პროექტის კონსტრუქციული ნაწილი
(სამშენებლო დოკუმენტაცია)

ქ.თბილისი

2025 წ.

ინსპექტირების ცენტრი
სამშენებლო დოკუმენტაცია

საკონტაქტო:

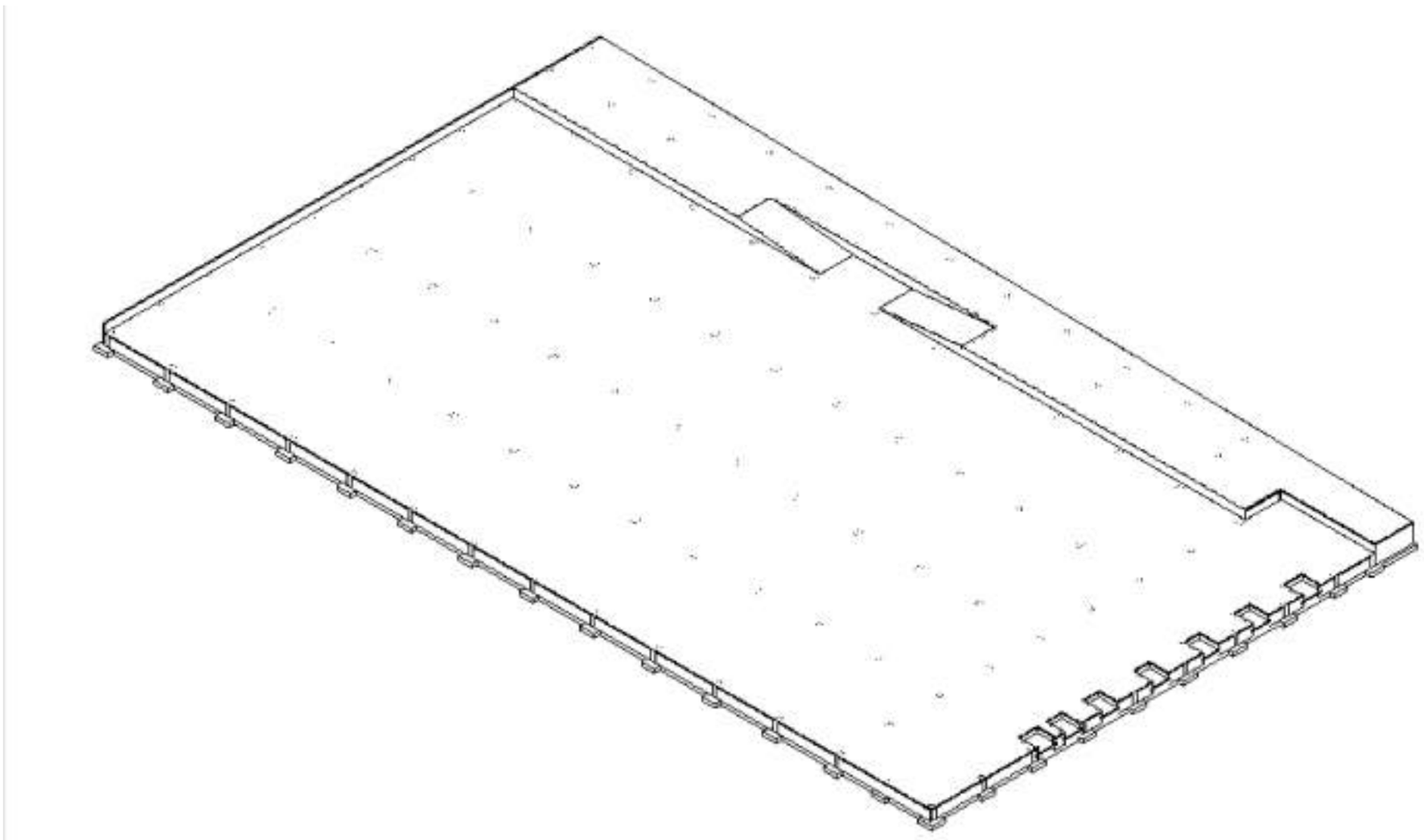
557 744 001 ; 598 149 814

info.megatwins@gmail.com

სოციალური ქსელები :

facebook.com/megatwins

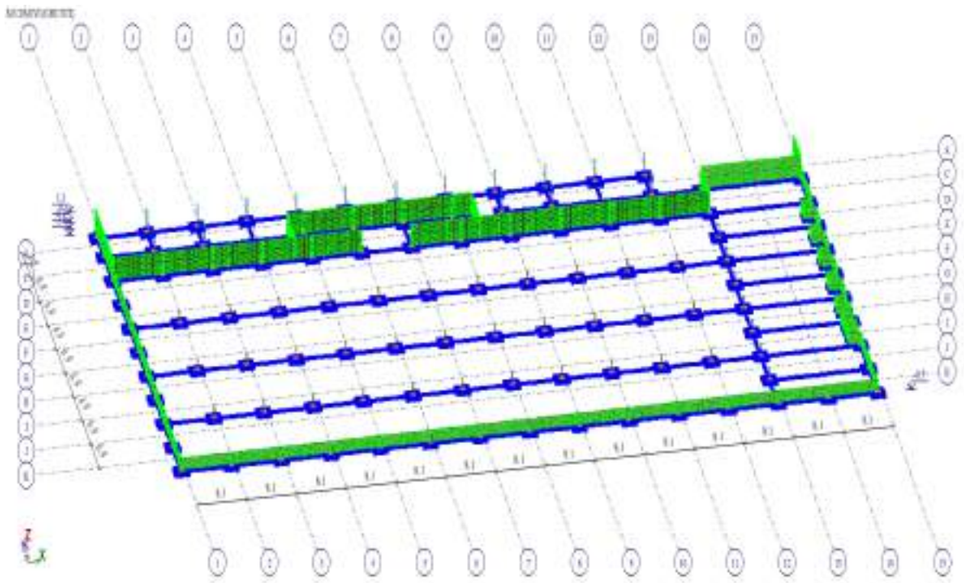
instagram.com/ltdmegatwins



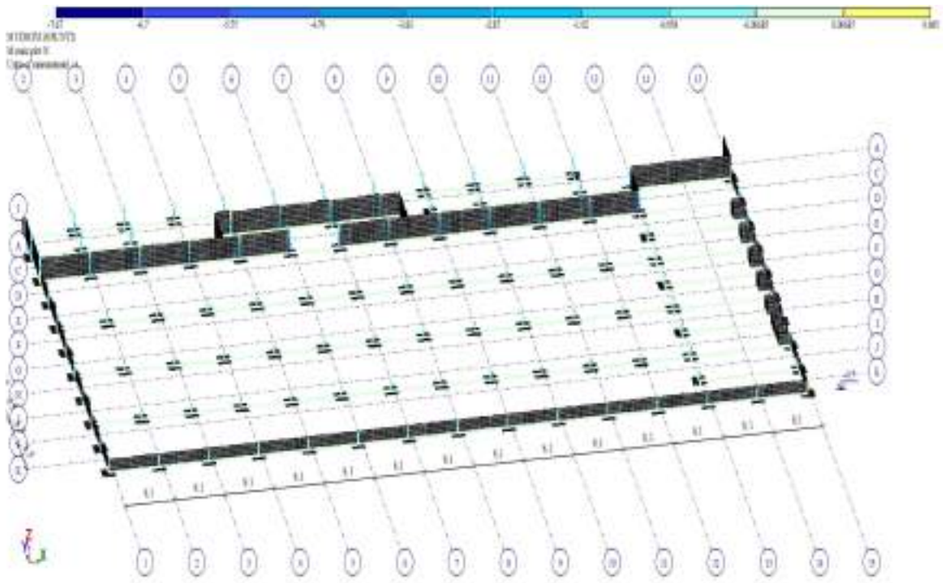
მ.კონსტრუქტორი	ბ.ჩხიკვაძე
ანალიტ.მოდელი	ბ.ჩხიკვაძე
BIM მოდელირება	კ.ჩხიკვაძე

2025 წ.

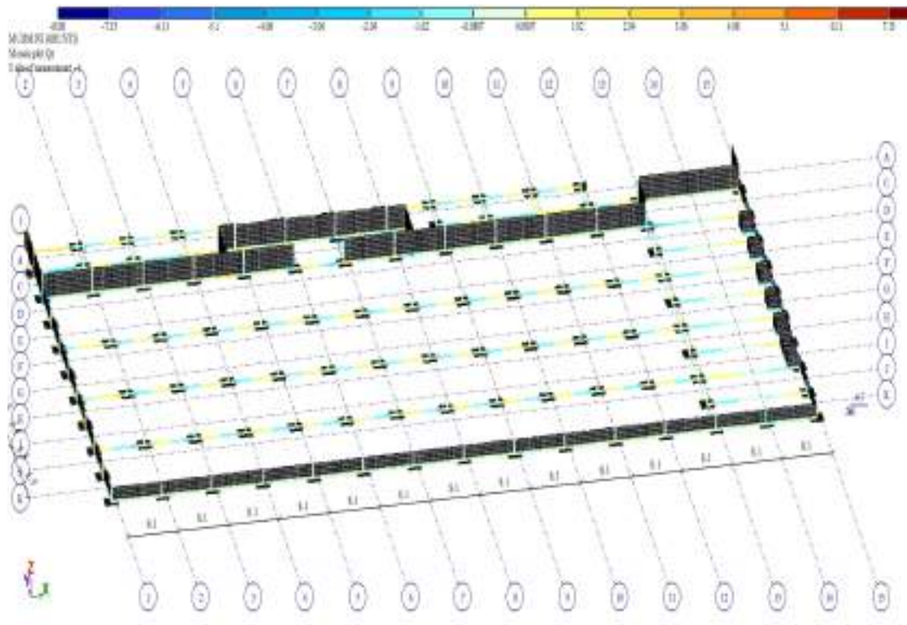
საანგარიშო სქემა



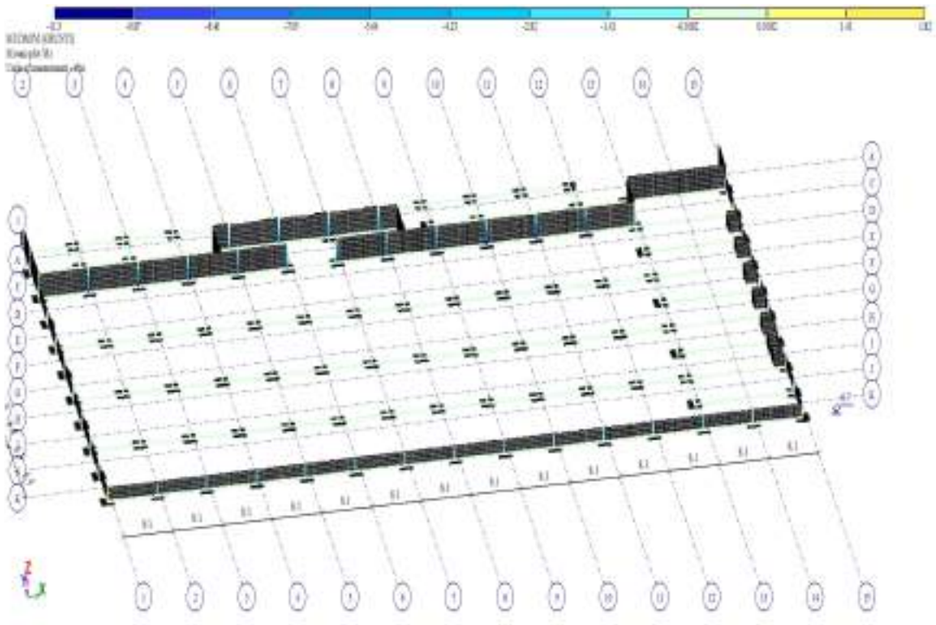
მაქსიმალური გრძივი ძალა



მაქსიმალური განივი ძალა



მაქსიმალური მომენტი



შენიშვნა :
Note :

1. საყალიბე ნახაზები გახილულ იქნას პროექტის არქიტექტურულ ნაწილთან ერთად.
2. სვეტის კვეთები ღერძის სიმეტრიულია

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

პროექტის დასახელება
Project name

A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name

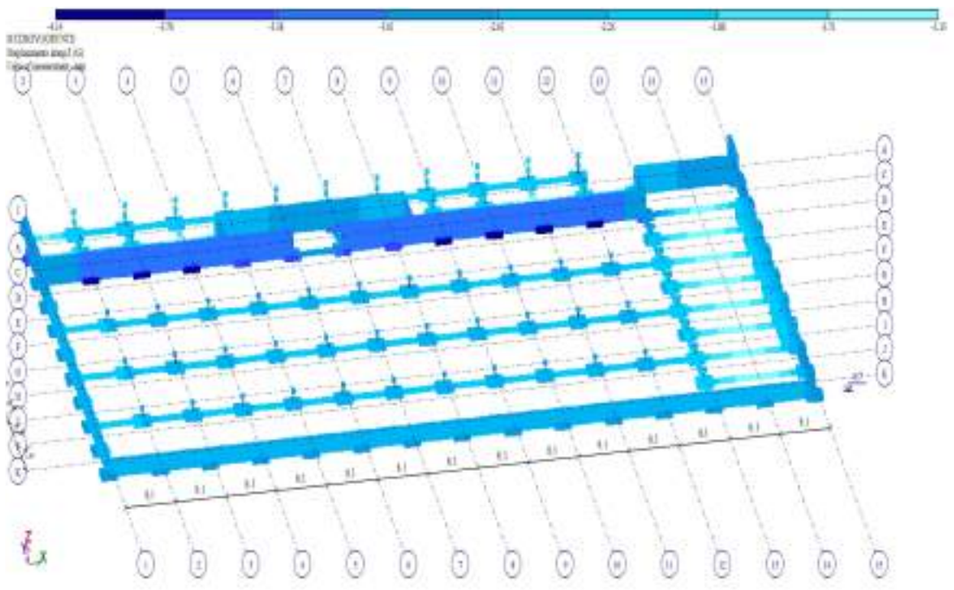
საანგარიშო მოდელის შედეგები

მთ.კონსტრუქტორი
Lead Structural Engineer

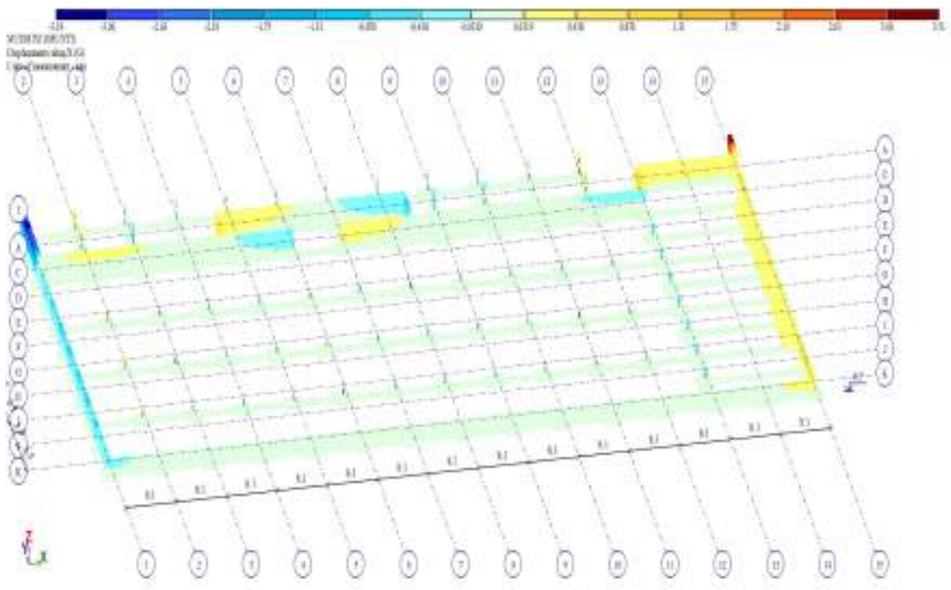
გ.ხიხაძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-0003		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

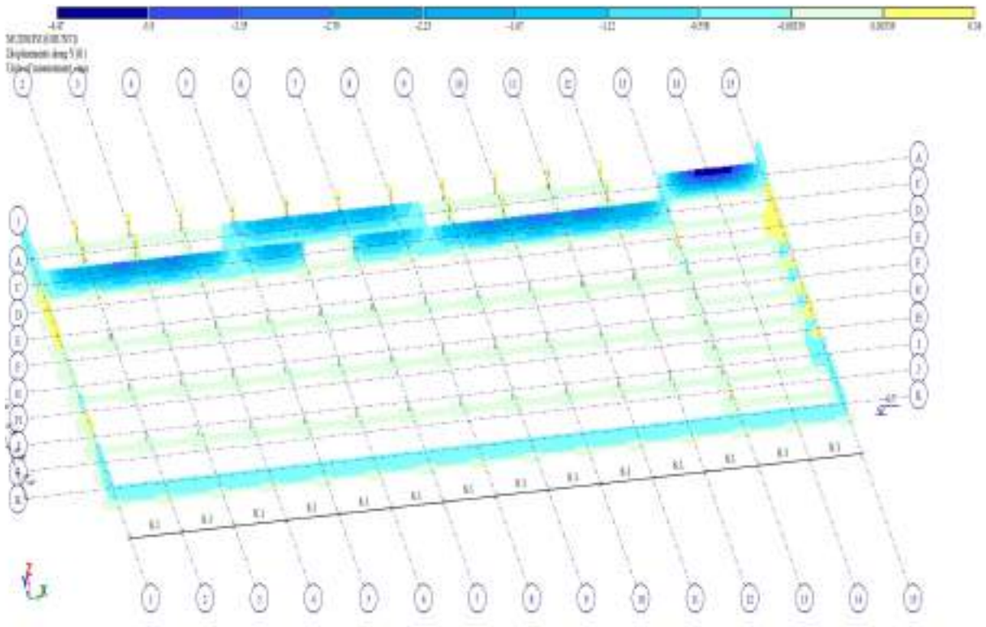
დეფორმაცია Z ღერძი



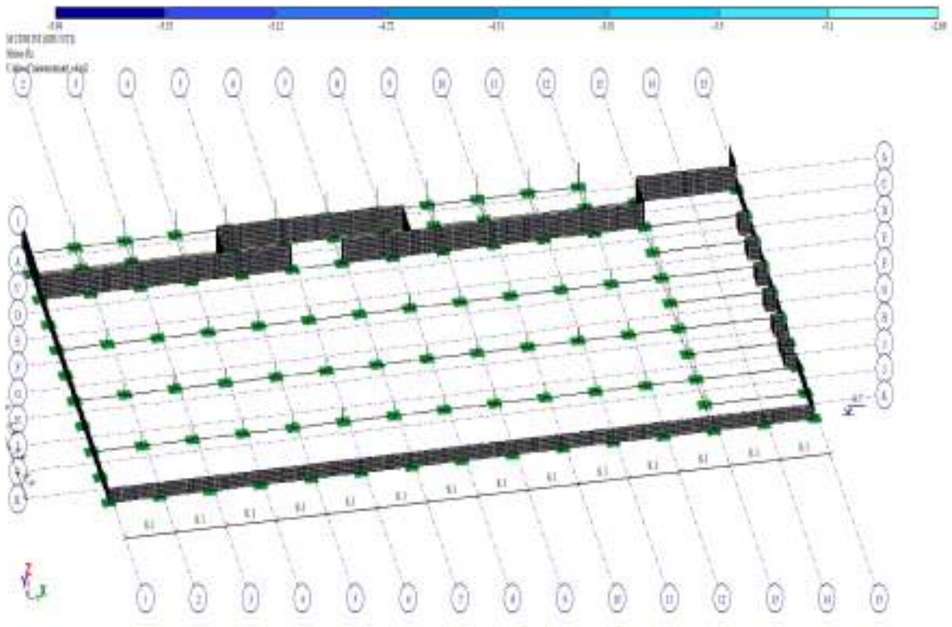
დეფორმაცია X ღერძი



დეფორმაცია Y ღერძი



გრუნტის რეაქცია Rz



შენიშვნა :
Note :

1. საყალიბე ნახაზები გახილულ იქნას პროექტის არქიტექტურულ ნაწილთან ერთად.
2. სვეტის კვეთები ღერძის სიმეტრიულია

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

პროექტის დასახელება
Project name

A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name

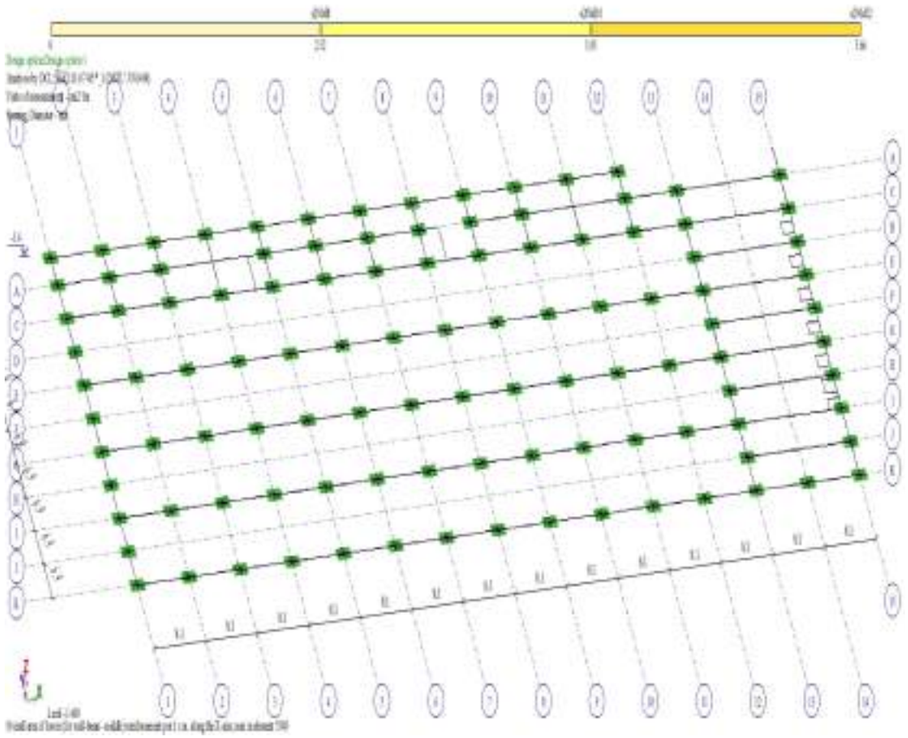
საანგარიშო მოდელის შედეგები

მთ.კონსტრუქტორი
Lead Structural Engineer

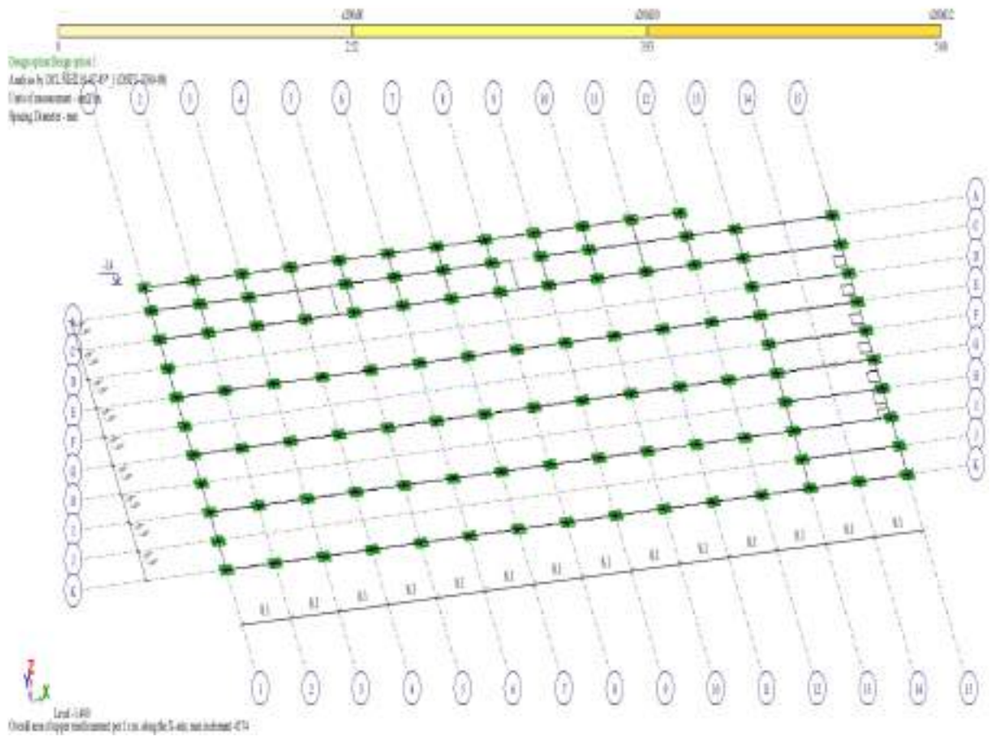
გ.ხიხვაძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-0004		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

საძირკვლის არმირება (ქვედა შრე)



ფილის არმირება (ზედა შრე)



შენიშვნა :
Note :

1. საყალიბე ნახაზები გახილულ იქნას პროექტის არქიტექტურულ ნაწილთან ერთად.
2. სვეტის კვეთები ღერძის სიმეტრიულია

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.084

პროექტის დასახელება
Project name

A კლასის სანყობი (საძირკველი)

ნახაზის სახელი
Drawing Name

საანგარიშო მოდელის შედეგები

მთ.კონსტრუქტორი
Lead Structural Engineer

გ.ხიხიაძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-0005		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

1. ზოგადი

- **ობ. მისამართი** - ქ.თბილისი. ქინძმარაულის ქუჩა

2. საინჟინრო გეოლოგია და დაფუძნების პირობები, ქვაბული

2.1 საძირკვლის ფუძედ მიჩნეული გრუნტის მახასიათებლები:

- დასახელება -სგე-1.თიხნარი, ყავისფერი და ღია ყავისფერი
- საანგარიშო წინაღობა R_0=300კპა (3,00 კგძ/სმ²);
- დეფორმაციის მოდული E=36000 კპა (367 კგძ/სმ²);
- შიგა ხახუნის კუთხე φ=39°;
- პუასონის კოეფიციენტი μ=0.27
- **გრუნტის წყალი** - სამშენებლო ტერიტორიაზე გრუნტის წყალი გამოვლენილი არ არის
- **ქვაბული** - ქვაბულის გვერდების დამუშავება მოხდეს გრუნტების ბუნებრივი ქანობის კუთხით.
- საძირკვლის მოწყობამდე დაიყაროს ≈30 სმ სისქის ქვიშა ღორღის ნარევი და დაიტკეპნოს ფენა ფენა 15 სმ-იან ფენებად ისე რომ საანგარიშო წინაღობა კუმშვაზე აღემატებოდეს 3.00 კგ.ძ/სმ^2

3. უსაფრთხოება

- მშენებლობის პროცესი წარიმართოს საქართველოს მთავრობის 2019 წლის 19 თებერვლის საქართველოს ორგანული კანონის - ,,შრომის უსაფრთხოების შესახებ" და საქართველოს მთავრობის 2014 წლის 27 მაისის N361-ე დადგენილების - ,,მშენებლობის უსაფრთხოების შესახებ ტექნიკური რეგლამენტის" მოთხოვნების შესაბამისად და მკაცრად იქნას დაცული უსაფრთხოების წესები.

