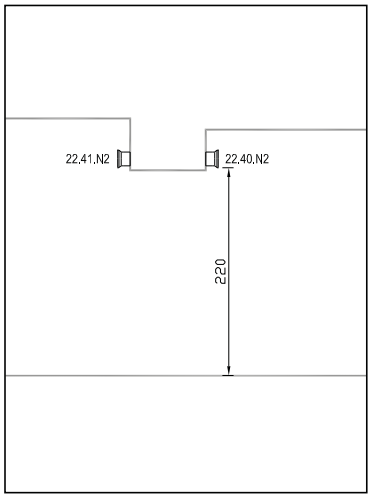
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22.40.N2
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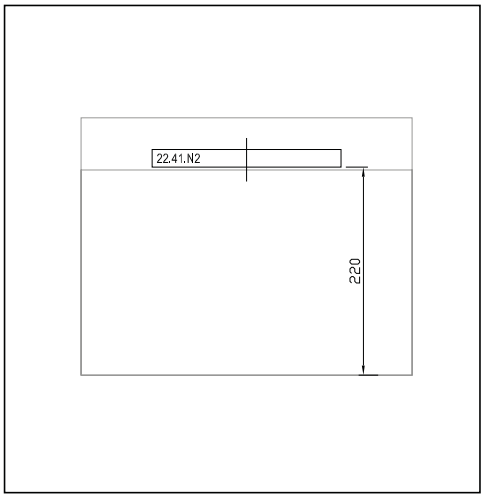
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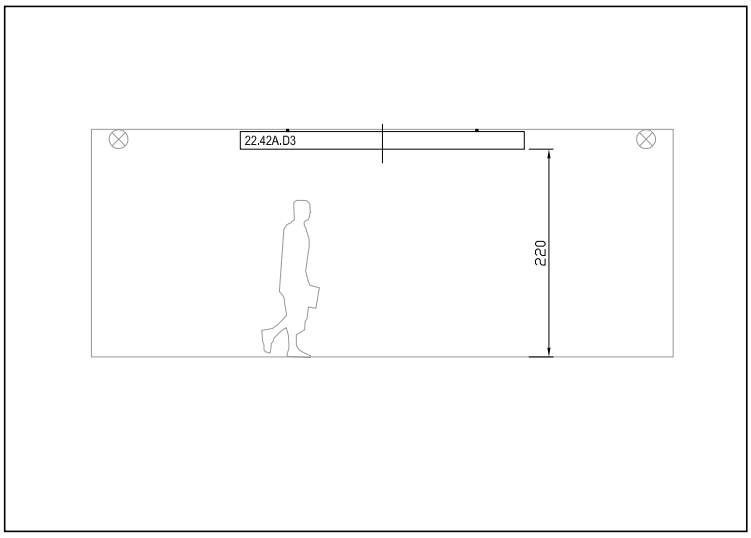
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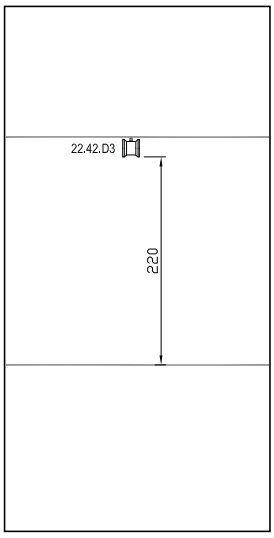
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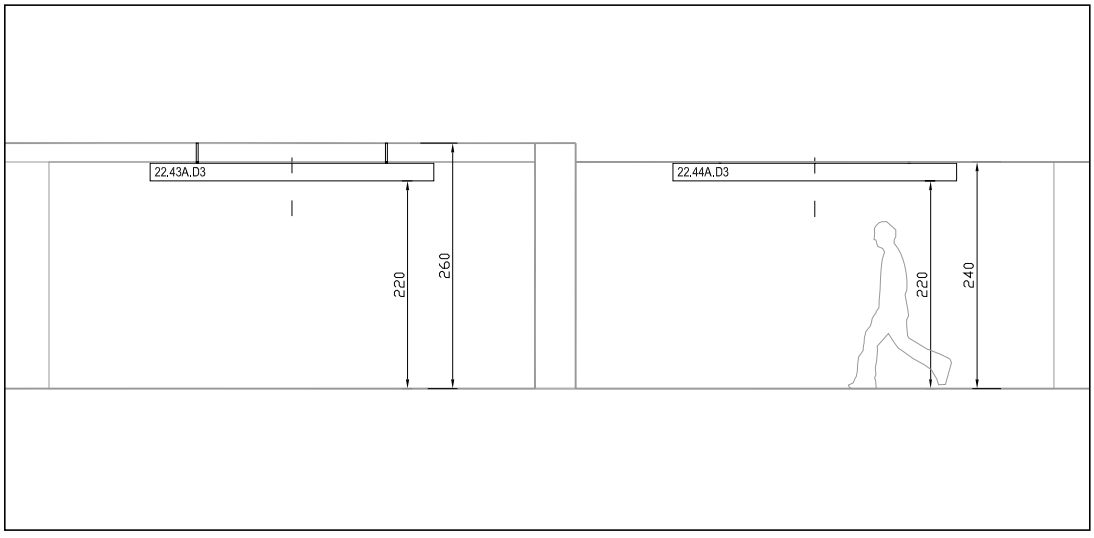
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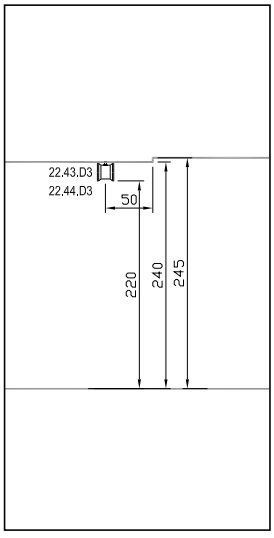
260
22.44A.D3
220
240


22.43.D3
22.44.D3
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245

22.01A.D3

22.01B.D3

22.02A.D3

22.02B.D3

22.03.N3

22.04.N3

22.05.N3

22.06.N3

22.07.N3

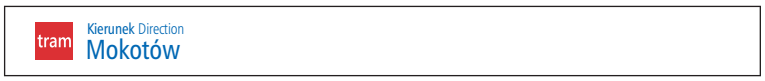
22.08.N3

22.09.N3

22.10.N3

22.11.N2

22.12.N2



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22.13B.D3

22.14A.D3

22.14B.D3

22.15.N3

22.16.N3

22.17.N3

22.18.N1

22.19.N1

22.20A.D2

22.20B.D2

22.21.N2

22.22.N2

22.23.N1

22.24.N1

22.25A.D3

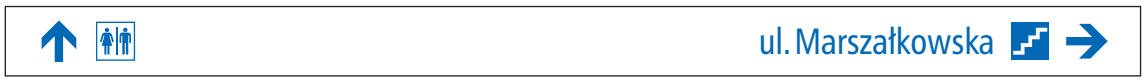
22.25B.D3

22.26A.D3

22.26B.D3

22.27.N3

22.28.N3

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22.30.N3

22.31A.D3

22.31B.D3

22.32.N2

22.33.N2

22.34A.D3

22.34B.D3

22.35.N3

22.36.N3

22.37.N3

22.38.N3

22.39A.D3

22.39B.D3

22.40.N2

22.41.N2

22.42A.D3

22.42B.D3

22.43A.D3

22.43B.D3

22.44A.D3

22.44B.D3

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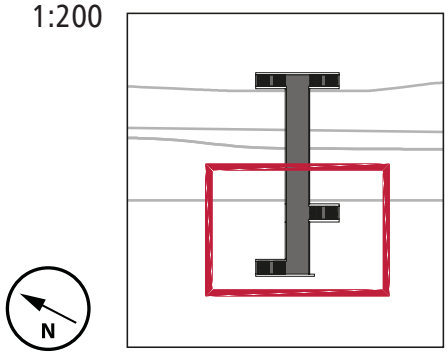


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ULICA JAGIELLOŃSKA

23.03B.D25
238,00
175
spód 215,00
spód ok 260,00
23.05.N2
300
300
175
23.03A.D25
150
spód 215,00
23.04.N1

tram Dyrekcja FSO 04

spód 215,00
23.02.N1
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23.01.N2
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242,00
spód ok 260,00
175

tram Dyrekcja FSO 03

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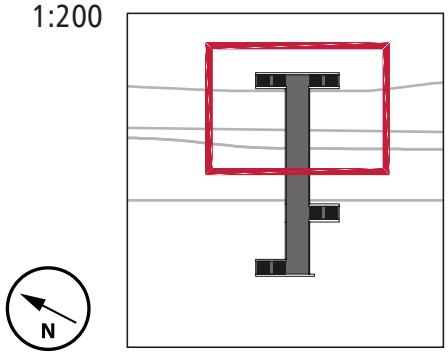

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bus Dyrekcja FSO 02

243,00

spód ok 260,00

spód ok 260,00

23.08.N2

23.09.N2

spód 215,00

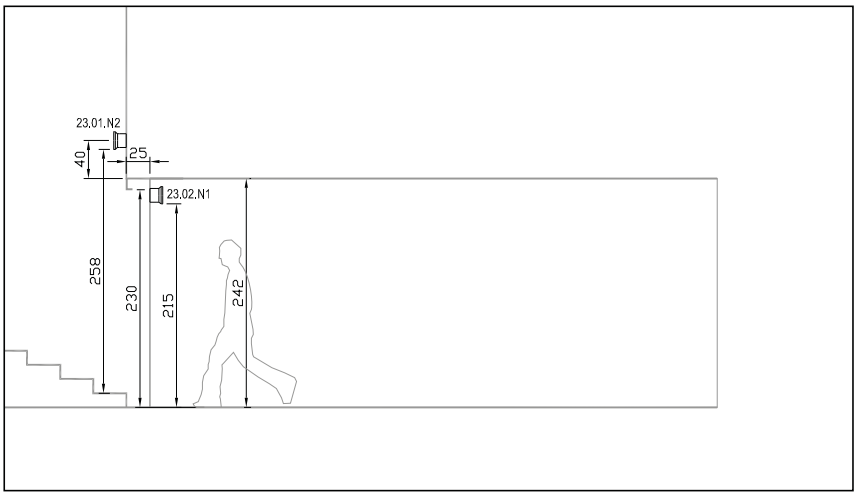
spód 215,00

23.07.N1

23.06.N1

ULICA JAGIELLOŃSKA

ULICA JAGIELLOŃSKA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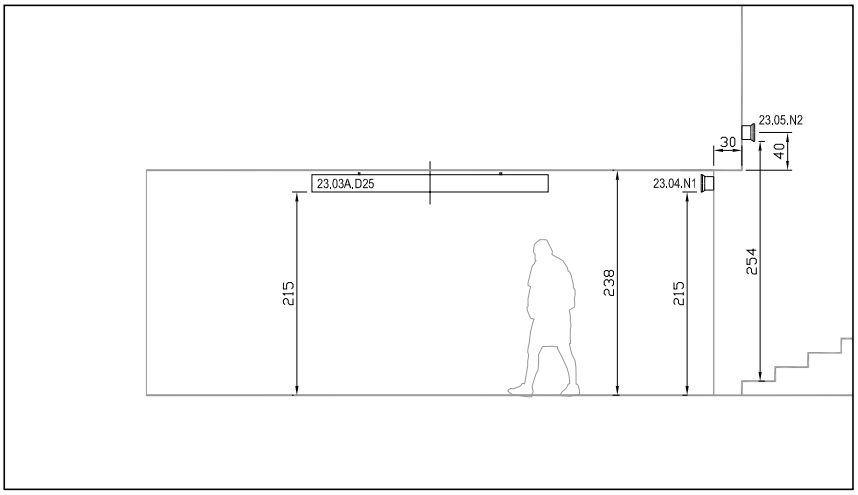
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23.03A,D25
23.04.N1
215
238
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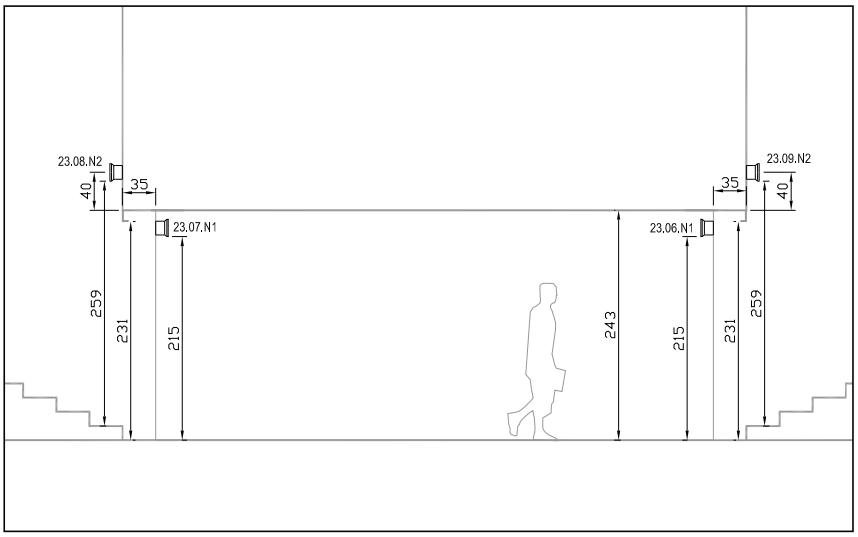
254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23.07.N1
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23.09.N2
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23.06.N1
243
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231
259

1:8

23.01.N2

23.02.N1

23.03A.D25

23.03B.D25

23.04.N1

23.05.N2

23.06.N1

23.07.N1

23.08.N2

23.09.N2

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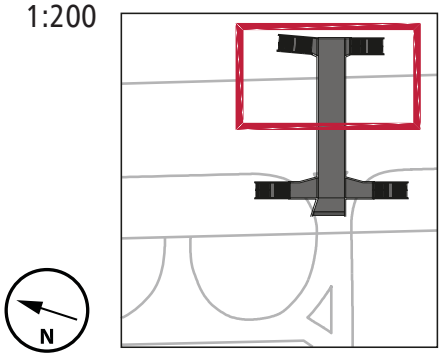
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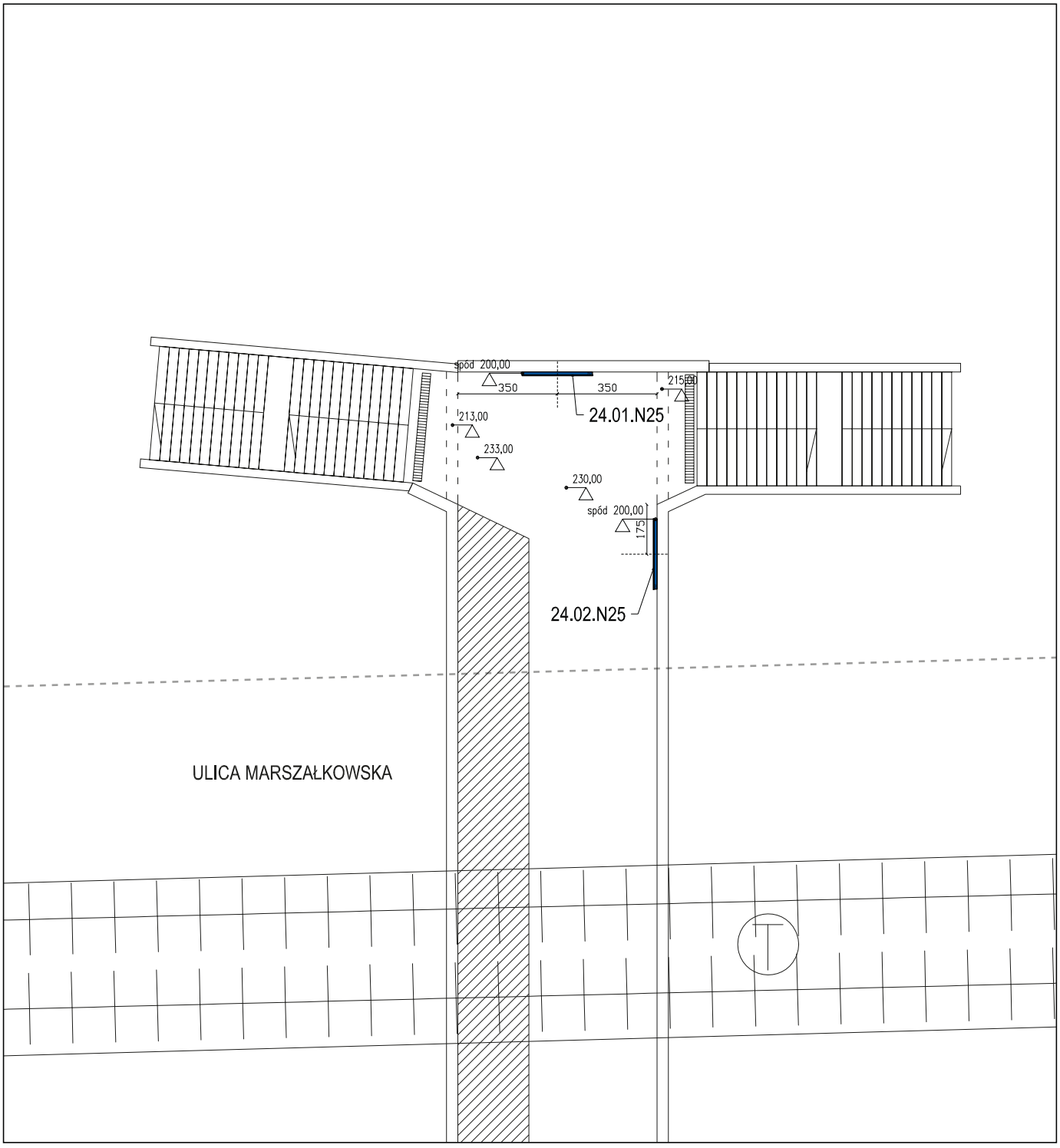
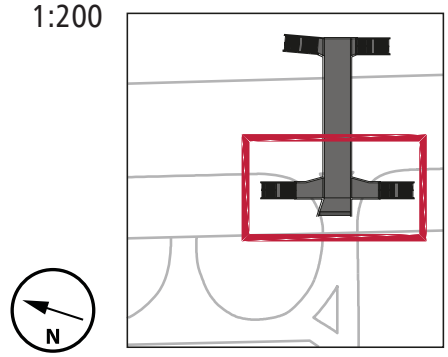

spód 200,00
350
350
215,00
24.01.N25
213,00
233,00
230,00
spód 200,00
175
24.02.N25
ULICA MARSZAŁKOWSKA

1:200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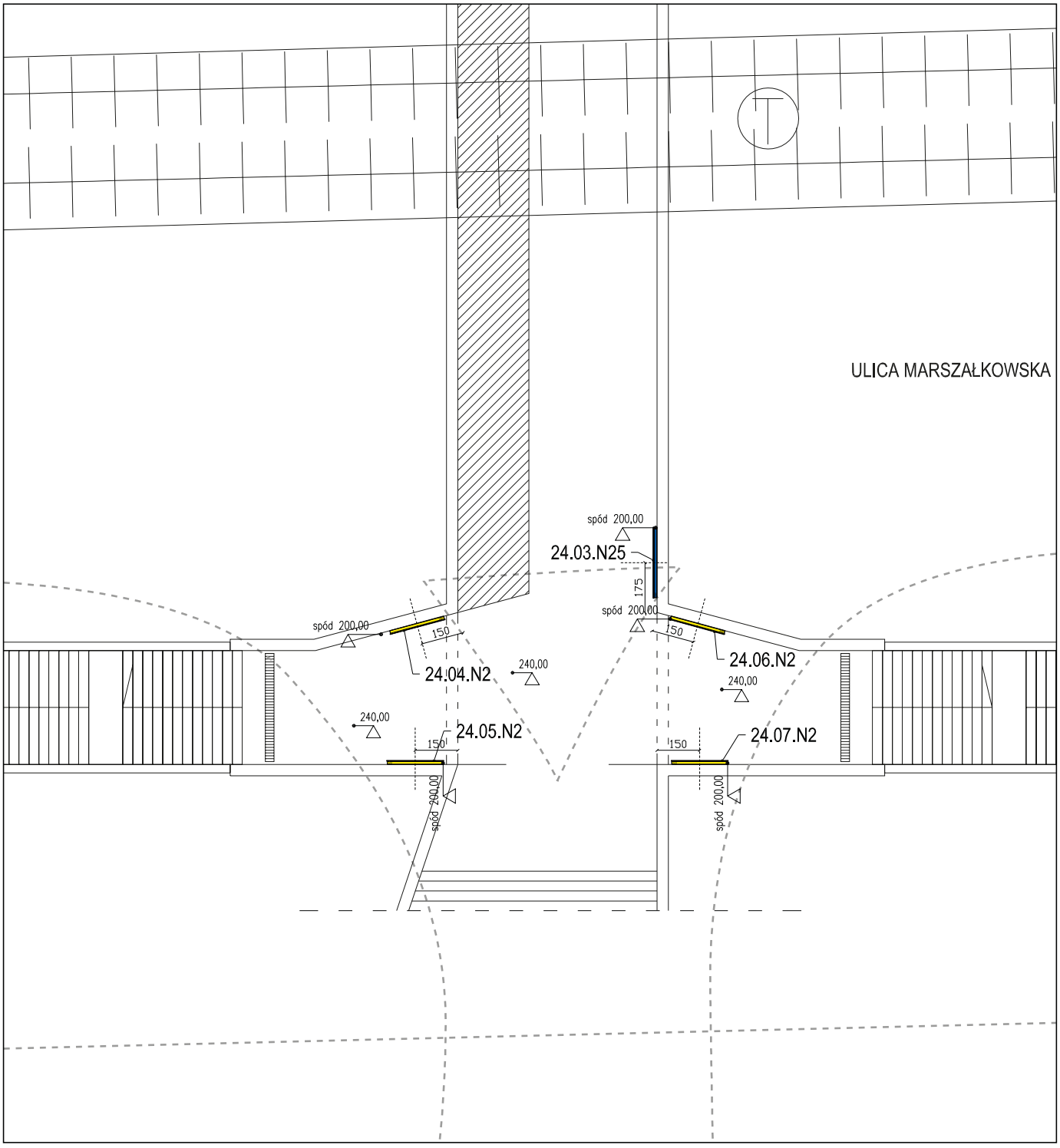
ULICA MARSZAŁKOWSKA
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spód 200,00
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24.06.N2
240,00
spód 200,00
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24.04.N2
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24.05.N2
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24.07.N2
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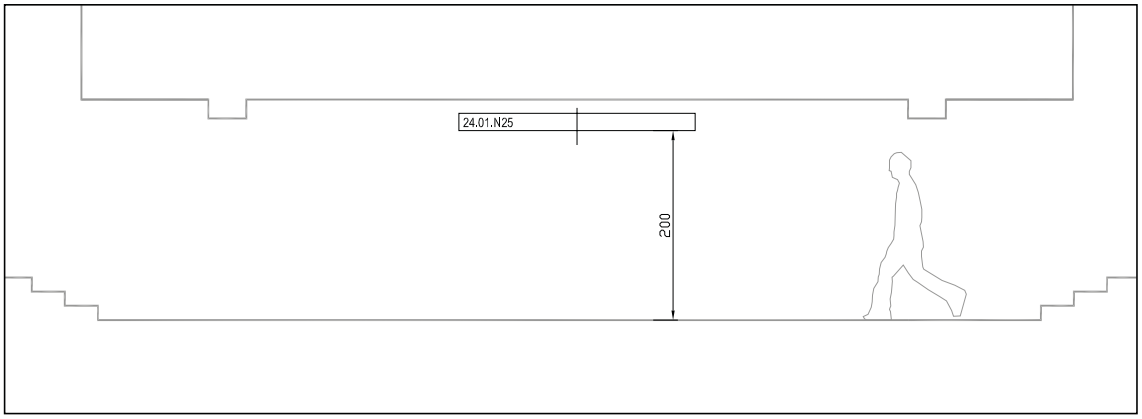
spód 200,00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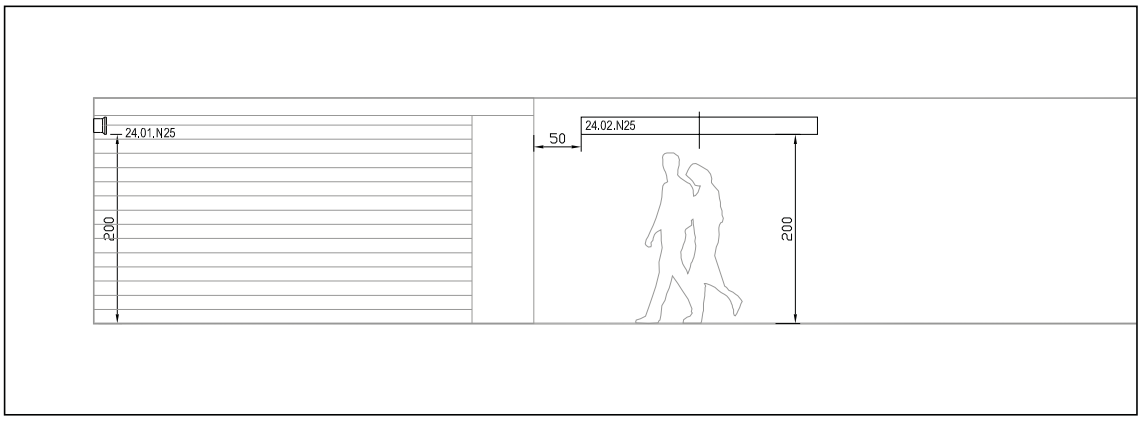
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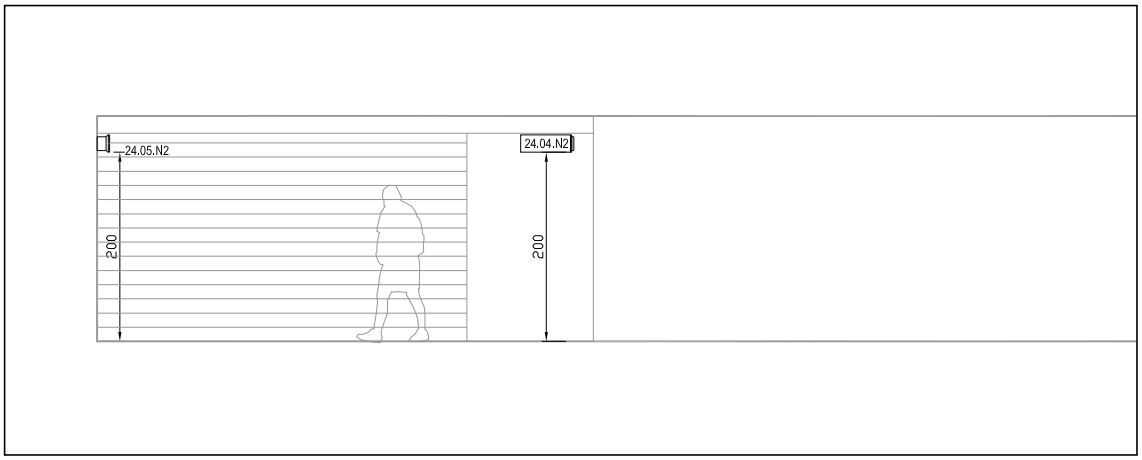
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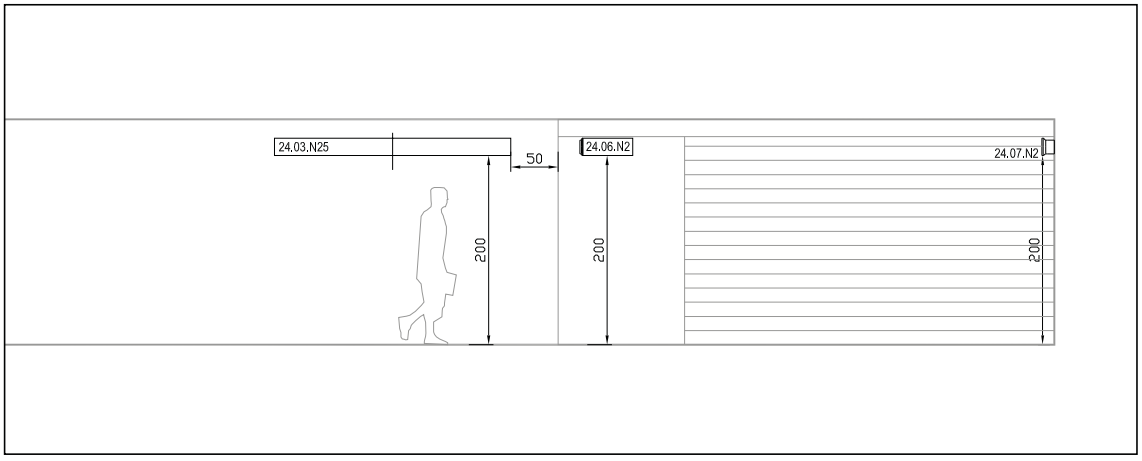
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24.02.N25

