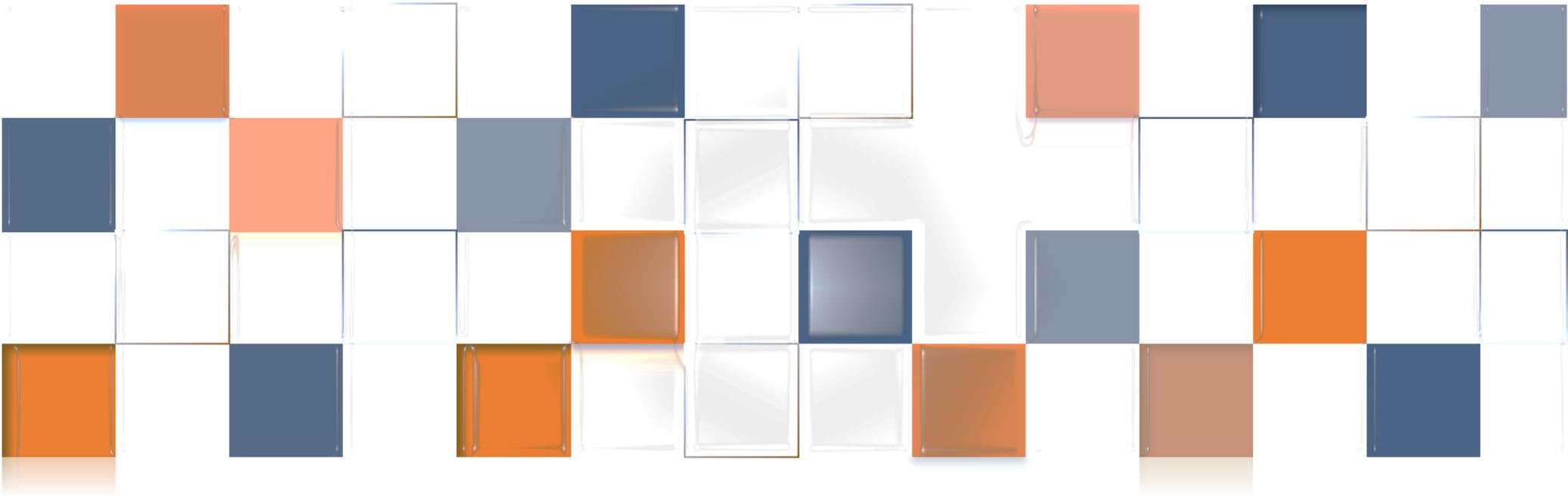


COLIVING – HABITAÇÃO ESTUDANTIL

Complexo de lazer, cultura e esporte



TRABALHO DE CONCLUSÃO DE CURSO 2020/2

FACULDADE DE ARQUITETURA
UNIVERSIDADE FEDERAL DO RIO GRANDE DO SUL

COLIVING – HABITAÇÃO ESTUDANTIL

Complexo de lazer, cultura e esporte



CAROLINE LOPEZ RIBEIRO
ORIENTADORA ANDREA SOLER MACHADO

2020/2

TEMÁTICA:

- Coliving de habitação coletiva;
- Complexo de lazer, cultura e esporte.

OBJETIVO:

- Revitalização do local;
- Criação de um Lugal Urbano.

JUSTIFICATIVA:

- Atualidade do tema;
- Demanda a partir dos condicionantes;
- Resgate da identidade do local;
- Público + Privado;
- Mistura de usos.



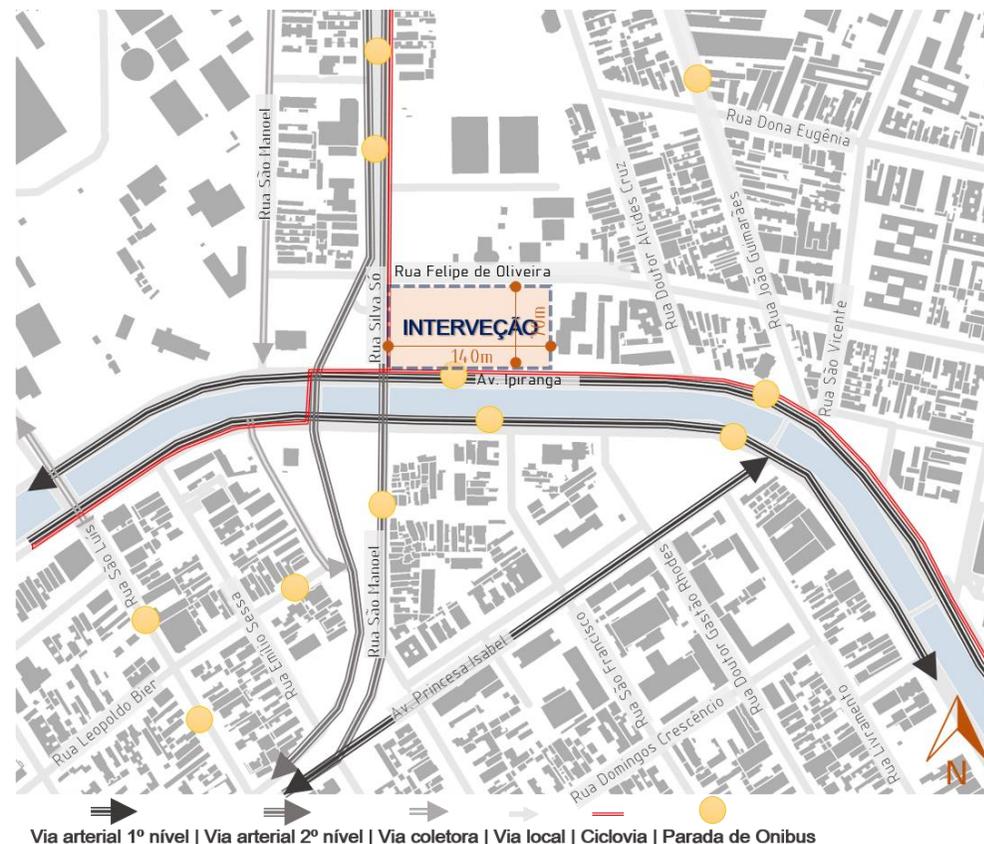
LOCALIZAÇÃO:

- Bairro Santa Cecília em Porto Alegre/RS;
- Na Av. Ipiranga e Rua Silva Só;
- Antigo Ginásio da Brigada Militar.



ESCOLHA DO SÍTIO:

- **VISIBILIDADE:**
- Inteseção entre duas vias arteriais.
- **ACESSIBILIDADE:**
- Vias de alto fluxo de veículos
- Ciclovias
- Linhas de Ônibus
- Acessibilidade com as principais universidades.
- **ÁREA:**
- Possui grandes dimensões, possibilitando vários programas, se tornando um real complexo.
- **IDENTIDADE DO LOCAL:**
- Ginásio da Brigada
- Complexo poliesportivo e de lazer
- Resgate da identidade do local.



CONDICIONANTE DO TERRENO:

• EQUIPAMENTOS PRÓXIMOS:

- Universidade Federal do Rio Grande so Sul
- Hospital de Clínicas
- Escola de Bombeiros da Brigada Militar
- Escola Felipe de Oliveira.

• MORFOLOGIA:

- Maioria de 1 a 4 pavimentos
- Mais altos estão na Av. Silva Só

• USO DO SOLO E ATIVIDADES:

- Predominantemente residencial
- Pequeno número de edificações comerciais e misto



Via arterial 1º nível



| Via arterial 2º nível



| Via coletora



Via local



| Ciclovias



| Parada de Onibus



PÚBLICO ALVO:

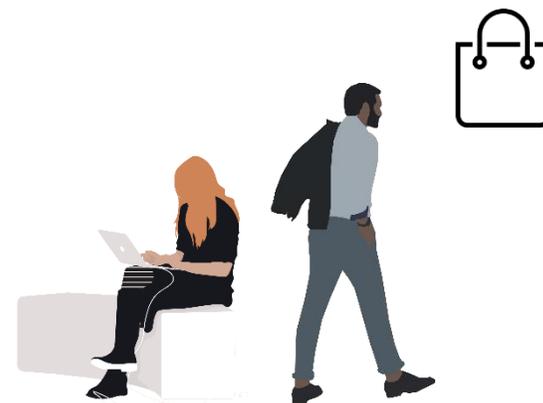
- Comunidade do bairro Santa Cecília e de bairros próximos;



- Artistas



- Comerciantes e empreendedores



- Estudantes



- Turistas



- Comunidade esportiva



CONDICIONANTES LEGAIS:

Recuo para ajardinamento:

Av. Ipiranga: 4,0m - (OAI)

R. Silva Só: Isento

R. Felipe de Oliveira: 4m - (OAI)

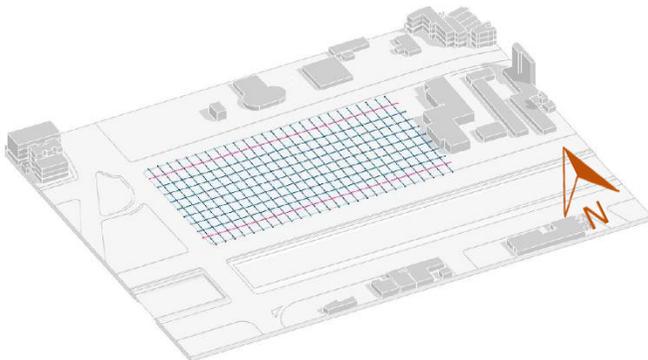
Aproveitamento (Anexo 6):

Índice de aproveitamento = 1,6

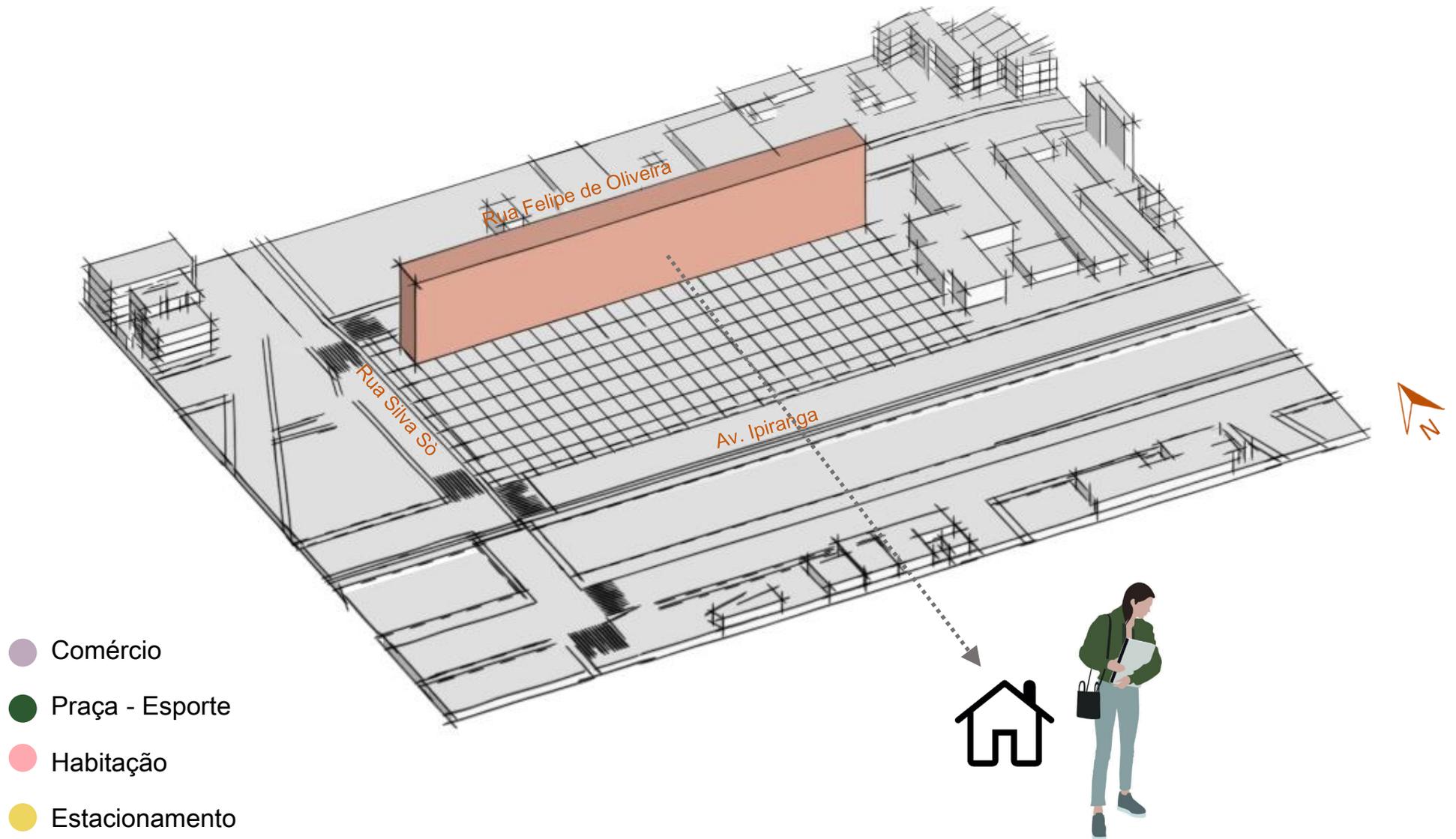
Volumetria (Anexo 7):

Taxa de ocupação = 90% na base

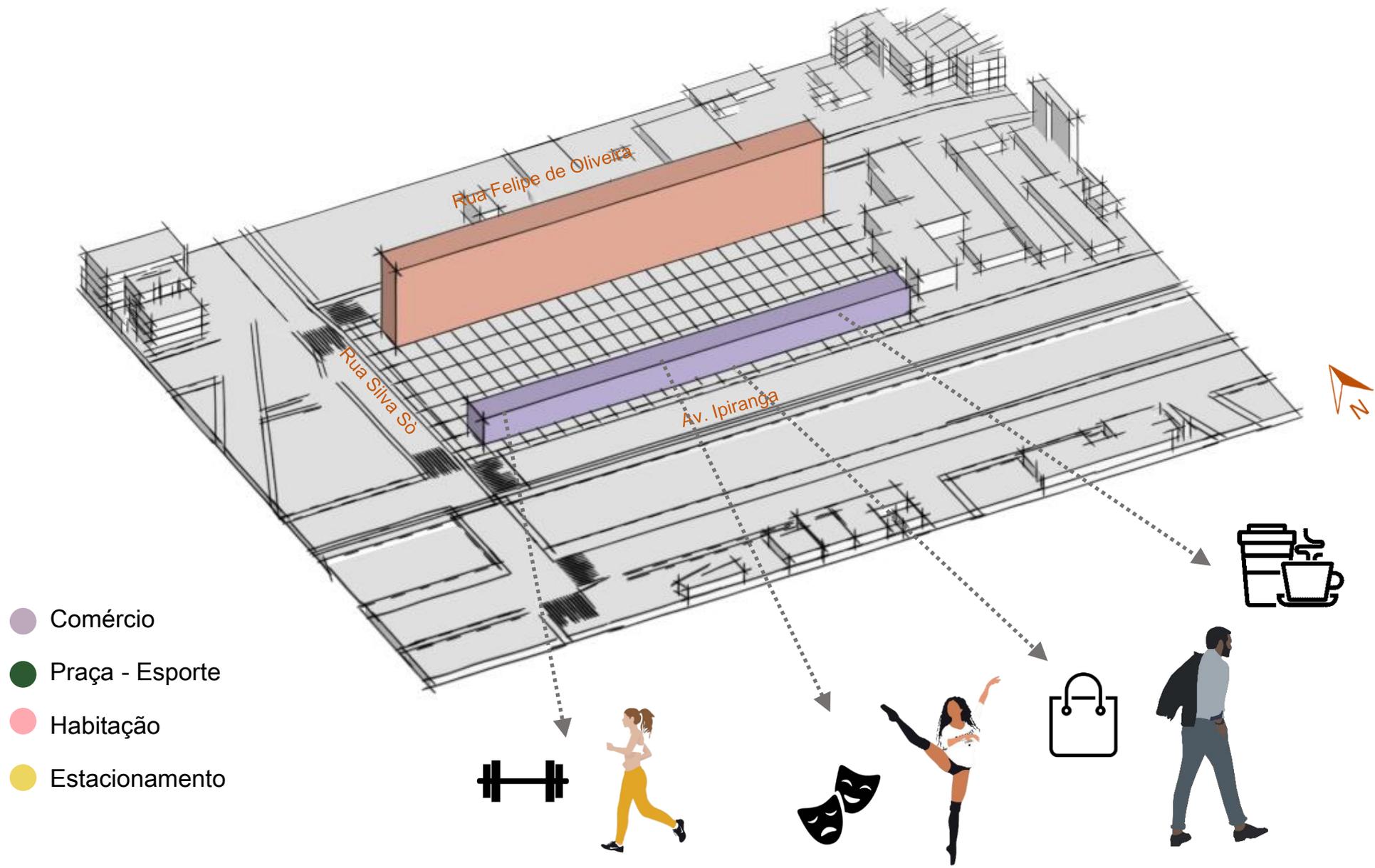
75% no corpo



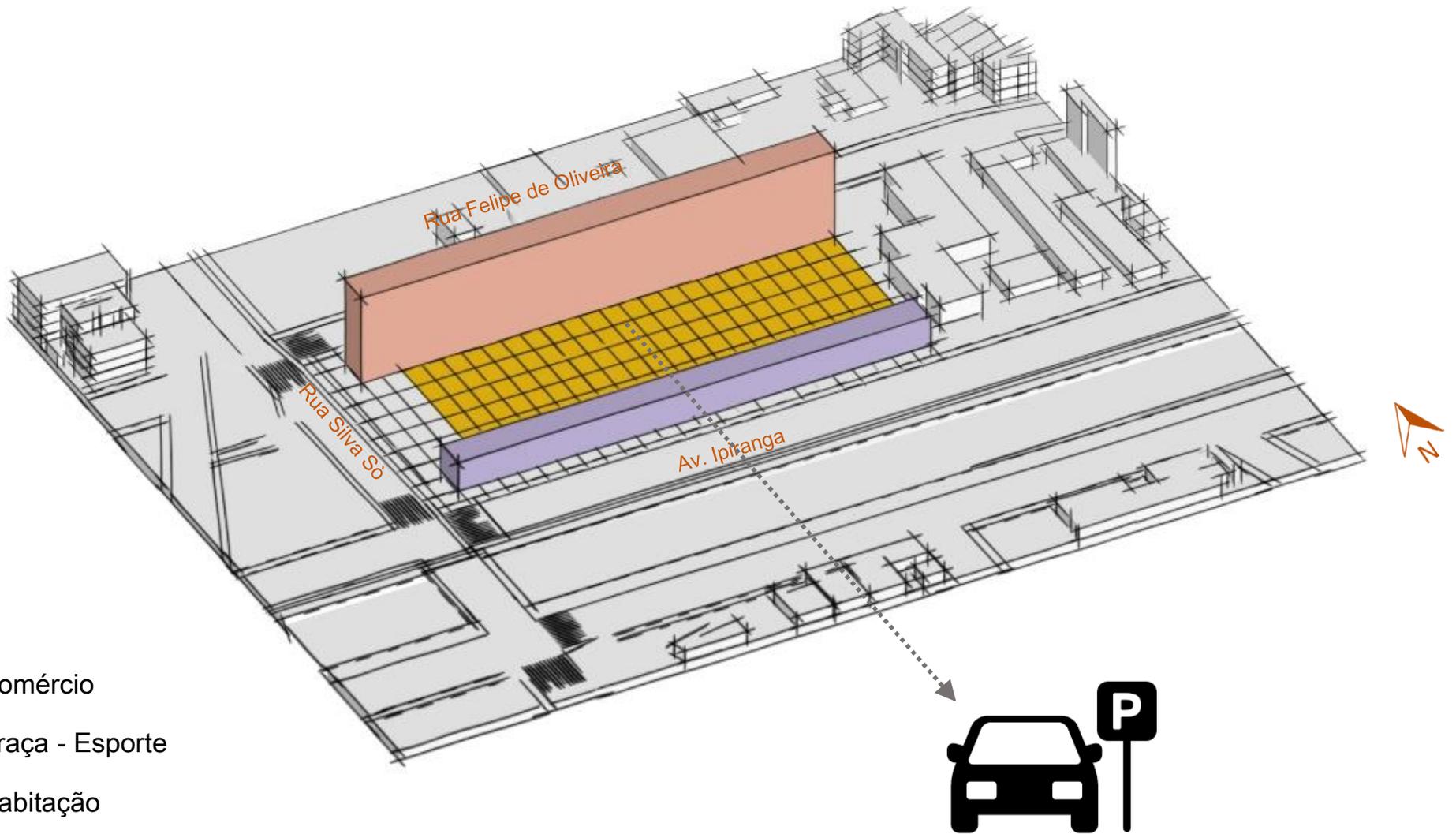
COMPOSIÇÃO VOLUMÉTRICA:



COMPOSIÇÃO VOLUMÉTRICA:

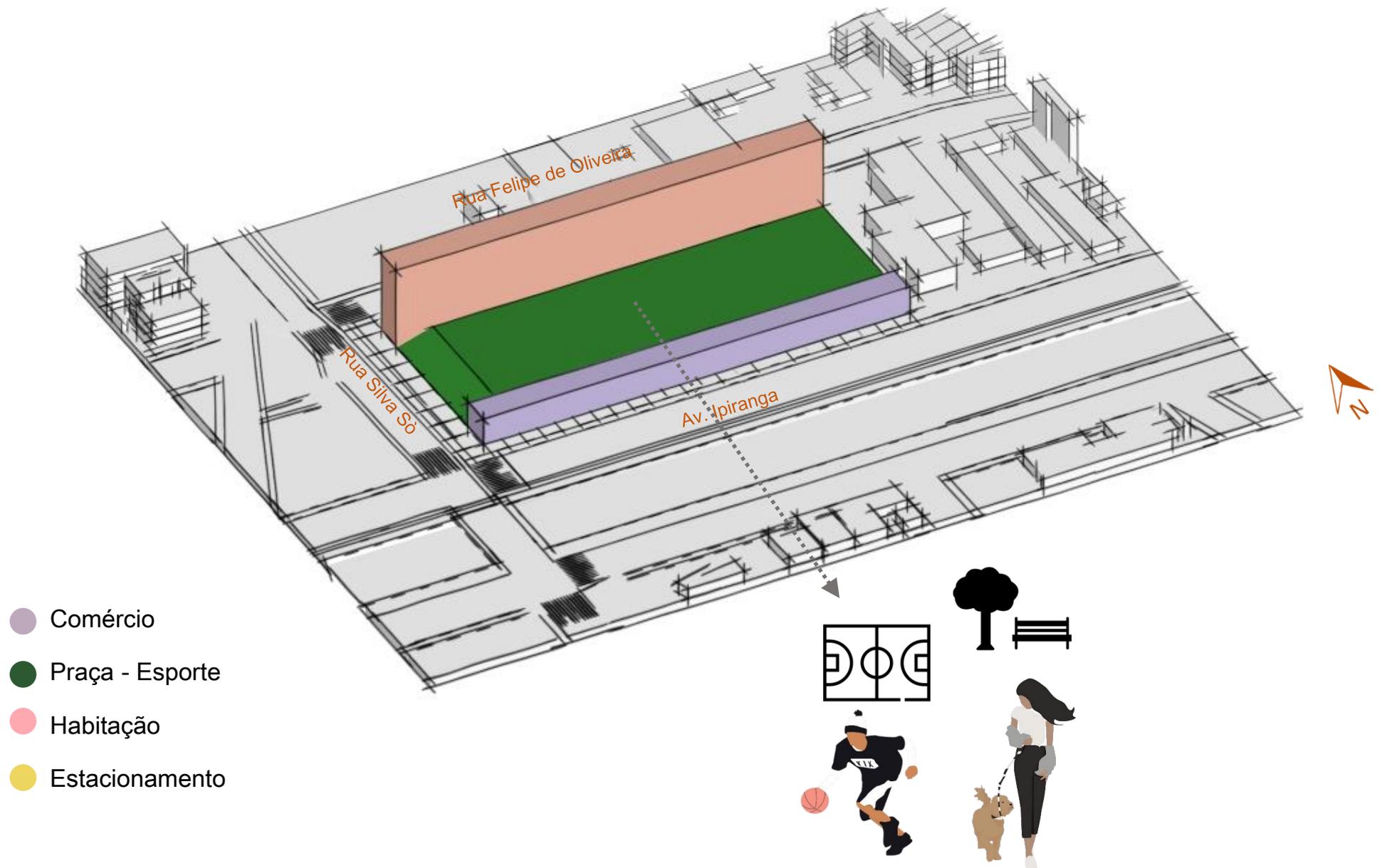


COMPOSIÇÃO VOLUMÉTRICA:

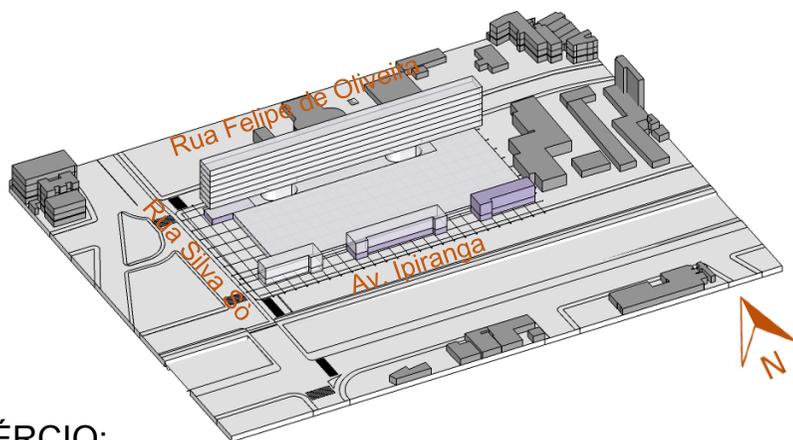


- Comércio
- Praça - Esporte
- Habitação
- Estacionamento

COMPOSIÇÃO VOLUMÉTRICA:

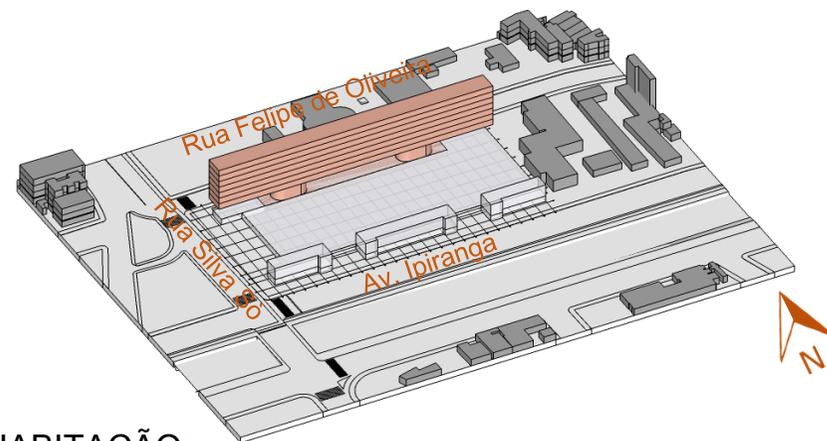


ZONEAMENTO:



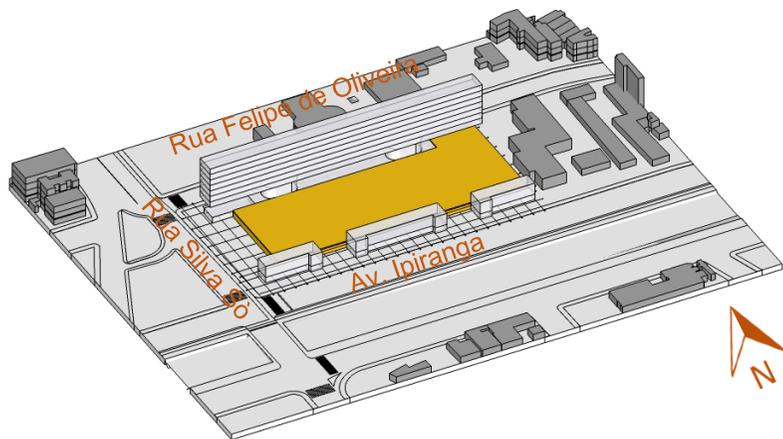
COMÉRCIO:

- Via de alto fluxo.
- Visibilidade
- Uso comercial



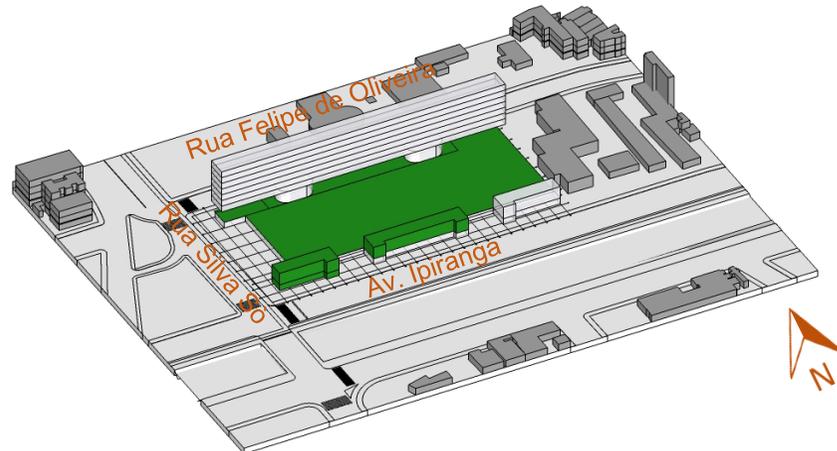
HABITAÇÃO:

- Via de baixo fluxo
- Baixo ruído
- Uso residencial
- Edificações mais altas estão presentes na Rua Silva Só



ESTACIONAMENTO:

- Acesso lojas
- Acesso edifício residencial
- Vagas que atendam o empreendimento como um todo



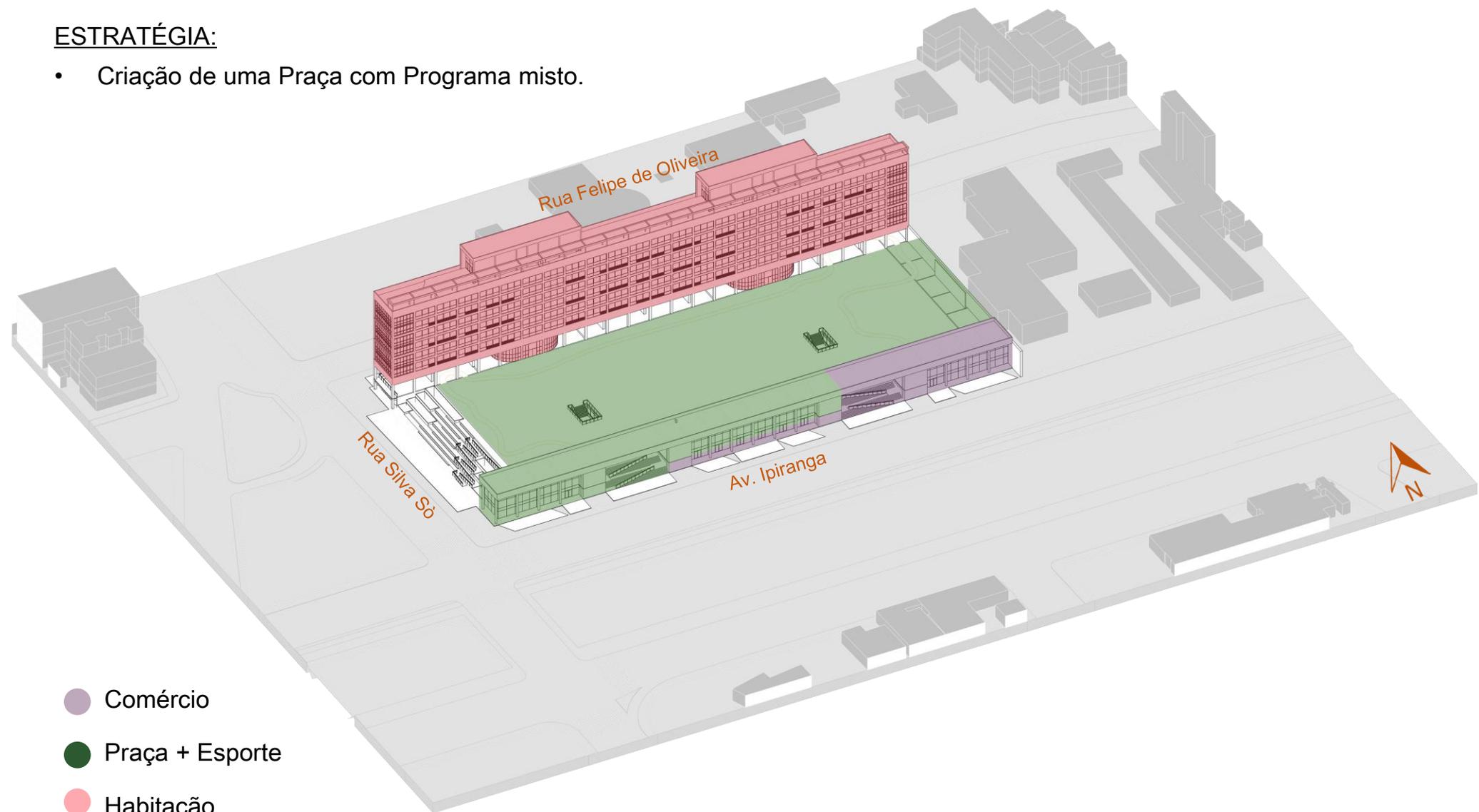
ESPORTE:

- Praça aberta elevada
- Acessível por todas as ruas
- Visibilidade

ZONEAMENTO:

ESTRATÉGIA:

- Criação de uma Praça com Programa misto.

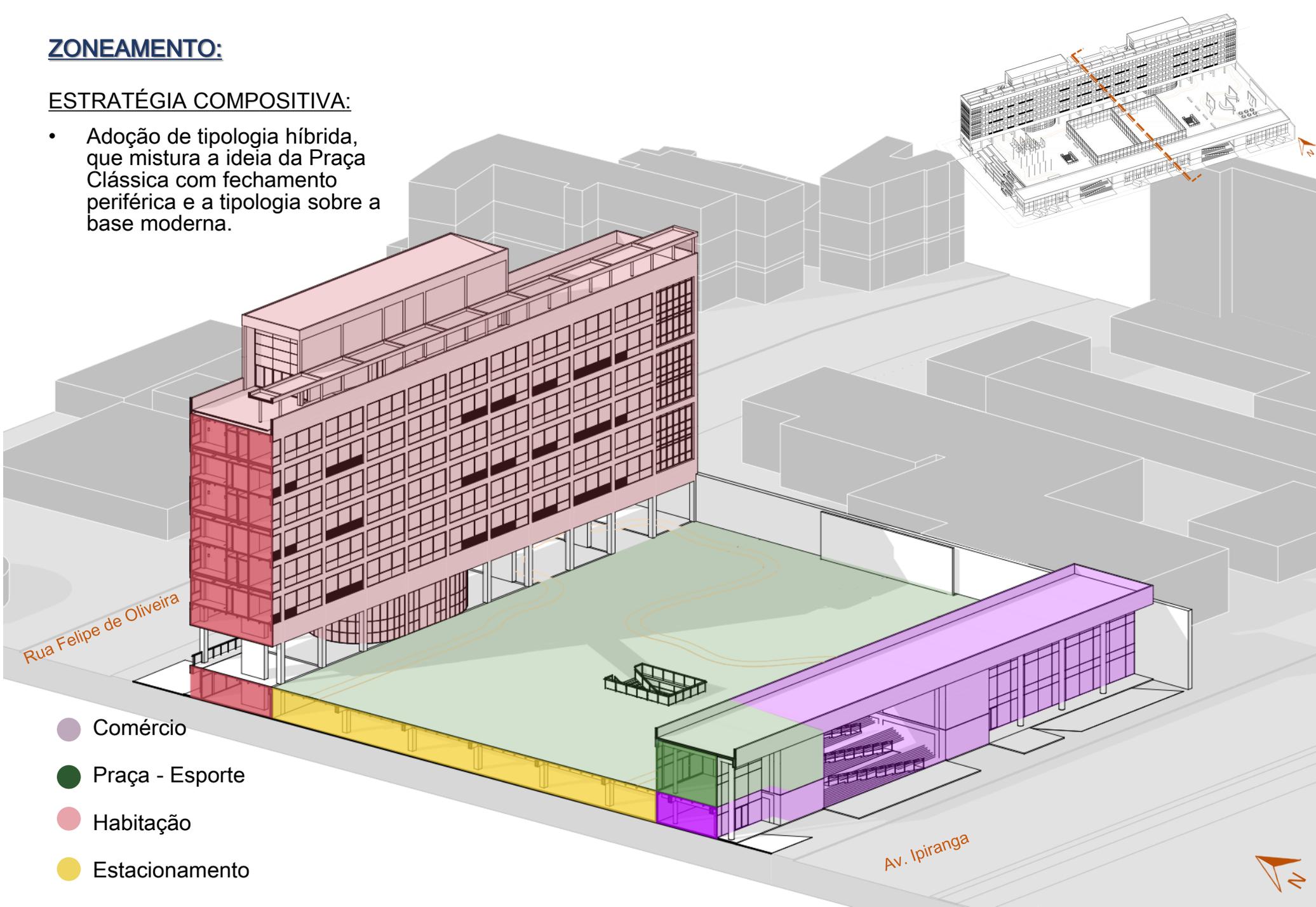


- Comércio
- Praça + Esporte
- Habitação
- Estacionamento

ZONEAMENTO:

ESTRATÉGIA COMPOSITIVA:

- Adoção de tipologia híbrida, que mistura a ideia da Praça Clássica com fechamento periférica e a tipologia sobre a base moderna.



- Comércio
- Praça - Esporte
- Habitação
- Estacionamento

Av. Ipiranga



GRADIENTE DE PRIVACIDADE:

PRIVADO

- QUARTO
- BANHEIRO
- COZINHA
- SALA

- ÁREA DE LAZER
- PISCINA
- SALÃO DE FESTAS
- ACADEMIA
- COWORKING

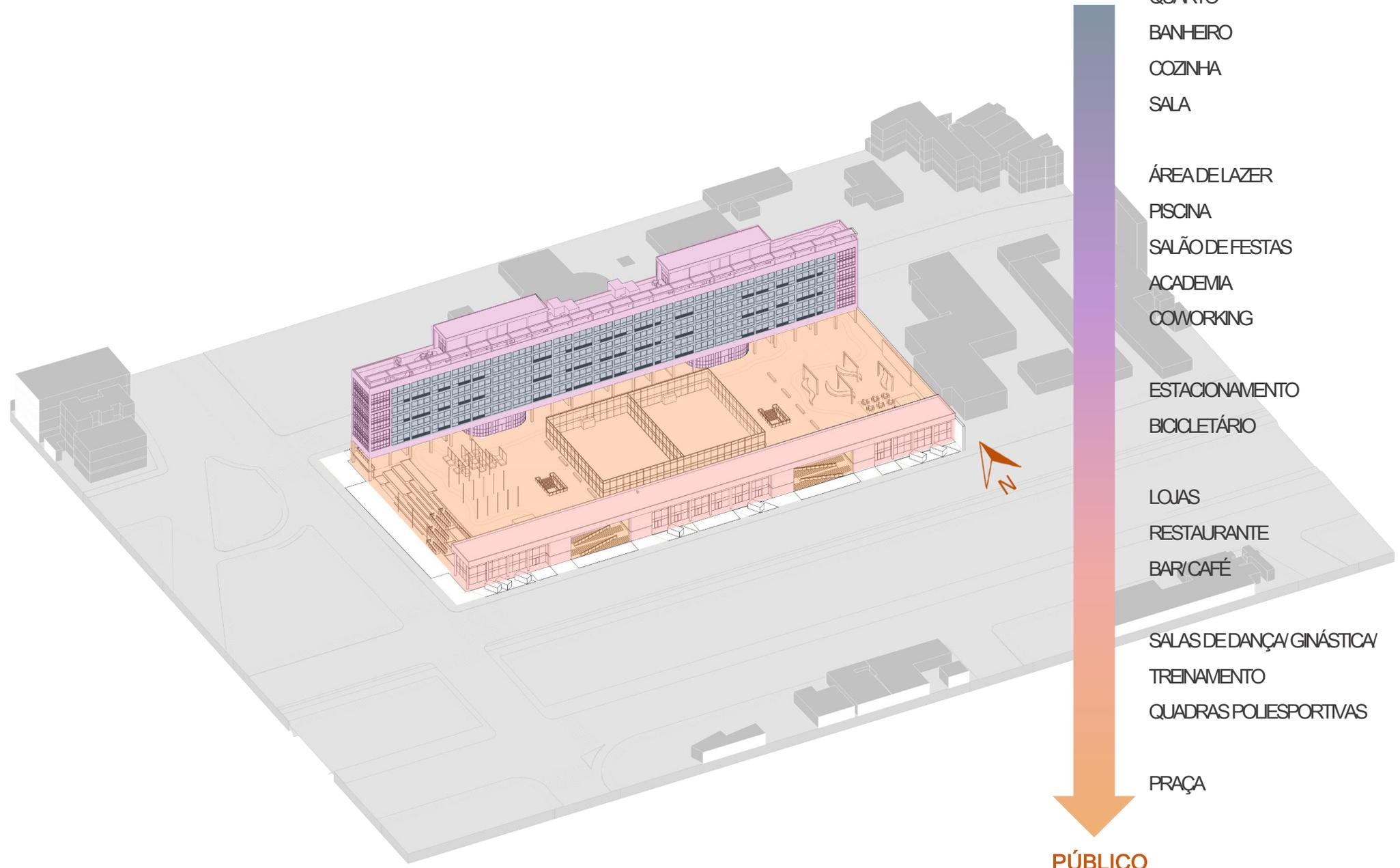
- ESTACIONAMENTO
- BICLETÁRIO

- LOJAS
- RESTAURANTE
- BAR/CAFÉ

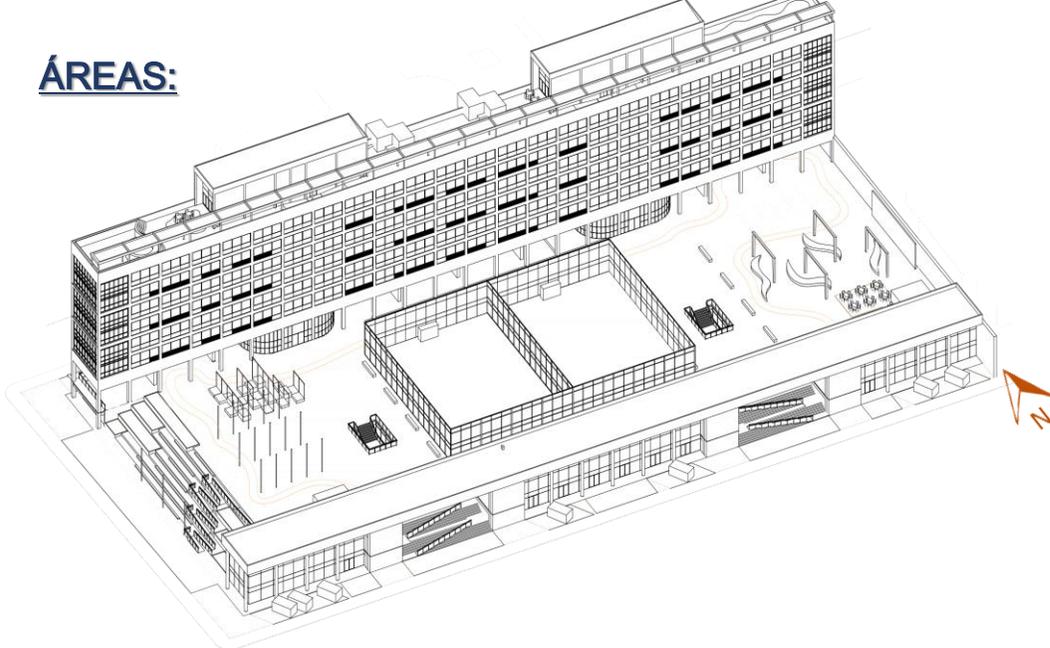
- SALAS DE DANÇA/GINÁSTICA/
TREINAMENTO
- QUADRAS POLIESPORTIVAS

- PRAÇA

PÚBLICO



ÁREAS:



• **área do terreno:** 10.073,90 m²

• **área ocupada:**

8.294,24 m² base

2.470,72 m² corpo

• **índice máximo de ocupação legal:**

90% na base

75% no corpo

• **índice obtido no projeto:**

82,3% na base

24,52% no corpo

• **área aproveitada máxima construída:**

16.939,85 m²

• **área aproveitada (adensável):**

7.978,48 m²

• **índice de aproveitamento :** 1,6

• **índice obtido no projeto (máxima construída):** 1,68

• **índice obtido no projeto (adensável):** 0,79

• **Demandas de vagas de**

estacionamento:

78 residencial

56 comercial

TOTAL: 134 vagas

• **Número de vagas do projeto:**

180 vagas cobertas

16 vagas descobertas

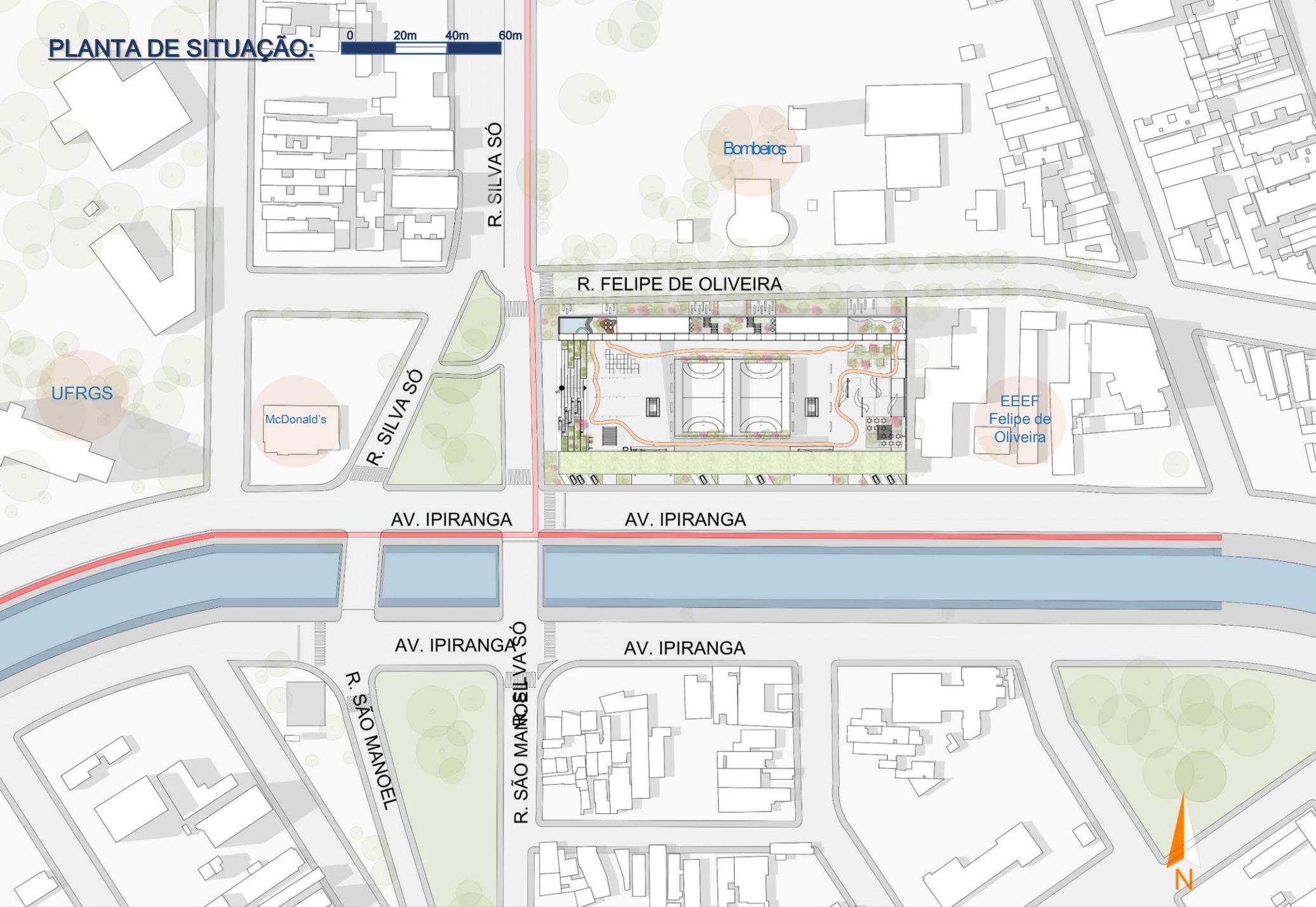
TOTAL: 196 vagas

	Adensável (m ²)	Não Adensável (m ²)
Apto 1 dorm.	327,60	
Apto PNE	109,20	
Apto 2 dorm.	2116,80	
Apto 5 dorm.	2520,00	
Academia	359,69	
Administrativo	85,25	
WC e vest. apoio		499,37
Área técnica		254,94
Bar/café	298,92	
Estacionamento bike		83,08
Churrasqueira		75,62
Circulação		2.018,70
Comércio	924,99	
Coworking	649,32	
Salas (esporte)	215,46	
Depósito		36,57
Elétrica/transf./bateria		40,95
Estacionamento		5.065,40
Hall		266,40
Lavanderia	156,03	
Lixo		16,80
Lojas	215,22	
Recepção/portaria		422,33
Reservatórios		106,98
Salão de festas		74,63
TOTAL	7.978,48	8.961,37

**ÁREA MÁXIMA
CONSTRUÍDA**

16.939,85 m²

PLANTA DE SITUAÇÃO:



PLANTA DE COBERTURA:

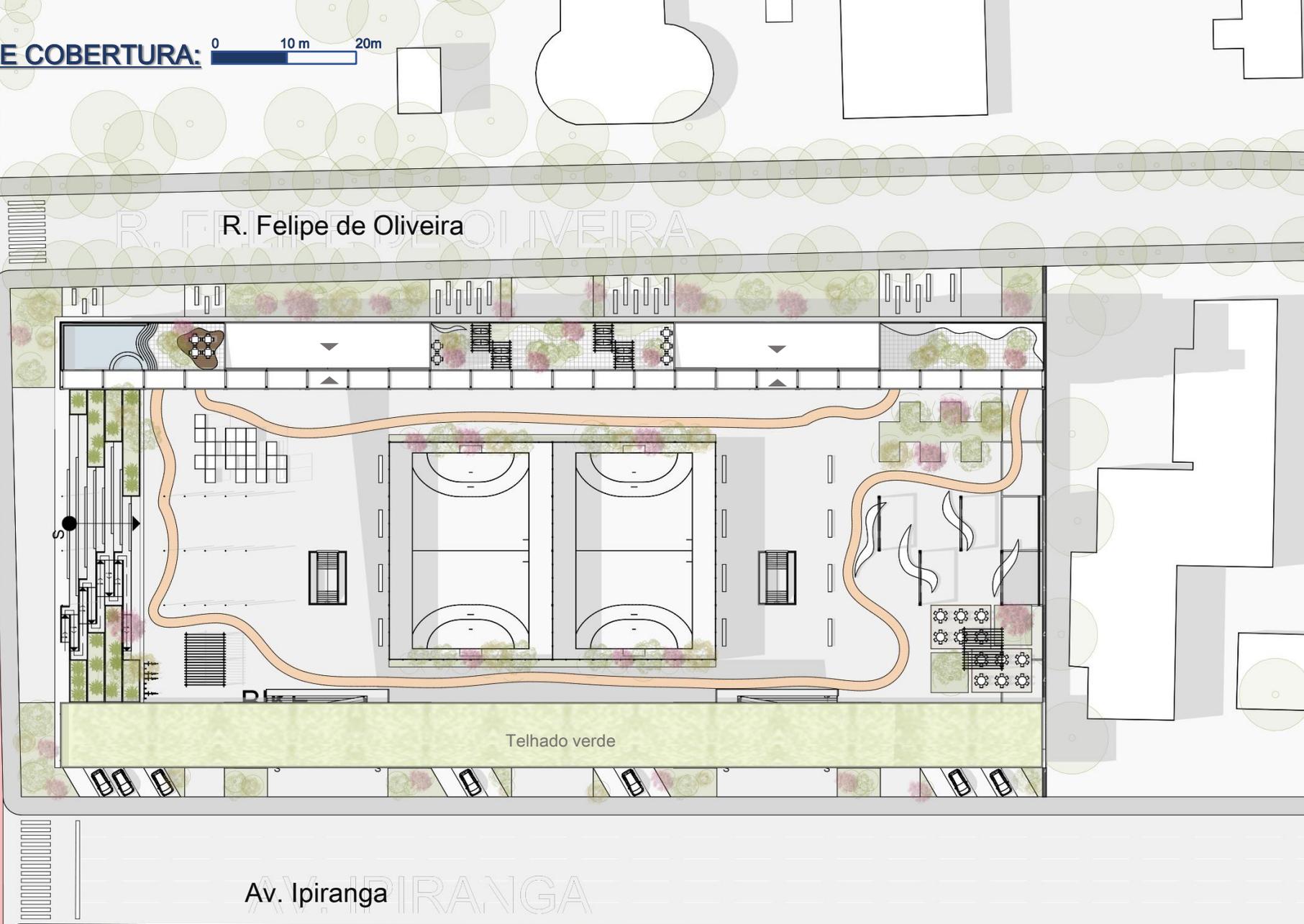


R. Silva Só

R. Felipe de Oliveira

Av. Ipiranga

Telhado verde

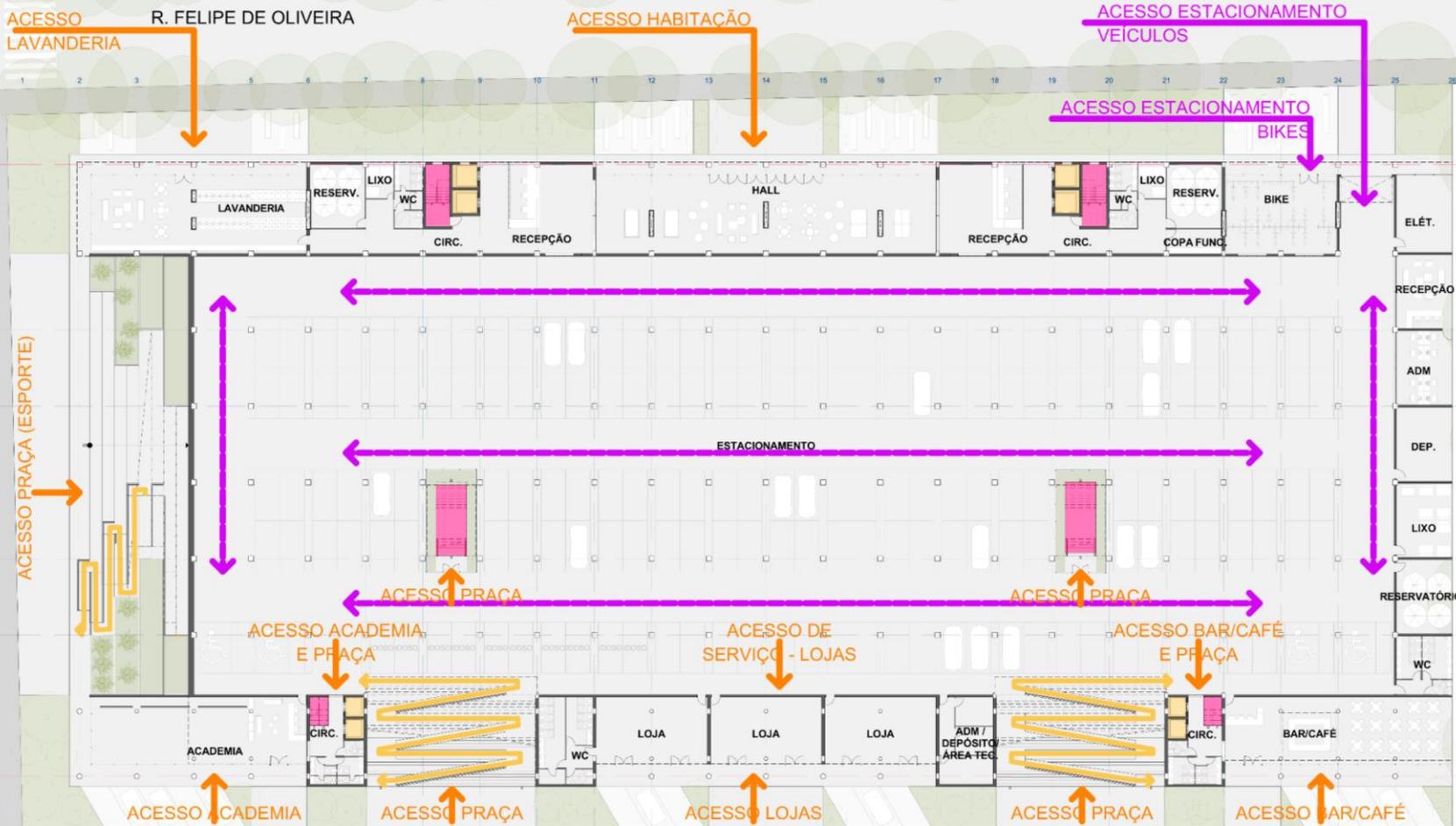


ACESSOS:



R. SILVA SÓ

AV. IPIRANGA



- Pedestres ●
- Veículos ●
- Acessibilidade ●
- Circulação vertical ●

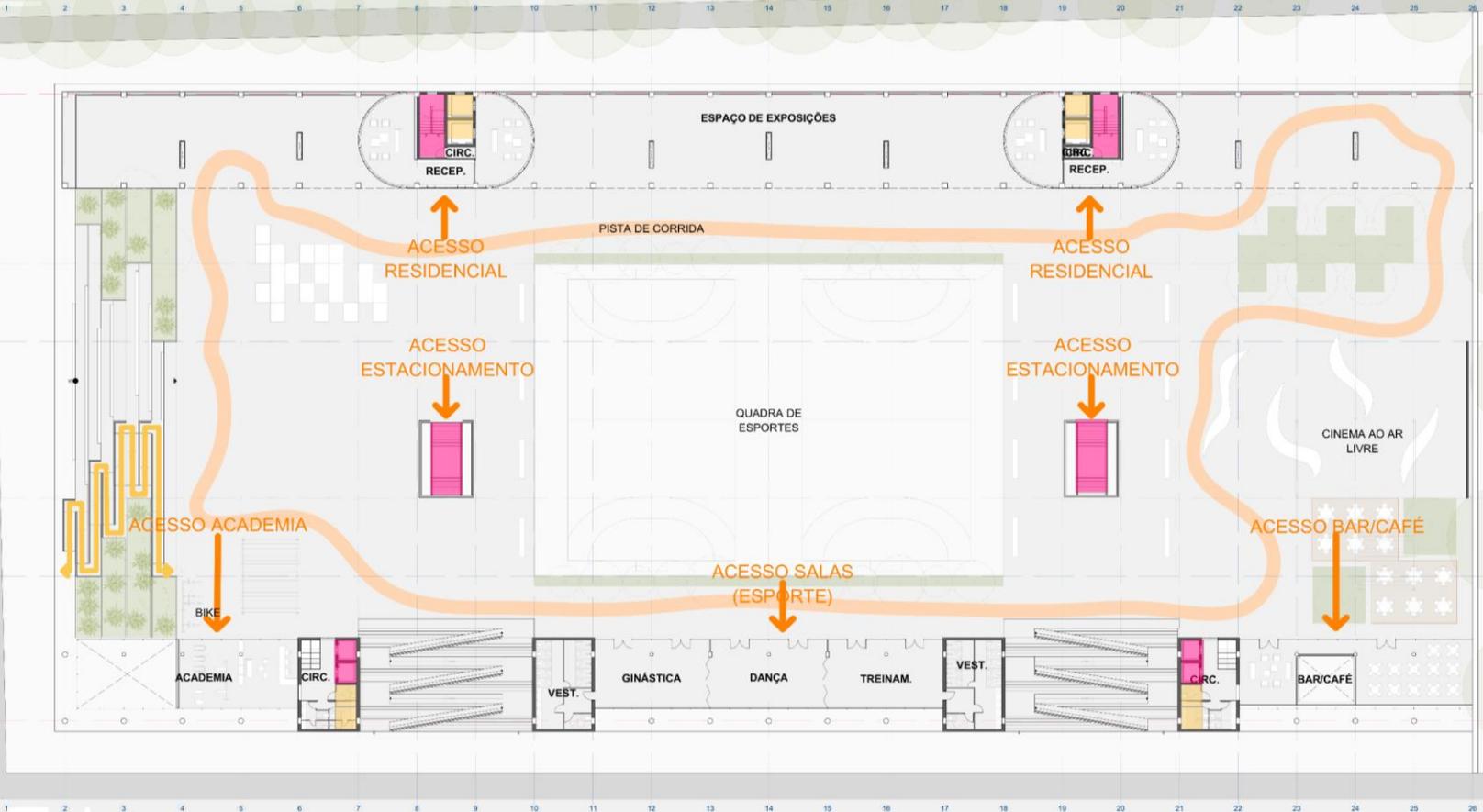
ACESSOS:



R. FELIPE DE OLIVEIRA

R. SILVA SÓ

AV. IPIRANGA



Pedestres ●

Veículos ●

Acessibilidade ●

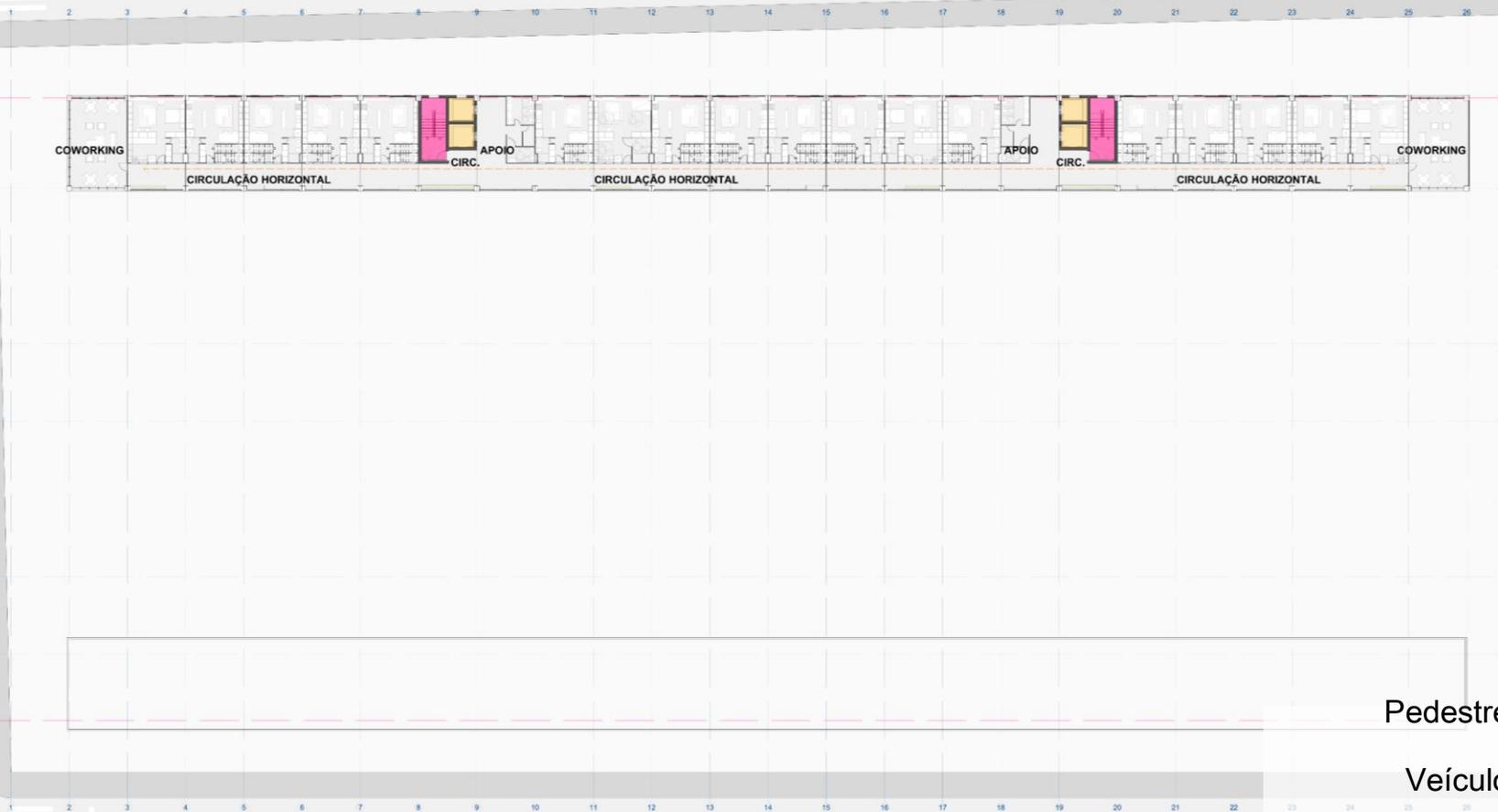
Circulação vertical ●



ACESSOS:



R. FELIPE DE OLIVEIRA



R. SILVA SÓ

AV. IPIRANGA



- Pedestres ●
- Veículos ●
- Acessibilidade ●
- Circulação vertical ●

TERREO:



R. FELIPE DE OLIVEIRA

S-03

S-01

S-02



S-04

S-04

S-05

S-05



R. SILVA SÓ

ESTACIONAMENTO

RECEPÇÃO

ADM

DEP.

LIXO

RESERVATÓRIOS

WC

ELÉT.

BIKE

COPA FUNC.

RECEPÇÃO

ADM / DEPOSITO / ÁREA TEC.

BAR/CAFÉ

WC

WC

WC

WC

LAVANDERIA

RESERV.

LIXO

WC

CIRC.

RECEPÇÃO

HALL

RECEPÇÃO

CIRC.

LIXO

WC

RESERV.

COPA FUNC.

ACADEMIA

CIRC.

WC

LOJA

LOJA

LOJA

ADM / DEPOSITO / ÁREA TEC.

CIRC.

BAR/CAFÉ

AV. IPIRANGA



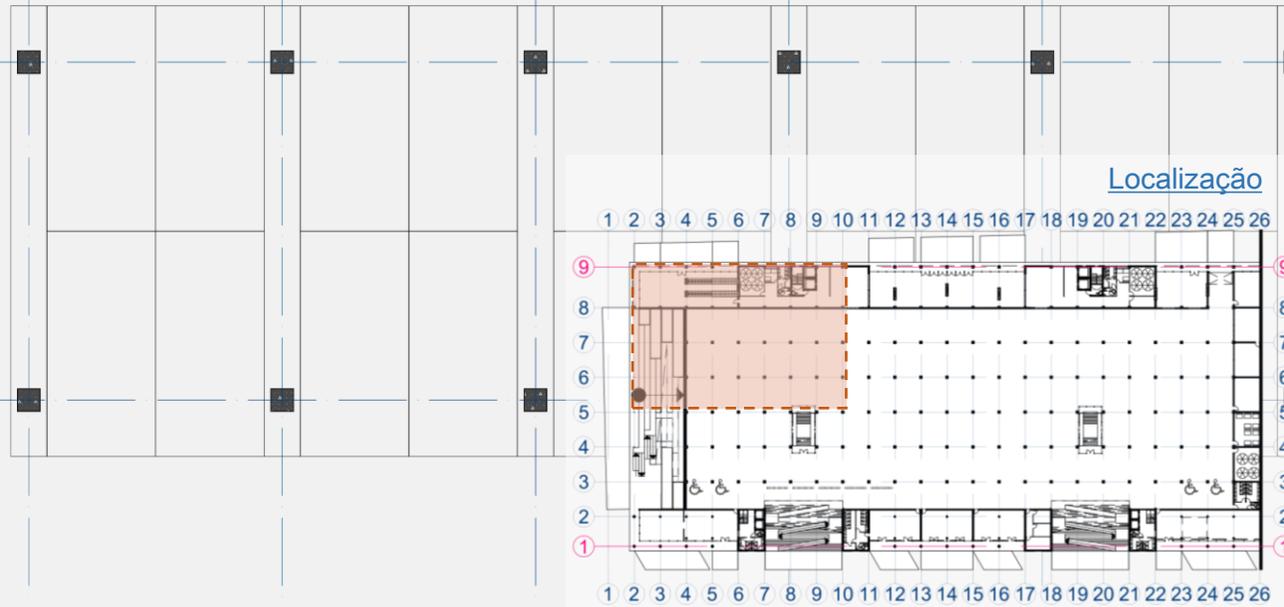
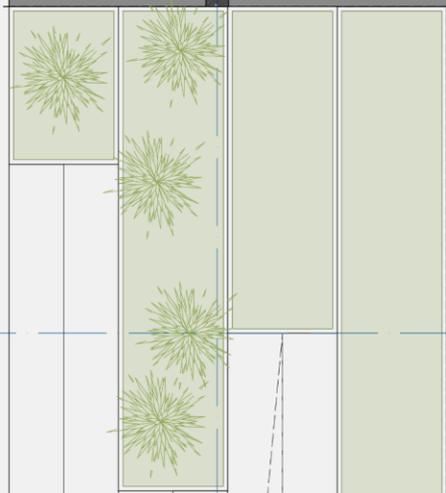
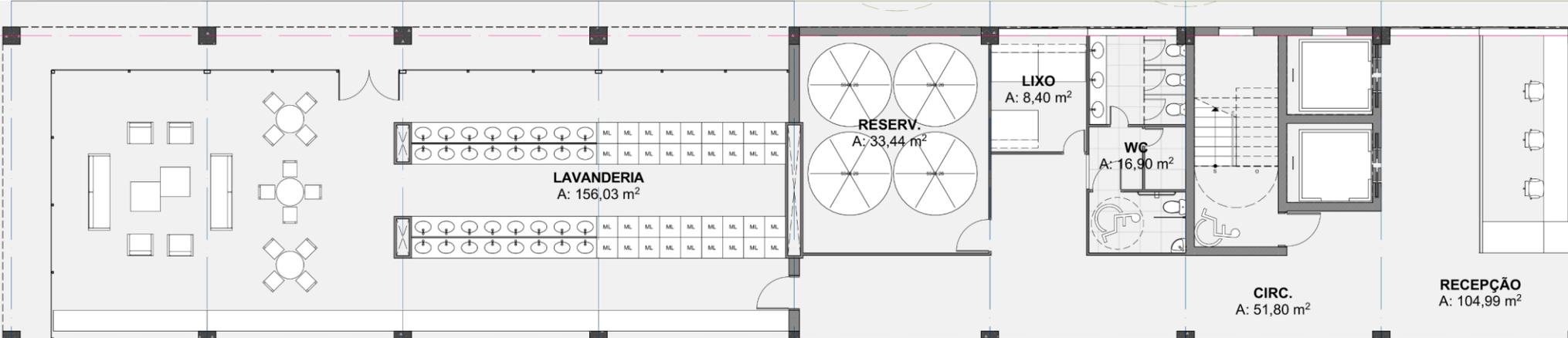
ESTACIONAMENTO:

TOTAL: 180 vagas

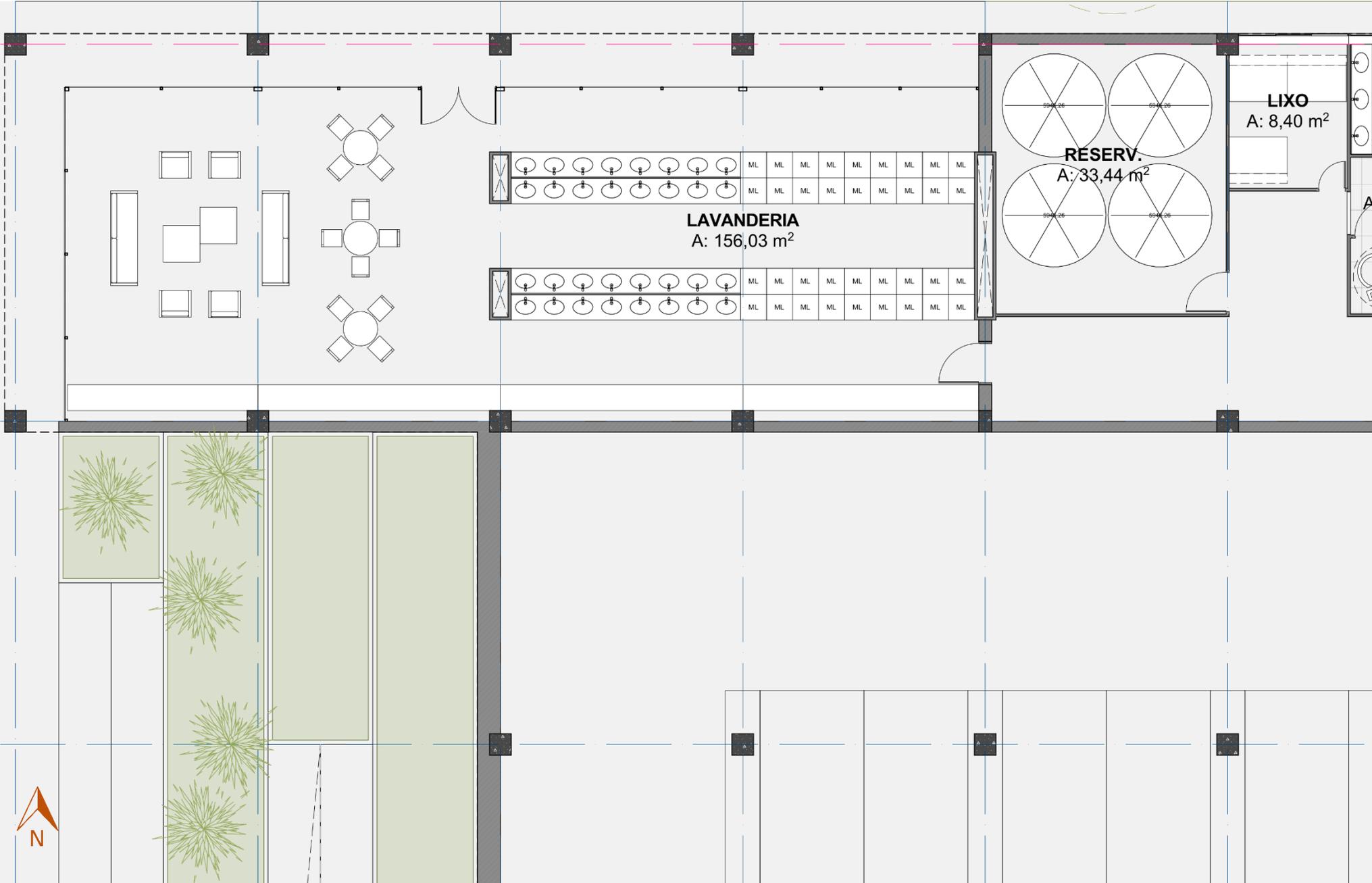
4 PNE 10 Idoso

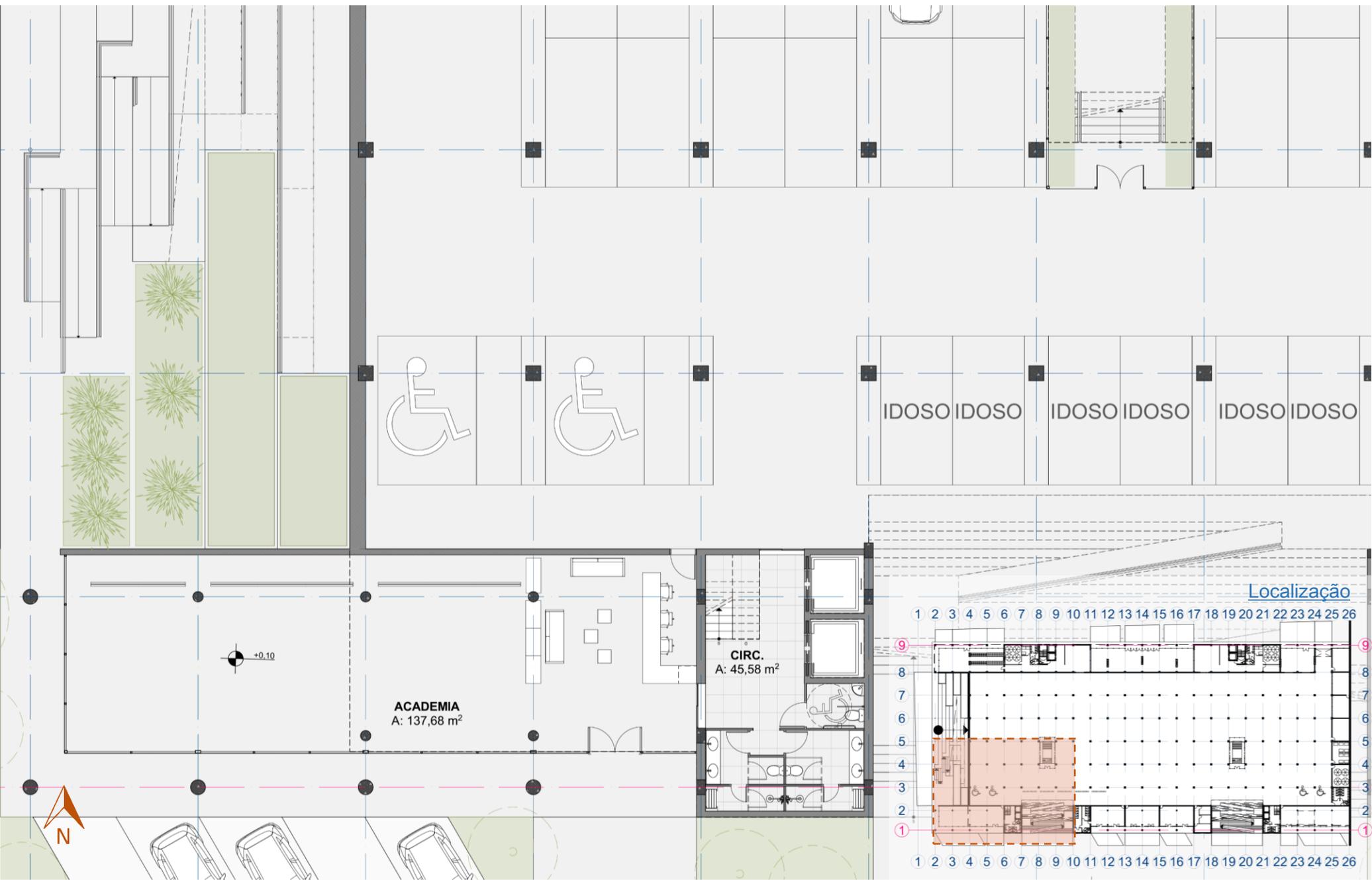


TÉRREO: 0 2,5 m 5m

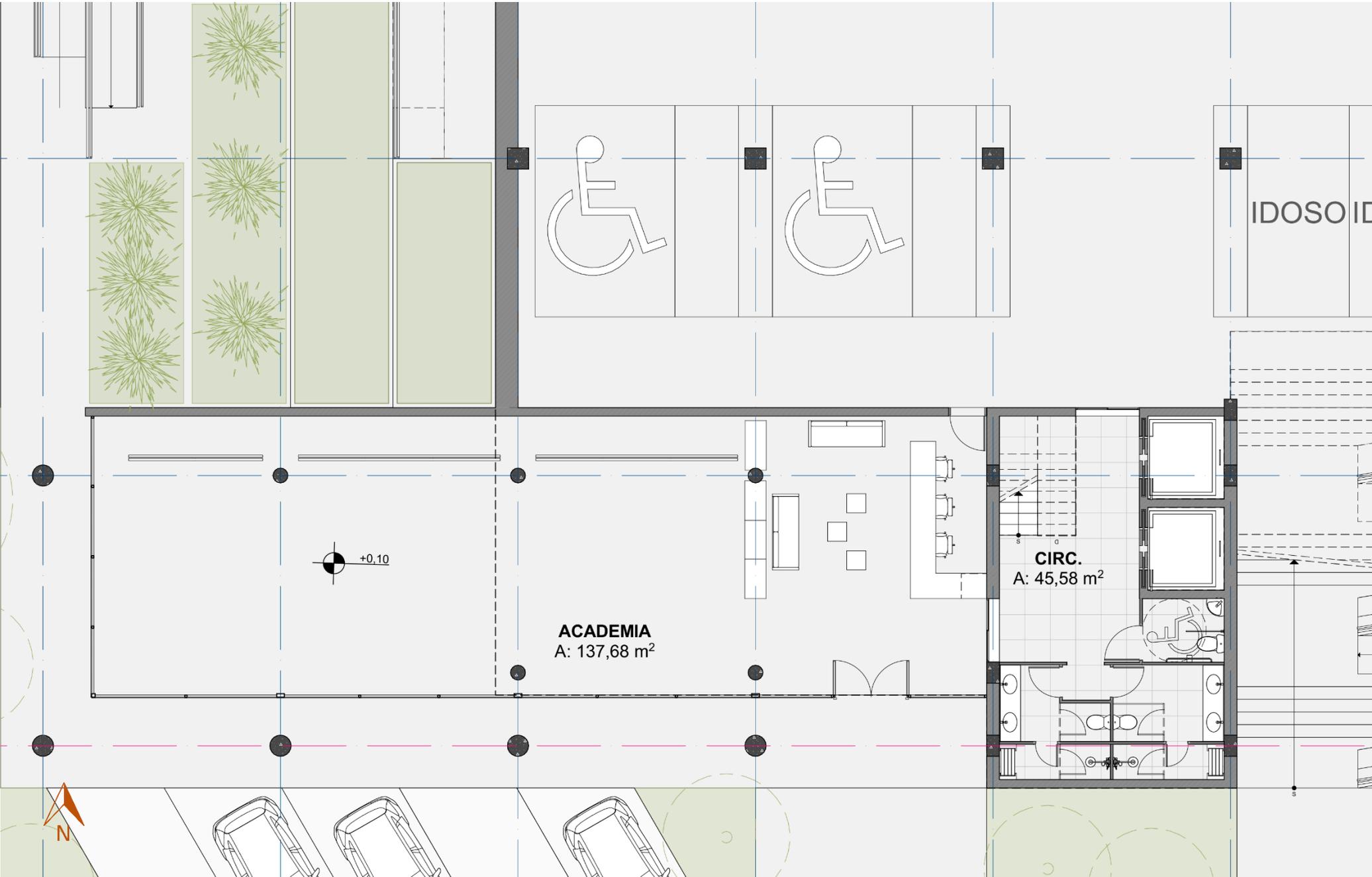


TÉRREO:





TÉRREO:



IDOSO ID

ACADEMIA
A: 137,68 m²

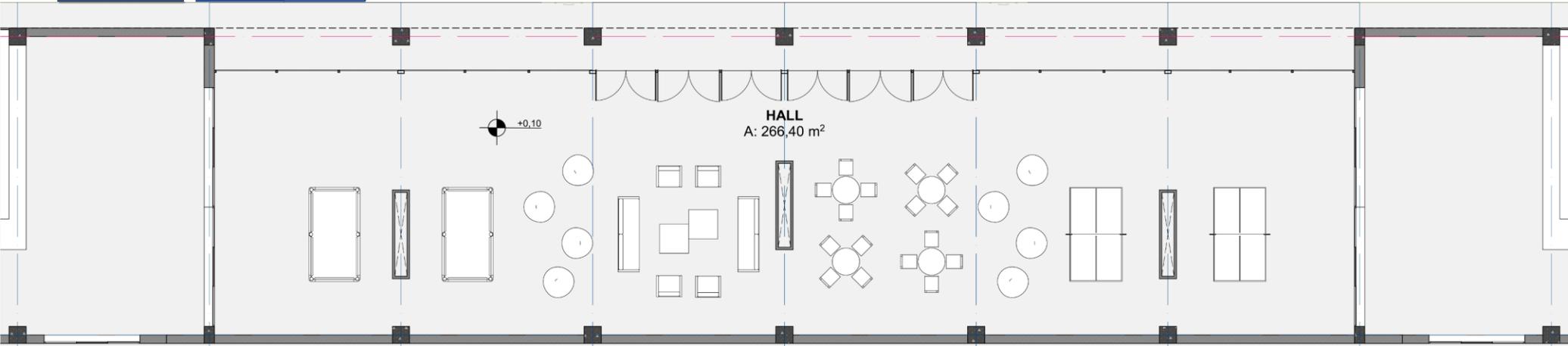
CIRC.
A: 45,58 m²

+0,10

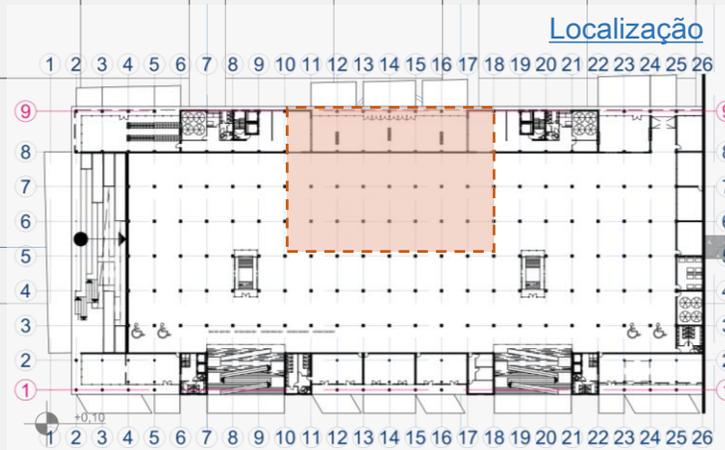




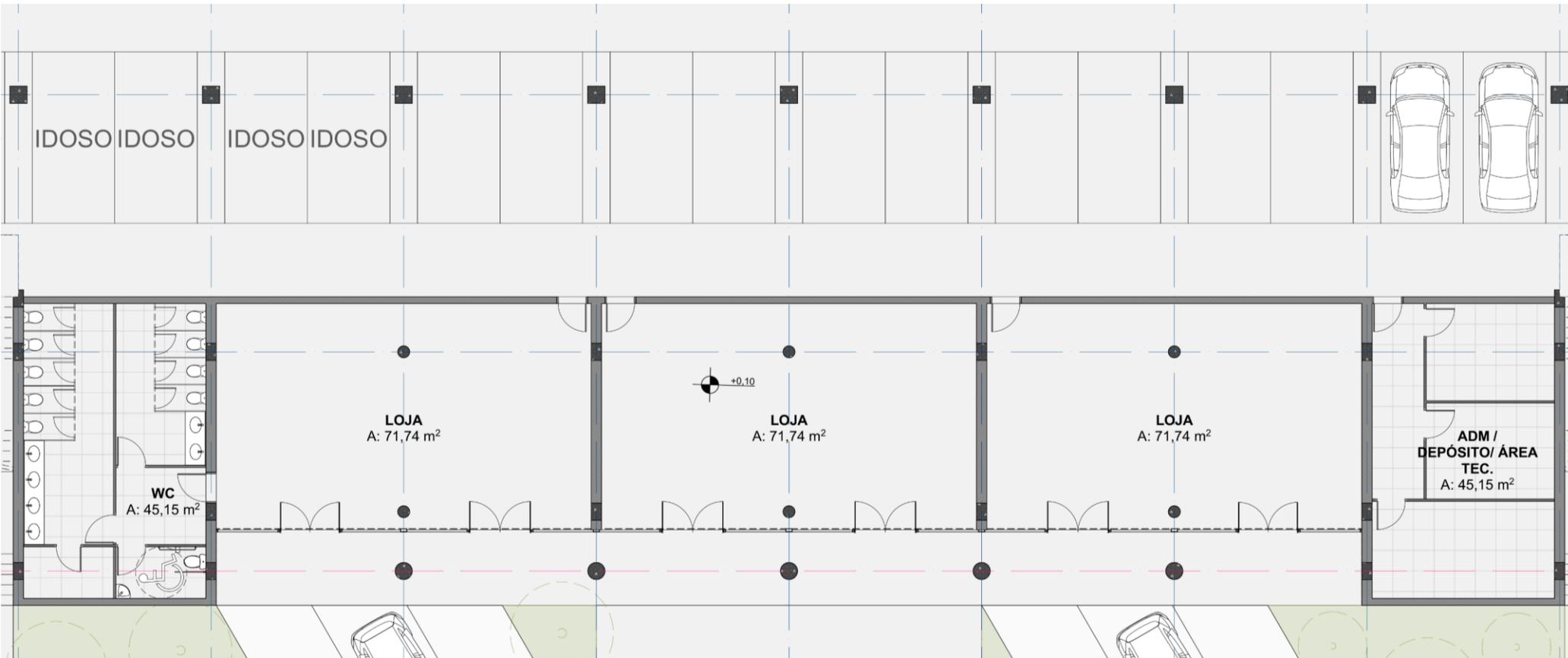
TÉRREO: 0 2,5 m 5m



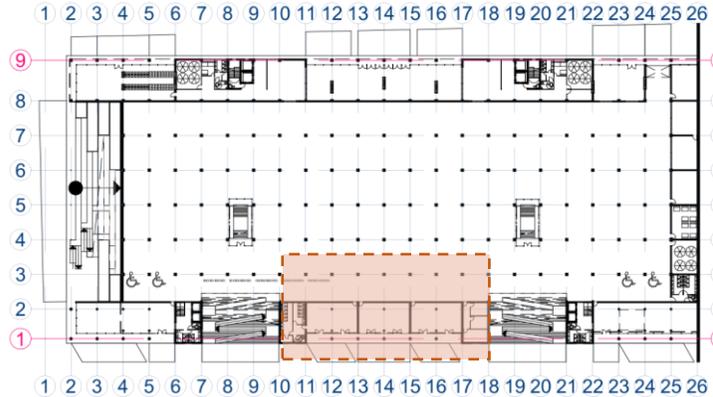
ESTACIONAMENTO
A: 5.065,40 m²



TÉRREO: 0 2,5 m 5m

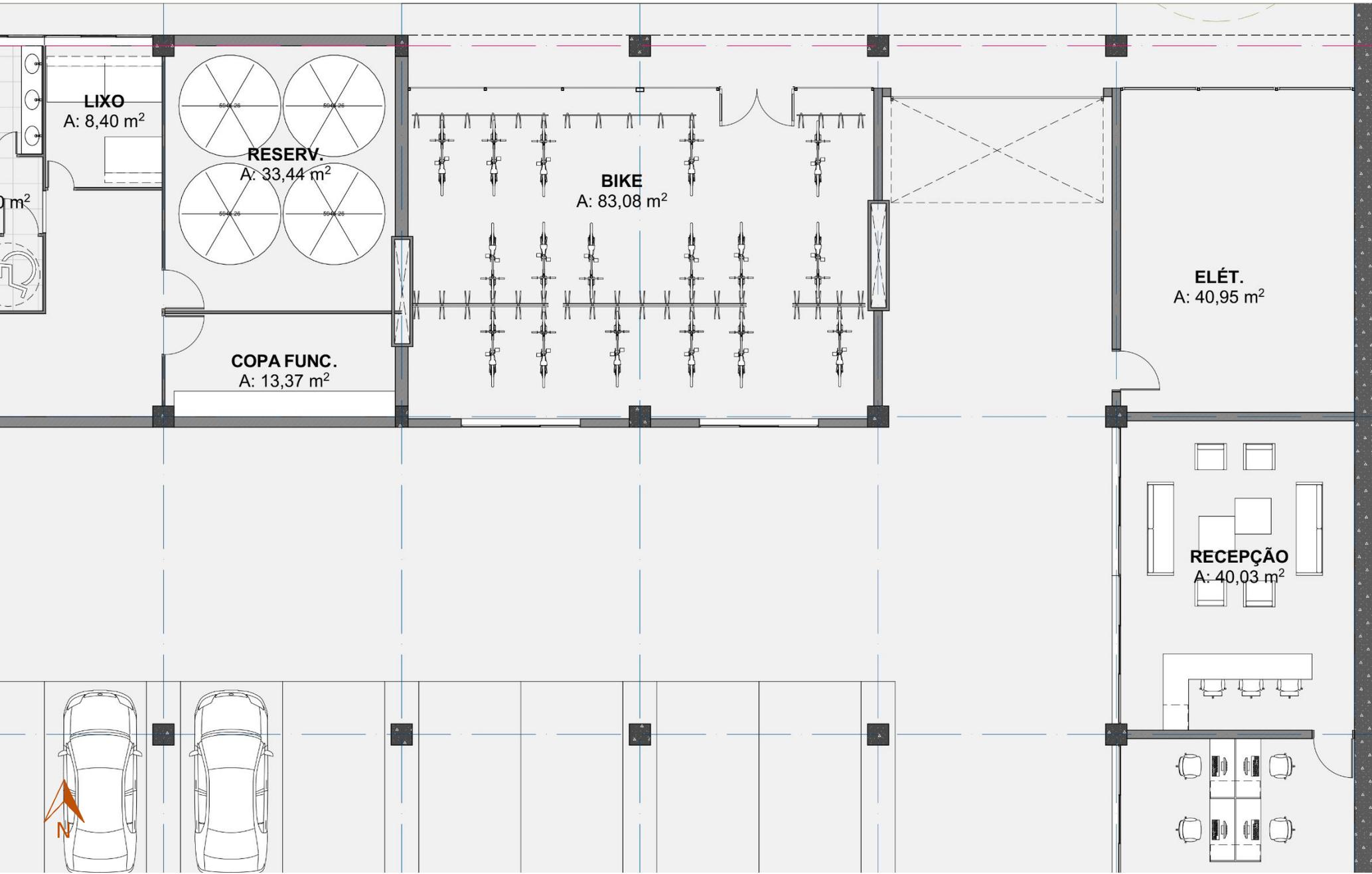


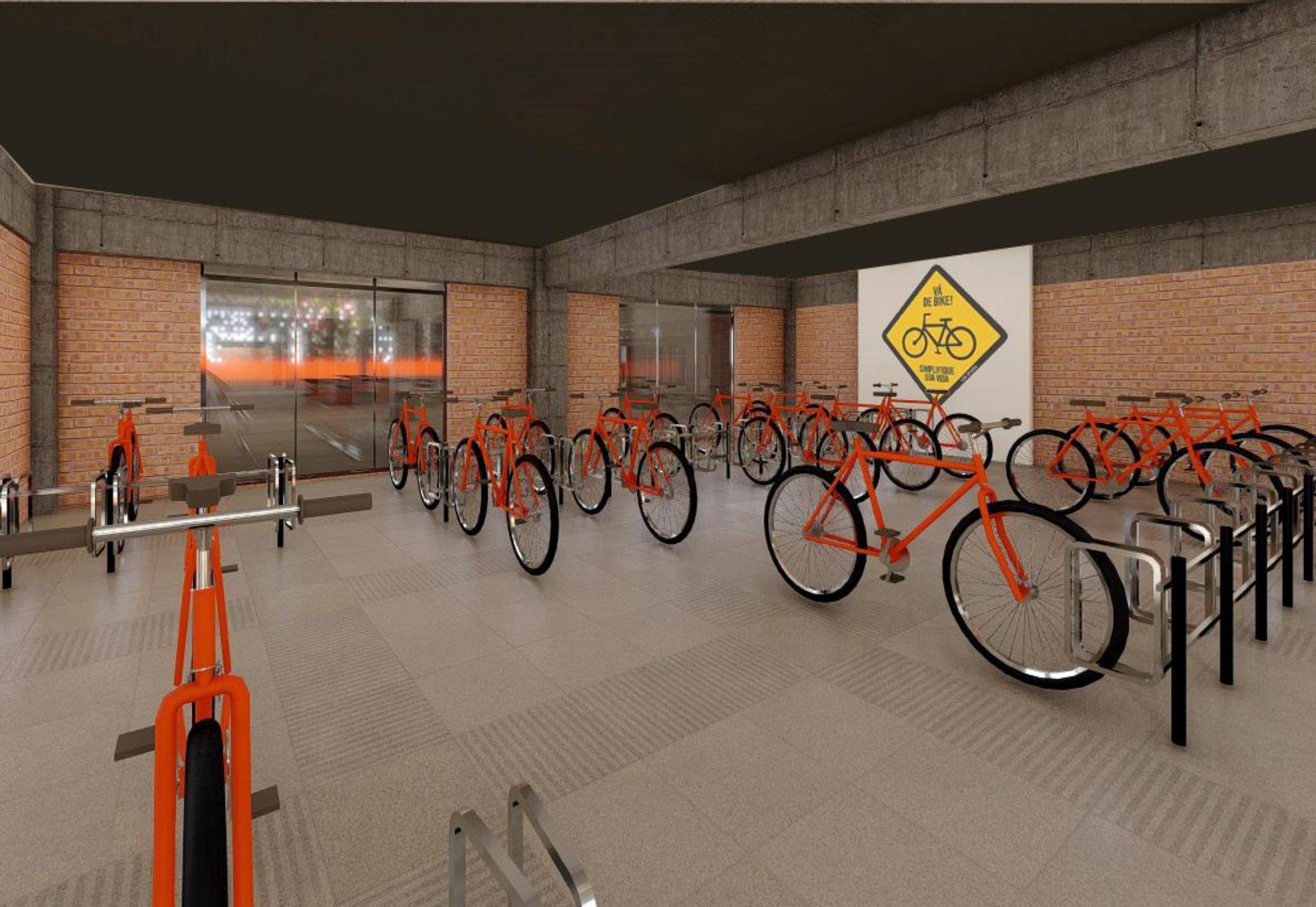
Localização



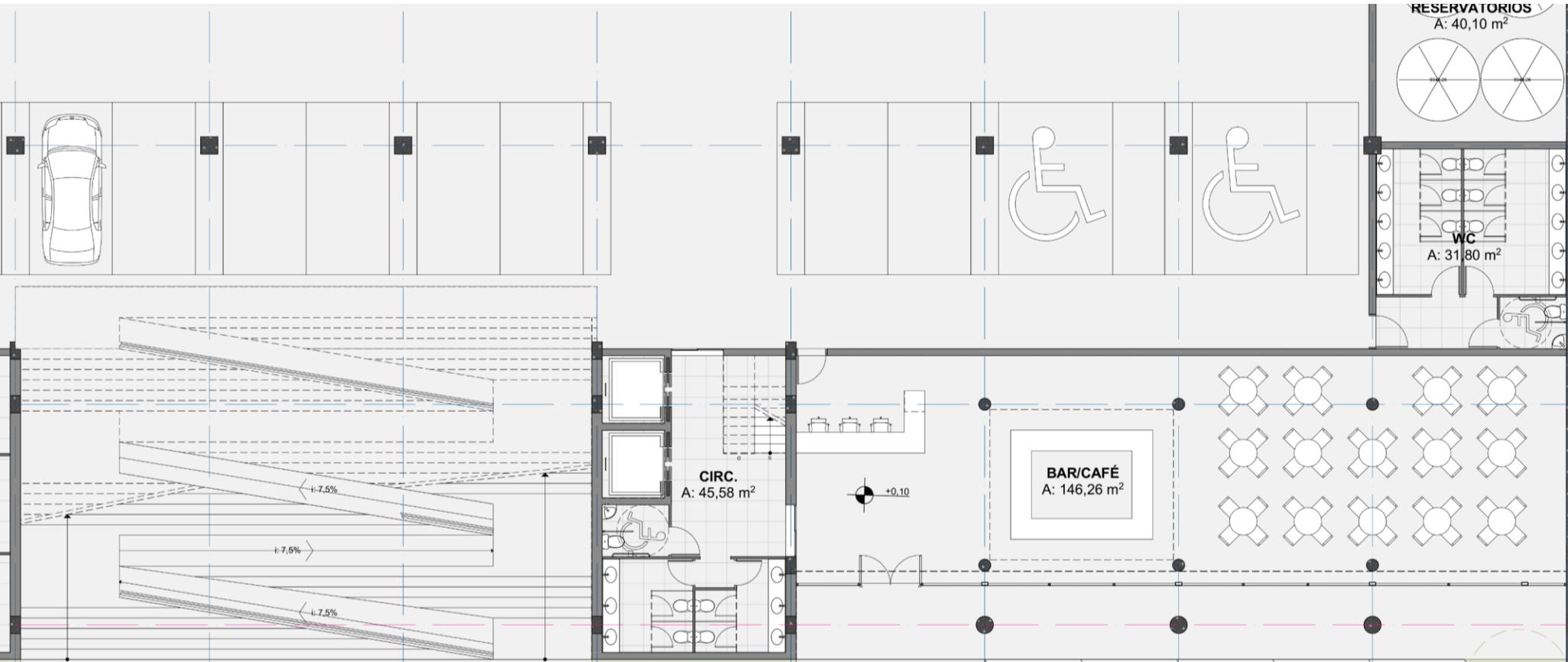


TÉRREO:

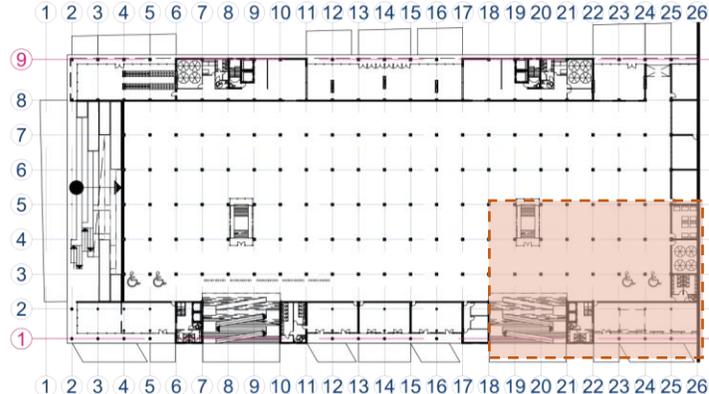




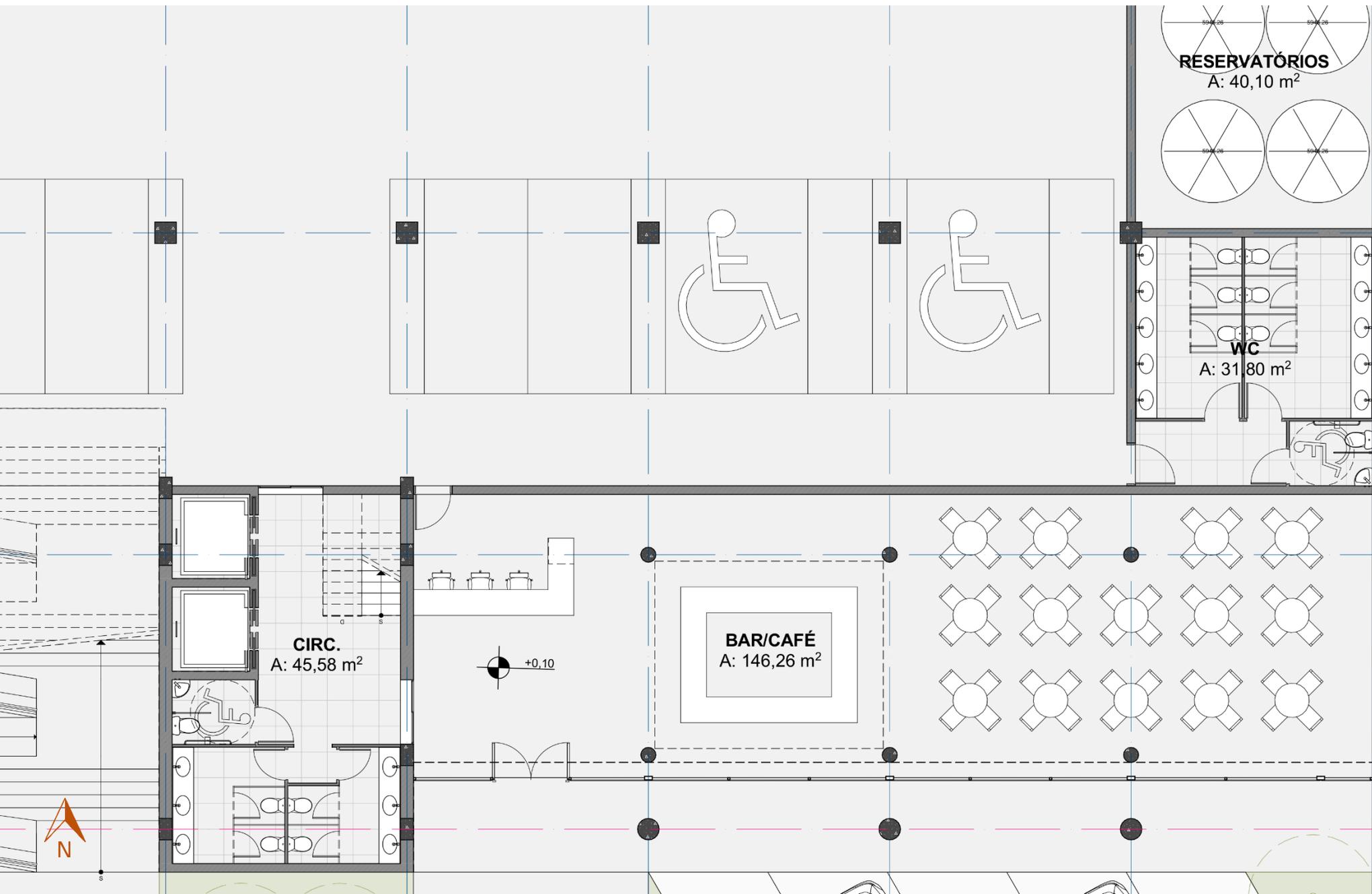
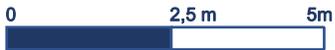
VA DE BIKE!
SIMPLIFIQUE SUA VIDA



Localização



TÉRREO:







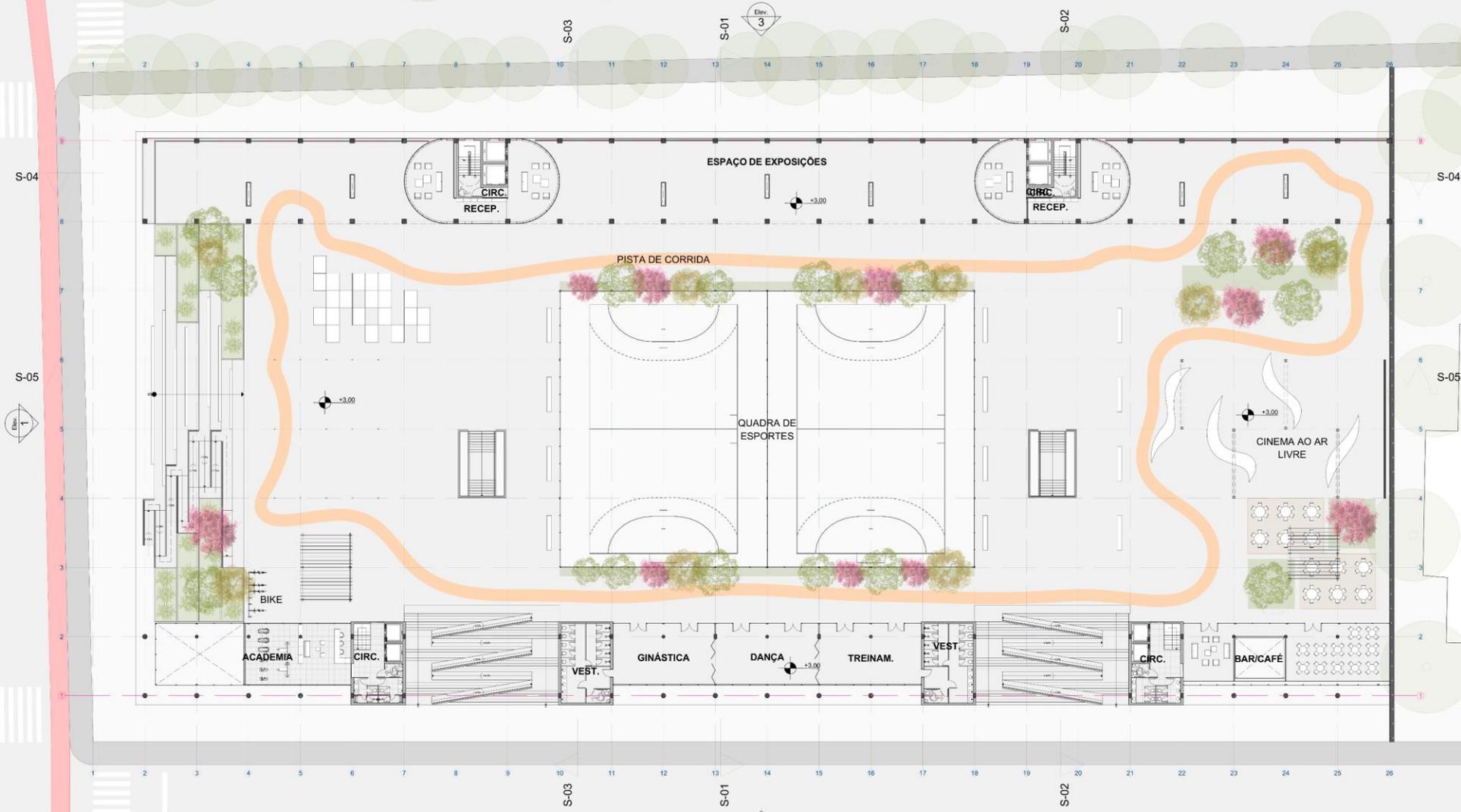
PRIMEIRO PAVIMENTO:



R. FELIPE DE OLIVEIRA

R. SILVA SÓ

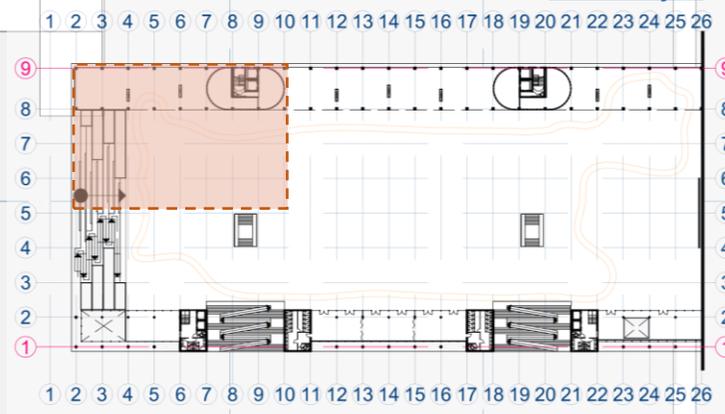
AV. IPIRANGA



PRIMEIRO PAVIMENTO:



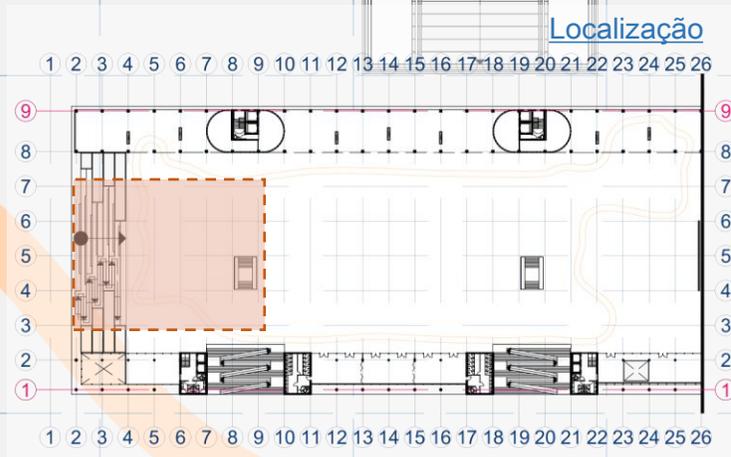
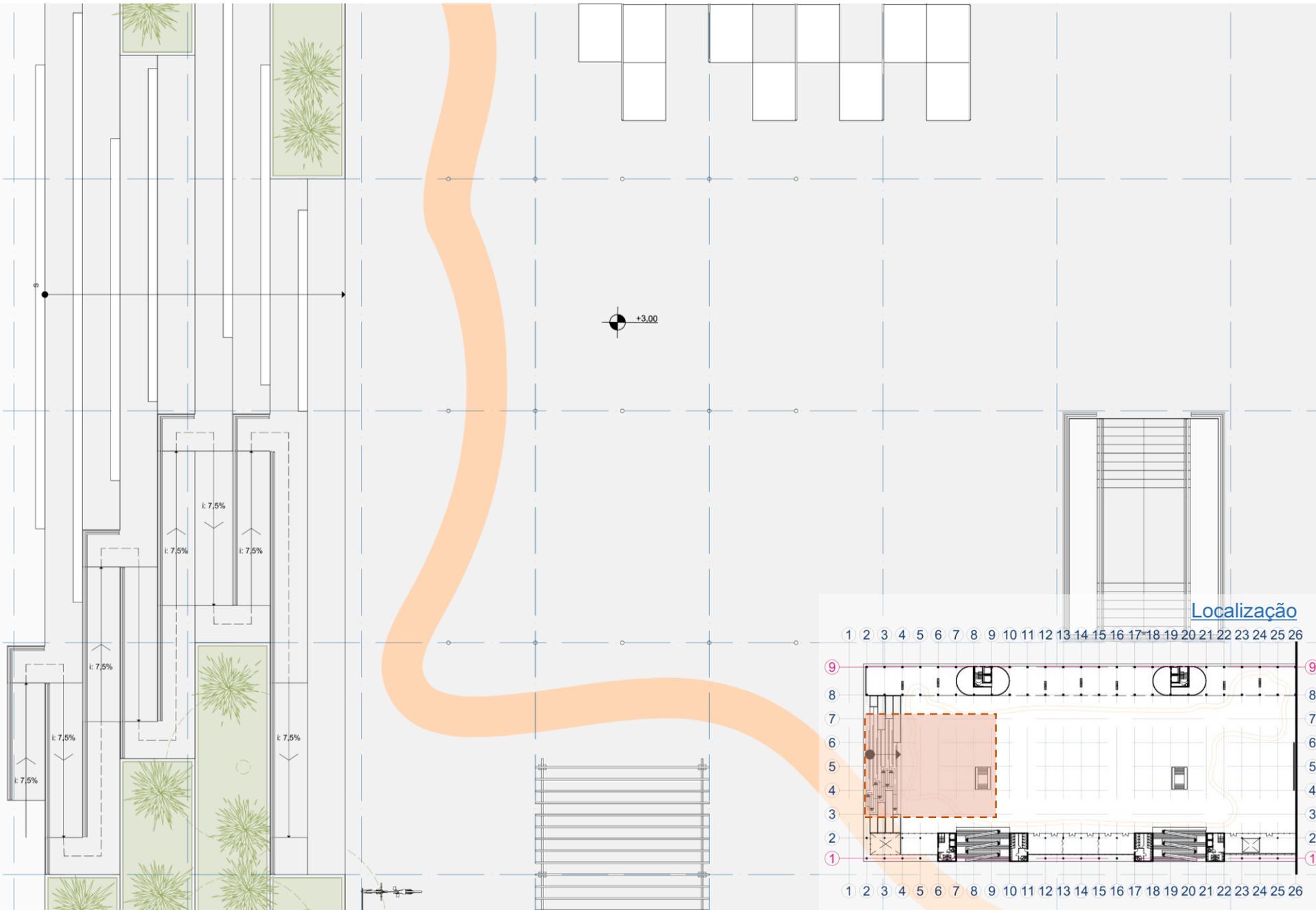
Localização

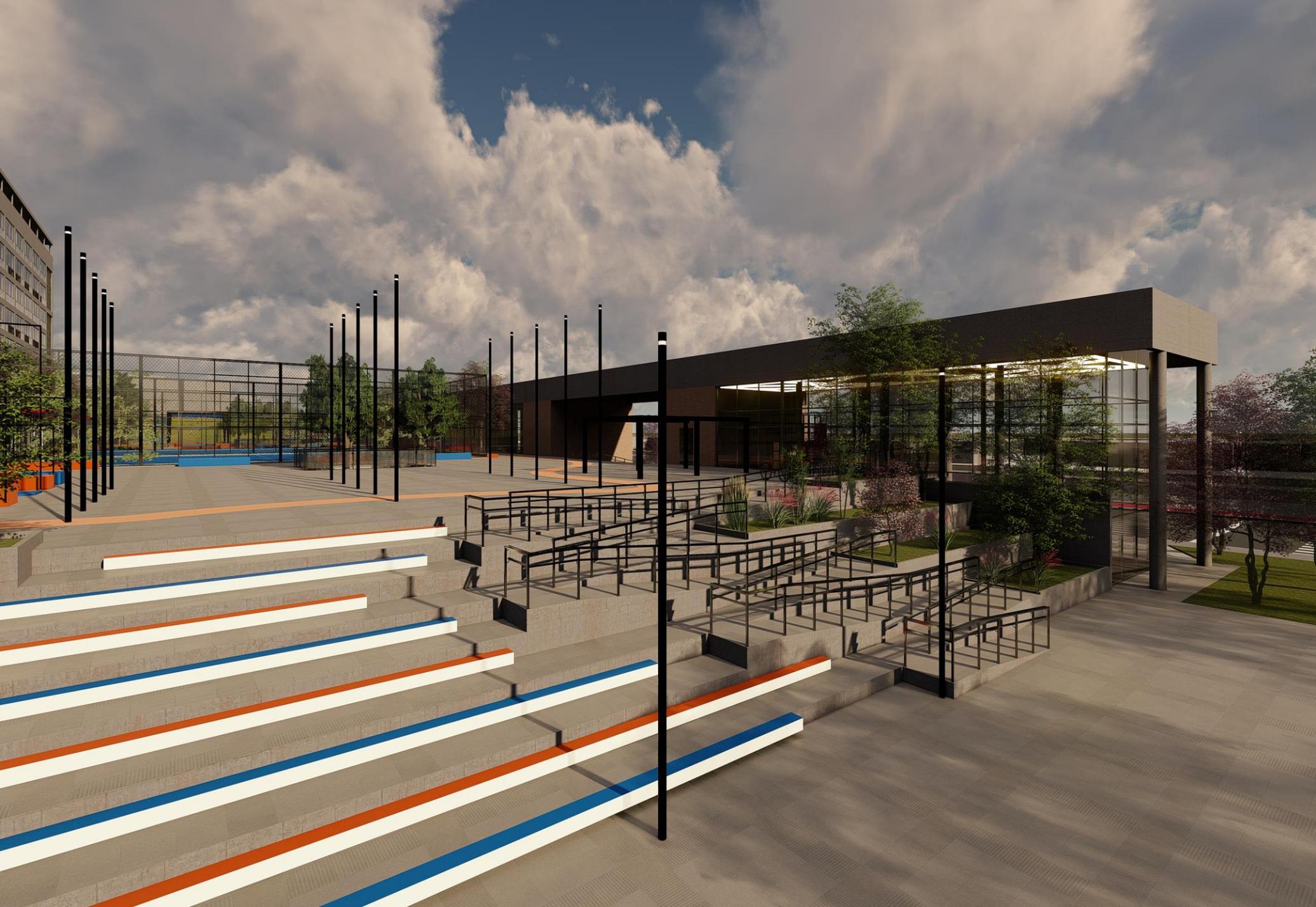


+3,00

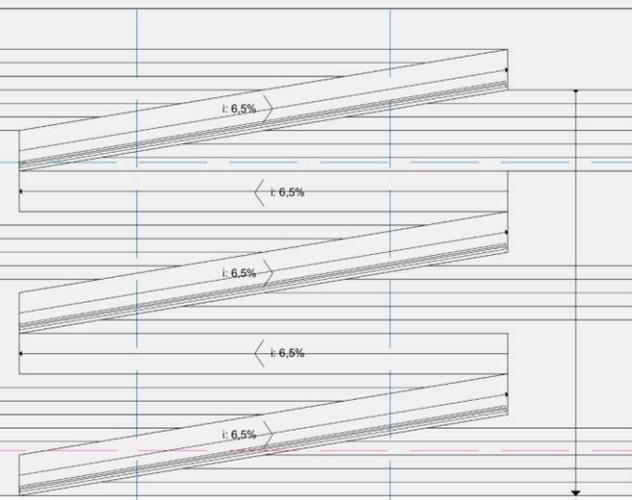
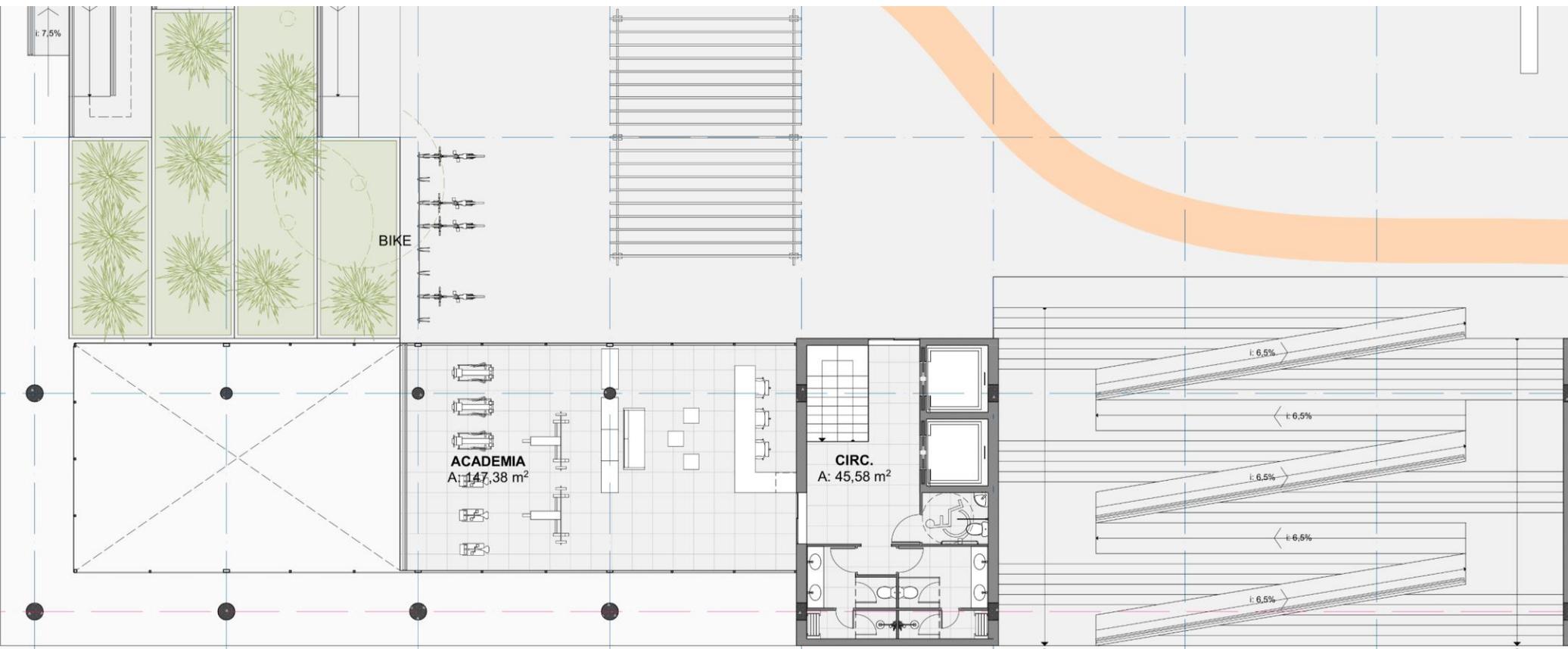


PRIMEIRO PAVIMENTO:

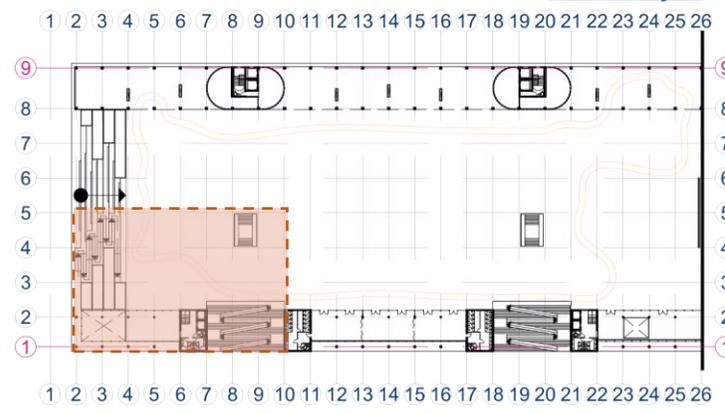




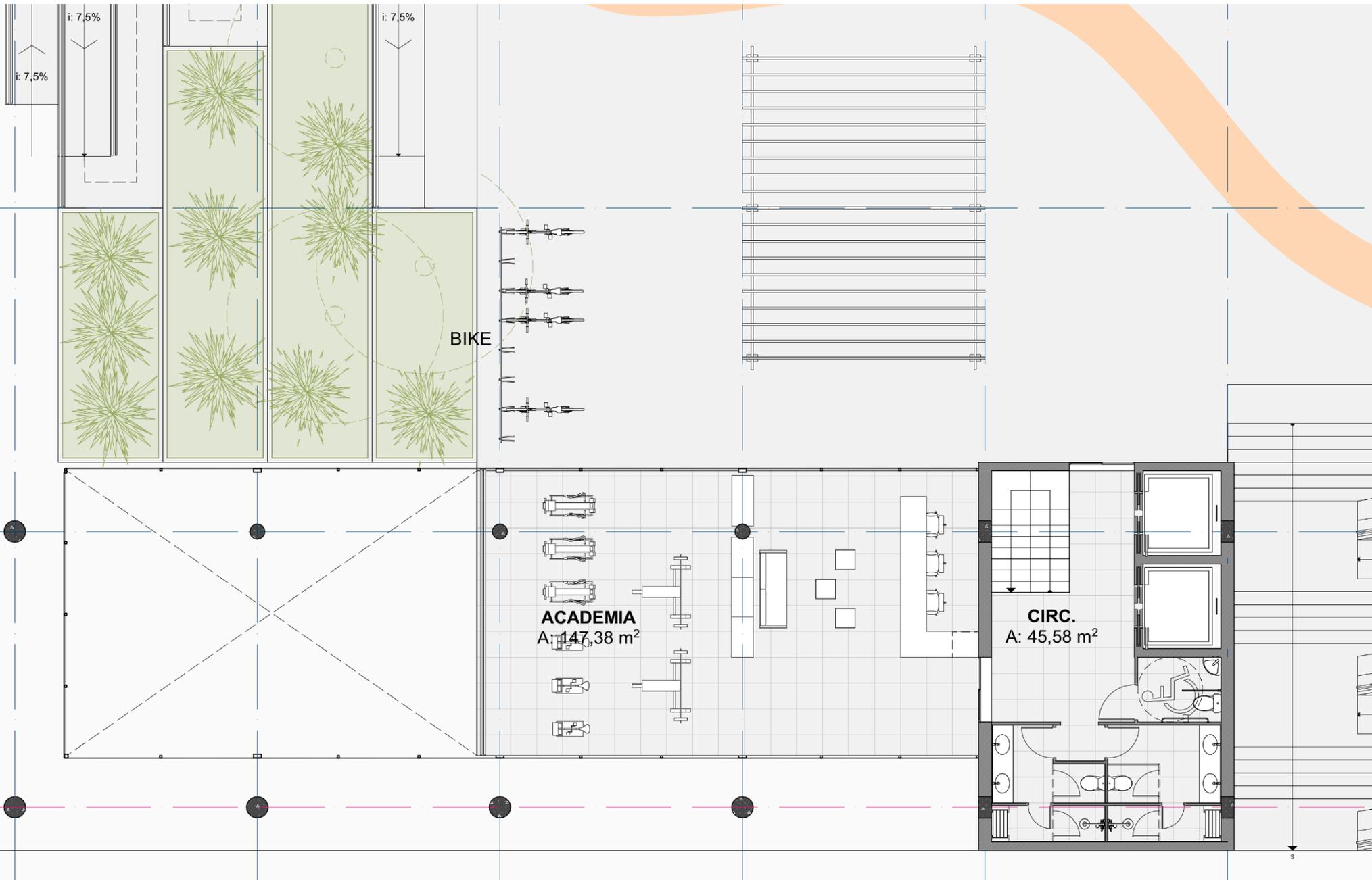
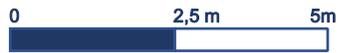
PRIMEIRO PAVIMENTO:



Localização



PRIMEIRO PAVIMENTO:





PRIMEIRO PAVIMENTO:

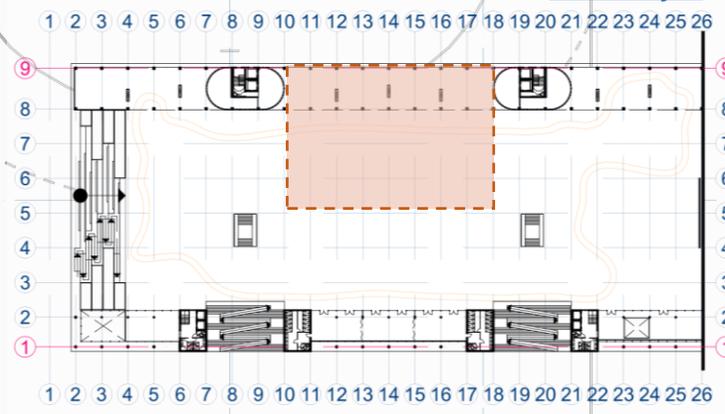


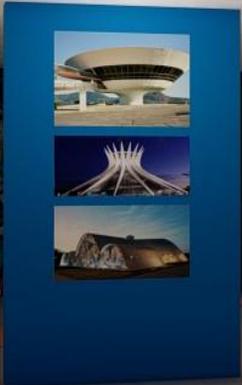
ESPAÇO DE EXPOSIÇÕES
A: 846,08 m²



PISTA DE CORRIDA

Localização





PRIMEIRO PAVIMENTO:

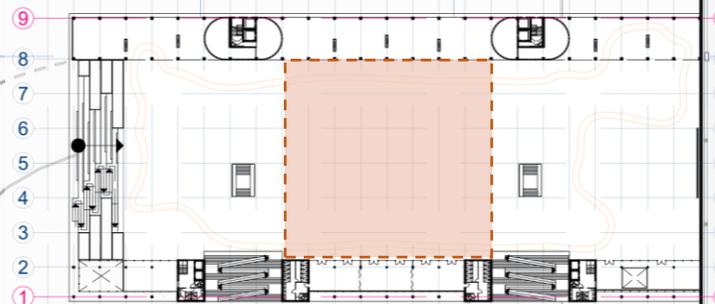


QUADRA DE ESPORTES



Localização

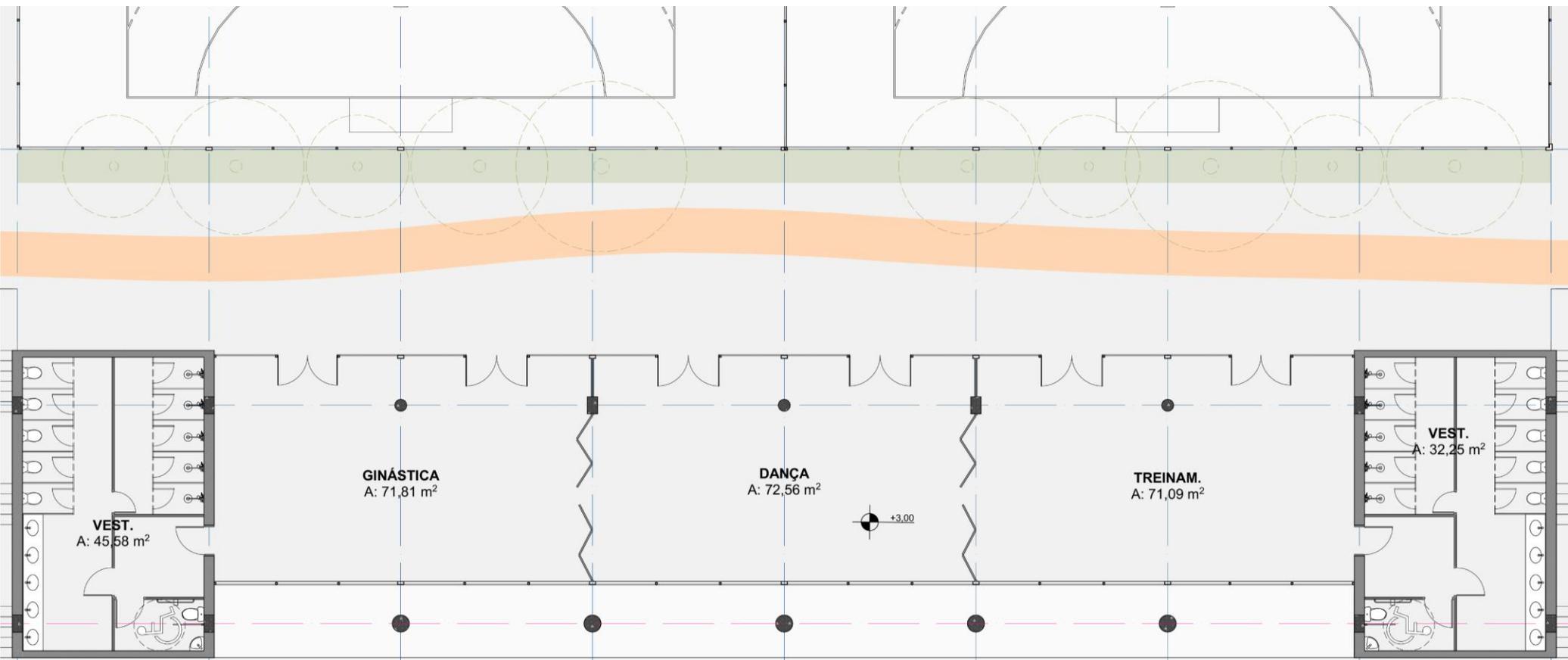
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26