4. მასალები

- მასალების ანტიკოროზიული და ხანძარსაწინააღმდეგო დაცვა - შესრულდეს ნორმების СНиП 2.01.02-85* და СНиП 2.03.11-85 მოთხოვნების შესაბამისად;
- ბეტონი - შენობის მზიდ კონსტრუქციებში გამოყენებულია ბეტონი კლასით - C20/25, საძირკვლის ქვეშ გამოყენებულია ბეტონის მომზადება C12/15 (ГОСТ 25192 - 2012);
- არმატურა - შენობის რკ.ბეტონის ელემენტებში გამოყენებულია არმატურა კლასით -B500C (ДСТУ 3760-98);

არქიტექტურულ მოთხოვნებიდან გამომდინარე შენობის ფორმა მართკუთხა ფორმისაა.

- **ჰიდროიზოლაცია** - შენობის კედლები რომლებიც შეხებაში არის გრუნტთან დაიფაროს ჰიდროსაიზოლაციო შრით, (ჰიდროიზოლაციის ტიპი განისაზღვროს დამკვეთთან შეთანხმებით);
- ან გამომდინარე აღნიშნული სიმტკიცის მირწევამდე აუცილებელია მკაცრად დაცული იქნას ტემპერატურის და ტენიანობის რეჟიმი;

5. კლიმატოლოგია და დატვირთვები

- **ჩაყინვის სიღრმე** - 0.00 მ (СНБ 01.05-08);
- **ქარი** - W0 = 48 კგ/მ² (СНБ 1.0508);
- **თოვლი** - q = 50 კგ/მ² (СНБ 01.0508);
- **სეისმურობა** - საქართველოს ტერიტორიის სეისმური საშიშროების რუქის მიხედვით ქ.თბილისი იმყოფება 8 ბ. სეისმურ ზონაში (სკალა MSK64), ჰორიზონტალური აჩქარება - 0.17 (სეისმურობის კოეფიციენტი);

6. მათ. მოდელირება (გაანგარიშება)

- «Lira - САПР 2021» (ვერსია R2.3) პროგრამული კომპლექსის მეშვეობით, სასრული ელემენტების მეთოდის საფუძველზე. შენობის საანგარიშო მოდელი შედგენილია არქიტექტურული ნახაზების მიხედვით.
- **გაანგარიშებაში მიღებულია შემდეგი დატვირთვები:**
  - სტატიკური მუდმივი;
  - სტატიკური დროებითი ხანგრძლივი;
  - სტატიკური დროებითი ხანმოკლე;
  - სეისმური X მიმართულება;
  - სეისმური Y მიმართულება;
- გათვალისწინებულია საკუთარი რხევების 24 ფორმა.
- სეისმური ზემოქმედების ანგარიშისას მასების მონაწილეობის ფაქტორი შეადგენს 80-85%;

7. შენობის აღწერილობა

- **შენობის მიახლოებითი გაბარიტული ზომები** - 109,5X58,6 მ. (ღერძებში), გეგმაში მართკუთხა ფორმის
- **საძირკველი** - მონოლითური რკ.ბეტონის ერთ საფეხურიანი წერტილოვანი საძირკველი საფეხურის სიმაღლე . - 50 სმ , ლენტური საძირკველი სისქით 50 სმ.
- **რანდკოჭი** - 50X50 (სმ);
- **მონოლითური კედელი** - 20 (სმ); 25 (სმ);
- **გრუნტზე მოწყობილი ფილა** - 15 (სმ); 20 (სმ);

შენიშვნები

- ქვაბულის გვერდები მოეწყობა გრუნტის ბუნებრივი დახრის კუთხით, ასეთ შემთხვევაში ქვაბულის გაბარიტული ზომები სცდება ტერიტორიის წითელ ხაზებს, ამიტომ საჭიროა ქვაბულის შემოთავაზებული წესით სამუშაოების დაწყებამდე დამკვეთმა მიიღოს სათანადო თანხმობა ან გადაწყვეტილება ქვაბულის გვერდების გამაგრების შესახებ.
- საძირკვლის ფუძე აუცილებელია მიიღოს ინჟ. გეოლოგმა.
- მიწის სამუშაოთა წარმოებისას დაცული უნდა იყოს СНиП 3.02.01-87 ЗЕМЛЯНЫЕ СООРУЖЕНИЯ,ОСНОВАНИЯ И ФУНДАМЕНТЫ 10.1÷10.5 პუნქტების მოთხოვნები;
- შენობის ღერძების დაკვალვა განხორციელდეს არქიტექტურული ნახაზების შესაბამისად;
- ნახაზებში აღმოჩენილი შეუსაბამობის, არქიტექტურულ ნახაზებთან შეუსაბამობის და/ან საინჟინრო-გეოლოგიური ნაწილის ადგილზე არსებულ სიტუაციასთან შეუსაბამობის შემთხვევაში - აუცილებლად ეცნობოს პროექტის ავტორს;
- არმატურების მოღუნვა განხორციელდეს ცივად გაცხელების გარეშე;
- რკ.ბეტონის კონსტრუქციებს (ფილები,რიგელები) მიეცეს სამშენებლო აწევა „შუქში მალის“ 1/100;
- თუ სადმე ბლოკის წყობის სიმაღლის და სიგანის ფარდობა (H/W) აღემატება 12-ს აუცილებელია შუალედური რკ.ბეტონის სარტყელის მოწყობა;

9. გამოყენებული ლიტერატურა

- (ᲡᲜ 01.01-09) - სეისმომედეგი მშენებლობა
- (ᲡᲜ 03.01-09) - ბეტონისა და რკინაბეტონის კონსტრუქციები
- (ᲡᲜ 02.01-08) - შენობების და ნაგებობების ფუძეები
- (ᲡᲜ 01.05-08) - სამშენებლო კლიმატოლოგია
- СНиП 2.02.03-85 _ Свайные фундаменты
- СНиП 2.01.07-85* _ Нагрузки и воздействия
- СНиП II-23-81* _ Стальные конструкции

შენიშვნა :
Note :

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

პროექტის დასახელება
Project name
A კლასის სანწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name
განმარტებითი ბარათი

მთ.კონსტრუქტორი
Lead Structural Engineer
ბ.ჩხიკვაძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-1006		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

რკინაბეტონის ელემენტების მასალის ამოკრეფა

კონსტრუქციის დასახელება	არმატურის კლასი B500C სტანდარტი BS EN 10080													მთლიანად არმატურა კგ.	ბეტონი კლასი C (მპა) სტანდარტი EN 206-1:2000	
	Ø 4	Ø 6	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 18	Ø 20	Ø 22	Ø 25	Ø 28	Ø 32		C12/15	C20/25
საძირკველი			43394		12486	2416		3181	38756					100231	100	1937
მონოლითური კედლები			373	3342	3631									7346		100
დოკლევველერი			460	694	2018	870	174							4215		48
ბარე კიბეები & პანდუსები			1715	1532	1167									4414	1	57
ჯამი ∑			45942	5567	19302	3285	174	3181	38756					116206	101	2141

შენიშვნა :
Note :

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ძინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

პროექტის დასახელება
Project name

A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name

მასალის ამოკრეფა

მთ.კონსტრუქტორი
Lead Structural Engineer

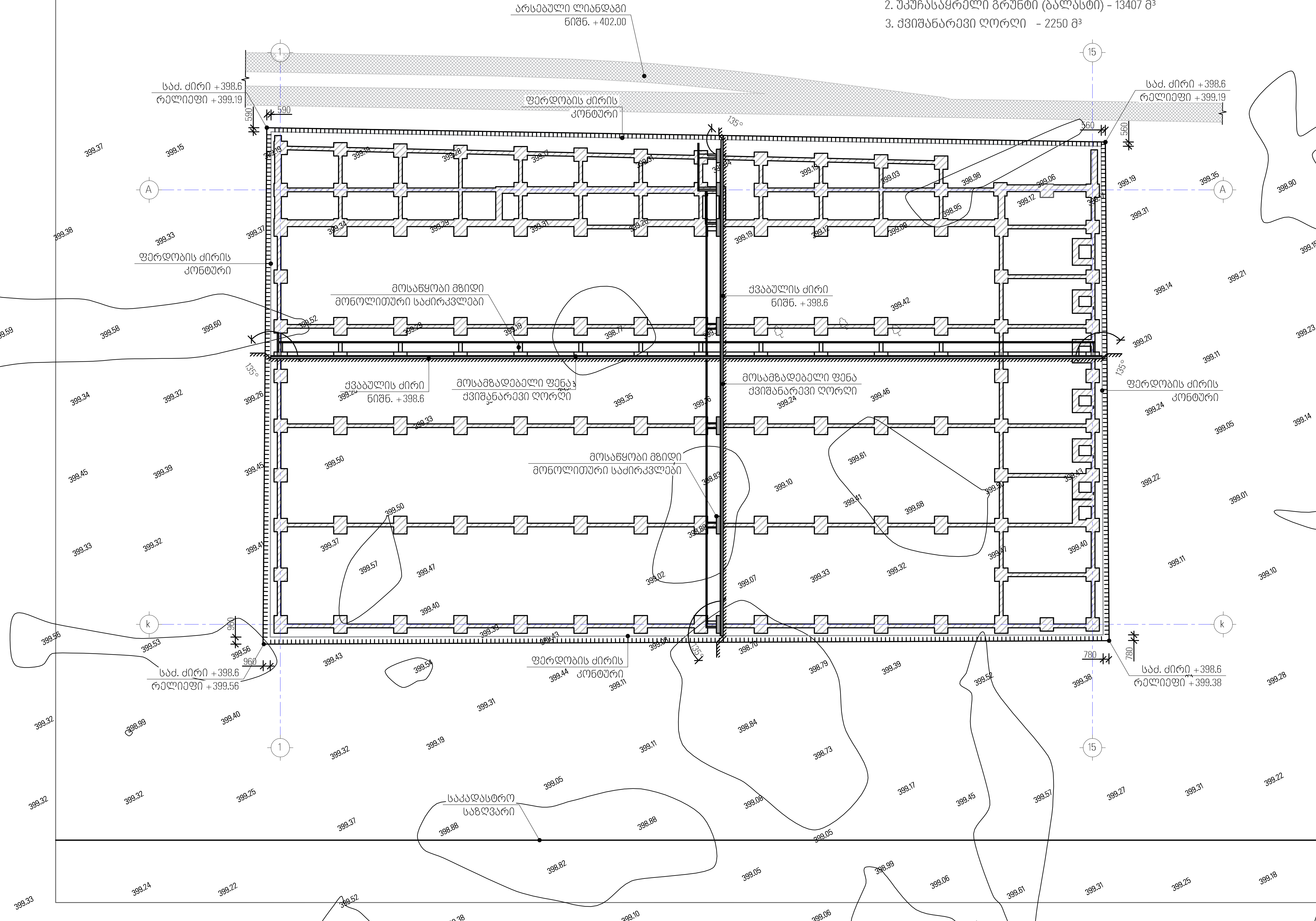
გ.ხიხიქაძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-0007		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

ქვაბულის გეგმა

შემოსატანი და გასატანი გრუნტის დაახლოებითი მოცულობები:

1. მოსაჭრელი გრუნტი - 5533 მ³
2. უკუჩასაყრელი გრუნტი (ბალასტი) - 13407 მ³
3. ქვიშანარევი ღორღი - 2250 მ³



შენიშვნა :
Note :

1. საყალიბე ნახაზები გახილულ იქნას პროექტის ლითონის კონსტრუქციულ ნაწილთან ერთად.
2. 0.00=400.9
3. ქვაბულის მოწყობისას დაცული იქნას "СП 45.13330.2017-Земляные сооружения, основания и фундаменты" ნორმა და "მშენებლობის უსაფრთხოების შესახებ ტექნიკური რეგლამენტი".

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.0[illegible]20, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

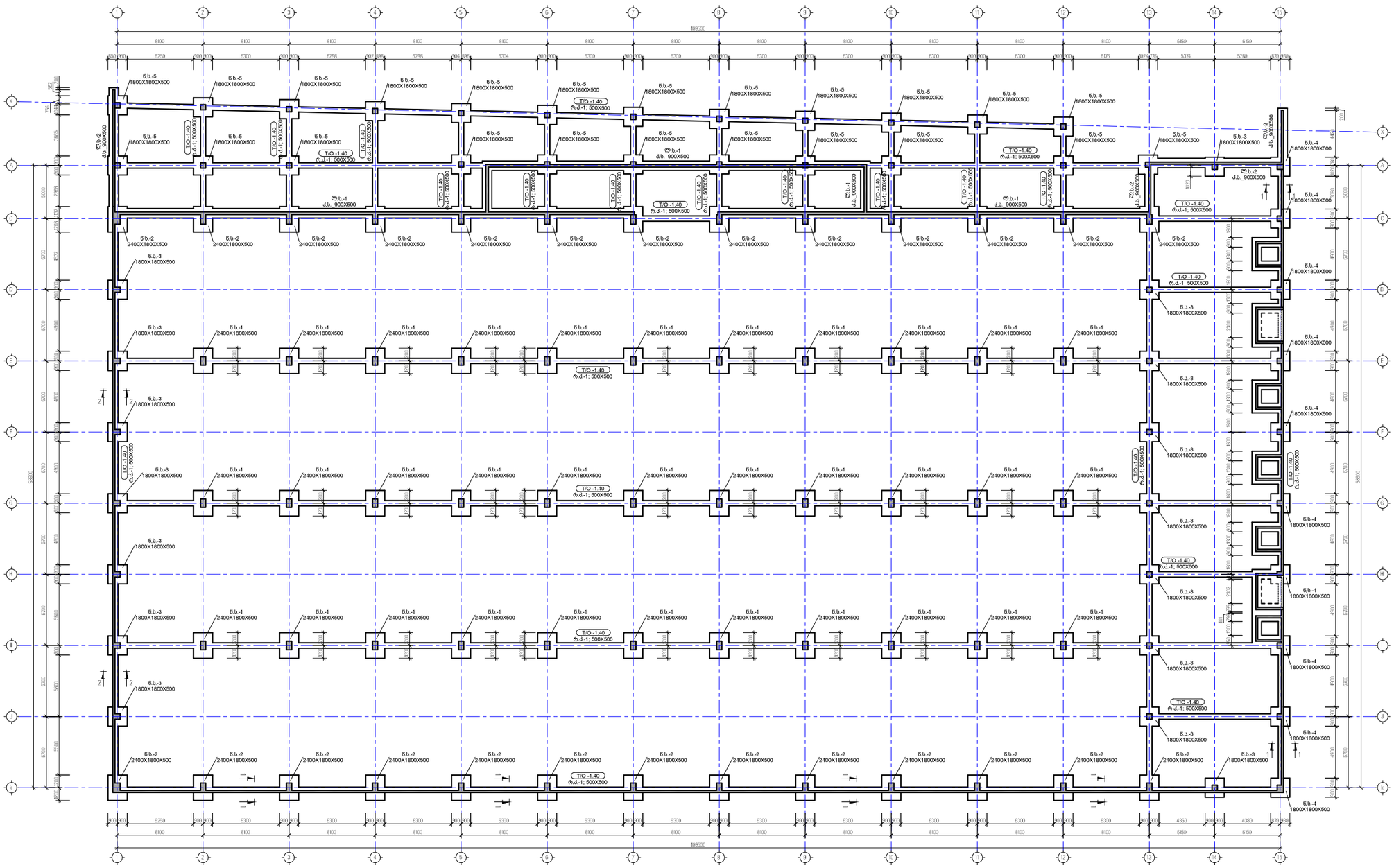
პროექტის დასახელება
Project name
A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name
ქვაბულის გეგმა

მთ.კონსტრუქტორი
Lead Structural Engineer
ბ.ჩხიკვაძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-1001		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

საძირკვლის საყალიბე გეგმა -1.40 ნიშნულზე



შენიშვნა :
Note :

1. საყალიბე ნახაზები გახილულ იქნას პროექტის ლითონის კონსტრუქციულ ნაწილთან ერთად.

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.084

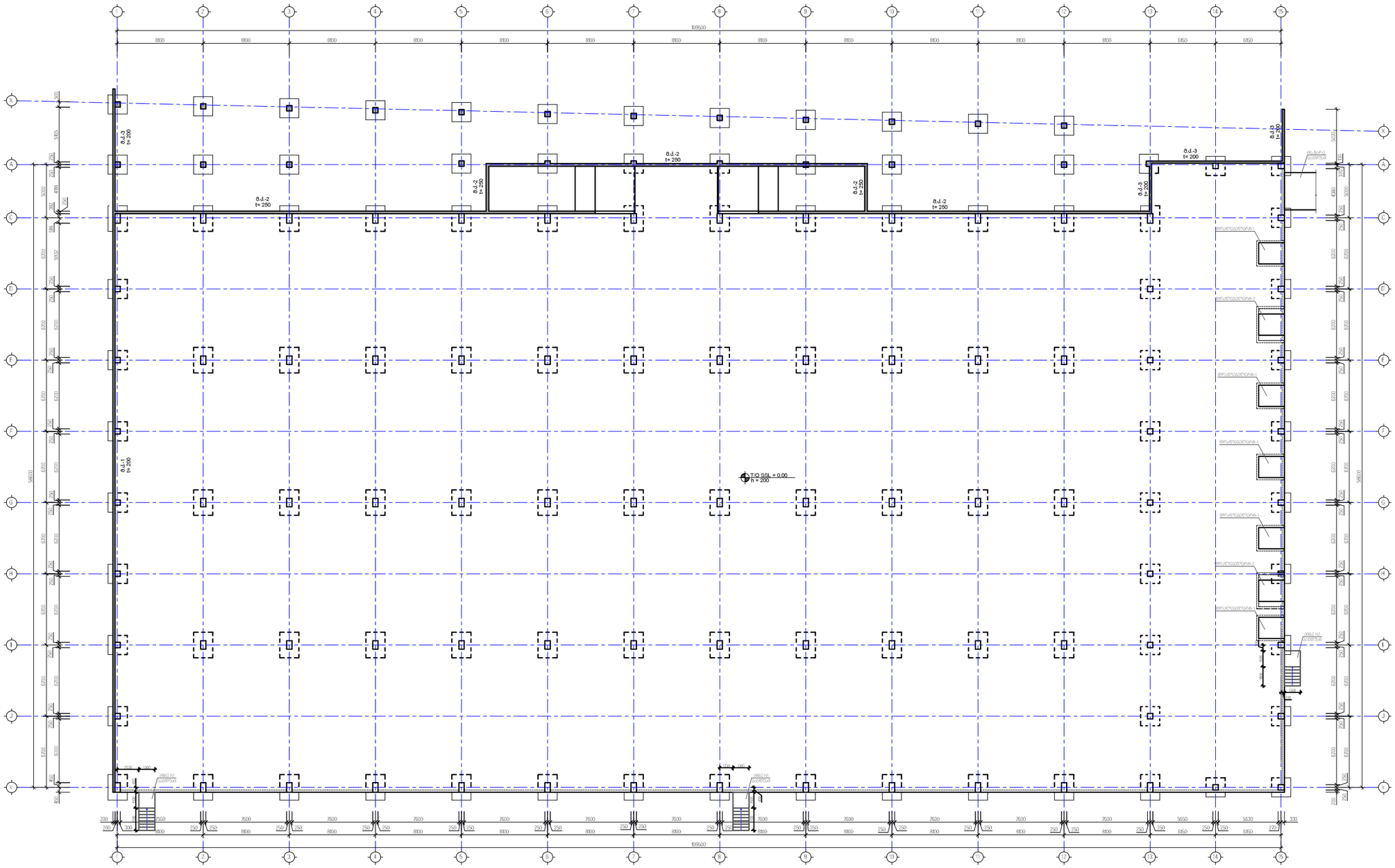
პროექტის დასახელება
Project name
A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name
საძირკვლის საყალიბე გეგმა -1.40 ნიშნულზე

მთ.კონსტრუქტორი
Lead Structural Engineer
გ.ხიხიაშვილი

ნახაზის ნომერი	ფორმატი	მასშტაბი
Drawing No.	Paper size	Scale
კ-1001		1:100
სტადია	პროექტის №	თარიღი
Status	Project No.	Date
მპ		03.12.2025

გრუნტზე მოწყობილი ფილის საყალიბე გეგმა ნიშნული 0.00



შენიშვნა :
Note :

1. საყალიბე ნახაზები გახილულ იქნას პროექტის ლითონის კონსტრუქციულ ნაწილთან ერთად.

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

პროექტის დასახელება
Project name

A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name

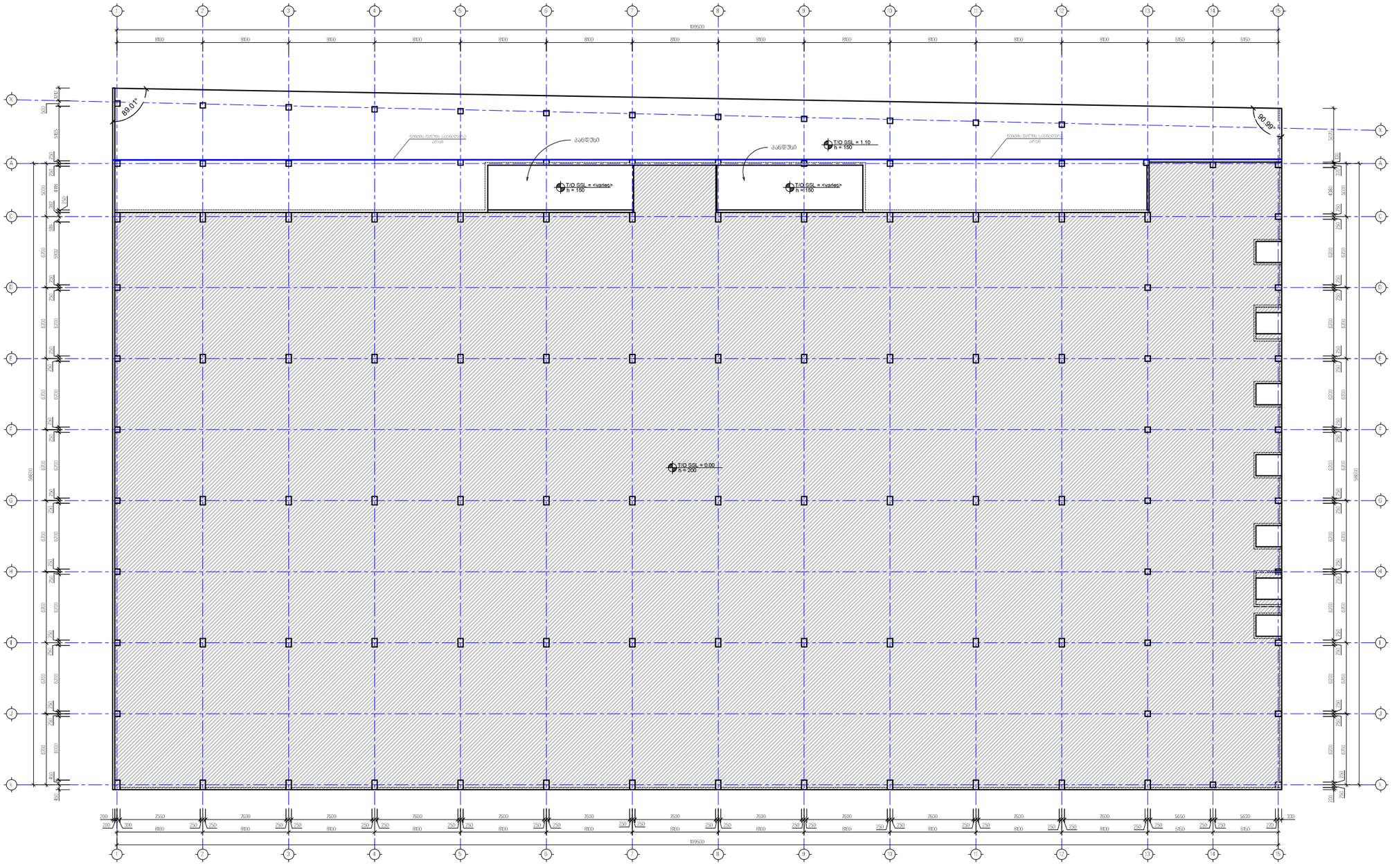
გრუნტზე მოწყობილი ფილის საყალიბე გეგმა ნიშნული 0.00

მთ.კონსტრუქტორი
Lead Structural Engineer

ბ.ჩხიკვაძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-1002		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

გრუნტზე მოწყობილი ფილის საყალიბე გეგმა ნიშნული 1.10



შენიშვნა :
Note :

1. საყალიბე ნახაზები გახილულ იქნას პროექტის ლითონის კონსტრუქციულ ნაწილთან ერთად.