24.03.N25

24.04.N2

24.05.N2

24.06.N2

24.07.N2

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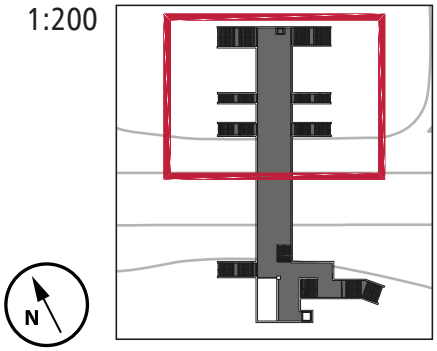
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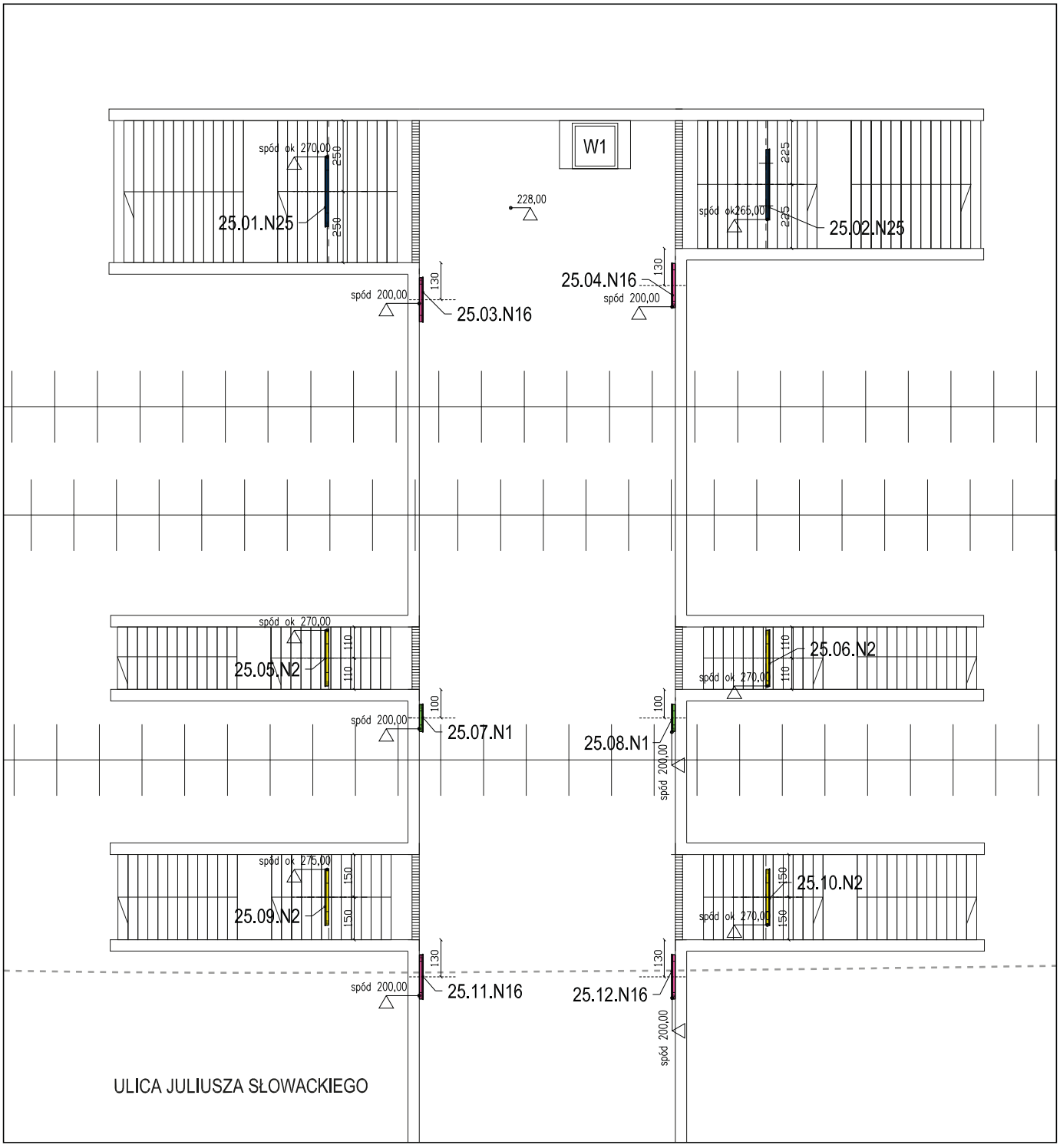
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spód ok 270,00
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250
25.01.N25
spód ok 265,00
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225
25.02.N25
spód 200,00
130
25.03.N16
25.04.N16
130
spód 200,00
spód ok 270,00
110
110
25.05.N2
25.06.N2
110
110
spód 200,00
100
25.07.N1
25.08.N1
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spód 200,00
spód ok 275,00
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150
25.09.N2
25.10.N2
150
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25.11.N16
25.12.N16
130
spód 200,00
ULICA JULIUSZA SŁOWACKIEGO

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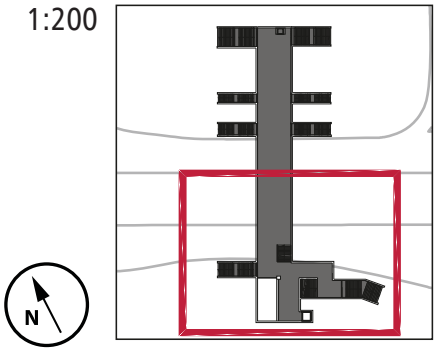
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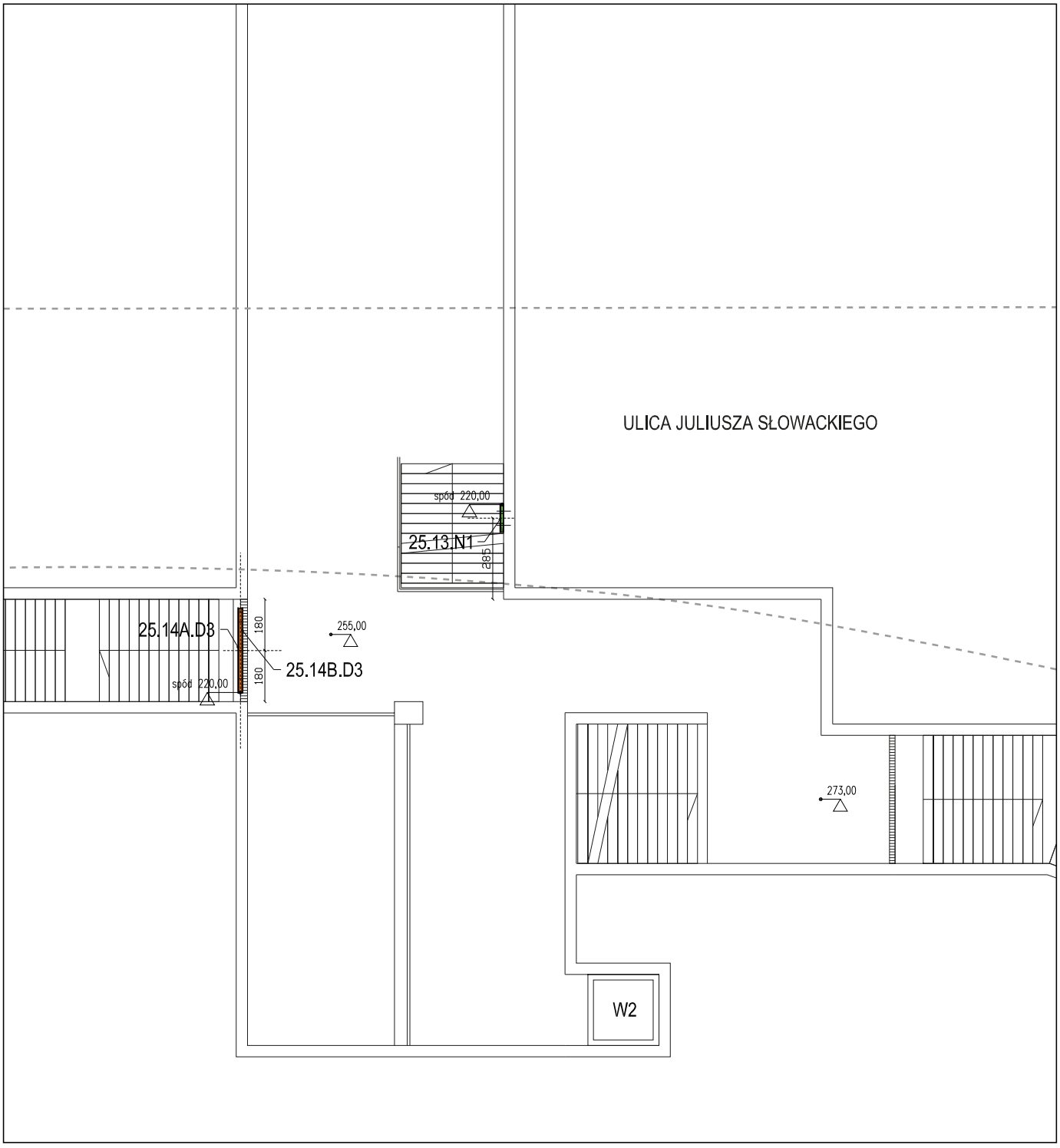
ULICA JULIUSZA SŁOWACKIEGO
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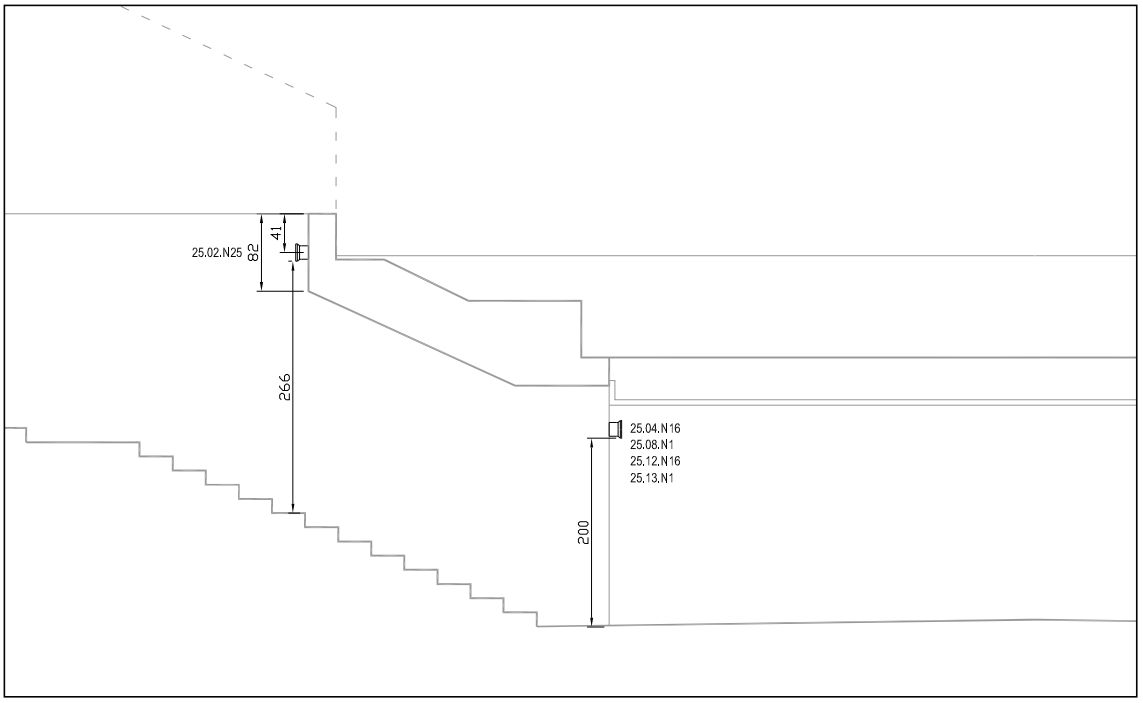
25.14A.D3
180
255,00
25.14B.D3
180
spód 220,00
273,00
W2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25.12.N16
25.13.N1
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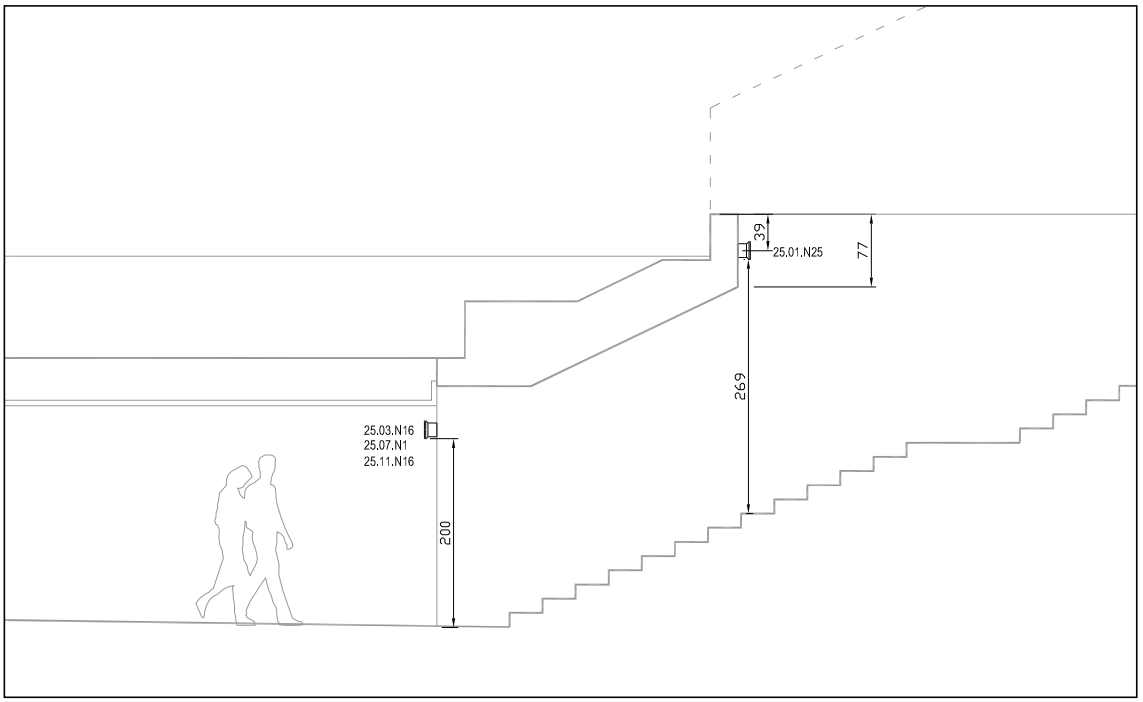
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25.07.N1
25.11.N16
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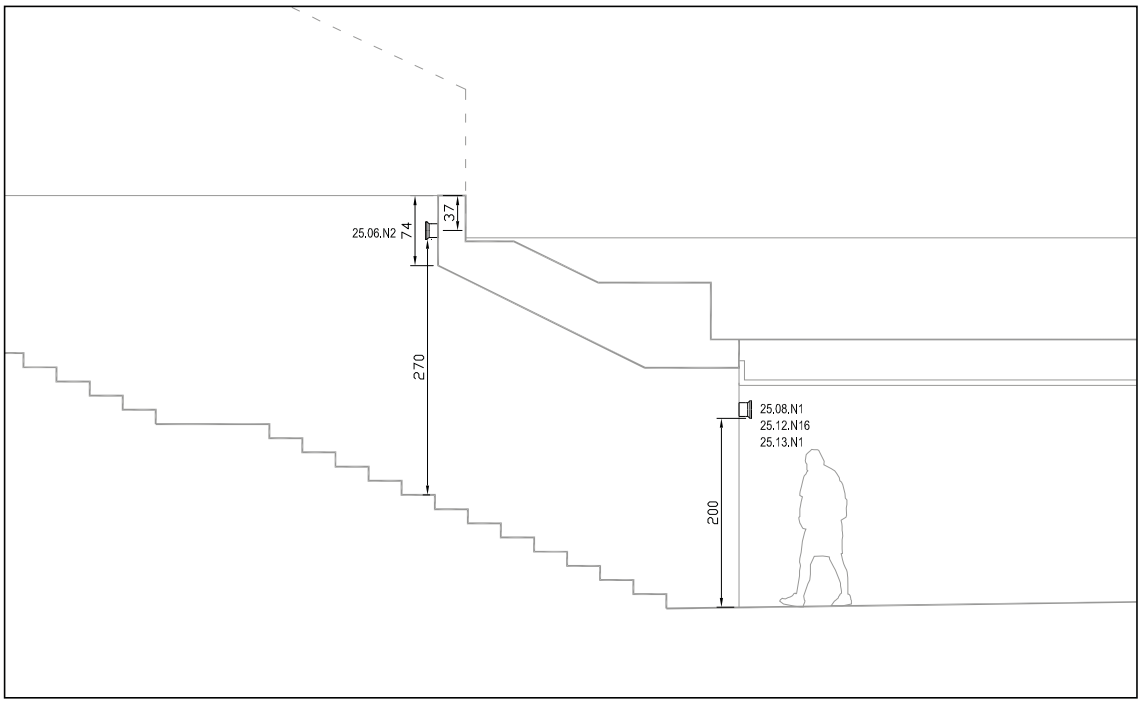
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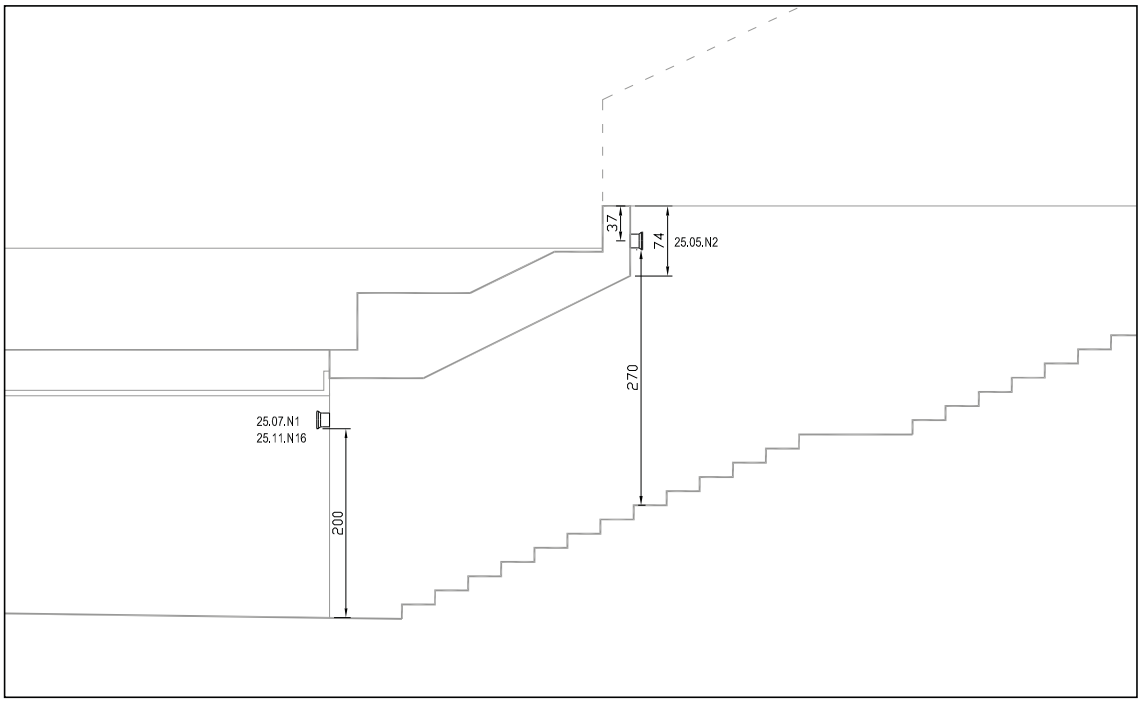
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25.07.N1
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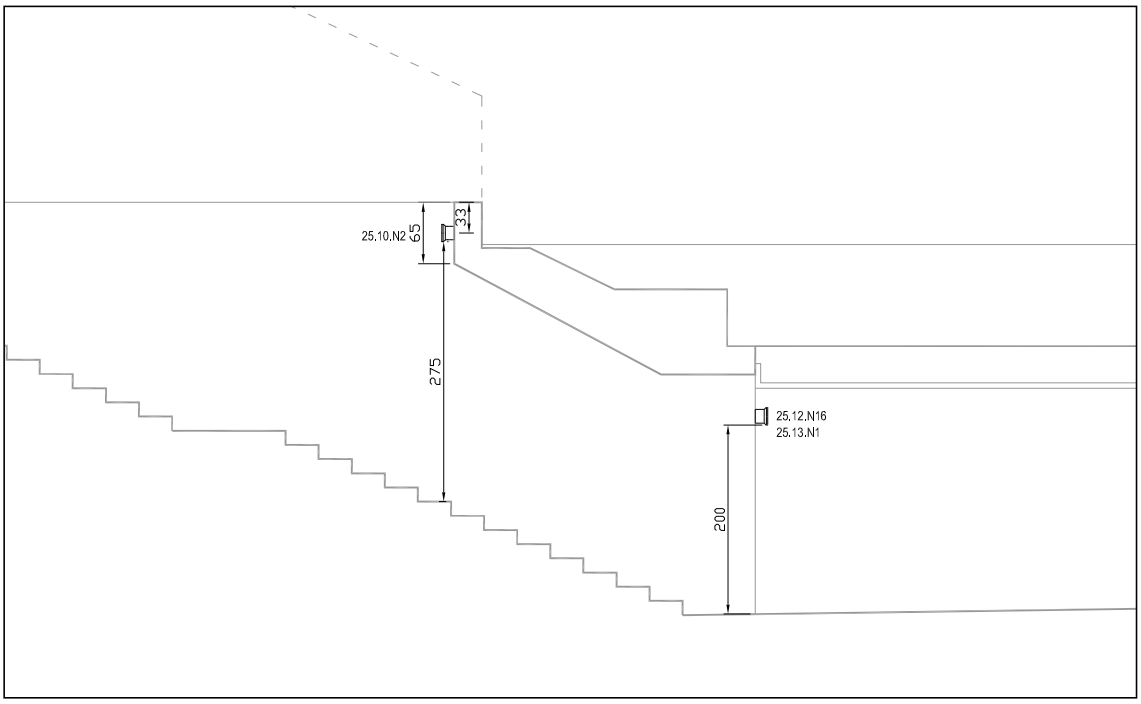
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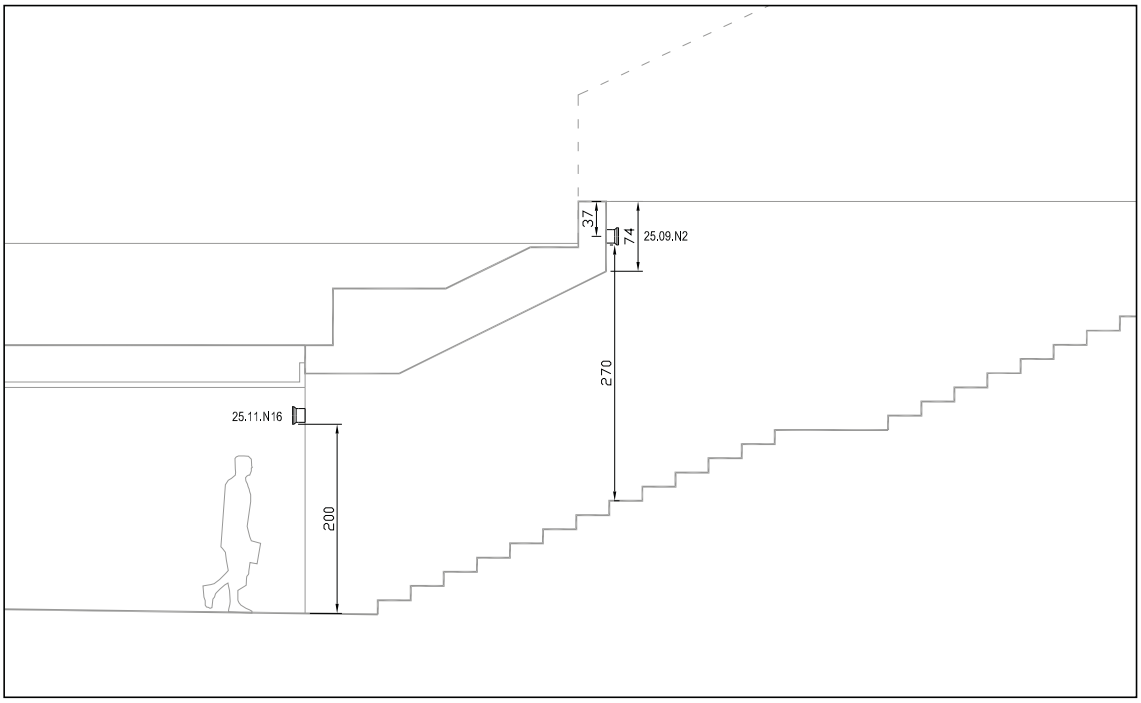
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25.11.N16
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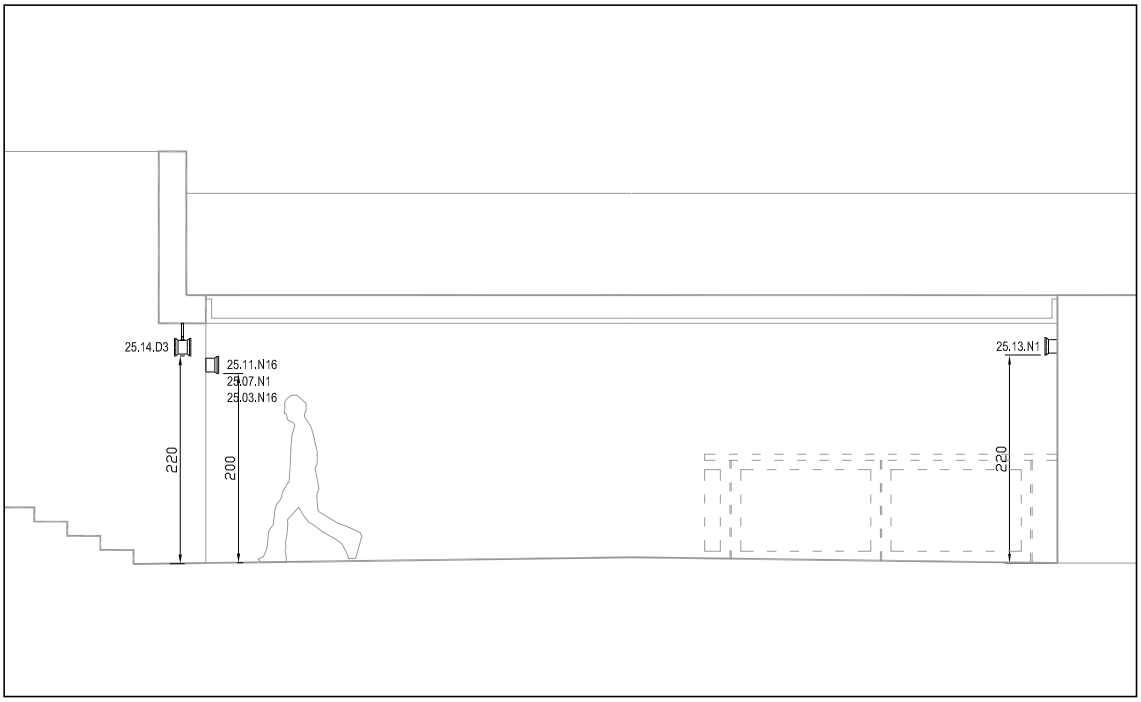


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25.01.N25

25.02.N25

25.03.N16

25.04.N16

25.05.N2

25.06.N2

25.07.N1

25.08.N1

25.09.N2

25.10.N2

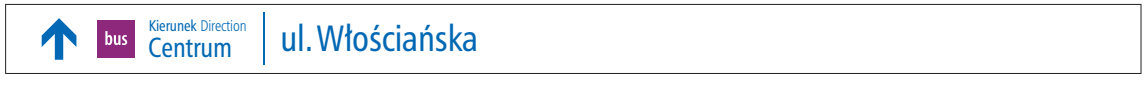
25.11.N16

25.12.N16

25.13.N1

25.14A.D3

25.14A.D3



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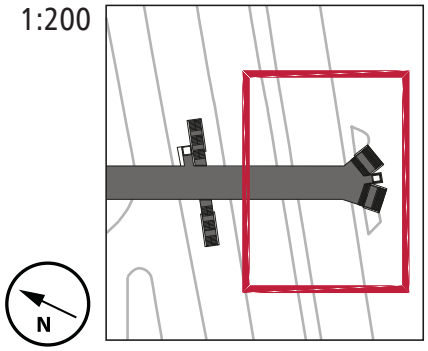


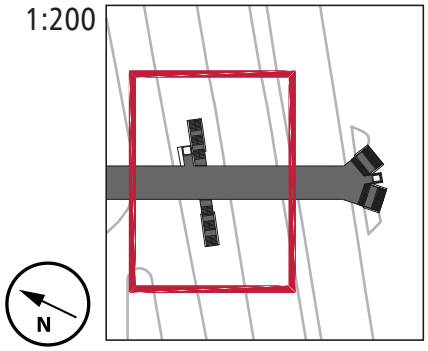

1:20

bus Dworzec Zachodni 01

ALEJE JEROZOLIMSKIE

250,00
spód 220,00
26.01A.D3
26.01B.D3
80
W1
30
250,00
spód 220,00
26.02A.D3
26.02B.D3