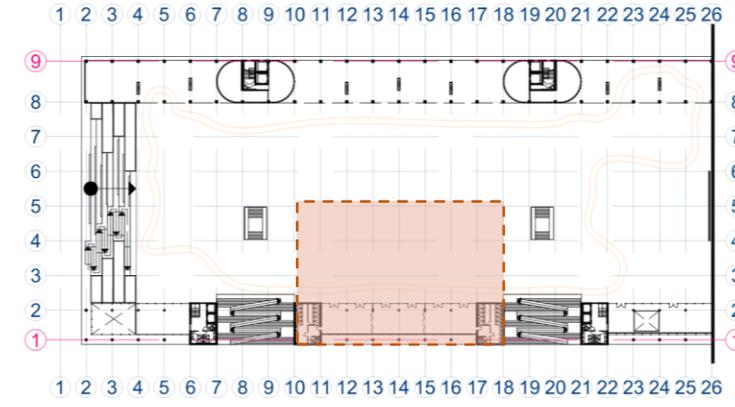
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26



PRIMEIRO PAVIMENTO:



Localização

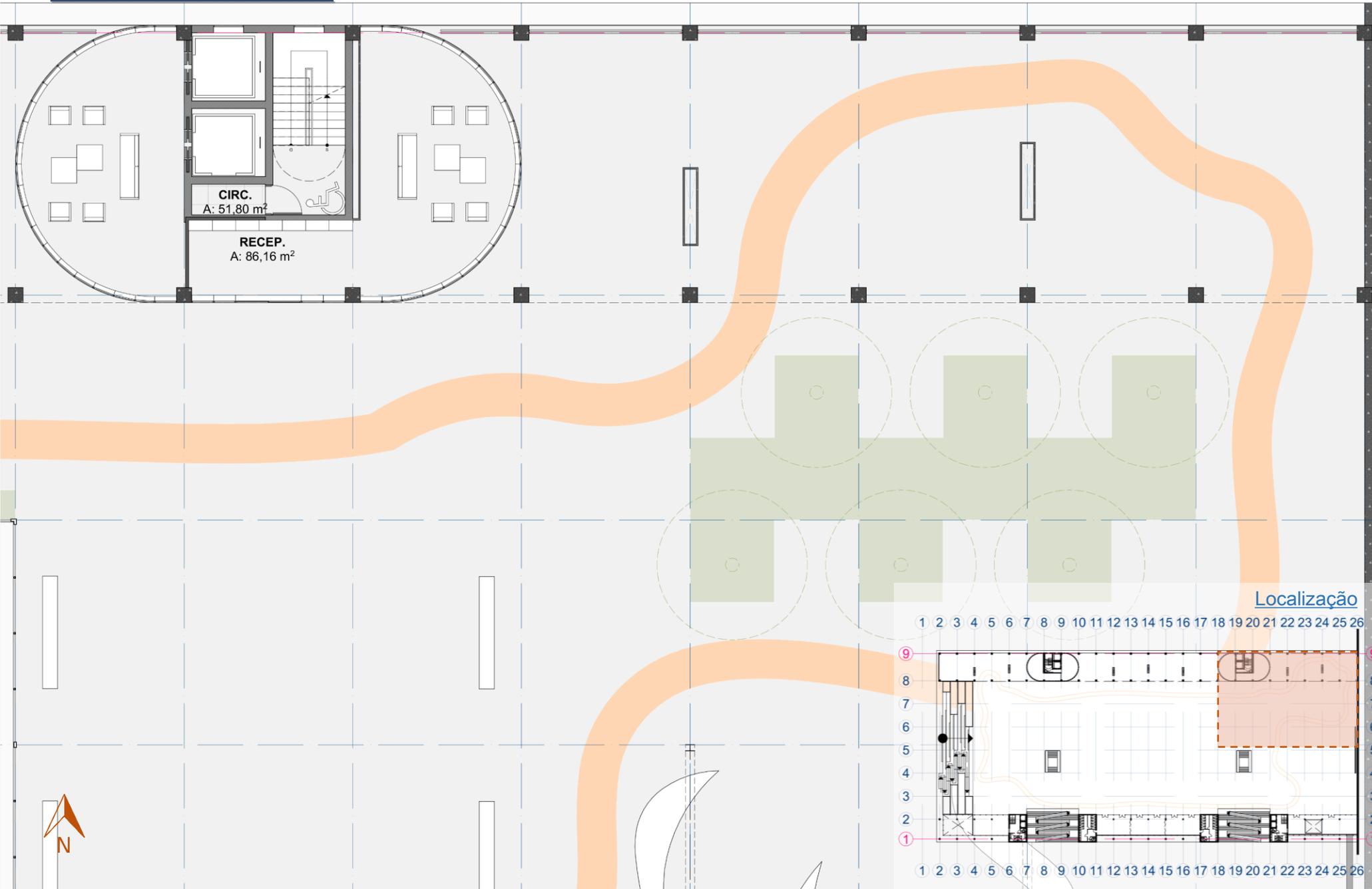






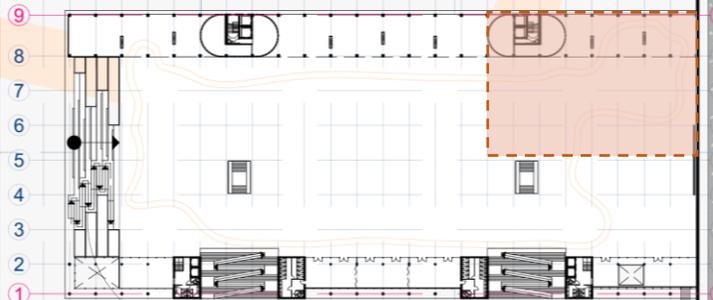


PRIMEIRO PAVIMENTO:



Localização

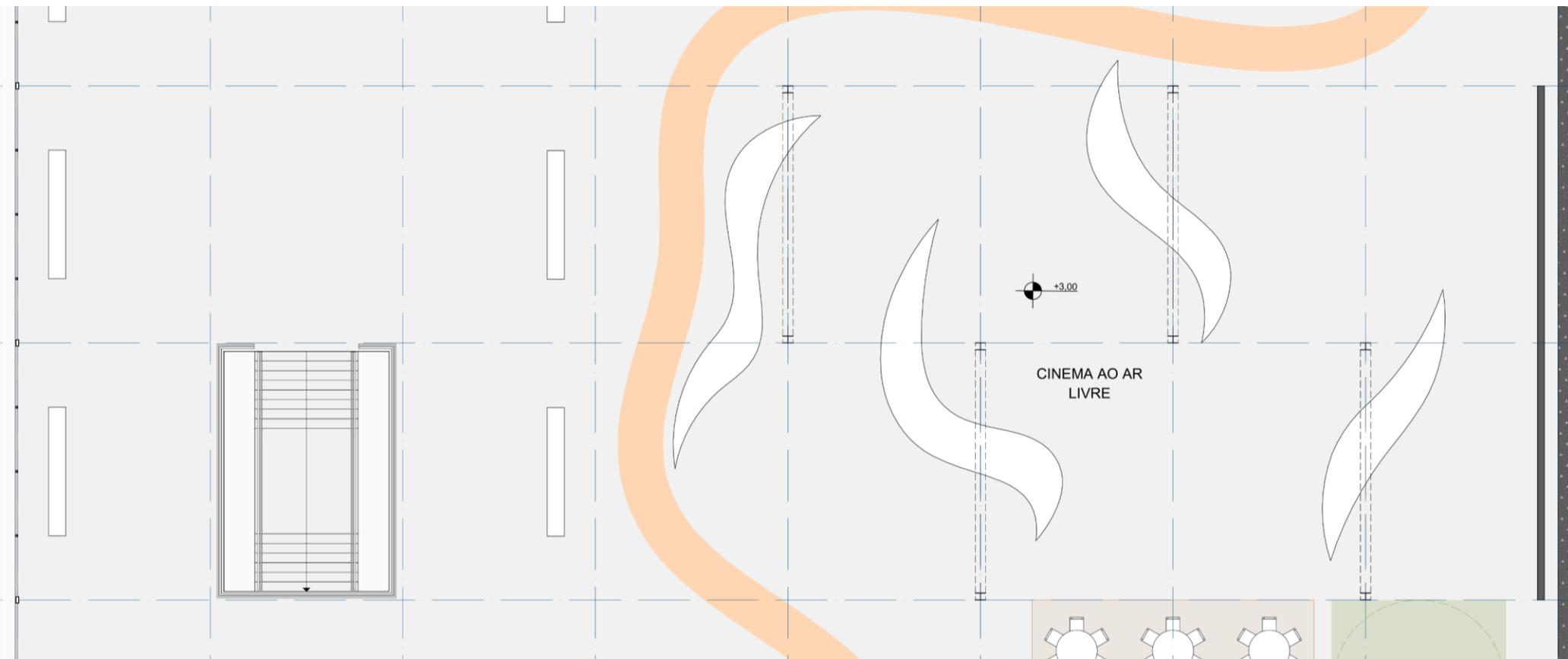
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26



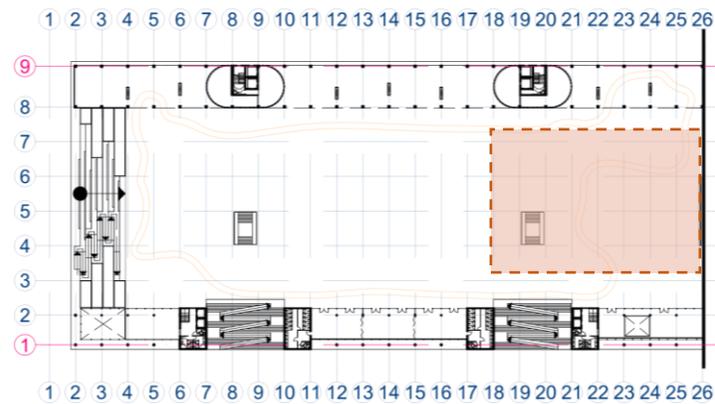
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26



PRIMEIRO PAVIMENTO:



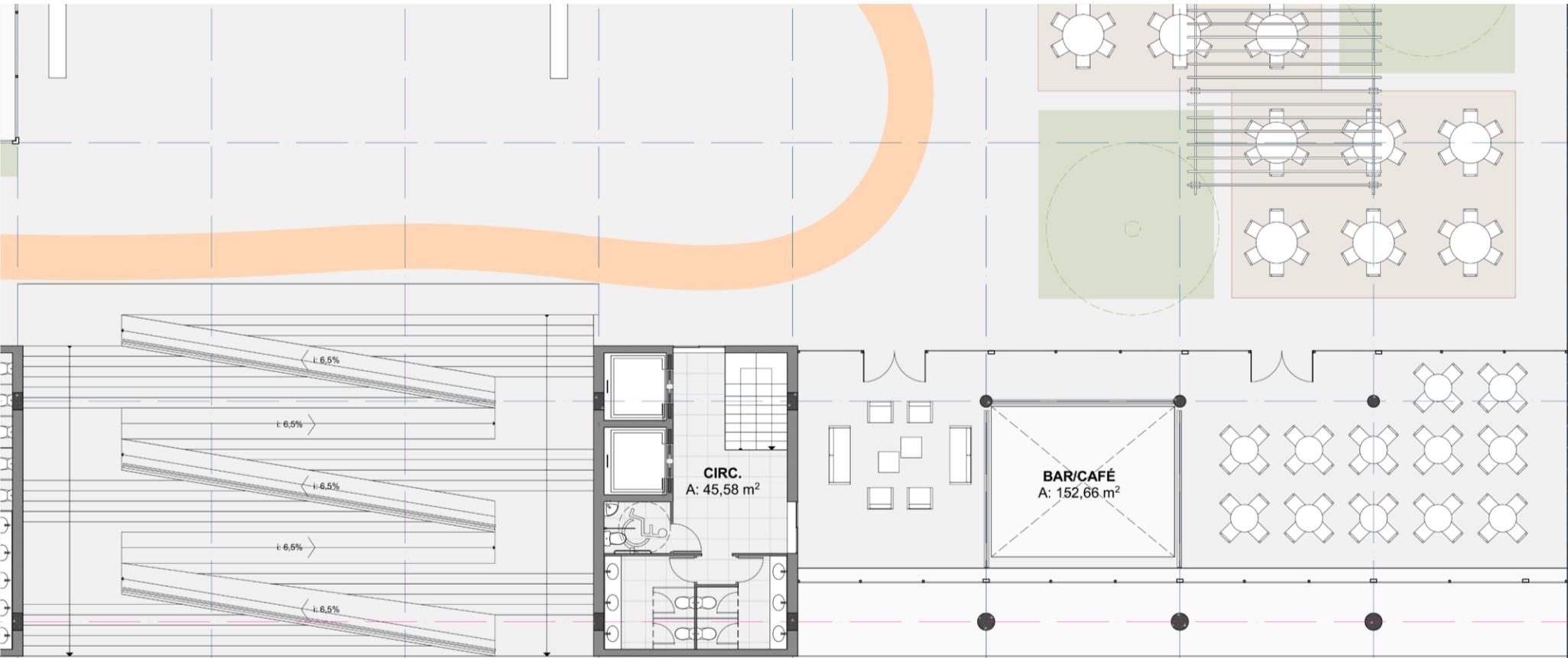
Localização



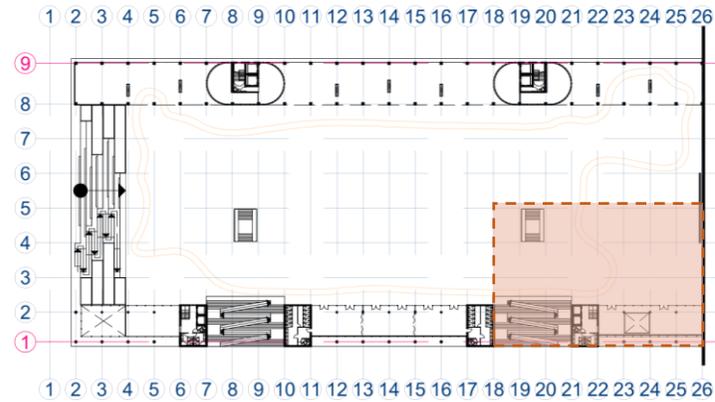




PRIMEIRO PAVIMENTO:



Localização



PRIMEIRO PAVIMENTO: 0 2,5 m 5m

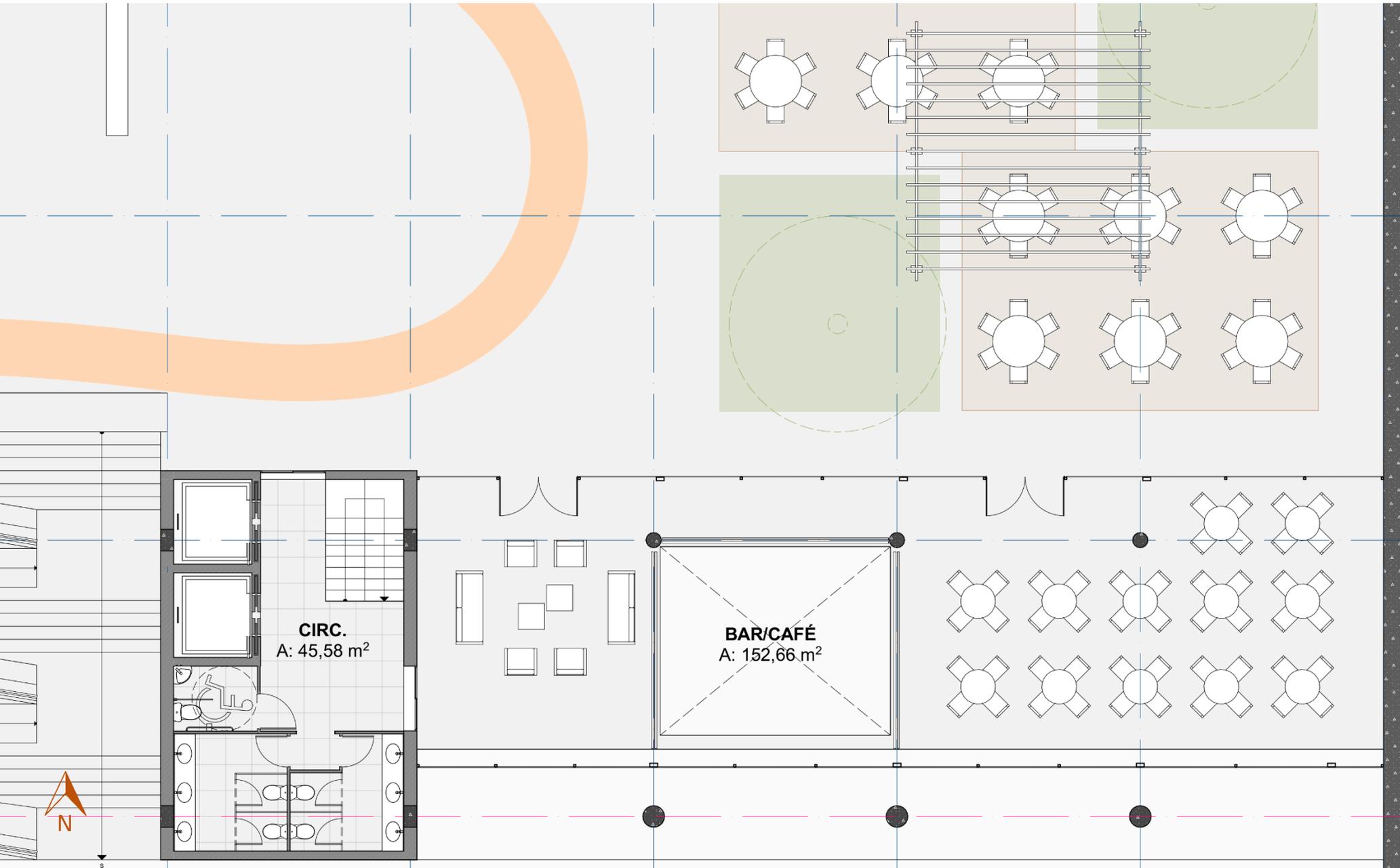
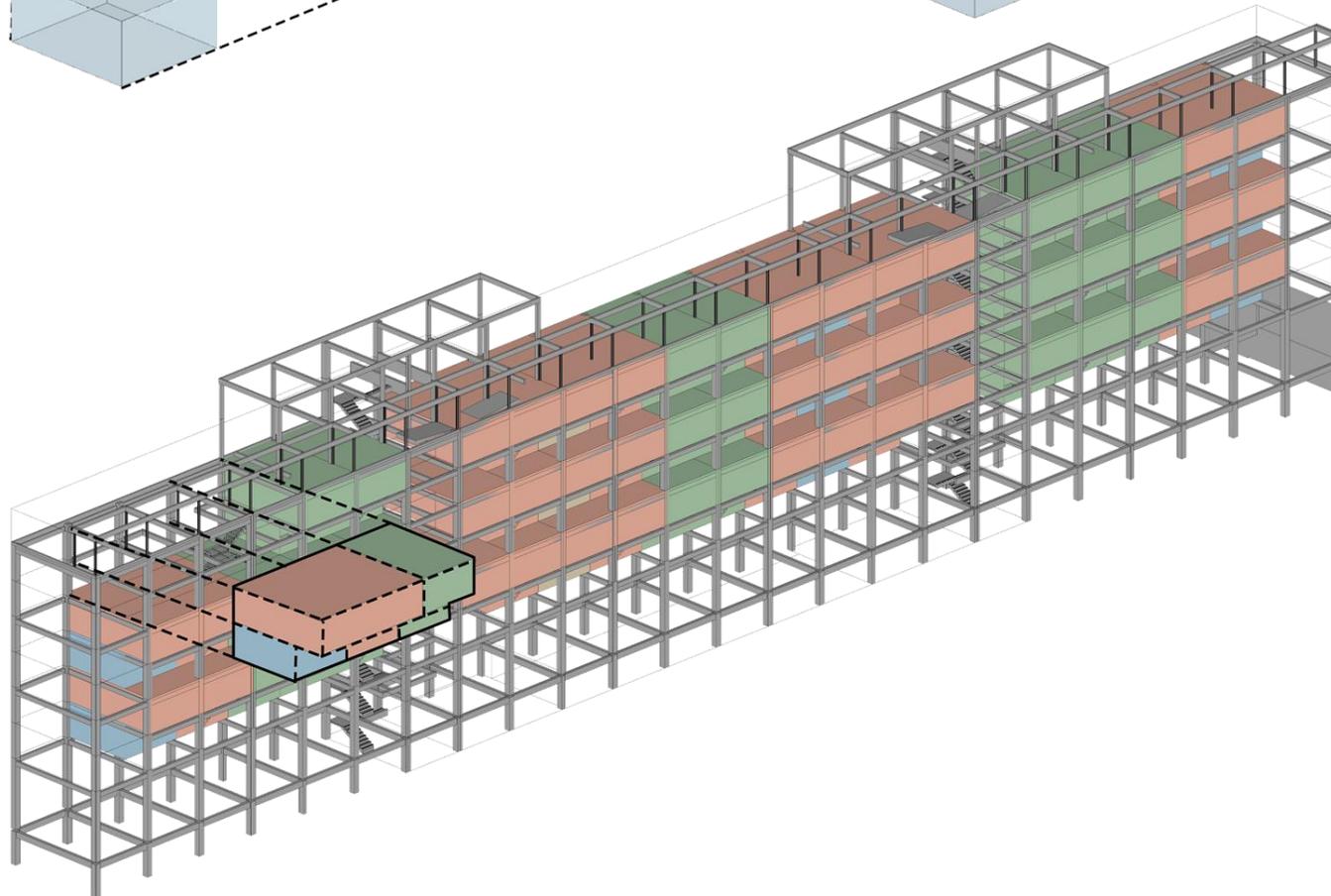
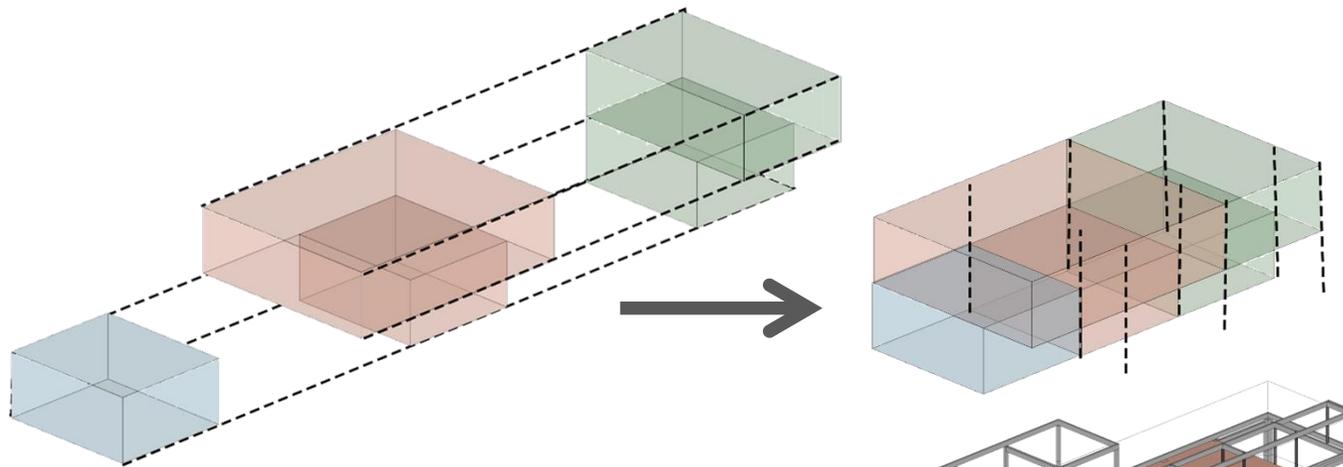


DIAGRAMA TIPOLÓGICO DO EDIFÍCIO HABITACIONAL:



2 DORMITÓRIOS

5 DORMITÓRIOS

1 DORMITÓRIO E PNE

18 UNIDADES

24 UNIDADES

9 UNIDADES

3 UNIDADES

TOTAL= 54 UNIDADES

DIAGRAMA TIPOLOGICO DO EDIFÍCIO HABITACIONAL:

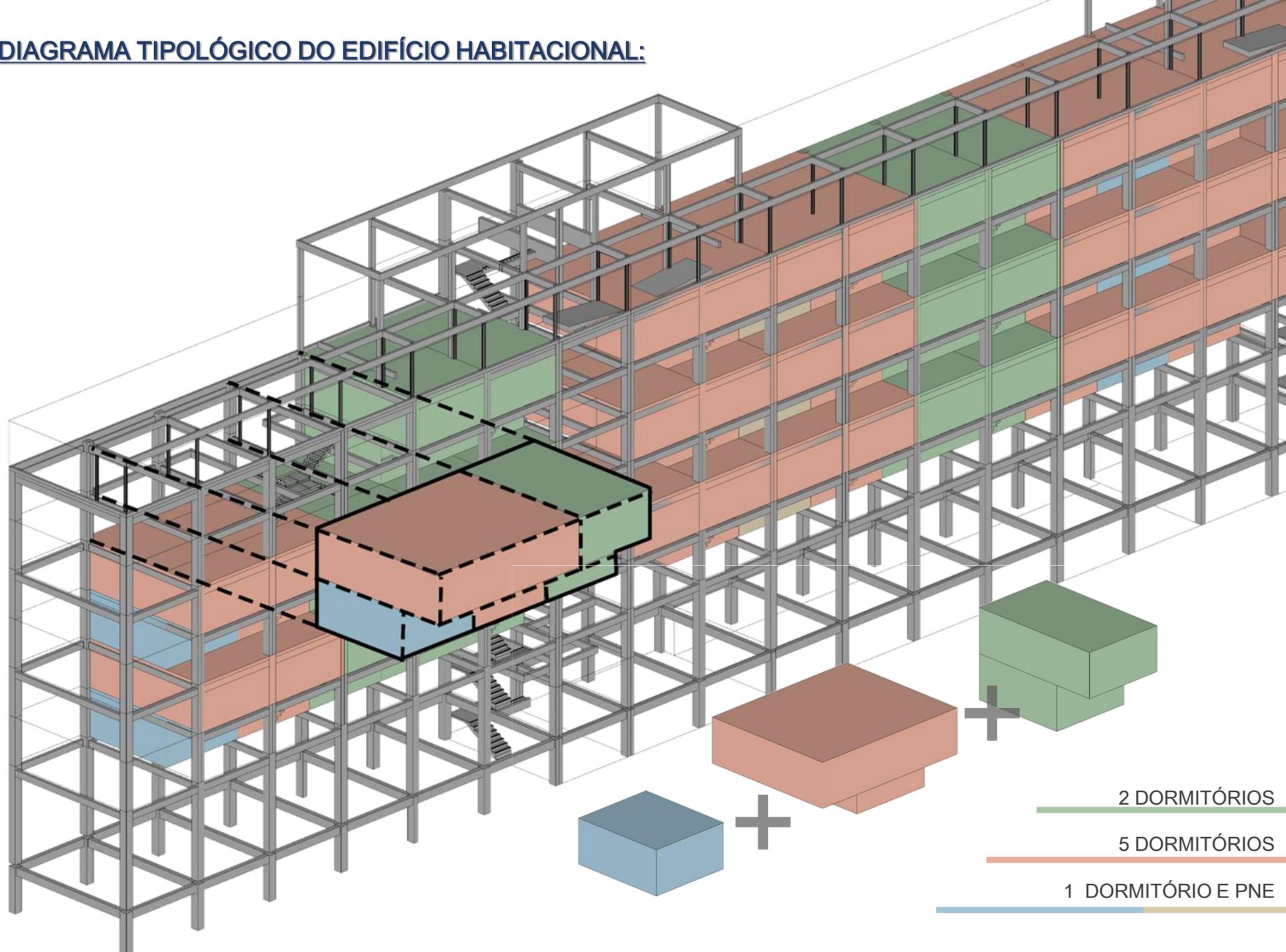


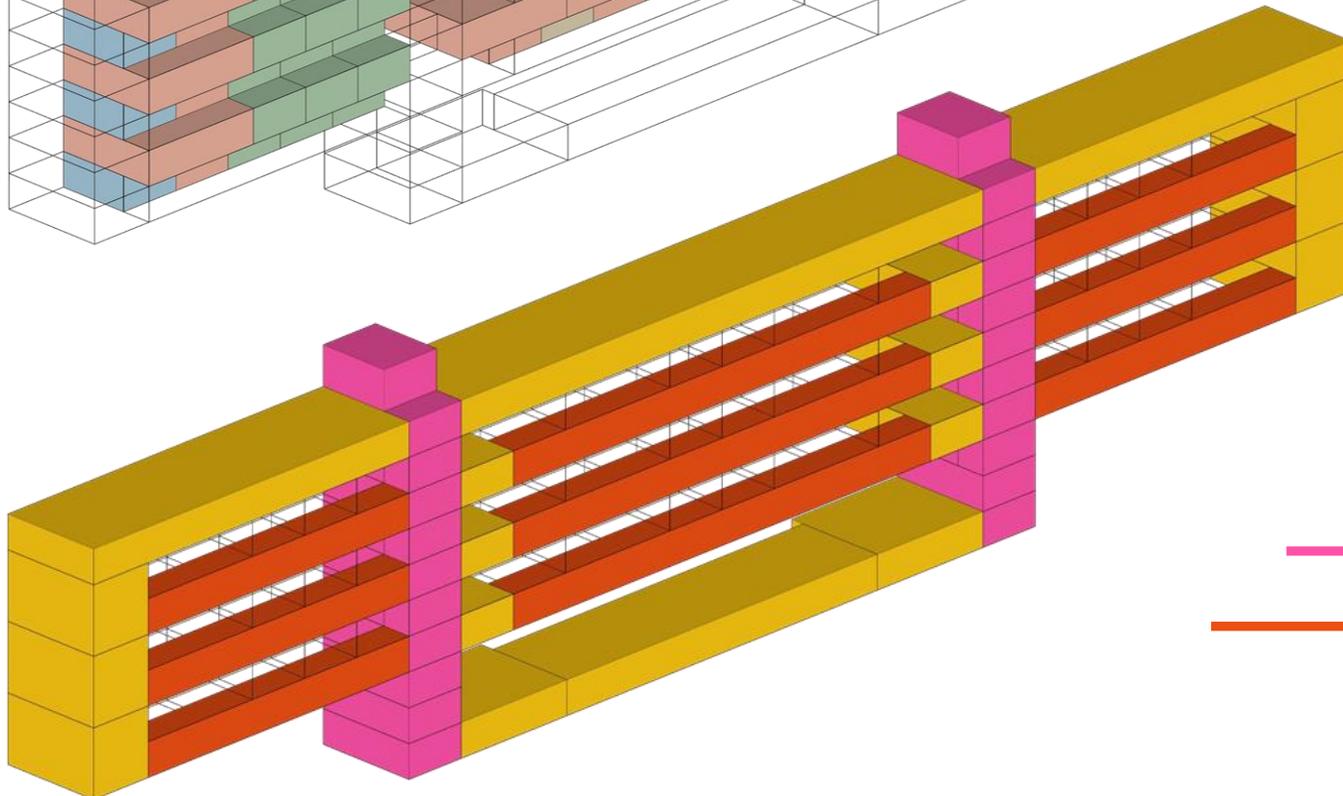
DIAGRAMA TIPOLOGICO DO EDIFÍCIO HABITACIONAL:



2 DORMITÓRIOS

5 DORMITÓRIOS

1 DORMITÓRIO E PNE



ESTAR COMPARTILHADO

CIRCULAÇÃO VERTICAL

CIRCULAÇÃO HORIZONTAL

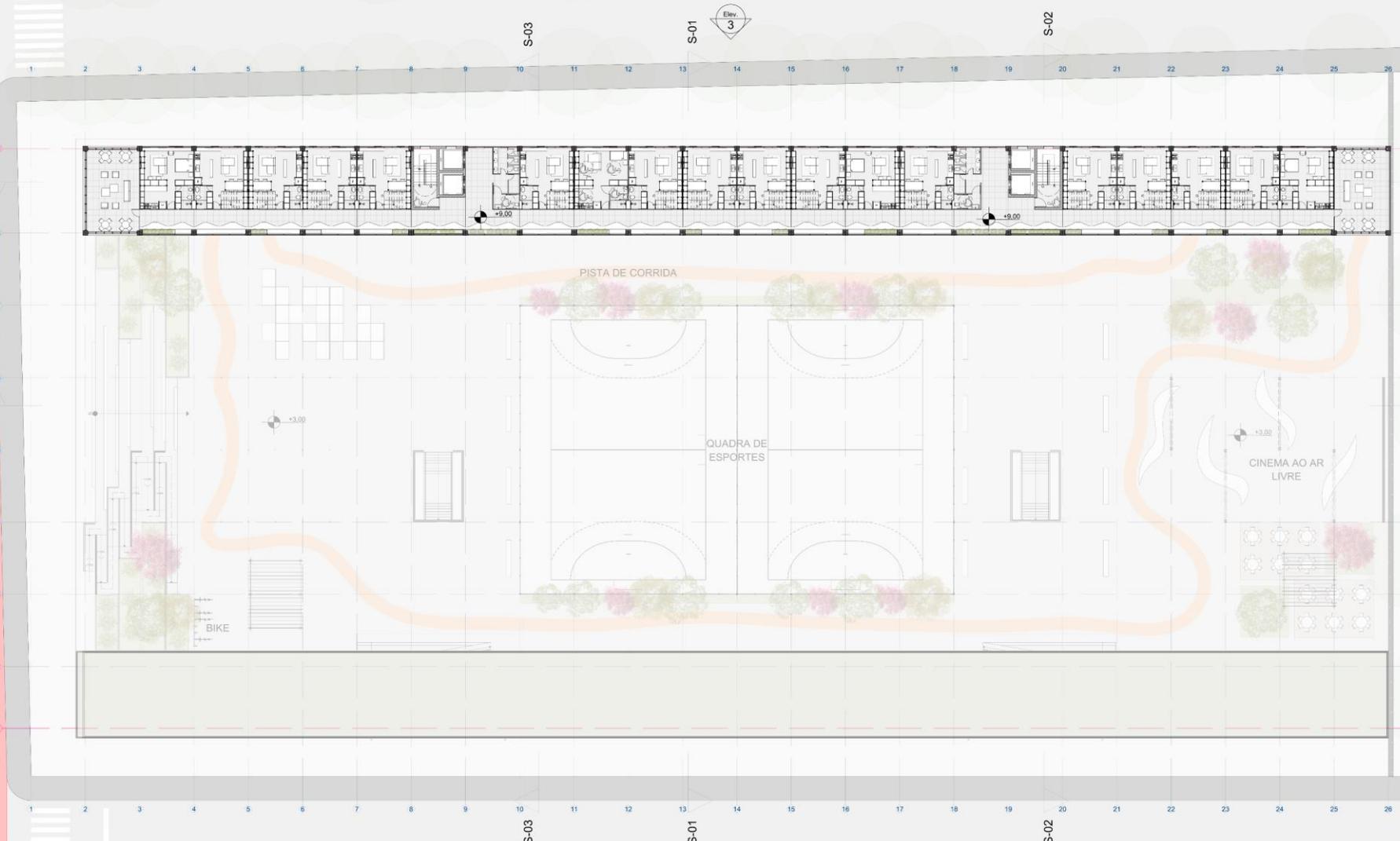
PLANTA BAIXA PAVIMENTO TIPO 1PAV:



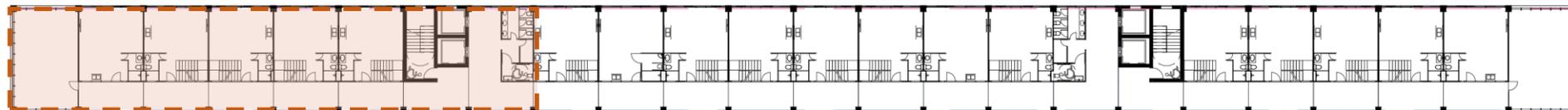
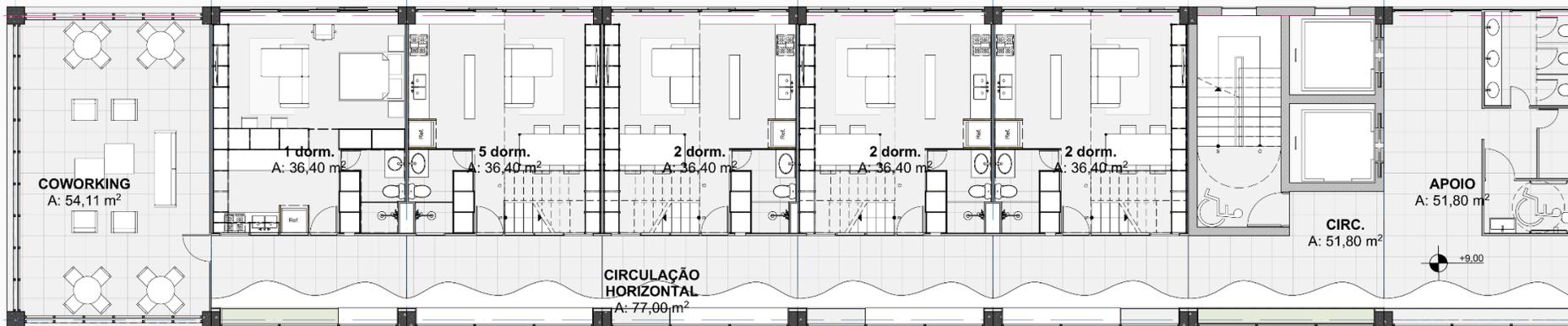
R. FELIPE DE OLIVEIRA

R. SILVA SÓ

AV. IPIRANGA



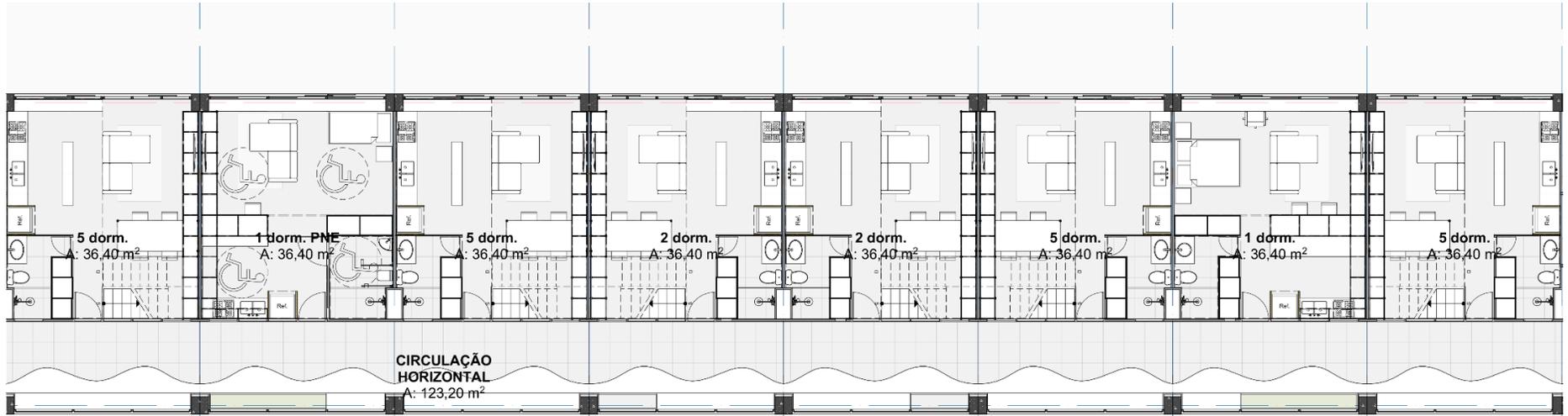
PLANTA BAIXA PAVIMENTO TIPO 1PAV: 0 2,5m 5m



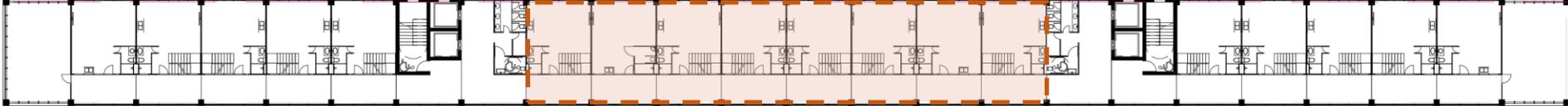
Localização



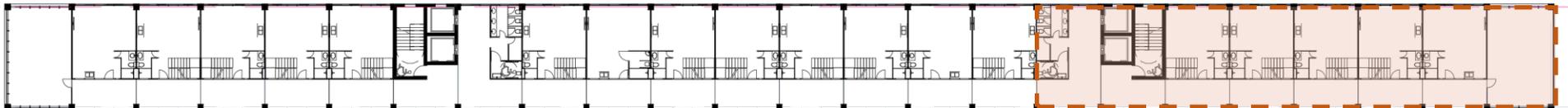
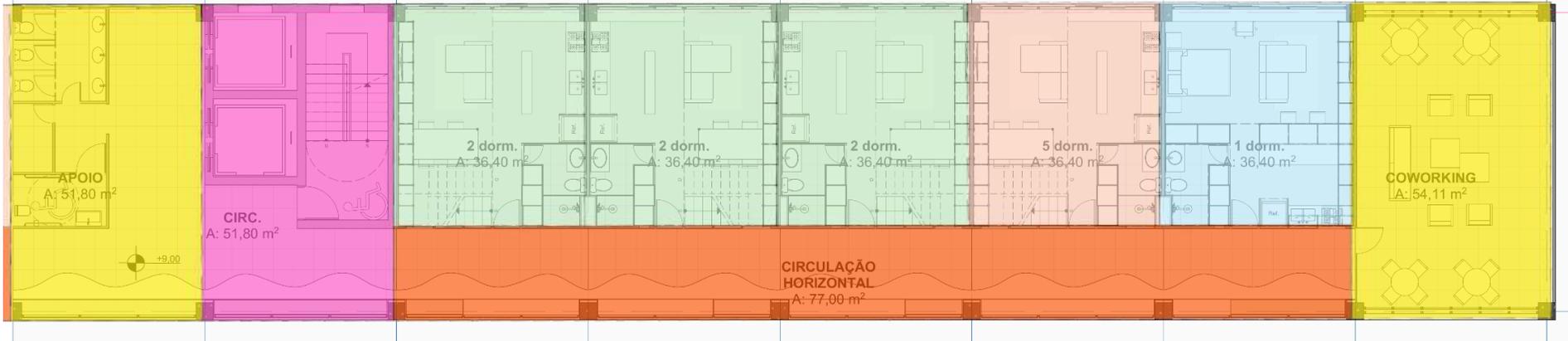
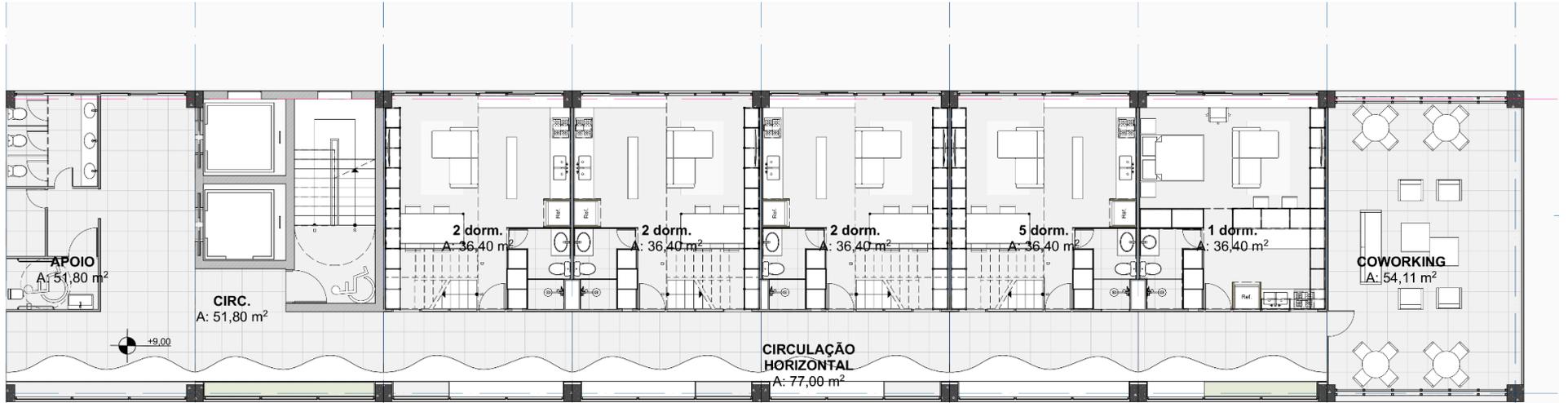
PLANTA BAIXA PAVIMENTO TIPO 1PAV: 0 2,5 m 5m



Localização



PLANTA BAIXA PAVIMENTO TIPO 1PAV: 0 2,5 m 5m



Localização

PLANTA BAIXA PAVIMENTO TIPO 2PAV:



R. FELIPE DE OLIVEIRA

S-03

S-01

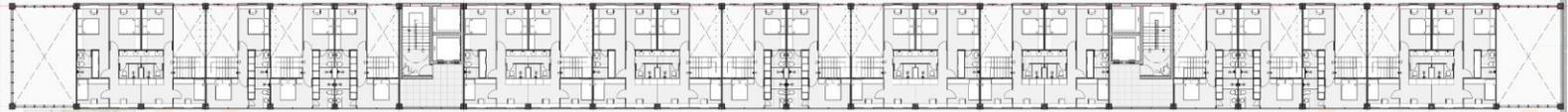


S-02

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

S-04

S-04



PISTA DE CORRIDA

S-05

S-05



QUADRA DE ESPORTES

CINEMA AO AR LIVRE



R. SILVA SÓ

BIKE

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

S-03

S-01

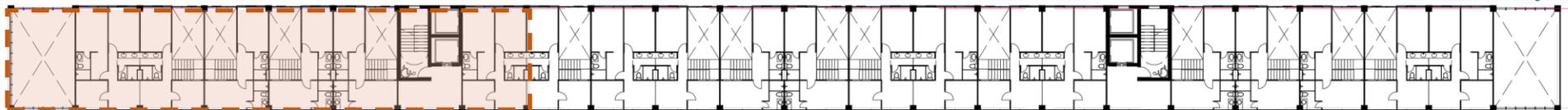
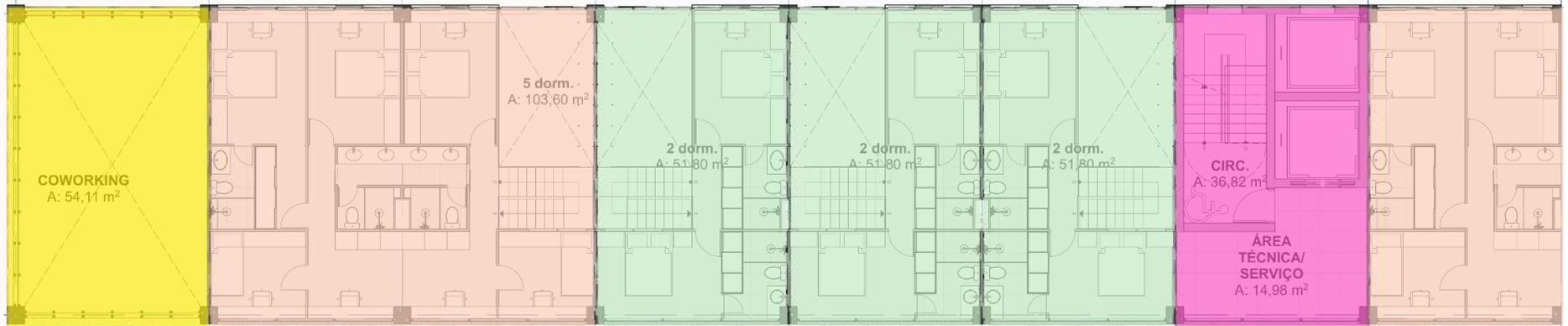
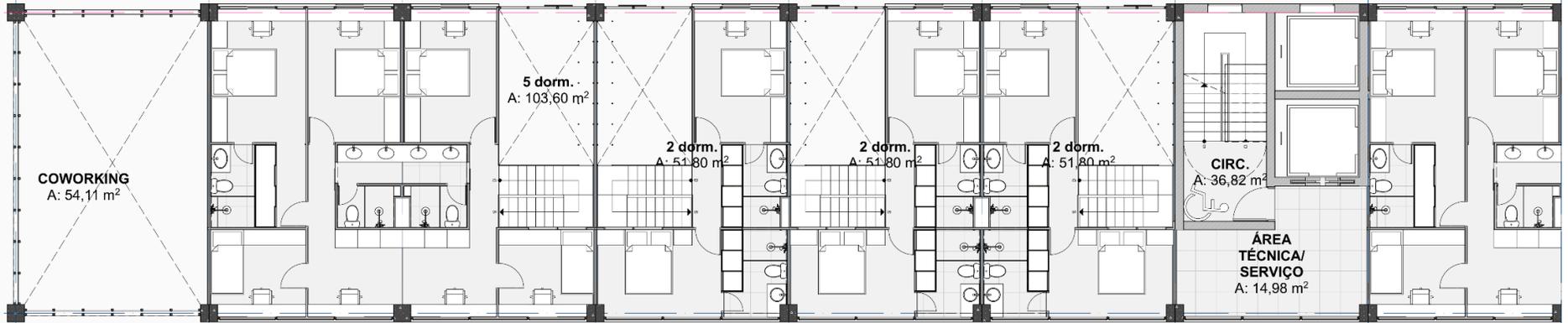


S-02

AV. IPIRANGA

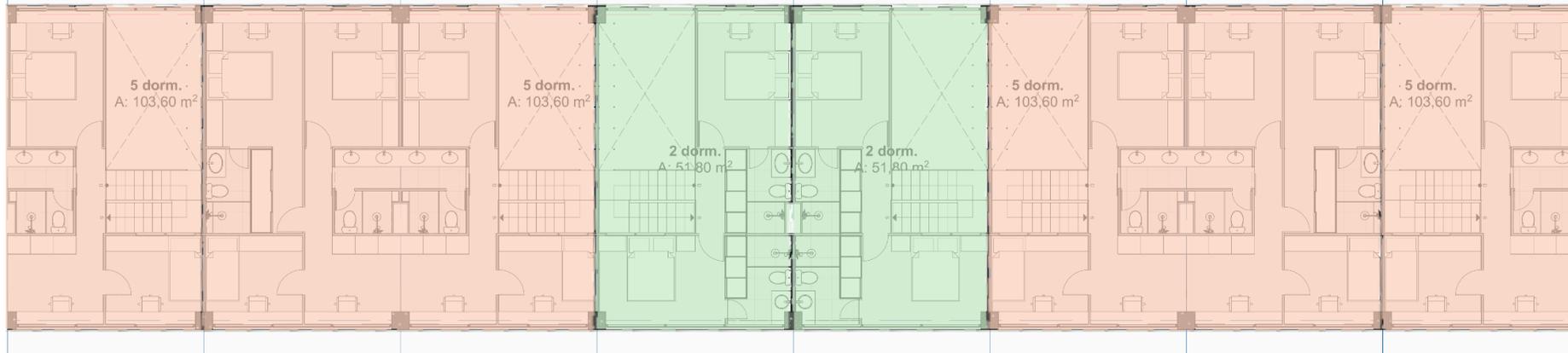
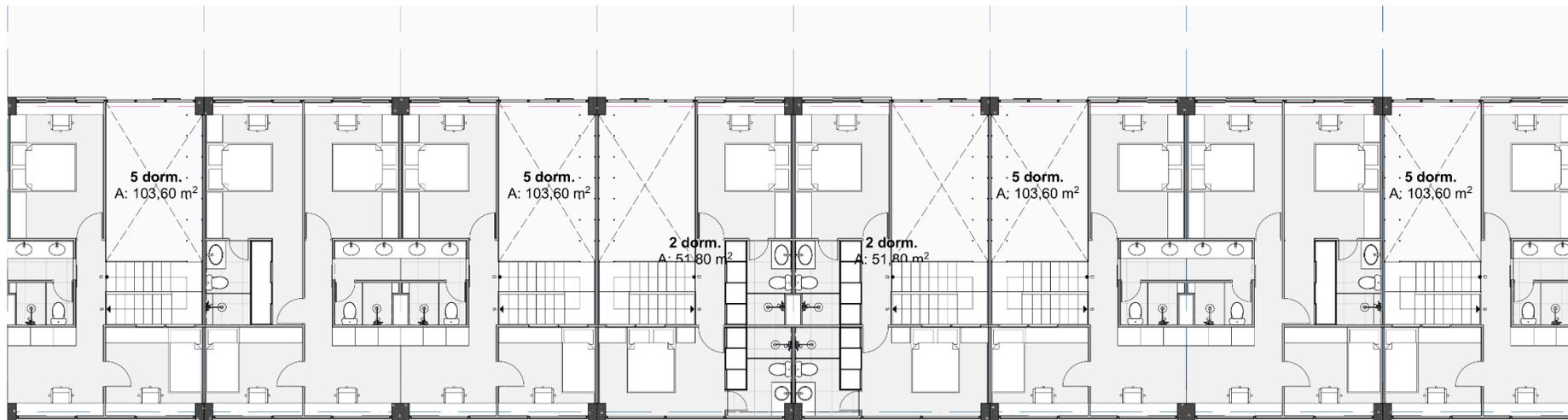


PLANTA BAIXA PAVIMENTO TIPO 2PAV:

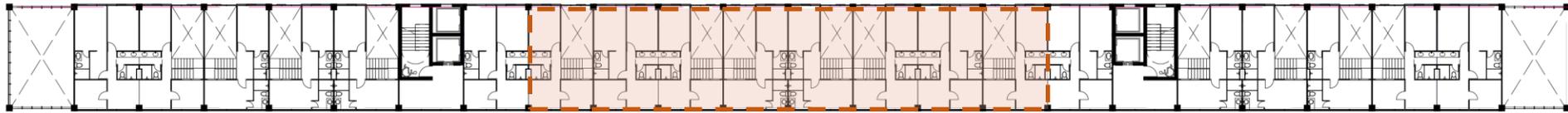


Localização

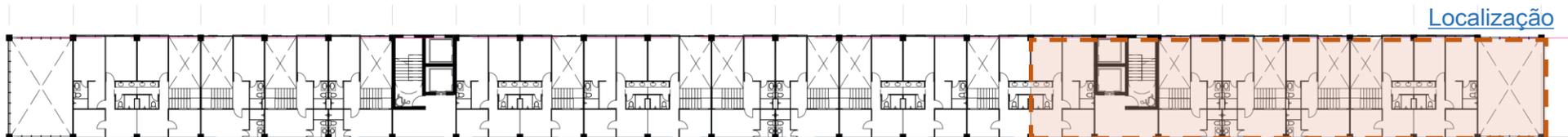
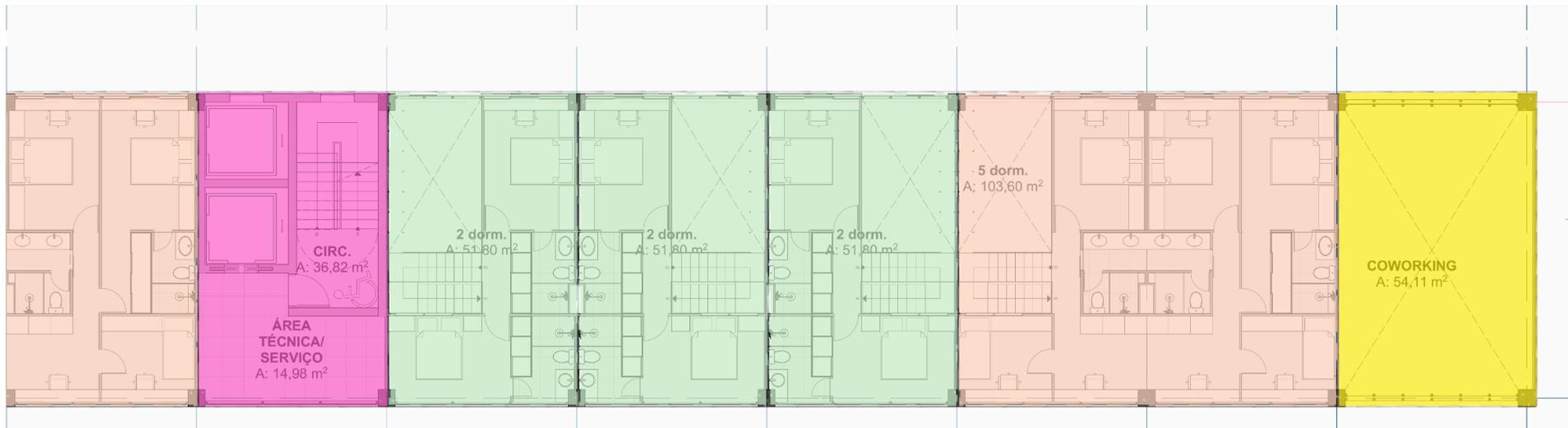
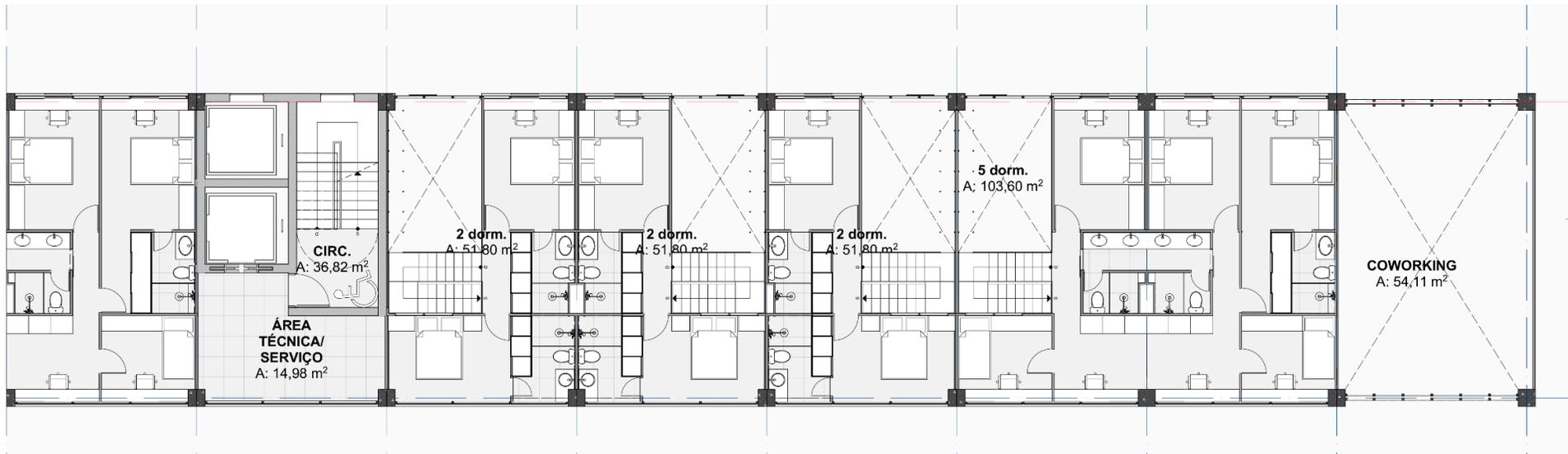
PLANTA BAIXA PAVIMENTO TIPO 2PAV:



Localização

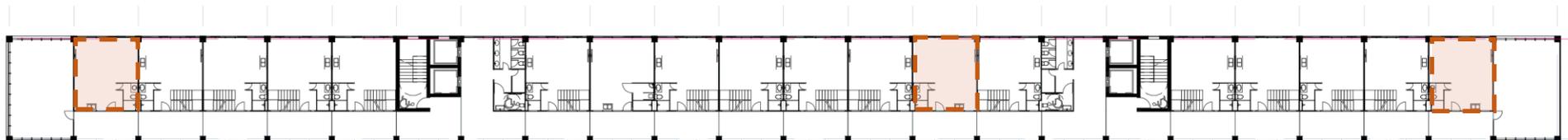
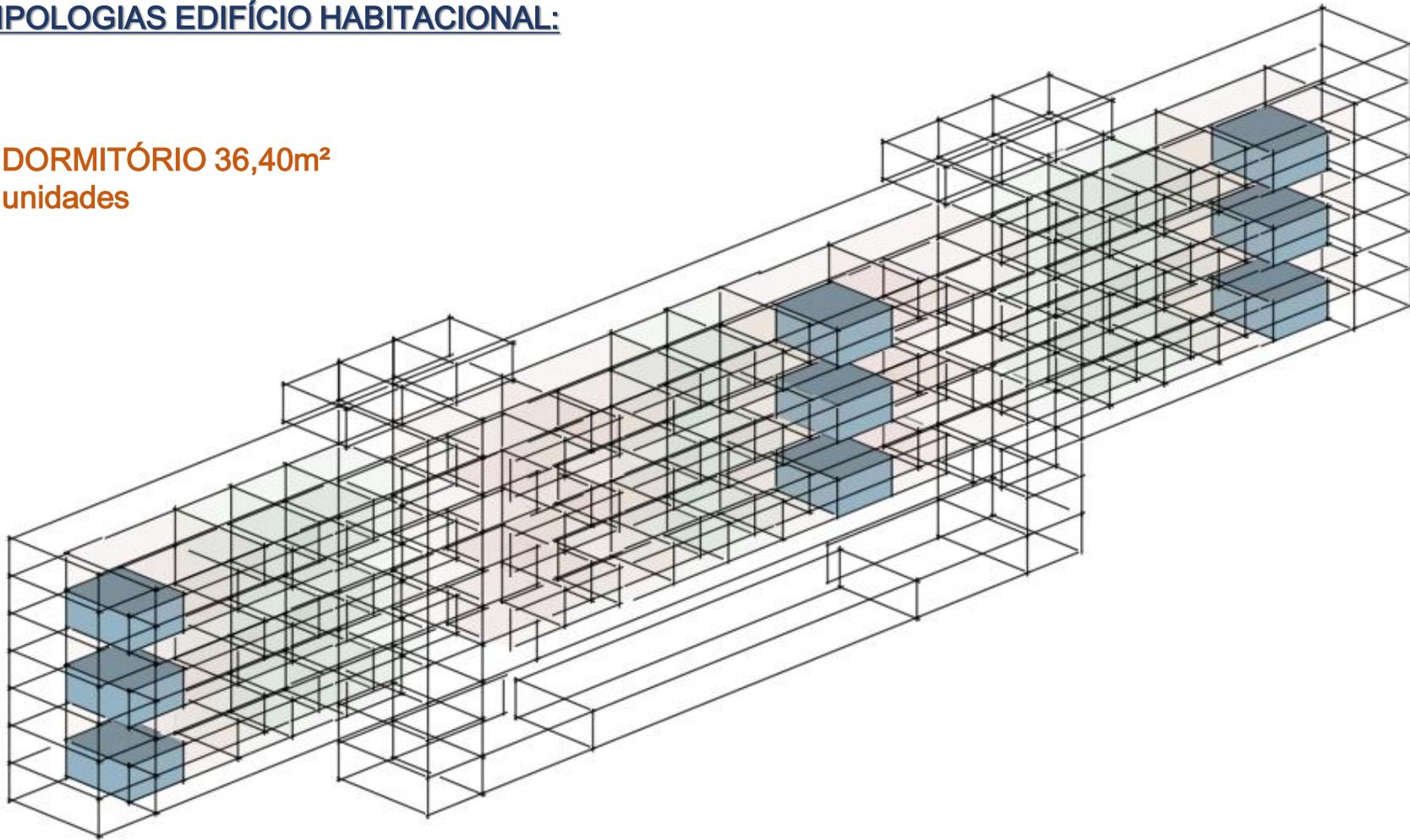
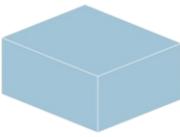


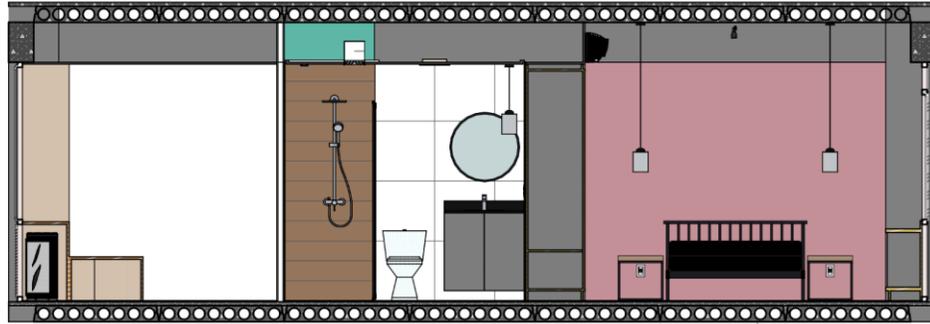
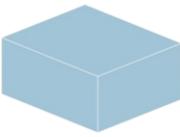
PLANTA BAIXA PAVIMENTO TIPO 2PAV: 0 2,5 m 5m



TIPOLOGIAS EDIFÍCIO HABITACIONAL:

1 DORMITÓRIO 36,40m²
9 unidades

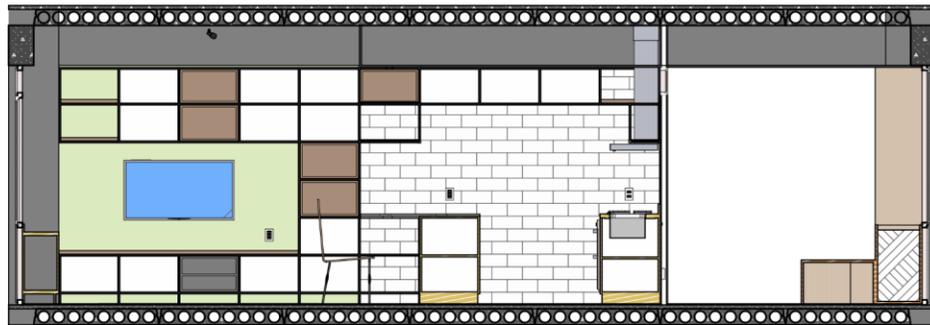




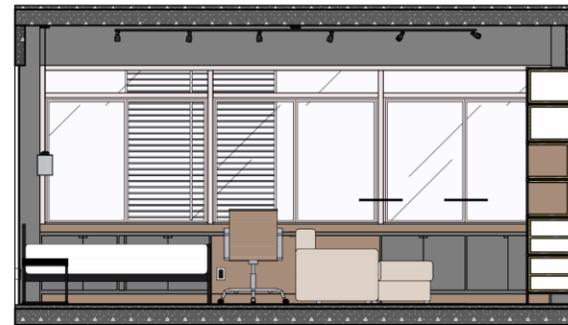
C1 — Corte



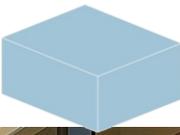
C3 — Corte

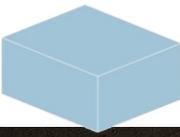


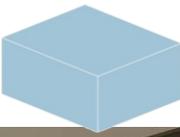
C2 — Corte



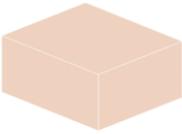
C4 — Corte



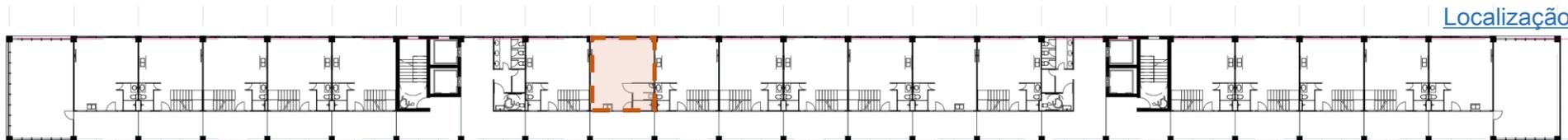
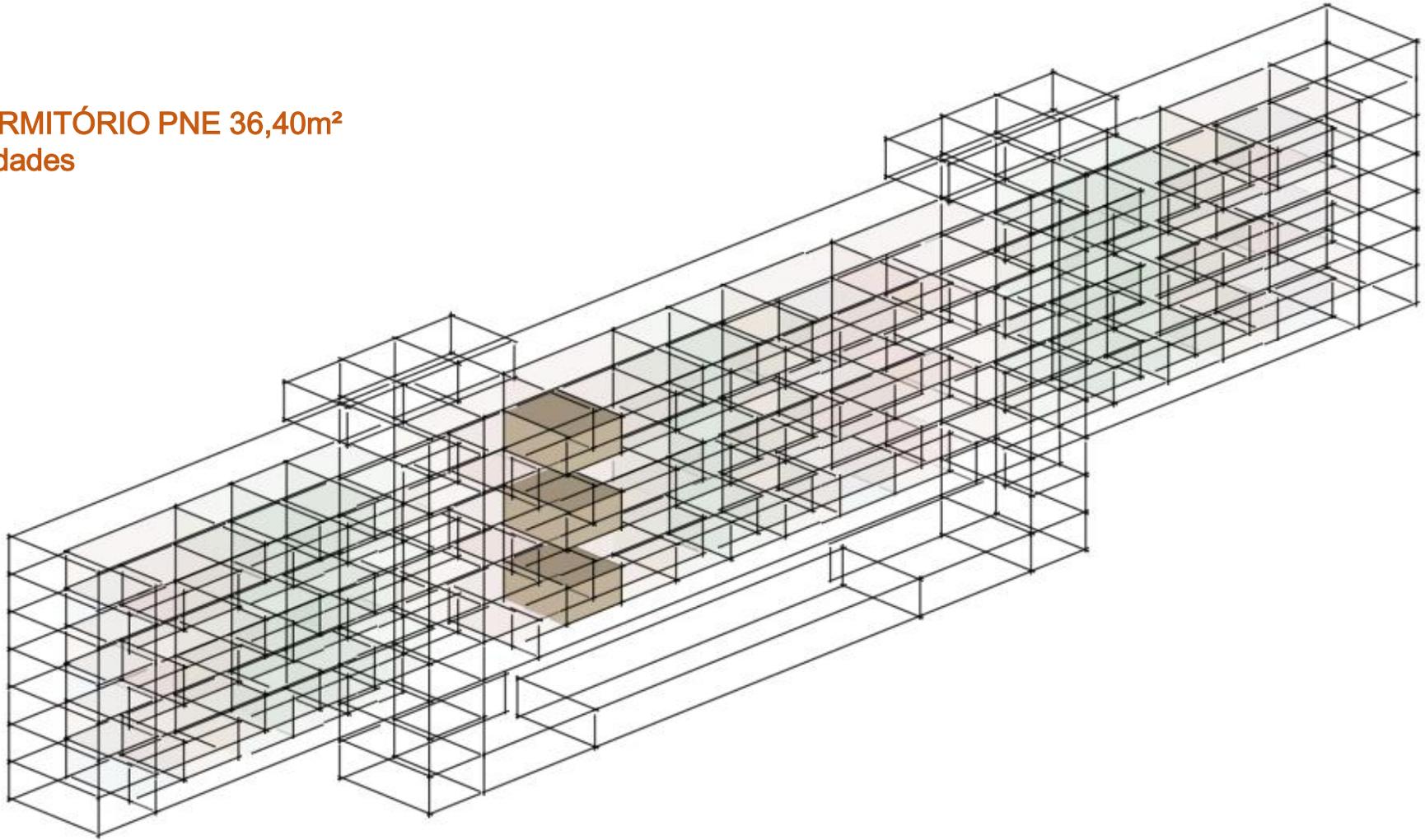




TIPOLOGIAS EDIFÍCIO HABITACIONAL:



1 DORMITÓRIO PNE 36,40m²
3 unidades

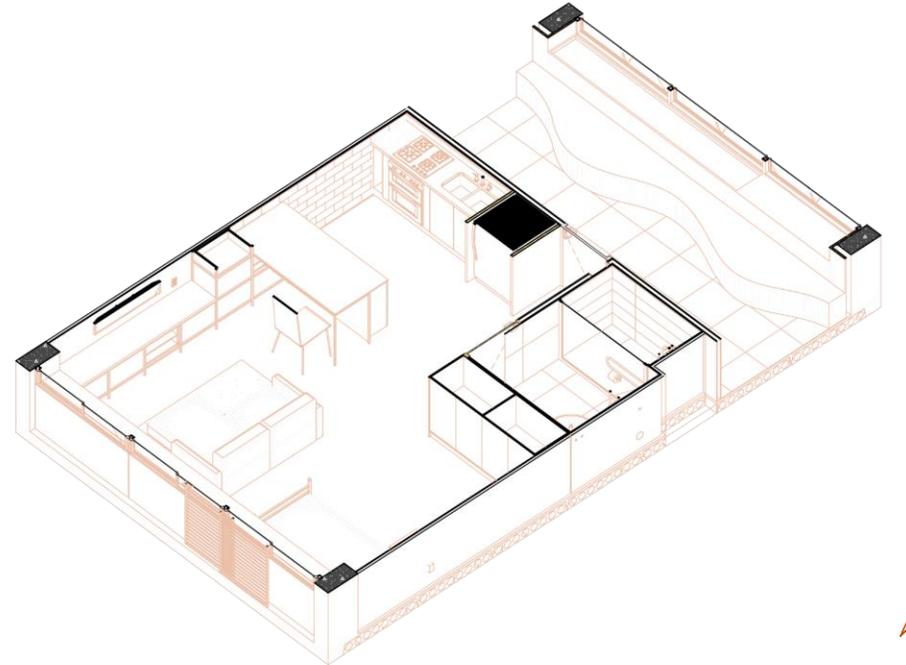
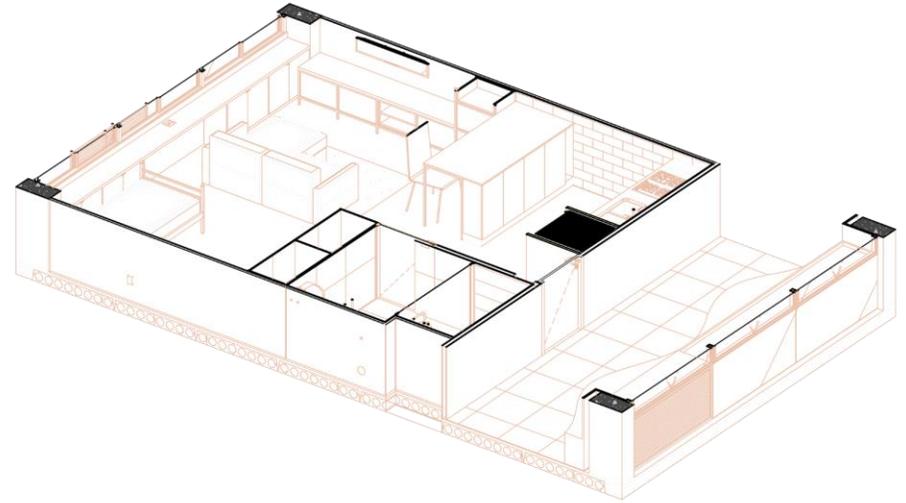
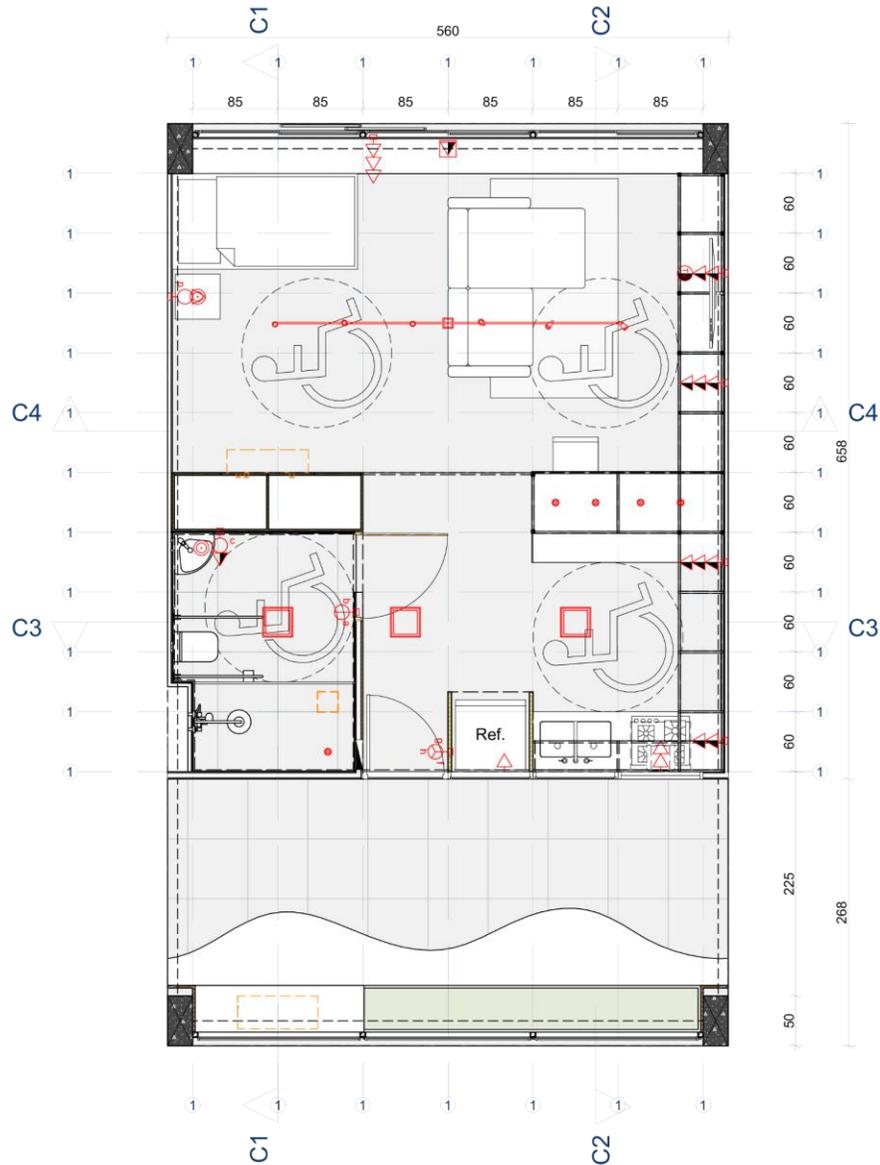
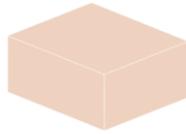


Localização

TIPOLOGIAS EDIFÍCIO HABITACIONAL:

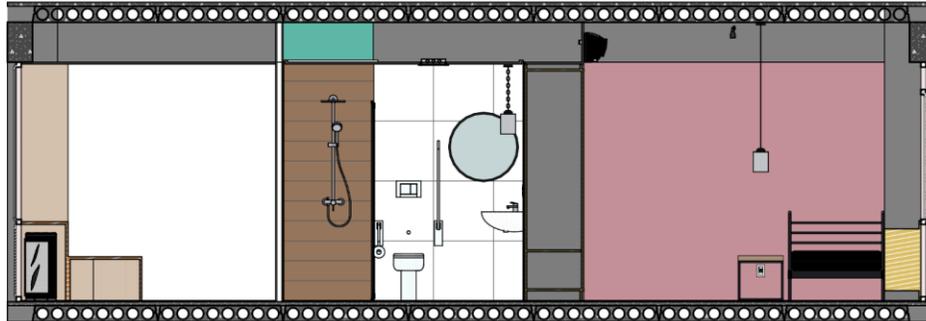
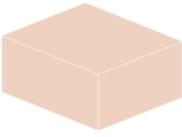


1 DORMITÓRIO PNE 36,40m²



TIPOLOGIAS EDIFÍCIO HABITACIONAL:

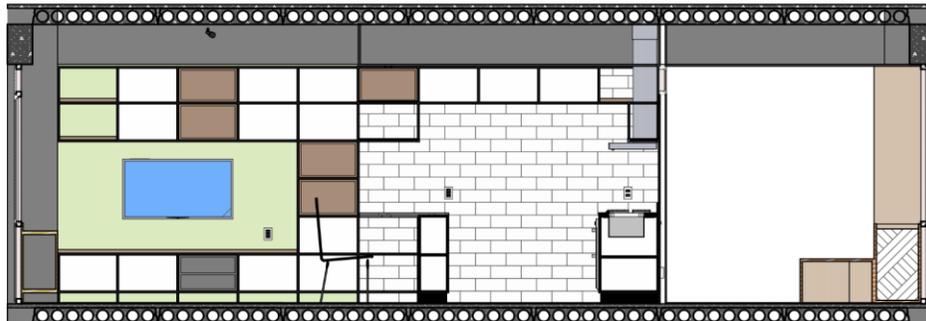
1 DORMITÓRIO PNE 36,40m²



C1 Corte



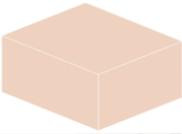
C3 Corte

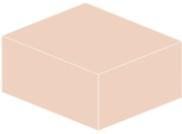


C2 Corte



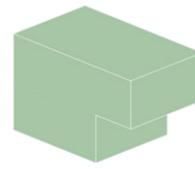
C4 Corte



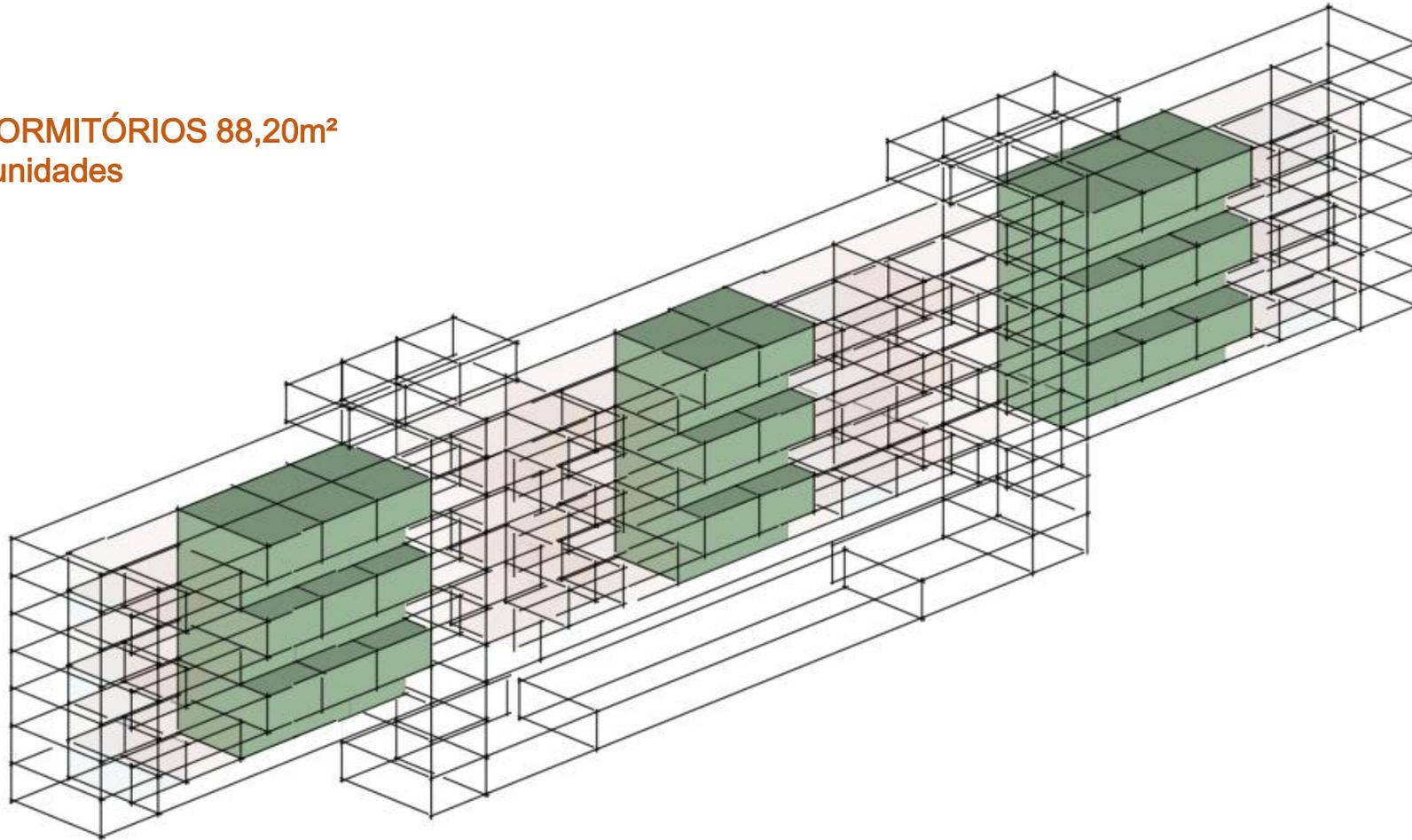


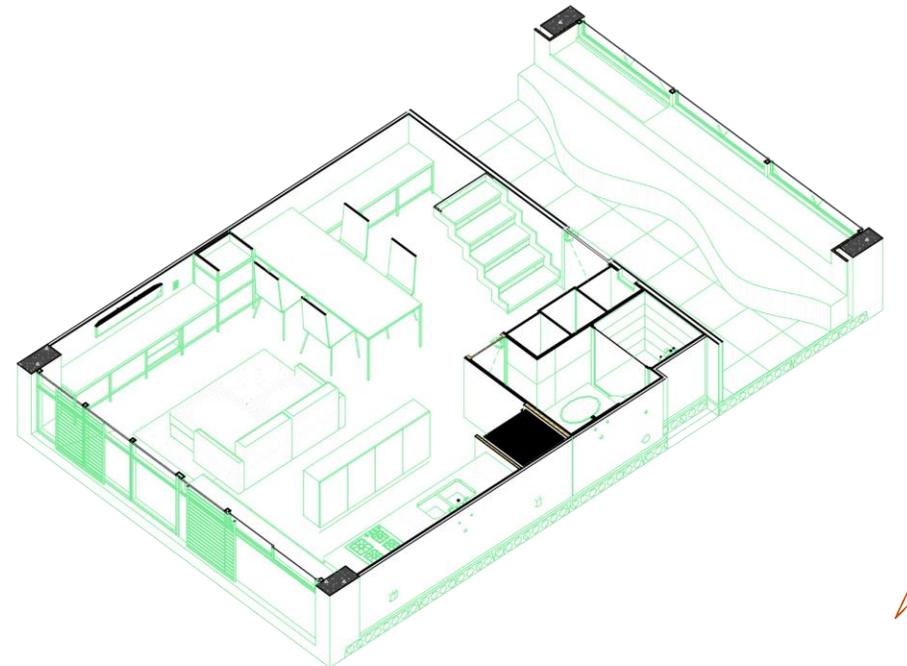
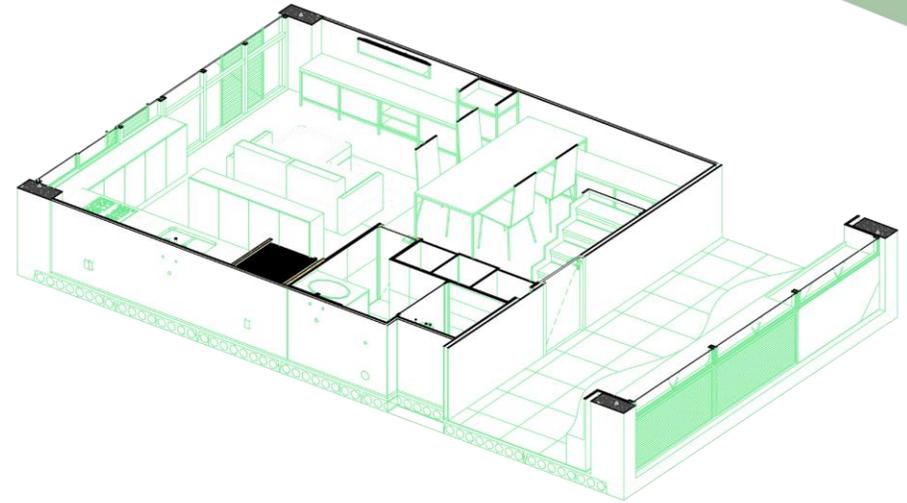
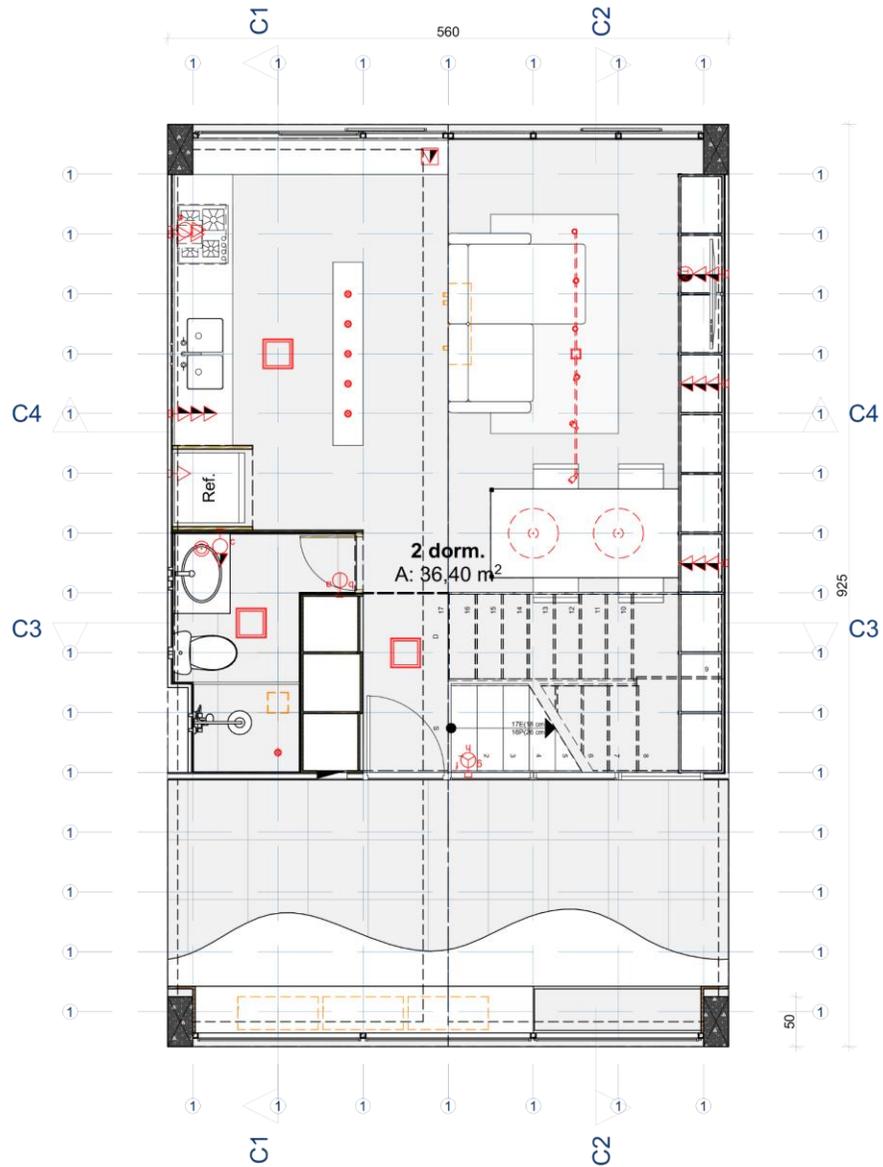
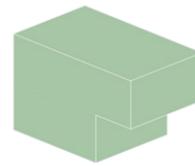
TIPOLOGIAS EDIFÍCIO HABITACIONAL:

2 DORMITÓRIOS 88,20m²



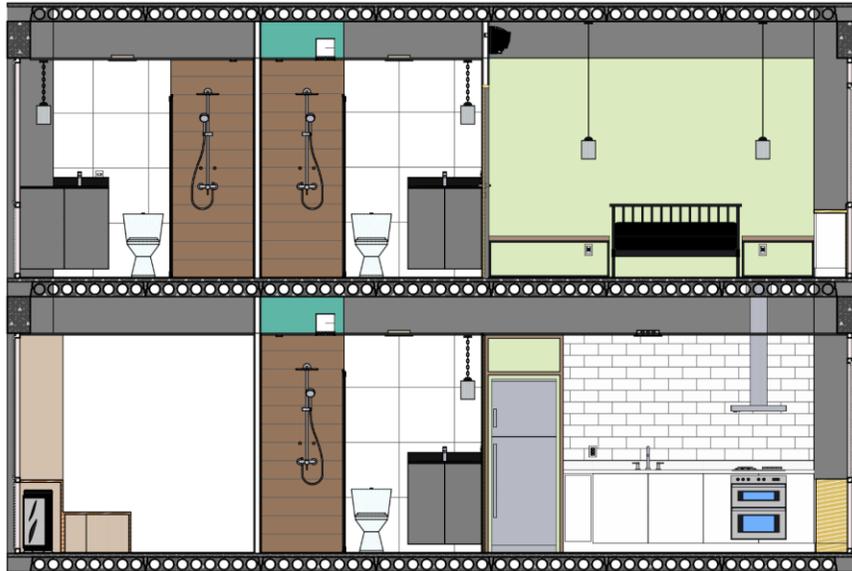
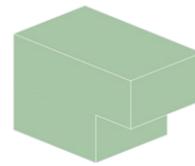
2 DORMITÓRIOS 88,20m²
24 unidades





TIPOLOGIAS EDIFÍCIO HABITACIONAL:

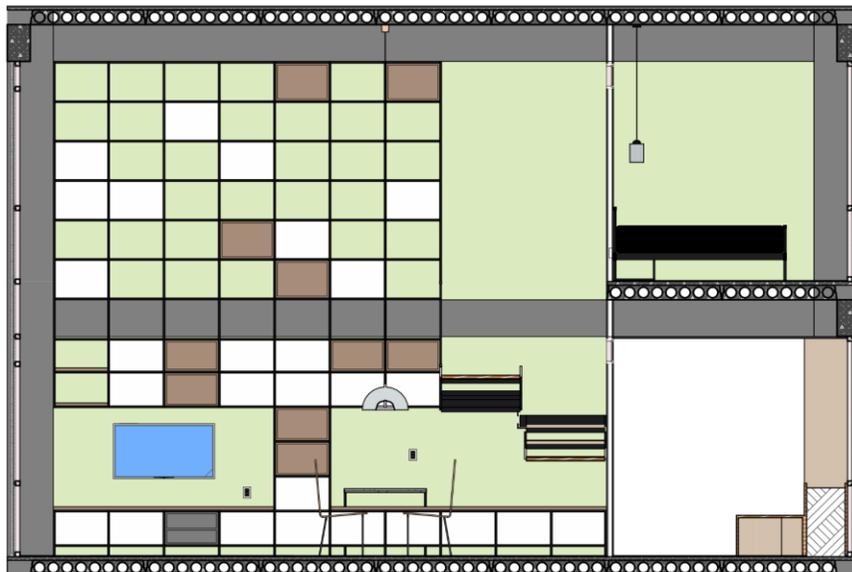
2 DORMITÓRIOS 88,20m²



C1 Corte



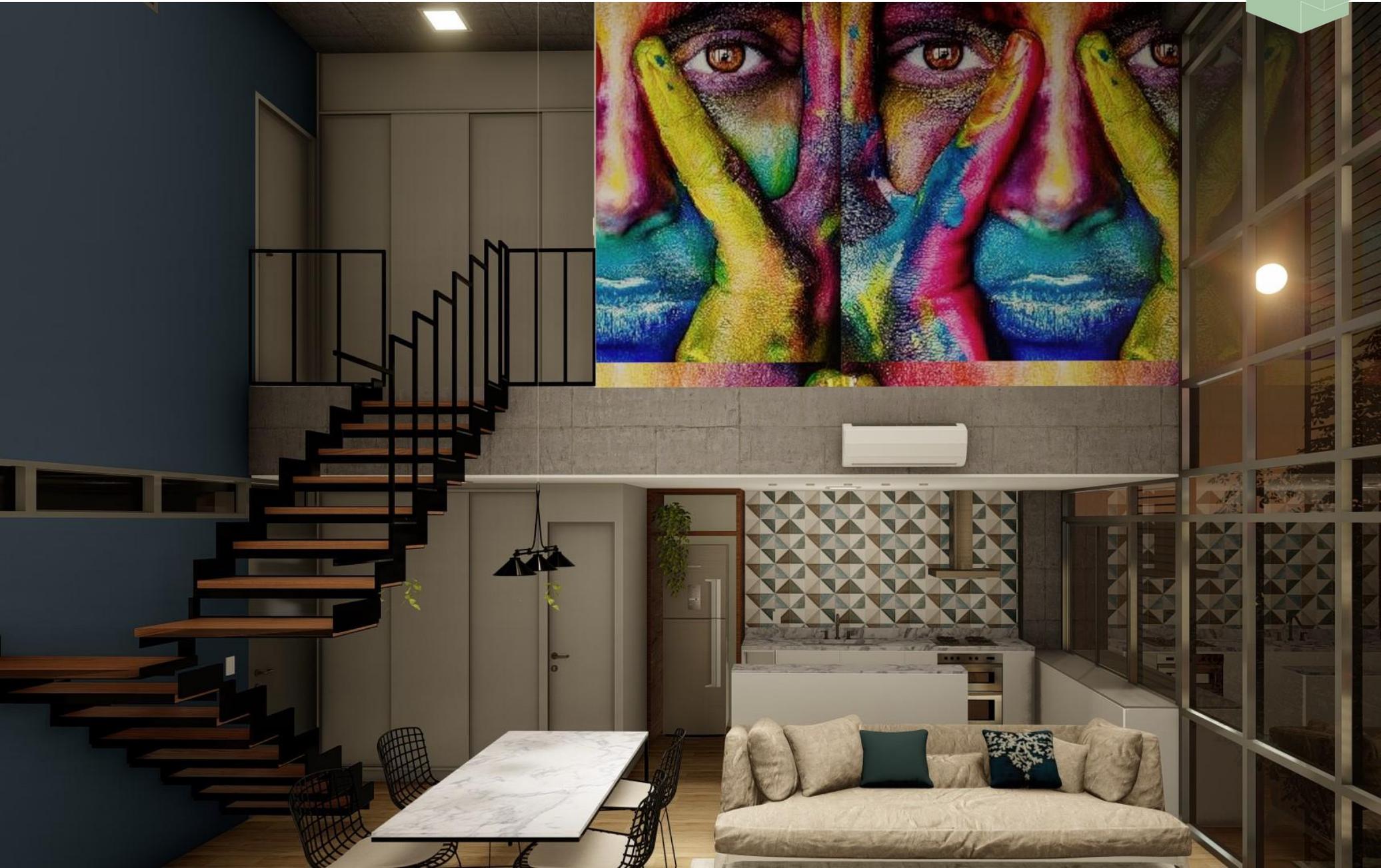
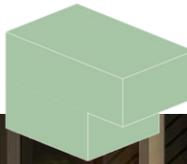
C3 Corte

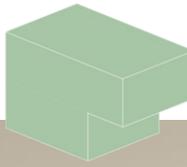


C2 Corte



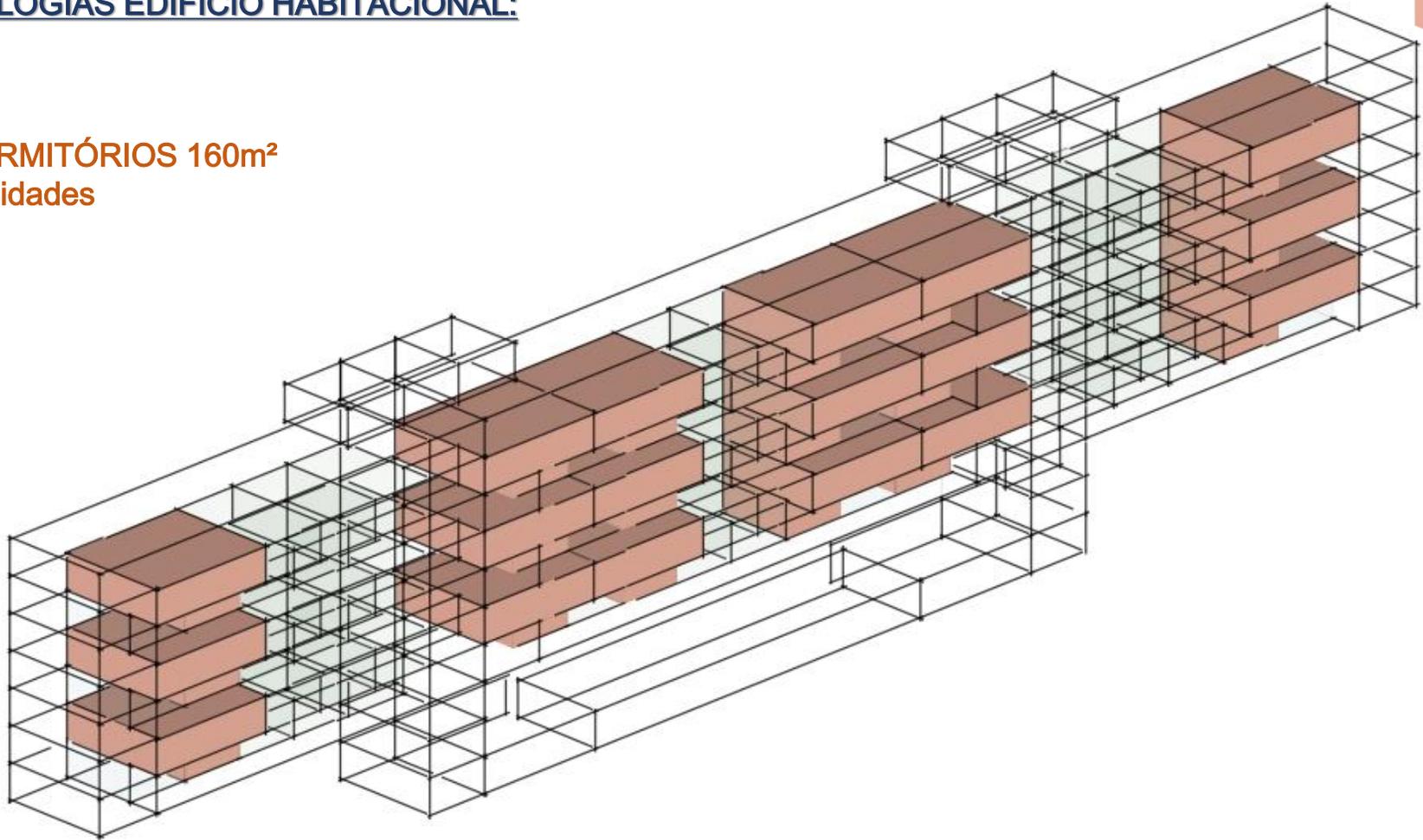
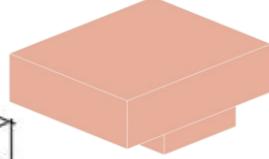
C4 Corte



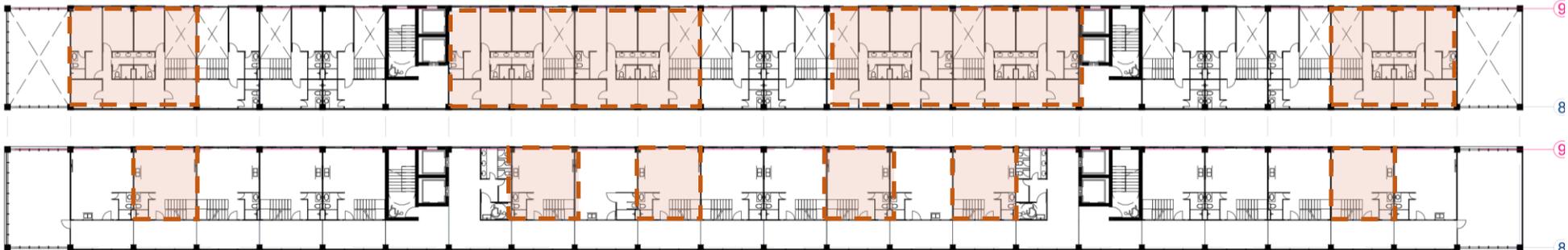


TIPOLOGIAS EDIFÍCIO HABITACIONAL:

5 DORMITÓRIOS 160m²
18 unidades



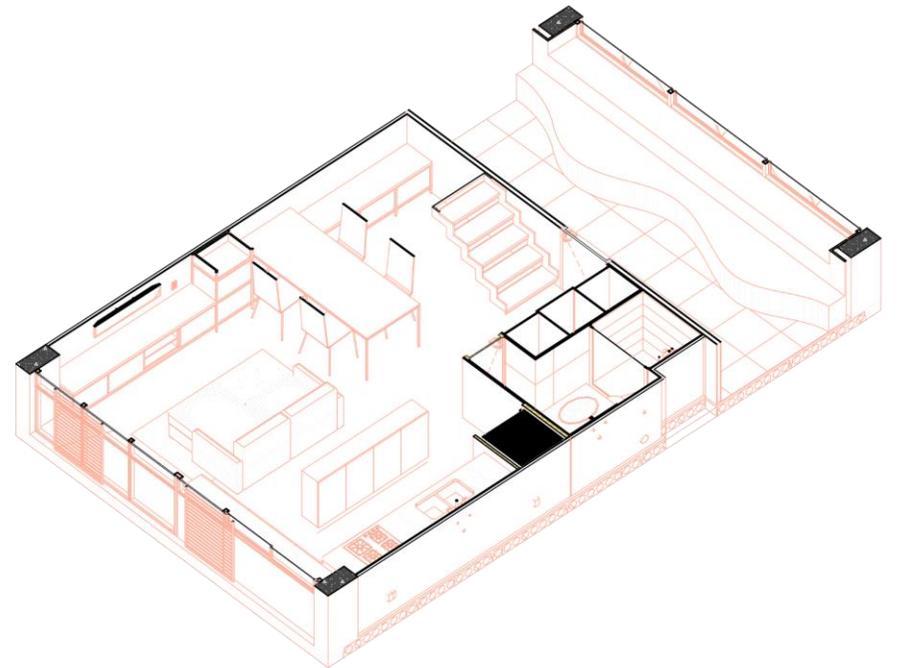
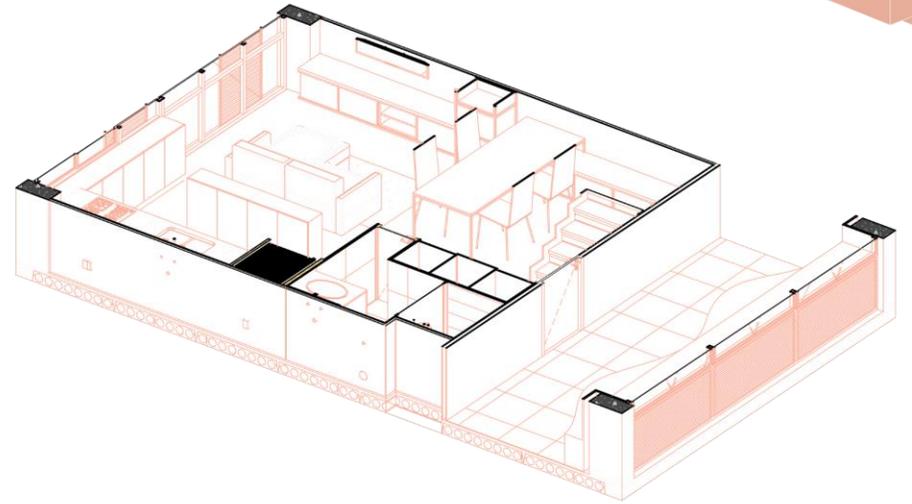
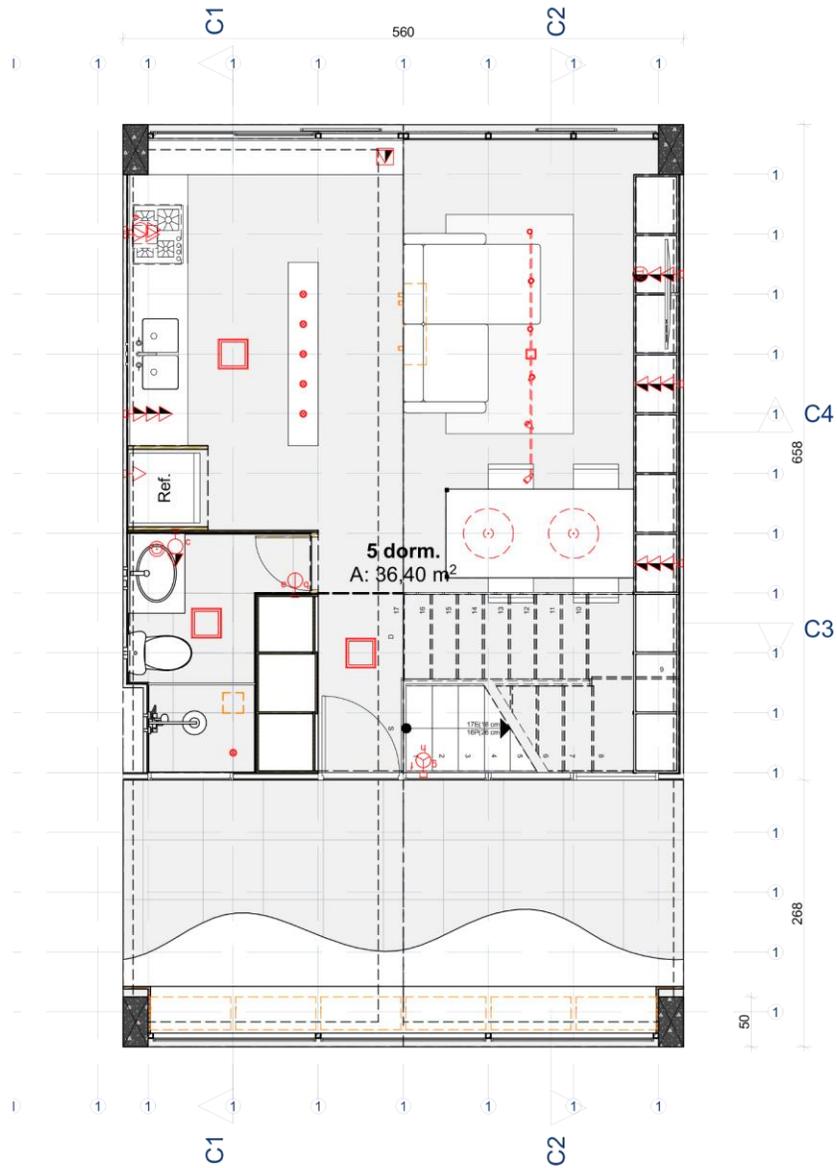
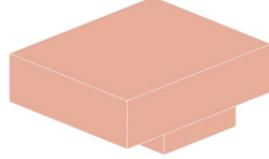
Localização



TIPOLOGIAS EDIFÍCIO HABITACIONAL:



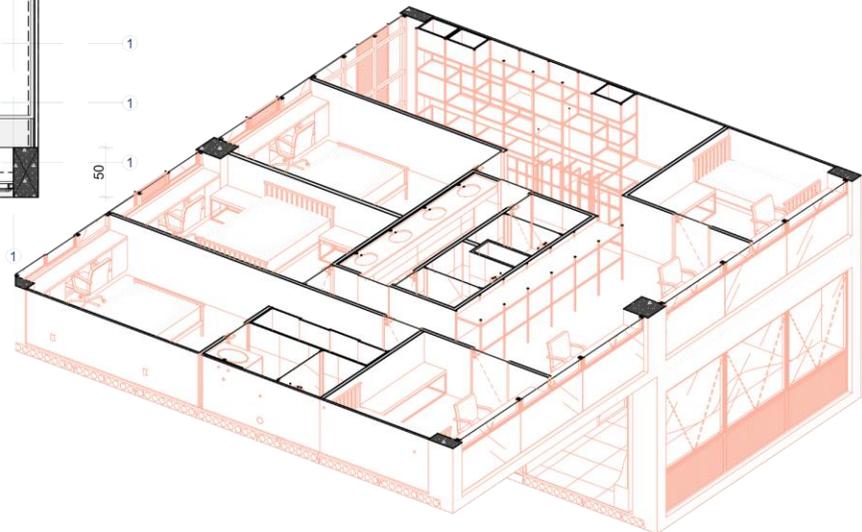
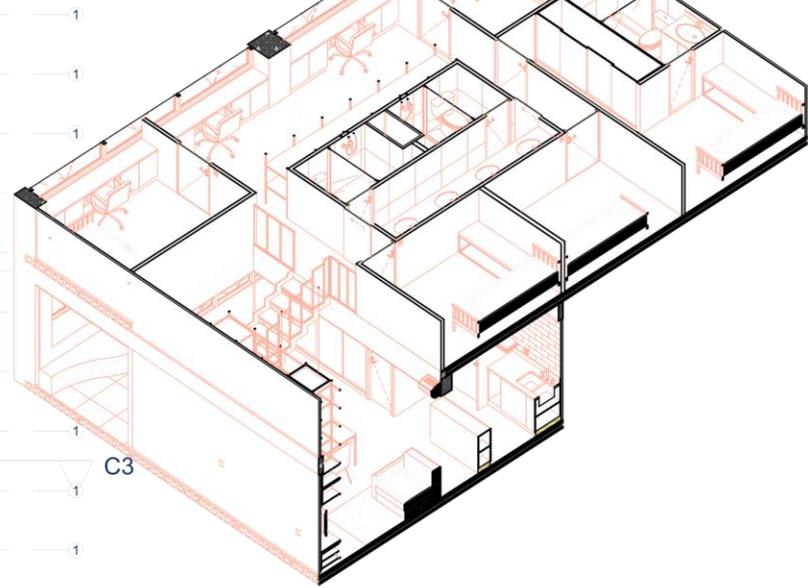
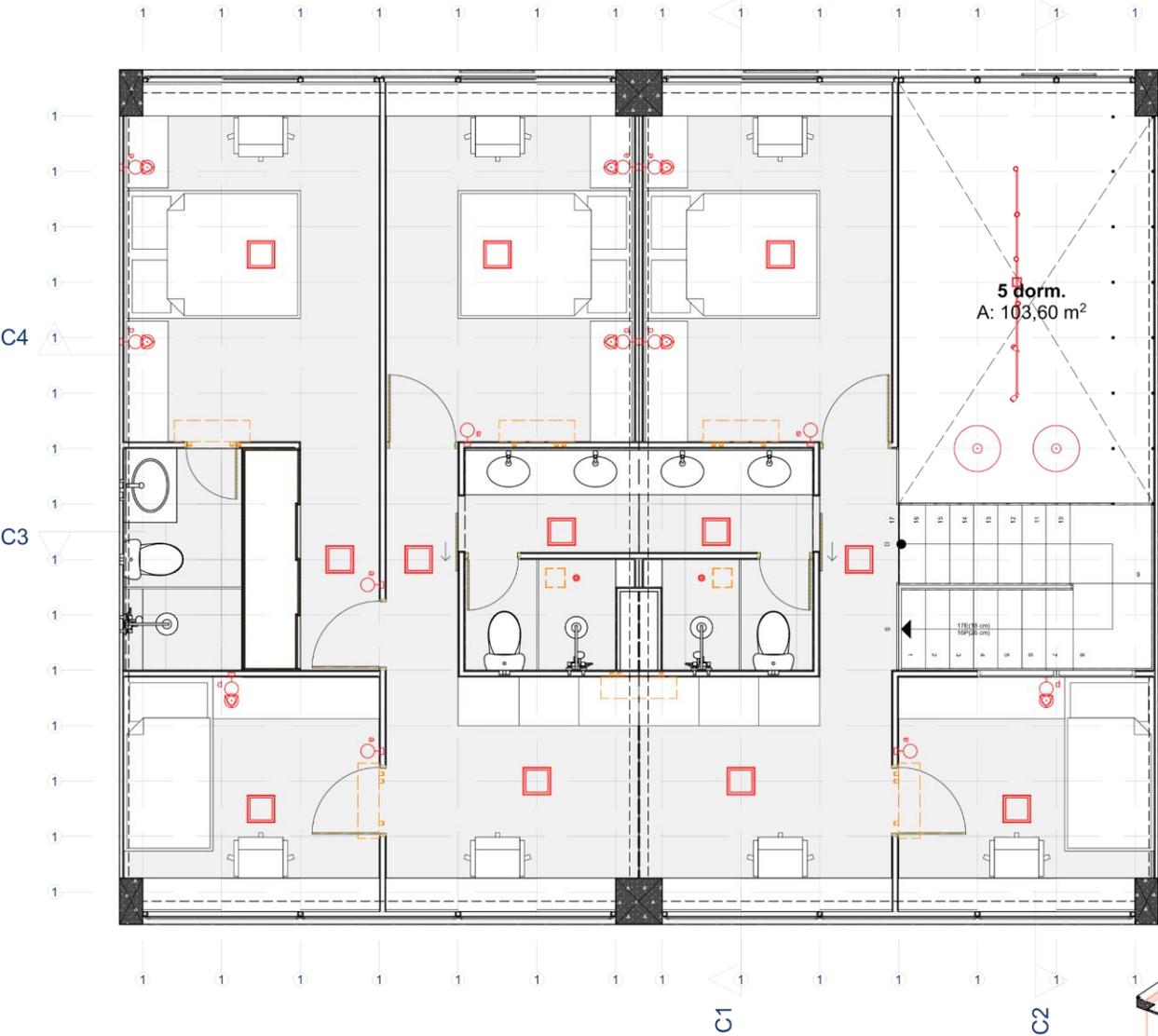
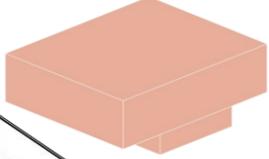
5 DORMITÓRIOS 160m²

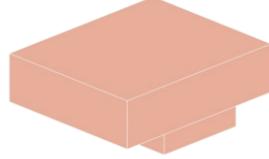


TIPOLOGIAS EDIFÍCIO HABITACIONAL:



5 DORMITÓRIOS 160m²

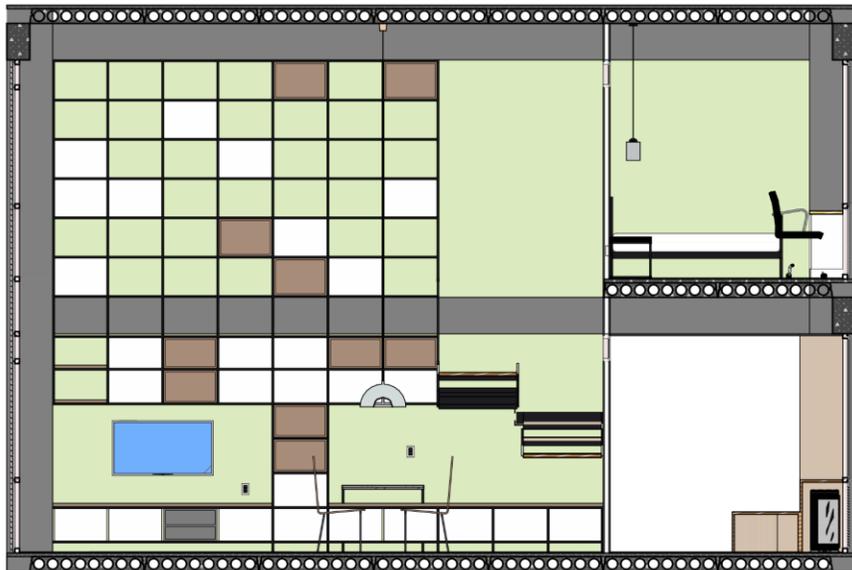




C1 — **Corte**



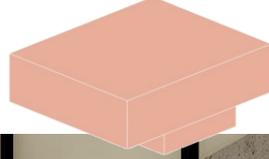
C3 — **Corte**

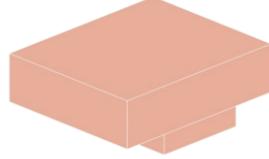


C2 — **Corte**



C4 — **Corte**





PLANTA BAIXA TERRAÇO:



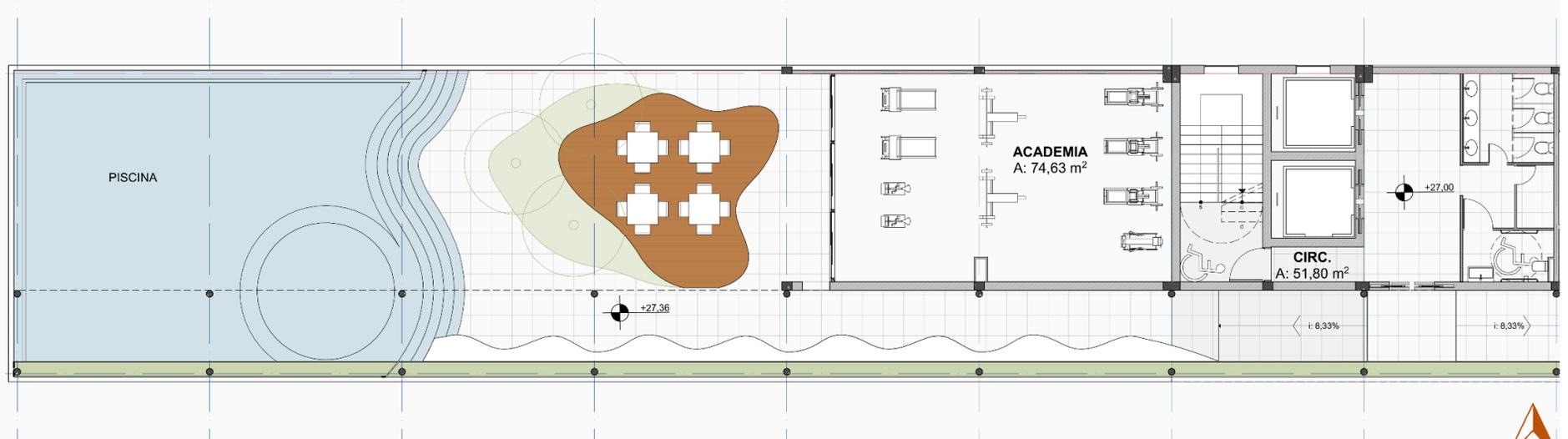
R. FELIPE DE OLIVEIRA

R. SILVA SÓ

AV. IPIRANGA



PLANTA BAIXA TERRAÇO:

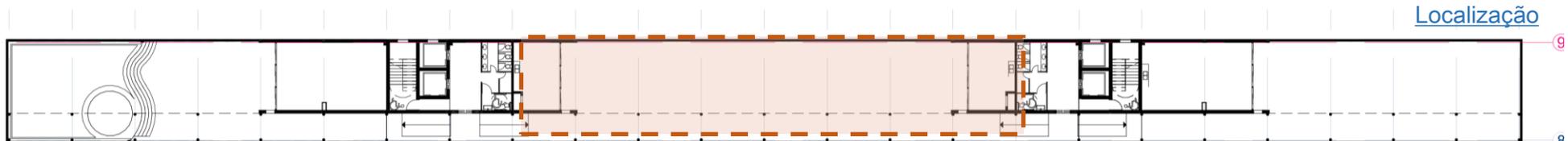
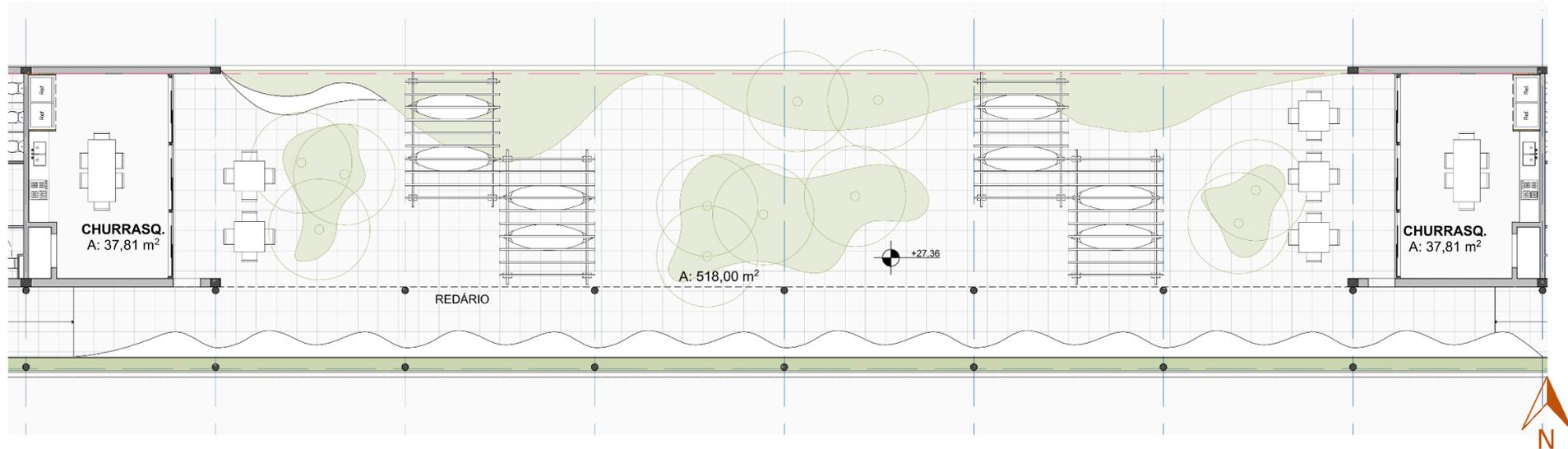


Localização



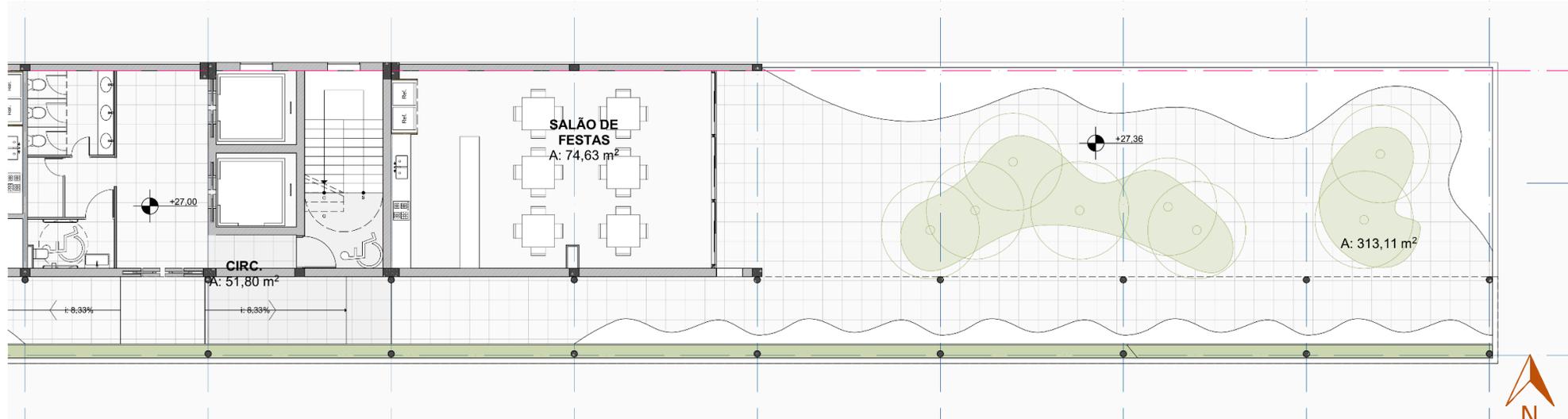


PLANTA BAIXA TERRAÇO: 0 2,5 m 5m

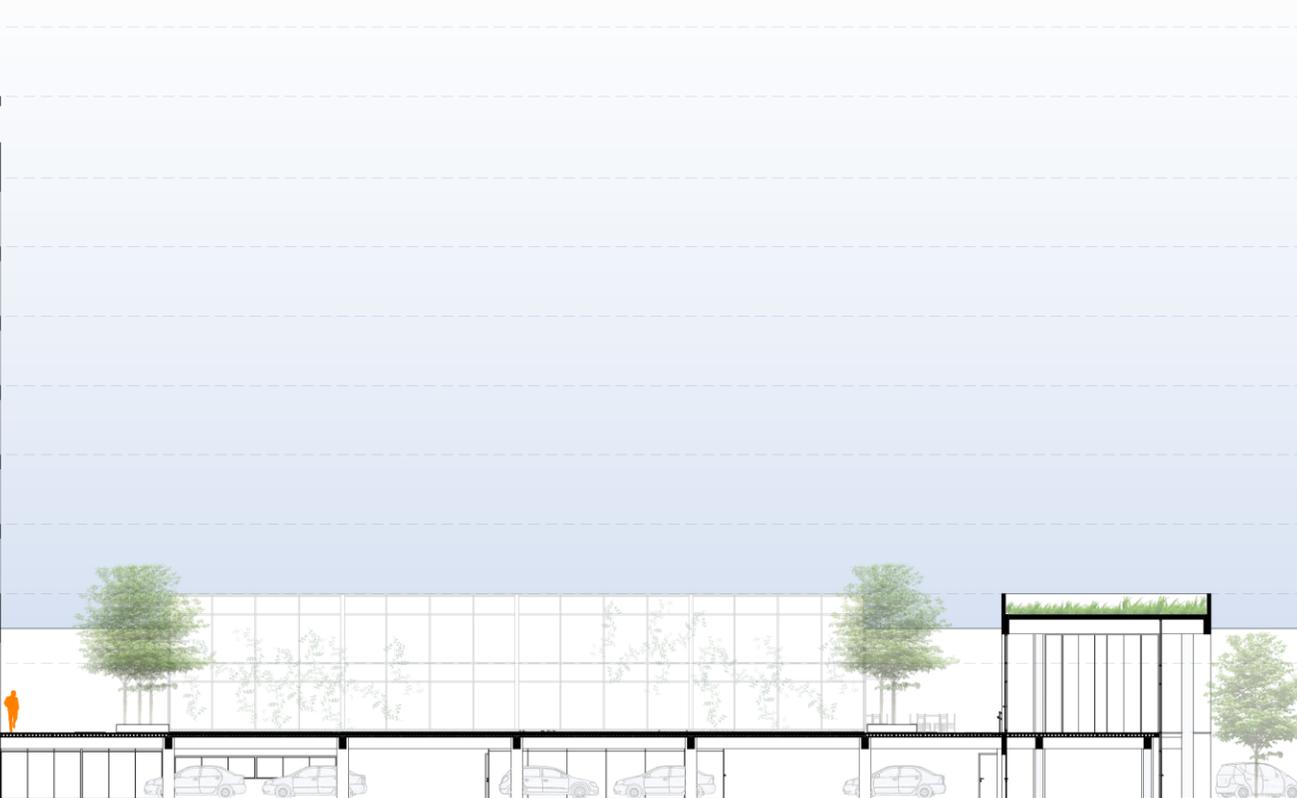
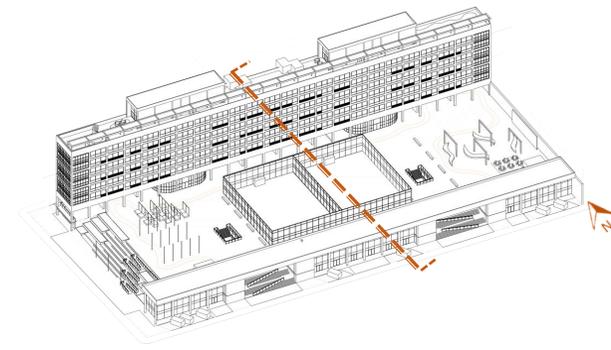




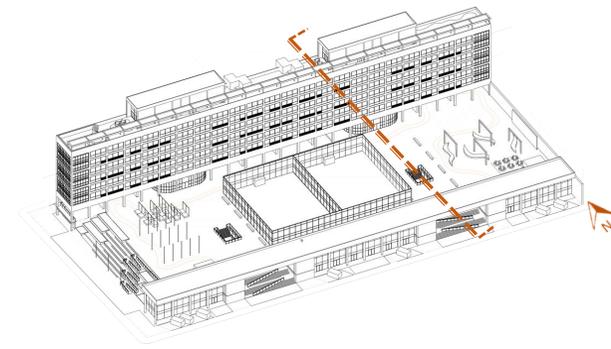
PLANTA BAIXA TERRAÇO:

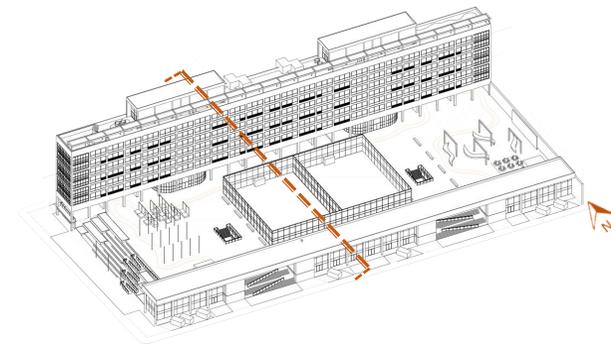


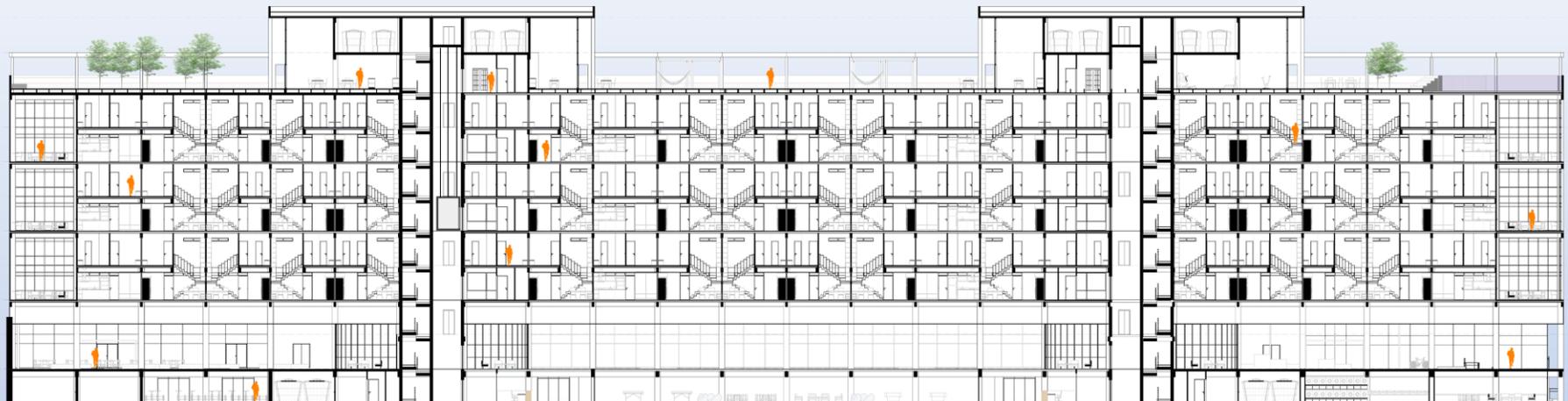
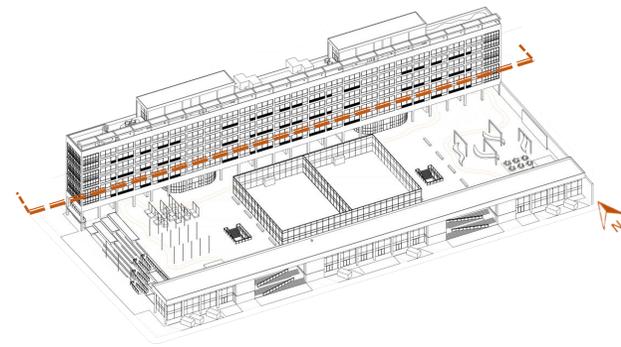