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

პროექტის დასახელება
Project name

A კლასის სასწყობი (სამრეწველო)

ნახაზის სახელი
Drawing Name

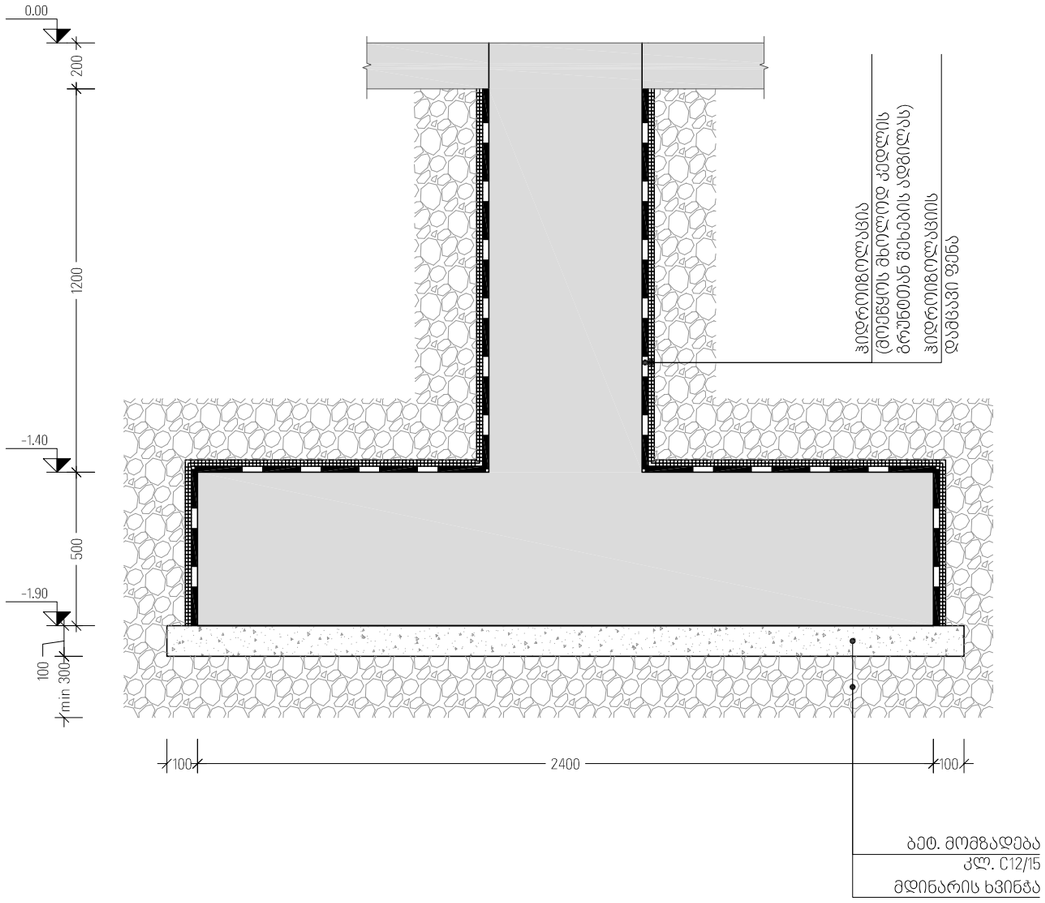
გრუნტზე მოწყობილი ფილის საყალიბე გეგმა ნიშნული 1.10

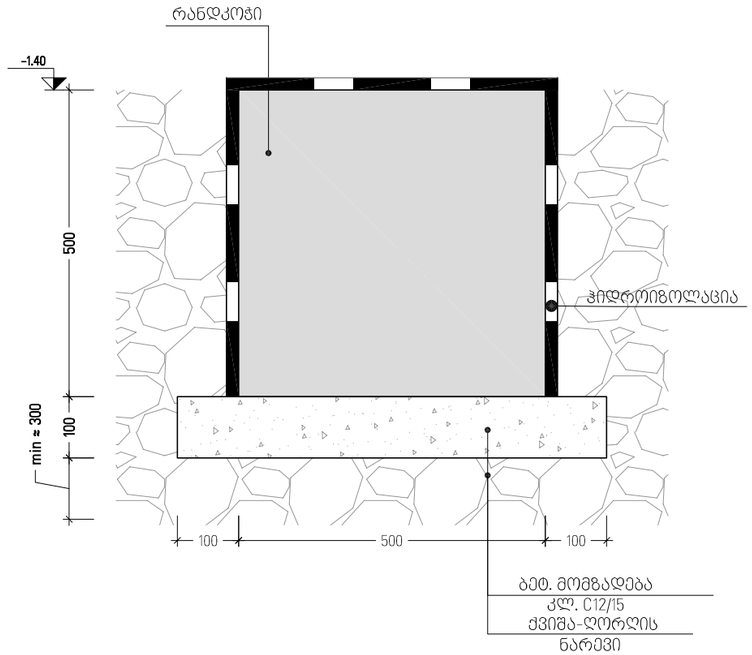
მთ.კონსტრუქტორი
Lead Structural Engineer

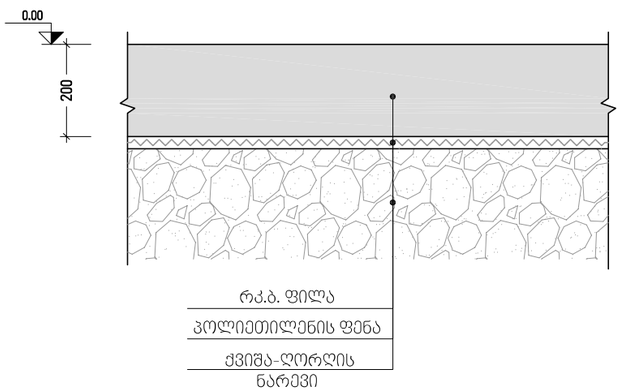
გ.ჩხეიძე

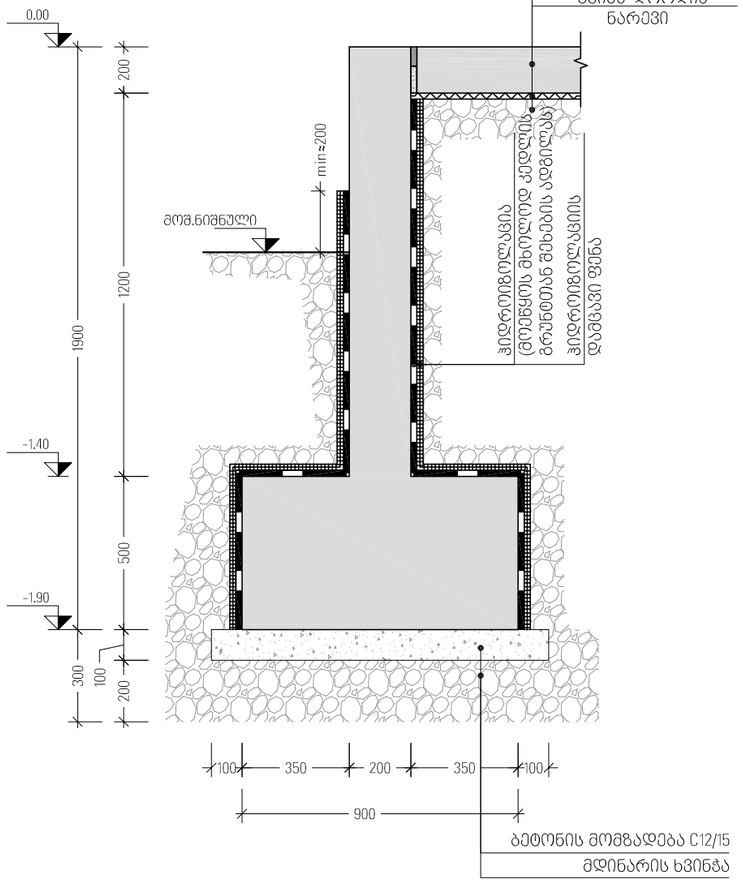
ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-1003		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

საძირკვლის ჰიდროიზოლაციის ტიპ. კვანძი









შენიშვნა :
Note :

1. საყალიბე ნახაზები გახილულ იქნას პროექტის ლითონის კონსტრუქციულ ნაწილთან ერთად.

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

პროექტის დასახელება
Project name

A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name

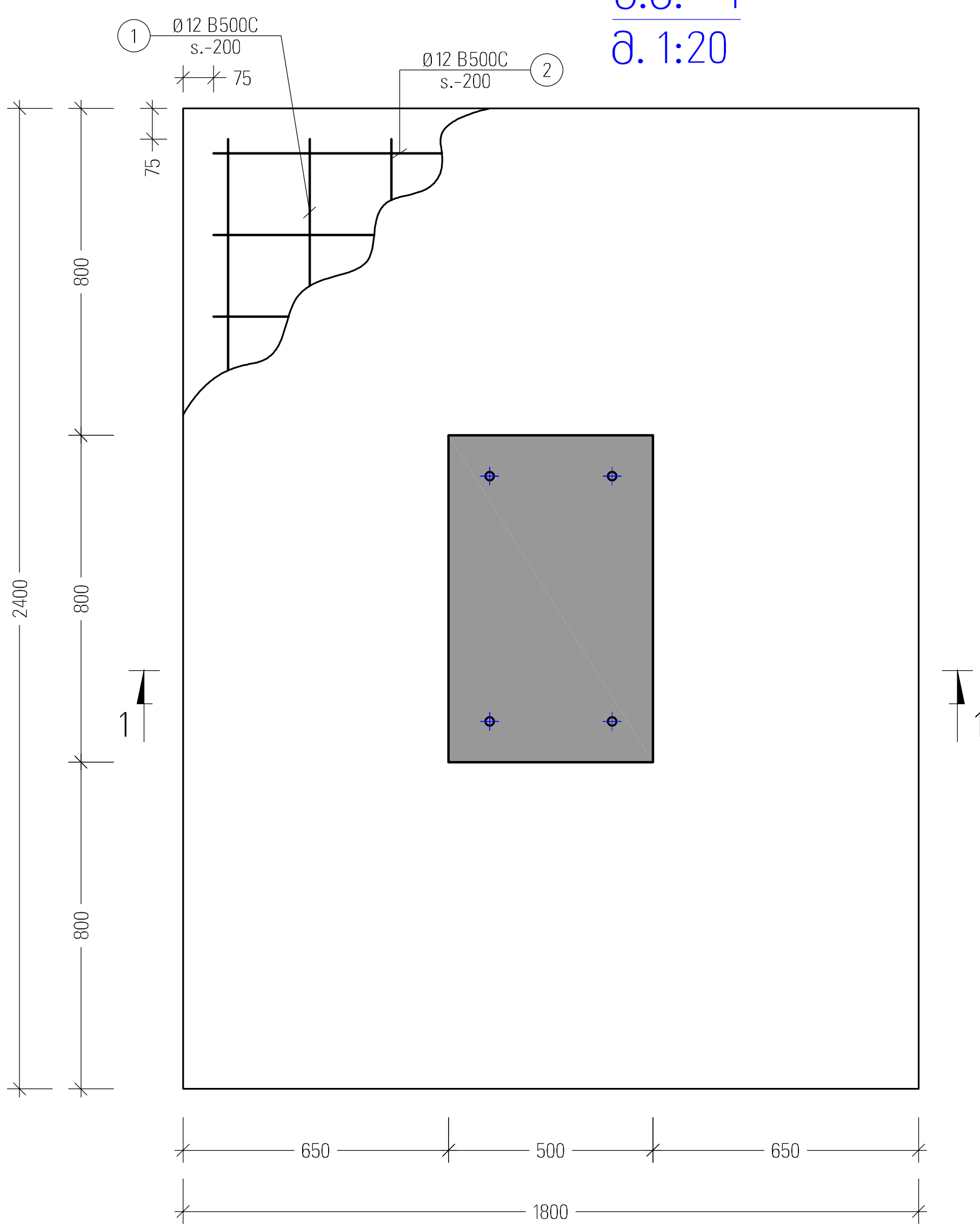
საძირკვლის ჰიდროიზოლაციის ტიპ. კვანძი

მთ.კონსტრუქტორი
Lead Structural Engineer

ბ.ჩხიკვაძე

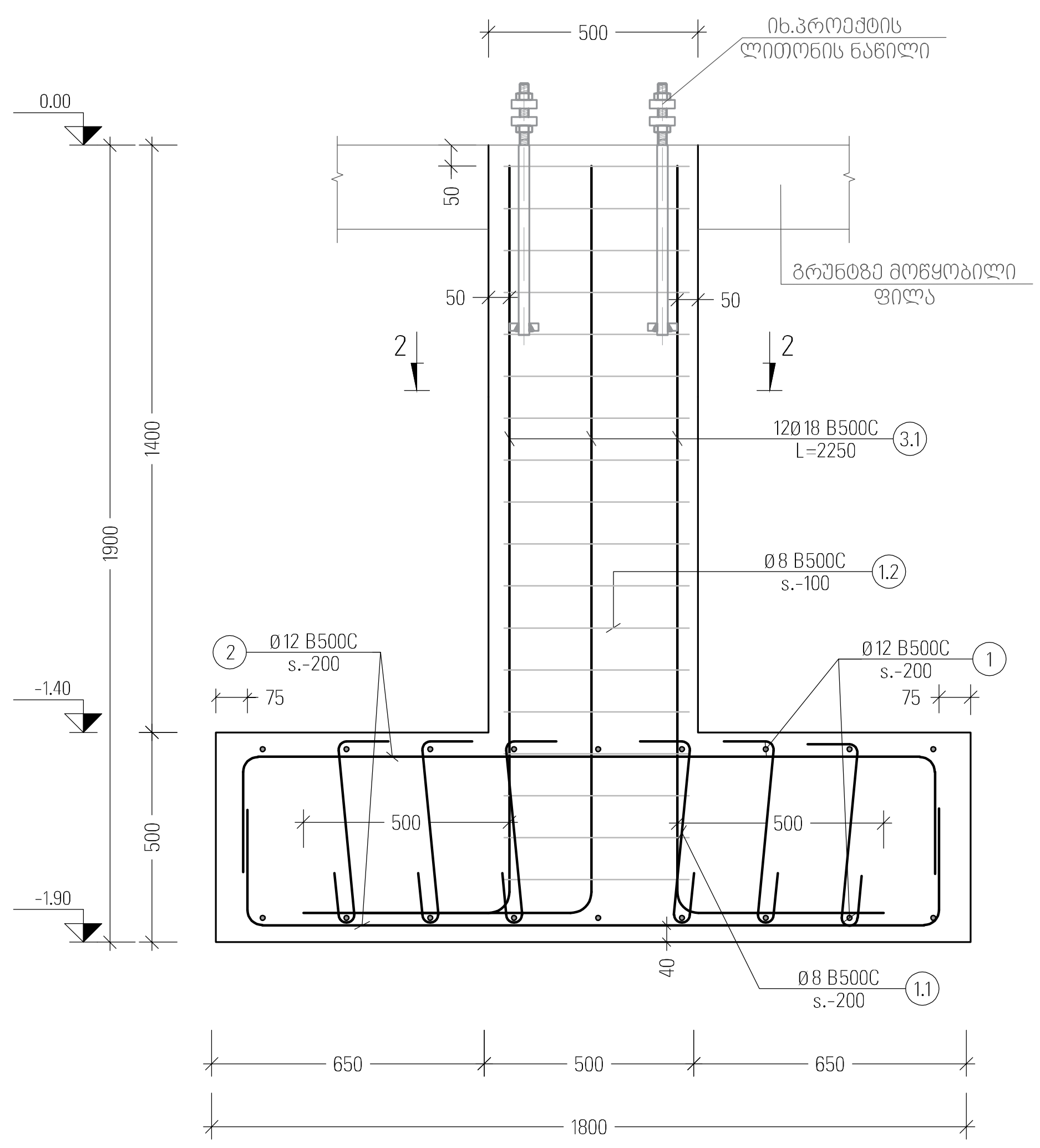
ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2001		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

წ.ს. - 1
მ. 1:20

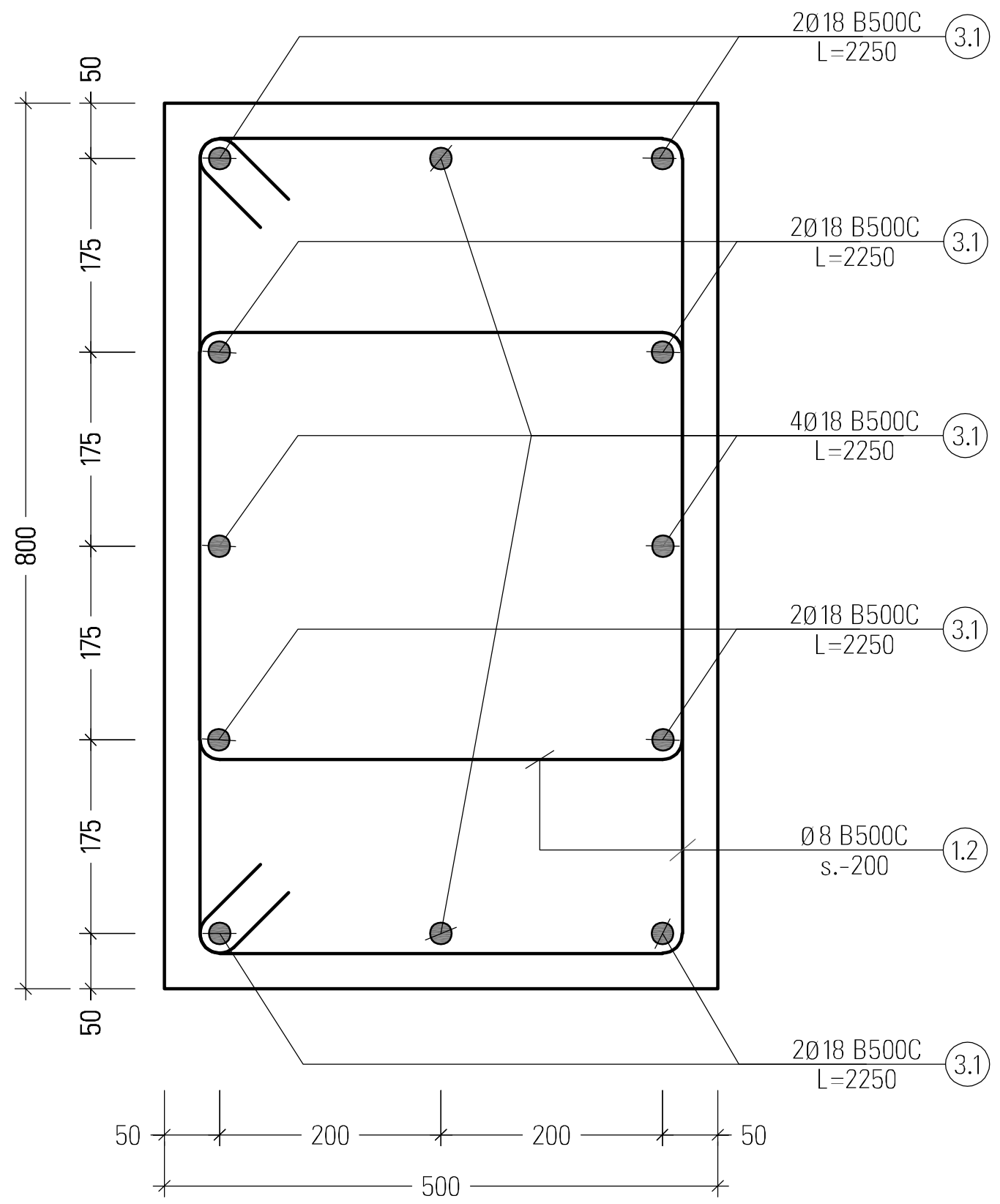


პოზ. №	ესკიზი	L მმ
1	275 / 2250 / 275 (U-shape)	2800
2	275 / 1650 / 275 (U-shape)	2200
3.1	1750 / 500 (L-shape)	2250
1.1	80 / 420 / 80	580
1.2	500 / 625 / 525 / 400	2050

კვეთი 1-1



კვეთი 2-2



ელემენტის დასახ. და რაოდენობა	პოზ. №	დიამეტრი ან კვეთი (მმ)	ერთეულის სიგრძე (მმ.)	რაოდენობა (ც.)	საერთო სიგრძე (მ.)	საერთო წონა (კგ.)
წ.ს.-1	1	Ø 12 B500C	2800	18 X 33	1663	1476
	2	Ø 12 B500C	2200	24 X 33	1742	1546
	3.1	Ø 18 B500C	2250	12 X 33	891	1779
	1.1	Ø 8 B500C	580	24 X 33	459	181
	1.2	Ø 8 B500C	2050	36 X 33	2435	960
	მძიმე ბეტონი C20/25	V =	2.5 X 33	=	82.83	მ³
	ბეტონის მომზადება C12/15	V =	0.5 X 33	=	17.16	მ³

შენიშვნა :
Note :

1. საყალიბე ნახაზები გახილულ იქნას პროექტის ლითონის კონსტრუქციულ ნაწილთან ერთად.

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

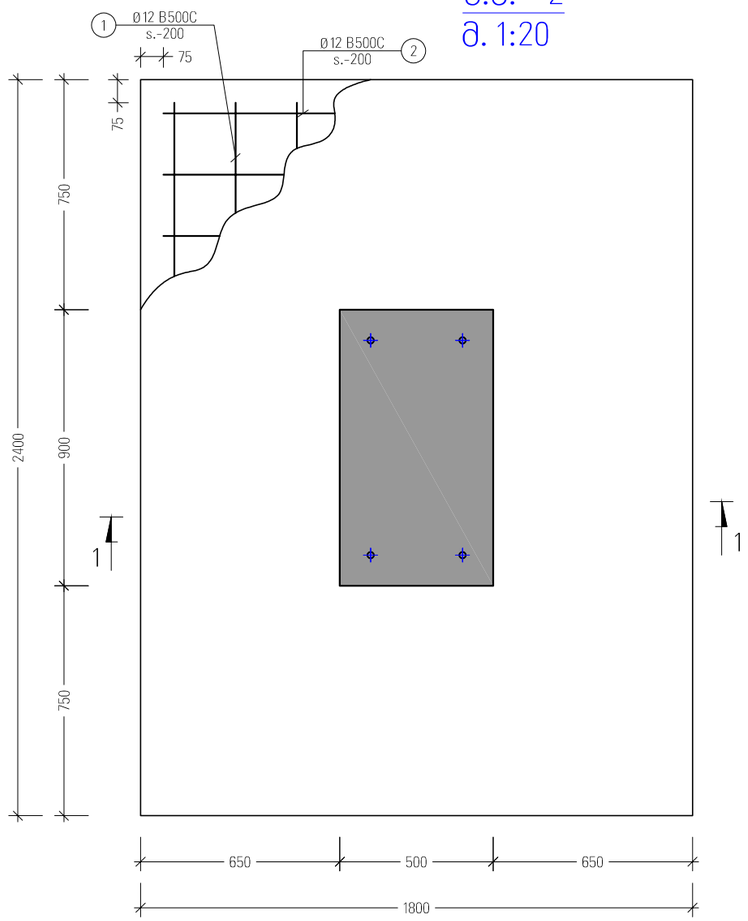
პროექტის დასახელება
Project name
A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name
წ.ს.-1 საძირკვლის არმირება

მთ.კონსტრუქტორი
Lead Structural Engineer
ბ.ჩხიკვაძე

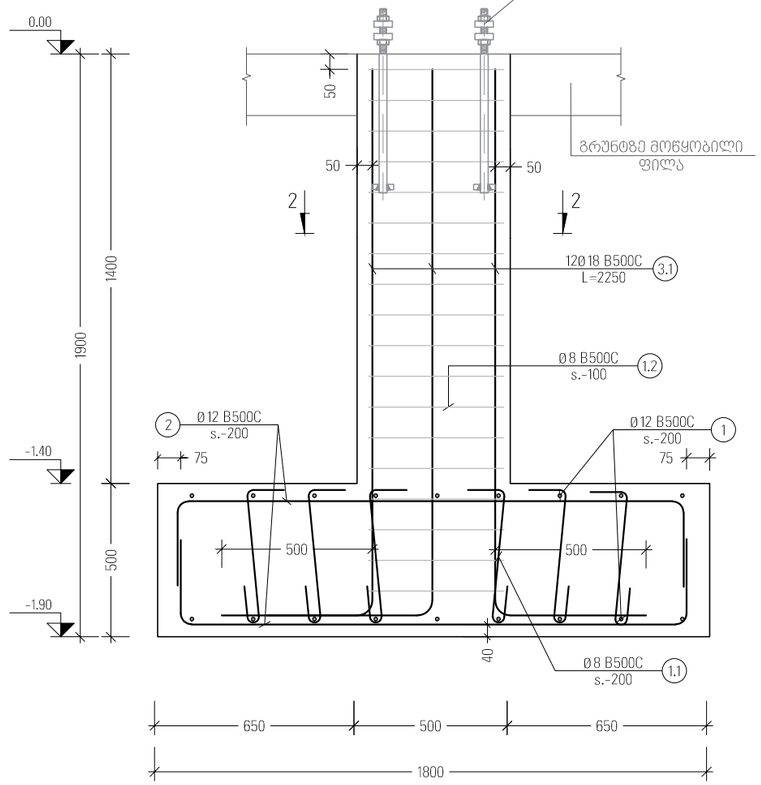
ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2002		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

წ.ს. - 2
მ. 1:20

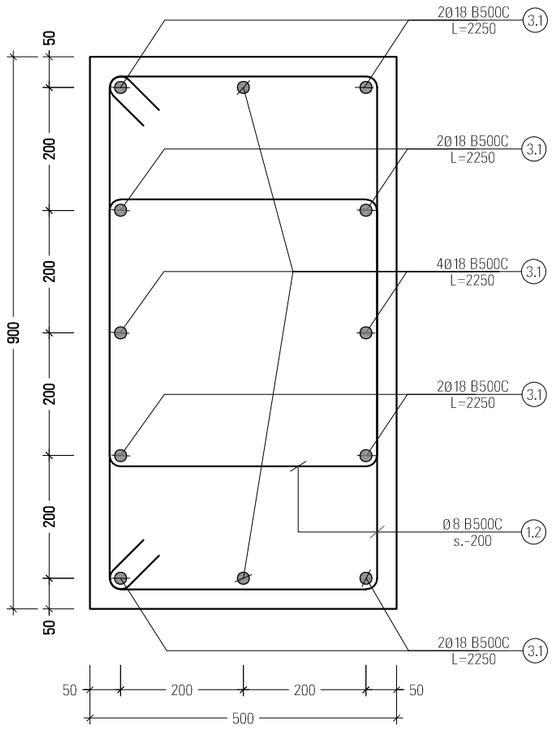


პოზ. №	ესკიზი	L მმ
1	275 275 2250	2800
2	275 275 1650	2200
3.1	1750 500	2250
1.1	80 420 80	580
1.2	500 700 600 400	2200

კვეთი 1-1



კვეთი 2-2



ელემენტის დასახ. და რაოდენობა	პოზ. №	დიამეტრი ან კვეთი (მმ)	ერთეულის სიმძიმე (მმ.)	რაოდენობა (ც.)	საერთო სიმძიმე (მ.)	საერთო წონა (კგ.)
წ.ს.-2	1	Ø 12 B500C	2800	18 X 26	1310	1163
	2	Ø 12 B500C	2200	24 X 26	1373	1218
	3.1	Ø 18 B500C	2250	12 X 26	702	1402
	1.1	Ø 8 B500C	580	24 X 26	362	143
	1.2	Ø 8 B500C	2200	36 X 26	2059	812
	მძიმე ბეტონი C20/25			V = 2.8 X 26 =	72.54	მ³
	ბეტონის მომზადება C12/15			V = 0.5 X 26 =	13.52	მ³

შენიშვნა :
Note :

1. საყალიბე ნახაზები გახილულ იქნას პროექტის ლიითონის კონსტრუქციულ ნაწილთან ერთად.