1:200




1:20

W2

26.03A.D25

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spód 220,00

153 153

8

26.03B.D25

235,00

26.04B.D25

154 154

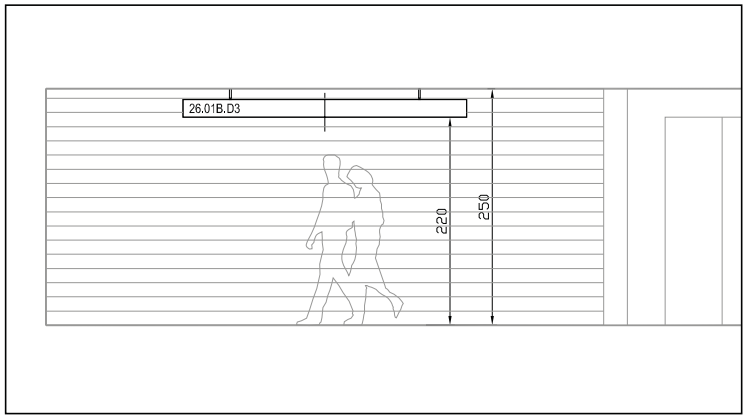
spód 220,00

8

250,00

26.04A.D25

ALEJE JEROZOLIMSKIE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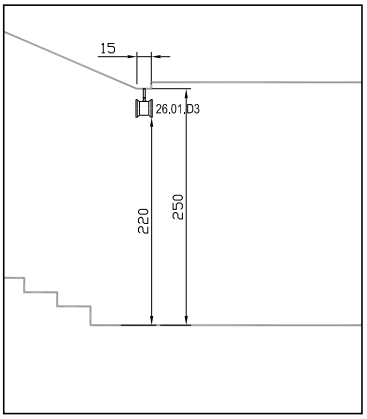
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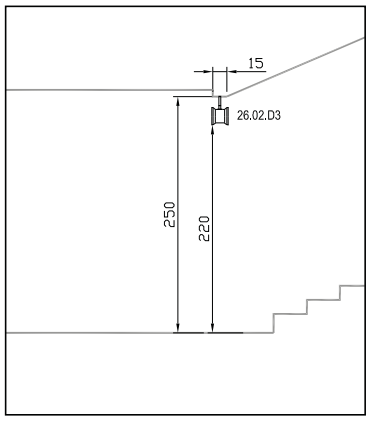
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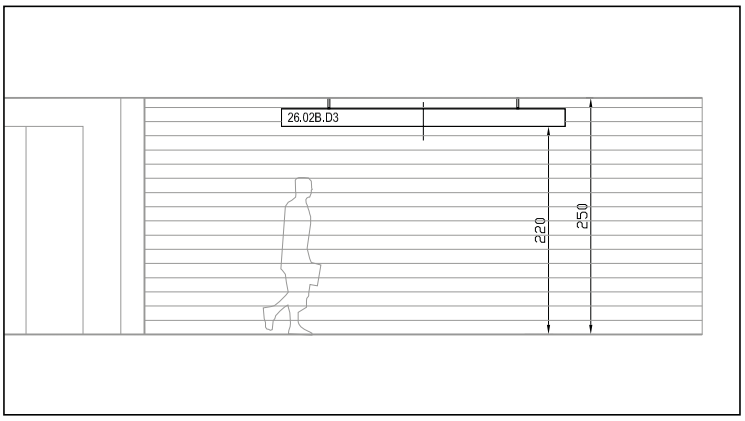
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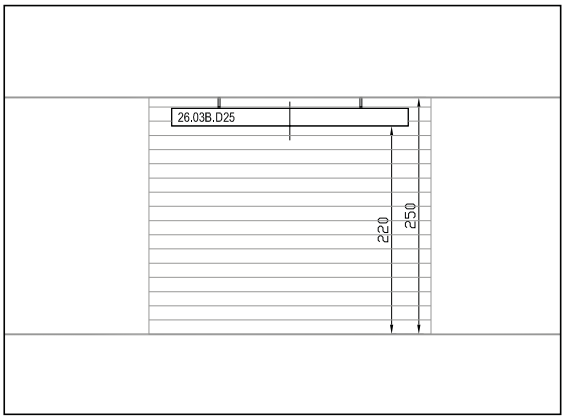
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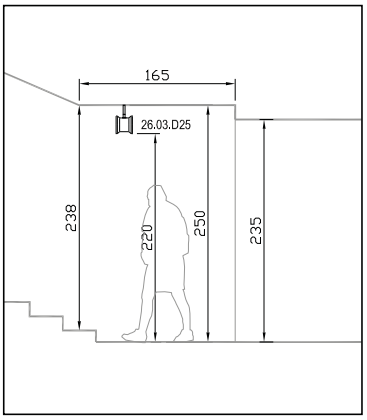
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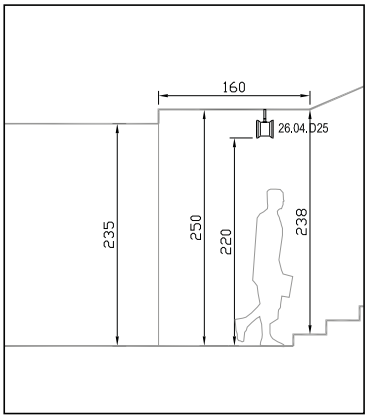
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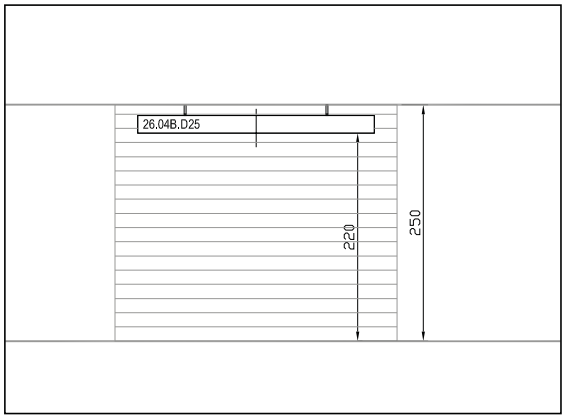
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26.1A.D3

26.1B.D3

26.2A.D3

26.2B.D3

26.3A.D25

26.3B.D25

26.4A.D25

26.4B.D25

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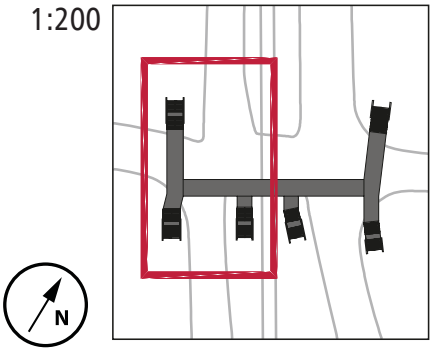


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ULICA STEFANA OKRZEI

ULICA TARGOWA

230,00

spód 200,00

225

225

27.01.N25

230,00

spód 200,00

175

27.02.N25

236,00

spód 200,00

150

27.03.N1

232,00

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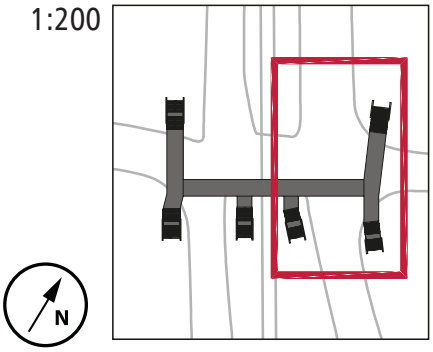


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ULICA TARGOWA

ULICA ZĄBKOWSKA

227,00

238,00

226,00

235,00

235,00

spód 200,00

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27.04.N1

spód 200,00

175

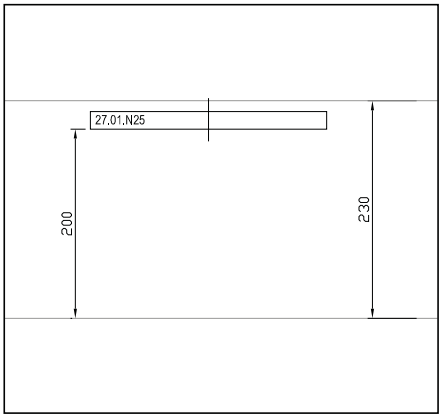
27.05.N25

spód 200,00

225

225

27.06.N25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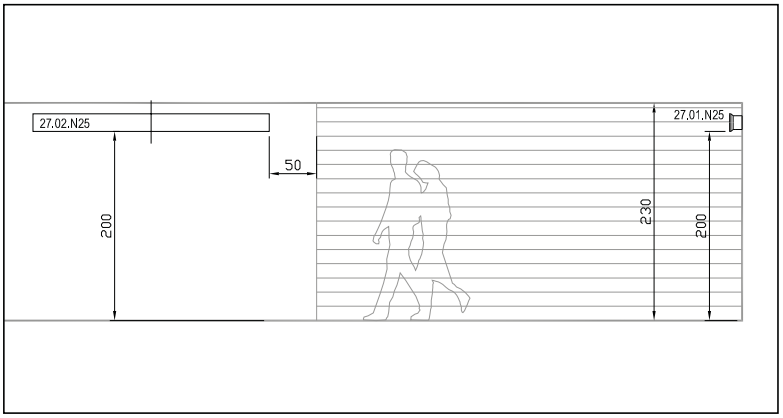
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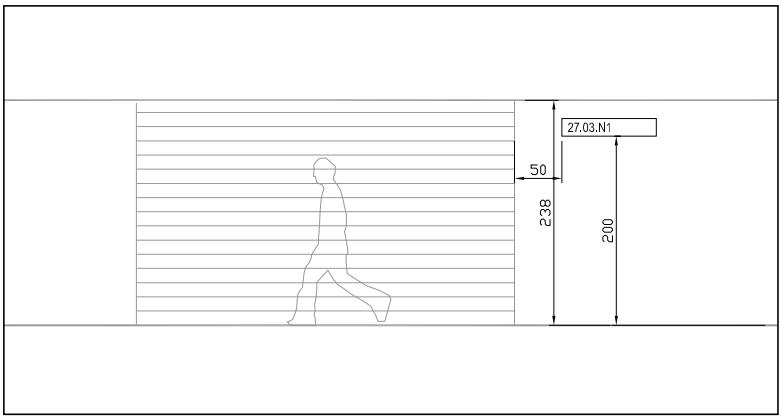
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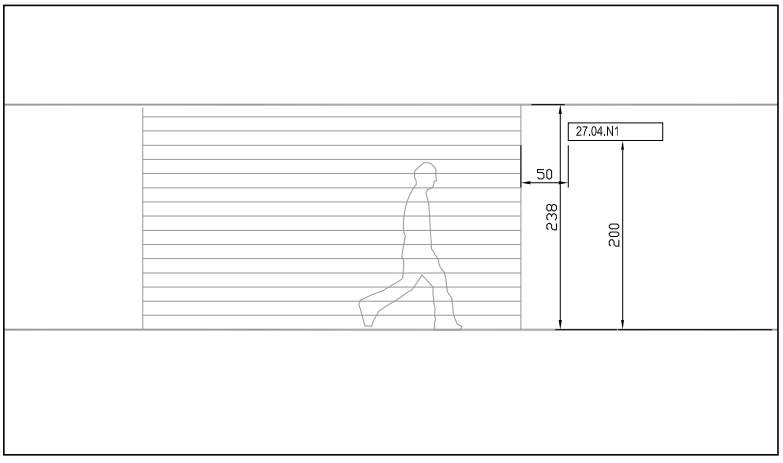
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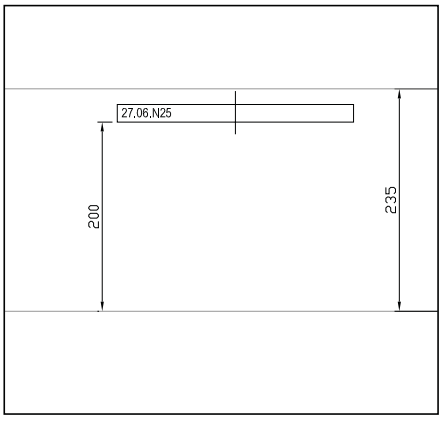
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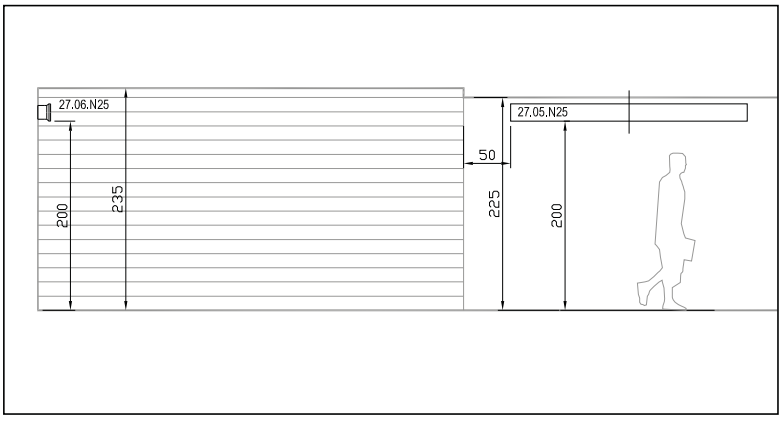
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27.02.N25

27.03.N1

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27.06.N25

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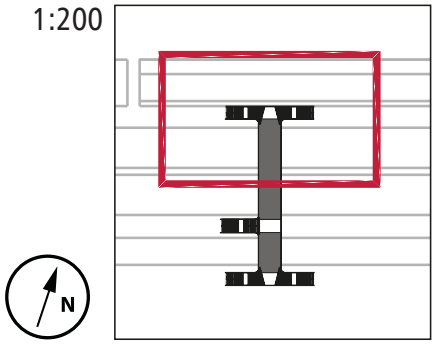
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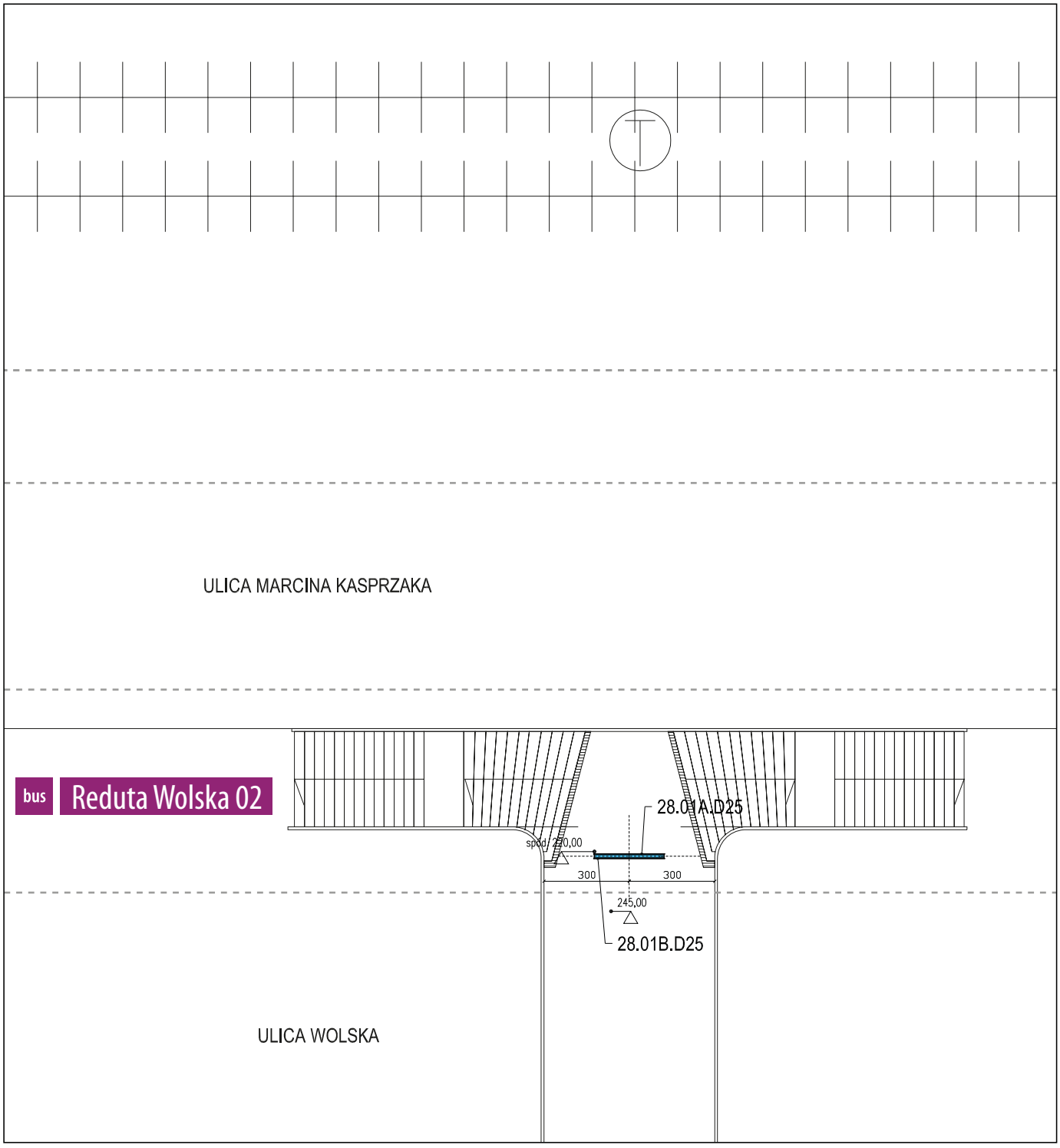
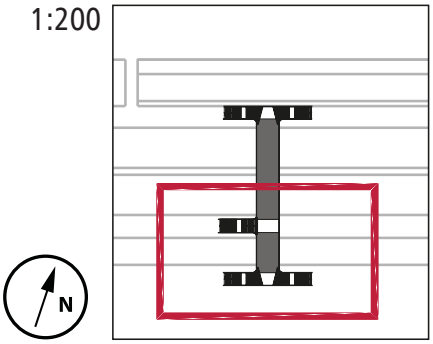

ULICA MARCINA KASPRZAKA
bus
Reduta Wolska 02
28.01A.D25
spad. 250,00
300
300
245,00
28.01B.D25
ULICA WOLSKA

1:200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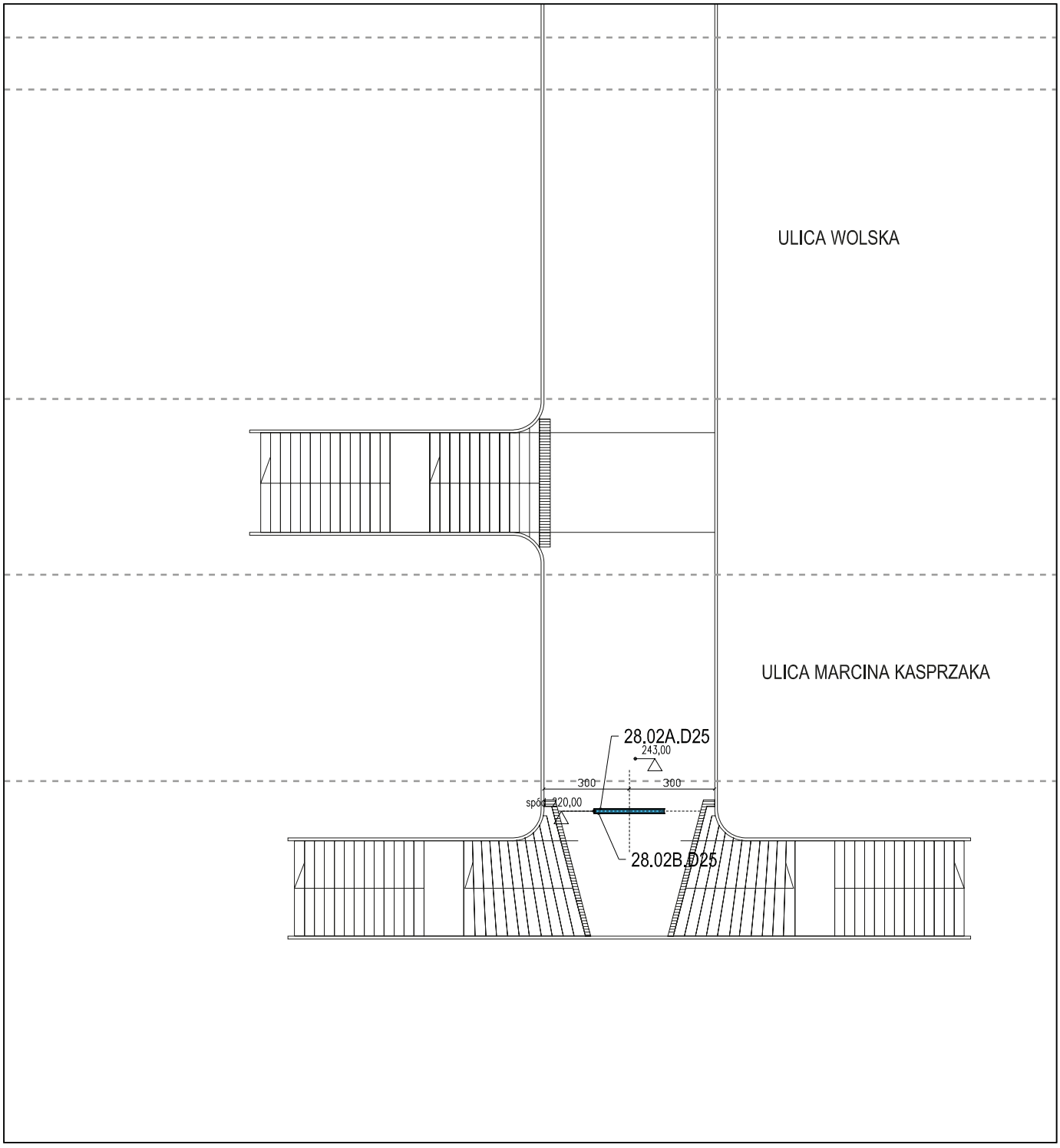
ULICA WOLSKA
ULICA MARCINA KASPRZAKA
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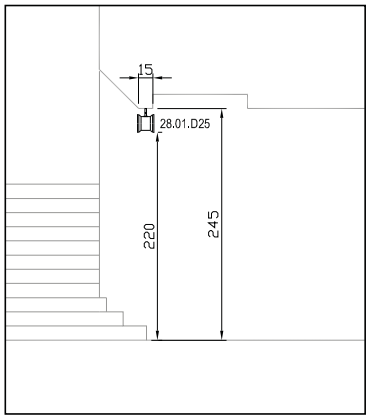
243,00
300
300
spód 220,00
28.02B.D25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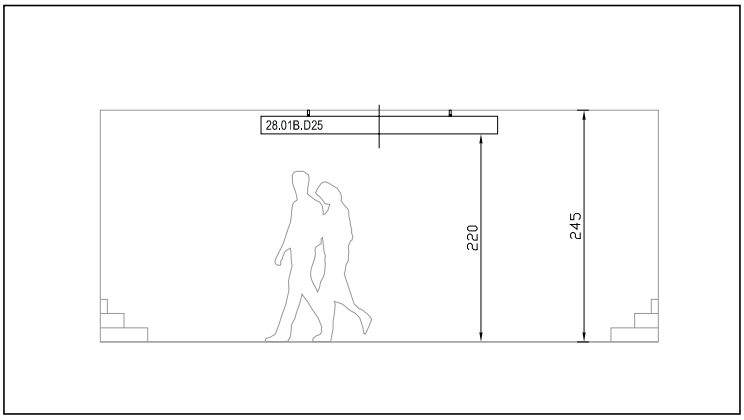
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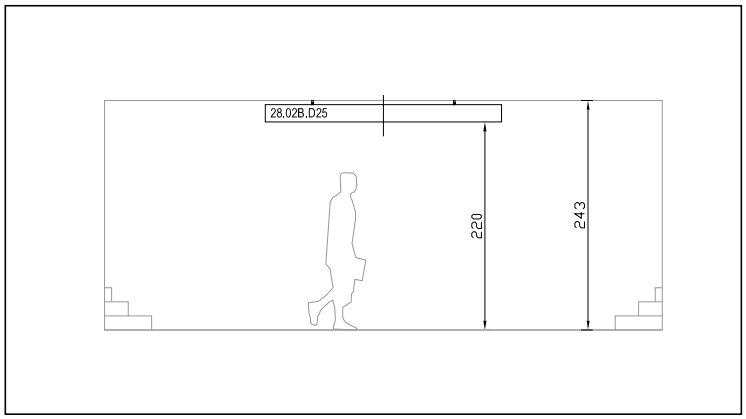
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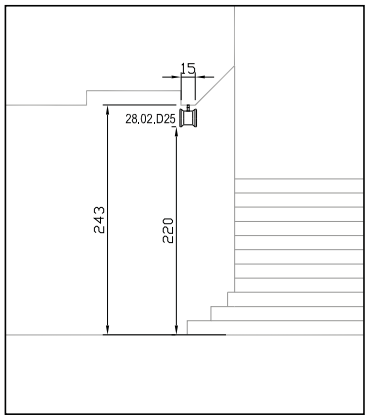
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243
220

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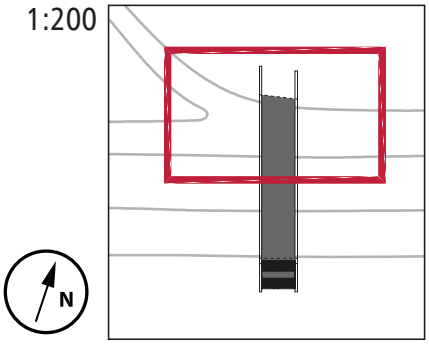
28.01A.D25

28.01B.D25

28.02A.D25

28.02B.D25

1:200

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ALEJA KEN

spód 220,00

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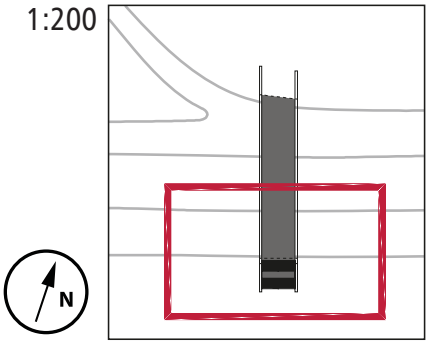
29.01A.D2

29.01B.D2

146 146

ULICA DOLINA SŁUŻEWIECKA

1:200

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ULICA DOLINA SŁUŻEWIECKA

146 146

29.02B.D2

248,00 spód 220,00

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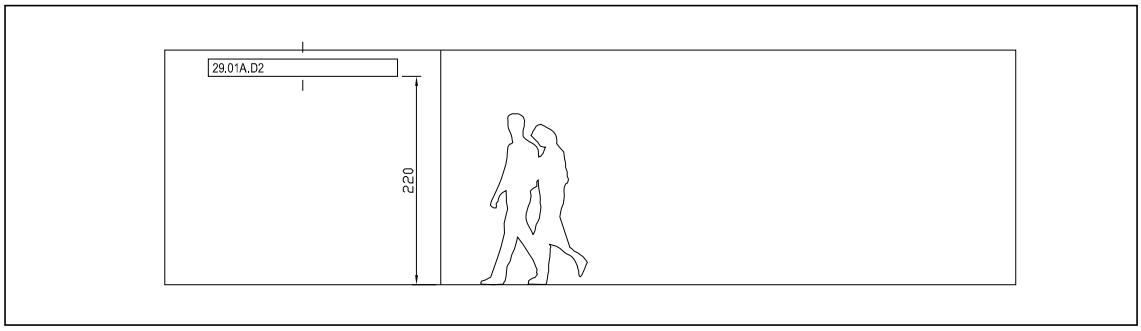
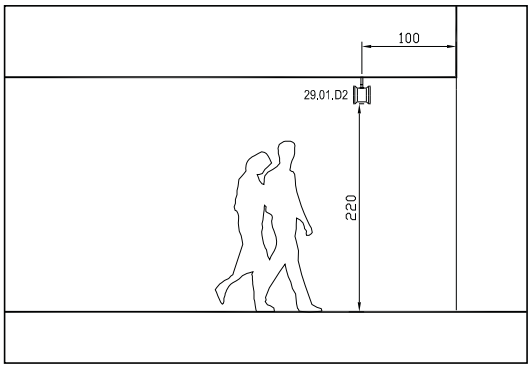
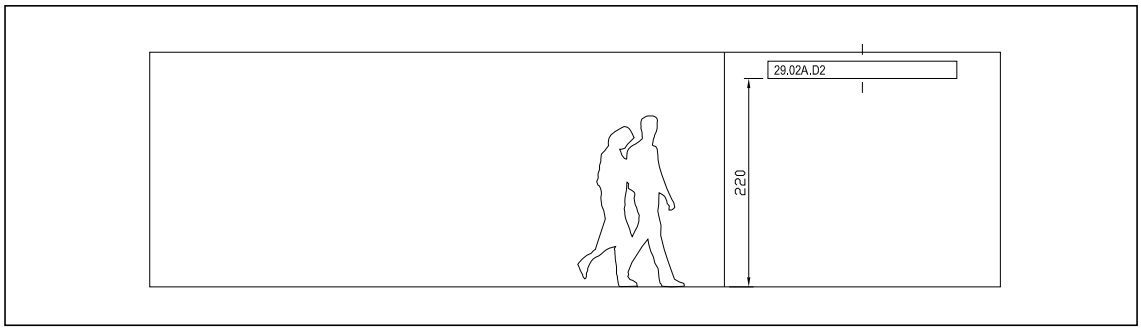
29.02A.D2

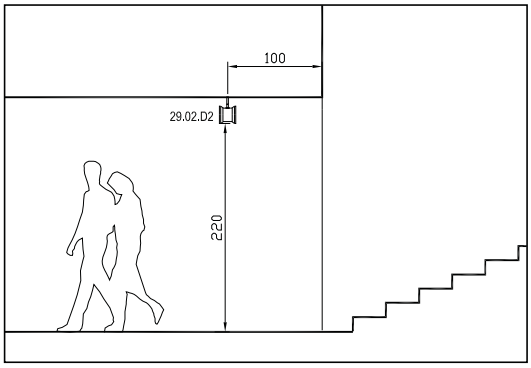
ALEJA KEN

bus Koncertowa 02

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29.02A.D2

29.02B.D2

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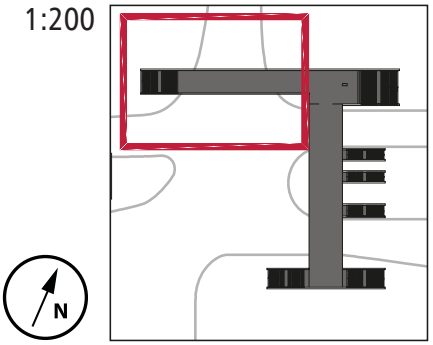
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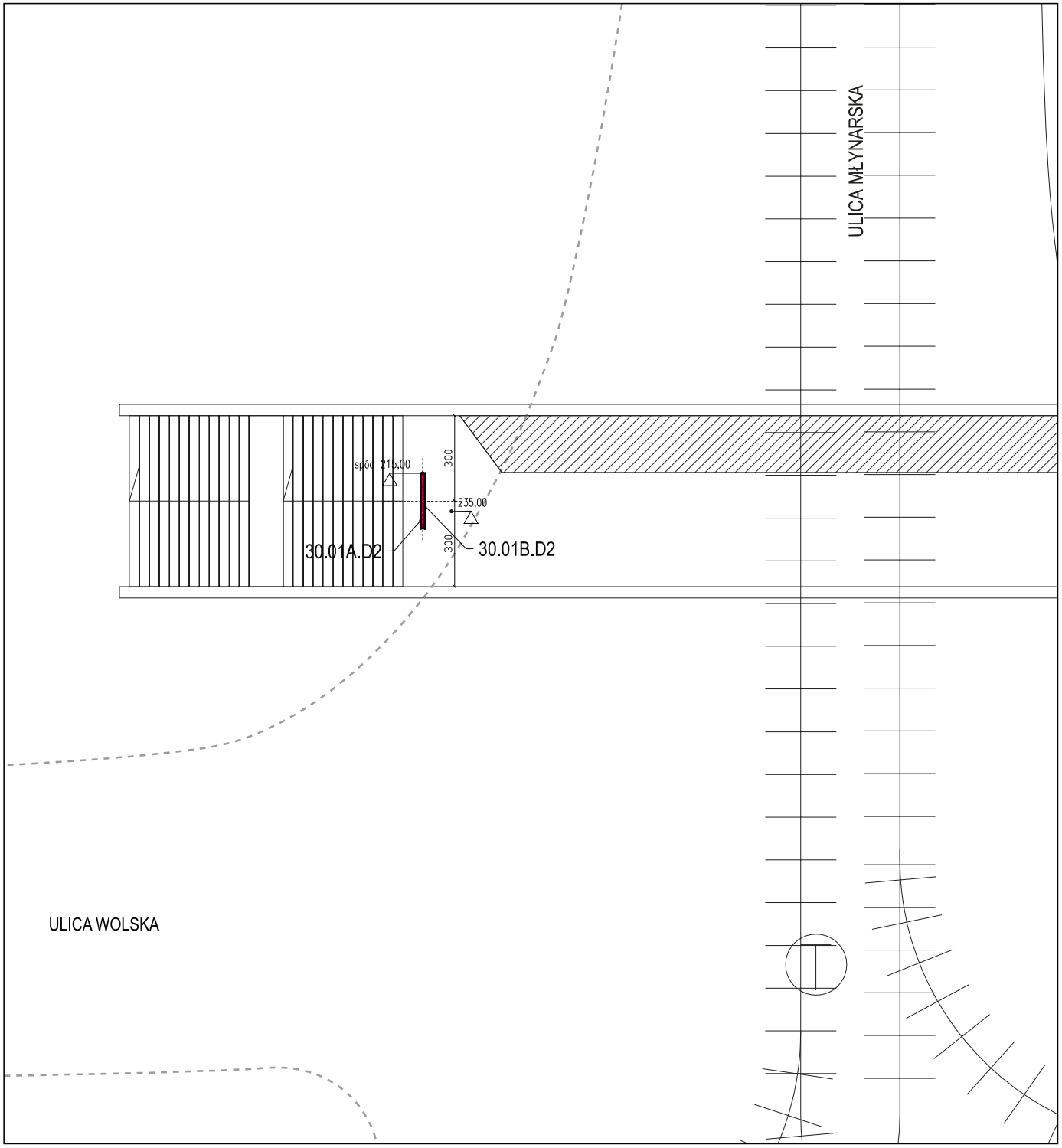
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30.01B.D2
ULICA WOLSKA