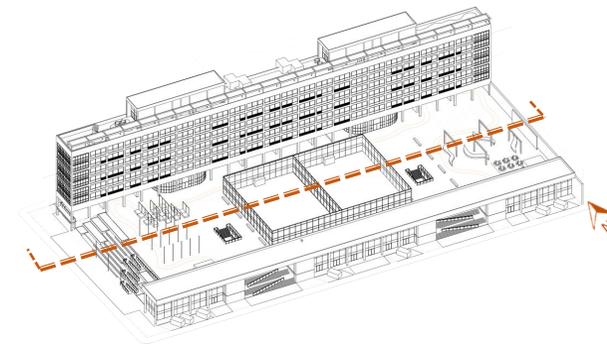
- +33,50
11 Piso
- +30,50
10 Piso
- +27,00
9 Nono Pavimento terraço
- +24,00
8 Oitavo Pavimento
- +21,00
7 Sétimo Pavimento
- +18,00
6 Sexto Pavimento
- +15,00
5 Quinto Pavimento
- +12,00
4 Quarto Pavimento
- +9,00
3 Terceiro Pavimento
- +6,00
2 Segundo Pavimento
- +3,00
1 Primeiro Pavimento
- +0,00
0 Pavimento Térreo







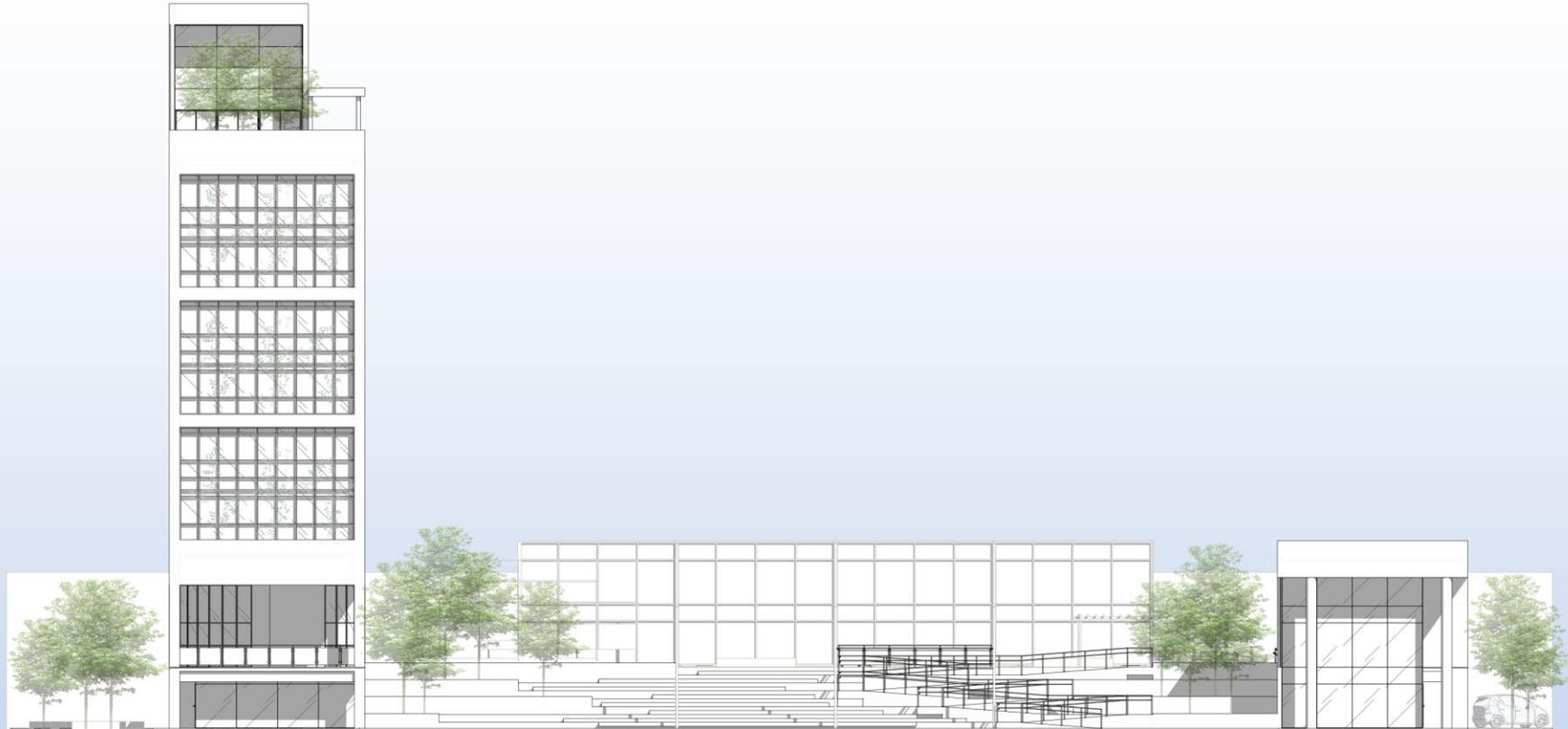
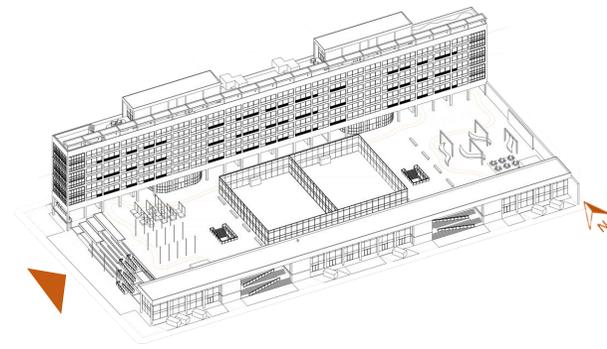
- +33,90 11 Piso
- +30,90 10 Piso
- +27,00 9 Nono Pavimento terraza
- +24,00 8 Oitavo Pavimento
- +21,00 7 Setimo Pavimento
- +18,00 6 Sexto Pavimento
- +15,00 5 Quinto Pavimento
- +12,00 4 Quarto Pavimento
- +9,00 3 Terceiro Pavimento
- +6,00 2 Segundo Pavimento
- +3,00 1 Primeiro Pavimento
- +0,00 0 Pavimento Terreo



- +33.50 11 Piso
- +30.50 10 Piso
- +27.00 9 Nível Pavimento terraço
- +24.00 8 Oitavo Pavimento
- +21.00 7 Sétimo Pavimento
- +18.00 6 Sexto Pavimento
- +15.00 5 Quinto Pavimento
- +12.00 4 Quarto Pavimento
- +9.00 3 Terceiro Pavimento
- +6.00 2 Segundo Pavimento
- +3.00 1 Primeiro Pavimento
- 0.00 0 Pavimento 16mo

ELEVAÇÃO

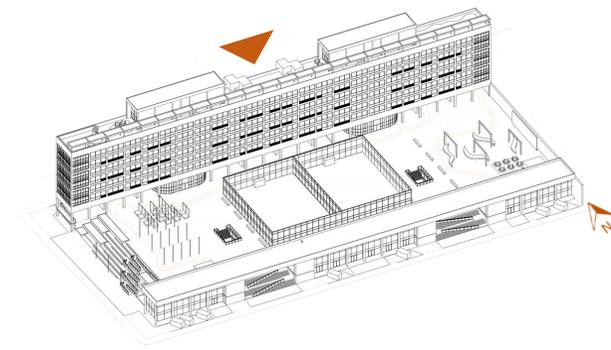
0 3 m 6m



FACHADA OESTE

ELEVAÇÃO

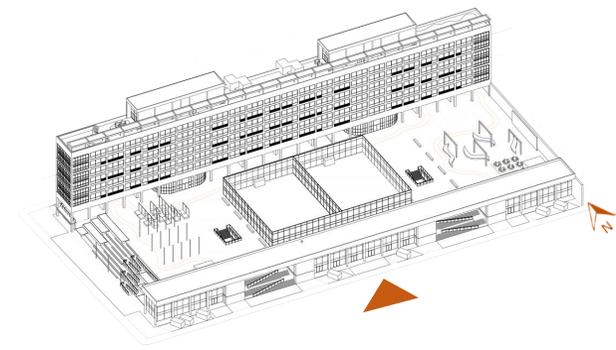
0 3 m 6m



FACHADA SUL

ELEVAÇÃO

0 3 m 6m



FACHADA NORTE

MATERIALIDADE

- Concreto aparente
- Tijolo
- Brise metálico
- Vidro
- Placas de Acm



ESTRUTURA

SISTEMA CONSTRUTIVO:

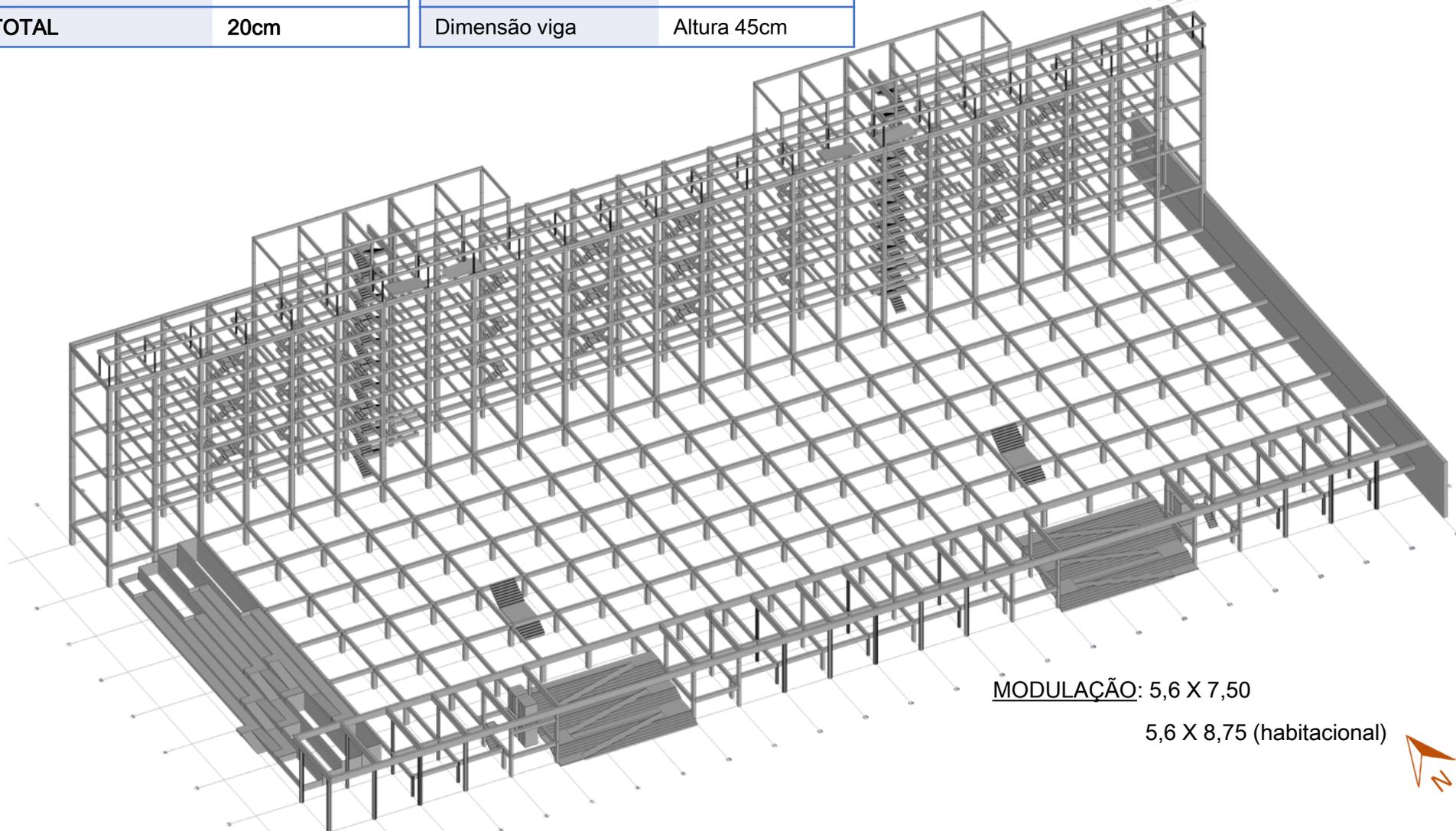
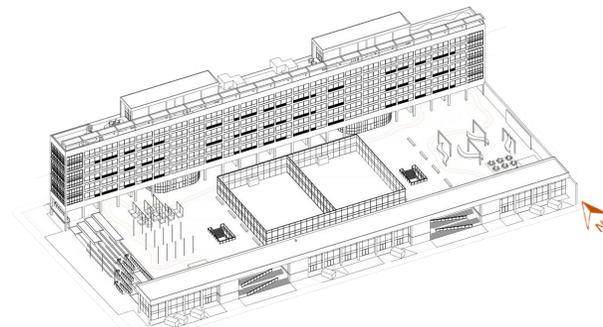
LAJE PRÉ FABRICADA – ALVEOLAR

Vão máximo	5,6m X 8,75m
Espessura da laje	16cm
Capecamento	4cm
TOTAL	20cm

PILAR DE CONCRETO ARMADO

VIGA DE CONCRETO PROTENDIDO

Vão máximo	5,6m X 8,75cm
Dimensão pilar	55cm X 55cm
Dimensão viga	Altura 45cm



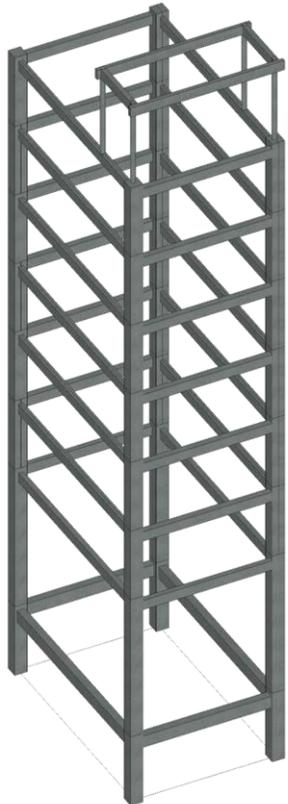
MODULAÇÃO: 5,6 X 7,50

5,6 X 8,75 (habitacional)

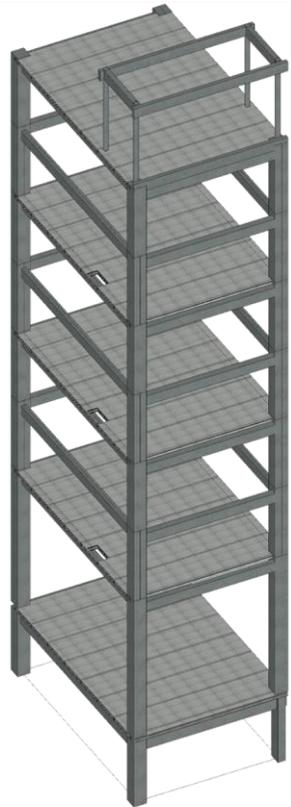


MÓDULO ESTRUTURAL

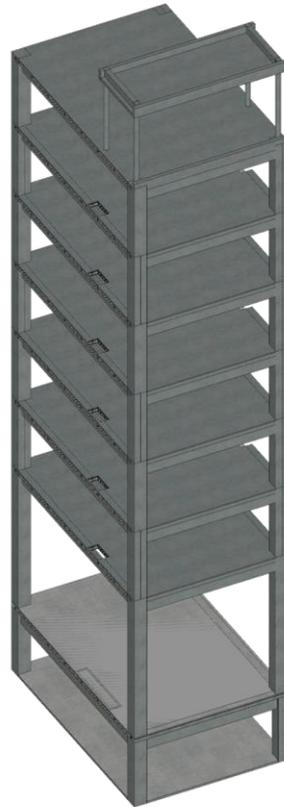
- Viga e pilar



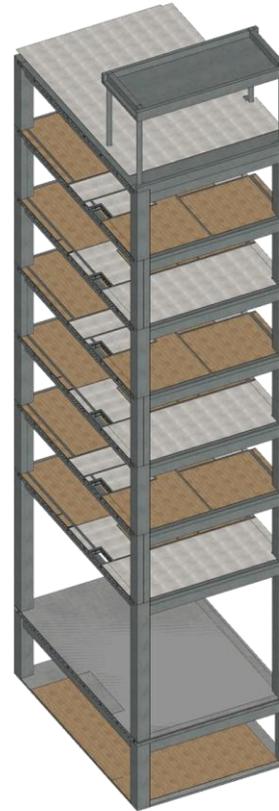
- Laje alveolar



- Capeamento

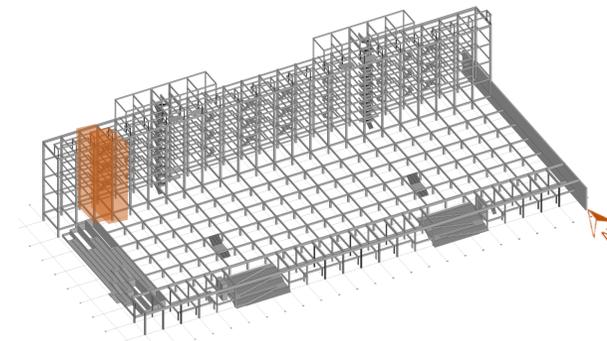
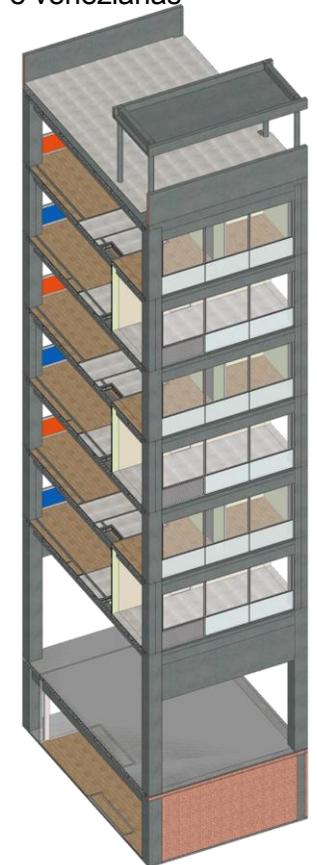


- Piso vinílico e porcelanato
- Terraço : piso elevado

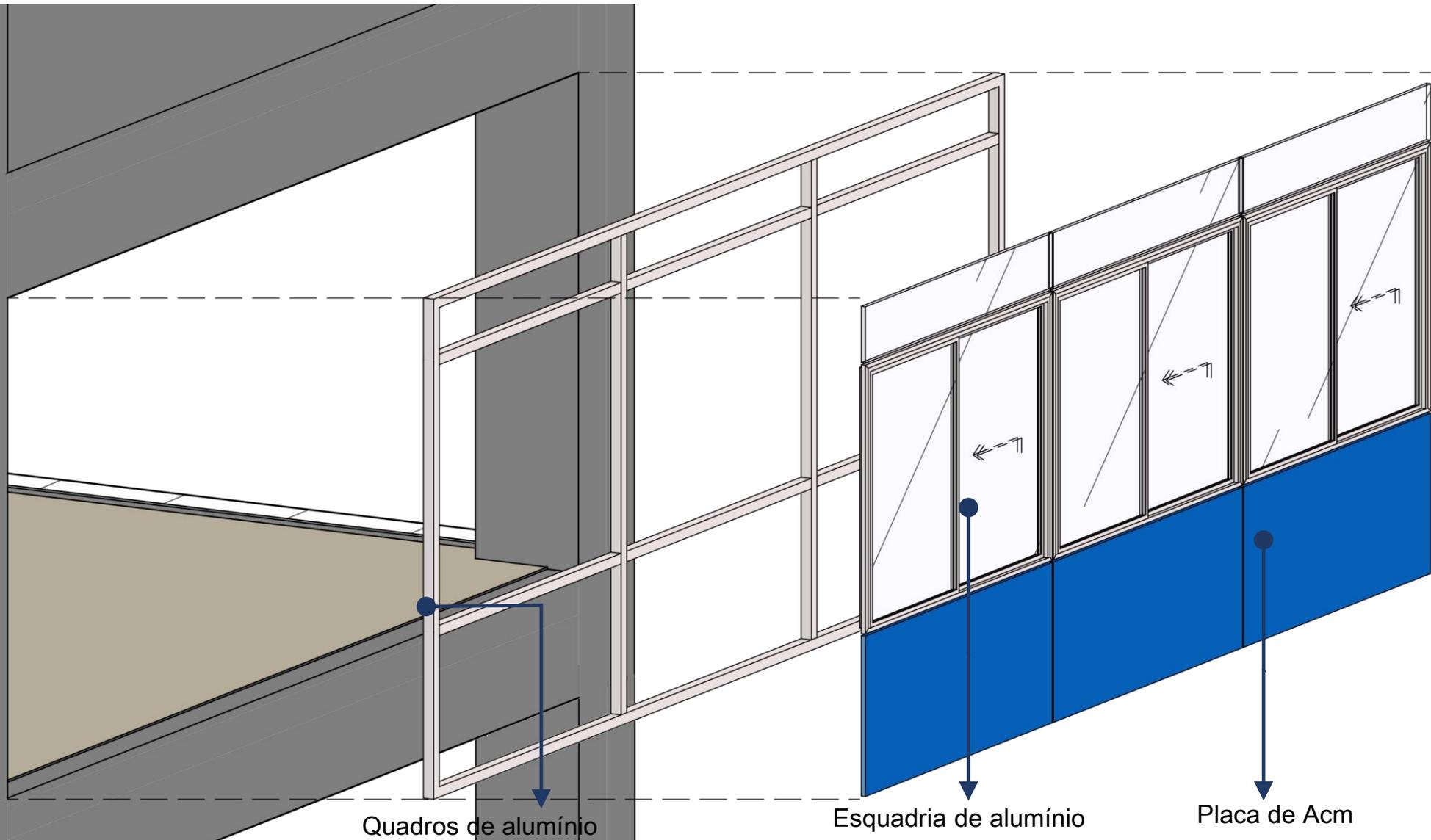


Quadros de alumínio:

- Janelas, placas de acm e venezianas

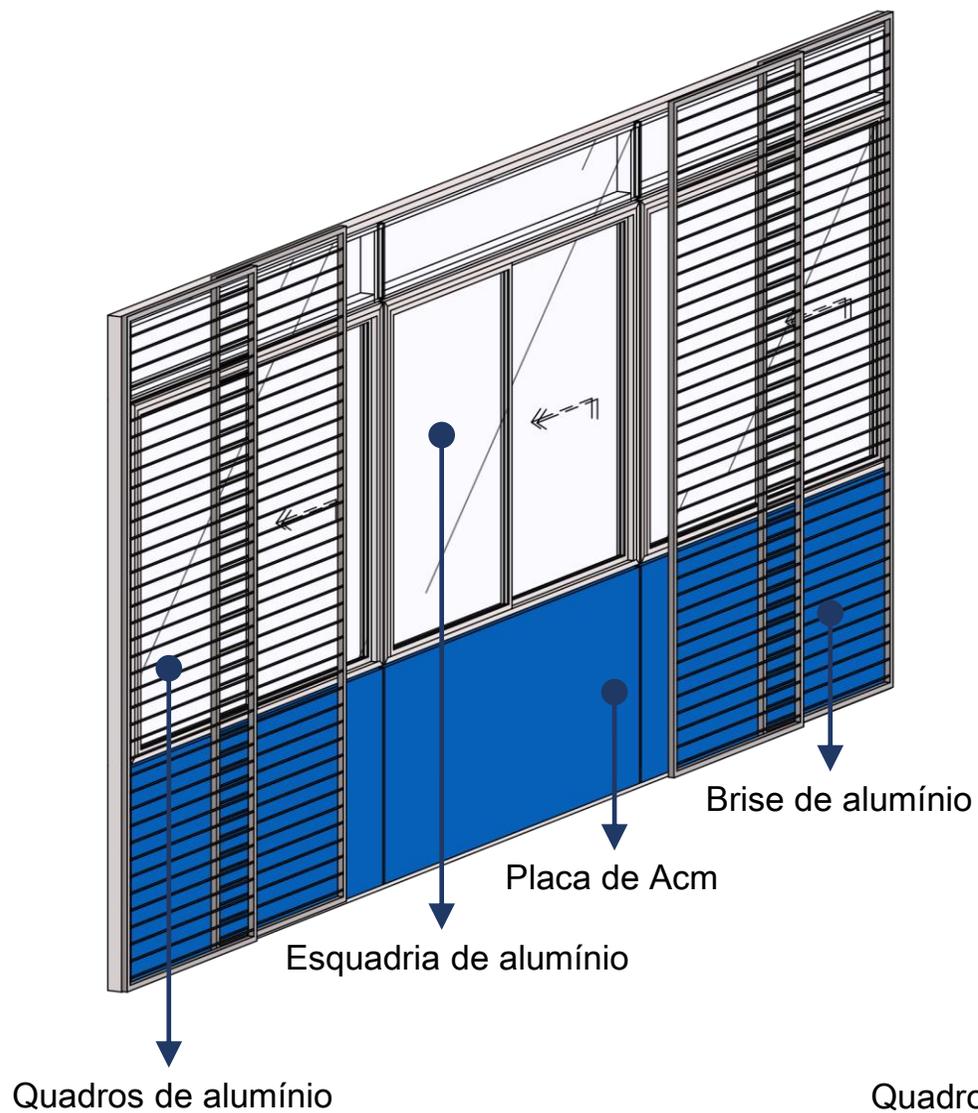


VEDAÇÃO



VEDAÇÃO

- Fachada Norte – Rua Felipe de Oliveira



- Fachada Sul – Av. Ipiranga

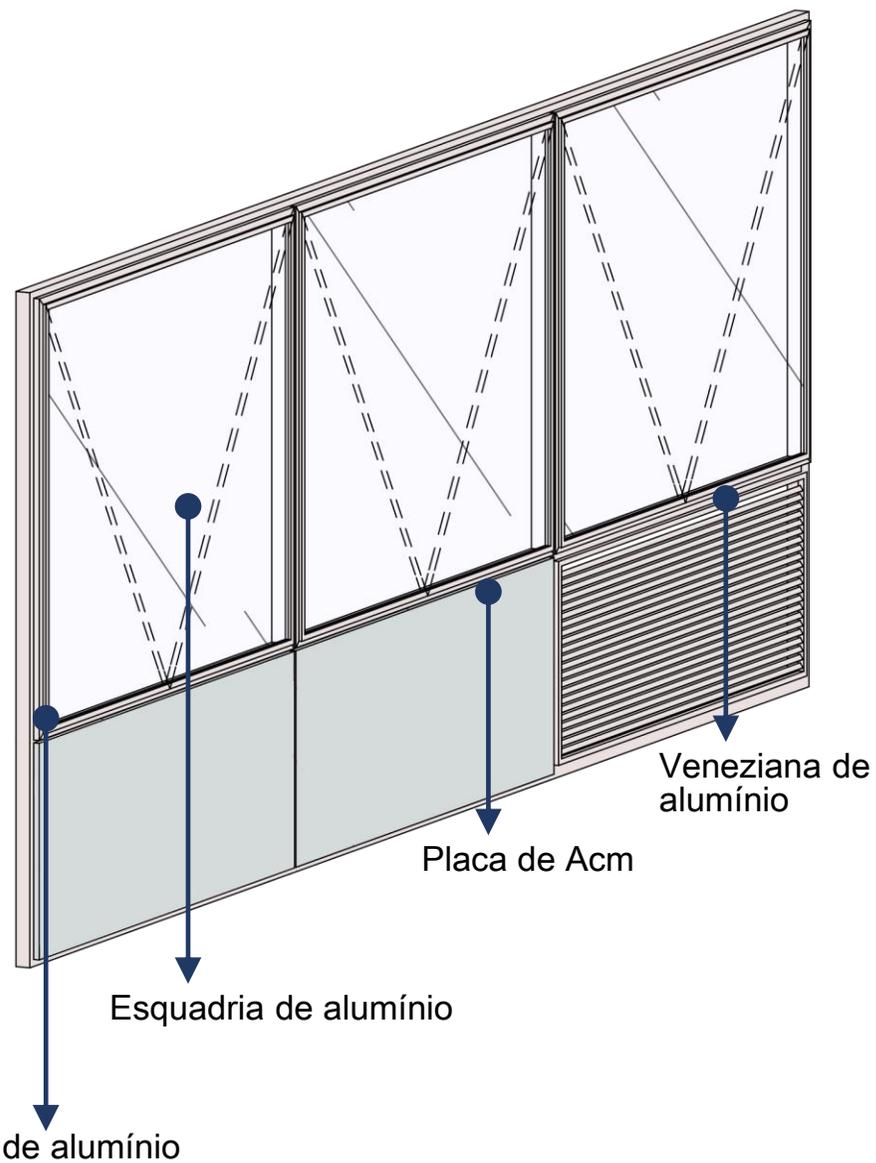


DIAGRAMA CLIMATIZAÇÃO

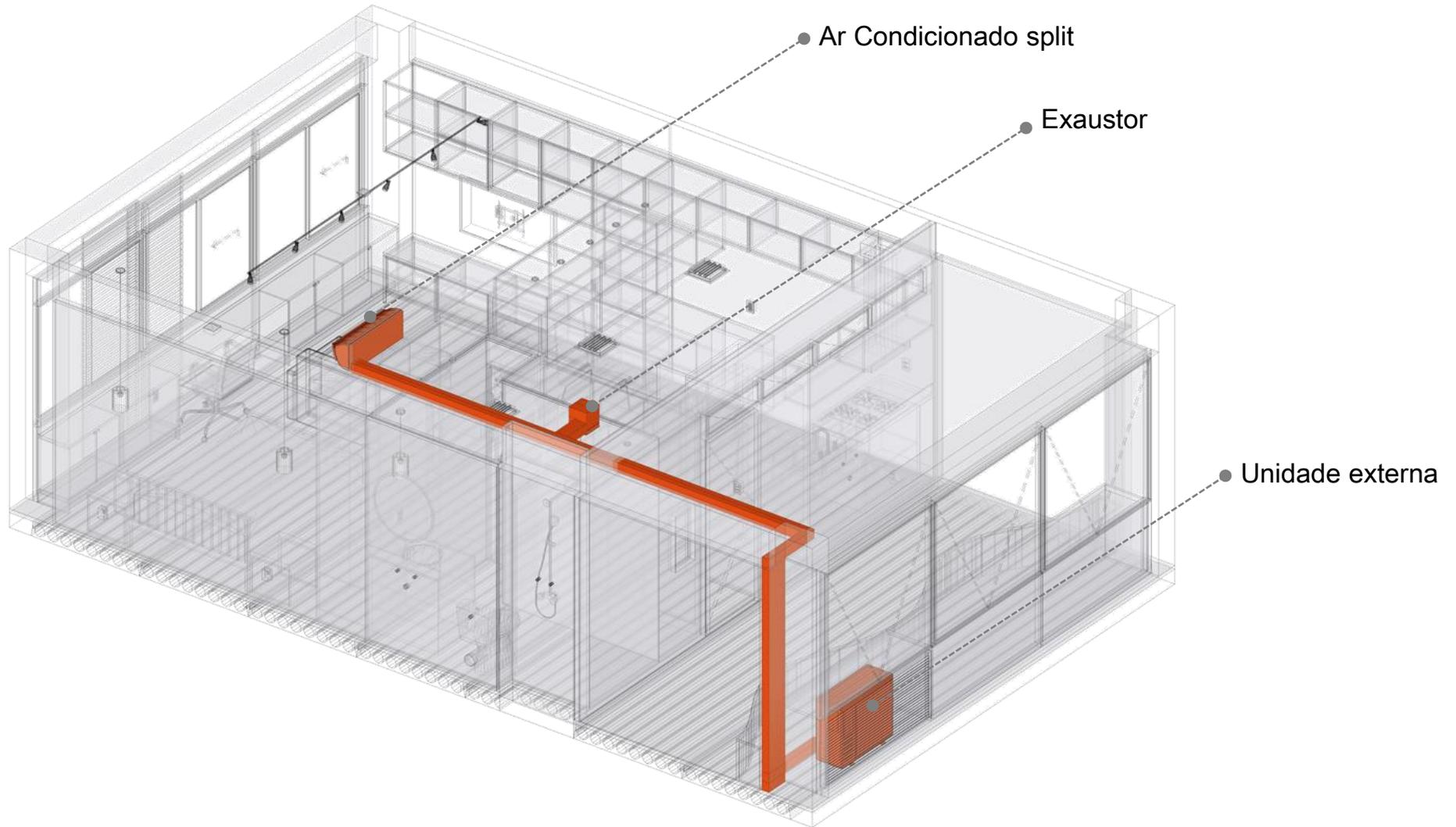


DIAGRAMA CLIMATIZAÇÃO

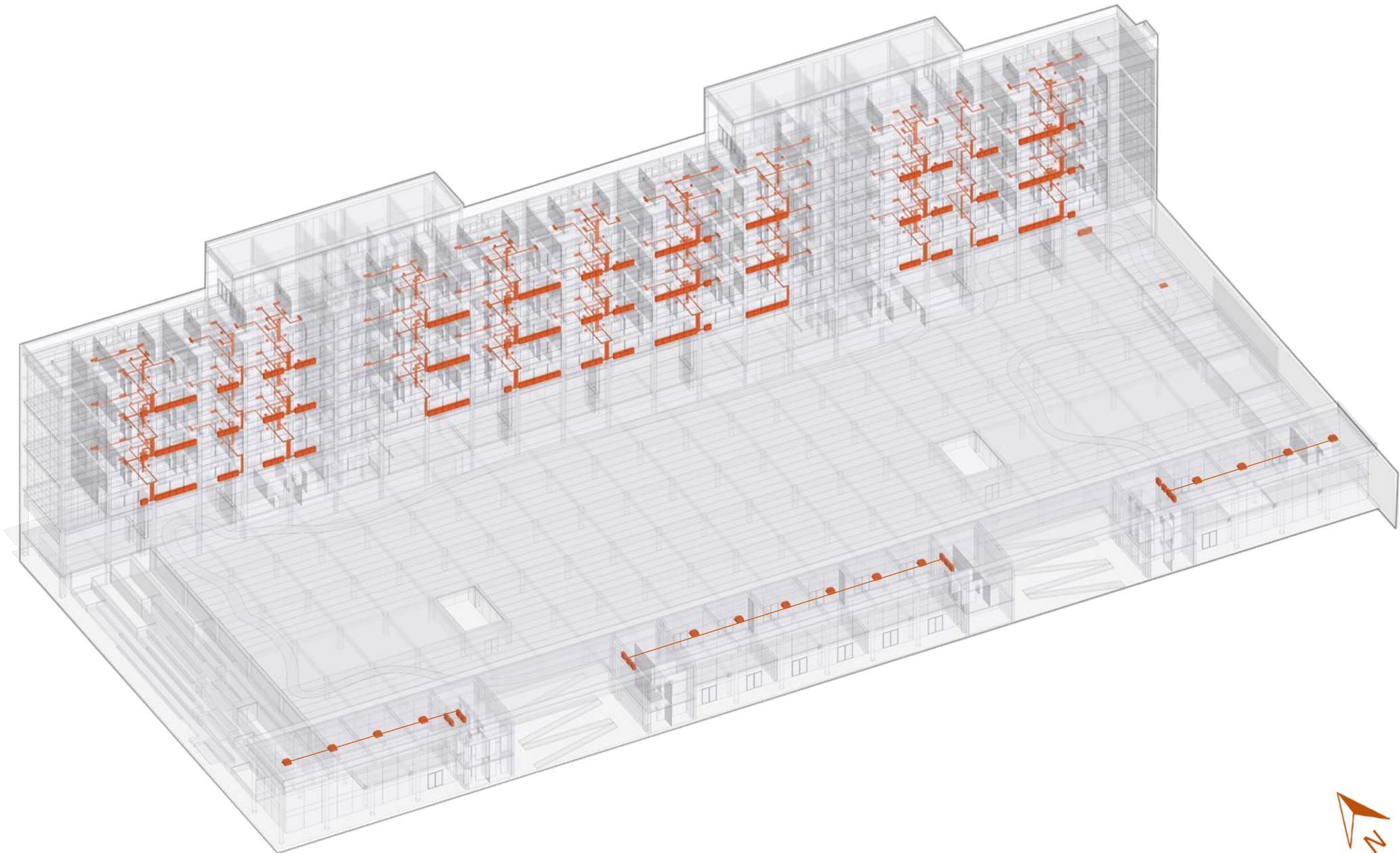


DIAGRAMA HIDRÁULICO

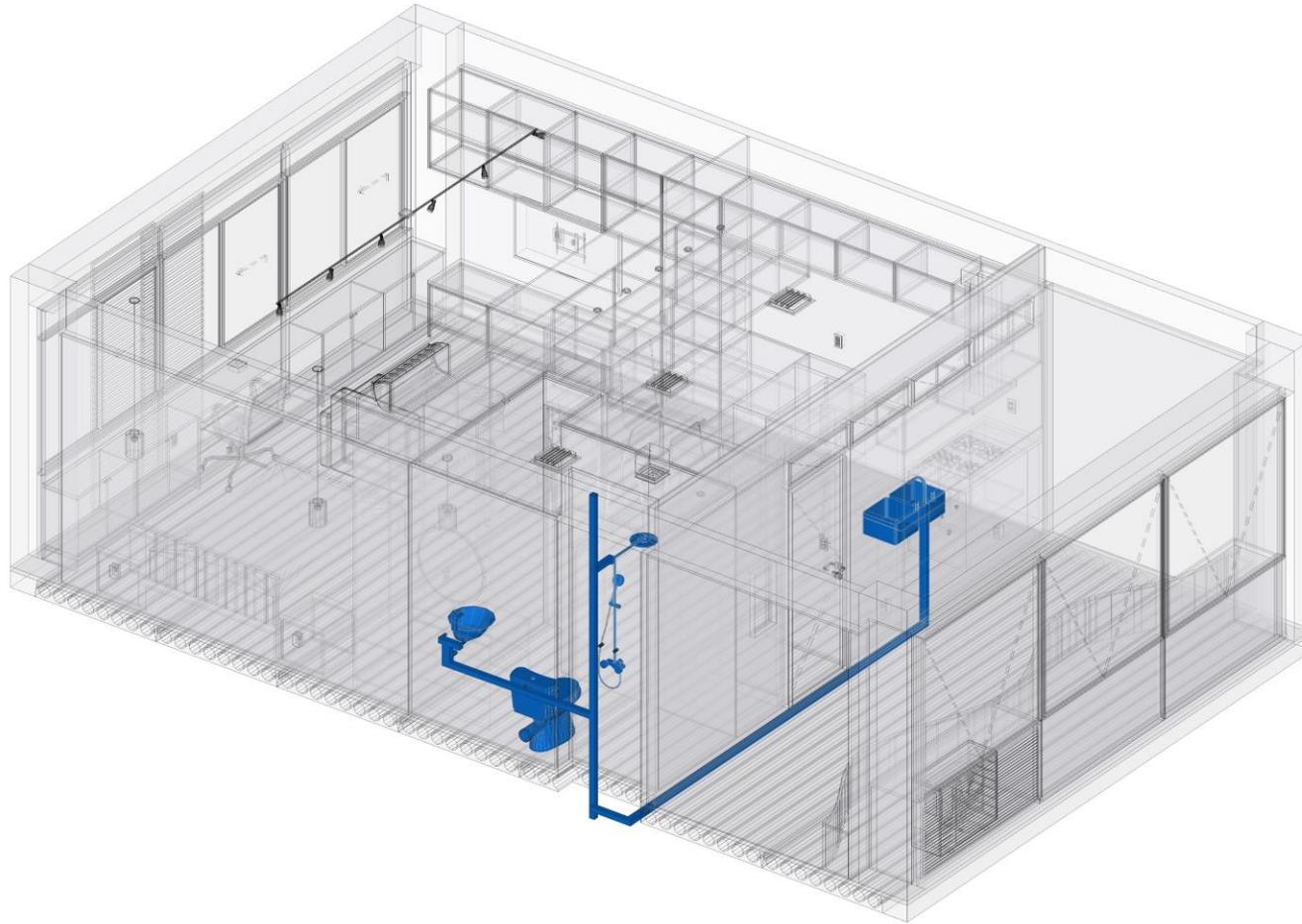


DIAGRAMA HIDRÁULICO

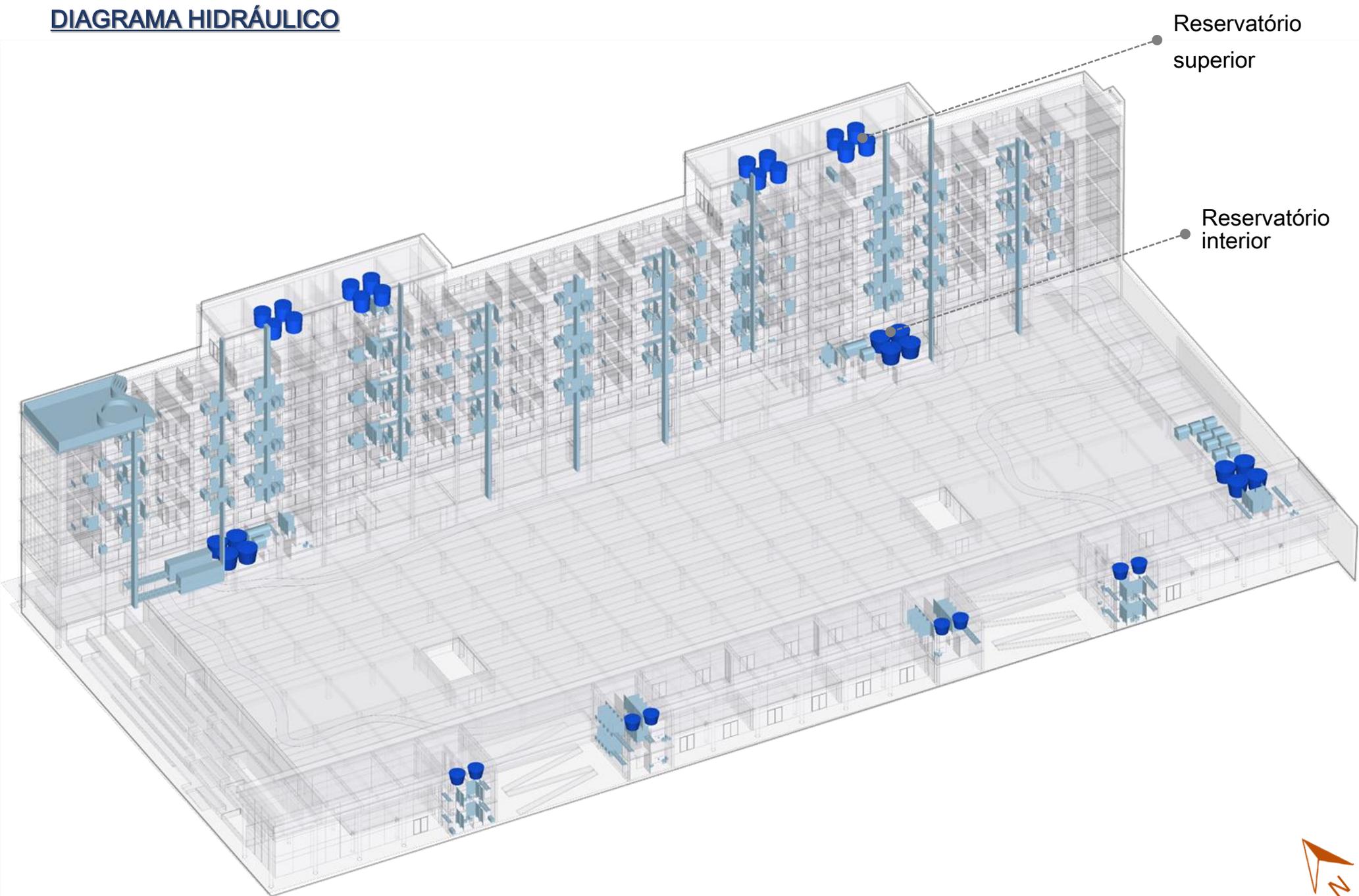


DIAGRAMA ELÉTRICA

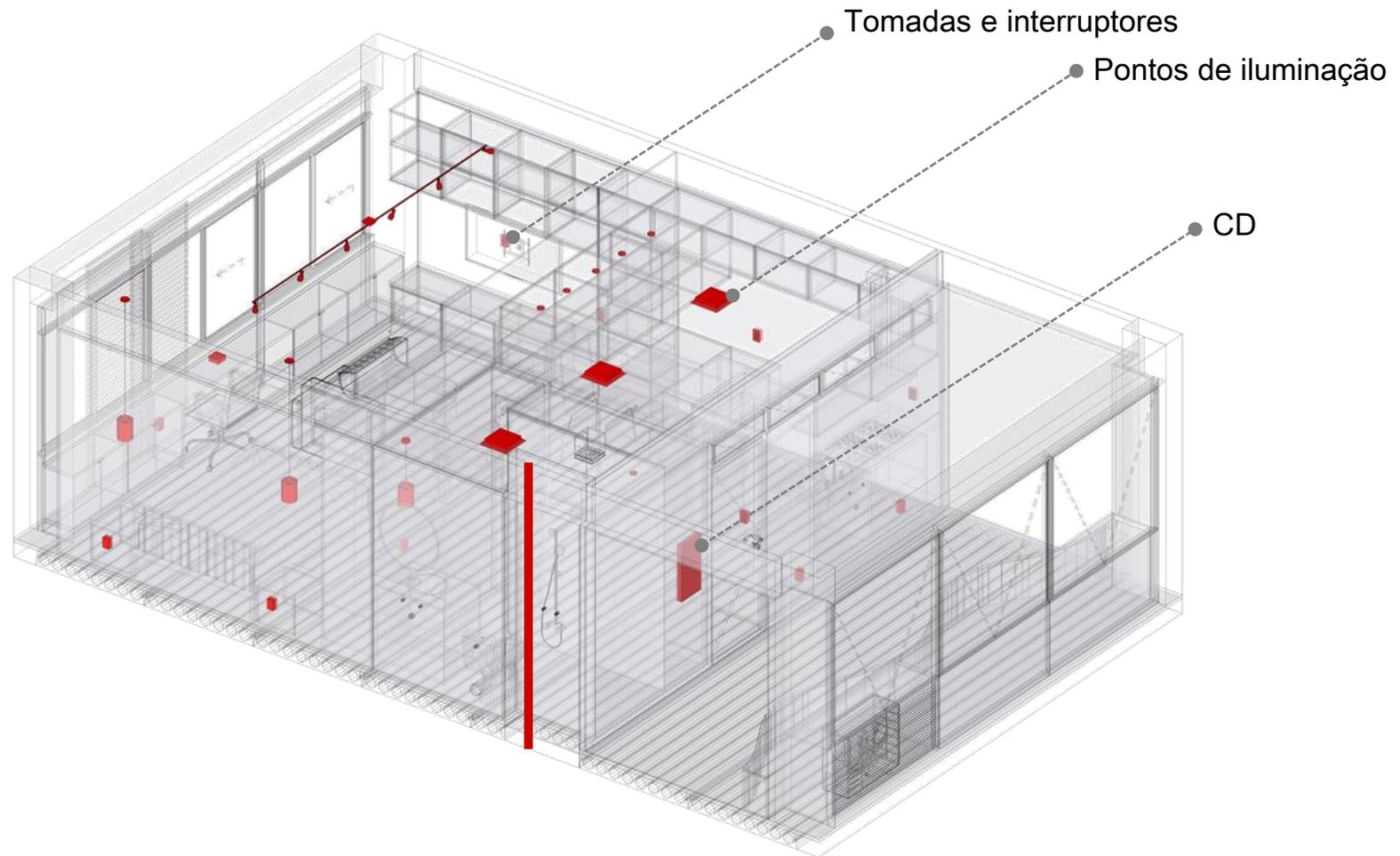
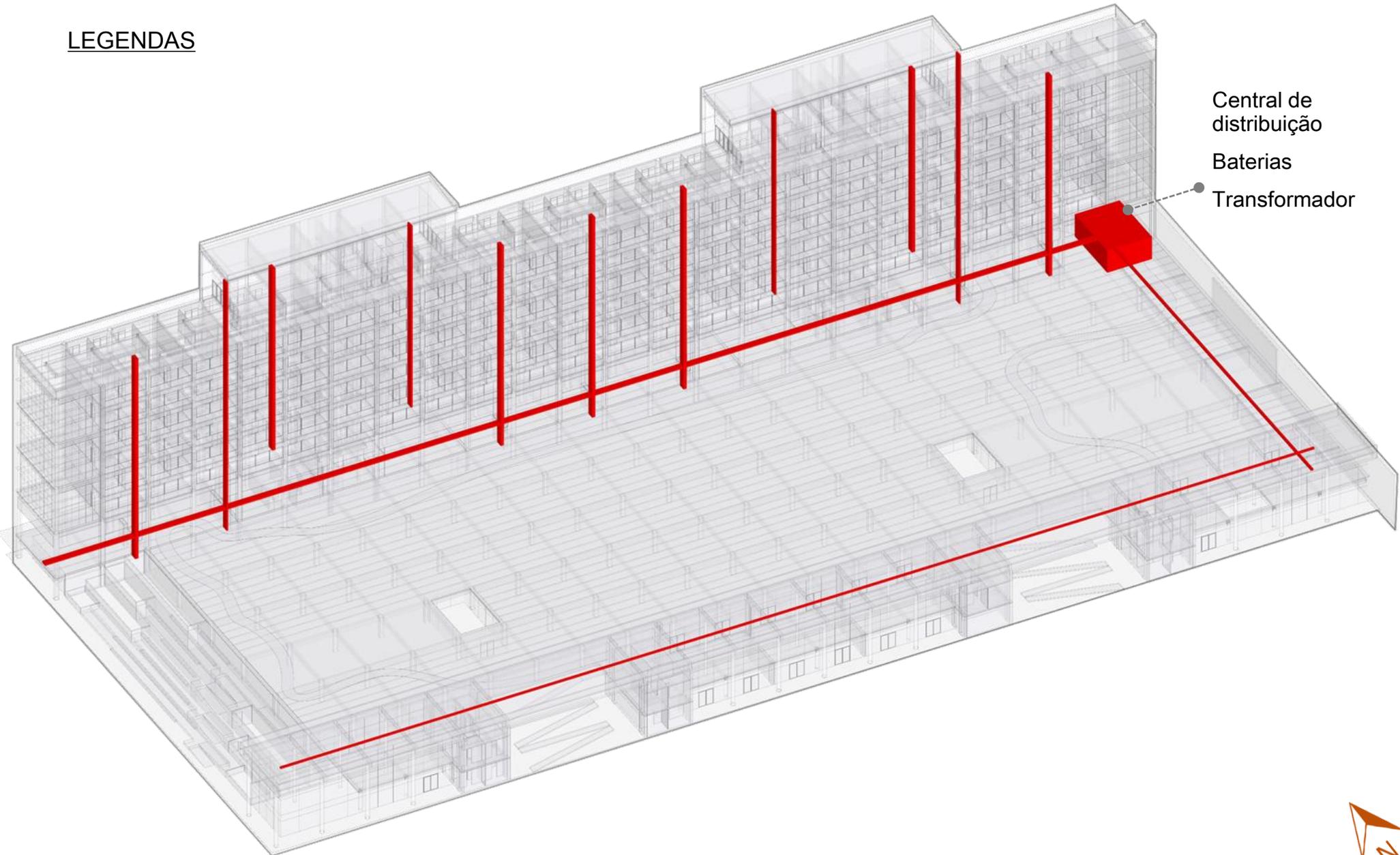
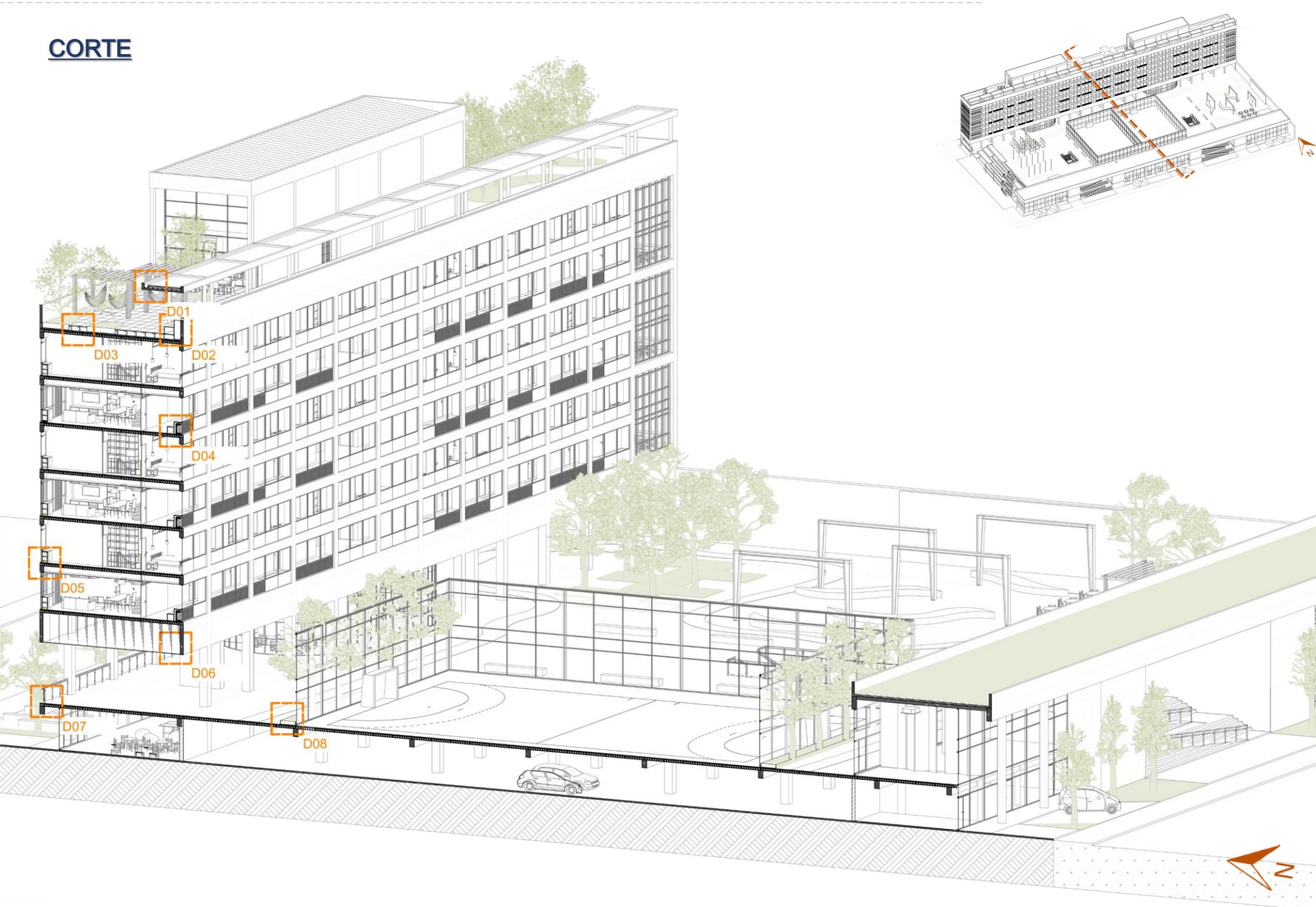


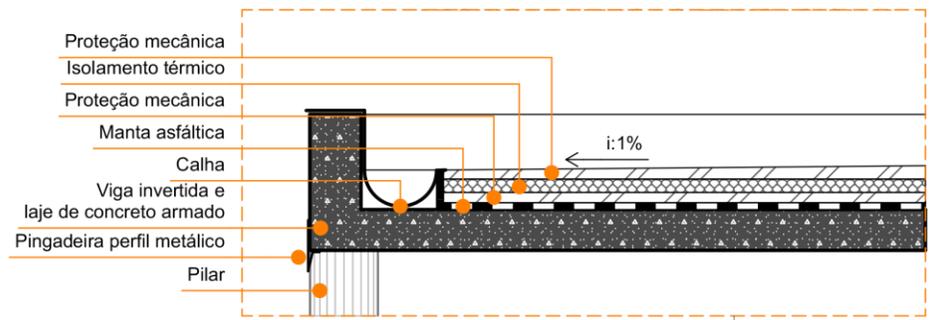
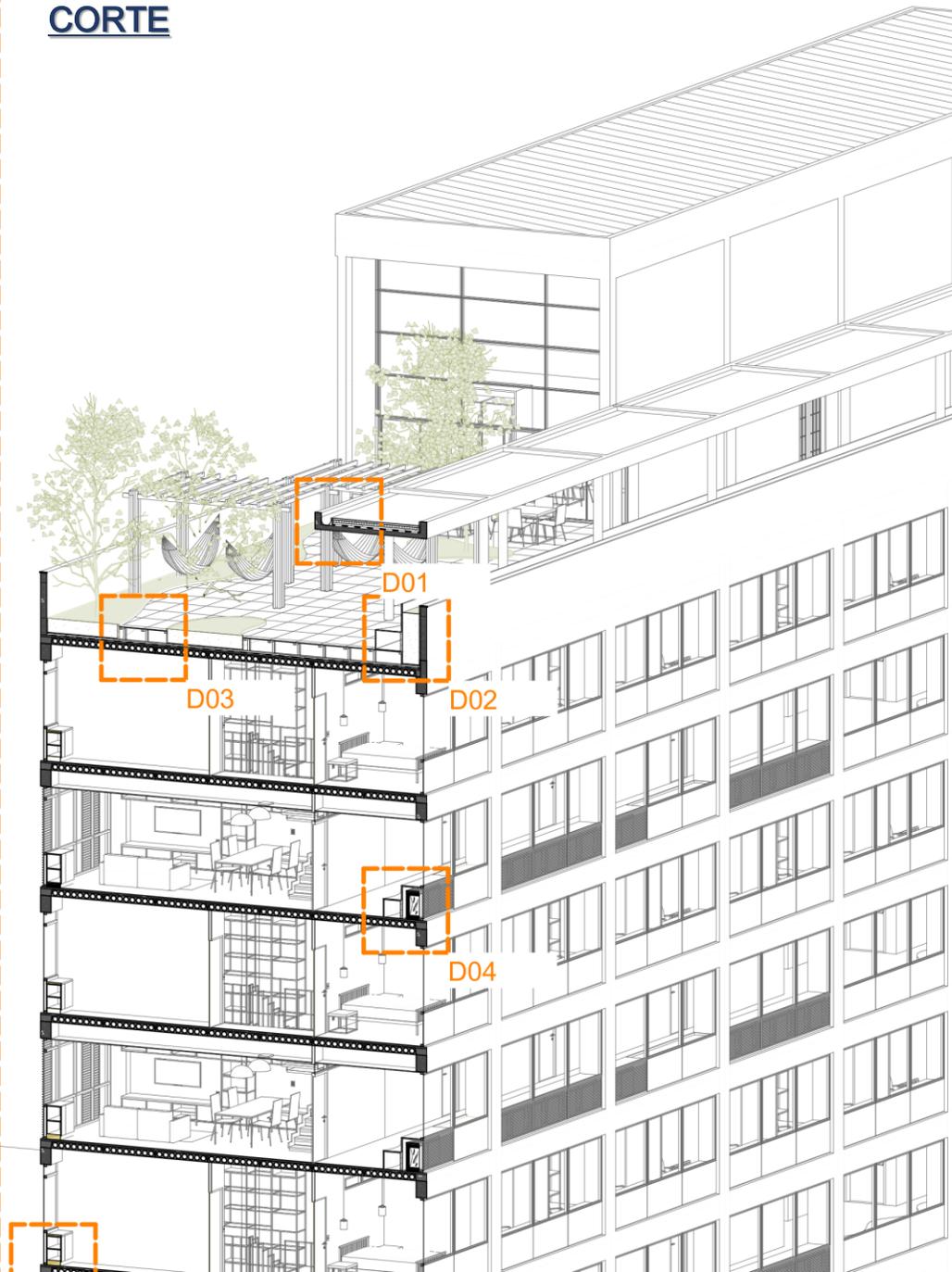
DIAGRAMA ELÉTRICA

LEGENDAS

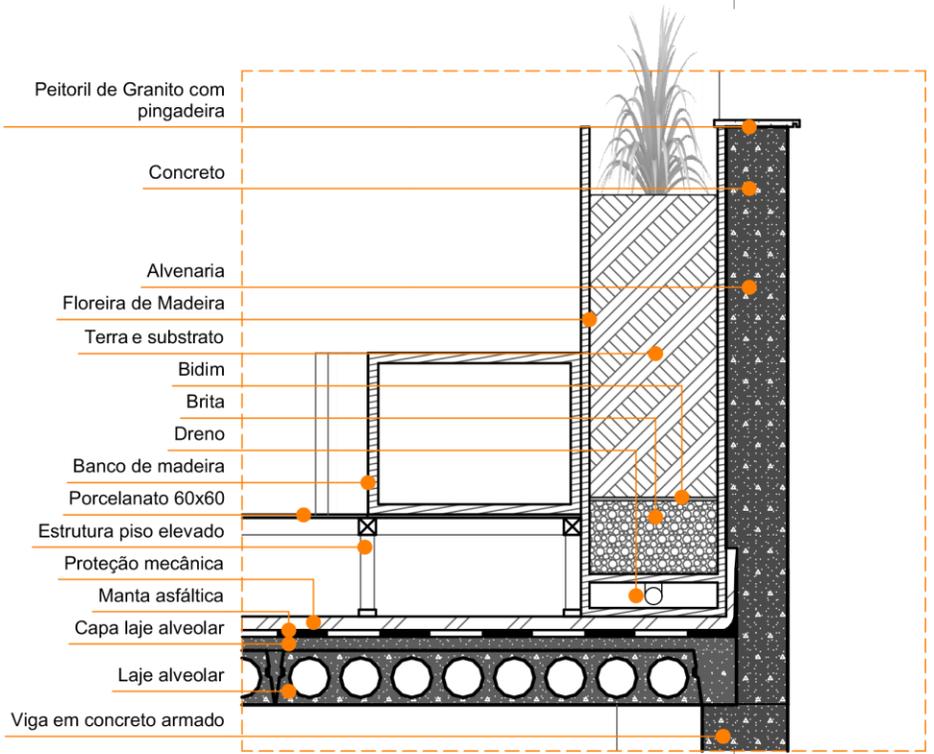




CORTE

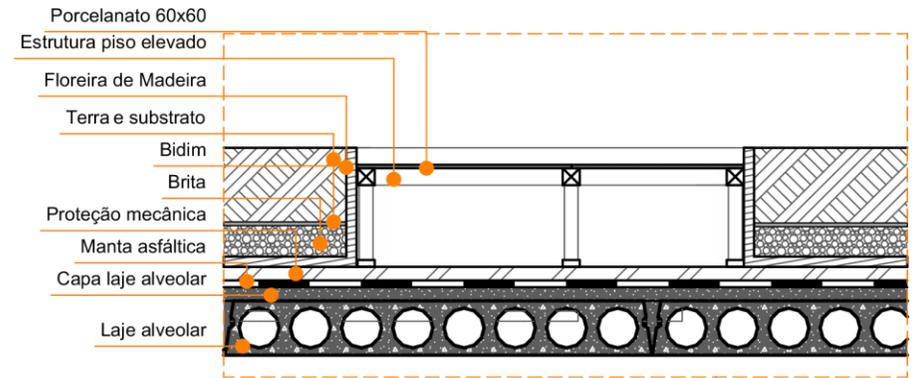
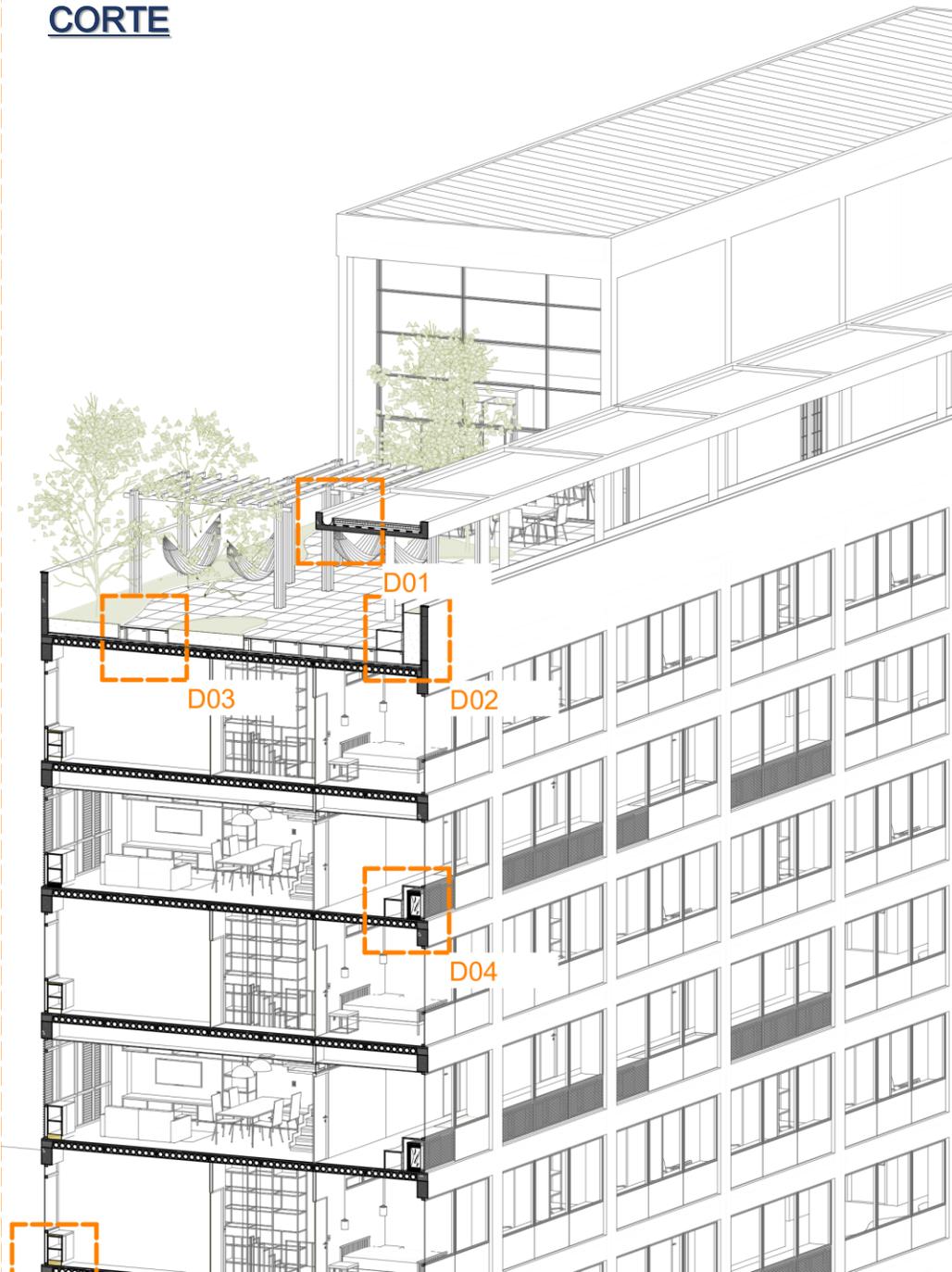


D01 Det.

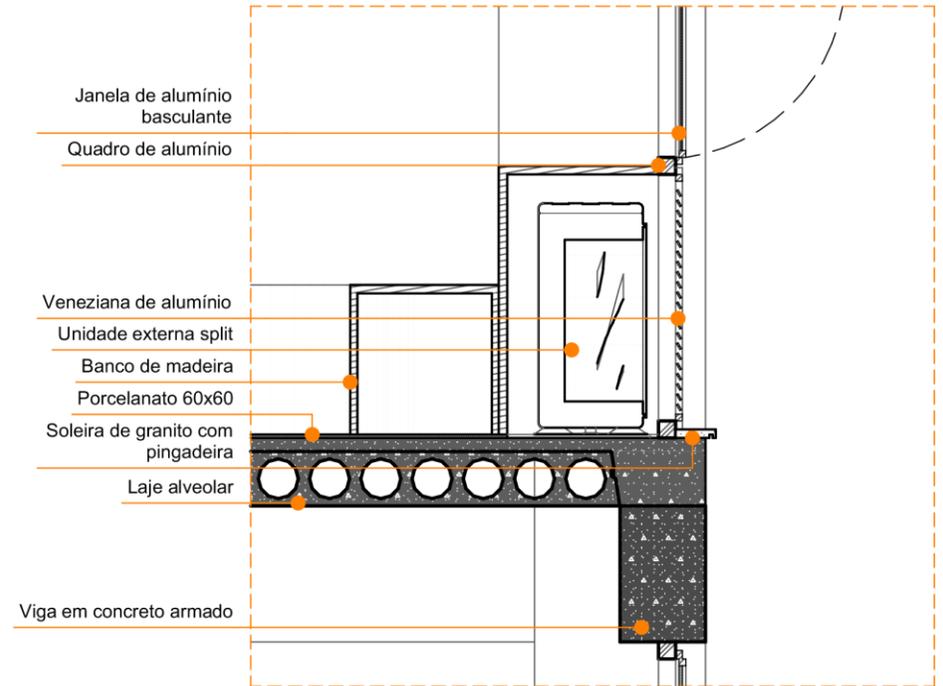


D02 Det.

CORTE

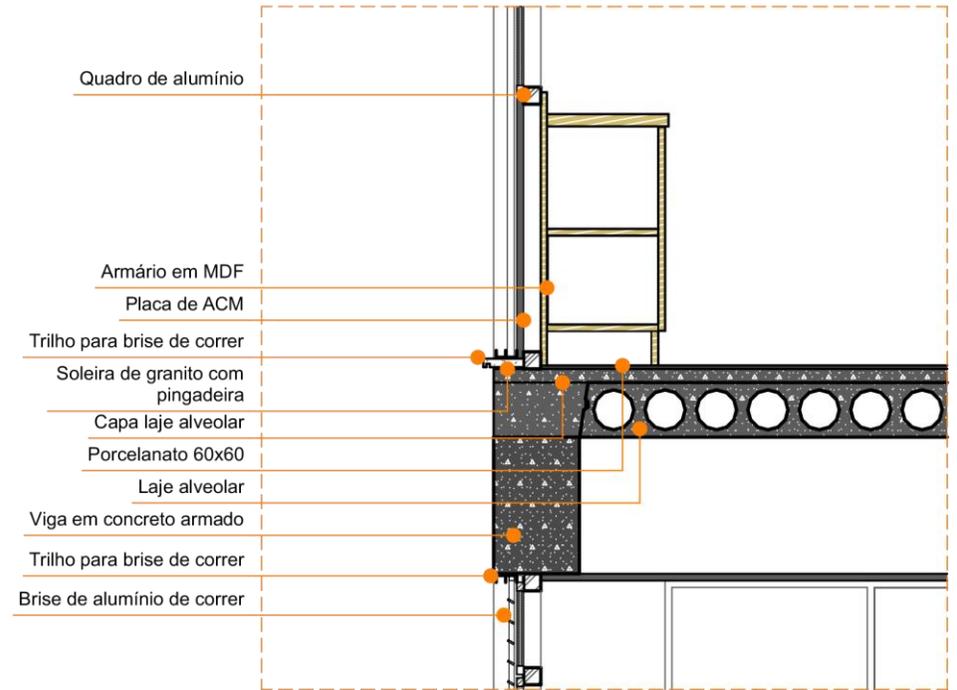
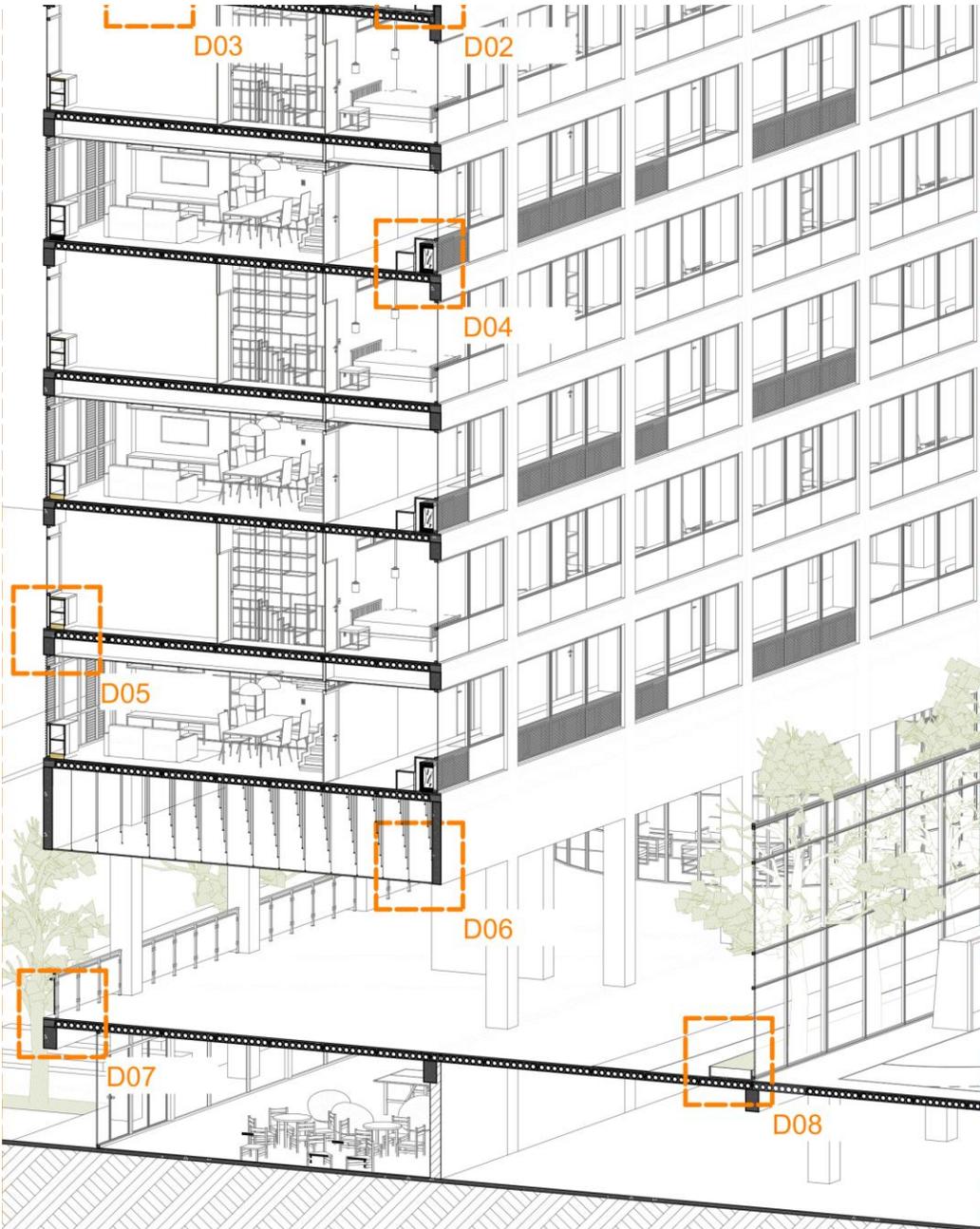


D03 Det.

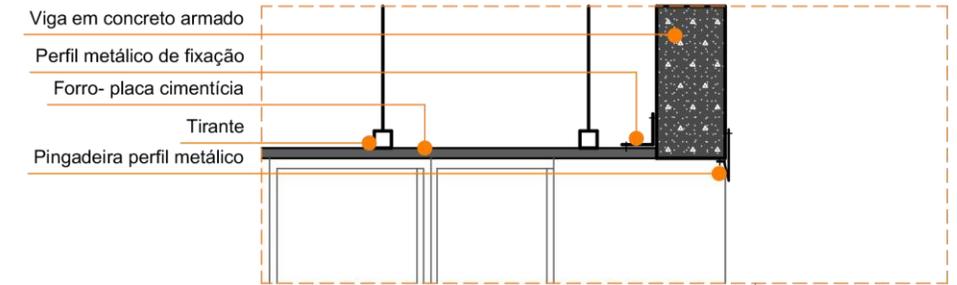


D04 Det.

CORTE



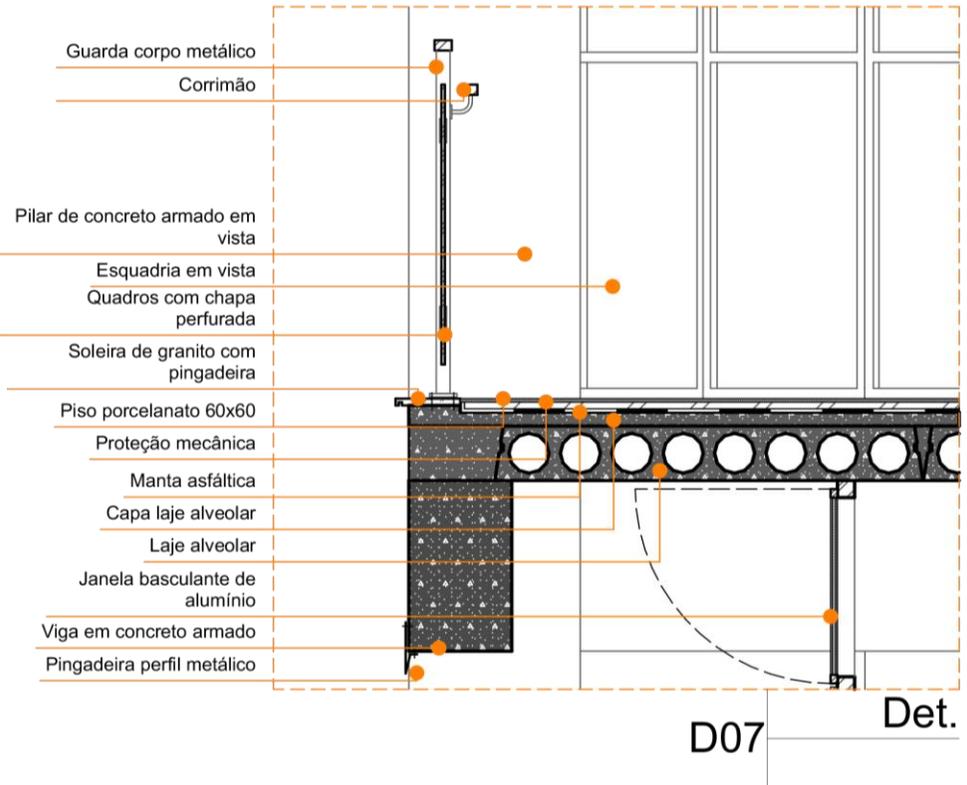
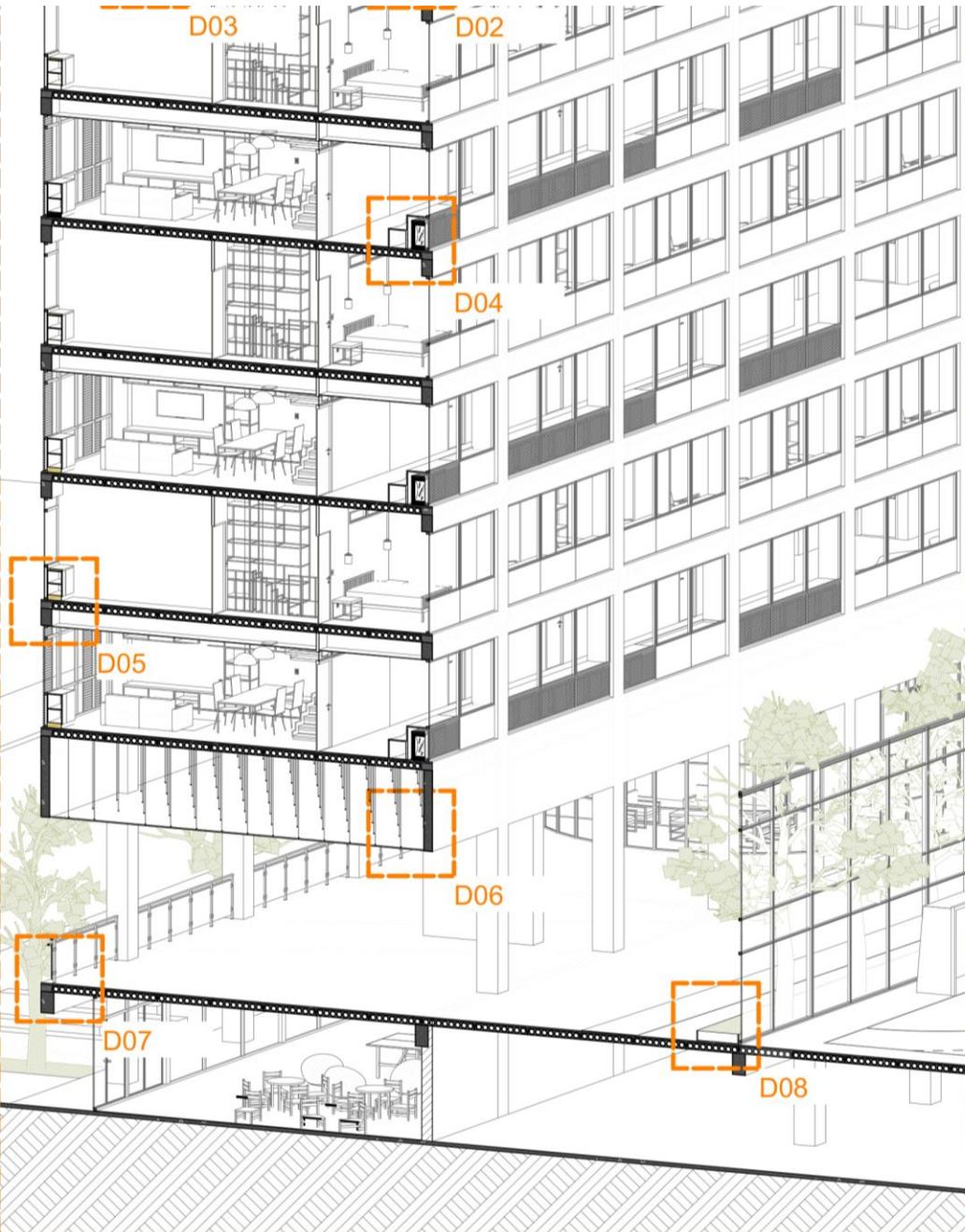
D05 Det.



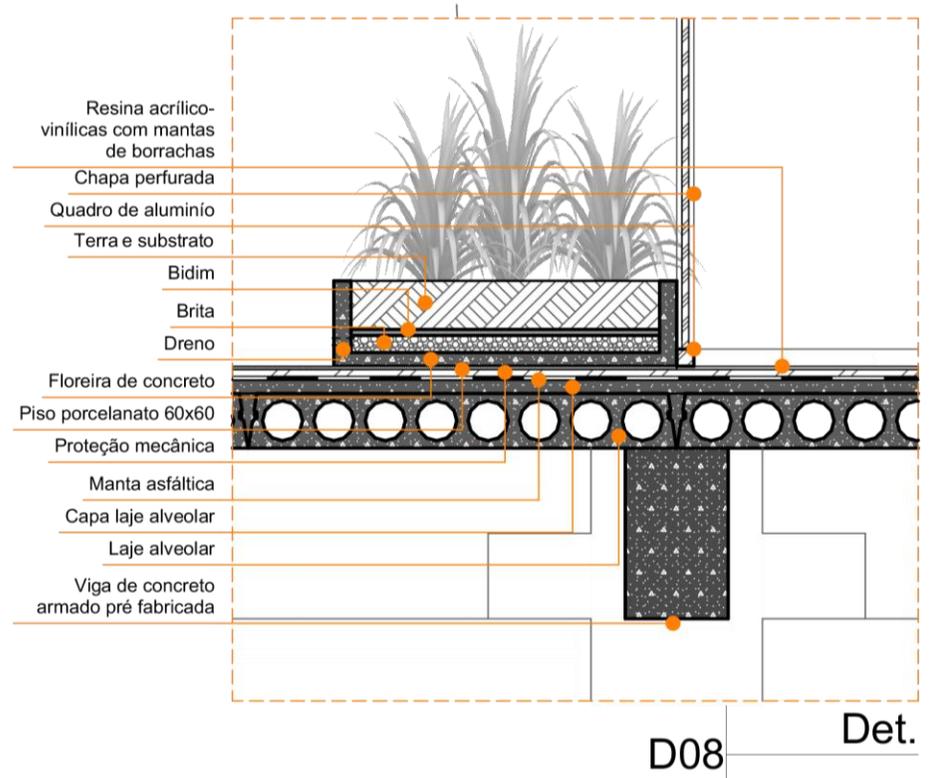
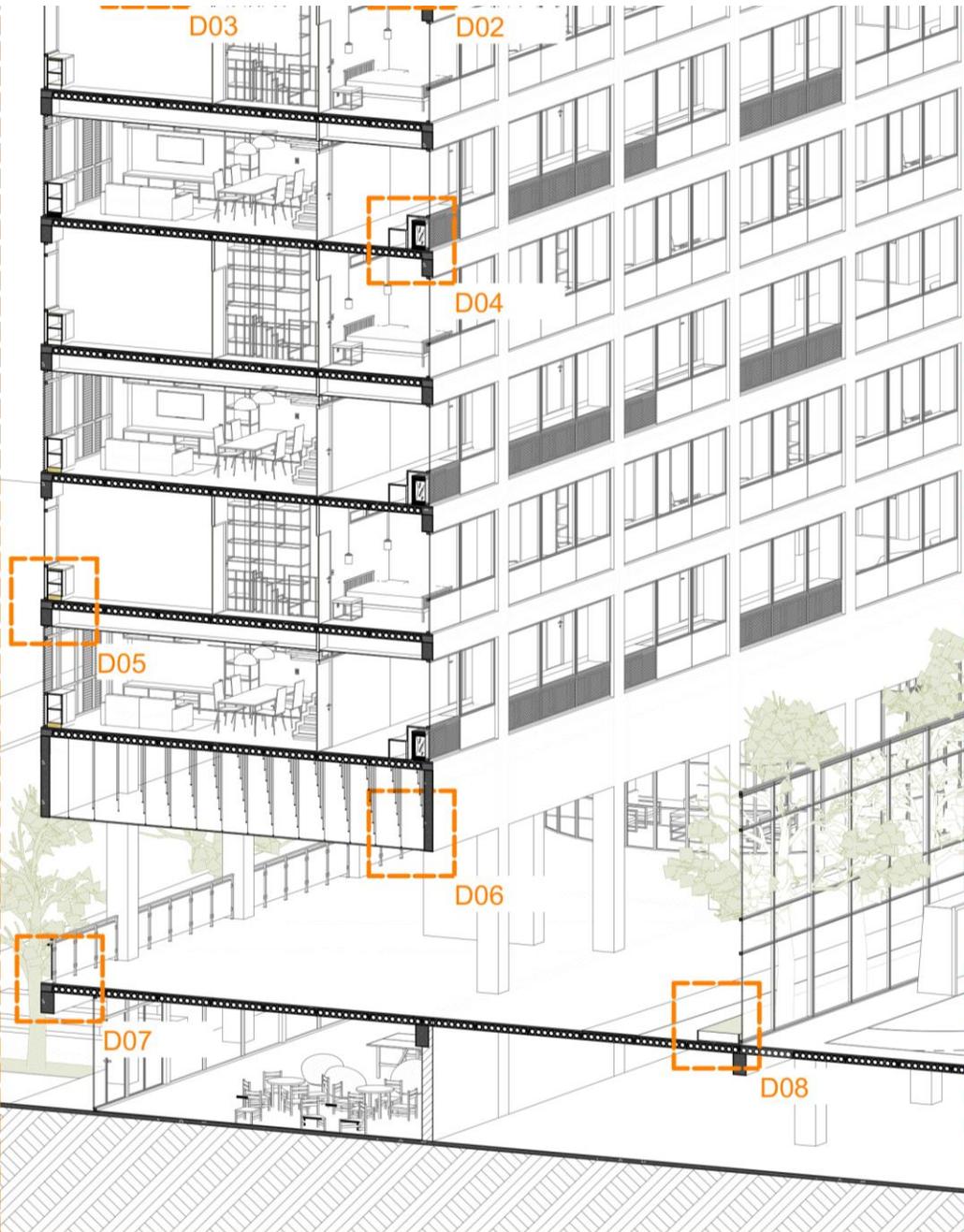
D06 Det.

0 20cm 40cm

CORTE



CORTE















Fitness

Coffee bar











Fitness





An architectural rendering of a modern building complex. The main building is a long, multi-story structure with a grid of windows. In the center, there is a courtyard with a basketball court and a tennis court, both enclosed by high fences. To the right, there is a smaller building with a flat roof and a few trees. In the foreground, there is a road with a crosswalk and a few cars. The overall style is clean and modern, with a focus on outdoor spaces and sports facilities.

OBRIGADA!