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

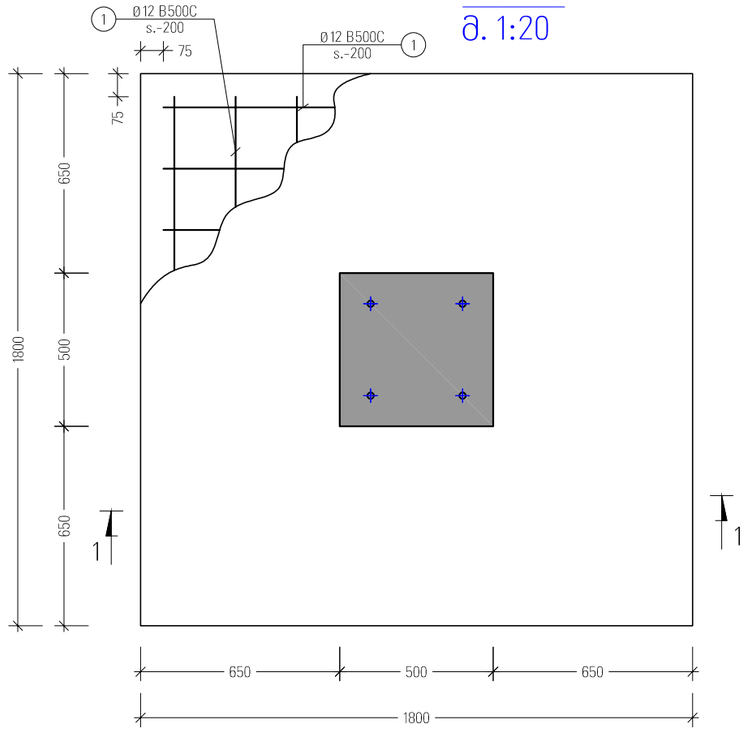
პროექტის დასახელება
Project name
A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name
წ.ს.-2 საძირკვლის არმირება

მთ.კონსტრუქტორი
Lead Structural Engineer
გ.ჩხეიძე

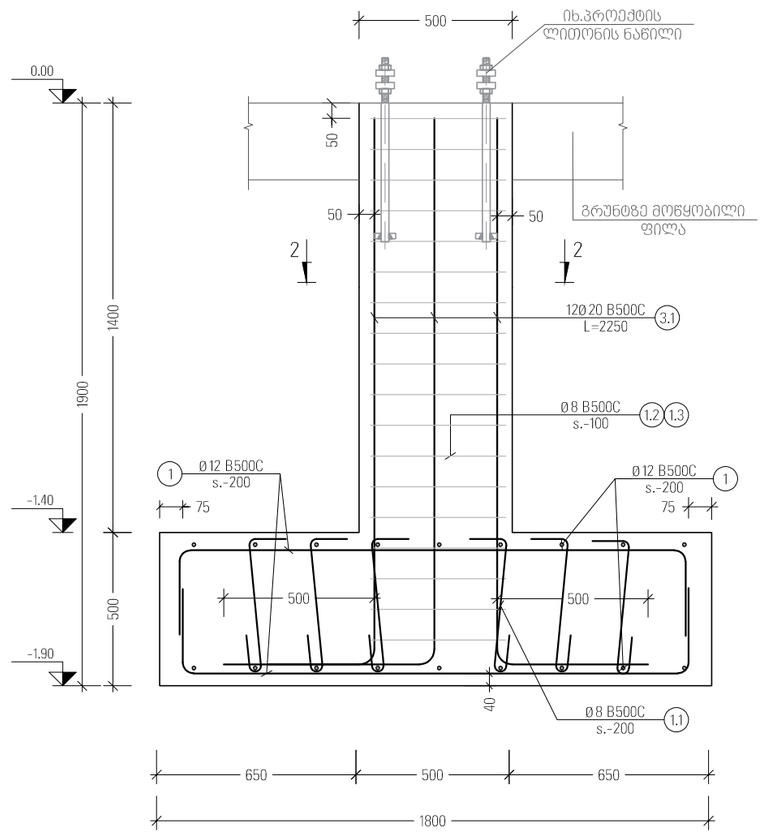
ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2003		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

წ.ს. - 3
მ. 1:20

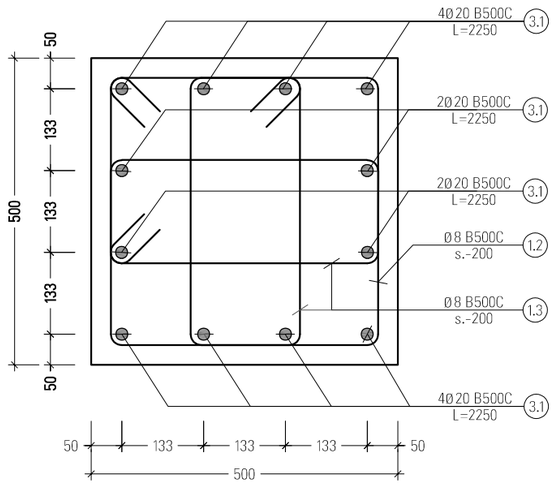


პოზ. №	ესკიზი	L მმ
1	275 275 1650	2200
3.1	R=250 1750 500	2250
1.1	80 420 80	580
1.2	500 500 400 400	1800
1.3	235 500 400 135	1270

კვეთი 1-1



კვეთი 2-2



ელემენტის დასახ. და რაოდენობა	პოზ. №	დიამეტრი ან კვეთი (მმ)	ერთეულის სიგრძე (მმ.)	რაოდენობა (ც.)	საერთო სიგრძე (მ.)	საერთო წონა (კგ.)
წ.ს.-3	1	Ø 12 B500C	2200	36 X 16	1267	1124
	3.1	Ø 20 B500C	2250	12 X 16	432	1065
	1.1	Ø 8 B500C	580	24 X 16	223	88
	1.2	Ø 8 B500C	1800	18 X 16	518	204
	1.3	Ø 8 B500C	1270	36 X 16	732	288
	მძიმე ბეტონი C20/25		V =	2.0 X 16	= 31.52	მ³
	ბეტონის მომზადება C12/15		V =	0.4 X 16	= 6.40	მ³

შენიშვნა :
Note :

1. საყალიბე ნახაზები გახილულ იქნას პროექტის ლიტონის კონსტრუქციულ ნაწილთან ერთად.

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

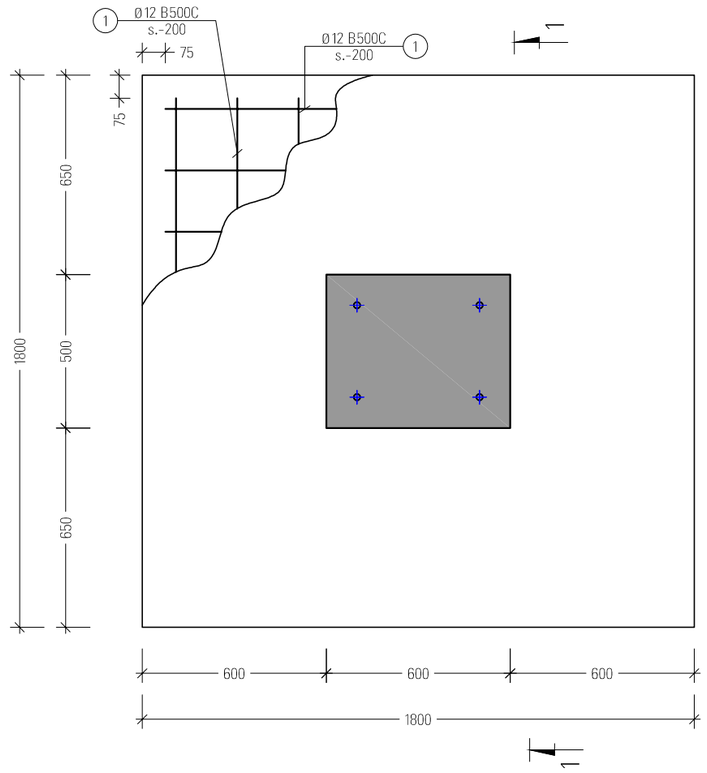
პროექტის დასახელება
Project name
A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name
წ.ს.-3 საძირკვლის არმირება

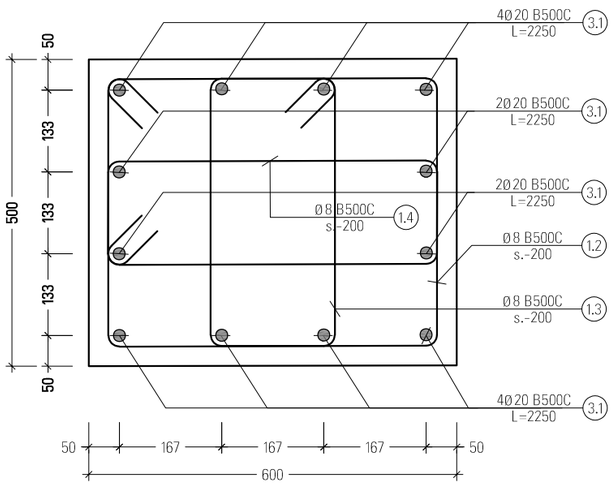
მთ.კონსტრუქტორი
Lead Structural Engineer
გ.ჩხეიძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2004		1:100
სტადია Status: მპ	პროექტის № Project No.	თარიღი Date: 03.12.2025

წ.ს. - 4
მ. 1:20

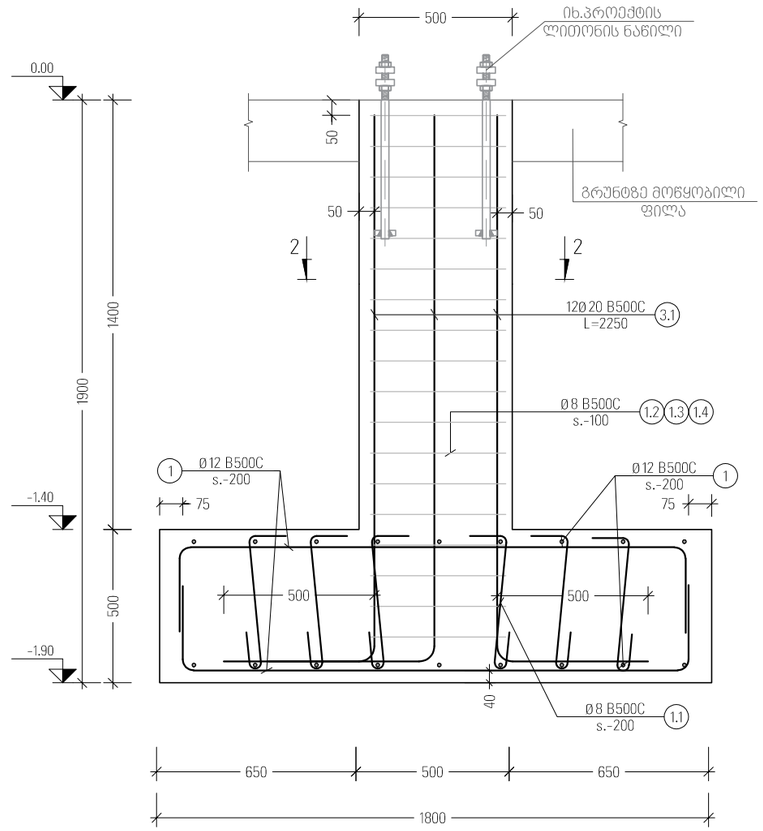


კვეთი 2-2



პოზ. №	ესკიზი	L მმ
1	275 275 1650	2200
3.1	R=250 1750 500	2250
1.1	80 420 80	580
1.2	500 500 400 400	1800
1.3	265 600 500 165	1530
1.4	265 500 400 165	1330

კვეთი 1-1



ელემენტის დასახ. და რაოდენობა	პოზ. №	დიამეტრი ან კვეთი (მმ)		ერთეულის სიგრძე (მმ.)	რაოდენობა (ც.)	საერთო სიგრძე (მ.)	საერთო წონა (კგ.)
წ.ს.-4	1	Ø 12	B500C	2200	36 X 10	792	703
	3.1	Ø 20	B500C	2250	12 X 10	270	666
	1.1	Ø 8	B500C	580	24 X 10	139	55
	1.2	Ø 8	B500C	1800	18 X 10	324	128
	1.3	Ø 8	B500C	1530	18 X 10	275	109
	1.4	Ø 8	B500C	1330	18 X 10	239	94
	მძიმე ბეტონი C20/25			V =	2.0 X 10	= 20.40	მ³
	ბეტონის მომზადება C12/15			V =	0.4 X 10	= 4.00	მ³

შენიშვნა :
Note :

1. საყალიბე ნახაზები გახილულ იქნას პროექტის ლიტონის კონსტრუქციულ ნაწილთან ერთად.

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

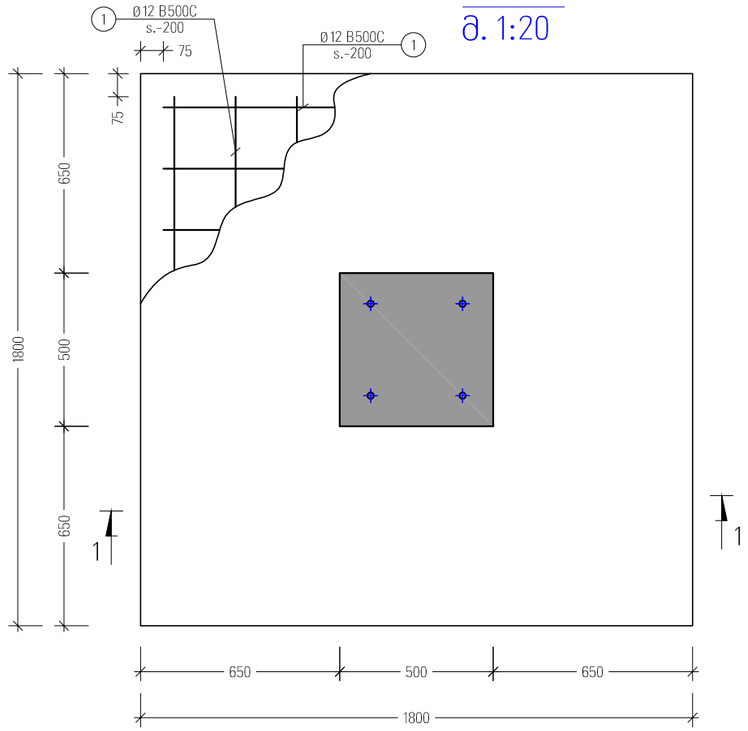
პროექტის დასახელება
Project name
A კლასის სააწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name
წ.ს.-4 საძირკვლის არმირება

მთ.კონსტრუქტორი
Lead Structural Engineer
გ.ხინკვაძე

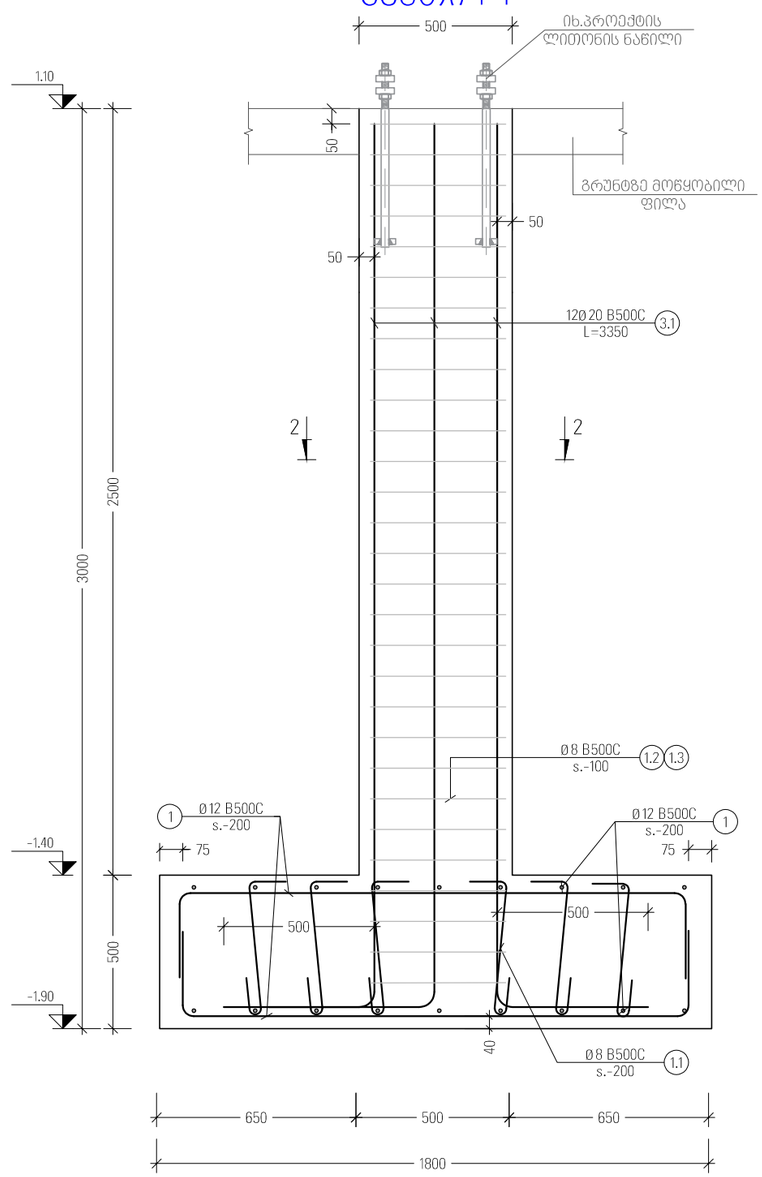
ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2005		1:100
სტადია Status: მპ	პროექტის № Project No.	თარიღი Date: 03.12.2025

წ.ს. - 5
მ. 1:20

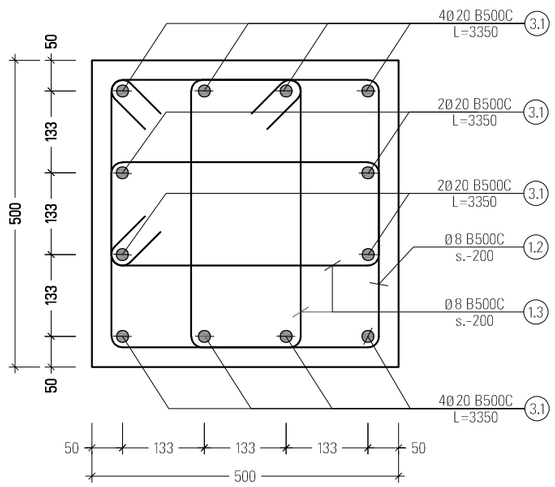


პოზ. №	ესკიზი	L მმ
1	275 275 1650	2200
3.1	R=250 2850 500	3350
1.1	80 420 80	580
1.2	500 500 400 400	1800
1.3	235 500 400 135	1270

კვეთი 1-1



კვეთი 2-2



ელემენტის დასახ. და რაოდენობა	პოზ. №	დიამეტრი ან კვეთი (მმ)	ერთეულის სიგრძე (მმ.)	რაოდენობა (ც.)	საერთო სიგრძე (მ.)	საერთო წონა (კგ.)
წ.ს.-5	1	Ø 12 B500C	2200	36 X 23	1822	1616
	3.1	Ø 20 B500C	3350	12 X 23	925	2279
	1.1	Ø 8 B500C	580	24 X 23	320	126
	1.2	Ø 8 B500C	1800	29 X 23	1201	473
	1.3	Ø 8 B500C	1270	58 X 23	1694	668
	მძიმე ბეტონი C20/25			V = 2.2 X 23 = 51.64 მ³		
	ბეტონის მომზადება C12/15			V = 0.4 X 23 = 9.20 მ³		

შენიშვნა :
Note :

1. საყალიბე ნახაზები გახილულ იქნას პროექტის ლითონის კონსტრუქციულ ნაწილთან ერთად.

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

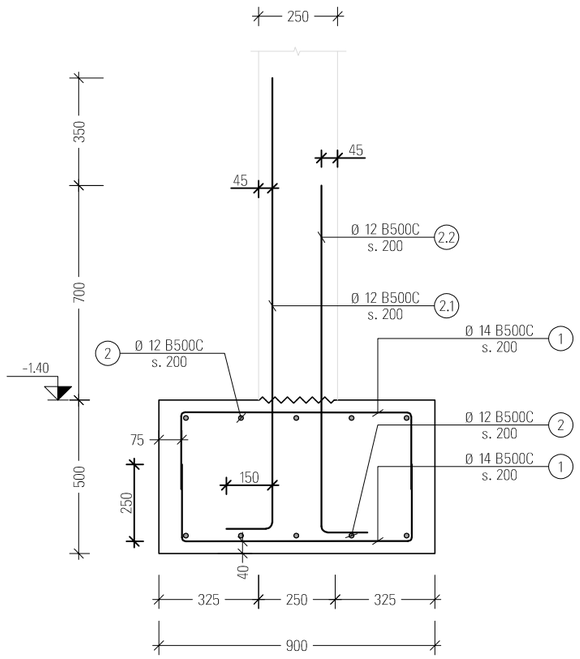
პროექტის დასახელება
Project name
A კლასის სანყობი (საძირკველი)

ნახაზის სახელი
Drawing Name
წ.ს.-5 საძირკვლის არმირება

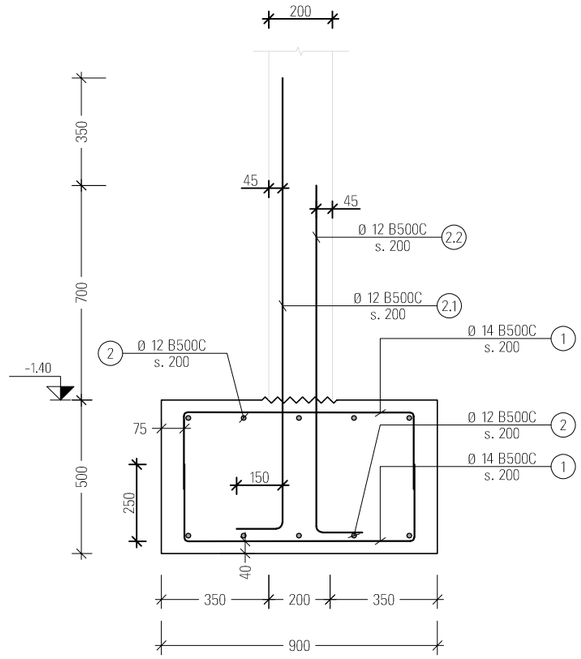
მთ.კონსტრუქტორი
Lead Structural Engineer
ბ.ჩხიკვაძე

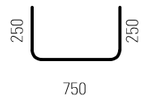
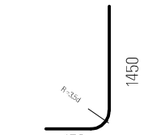
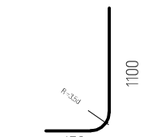
ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2006		1:100
სტადია Status: მპ	პროექტის № Project No.	თარიღი Date: 03.12.2025

ლ.ს.-1
მ. 1:20



ლ.ს.-2
მ. 1:20



პოზ. №	ესკიზი	L მმ
1		1250
2.1		1600
2.2		1250

ელემენტის დასახ. და რაოდენობა	პოზ. №	დიამეტრი ან კვეთი (მმ)	ერთეულის სიგრძე (მმ.)	რაოდენობა (ც.)	საერთო სიგრძე (მ.)	საერთო წონა (კგ.)
ლ.ს.-1	1	Ø 14 B500C	1250	1260 X 1	1575	1902
	2	Ø 12 B500C	დ.ა.	–	1386	1230
	2.1	Ø 12 B500C	1600	630 X 1	1008	894
	2.2	Ø 12 B500C	1250	630 X 1	788	699
	მძიმე ბეტონი C20/25		V =	67.2 X 1	= 67.20	მ³
	ბეტონის მომზადება C12/15		V =	13.4 X 1	= 13.44	მ³
ლ.ს.-2	1	Ø 14 B500C	1250	340 X 1	425	513
	2	Ø 12 B500C	დ.ა.	–	374	332
	2.1	Ø 12 B500C	1600	170 X 1	272	241
	2.2	Ø 12 B500C	1250	170 X 1	213	189
	მძიმე ბეტონი C20/25		V =	12.0 X 1	= 12.00	მ³
	ბეტონის მომზადება C12/15		V =	1.2 X 1	= 1.20	მ³

შენიშვნა :
Note :

1. საყალიბე ნახაზები გახილულ იქნას პროექტის ლითონის კონსტრუქციულ ნაწილთან ერთად.

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.084

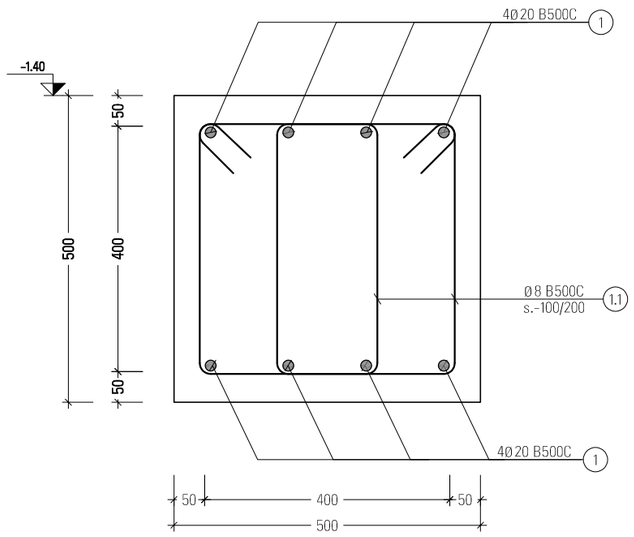
პროექტის დასახელება
Project name
A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name
ლენტური საძირკვლის არმირების კვეთები

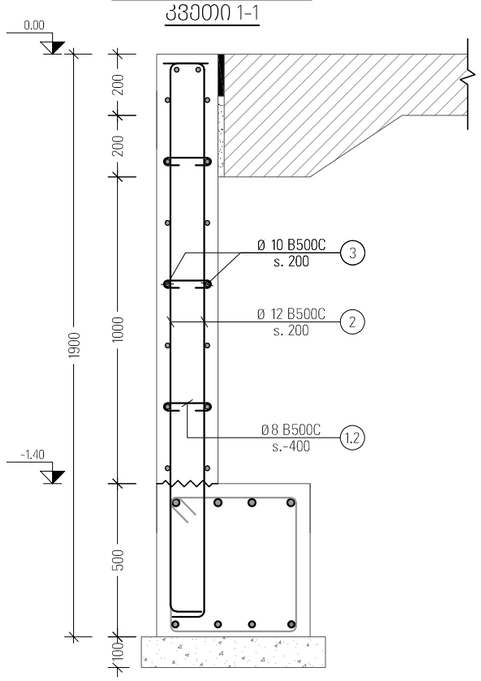
მთ.კონსტრუქტორი
Lead Structural Engineer
გ.ჩხიკვაძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2007		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

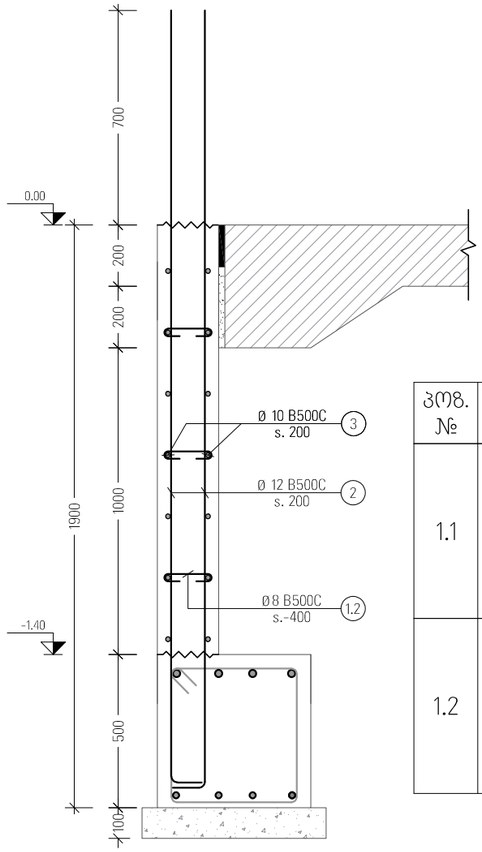
რ.კ.-1
მ. 1:10

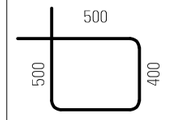
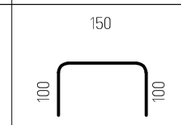


კედელი რ.კ.-1-დან კვეთი 1-1

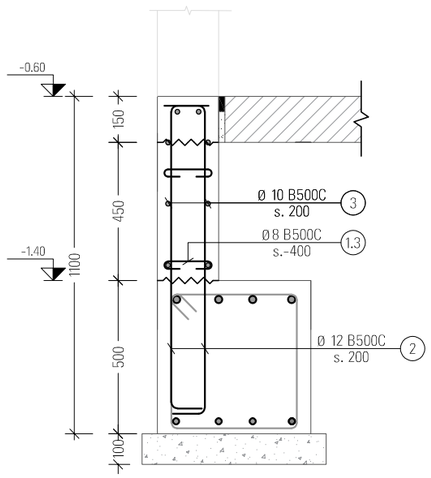


კედელი რ.კ.-1-დან კვეთი 2-2



პოზ. №	ესკიზი	L მმ
1.1		1800
1.2		350

კედელი დოკლეველერთან



ელემენტის დასახ. და რაოდენობა	პოზ. №	დიამეტრი ან კვეთი (მმ)	ერთეულის სიგრძე (მმ.)	რაოდენობა (ც.)	საერთო სიგრძე (მ.)	საერთო წონა (კგ.)
რ.კ.-1	1	Ø 20 B500C	დ.ბ.	–	7788	19197
	1.1	Ø 8 B500C	1800	11800 X 1	21240	8377
	მძიმე ბეტონი C20/25		V =	171.5 X 1	= 171.50 მ³	
	ბეტონის მომზადება C12/15		V =	34.3 X 1	= 34.30 მ³	
რ.კ.-1 და კედელი	1	Ø 20 B500C	დ.ბ.	–	6309	15550
	1.2	Ø 8 B500C	350	1680 X 1	588	232
	მძიმე ბეტონი C20/25		V =	69.0 X 1	= 69.00 მ³	

შენიშვნა :
Note :

1. საყალიბე ნახაზები გახილულ იქნას პროექტის ლითონის კონსტრუქციულ ნაწილთან ერთად.