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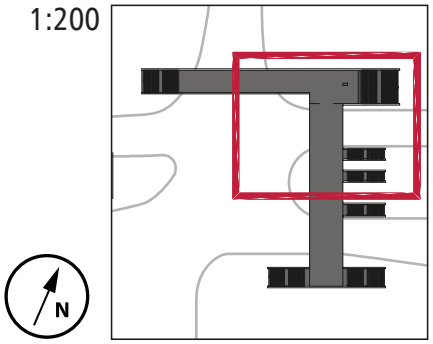
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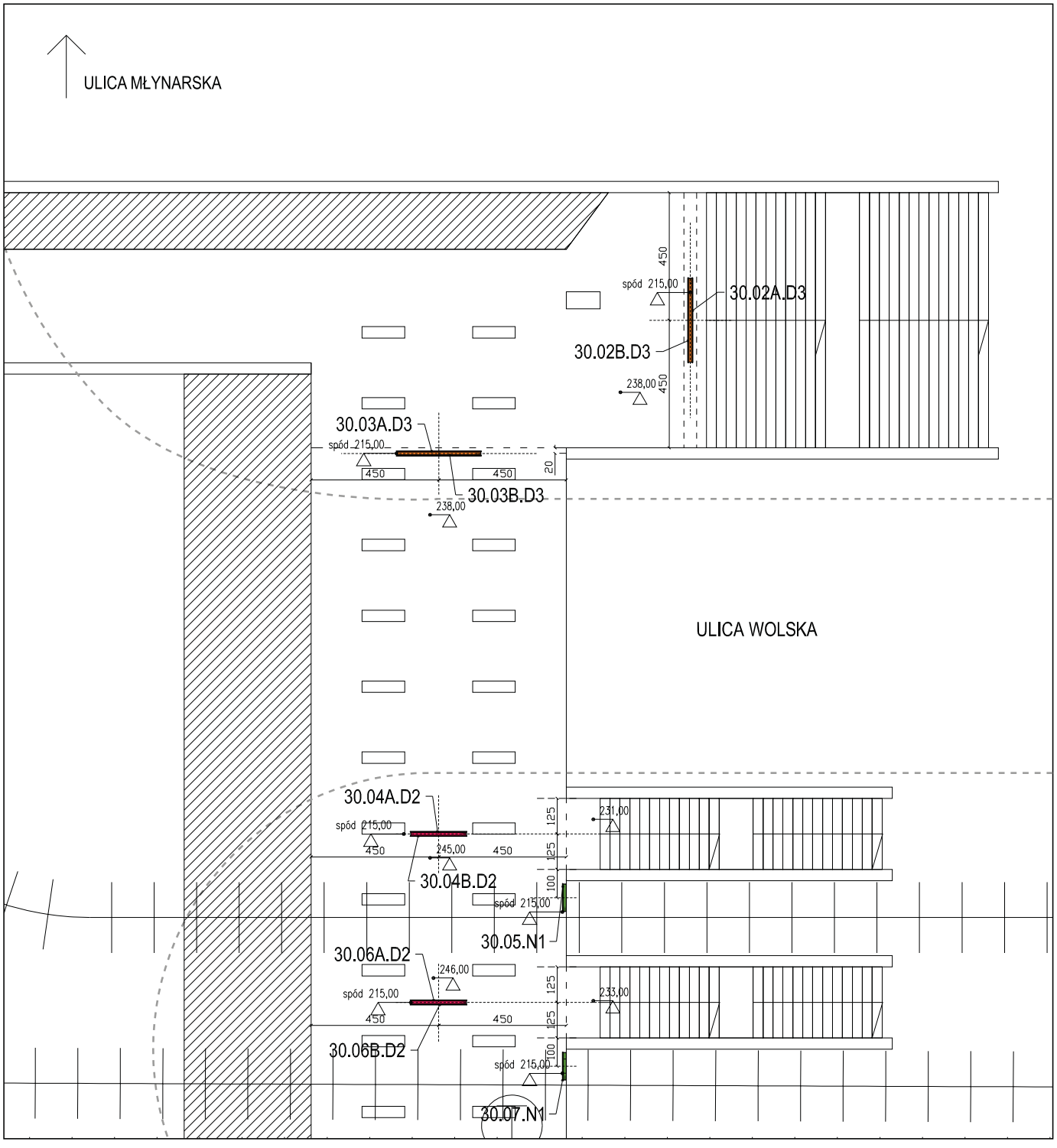
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30.02B.D3
30.03A.D3
30.03B.D3
30.04A.D2
30.04B.D2
30.05.N1
30.06A.D2
30.06B.D2
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246,00
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100
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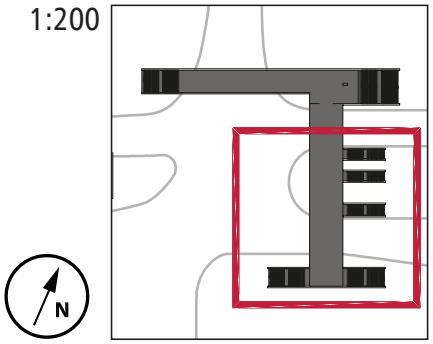
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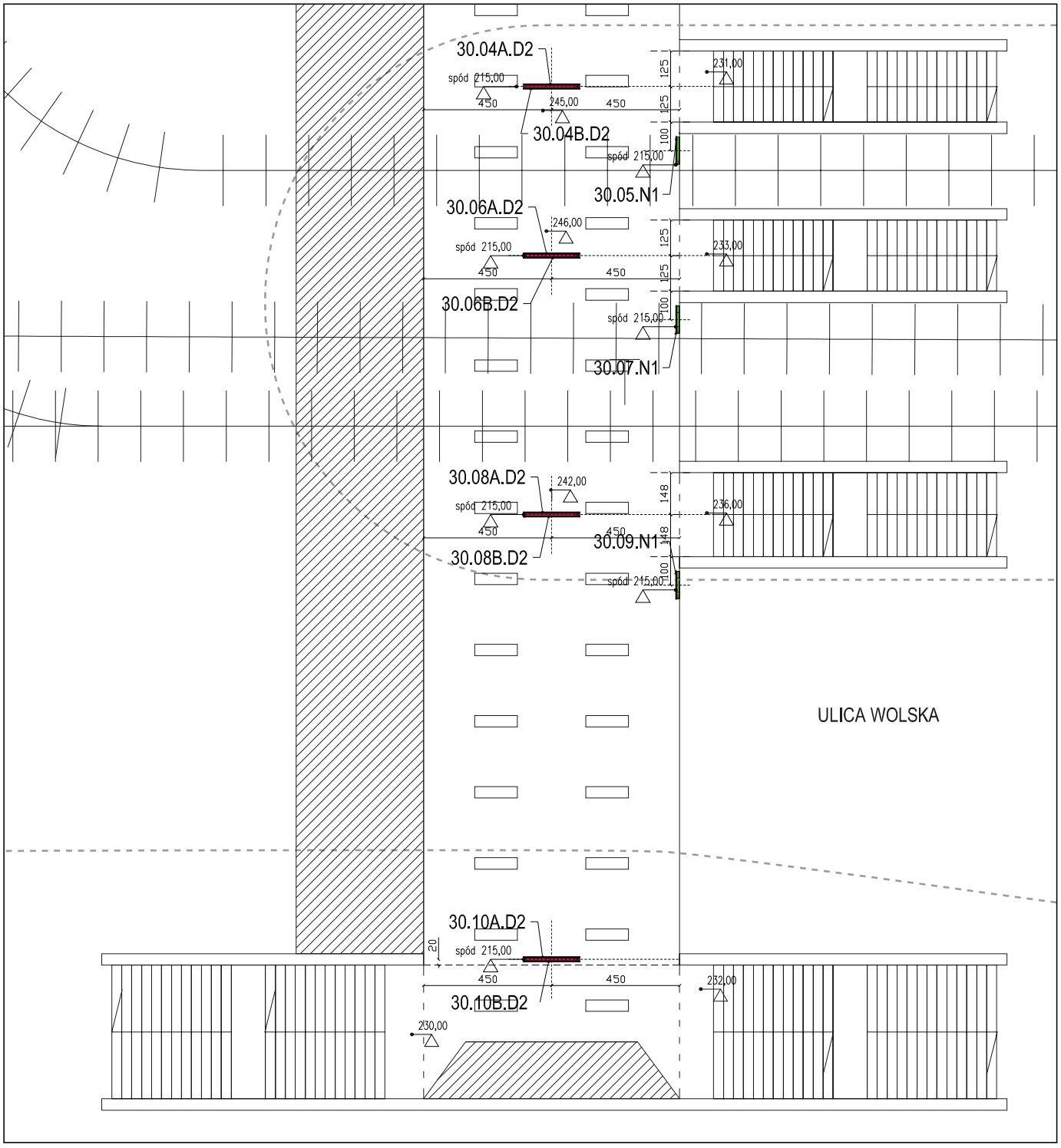
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30.06A.D2
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spód 215,00
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450
125
233,00
30.06B.D2
100
spód 215,00
30.07.N1
30.08A.D2
242,00
spód 215,00
450
450
148
236,00
30.09.N1
30.08B.D2
100
spód 215,00
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232,00
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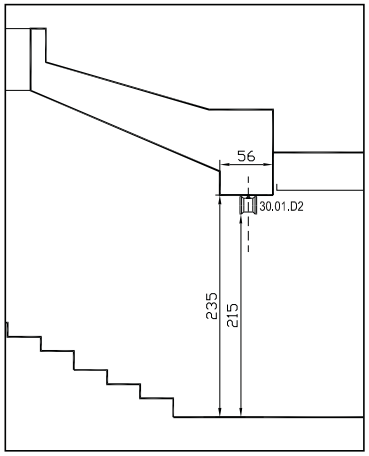
230,00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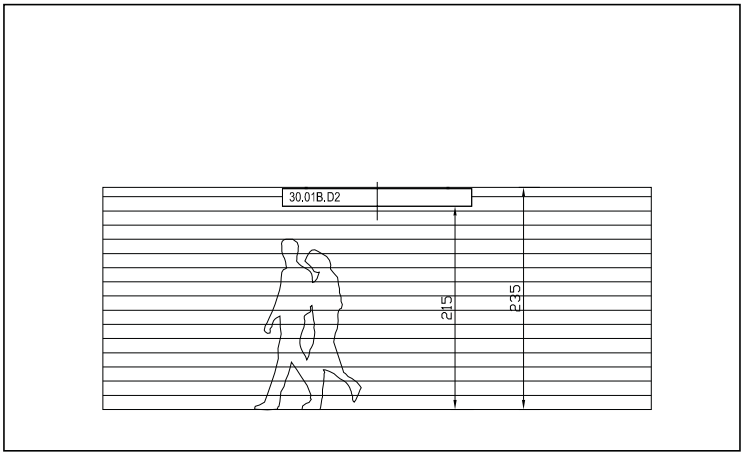
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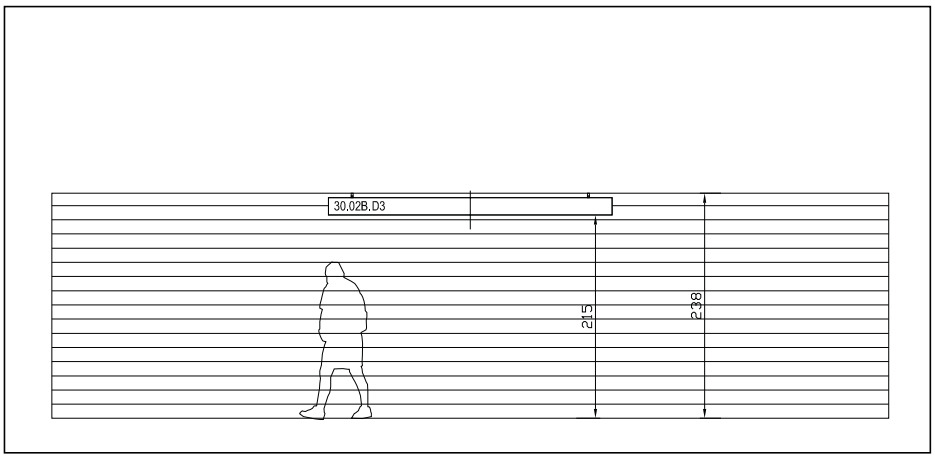
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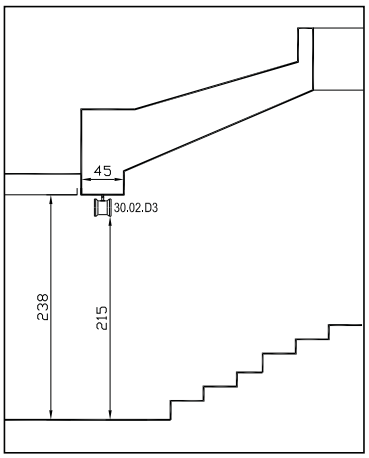
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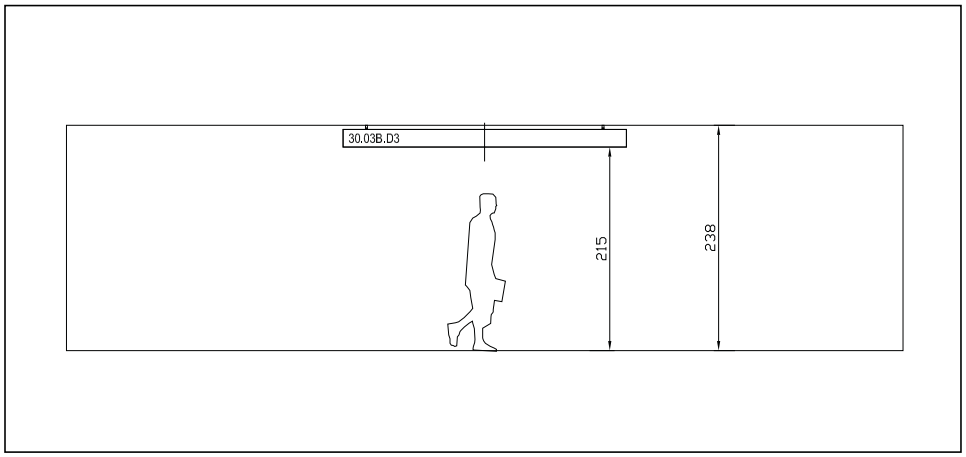
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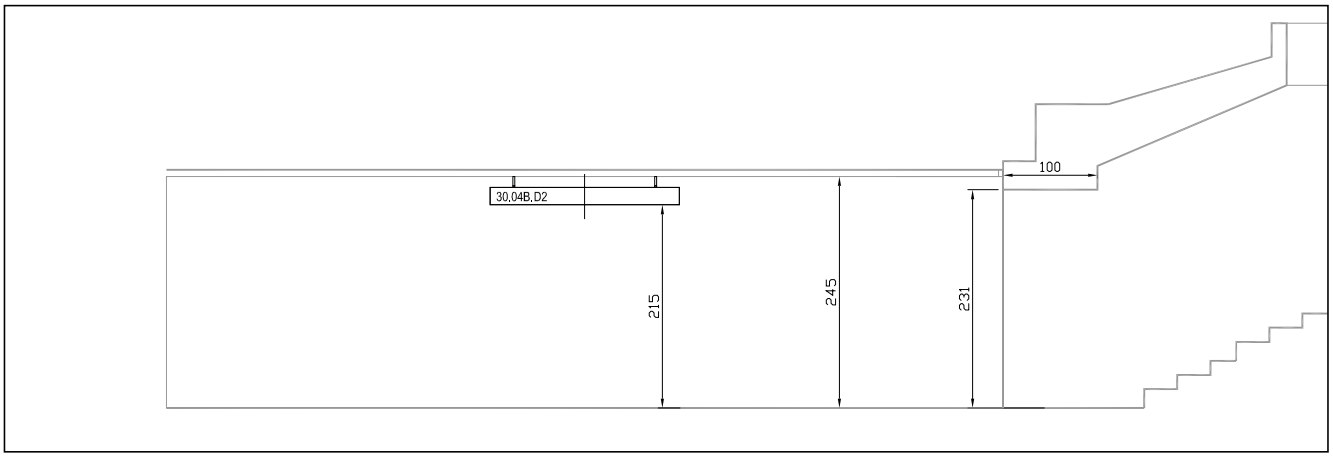
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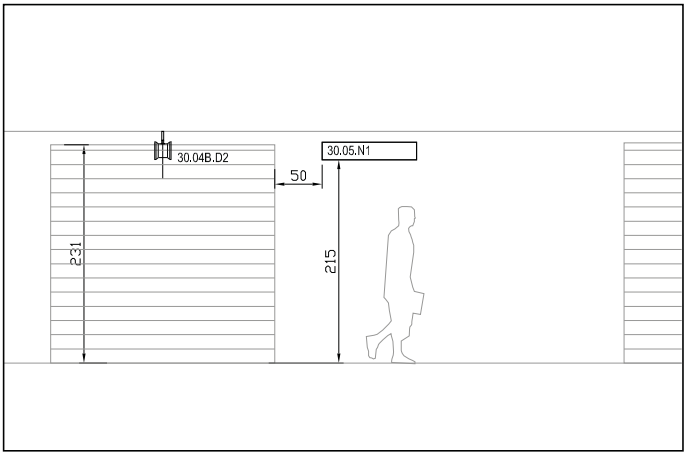
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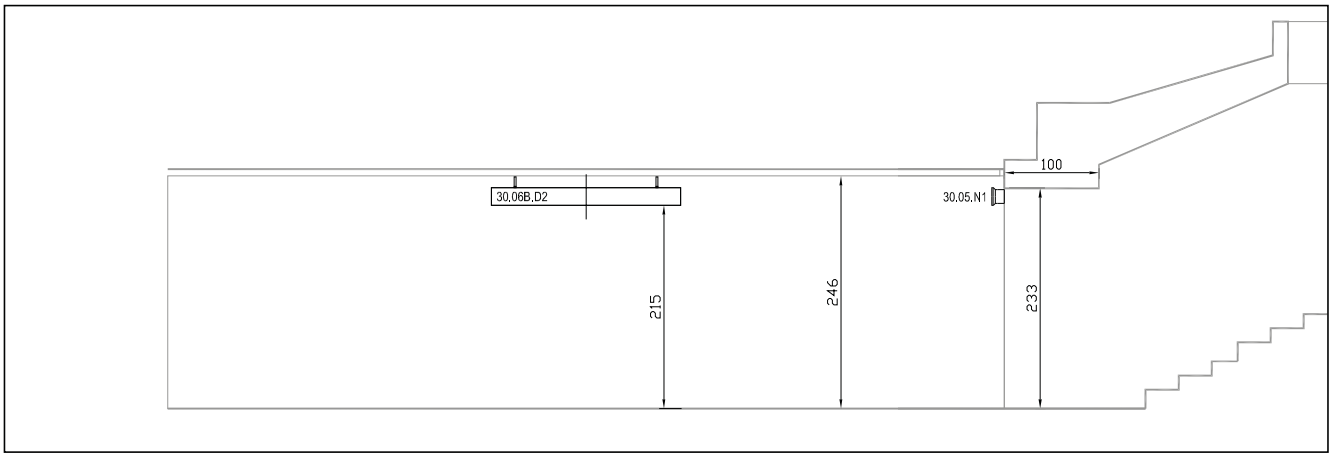
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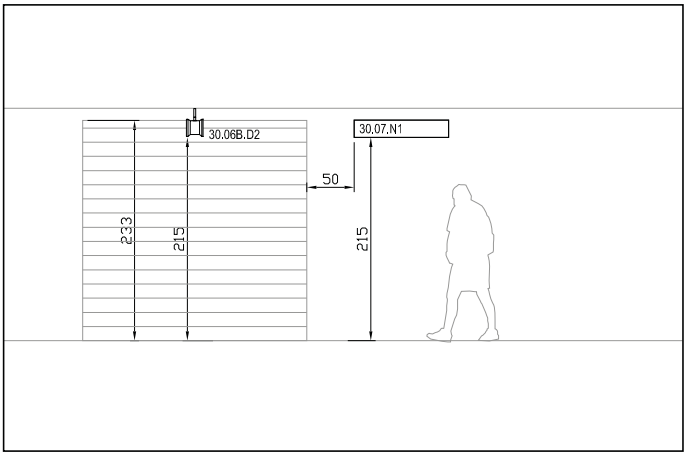
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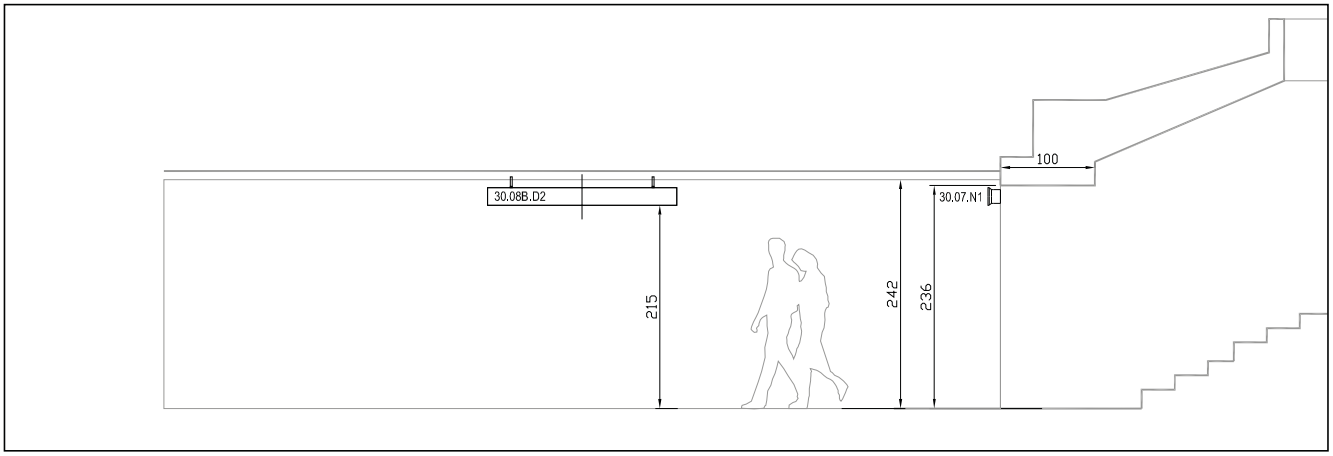
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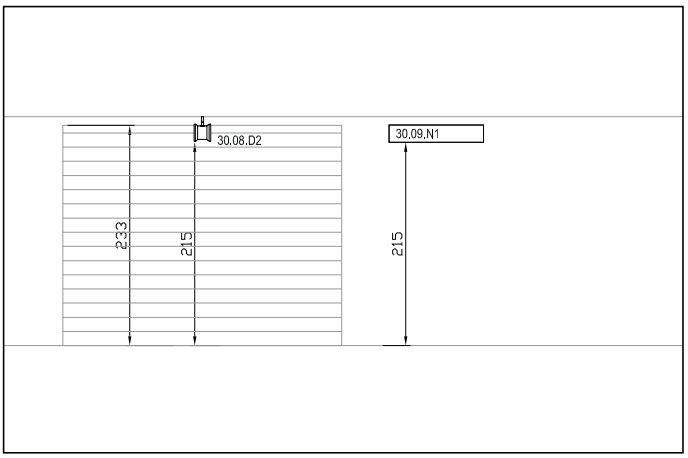
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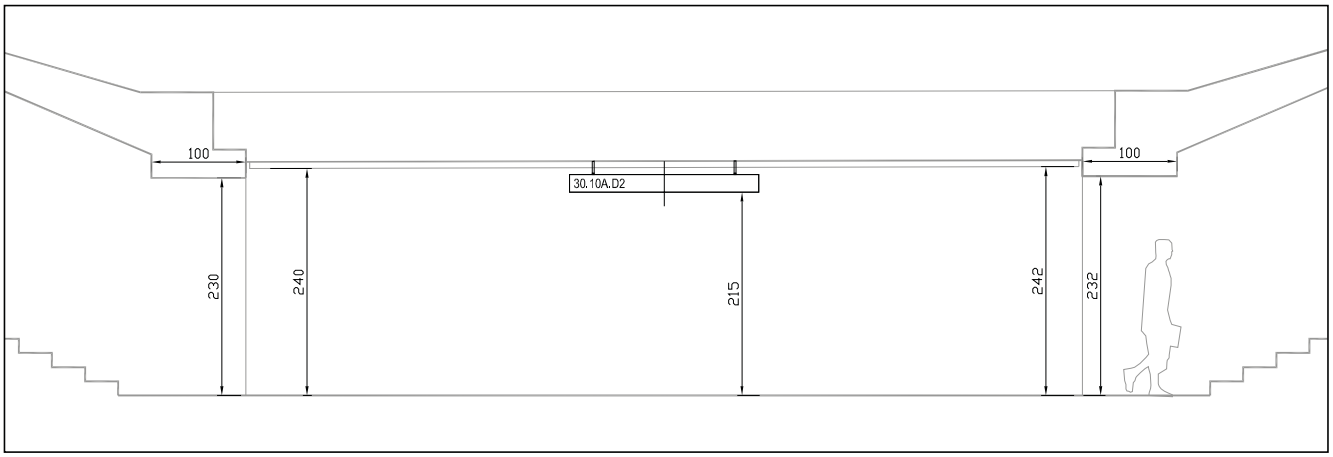
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100
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230
240
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242
232

1:8

30.01A.D2

30.01B.D2

30.02A.D3

30.02B.D3

30.03A.D3

30.03B.D3

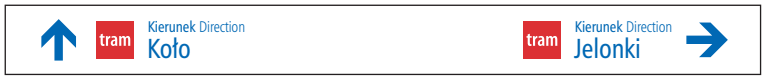
30.04A.D2

30.04B.D2

30.05.N1

30.06A.D2

30.06B.D2

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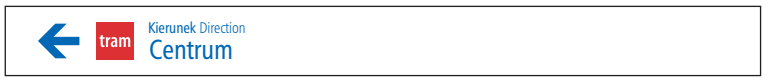