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.084

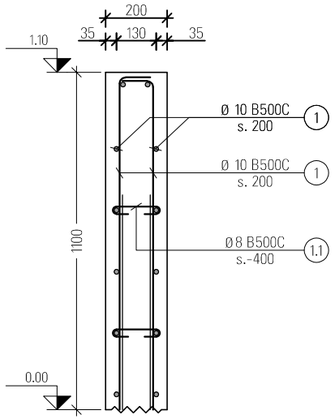
პროექტის დასახელება
Project name
A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name
რანდკოჭის და რანდკოჭის კედლის არმირება

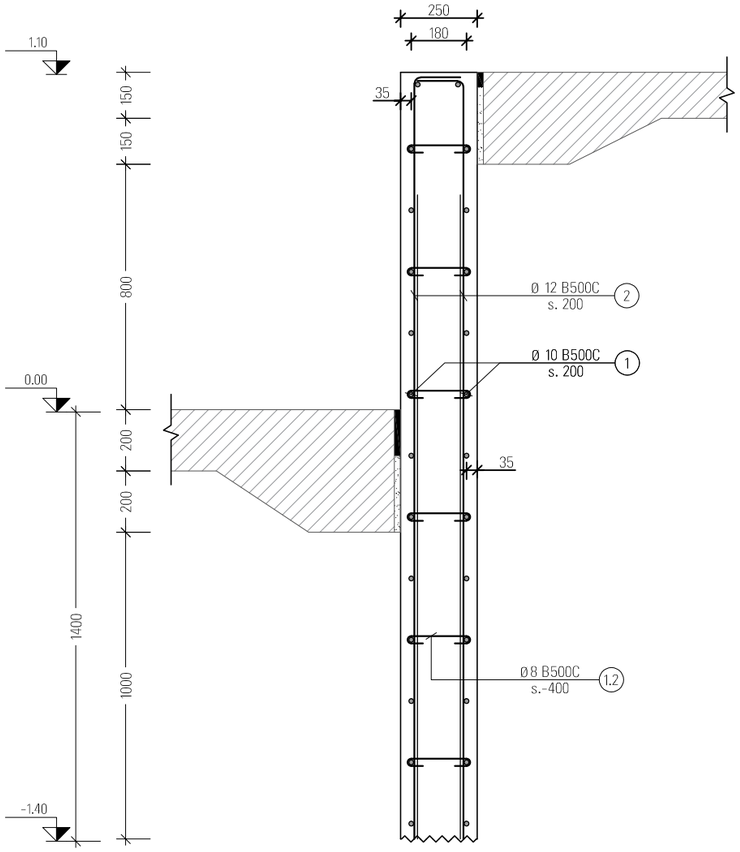
მთ.კონსტრუქტორი
Lead Structural Engineer
გ.ჩხივაძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2008		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

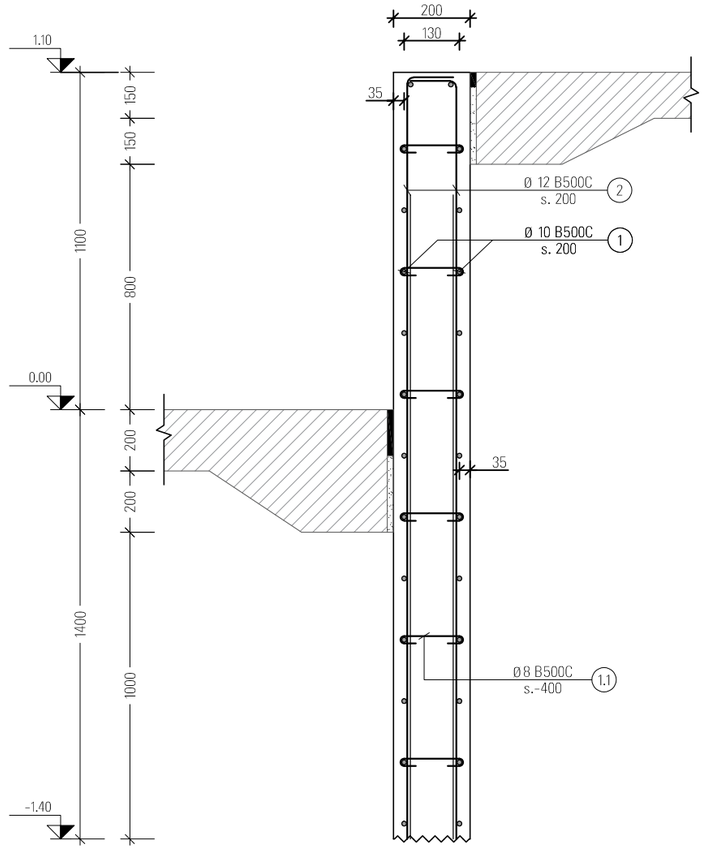
მ.კ.-1
მ. 1:20



მ.კ.-2
მ. 1:20



მ.კ.-3
მ. 1:20



შენიშვნა :
Note :

1. საყალიბე ნახაზები გახილულ იქნას პროექტის ლითონის კონსტრუქციულ ნაწილთან ერთად.

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.084

პროექტის დასახელება
Project name

A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name

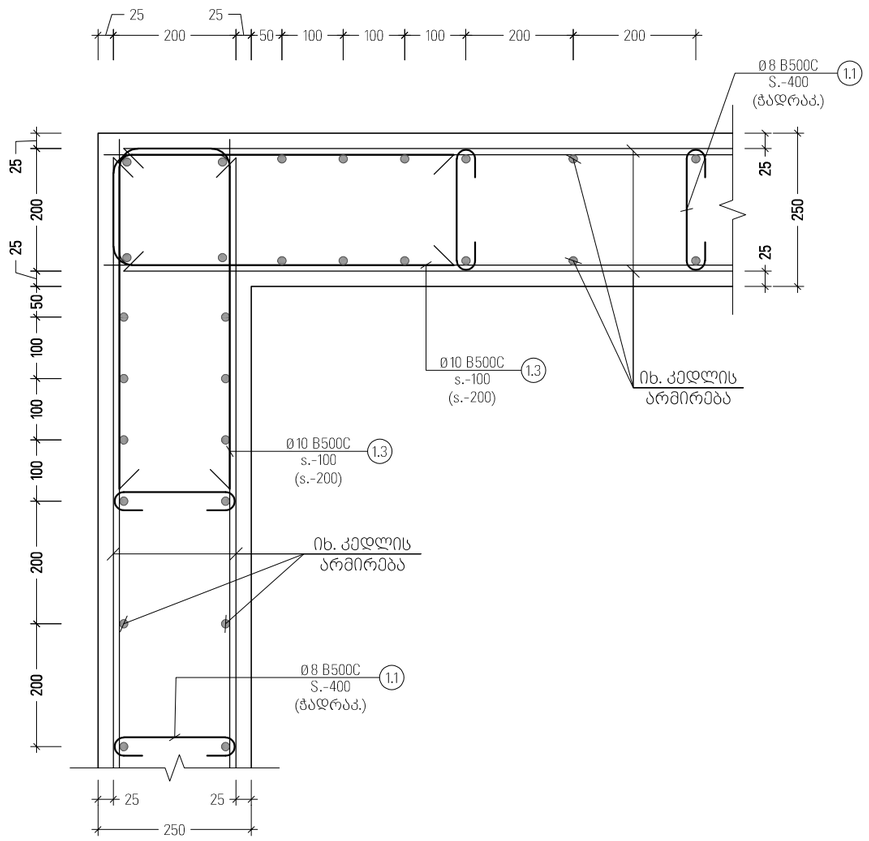
მონ.ქედლების არმირება

მთ.კონსტრუქტორი
Lead Structural Engineer

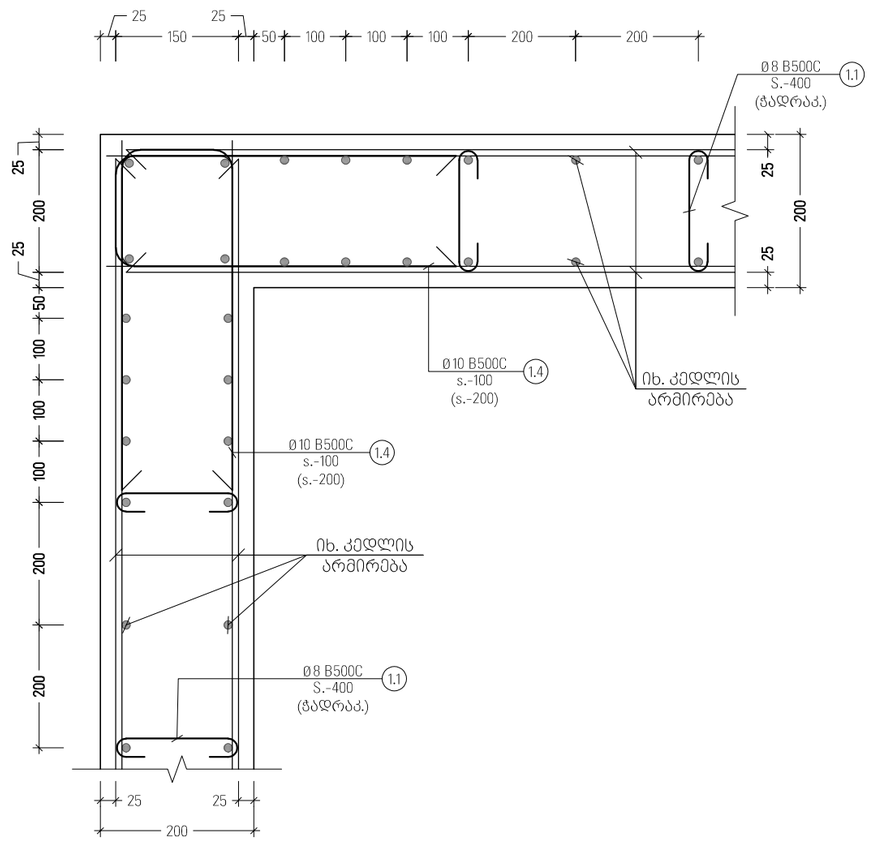
ბ.ჩხიკვაძე

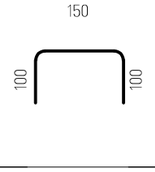
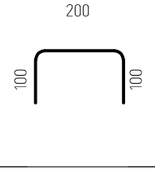
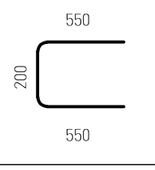
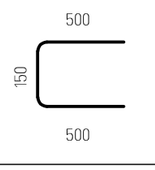
ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2009		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

კედლების შეერთების კვანძი I
მ. 1:20



კედლების შეერთების კვანძი II
მ. 1:20



პოზ. №	ესკიზი	L მმ
1.1		350
1.2		400
1.3		1300
1.4		1150

კონსტრ. დასახ. და სართული	ელემენტის დასახ. და რაოდენობა	პოზ. №	დიამეტრი ან კვეთი (მმ)		ერთეულის სიგრძე (მმ.)	რაოდენობა (ც.)	სიგრძე (მ.)	წონა (კგ.)
მონ. კედლების სპეციფიკაცია	მ.ქ.-1 1 (ც.)	1	Ø 10	B500C	წ.ა.	–	1331	820
		1.1	Ø 8	B500C	350	378 X 1	132.34	52
		მძიმე ბეტონი C20/25			V = 12.1 X 1		= 12.10	მ³
	მ.ქ.-2 1 (ც.)	1	Ø 10	B500C	წ.ა.	–	3146	1939
		2	Ø 12	B500C	წ.ა.	–	3146	2792
		1.1	Ø 8	B500C	350	1788 X 1	625.63	247
		მძიმე ბეტონი C20/25			V = 72.0 X 1		= 72.00	მ³
	მ.ქ.-3 1 (ც.)	1	Ø 10	B500C	წ.ა.	–	946	583
		2	Ø 12	B500C	წ.ა.	–	946	839
		1.1	Ø 8	B500C	350	538 X 1	188.13	74
		მძიმე ბეტონი C20/25			V = 15.7 X 1		= 15.70	მ³

შენიშვნა :
Note :

1. საყალიბე ნახაზები გახილულ იქნას პროექტის ლითონის კონსტრუქციულ ნაწილთან ერთად.

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ძინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

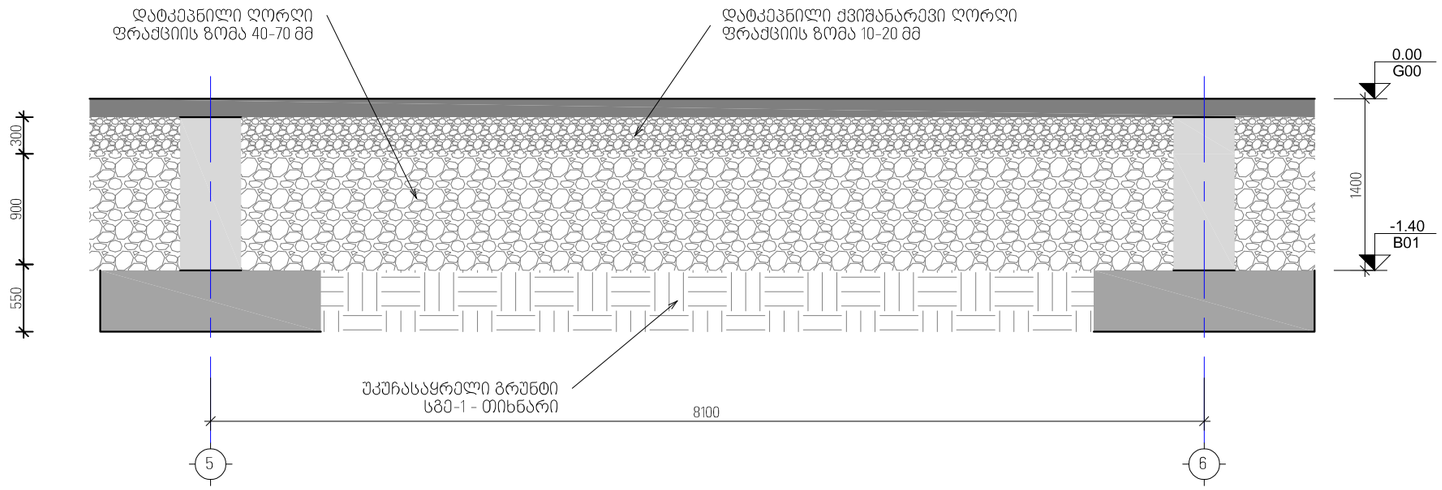
პროექტის დასახელება
Project name
A კლასის სანყობი (საძირკვლი)

ნახაზის სახელი
Drawing Name
მონ.კედლების არმირება

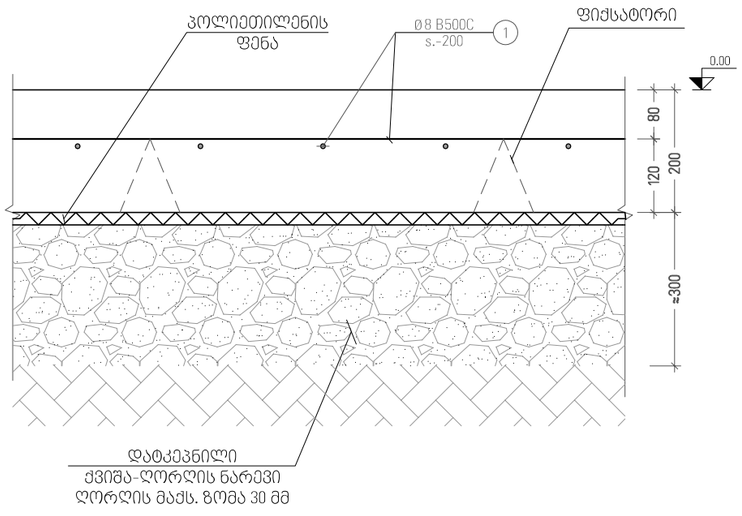
მთ.კონსტრუქტორი
Lead Structural Engineer
ბ.ჩხიკვაძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2010		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

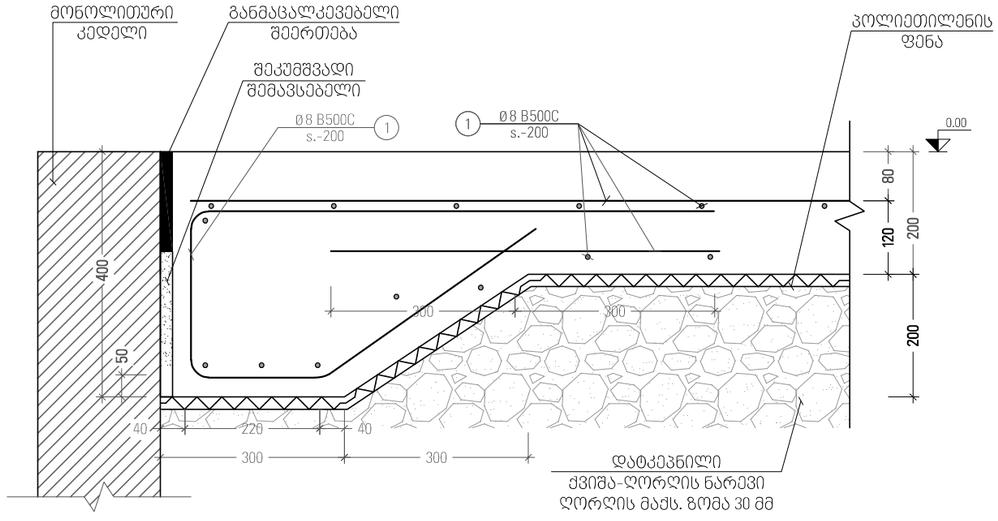
შემავსებელი გრუნტების ჭრილი



კვეთი გრუნტზე მოწყობილი ფილა 0.00 ნიშნულზე
მ 1:10



გრუნტზე მოწყობილი ფილა 0.00 და ნიშნულზე (ჩაკეტვა)
მ 1:10



შენიშვნა : მსხვილი ფრაქციის ღორღი დაიტკეპნოს 40 სმ-იან შრეებად ისე რომ მისი მიახლოებითი სიმტკიცე აღემატებოდეს 3.00 კგ/სმ^2.

ელემენტის დასახ. და რაოდენობა	პოზ. №	დიამეტრი ან კვეთი (მმ)	ერთეულის სიგრძე (მმ.)	რაოდენობა (ც.)	საერთო სიგრძე (მ.)	საერთო წონა (კგ.)
გრუნტ. მოწყ. ფილა 0.00 ზე	1	Ø 8 B500C	დ.ა.	–	66550	26246
	მძიმე ბეტონი C20/25 V = 1210.0 X 1 = 1210.00 მ^3					

შენიშვნა :
Note :

1. საყალიბე ნახაზები განხილულ იქნას პროექტის ლითონის კონსტრუქციულ ნაწილთან ერთად.

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.ტყიბული, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

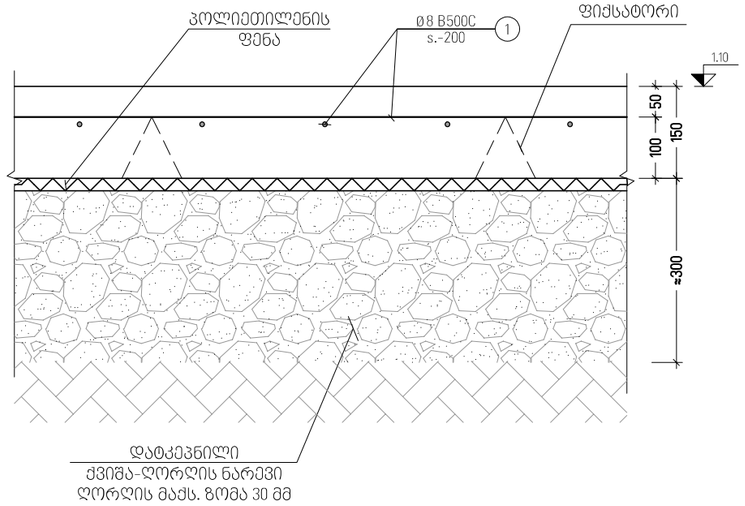
პროექტის დასახელება
Project name
A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name
გრუნტზე მოწყობილი ფილის არმირების კვეთი ნიშნული 0.00

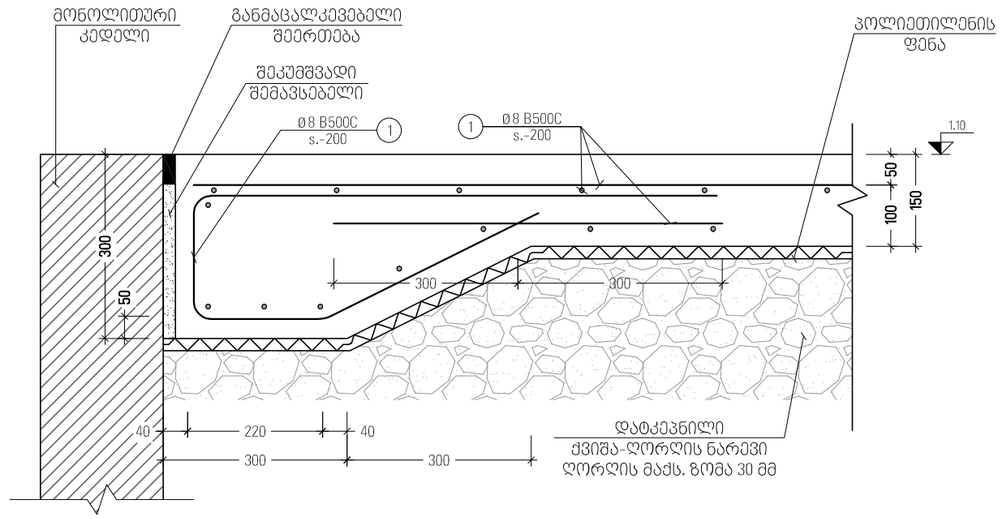
მთ.კონსტრუქტორი
Lead Structural Engineer
ბ.ჩხენკელი

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2011		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

კვეთი გრუნტზე მოწყობილი ფილა 1.10 ნიშნულზე
მ 1:10



გრუნტზე მოწყობილი ფილა 1.10 ნიშნულზე (ჩაკეტვა)
მ 1:10



შენიშვნა : მსხვილი ფრაქციის ღორღი დაიტკეპნოს 40 სმ-იან შრეებად ისე რომ მისი მიახლოებითი სიმტკიცე აღემატებოდეს 3.00 კგ/სმ^2.

ელემენტის დასახ. და რაოდენობა	პოზ. №	დიამეტრი ან კვეთი (მმ)	ერთეულის სიგრძე (მმ.)	რაოდენობა (ც.)	საერთო სიგრძე (მ.)	საერთო წონა (კგ.)
გრუნტ. მოწყ. ფილა 1.10 ზე	1	Ø 8 B500C	დ.ა.	–	10670	4208
	მძიმე ბეტონი C20/25 V = 146.0 X 1 = 146.00 მ³					

შენიშვნა :
Note :

1. საყალიბე ნახაზები განხილულ იქნას პროექტის ლითონის კონსტრუქციულ ნაწილთან ერთად.

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.084

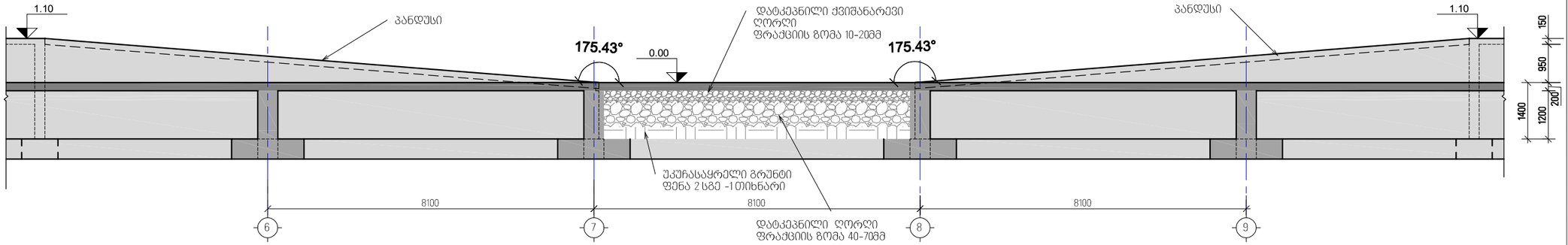
პროექტის დასახელება
Project name
A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name
გრუნტზე მოწყობილი ფილის არმირების კვეთი ნიშნული 1.10

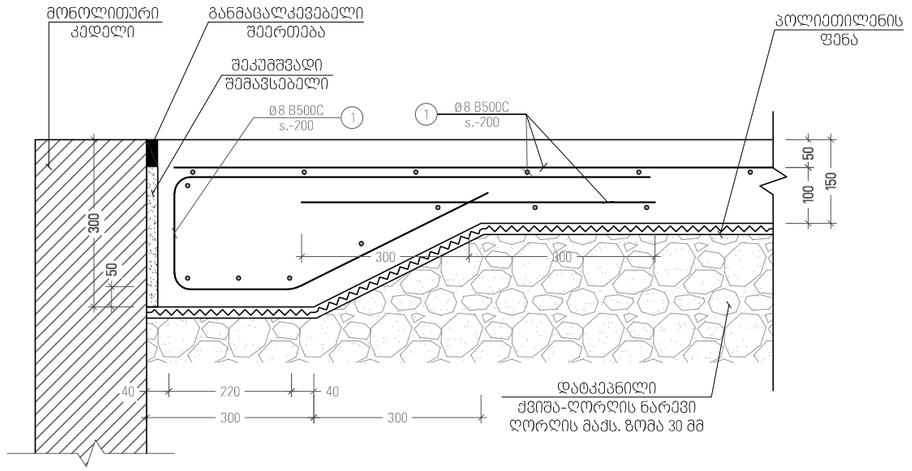
მთ.კონსტრუქტორი
Lead Structural Engineer
გ.ხიხავაძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2012		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

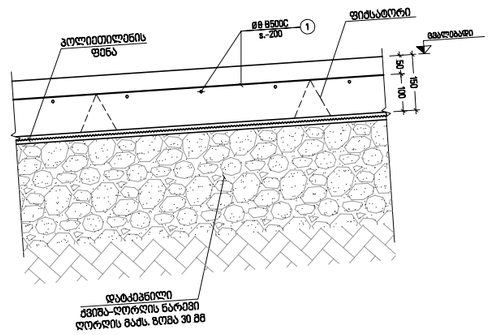
შენობაში მოსაწყობი პანდუსის ჭრილი



გრუნტზე მოწყობილი ფილა პანდუსისთვის(ჩაკეტვა)
მ 1:10



კვეთი გრუნტზე მოწყობილი ფილა პანდუსისთვის



შენიშვნა : მსხვილი ფრაქციის ღორღი დაიტკეპნოს 40 სმ-იან შრეებად ისე რომ მისი მიახლოებითი სიმტკიცე აღემატებოდეს 3.00 კგ/სმ^2.