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30.10B.D2

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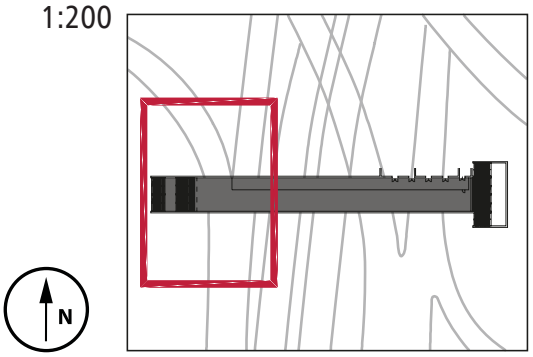
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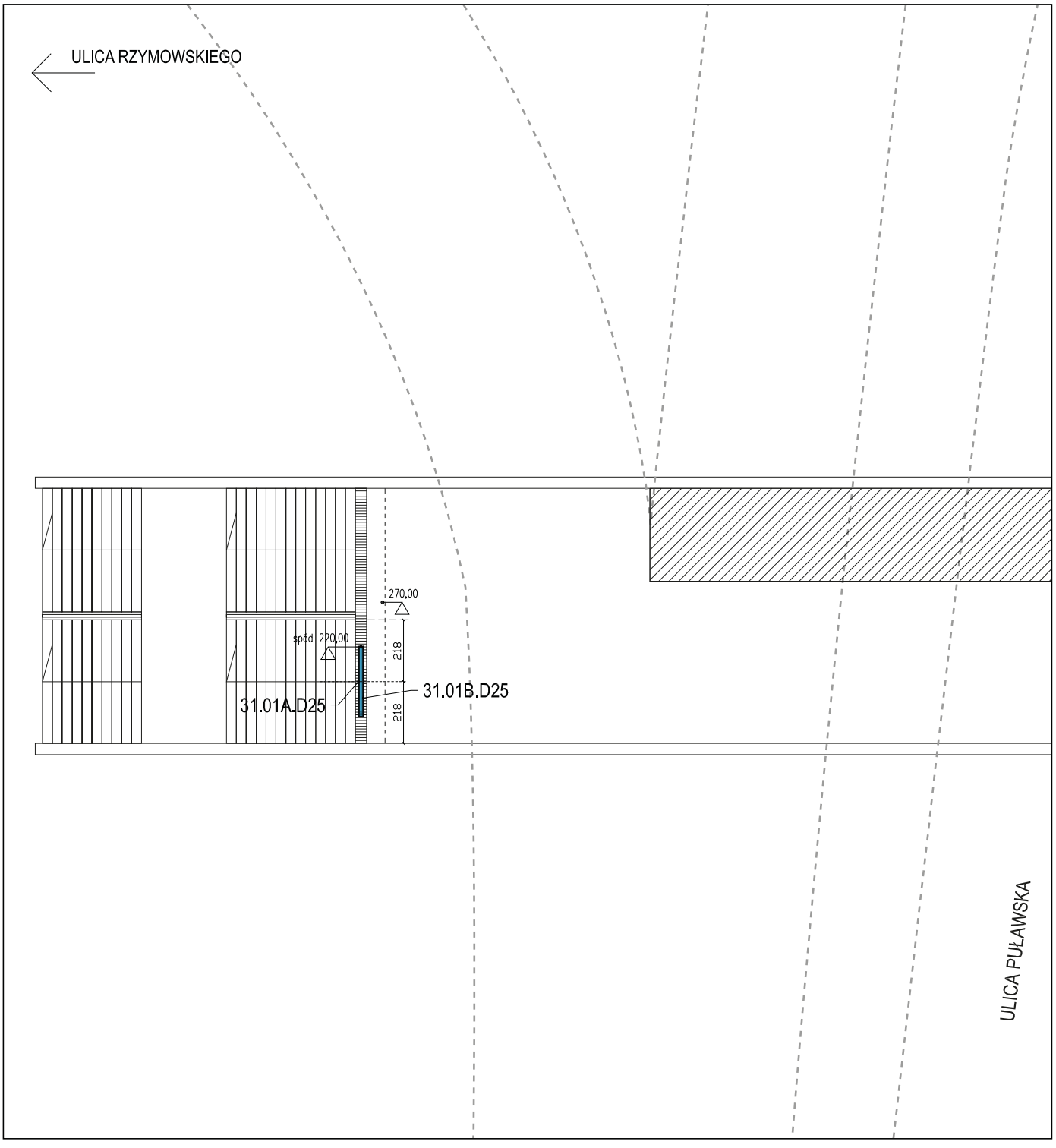
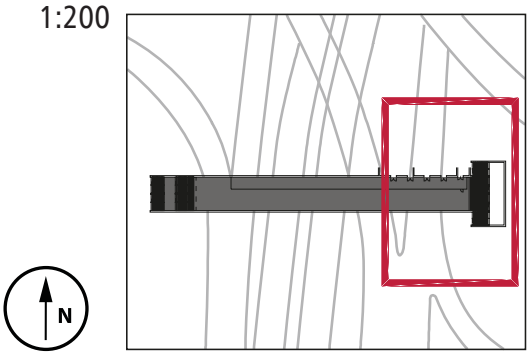

ULICA RZYMOWSKIEGO
270,00
spad 220,00
218
218
31.01A.D25
31.01B.D25
ULICA PUŁAWSKA

# 31

1:200

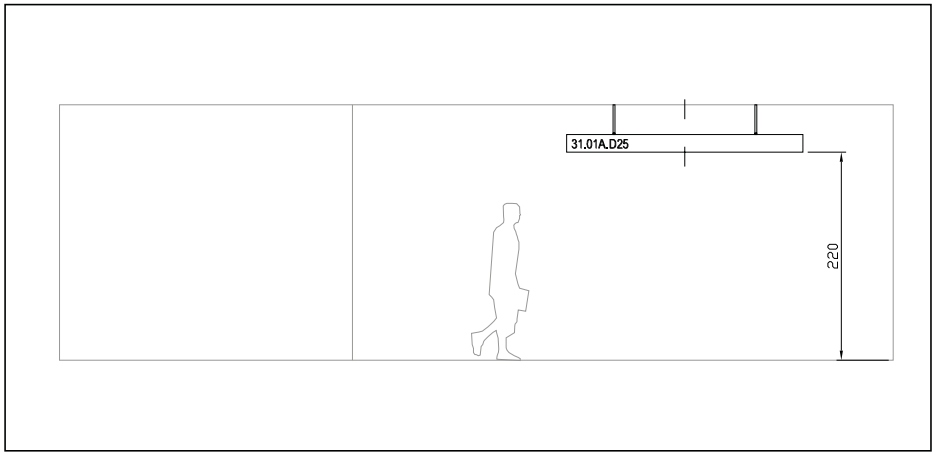


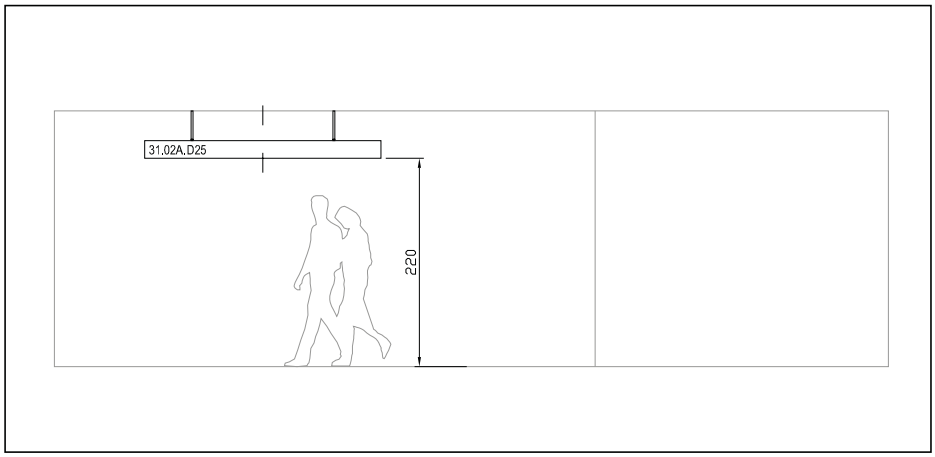

1:20

ULICA DOLINA SŁUŻEWIECKA

206,50
218
spód 220,00
218
31.02B.D25
31.02A.D25

ULICA PUŁAWSKA

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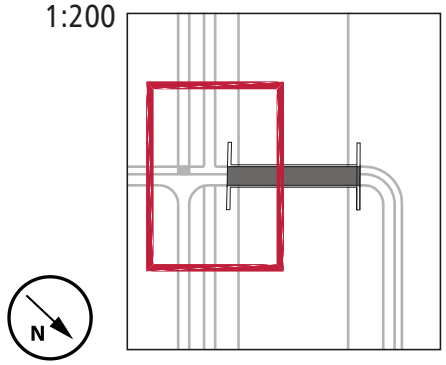
31.01A.D25

31.01B.D25

31.02A.D25

31.02B.D25

1:200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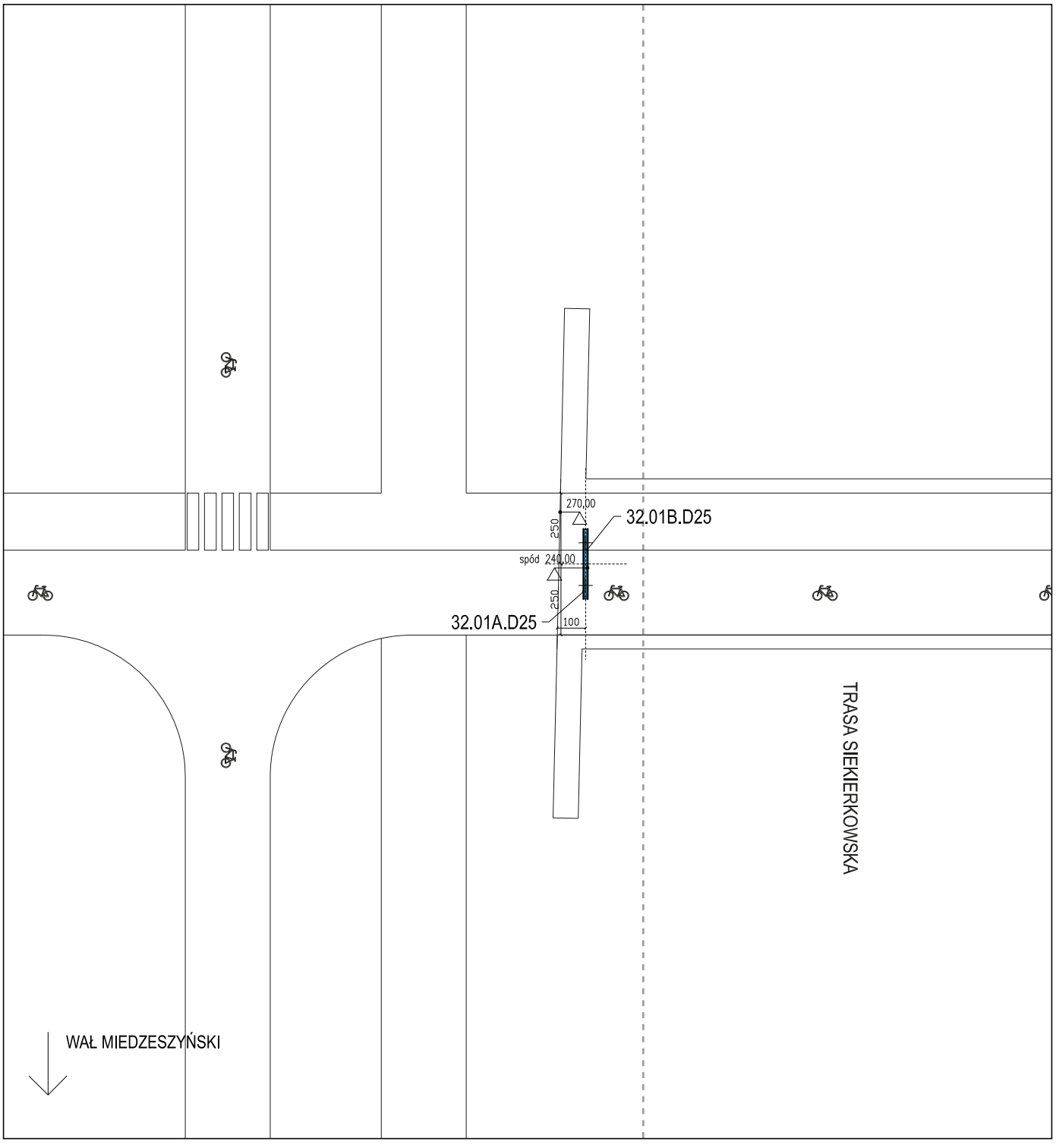
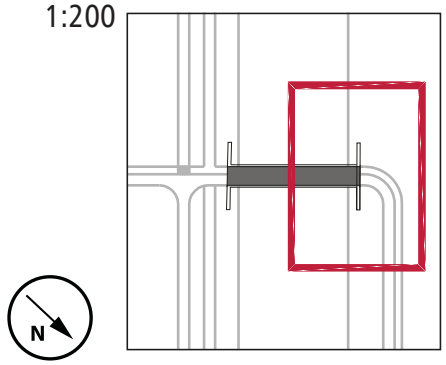

270,00
250
32.01B.D25
spód 240,00
250
32.01A.D25
100
TRASA SIEKIERKOWSKA
WAŁ MIEDZESZYŃSKI

# 32

1:200




1:20

TRASA SIEKIERKOWSKA

spód 240,00

250

32.02A.D25

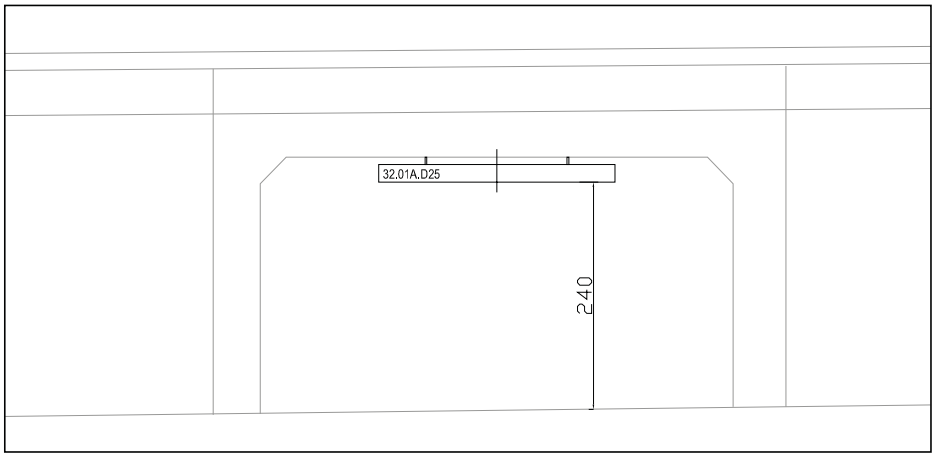
266,00

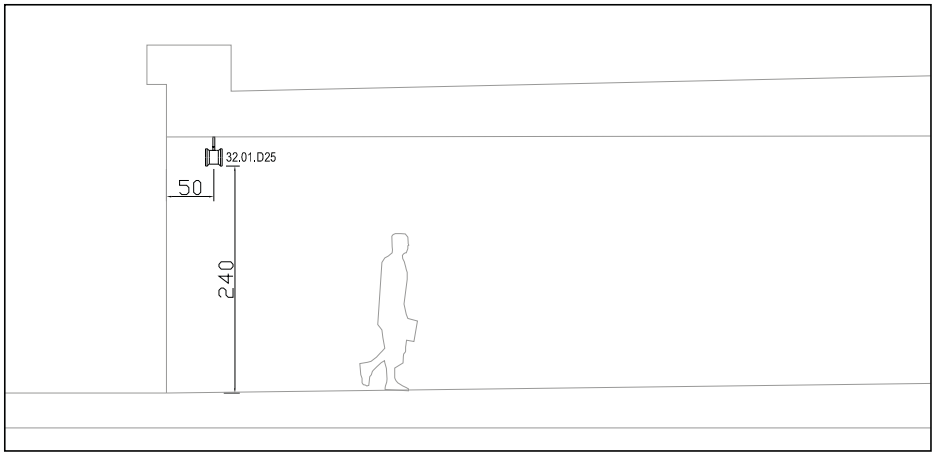
250

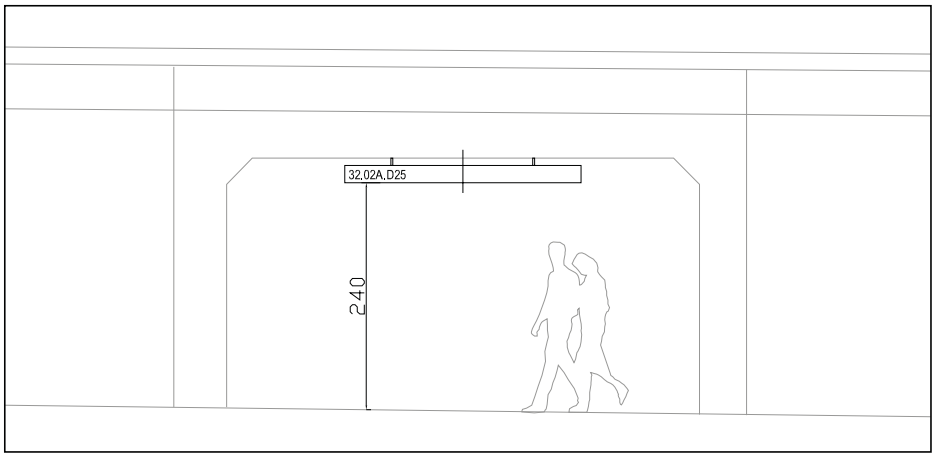
32.02B.D25

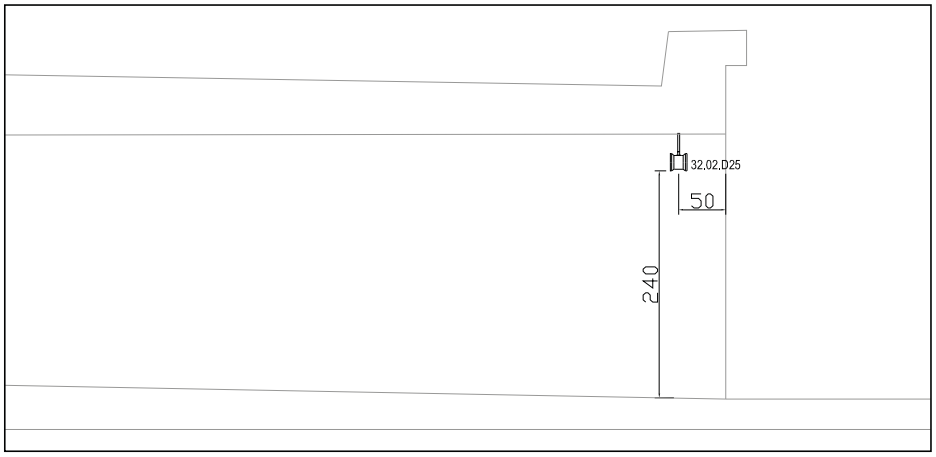
100

bus Gocław 10

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32.01A.D25

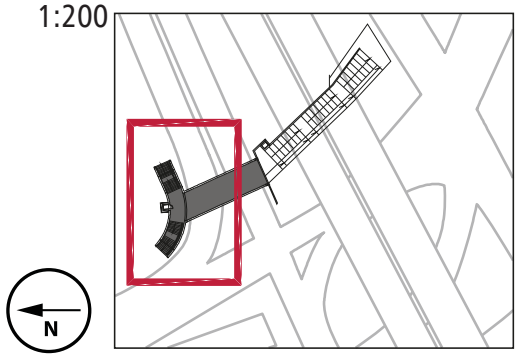
32.01B.D25

32.02A.D25

32.02B.D25

# 33

1:200

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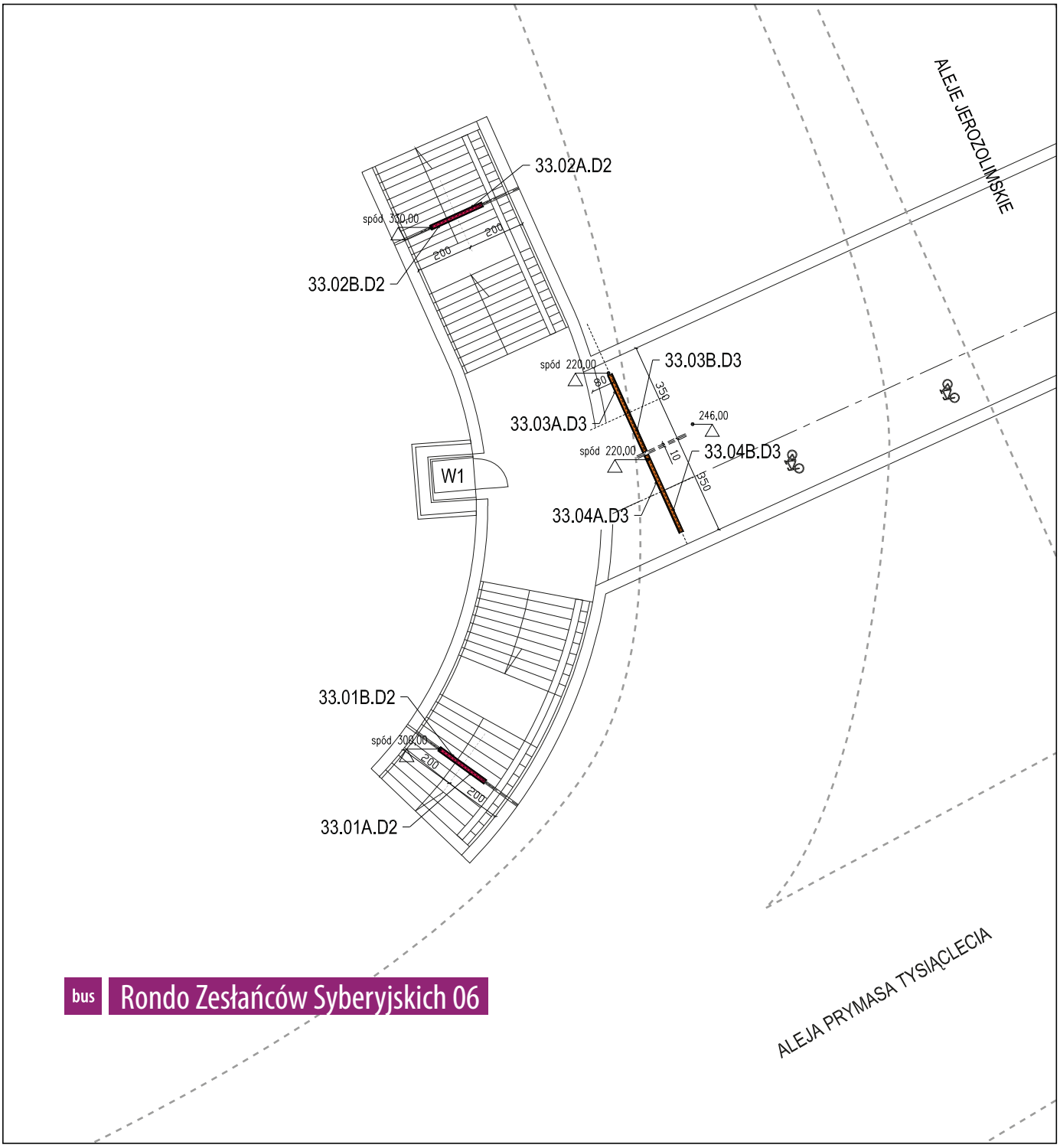
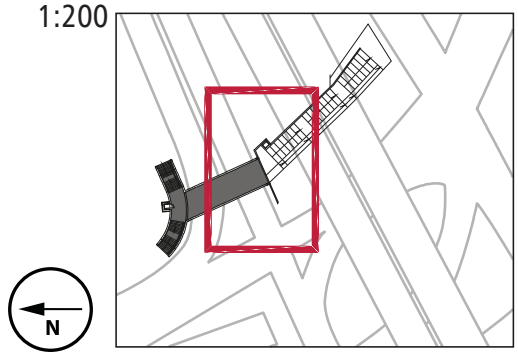



bus Rondo Zesłańców Syberyjskich 06

1:200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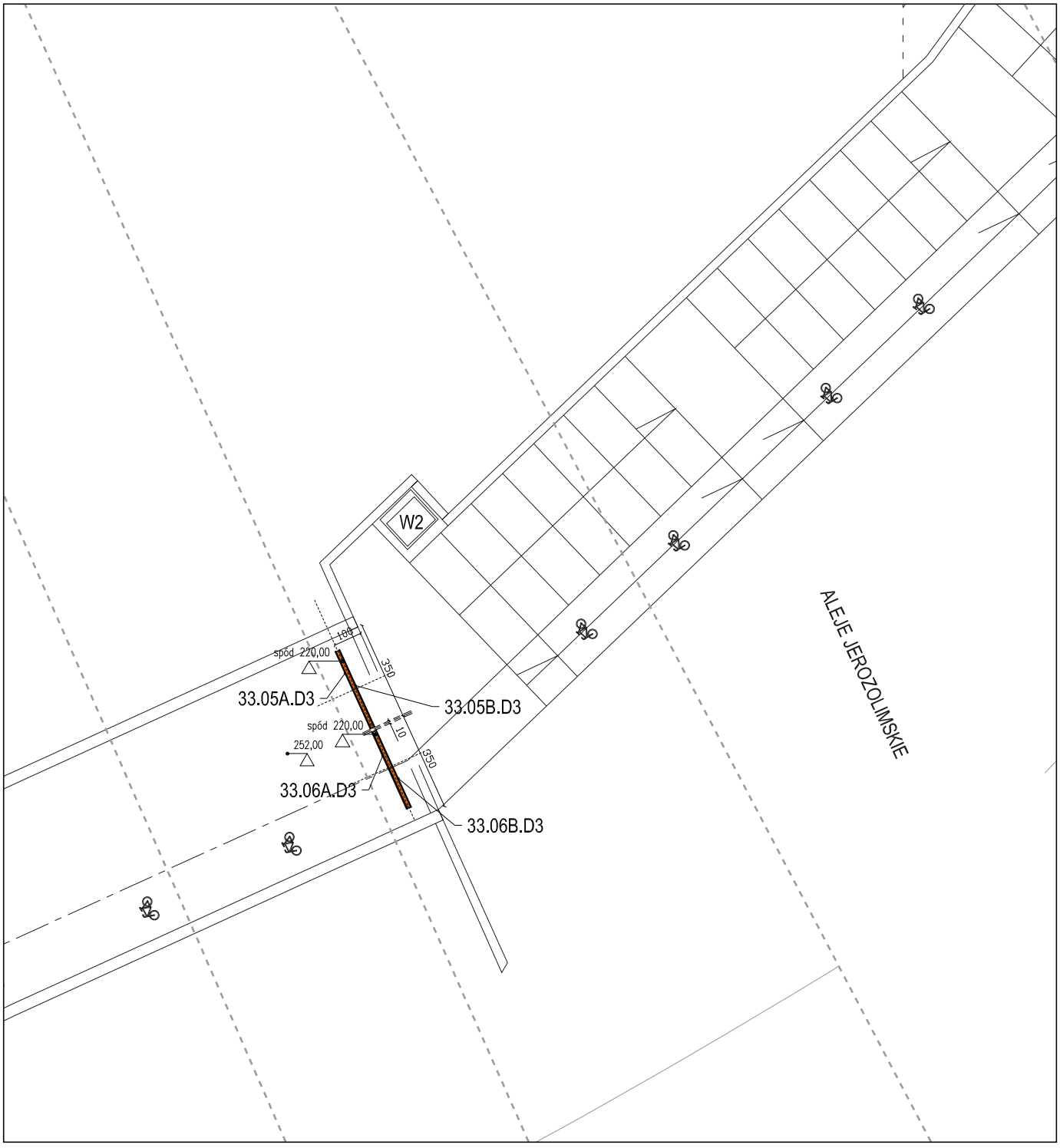
W2
ALEJE JEROZOLIMSKIE
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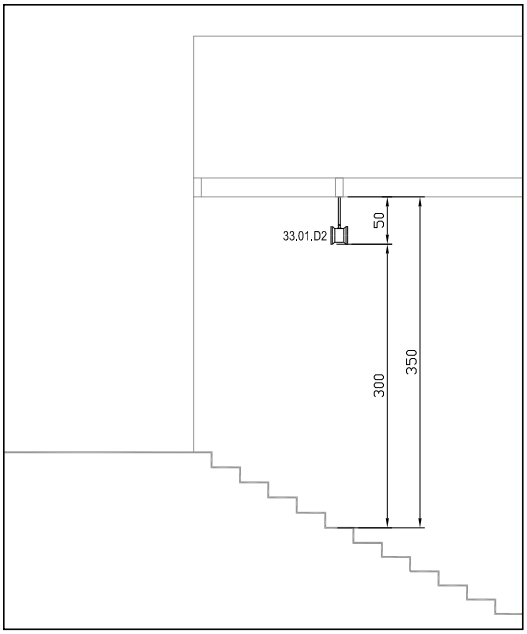
33.05B.D3
spód 220,00
10
252,00
350
33.06A.D3
33.06B.D3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300
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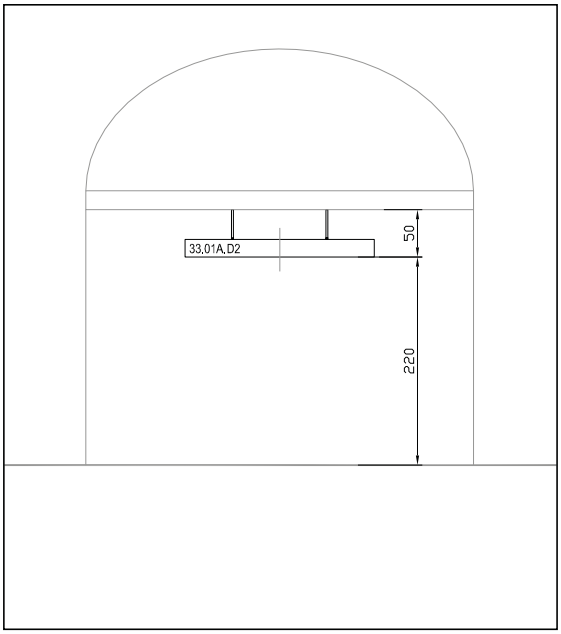
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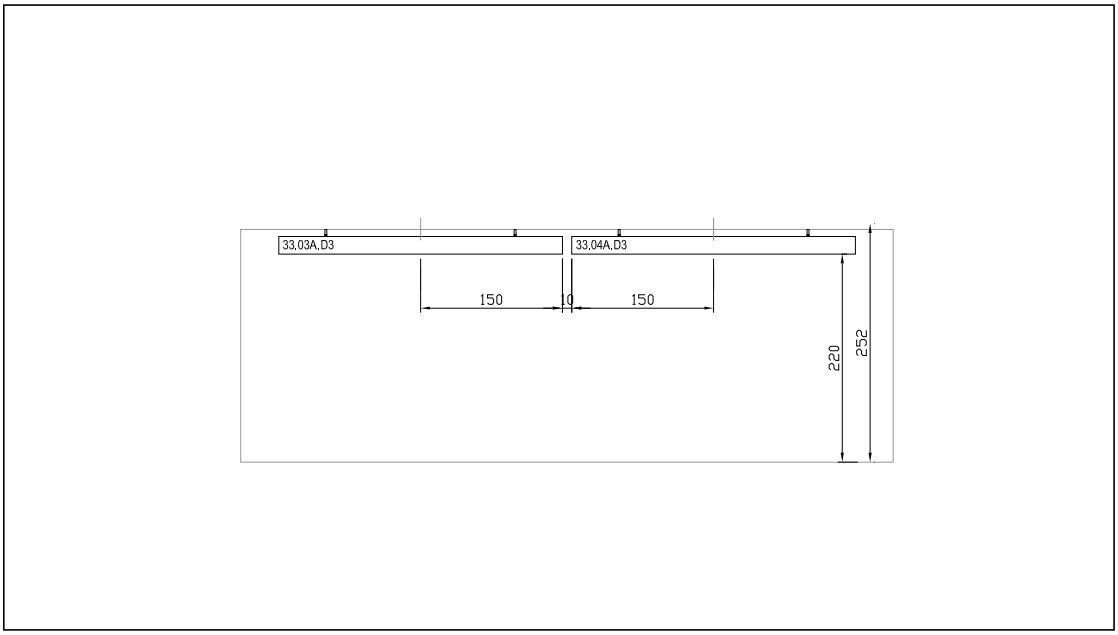
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33,04A,D3
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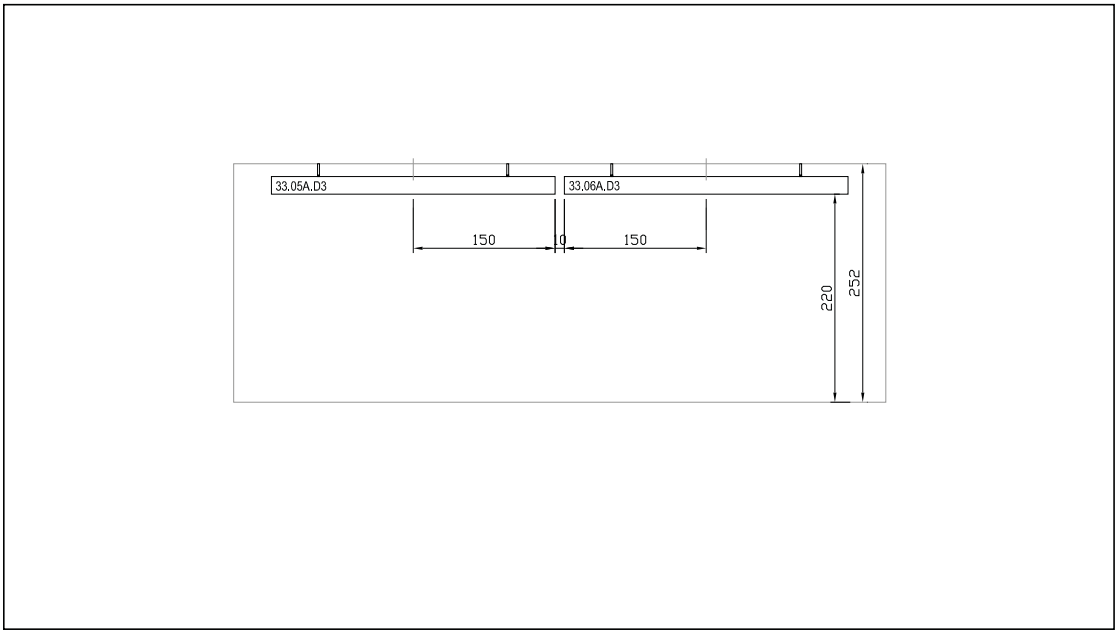
220
252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150
220
252

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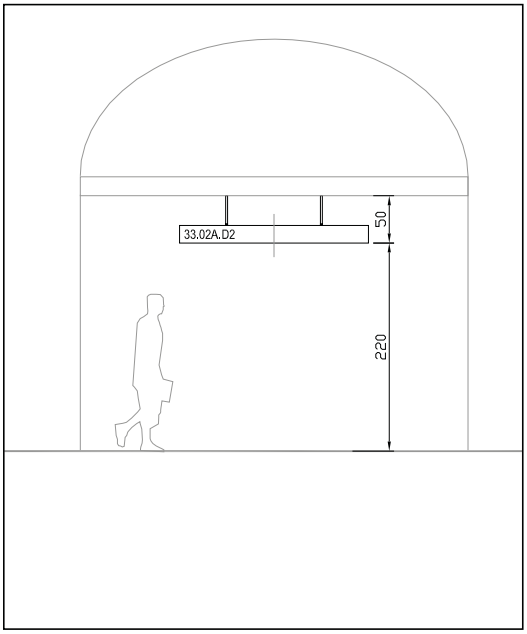


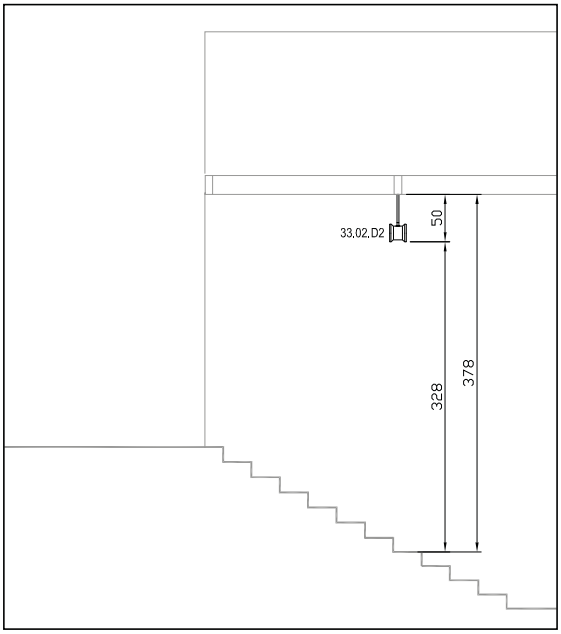


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33.01A.D2

33.01B.D2

33.02A.D2

33.02B.D2

33.03A.D3

33.03B.D3

33.04A.D3

33.04B.D3

33.05A.D3

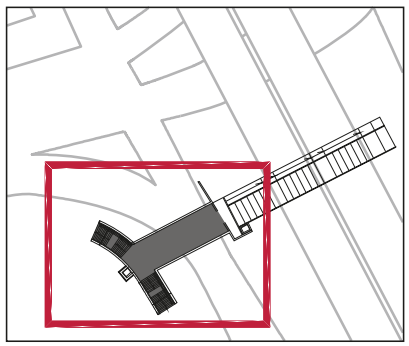
33.05B.D3

33.06A.D3

33.06B.D3

# 34

1:200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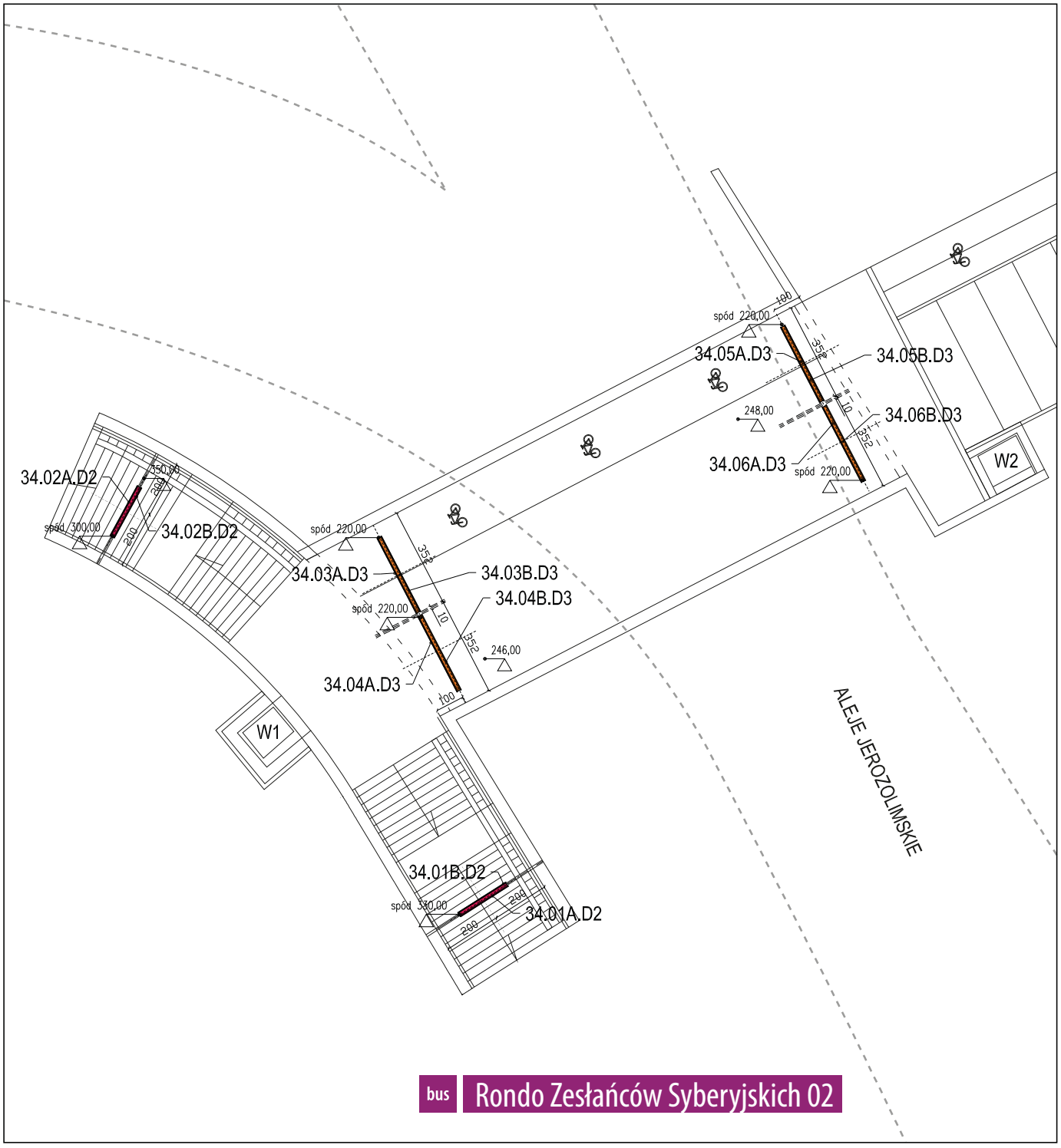
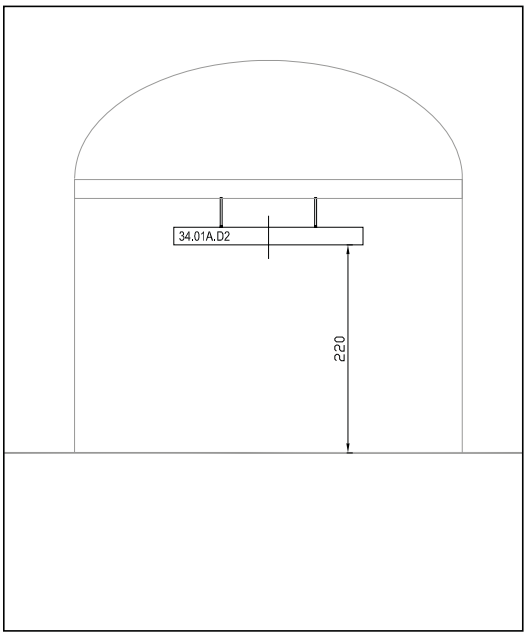

34.02A.D2
350,00
200
spód 300,00
200
34.02B.D2
spód 220,00
34.03A.D3
355
34.03B.D3
34.04B.D3
spód 220,00
10
352
246,00
34.04A.D3
100
W1
34.01B.D2
spód 330,00
200
200
34.01A.D2
ALEJE JEROZOLIMSKIE
spód 220,00
180
34.05A.D3
355
34.05B.D3
248,00
10
34.06B.D3
352
34.06A.D3
spód 220,00
W2
bus
Rondo Zesłańców Syberyjskich 02


34.01A.D2
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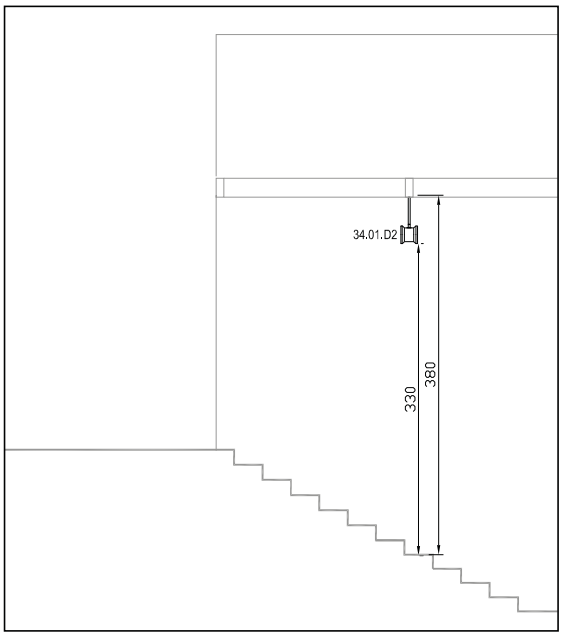
34.01.D2
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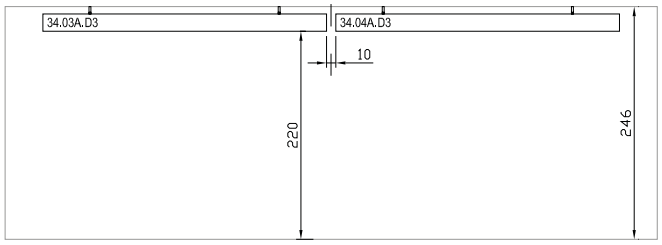
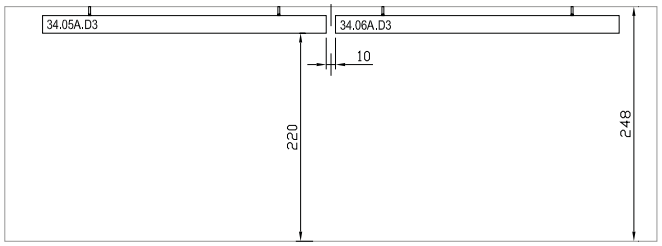
380


34.03A.D3
34.04A.D3
10
220
246


34.05A.D3
34.06A.D3
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220
248

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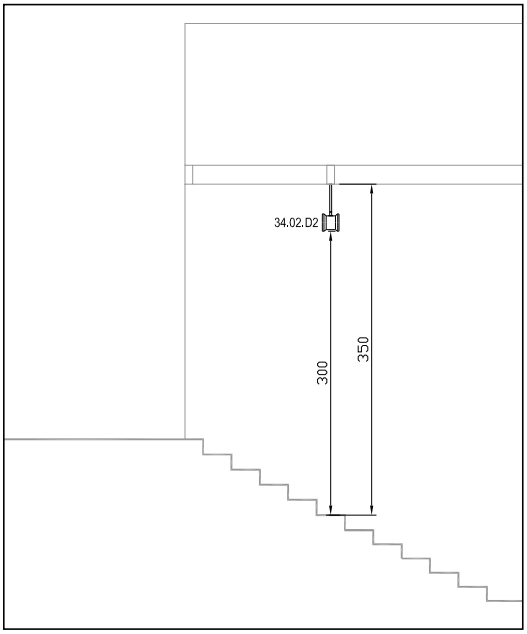


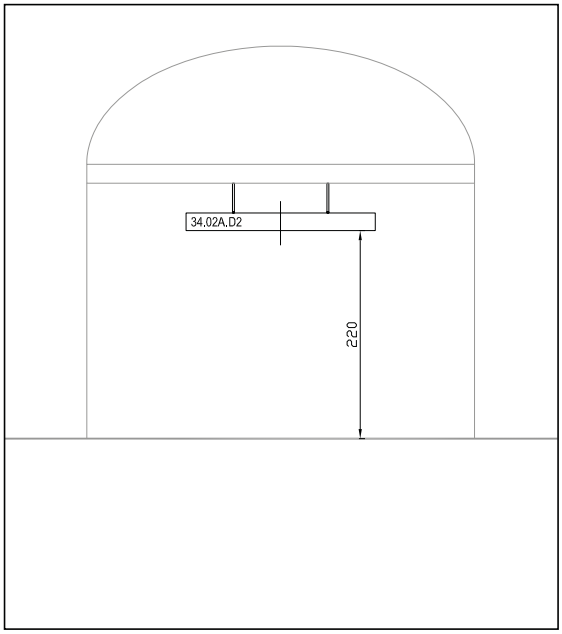


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34.01A.D2

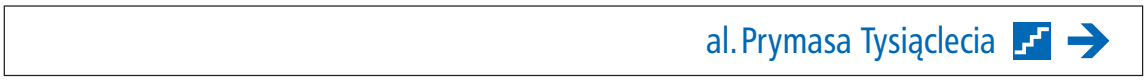
34.01B.D2

34.02A.D2

34.02B.D2

34.03A.D3

34.03B.D3

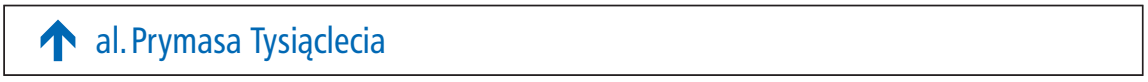



34.04A.D3

34.04B.D3

34.05A.D3

34.05B.D3




34.06A.D3

34.06B.D3

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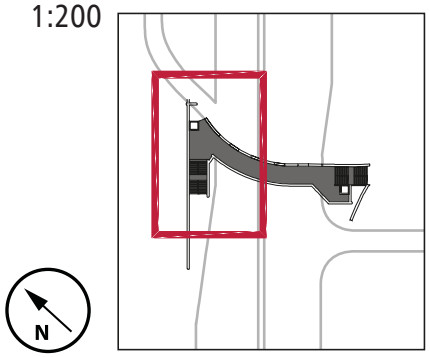



1:20

CH REDUTA

W1

35.01B.D2

235

235

290,00

spód 220,00

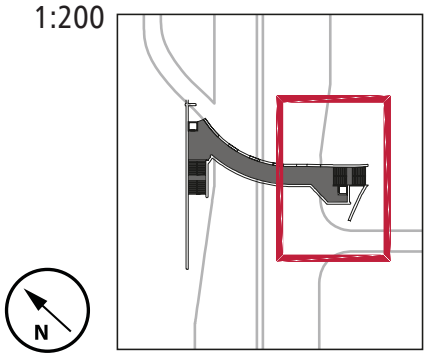
30

35.01A.D2

ALEJE JEROZOLIMSKIE

bus Berestecka 02

1:200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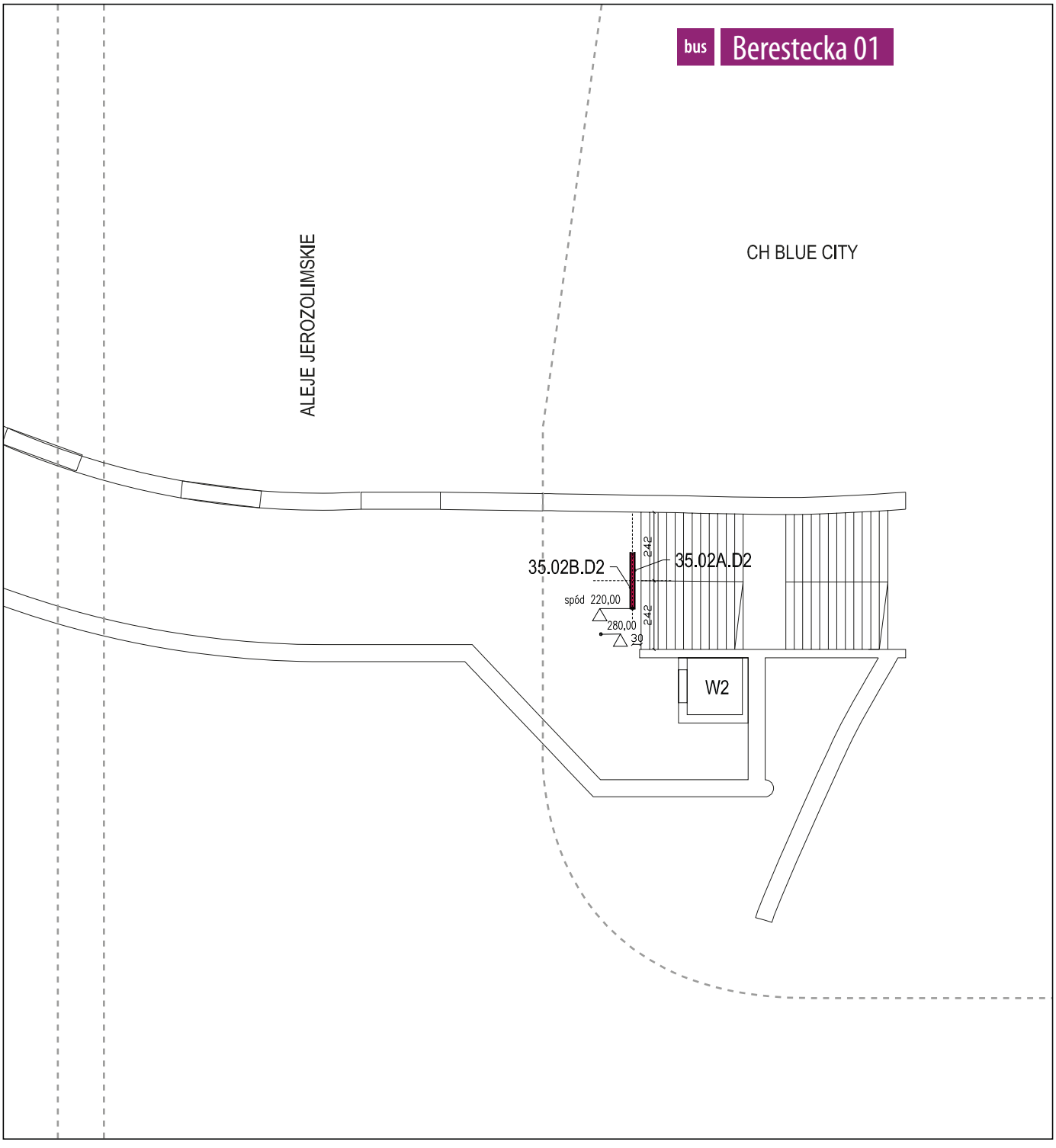
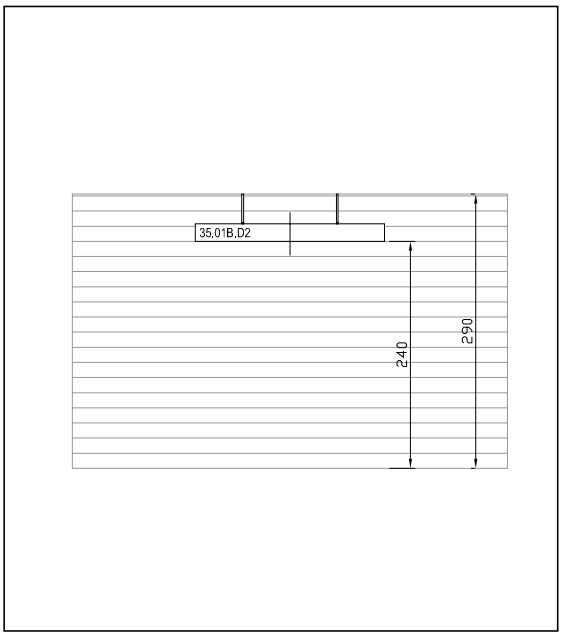

bus
Berestecka 01
ALEJE JEROZOLIMSKIE
CH BLUE CITY
35.02B.D2
35.02A.D2
242
242
spód 220,00
280,00
30
W2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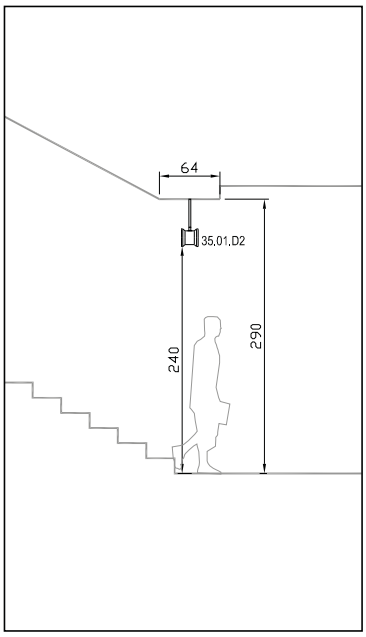
240
290


64
35,01.D2
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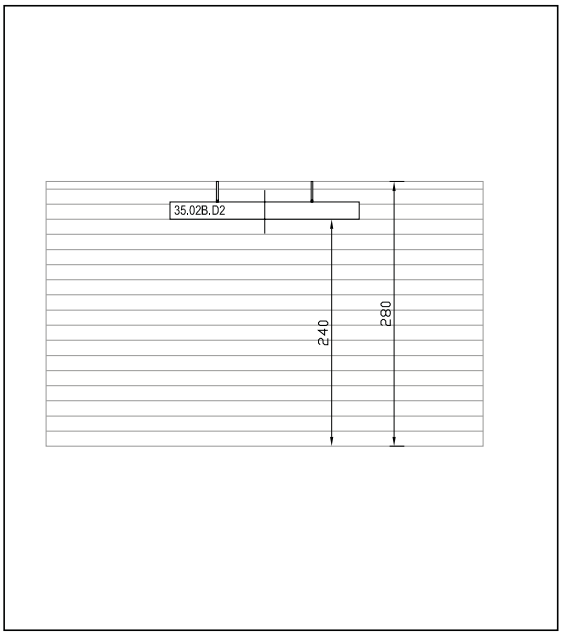
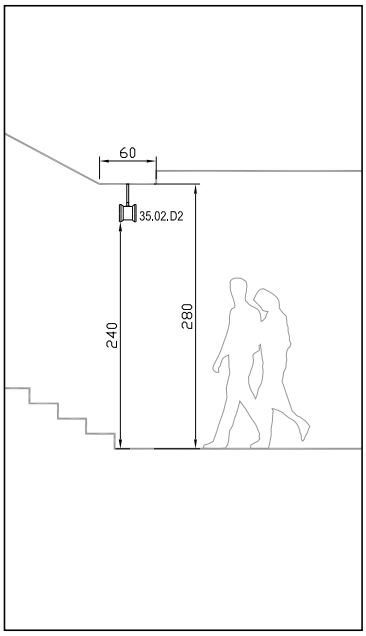
290


35.02B.D2
240
280


60
35.02.D2
240
280

1:8

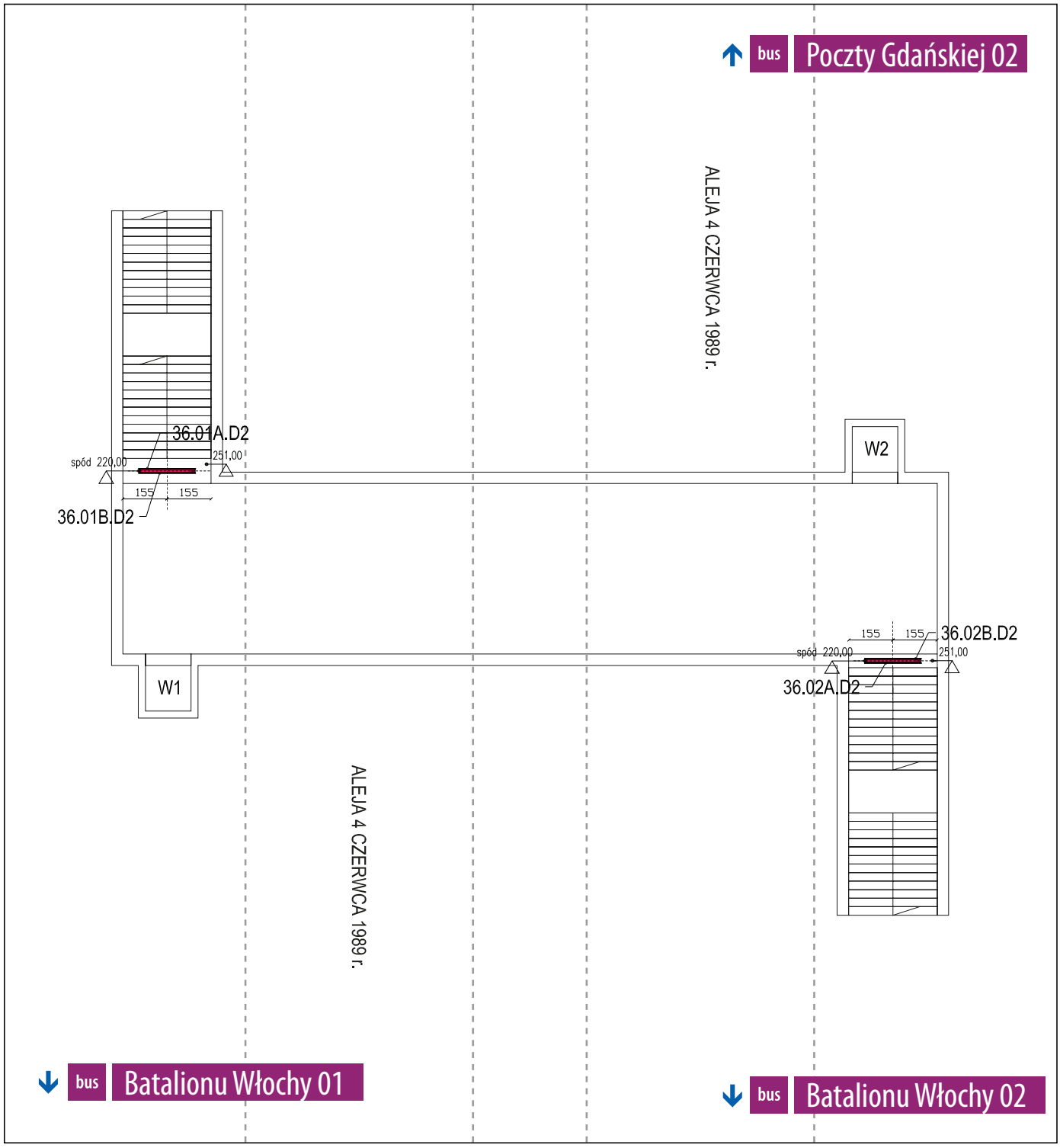
35.01A.D2

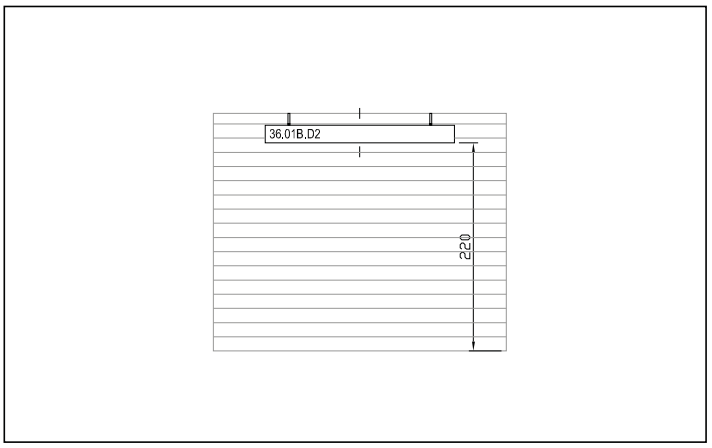
35.01B.D2

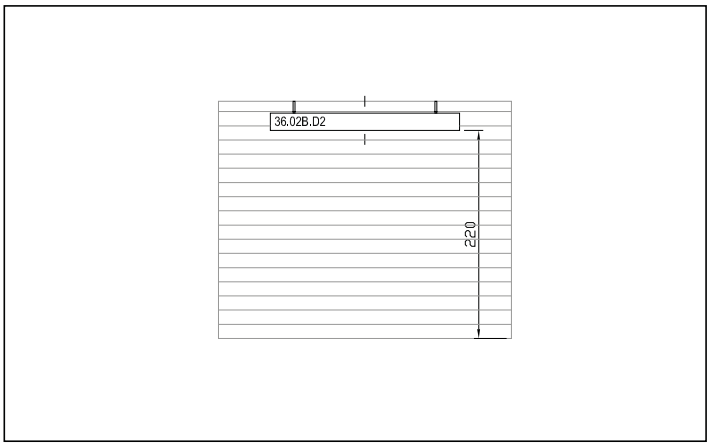
35.02A.D2

35.02B.D2

1:20


bus Poczty Gdańskiej 02
ALEJA 4 CZERWCA 1989 r.
36.01A.D2
spód 220,00
251,00
155
155
36.01B.D2
W2
W1
155
155
36.02B.D2
spód 220,00
251,00
36.02A.D2
ALEJA 4 CZERWCA 1989 r.
bus Batalionu Włochy 01
bus Batalionu Włochy 02