ელემენტის დასახ. და რაოდენობა	პოზ. №	დიამეტრი ან კვეთი (მმ)	ერთეულის სიგრძე (მმ.)	რაოდენობა (ც.)	საერთო სიგრძე (მ.)	საერთო წონა (კგ.)
პანდუსი	1	Ø 8 B500C	მ.პ	-	1100	434
	მძიმე ბეტონი C20/25		V =	7.5 X 2	= 15.00	მ³

შენიშვნა :
Note :

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

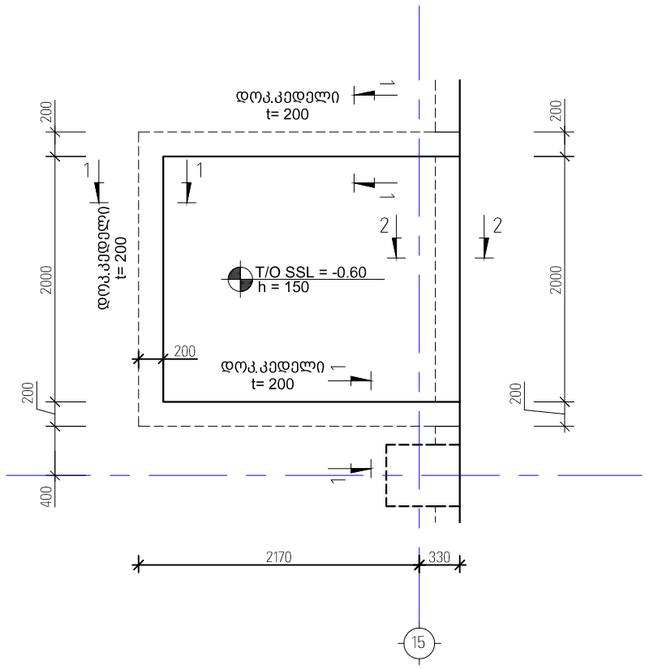
პროექტის დასახელება
Project name
A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name
პანდუსის ჭრილი ; არმირების კვეთი

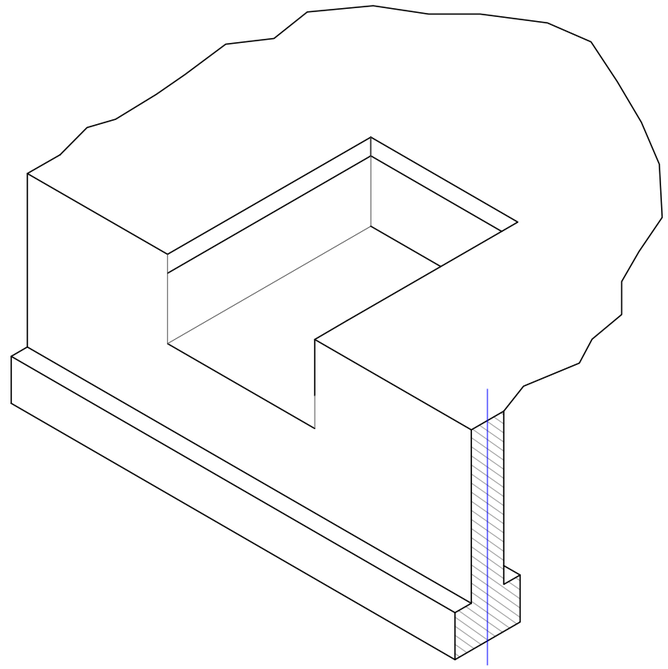
მთ.კონსტრუქტორი
Lead Structural Engineer
ბ.ჩხიძვაძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2013		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

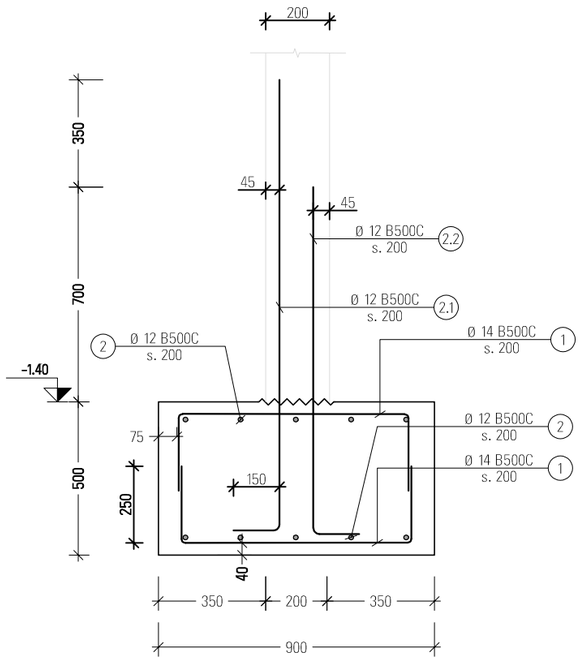
დოკლეველერი - 1 საყალიბე გეგმა



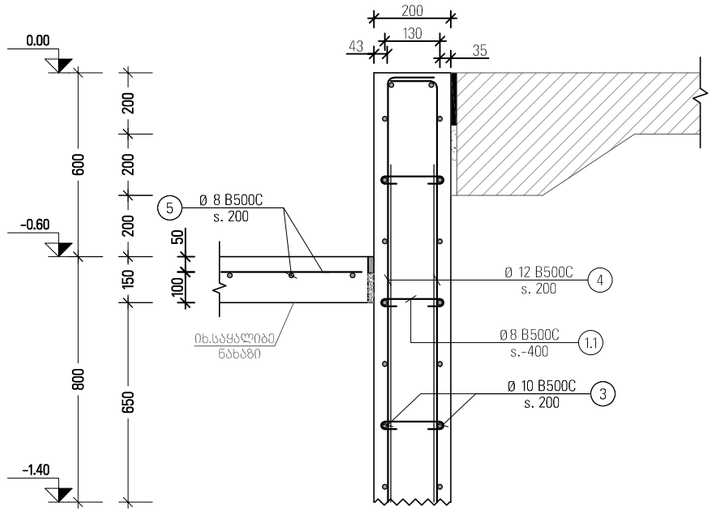
დოკლეველერი - 1 3D ხედი



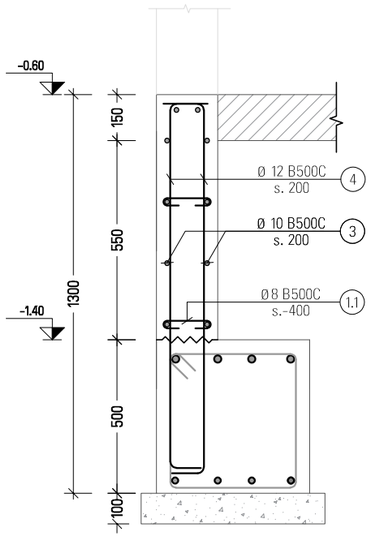
საძირკველის არმირება
მ. 1:20



კვეთი 1-1
მ. 1:20



კვეთი 2-2
მ. 1:20



შენიშვნა :
Note :

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.084

პროექტის დასახელება
Project name

A კლასის საწყობი (საძირკველი)

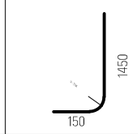
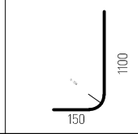
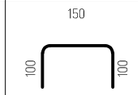
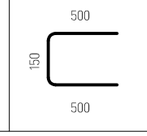
ნახაზის სახელი
Drawing Name

დოკლეველერი -1 ; არმირების კვეთები

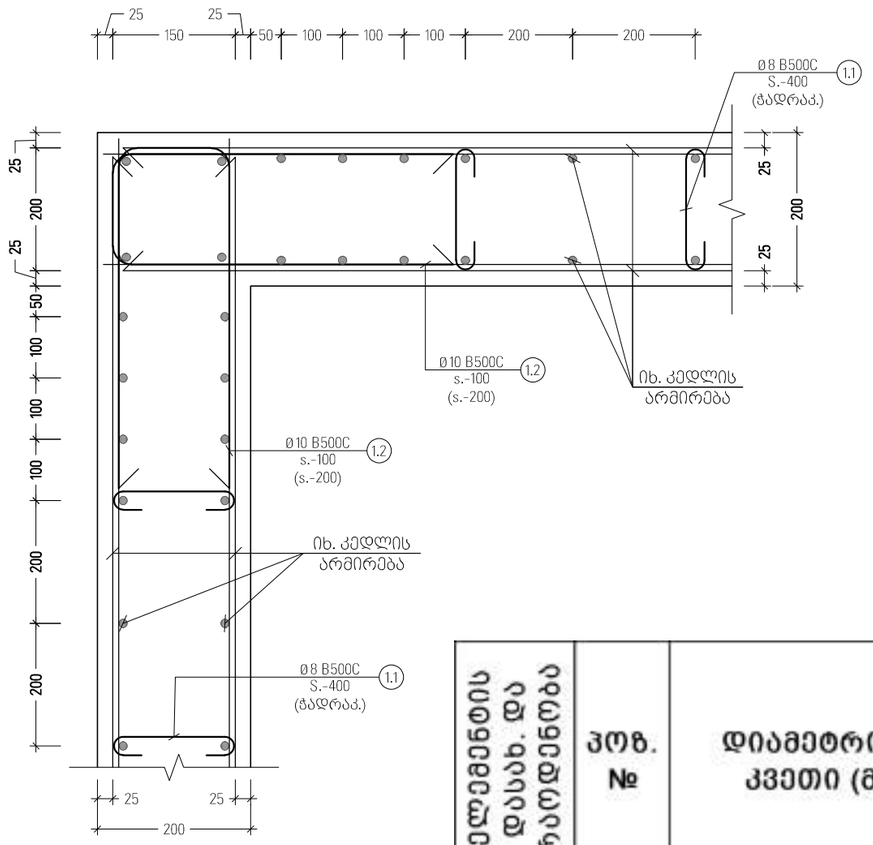
მთ.კონსტრუქტორი
Lead Structural Engineer

გ.ხიხაძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2014		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

პოზ. №	ესკიზი	L მმ
1		1250
2.1		1600
2.2		1250
1.1		350
1.2		1150

კედლების შეერთების კვანძი
მ. 1:10



ელემენტის დასახ. და რაოდენობა	პოზ. №	დიამეტრი ან კვეთი (მმ)	ერთეულის სიგრძე (მმ.)	რაოდენობა (ც.)	საერთო სიგრძე (მ.)	საერთო წონა (კგ.)
დოკლეველები-1	1	Ø 14 B500C	1250	402 X 1	503	607
	2	Ø 12 B500C	დ.ა	-	442	392
	2.1	Ø 12 B500C	1600	201 X 1	322	285
	2.2	Ø 12 B500C	1250	201 X 1	251	223
	3	Ø 10 B500C	დ.ა	-	567	349
	4	Ø 12 B500C	დ.ა	-	567	503
	5	Ø 8 B500C	დ.ა	-	662	261
	1.1	Ø 8 B500C	350	322 X 1	113	44
	1.2	Ø 10 B500C	1150	210 X 1	242	149
	მძიმე ბეტონი C20/25 V = 31.5 X 1 = 31.50 მ³					

შენიშვნა :
Note :

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.084

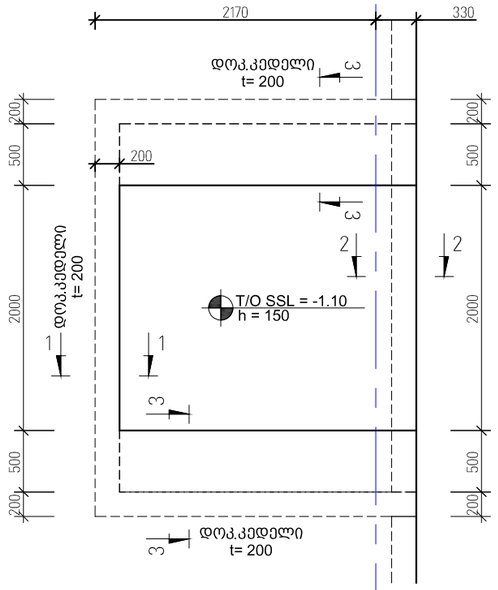
პროექტის დასახელება
Project name
A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name
დოკლეველერი -1 სპეციფიკაცია

მთ.კონსტრუქტორი
Lead Structural Engineer
გ.ჩხიკვაძე

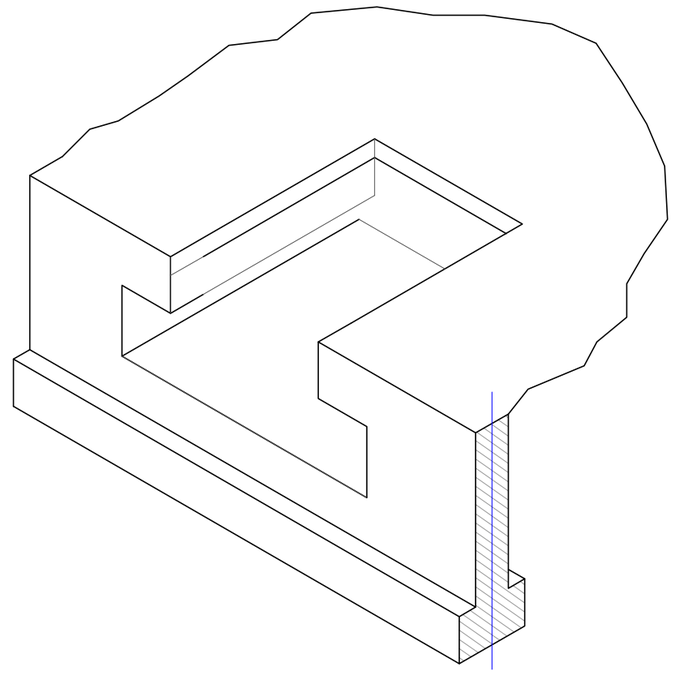
ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2015		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

დოკლეველერი - 2 საყალიბე გეგმა

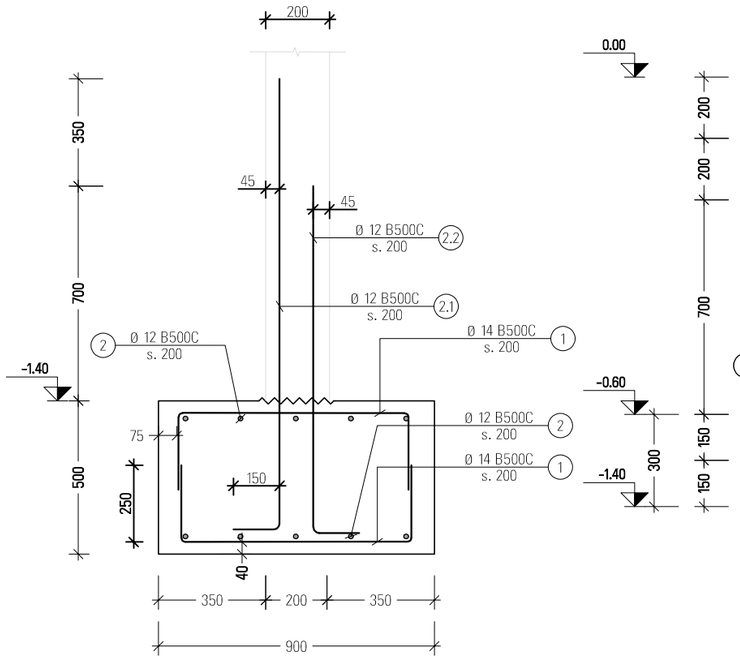


15

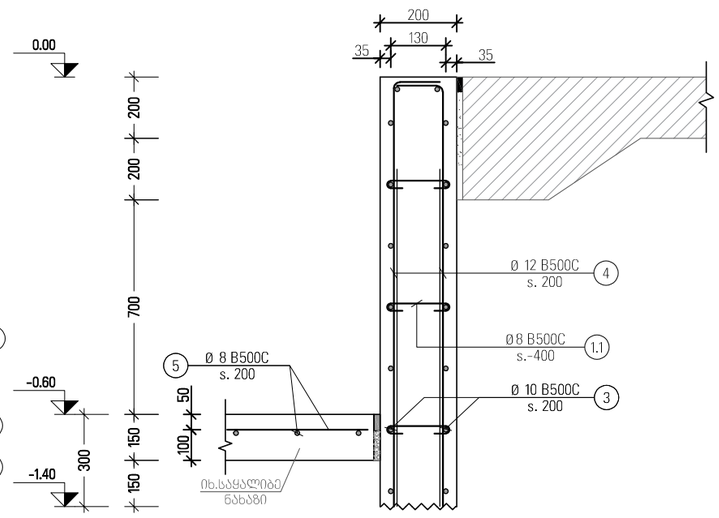
დოკლეველერი - 2 3D ხედი



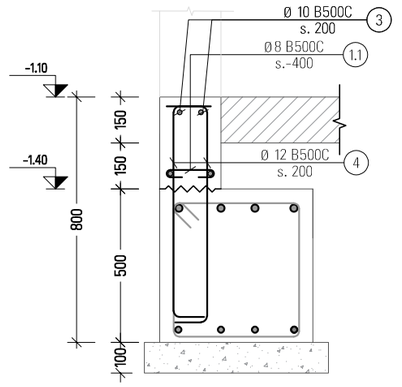
საძირკვლის არმირება
მ. 1:20



კვეთი 1-1
მ. 1:20



კვეთი 2-2
მ. 1:20



შენიშვნა :
Note :

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.084

პროექტის დასახელება
Project name

A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name

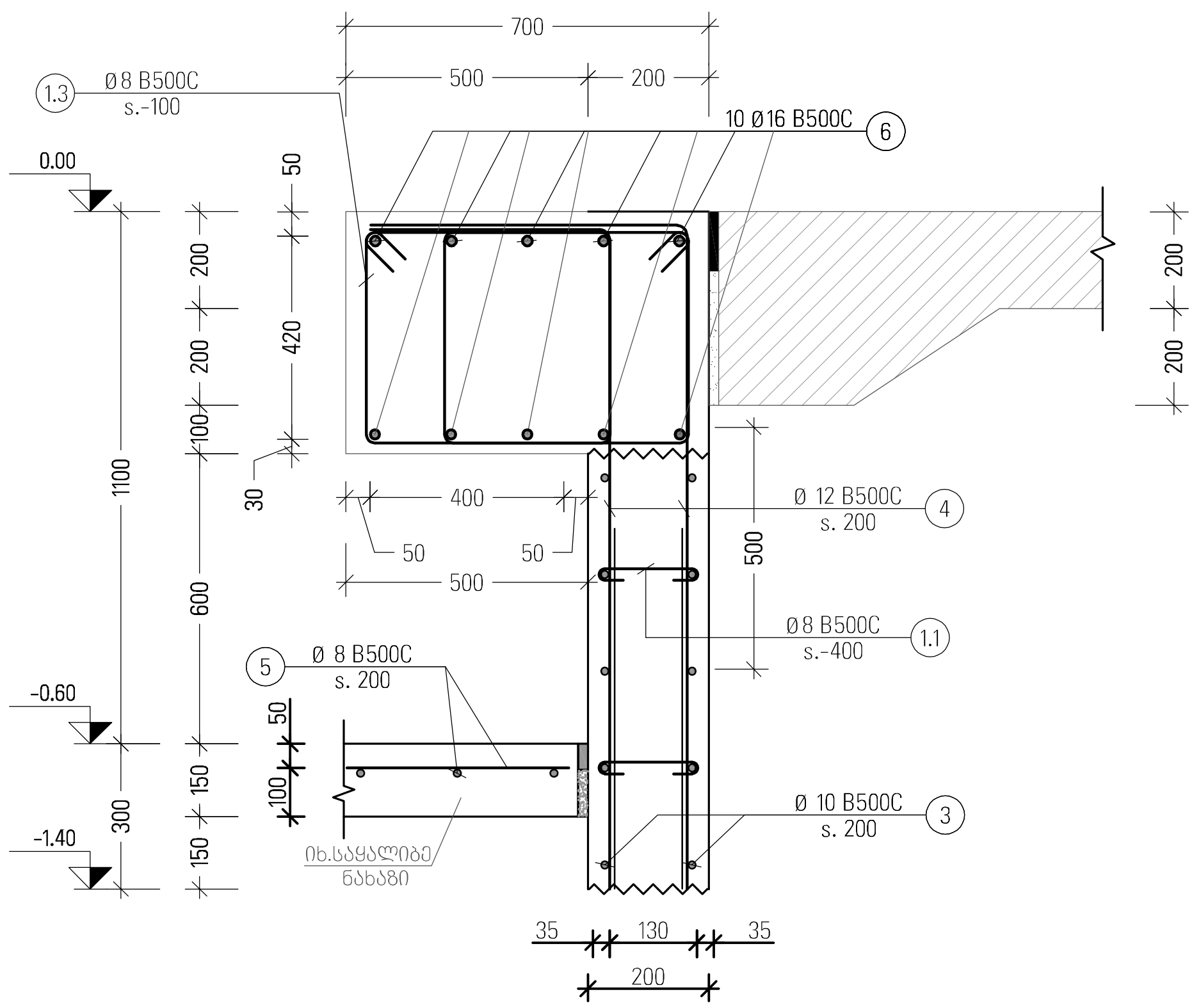
დოკლეველერი -2 ; არმირების კვეთები

მთ.კონსტრუქტორი
Lead Structural Engineer

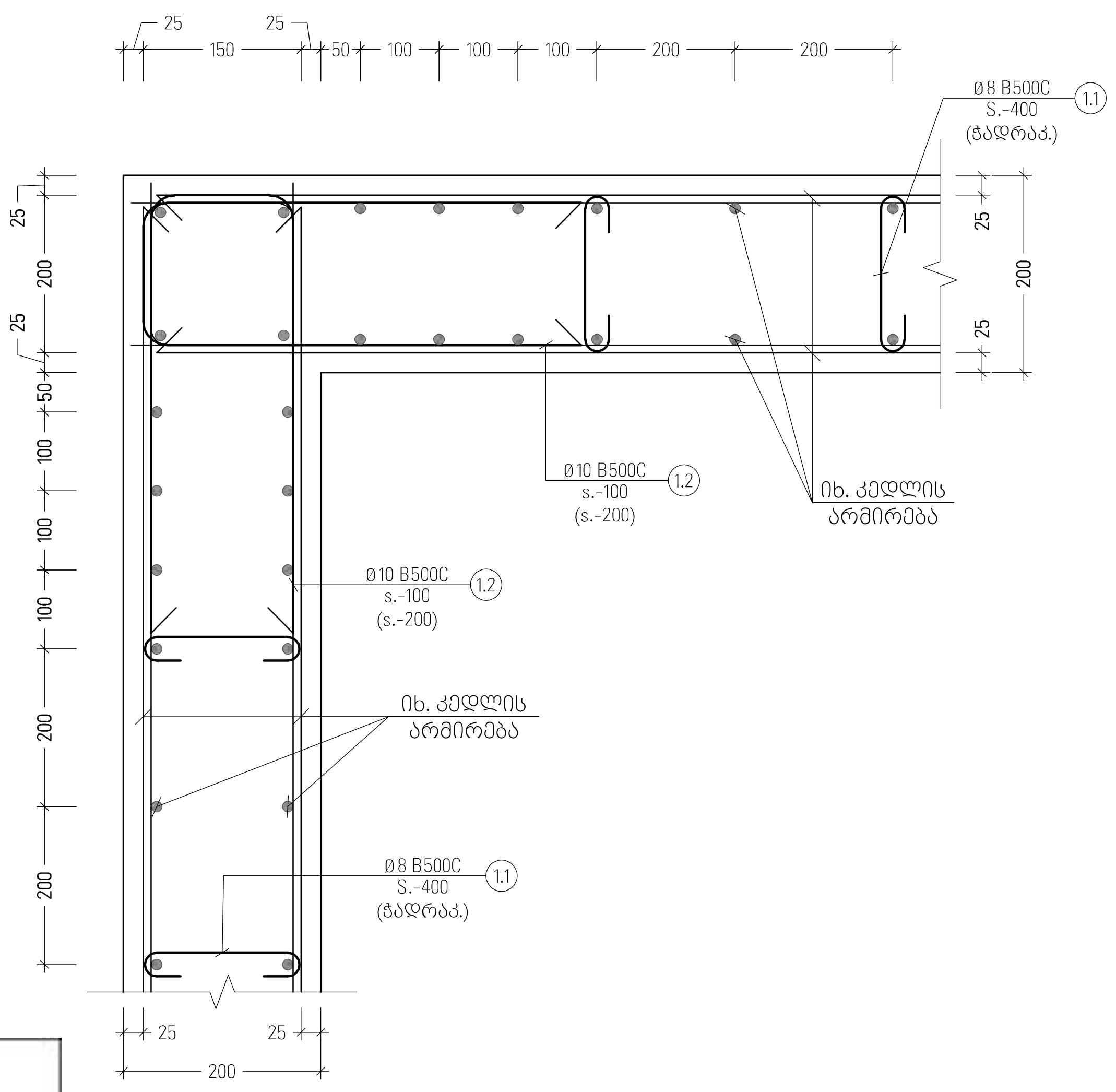
გ.ხიხვაძე

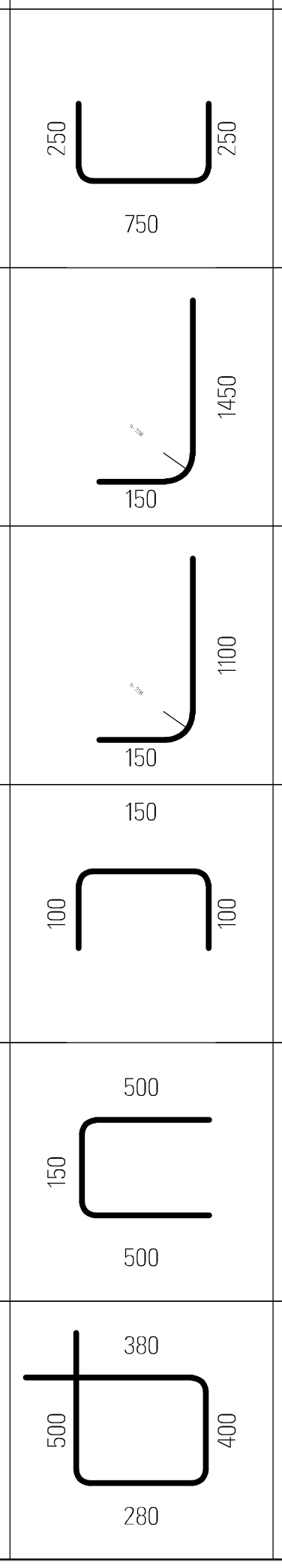
ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2016		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