1:8

36.1A.D2

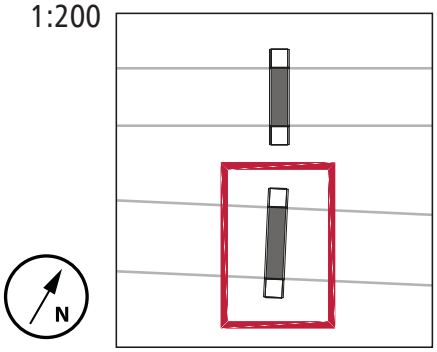
36.1B.D2

36.2A.D2

36.2B.D2

# 37

1:200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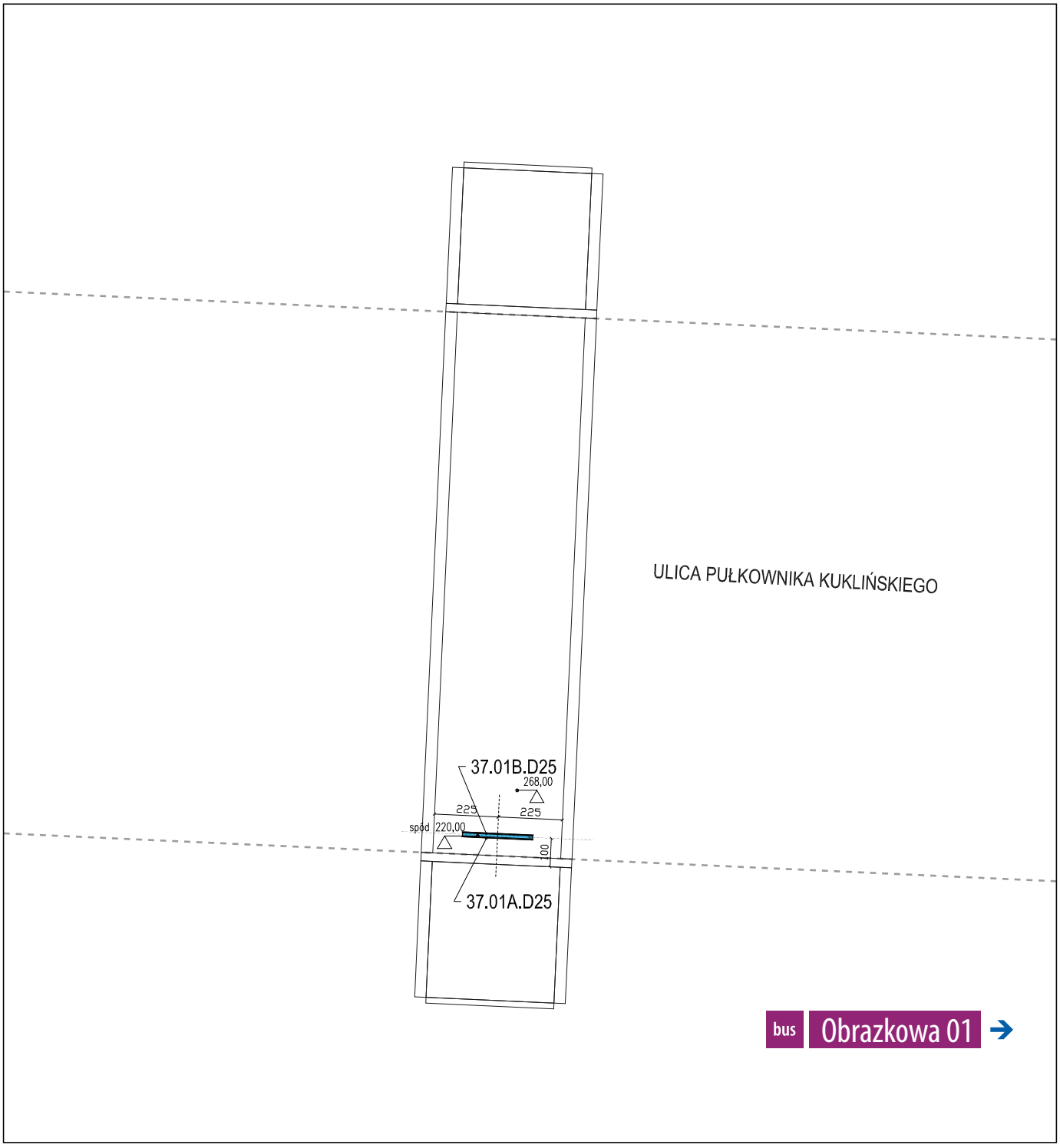
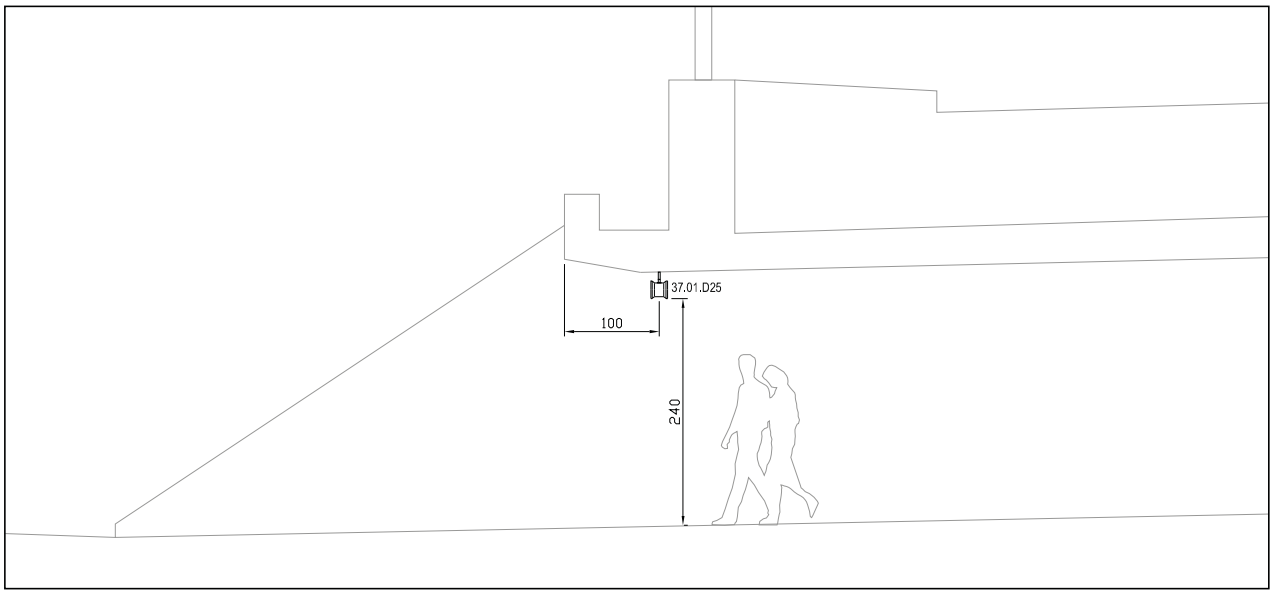
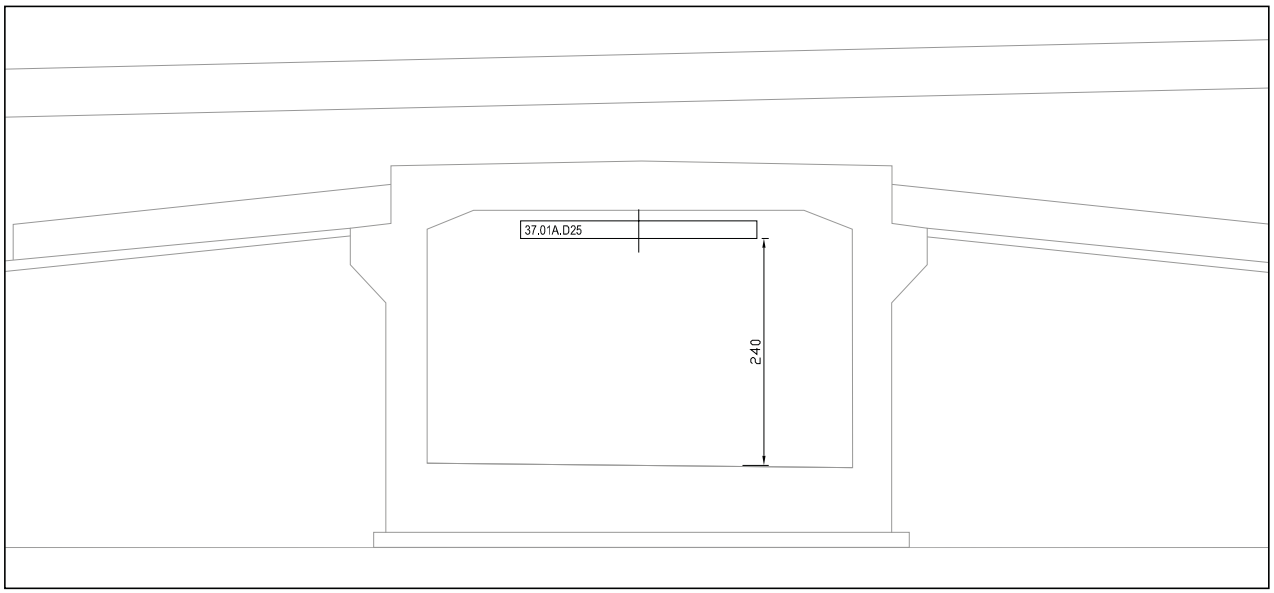

ULICA PUŁKOWNIKA KUKLIŃSKIEGO
37.01B.D25
268,00
225
225
spad 220,00
100
37.01A.D25
bus
Obrazkowa 01

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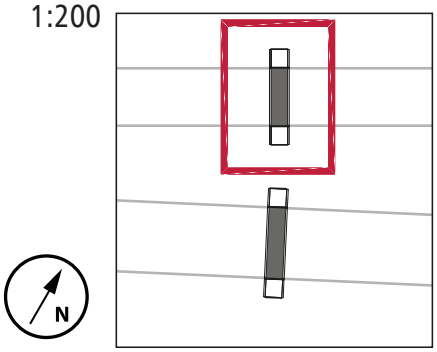
37.1A.D25

37.1B.D25

1:200

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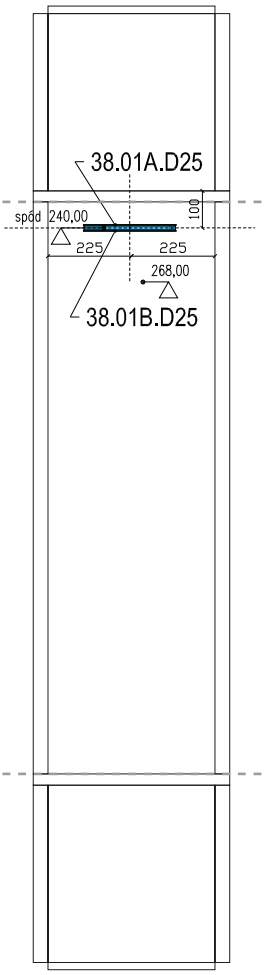
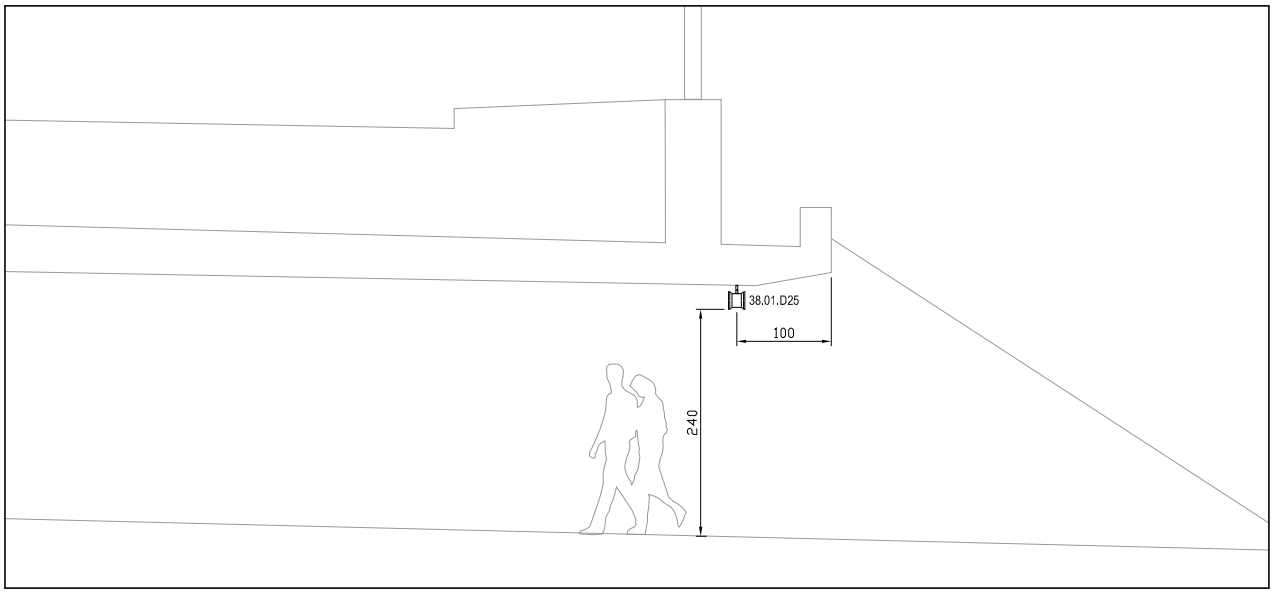
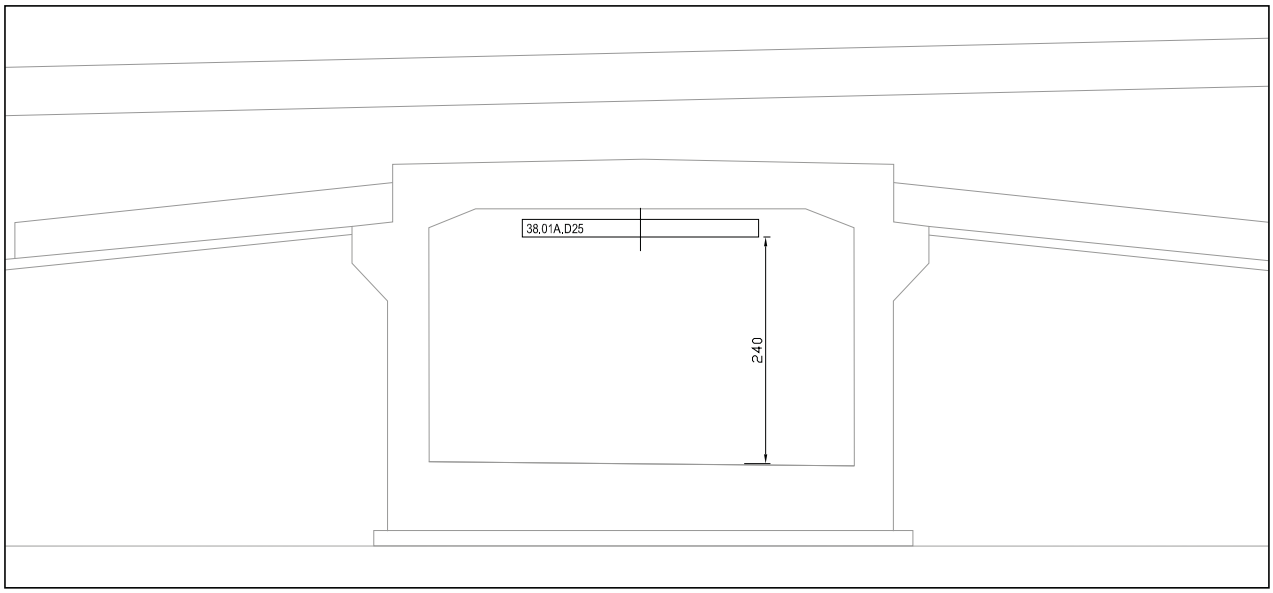
bus Obrazkowa 03




ULICA PUŁKOWNIKA KUKLIŃSKIEGO

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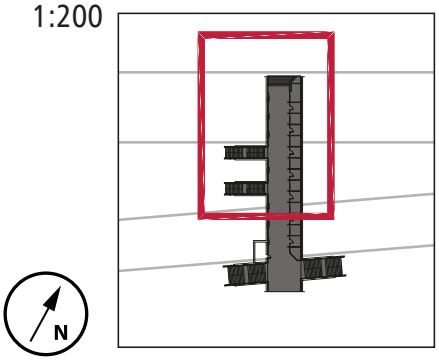
38.1A.D25

38.1B.D25

1:200



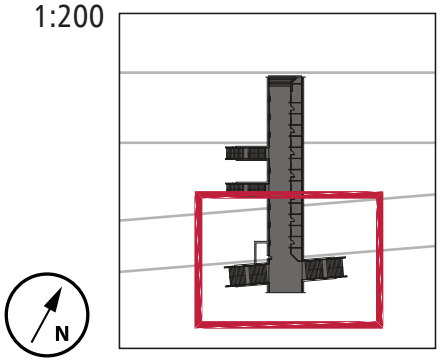
1:20

DWORZEC WARSZAWA CENTRALNA

ALEJE JEROZOLIMSKIE

39.01A.D3
39.01B.D3
39.02A.D25
39.02B.D25
39.03A.D3
39.03B.D3
39.04A.D25
39.04B.D25
39.05A.D3
39.05B.D3

1:200



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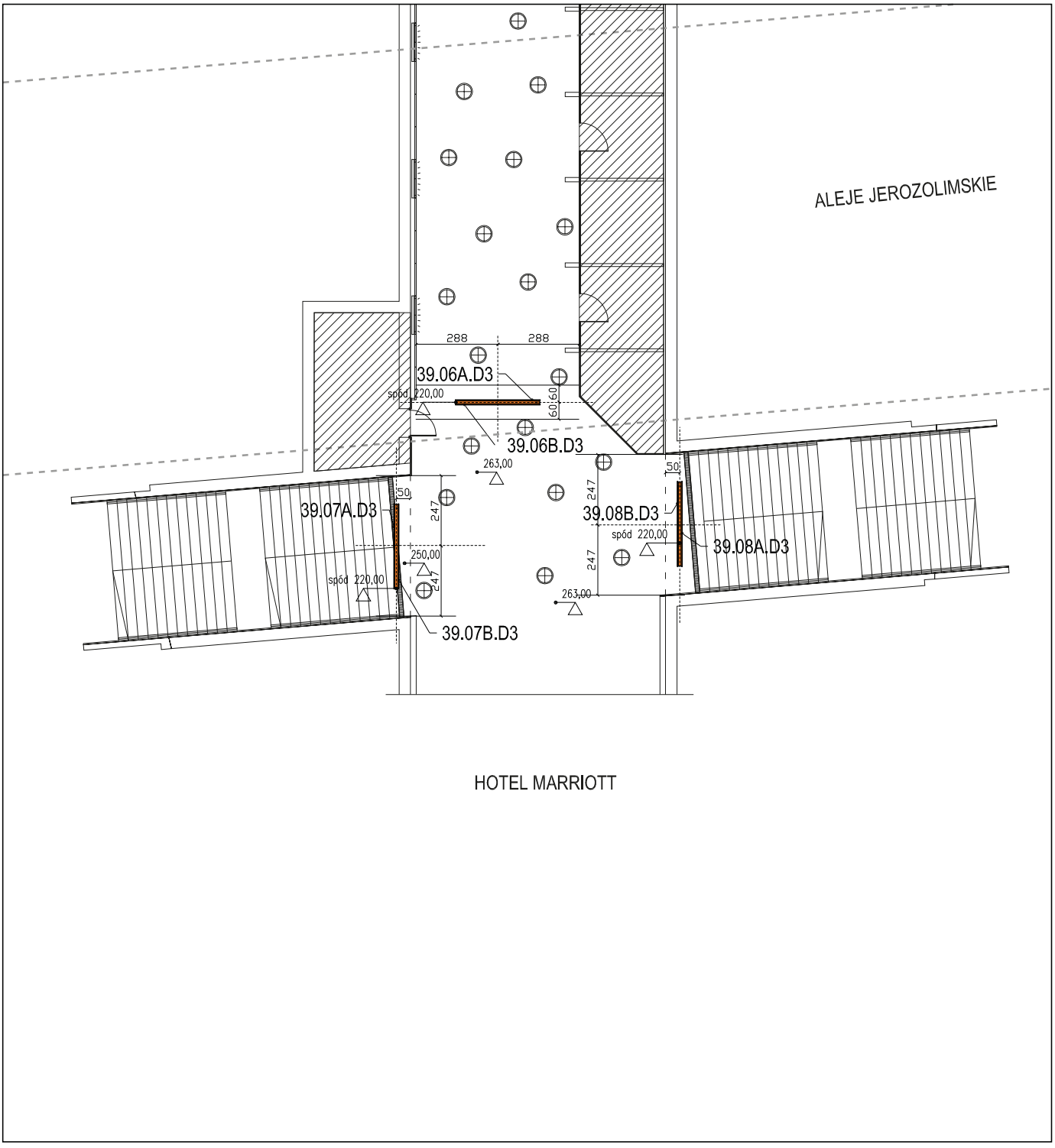
ALEJE JEROZOLIMSKIE
288
288
39.06A.D3
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60
39.06B.D3
263,00
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247
39.07A.D3
50
247
39.08B.D3
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spód 220,00
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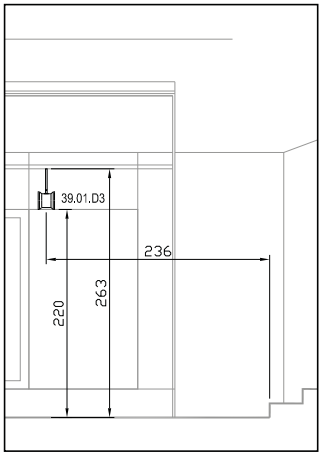
247
263,00
39.07B.D3
HOTEL MARRIOTT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263
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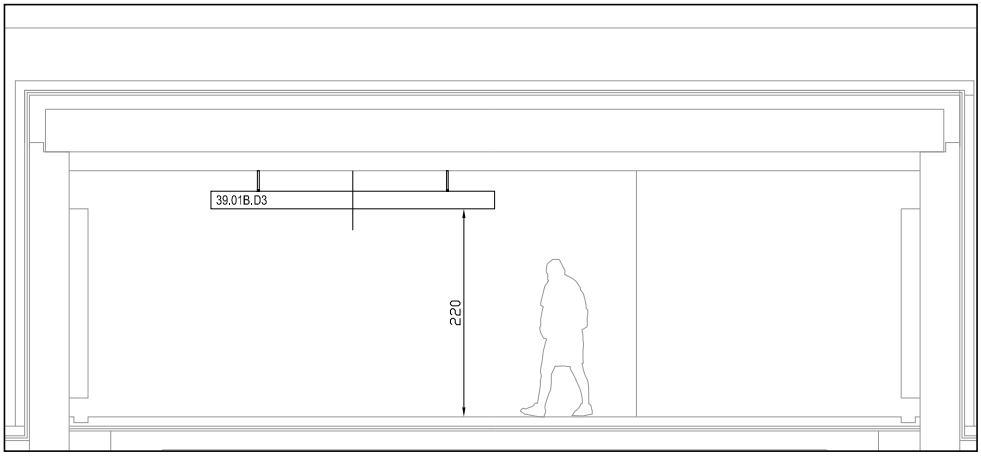
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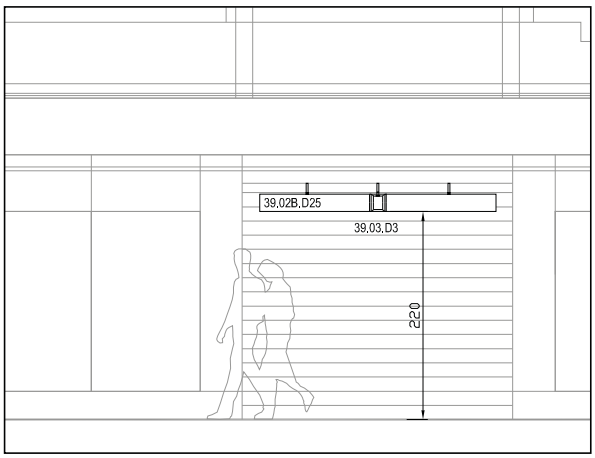
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39.03.D3
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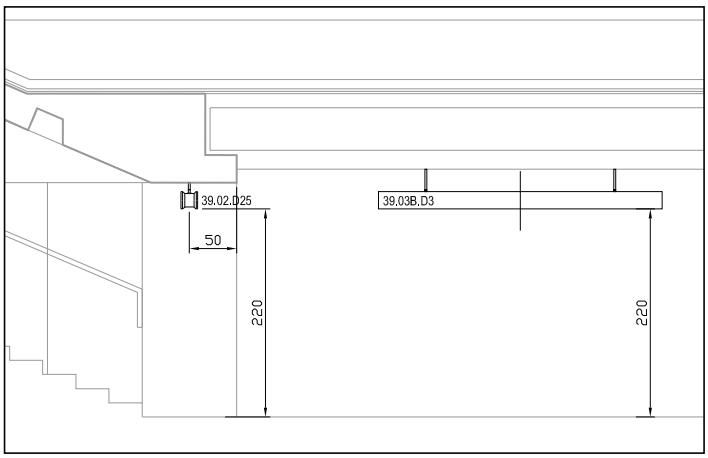
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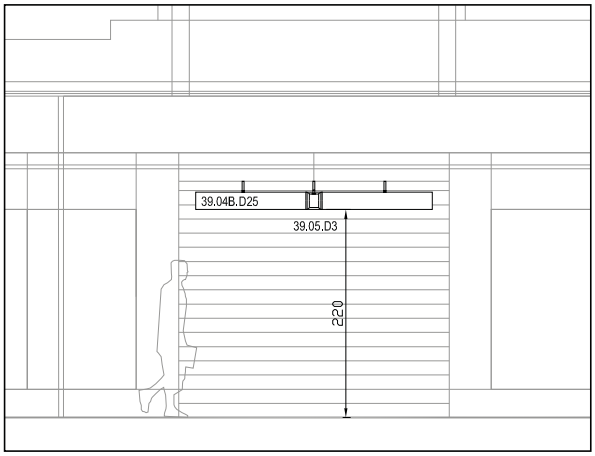
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39.05.D3
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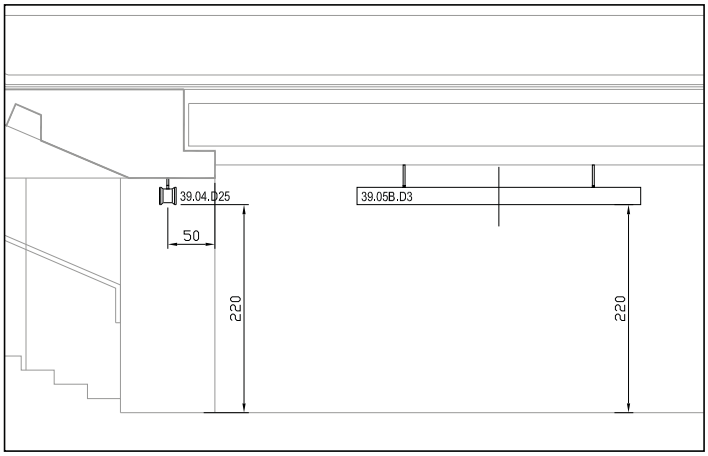
39.04.D25
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39.05B.D3
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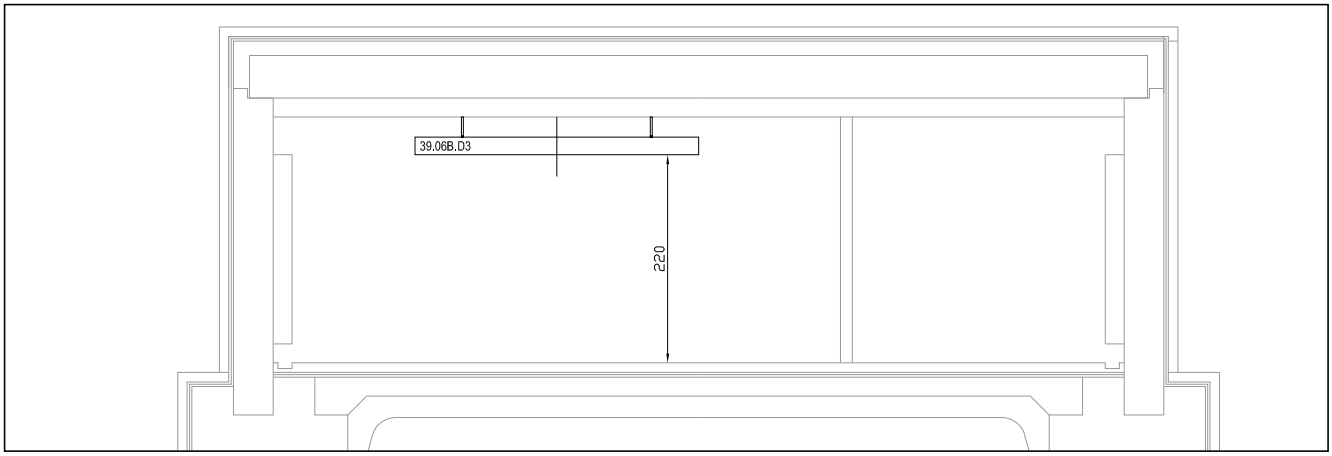
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39.08.D3
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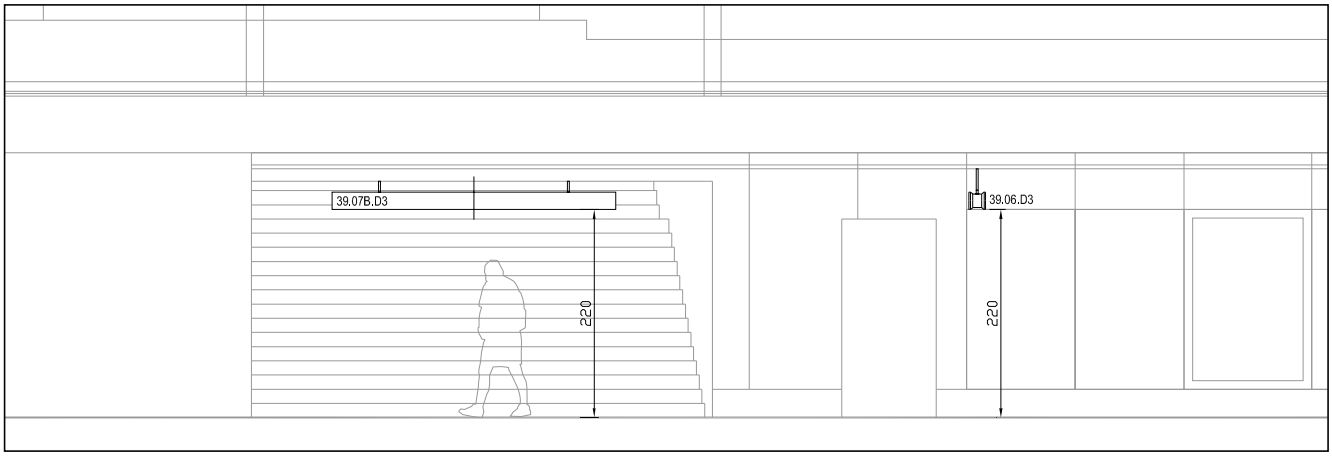
220
39.07.D3
50
220


39.07B.D3
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39.06.D3
220

1:8

39.1A.D3

39.1B.D3

39.2A.D25

39.2B.D25

39.3A.D3

39.3B.D3

39.4A.D25

39.4B.D25

39.5A.D3

39.5B.D3

39.6A.D3

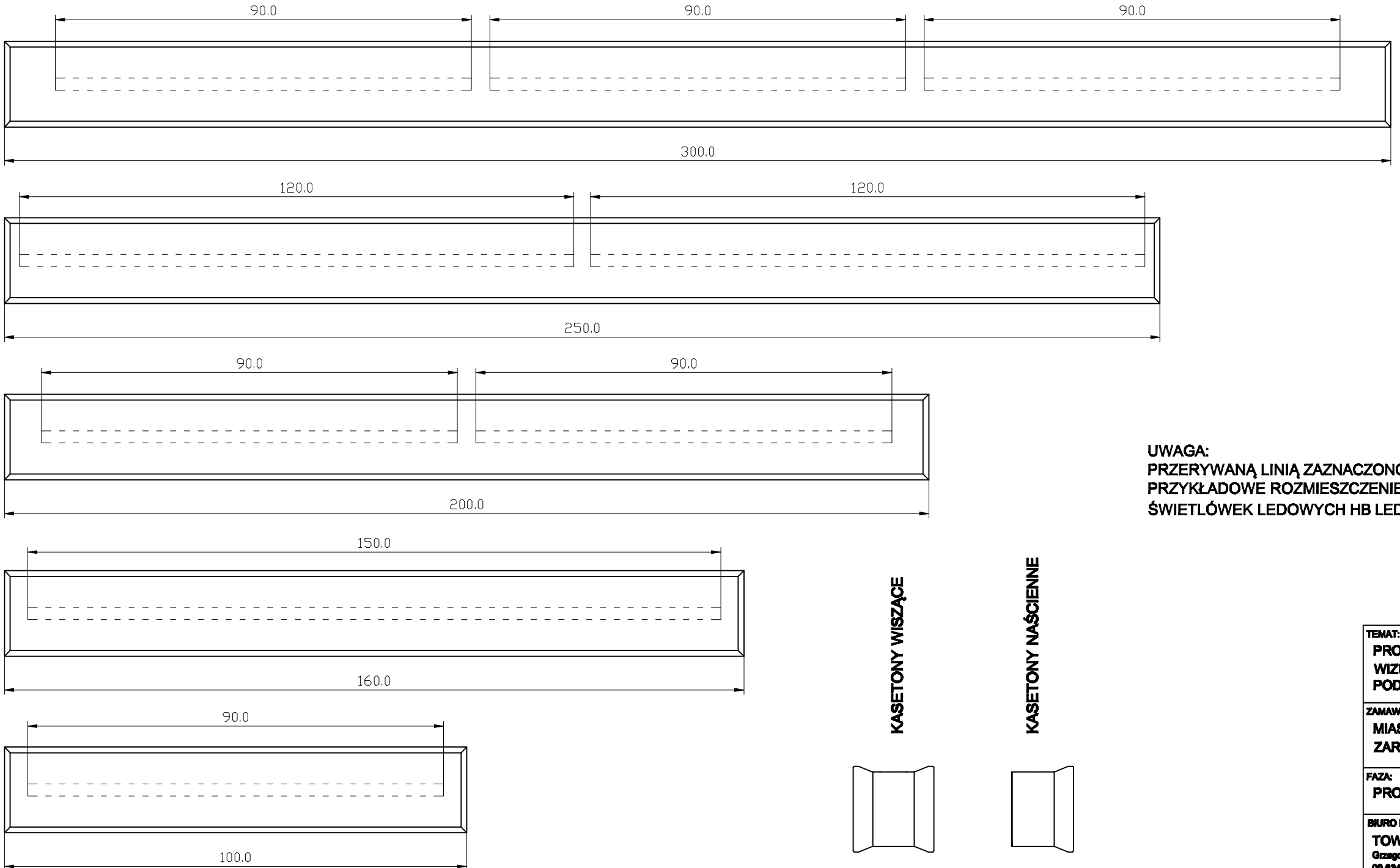
39.6B.D3

39.7A.D3

39.7B.D3

39.8A.D3

39.8B.D3




**UWAGA:**
**PRZERYWANĄ LINIĄ ZAZNACZONO PRZYKŁADOWE ROZMIESZCZENIE ŚWIETLÓWEK LEDOWYCH HB LED TUBE**



KASETONY WISZĄCE



KASETONY NAŚCIENNE

TEMAT:
**PROJEKT SYSTEMU INFORMACJI WIZUALNEJ W PRZEJŚCIACH PODZIEMNYCH W WARSZAWIE**

ZAMAWIAJĄCY:
**MIASTO STOŁECZNE WARZSAWA ZARZĄD DRÓG MIEJSKICH**

FAZA:
**PROJEKT WYKONAWCZY**

BIURO PROJEKTOWE:
**TOWARZYSTWO PROJEKTOWE S.C.**
Grzegorz Niwiński, Jerzy Porębski
00-634 Warszawa
ul. Jaworzyńska 8 lok. 7
tel. 022 825 55 55, fax 022 825 69 69

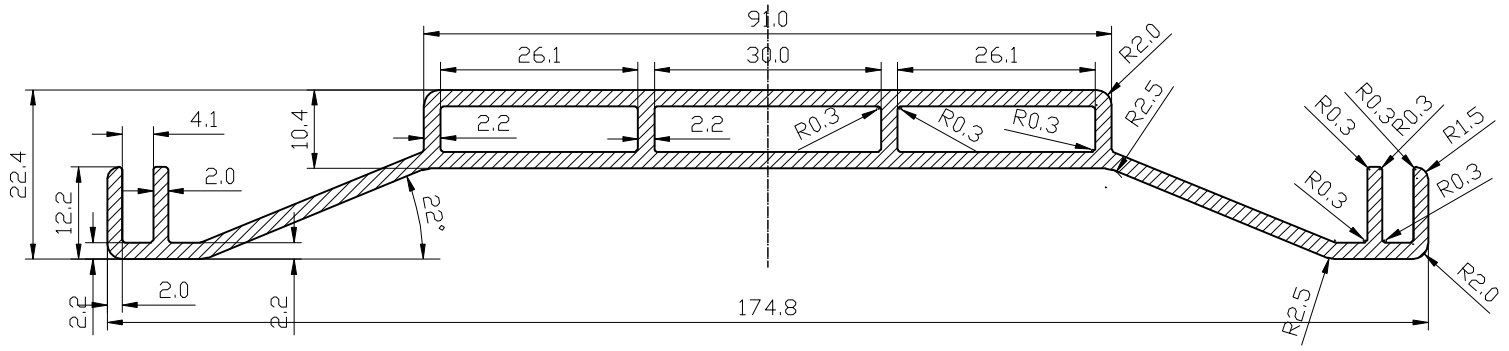
Barbara Dobrzyńska
Grzegorz Niwiński
Jerzy Porębski

TREŚĆ RYSUNKU:
**TYPOSZEREG KASETONÓW INFORMACYJNYCH**

| SKALA: | DATA: | NR RYS.: |
|---|---|---|
| 1:10 | 11.09.2015 | 01 |

POZIOM SUFITU BETONOWEGO

POZIOM SUFITU PODWIESZANEGO



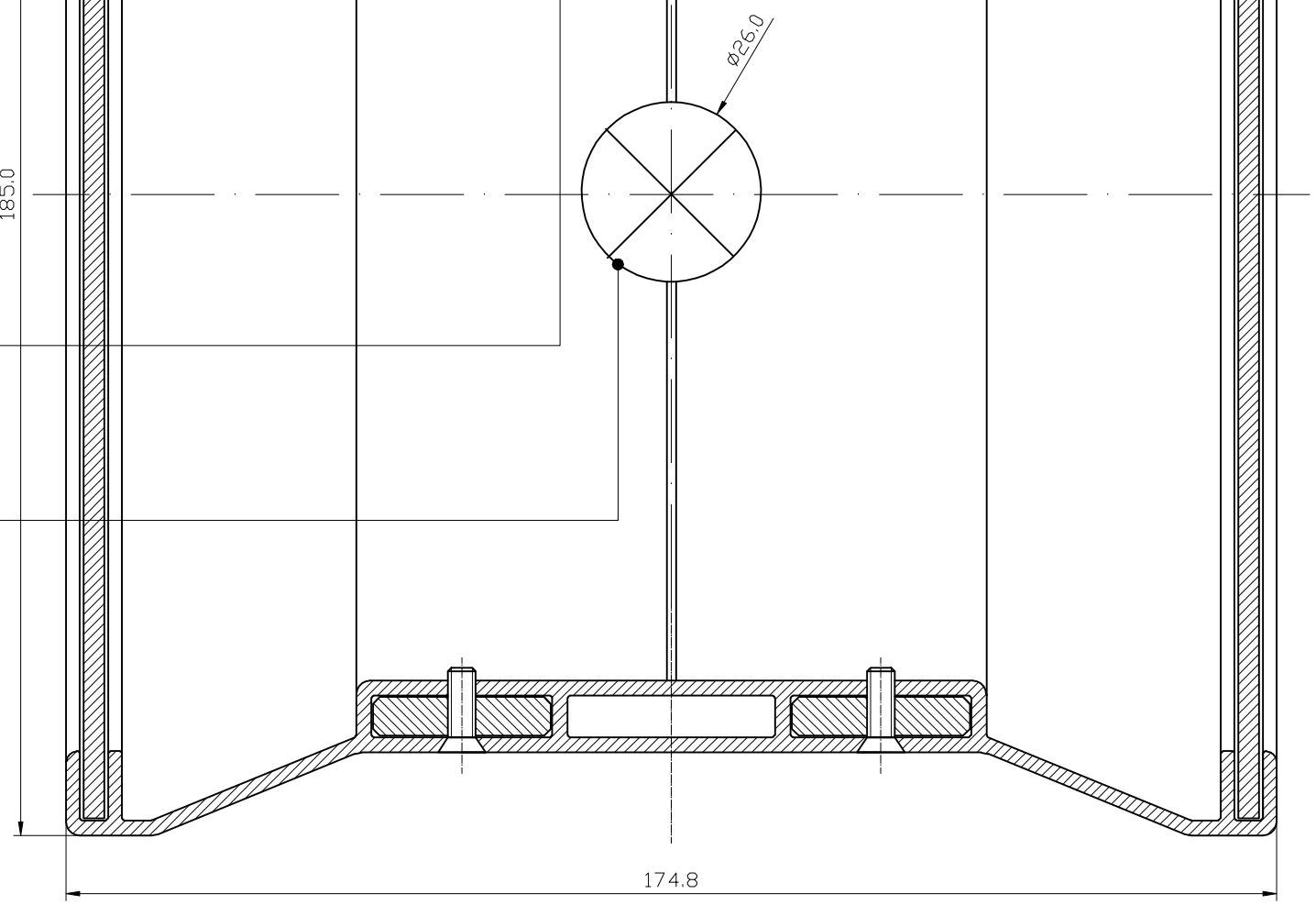

PROFIL ALUMINIOWY

DYFUZOR Z PLEXI OPAL
GRAFIKA Z FOLII TRANSLUCENTNEJ

SZYNY BOCZNEGO PROFILA
MOCOWANE NA ŚRUBY

OBUDOWA KASETONU
PROFILE GÓRNY, DOLNY
I JEDEN Z BOCZNYCH ZESPAWANE,
DRUGI BOCZNY POSIADA SZYNY
KTÓRE WSÓWA SIĘ W KOMORY
PROFILI DOLNEGO I GÓRNEGO
OBUDOWA KASETONU LAKIEROWANA
PROSZKOWO NA KOLOR BIAŁY RAL 9010

ŚWIETLÓWKI HB LED TUBE




TEMAT:
**PROJEKT SYSTEMU INFORMACJI WIZUALNEJ W PRZEJŚCIACH PODZIEMNYCH W WARSZAWIE**

ZAMAWIAJĄCY:
**MIASTO STOŁECZNE WARSZAWA**
**ZARZĄD DRÓG MIEJSKICH**

FAZA:
**PROJEKT WYKONAWCZY**


BIURO PROJEKTOWE:
**TOWARZYSTWO PROJEKTOWE S.C.**
Grzegorz Niwiński, Jerzy Porębski
00-634 Warszawa
ul. Jaworzyńska 8 lok. 7
tel. 022 825 55 55, fax 022 825 69 69

Barbara Dobrzyńska
Grzegorz Niwiński
Jerzy Porębski


TREŚĆ RYSUNKU:
**PRZEKRÓJ WISZĄCEGO KASETONU INFORMACYJNEGO**

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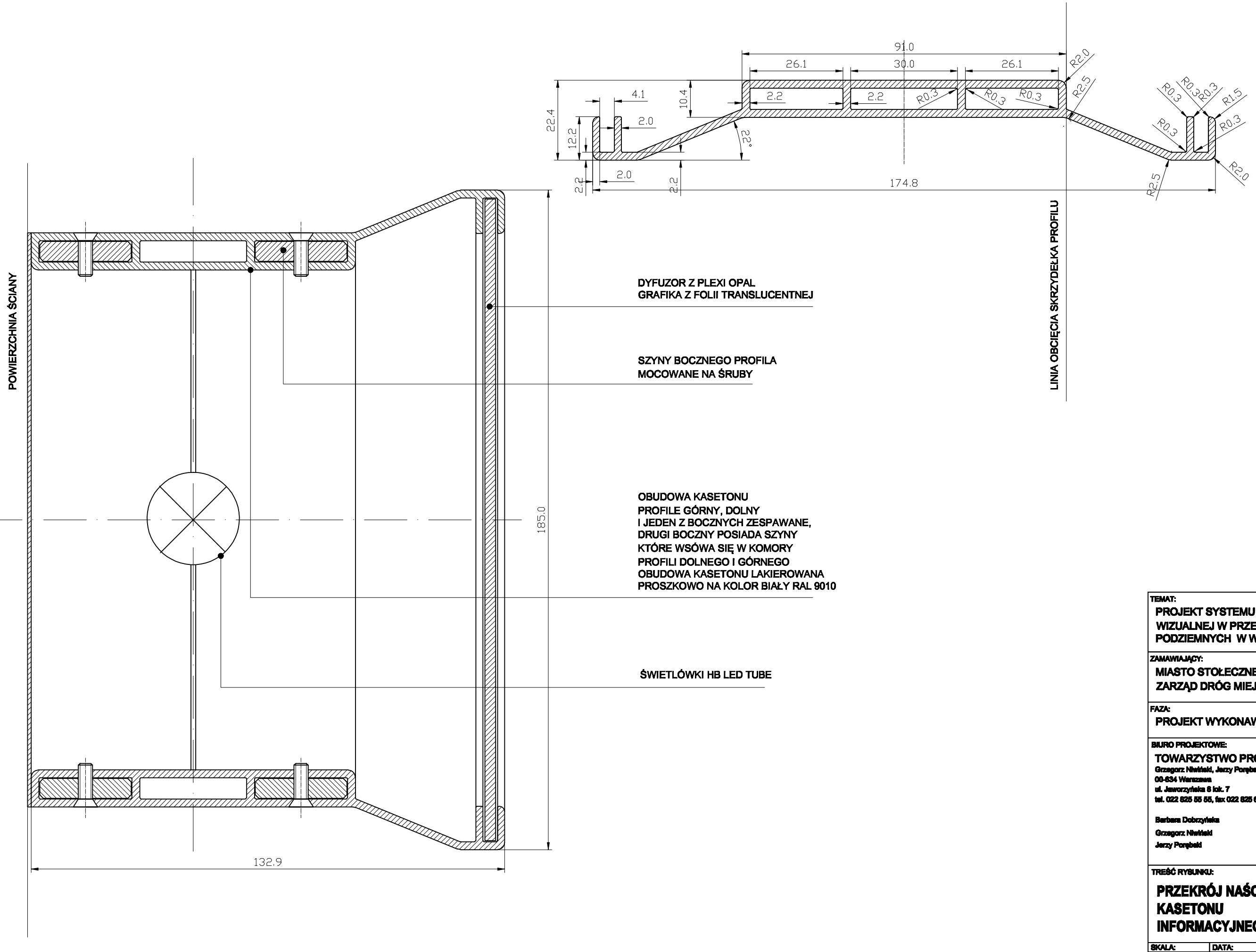


TEMAT:
**PROJEKT SYSTEMU INFORMACJI WIZUALNEJ W PRZEJŚCIACH PODZIEMNYCH W WARSZAWIE**

ZAMAWIAJĄCY:
**MIASTO STOŁECZNE WARZSAWA**
**ZARZĄD DRÓG MIEJSKICH**

FAZA:
**PROJEKT WYKONAWCZY**


BIURO PROJEKTOWE:
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TREŚĆ RYSUNKU:
**PRZEKRÓJ NAŚCIENNEGO KASETONU INFORMACYJNEGO**

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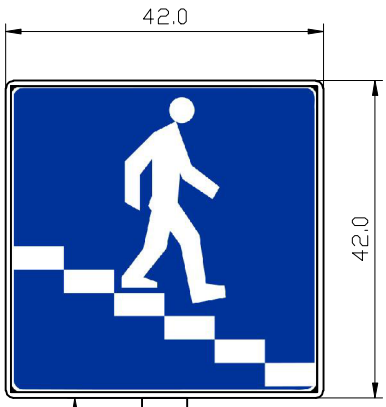


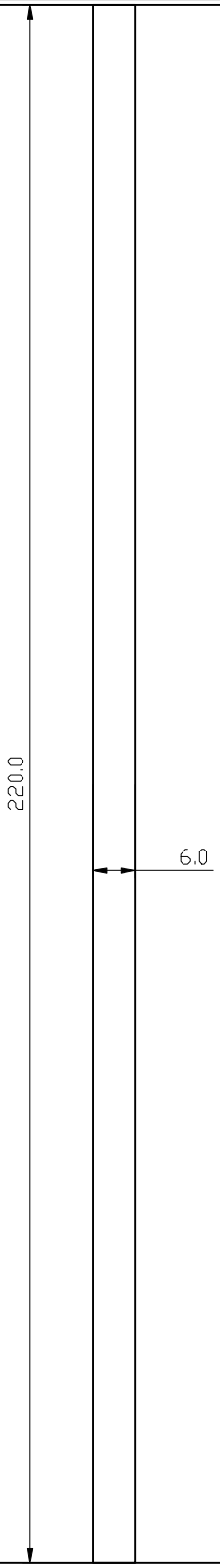


TEMAT:
**PROJEKT SYSTEMU INFORMACJI WIZUALNEJ W PRZEJŚCIACH PODZIEMNYCH W WARSZAWIE**

ZAMAWIAJĄCY:
**MIASTO STOŁECZNE WARSZAWA ZARZĄD DRÓG MIEJSKICH**

FAZA:
**PROJEKT WYKONAWCZY**

BIURO PROJEKTOWE:
**TOWARZYSTWO PROJEKTOWE S.C.**
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Grzegorz Niwiński
Jerzy Porębski

TREŚĆ RYSUNKU:
**TYPOWY NOŚNIK ZNAKU D-35 PRZY ZEJŚCIU DO PRZEJŚCIA PODZIEMNEGO**

| SKALA: | DATA: | NR RYS.: |
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HOLDBOX®

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# HB-LED TUBE

## 1. Przeznaczenie:

Świetlówki LED zapewniające wyjątkowe oświetlenie LED, redukujące zużycie energii oraz umożliwiające obniżenie kosztów eksploatacji. Jest to topowa linia źródeł światła przeznaczonych do zastosowania w miejscach użyteczności publicznej (biura, sklepy, magazyny) jako zamiennik tradycyjnych świetlówek fluorescencyjnych.

## 2. Podstawowe parametry:

- Moc świetlówki: 7W, 9W, 12W, 18W, 24W
- Pełne spektrum kolorów temperatury barwowej: 3000K, 4000K, 6000K
- Typ i trzonek: T8, G13
- Szeroki kąt świecenia: 270°
- Żywotność: 30.000h
- Napięcie zasilające 220-240VAC
- Start: 0,1 sek.
- Temperatura pracy: -10 / +45°C
- Nie ściemnialne
- Podwójna powłoka (plastik + szkło) zabezpieczająca przed eksplozją oraz porażeniem elektrycznym.
- Wysoka przepuszczalność światła przez powłokę ochronną.
- Prosta instalacja umożliwiająca pracę po podłączeniu bezpośrednio do napięcia sieciowego 220-240V.
- Wbudowany zasilacz napięciowy (nie wymaga statecznika do pracy).
- W przypadku użycia świetlówki LED jako zamiennik świetlówki fluorescencyjnej pracującej w układzie z jednym statecznikiem oraz starterem wymagana jest wymiana startera na bezpiecznik (jest w komplecie ze świetlówką LED).

## 3. Wygląd zewnętrzny oraz zastosowanie świetlówki LED

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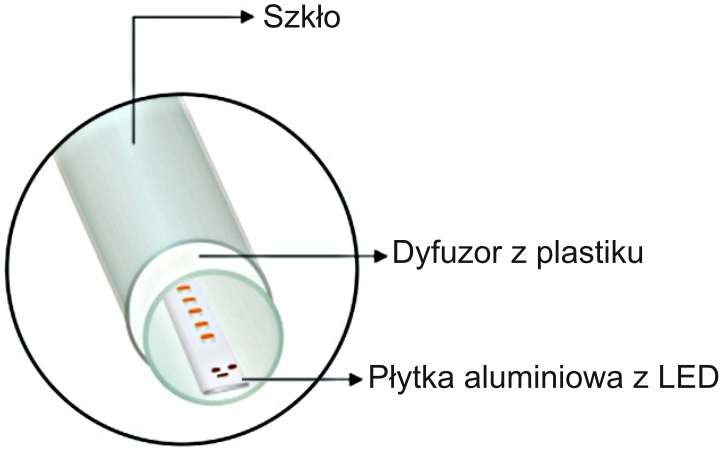
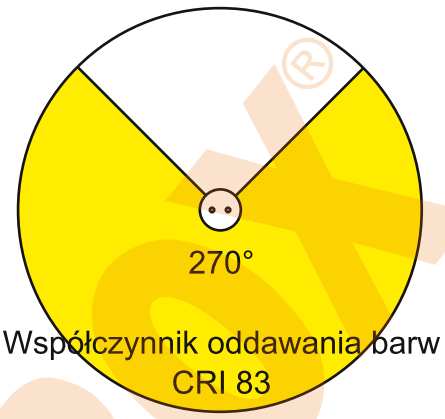
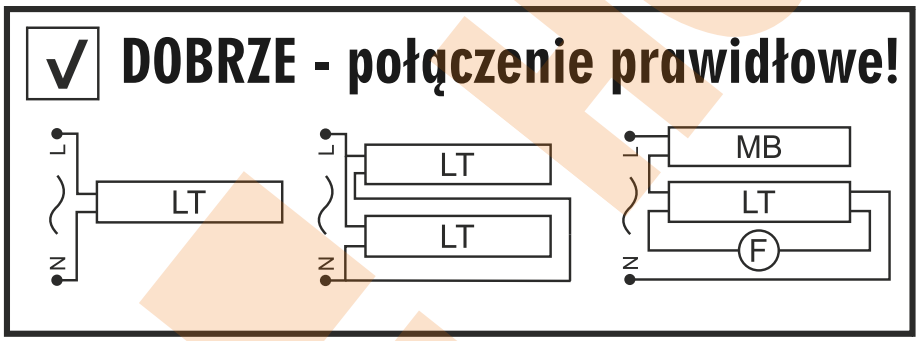



## 4. Tabela zamienników tradycyjnych świetlówek fluorescencyjnych T8 G13

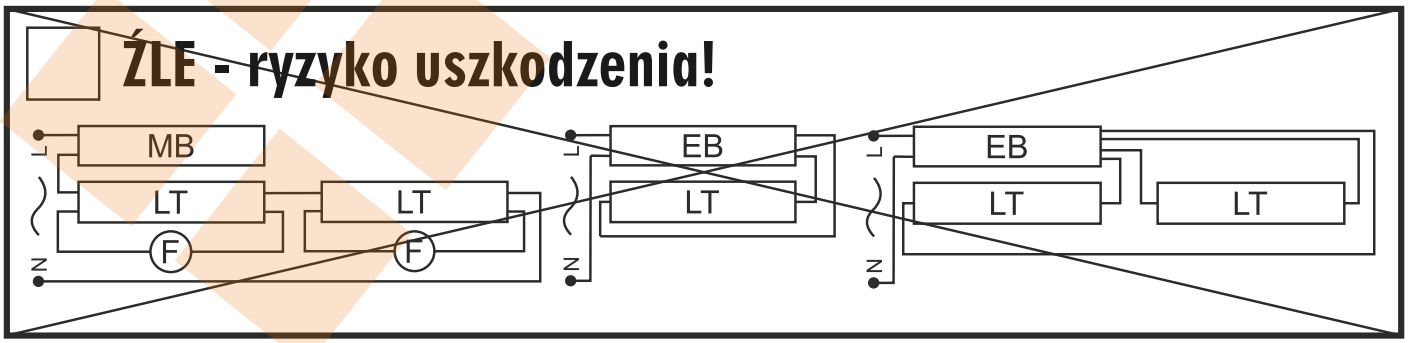
| Świetlówka standardowa [W] | Świetlówka LED [W] | Współczynnik mocy PF | Temperatura barwowa [K] | Strumień świetlny [lm] | Wymiary [mm] | Żywotność [h] | Kąt świecenia [°] |
|---|---|---|---|---|---|---|---|
| 15 | 7 | >0,9 | 3000,4000, 6000 | 700 | Ø26x437 | 30.000 | 270 |
| 18 | 9 | >0,9 | 3000,4000, 6000 | 900 | Ø26x590 | 30.000 | 270 |
| 30 | 12 | >0,9 | 3000,4000, 6000 | 1200 | Ø26x895 | 30.000 | 270 |
| 36 | 18 | >0,9 | 3000,4000, 6000 | 1800 | Ø26x1200 | 30.000 | 270 |
| 58 | 24 | >0,9 | 3000,4000, 6000 | 2400 | Ø26x1500 | 30.000 | 270 |

## 5. Schemat połączeń




Legenda:

LT - świetlówka LED
MB - statecznik magnetyczny
EB - statecznik elektroniczny
F - bezpiecznik



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## 6. Bezpieczeństwo i ostrzeżenia

- Produkt powinien być instalowany i serwisowany przez osobę wykwalifikowaną.
- Stopień ochrony urządzenia: IP20. Produkt przeznaczony wyłącznie do pomieszczeń wewnętrznych.
- Wymagane jest zapewnienie odpowiedniej wentylacji w miejscu montażu w celu uniknięcia przegrzania.
- Nigdy nie podłączaj żadnych przewodów gdy urządzenie jest włączone. Zawsze sprawdź poprawność połączeń przed włączeniem zasilania w celu uniknięcia krótkiego spięcia.
- Upewnij się, że przewody są prawidłowo osadzone w złączce.
- W przypadku problemów lub wątpliwości skontaktuj się ze sprzedawcą.

## 7. Warunki gwarancji

- Udzielamy 3-letniej gwarancji na zakupiony produkt od daty zakupu, ale nie dłużej niż 5 lat od daty produkcji oznaczonej na produkcie.
- Gwarancja nie dotyczy uszkodzeń powstałych w wyniku:
  - użytkowania niezgodnie z instrukcją
  - podłączania elektrycznego niezgodnie z instrukcją
  - dokonywania nieautoryzowanych napraw lub samodzielnych modyfikacji
  - przepięć w instalacji elektrycznej. Instalacja powinna posiadać stosowne zabezpieczenia przepięciowe.
  - zalania wodą, przegrzania lub też używania produktu w pobliżu chemikaliów.
  - informacje nie zawarte w niniejszej instrukcji są uzupełnione w OWS znajdujących się na naszej stronie www.holdbox.eu.

## 8. Informacje dodatkowe

- Zabrania się kopiowania, modyfikowania i publikacji zdjęć oraz opisów zawartych na stronie (w całości lub w części) bez wiedzy i pisemnej zgody HOLDBOX.

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