კვეთი 3-3
მ. 1:20



კედლების შეერთების კვანძი
მ. 1:10





პოზ. №	ესკიზი	L მმ
1		1250
2.1		1600
2.2		1250
1.1		350
1.2		1150
1.3		1560

ელემენტის დასახ. და რაოდენობა	პოზ. №	დიამეტრი ან კვეთი (მმ)	ერთეულის სიგრძე (მმ.)	რაოდენობა (ც.)	საერთო სიგრძე (მ.)	საერთო წონა (კგ.)
დოკლეველერი-2	1	Ø 14 B500C	1250	174 X 1	218	263
	2	Ø 12 B500C	დ.ა	-	191	170
	2.1	Ø 12 B500C	1600	87 X 1	139	124
	2.2	Ø 12 B500C	1250	87 X 1	109	97
	3	Ø 10 B500C	დ.ა	-	253	156
	4	Ø 12 B500C	დ.ა	-	253	225
	5	Ø 8 B500C	დ.ა	-	189	75
	6	Ø 16 B500C	დ.ა	-	110	174
	1.1	Ø 8 B500C	350	132 X 1	46	18
	1.2	Ø 10 B500C	1150	56 X 1	64	40
	1.3	Ø 8 B500C	1560	100 X 1	156	62
	მძიმე ბეტონი	C20/25	V =	16.8 X 1	= 16.80	მ³

შენიშვნა :
Note :

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

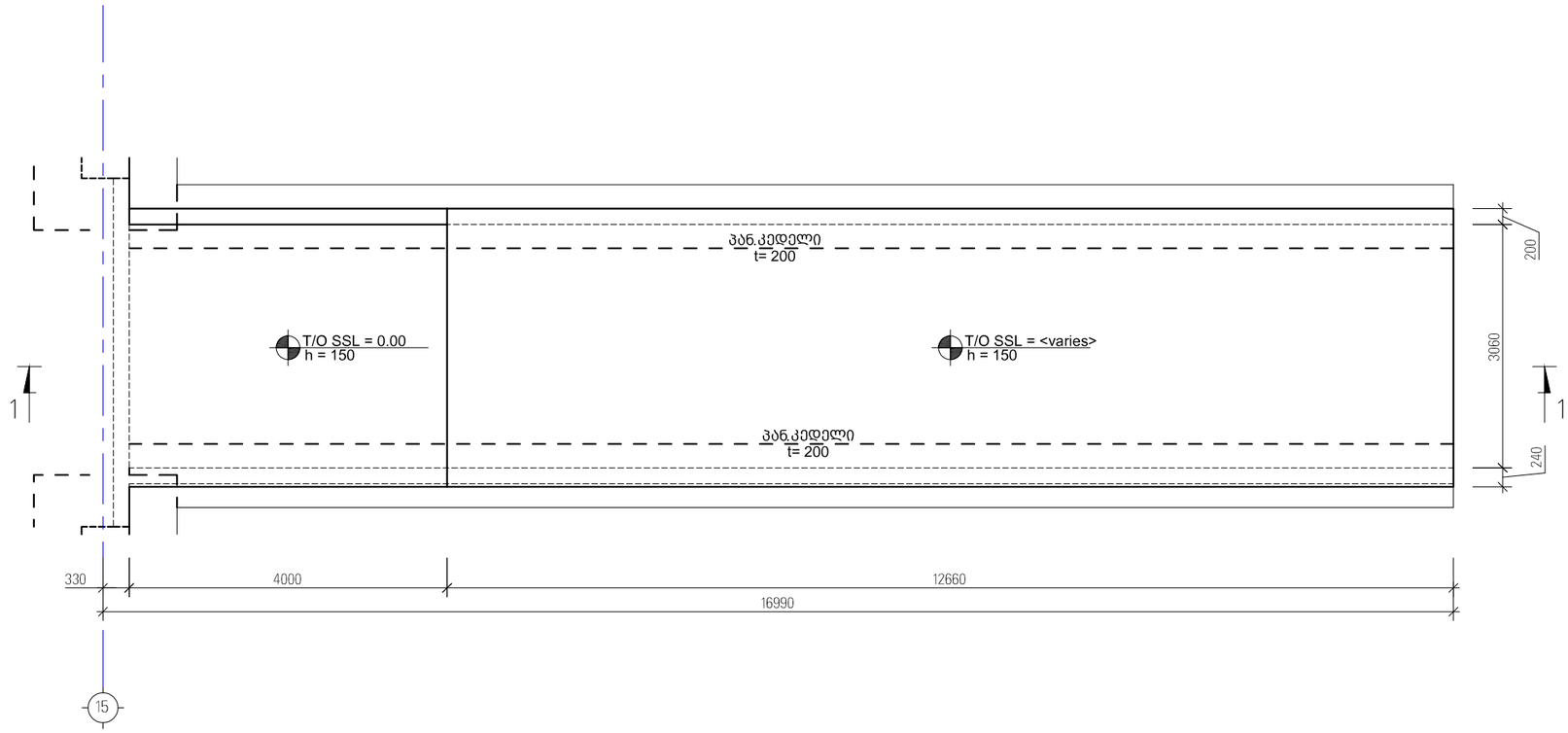
პროექტის დასახელება
Project name
A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name
დოკლეველერი -2 ; არმირების კვეთები და სპეციფიკაცია

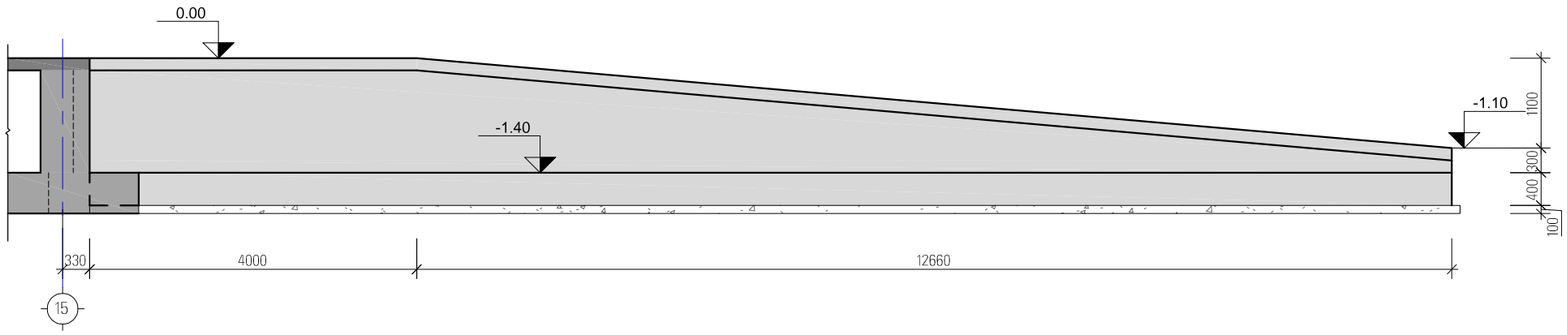
მთ.კონსტრუქტორი
Lead Structural Engineer
ბ.ჩხიკვაძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2017		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

გარე პანდუსის საყალიბე გეგმა



ჭრილი 1-1



შენიშვნა :
Note :

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.084

პროექტის დასახელება
Project name

A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name

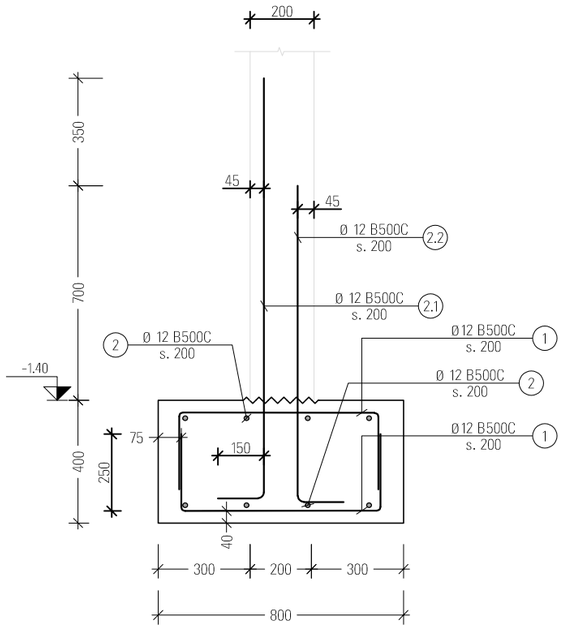
გარე პანდუსის საყალიბე გეგმა და ჭრილი

მთ.კონსტრუქტორი
Lead Structural Engineer

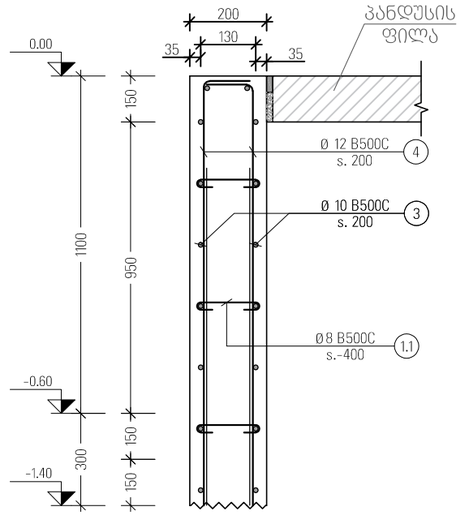
გ.ჩხეიძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2018		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

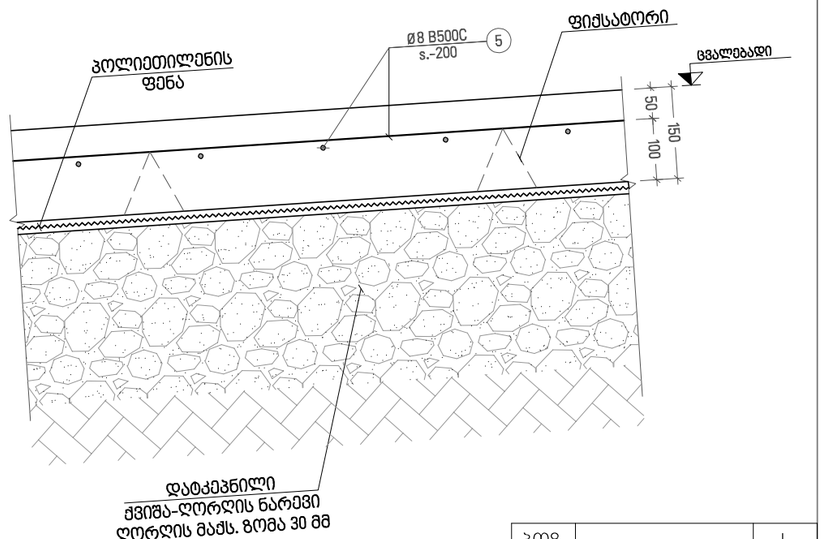
პანდუსის კედლის საძირკველი
მ. 1:20



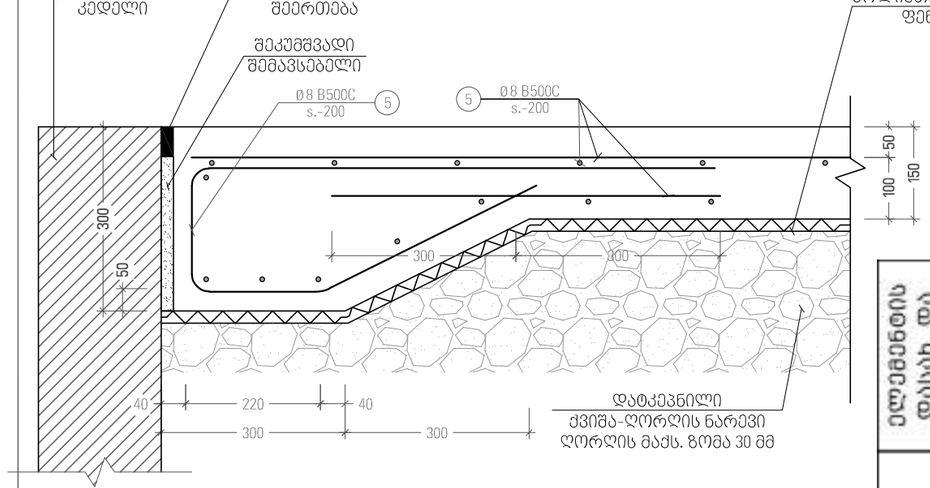
პან.კედელი
მ. 1:20

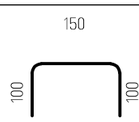


კვეთი გრუნტზე მოწყობილი ფილა პანდუსისთვის



გრუნტზე მოწყობილი ფილა პანდუსისთვის(ჩაკეტვა)
მ 1:10



პოზ. №	ესკიზი	L მმ
1		1150
2.1		1600
2.2		1250
1.1		350

ელემენტის დასახ. და რაოდენობა	პოზ. №	დიამეტრი ან კვეთი (მმ)	ერთეულის სიგრძე (მმ.)	რაოდენობა (ც.)	საერთო სიგრძე (მ.)	საერთო წონა (კგ.)
პანდუსი 2	1	Ø 12 B500C	1150	334 X 1	384	341
	2	Ø 12 B500C	დ.ა.	–	147	130
	3	Ø 10 B500C	დ.ა.	–	308	190
	4	Ø 12 B500C	დ.ა.	–	308	273
	5	Ø 8 B500C	დ.ა.	–	649	256
	2.1	Ø 12 B500C	1600	167 X 1	267	237
	2.2	Ø 12 B500C	1250	167 X 1	209	185
	1.1	Ø 8 B500C	350	200 X 1	70	28
მძიმე ბეტონი C20/25			V =	24.8 X 1	= 24.80	მ³
ბეტონის მომზადება C12/15			V =	1.5 X 1	= 1.46	მ³

შენიშვნა :
Note :

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.084

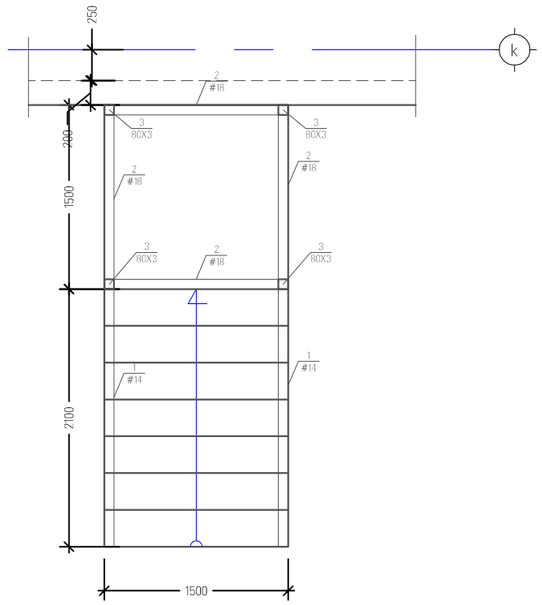
პროექტის დასახელება
Project name
A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name
გარე პანდუსის არმირების კვეთები და სპეციფიკაცია

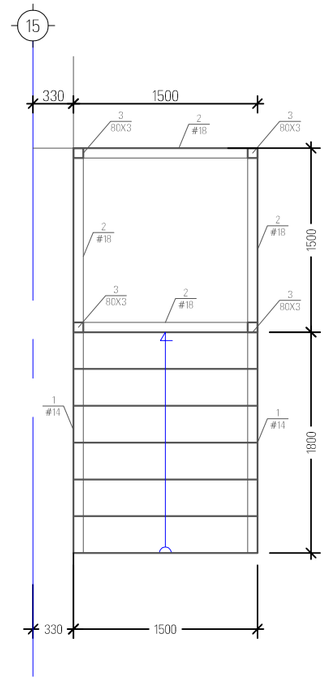
მთ.კონსტრუქტორი
Lead Structural Engineer
გ.ჩხიკვაძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2019		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

ლითონის კიბე N1 საყალიბე გეგმა

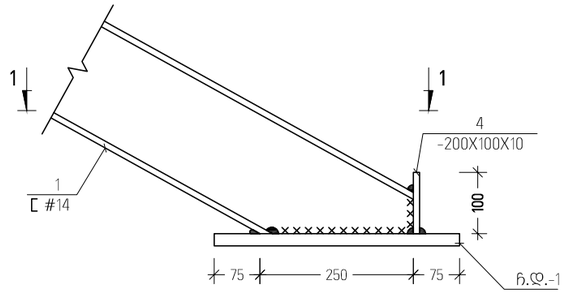


ლითონის კიბე N2 საყალიბე გეგმა

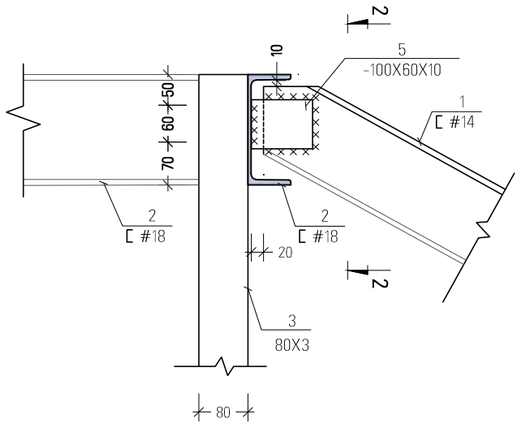


შენიშვნა :
Note :

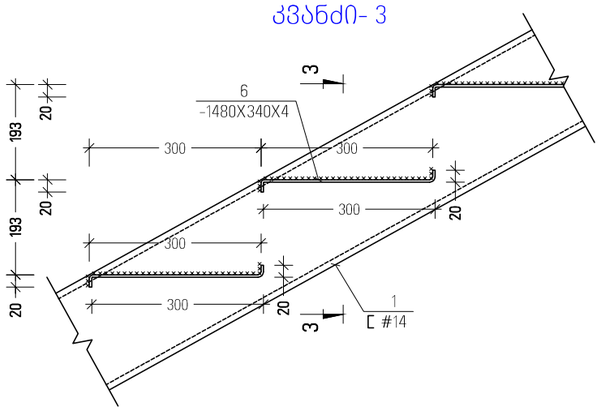
კვანძი-1



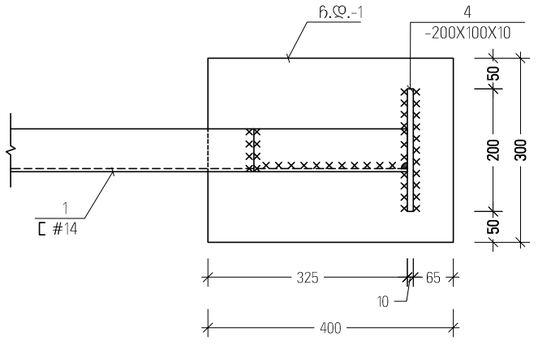
კვანძი-2



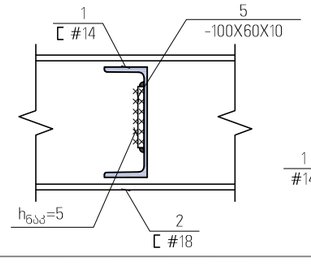
კვანძი- 3



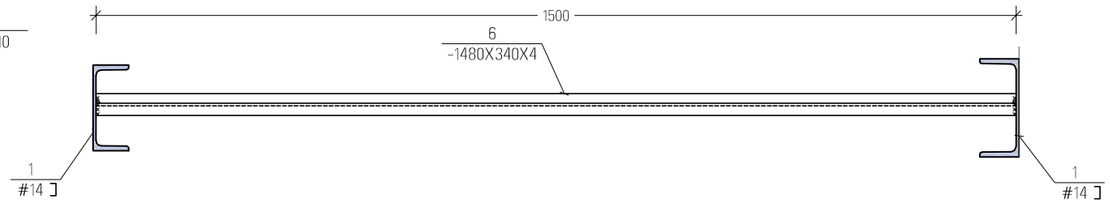
კვეთი 1-1



კვეთი 2-2



კვეთი 3-3



დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ძინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

პროექტის დასახელება
Project name

A კლასის სანყობი (სატირკვლი)

ნახაზის სახელი
Drawing Name

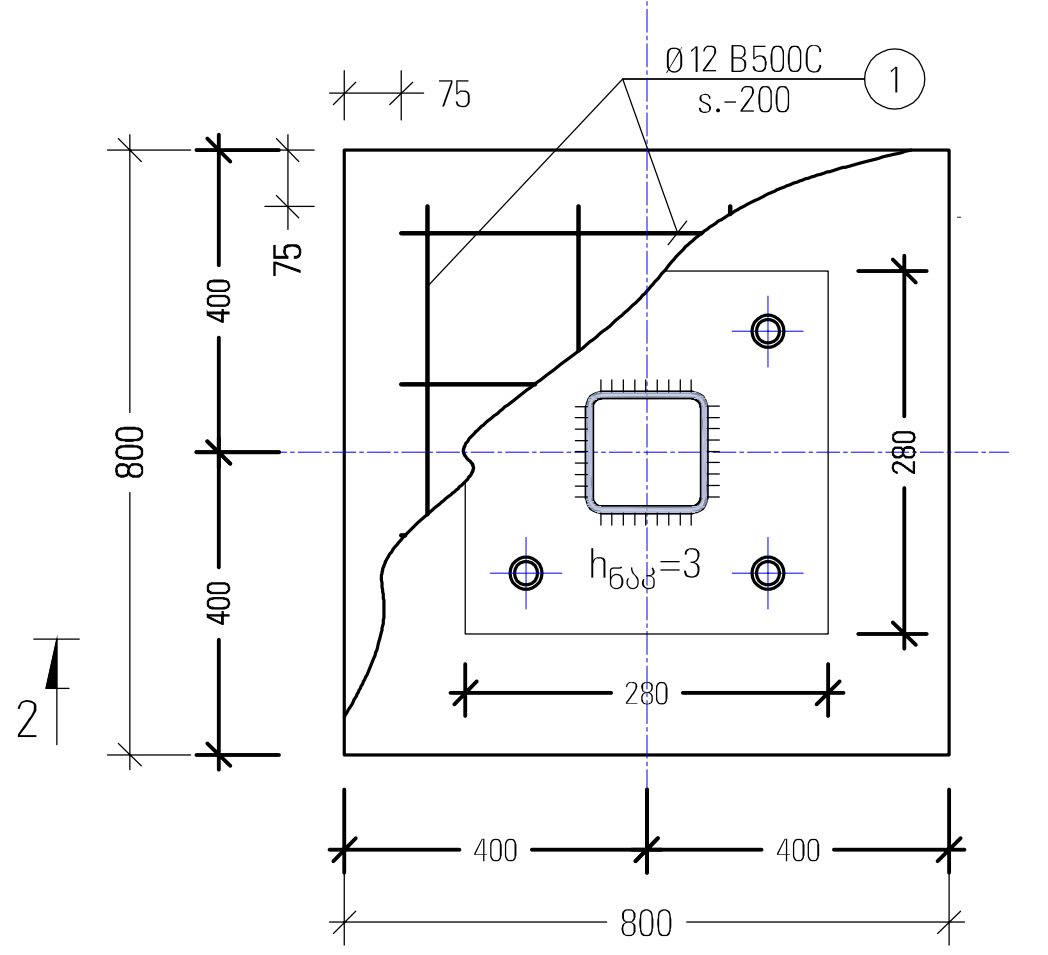
ლითონის კიბის საყალიბე გეგმები და მოწყობის კვანძები

მთ.კონსტრუქტორი
Lead Structural Engineer

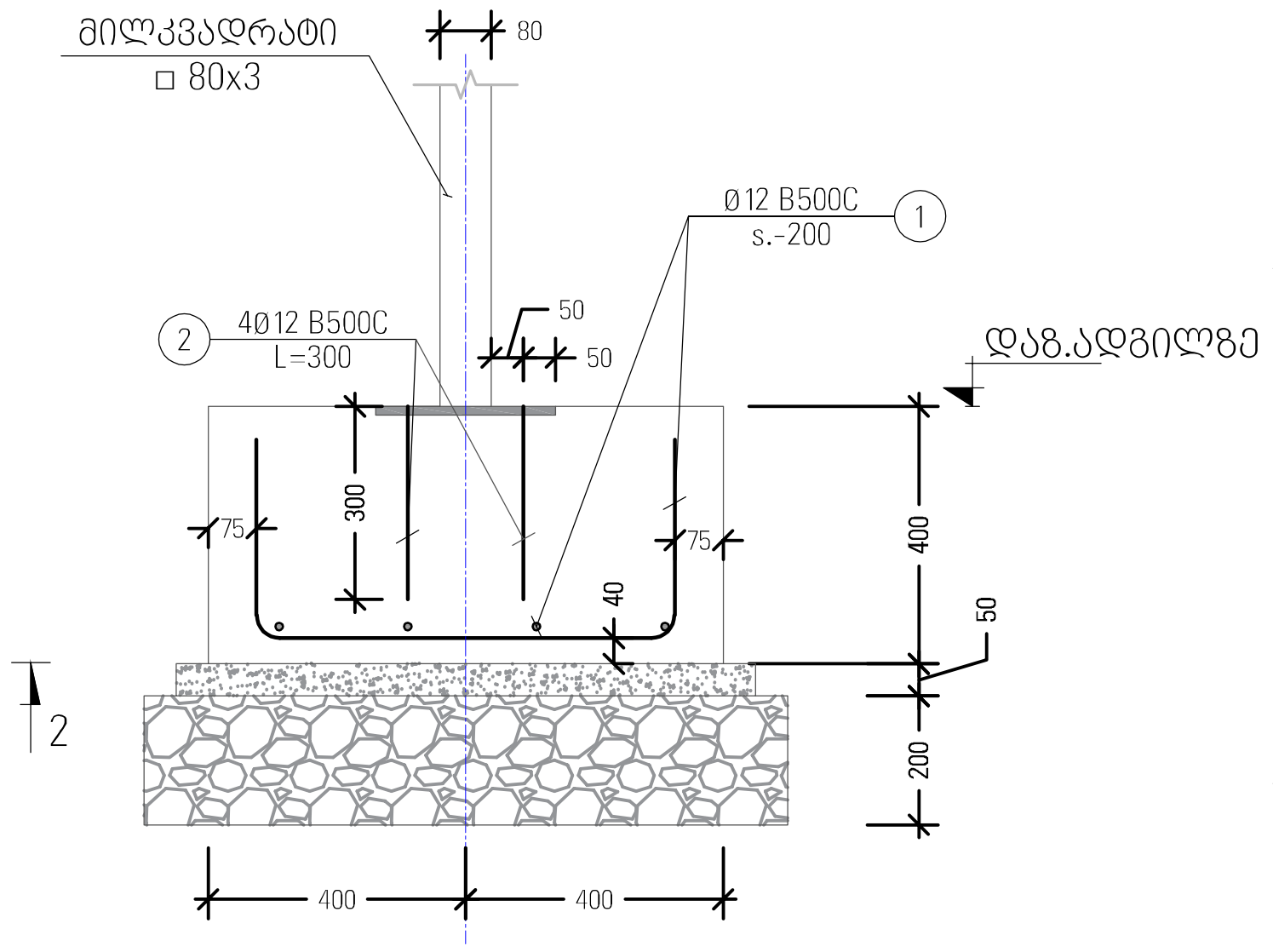
ბ.ჩხიკვაძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2020		1:100
სტადია Status	პროექტის № Project No.	თარიღი Date
მპ		03.12.2025

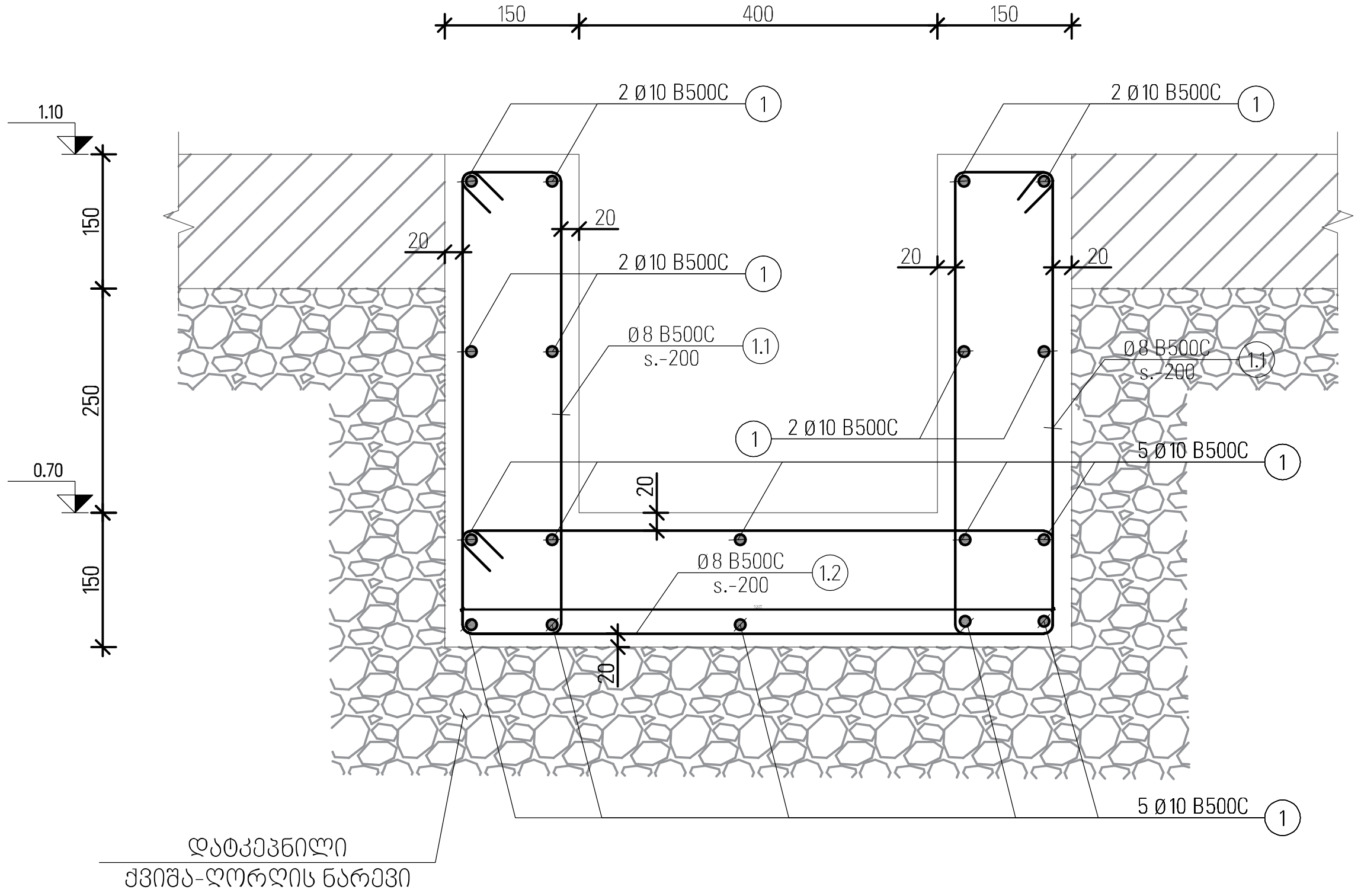
ლითონის სვეტის საძირკველი



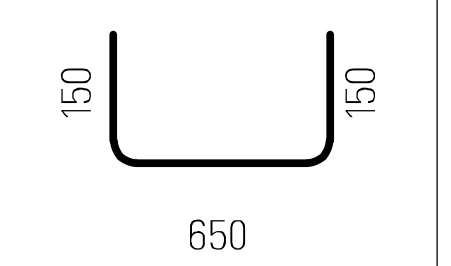
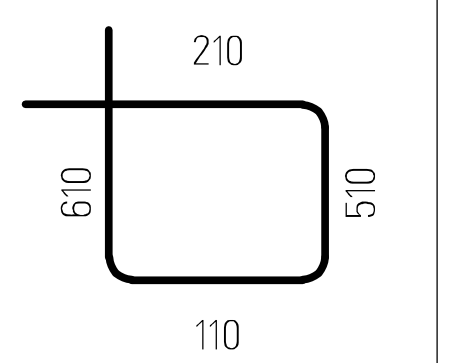
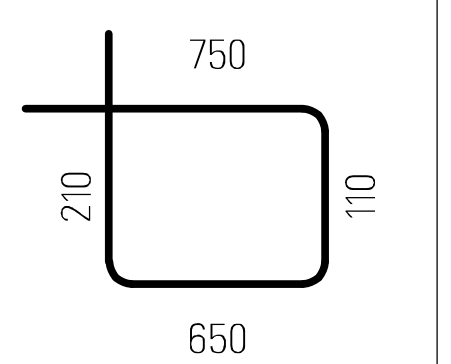
კვეთი 1-1



სანიაღვრე არხის არმირების
კვეთი



ელემენტის დასახ. და რაოდენობა	პოზ. №	დიამეტრი ან კვეთი (მმ)	ერთეულის სიგრძე (მმ.)	რაოდენობა (ც.)	საერთო სიგრძე (მ.)	საერთო წონა (კგ.)
ლთ. კიბის საძირკველი	1	Ø 12 B500C	950	8 X 8	61	54
	მძიმე ბეტონი C20/25		V =	0.3 X 8	= 2.05	მ³
	ბეტონის მომზადება C12/15		V =	0.1 X 8	= 0.80	მ³
სანიაღვრე არხი	1	Ø 10 B500C	დ.ა.	–	2178	1342
	1.1	Ø 8 B500C	1440	1100 X 1	1584	625
	1.2	Ø 8 B500C	1720	550 X 1	946	373
	მძიმე ბეტონი C20/25		V =	24.2 X 1	= 24.20	მ³

პოზ. №	ესკიზი	L მმ
1	 150 / 650 / 150	950
1.1	 210 / 610 / 510 / 110	1440
1.2	 750 / 210 / 110 / 650	1720

ფოლადის მასალის ამოკრეფა

კონსტრუქციის დასახელება	ელემენტის მარკირება	რაოდენობა (ც.)	პოზ. N	პროფილი	სტანდარტი	სიგრძე (მმ)	ერთ ელემენტზე: რაოდენობა (ც.)	ერთ ელემენტზე: სიგრძე (მ.)	ერთ ელემენტზე: წონა (კგ.)	მთლიანად: რაოდენობა (ც.)	მთლიანად: სიგრძე (მ.)	მთლიანად: წონა (კგ.)	ფოლადის მარკა
	[illegible]	1 (ც)	1	I N 14	ГОСТ 8239-89	დ.ა	-	-	-	-	12.60	170.10	C235 S235
	[illegible]	1 (ც)	2	[N 18	ГОСТ 8240-97	1500	12	18.00	293.40	12.00	18.00	293.40	C235 S235
	[illegible]	1 (ც)	3	□ 80 X 3	ГОСТ 30245-2003	1100	12	13.20	93.72	12.00	13.20	93.72	C235 S235
	[illegible]	1 (ც)	4	— 200 X 10	ГОСТ 19903-74	100	6	0.60	9.42	6.00	0.60	9.42	C235 S235
	[illegible]	1 (ც)	5	— 100 X 10	ГОСТ 19903-74	60	6	0.36	2.83	6.00	0.36	2.83	C235 S235
	[illegible]	1 (ც)	6	— 300 X 4	ГОСТ 19903-74	1480	20	29.60	278.83	20.00	29.60	278.83	C235 S235
	ჩ.ფ.-1	1 (ც)	1	— 300 X 14	ГОСТ 19903-74	400	6	2.40	79.13	6.00	2.40	79.13	C235 S235
			2	Ø 12 A500C	ДСТУ 3760-98	300	48	14.40	12.78	48.00	14.40	12.78	C235 S235

შენიშვნა :
Note :

დამკვეთი :
Client :

სიტუაციური სქემა
Key plan

მისამართი
Adress
ქ.თბილისი, ქინძმარაულის ქუჩა
ს.კ 01.19.33.015.192, 01.19.33.015.050, 01.19.33.015.120, 01.19.33.015.195, 01.19.33.015.194, 01.19.33.015.219; 01.19.33.015.094

პროექტის დასახელება
Project name
A კლასის საწყობი (საძირკველი)

ნახაზის სახელი
Drawing Name
ლით; კიბის საძირკველი და სპეციფიკაცია ;
სანიაღვრე არხის არმირების კვეთი ;

მთ.კონსტრუქტორი
Lead Structural Engineer
ბ.ჩხიკვაძე

ნახაზის ნომერი Drawing No.	ფორმატი Paper size	მასშტაბი Scale
კ-2021		1:100
სტადია Status	**პროექტის № Project No.**	**თარიღი Date**
მპ		03.12.2025

APPROVAL DRAWING

S12	02	19.09.25	ENDWALL FRAMING ELEVATION AT GL-13 AND DETAILS
S11	02	19.09.25	ENDWALL FRAMING ELEVATION AT GL-1 AND DETAILS
S10	02	19.09.25	DELETED
S09	03	23.10.25	WALL FRAMING ELEVATION AT GL-A, X & 15 AND DETAILS
S08	03	23.10.25	WALL FRAMING ELEVATION AT GL-C & K AND DETAILS
S07	02	19.09.25	ROOF FRAMING PLAN AND DETAILS (AREA-02 & 03)
S06	02	19.09.25	ROOF FRAMING PLAN AND DETAILS (AREA-01)
S05	03	23.10.25	RIGID FRAME CROSS SECTION AT GL - A, C, D, E, F, G, H, I, J & K (AREA-03)
S04	02	19.09.25	RIGID FRAME CROSS SECTION AT GL - 13
S03	02	19.09.25	RIGID FRAME CROSS SECTION AT GL - 4 & 11
S02	02	19.09.25	RIGID FRAME CROSS SECTION AT GL - 2, 3, 5 TO 10 & 12
S01	02	19.09.25	RIGID FRAME CROSS SECTION AT GL - 1

A08	00	16.09.25	COLUMN BASE REACTIONS-5
A07	00	16.09.25	COLUMN BASE REACTIONS-4
A06	00	16.09.25	COLUMN BASE REACTIONS-3
A05	02	16.09.25	COLUMN BASE REACTIONS-2
A04	02	16.09.25	COLUMN BASE REACTIONS-1
A03	02	16.09.25	NODE NUMBERING PLAN
A02	03	16.09.25	COLUMN BASE DETAILS
A01	04	23.10.25	ANCHOR BOLT SETTING PLAN
DWG NO.	REV.	DATE	DRAWING TITLE

REV.	DATE	DESCRIPTION	DSN	DRN	CHK
03	23.10.25	RE-ISSUED FOR APPROVAL	JJP	JJP	PBA
02	19.09.25	RE-ISSUED FOR APPROVAL	JJP	JJP	PBA
01	07.08.25	RE-ISSUED FOR APPROVAL	SYA	SYA	PBA
00	13.06.25	ISSUED FOR APPROVAL	JJP	JJP	PBA

PROJECT

LOGISTICS WAREHOUSE GEORGIA

CUSTOMER

TBILISI DRY PORT LLC

STEEL SUPPLIER

ACERO

DRAWING TITLE

INDEX SHEET

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	
BUILDING NO.	01	S00	
FILE NAME	A0997-01-S00-R03	REV. NO.	03

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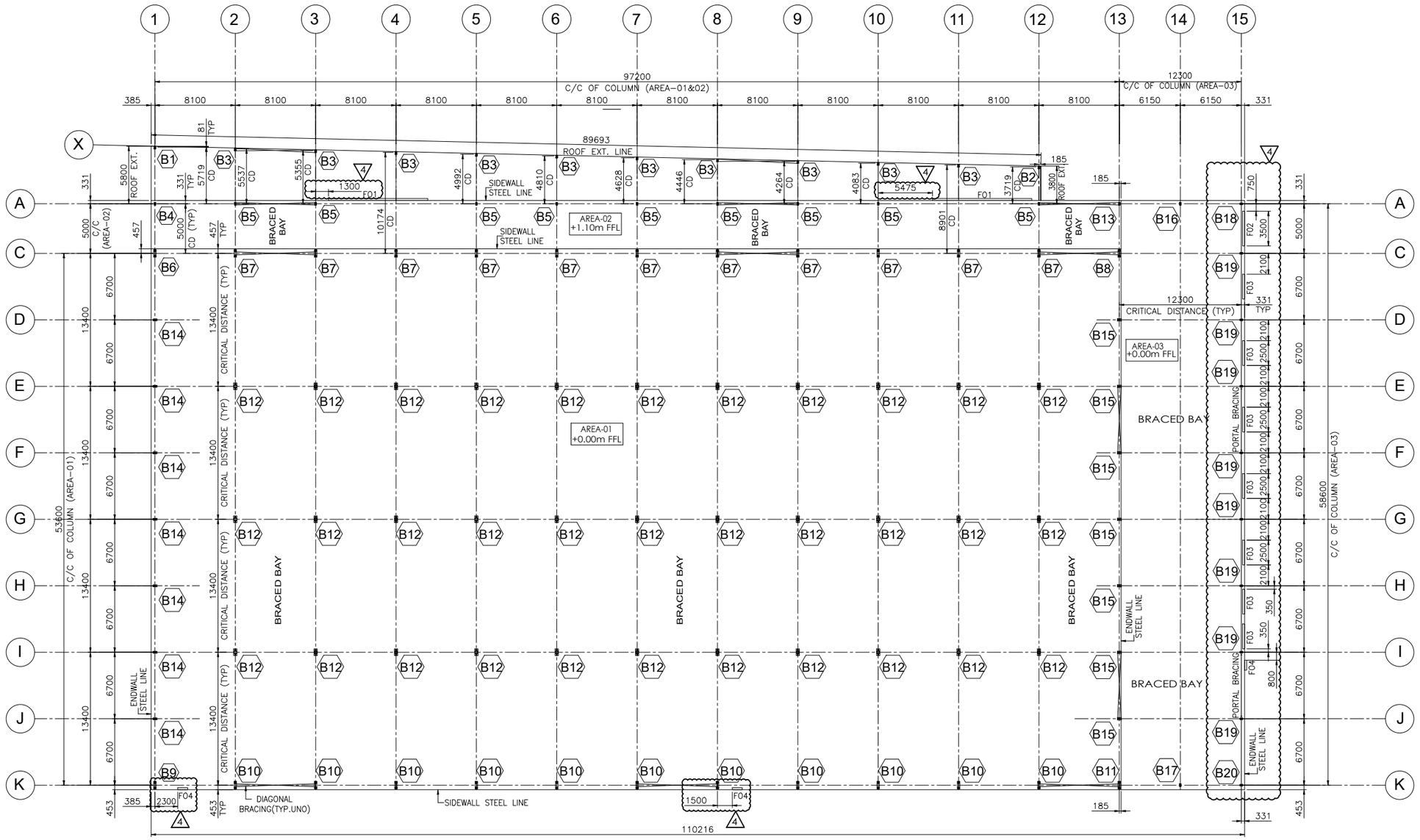


ANCHOR BOLT SETTING PLAN

CD: DENOTES CRITICAL DISTANCE

FO1: DENOTES WALL FRAMED OPENING FOR DOUBLE SLIDING DOOR (BY OTHERS) OF SIZE 10000mm(W) x 3700mm(H) - 2 NOS.

FO2 - DENOTES WALL FRAMED OPENING FOR OHSD-1 (BY OTHERS) OF SIZE 3500mm(W) x4000mm(H) - 1 NOS.

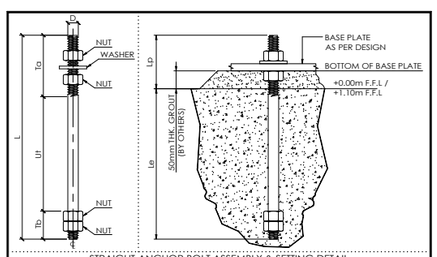
FO3 - DENOTES WALL FRAMED OPENING FOR OHSD-2 (BY OTHERS) OF SIZE 2500mm(W) x3000mm(H) (7 NOS.)

FO4 - DENOTES WALL FRAMED OPENING FOR SPD (BY OTHERS) OF SIZE 1000mm(W) x2200mm(H) - 3 NOS. (4)

CLIENT/CUSTOMER TO CONFIRM ALL COLUMN LOCATIONS AND BRACING LOCATIONS

CLIENT/CUSTOMER TO CONFIRM ALL THE WALL FRAMED OPENING LOCATIONS

THE ANCHOR BOLTS ARE DESIGNED FOR THE EFFECTS OF ALL THE FORCES TRANSFERRED BY THE STEEL SUPERSTRUCTURE TO THE REINFORCED CONCRETE SUBSTRUCTURE. IT IS THE CUSTOMER'S RESPONSIBILITY TO DESIGN THE REINFORCED CONCRETE SUBSTRUCTURE TO CARRY ALL THE FORCES TRANSFERRED BY THE STEEL COLUMN BASES & THE ANCHOR BOLTS SAFELY ACCORDING TO THE CODE FOLLOWED FOR THE FOUNDATION DESIGN.



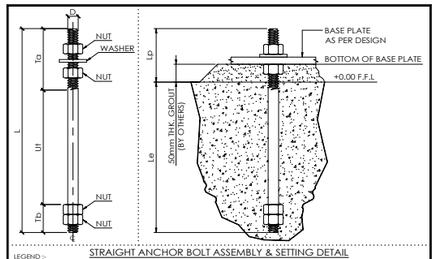
STRAIGHT ANCHOR BOLT ASSEMBLY & SETTING DETAIL

LEGEND:-
QTY :- QUANTITY
To :- THREADED LENGTH
Tb :- THREADED LENGTH
Ut :- UNTHREADED LENGTH
L :- ANCHOR ROD TOTAL LENGTH
Lp :- ANCHOR ROD PROJECTED LENGTH
Le :- ANCHOR ROD EMBEDMENT LENGTH

NOTE:-
EACH SUPPLIED ASSEMBLY CONSISTS OF
1 - ANCHOR BOLT
4 - HEAVY HEXAGONAL NUTS AND
1 - WASHER

PART MARK	DIAMETER (D)	QTY	To (mm)	Tb (mm)	Ut (mm)	L (mm)	Lp (mm)	Le (mm)
SA8020	20 mm	196	150	50	315	515	125	390

STRAIGHT ANCHOR BOLT SCHEDULE (GRADE A36)



STRAIGHT ANCHOR BOLT ASSEMBLY & SETTING DETAIL

LEGEND:-
QTY :- QUANTITY
To :- THREADED LENGTH
Tb :- THREADED LENGTH
Ut :- UNTHREADED LENGTH
L :- ANCHOR ROD TOTAL LENGTH
Lp :- ANCHOR ROD PROJECTED LENGTH
Le :- ANCHOR ROD EMBEDMENT LENGTH

NOTE:-
EACH SUPPLIED ASSEMBLY CONSISTS OF
1 - ANCHOR BOLT
4 - HEAVY HEXAGONAL NUTS AND
1 - WASHER

PART MARK	DIAMETER (D)	QTY	To (mm)	Tb (mm)	Ut (mm)	L (mm)	Lp (mm)	Le (mm)
SA8124	24 mm	264	150	60	385	595	125	470
SA8130	30 mm	200	208	70	550	820	150	670

STRAIGHT ANCHOR BOLT SCHEDULE (GRADE 8.8)

APPROVAL DRAWING

GENERAL NOTES :

1. All dimensions are in millimeters (mm), unless noted otherwise.
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   - 9.2. ± 3 mm between any two adjacent anchor bolt groups.
   - 9.3. ± 5 mm for the top of anchor bolts.
10. All the anchor bolts must be set perpendicular to the theoretical bearing surface unless noted otherwise.
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FOR APPROVAL

DATE	23.10.2025

In order to establish the most effective schedule for this project, kindly return these documents with your comments within two weeks of the issued date.

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- ☐ APPROVED WITH COMMENTS (Production may proceed incorporating comments)
- ☐ RE-SUBMIT (Re-Submit drawings incorporating comments)

APPROVER : _____

SIGNATURE : _____

DATE : _____

NOTE : THESE DRAWINGS ARE NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	DSN	DRN	CHK
04	23.10.25	RE-ISSUED FOR APPROVAL	JJP	JJP	PBA
03	19.09.25	RE-ISSUED FOR APPROVAL	JJP	JJP	PBA
02	16.09.25	RE-ISSUED FOR APPROVAL	JJP	SSB	PBA
01	01.08.25	RE-ISSUED FOR APPROVAL	SYA	SYA	PBA
00	13.06.25	ISSUED FOR APPROVAL	JJP	SSB	PBA

PROJECT
LOGISTICS WAREHOUSE GEORGIA

CUSTOMER
TBILISI DRY PORT LLC

STEEL SUPPLIER
ACERO

DRAWING TITLE
ANCHOR BOLT SETTING PLAN

BUILDING USAGE	LOGISTICS WAREHOUSE
JOB NO.	GE-A0997
DRAWING NO.	A01
BUILDING NO.	01
FILE NAME	A0997-01-A01-R04
REV. NO.	04

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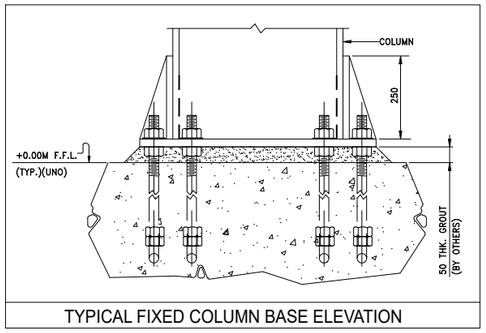
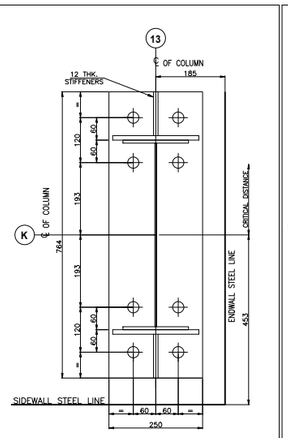


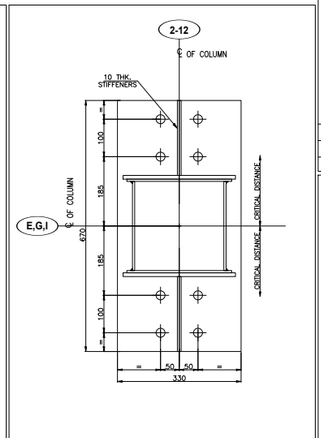
TYPICAL FIXED COLUMN BASE ELEVATION



ANCHOR BOLT GRADE–8.8

ANCHOR BOLTS	8 Nos. 30 DIA.
BASE PLATE	250 X 764 X 40 THK.

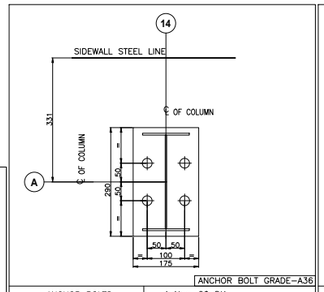
B11 (1 Nos.)



ANCHOR BOLT GRADE–8.8

ANCHOR BOLTS	8 Nos. 24 DIA.
BASE PLATE	330 X 670 X 40 THK.

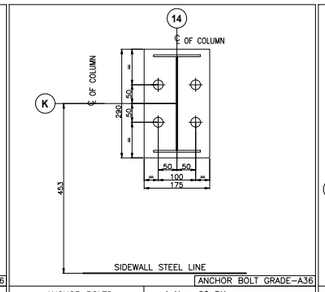
B12 (33 Nos.)



ANCHOR BOLT GRADE–A36

ANCHOR BOLTS	4 Nos. 20 DIA.
BASE PLATE	175 X 290 X 15 THK.

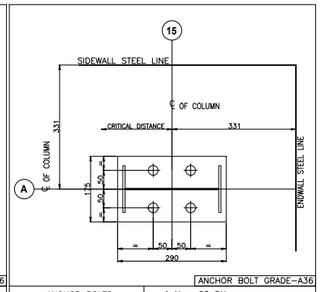
B16 (1 Nos.)



ANCHOR BOLT GRADE–A36

ANCHOR BOLTS	4 Nos. 20 DIA.
BASE PLATE	175 X 290 X 15 THK.

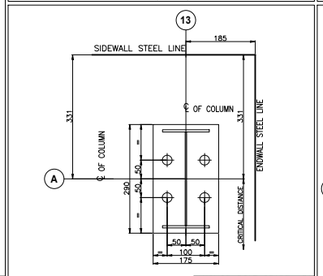
B17 (1 Nos.)



ANCHOR BOLT GRADE–A36

ANCHOR BOLTS	4 Nos. 20 DIA.
BASE PLATE	175 X 290 X 15 THK.

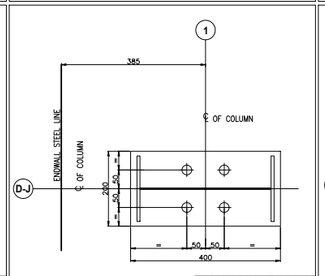
B18 (1 Nos.)



ANCHOR BOLT GRADE–A36

ANCHOR BOLTS	4 Nos. 20 DIA.
BASE PLATE	175 X 290 X 15 THK.

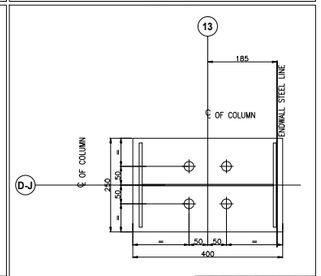
B13 (1 Nos.)



ANCHOR BOLT GRADE–A36

ANCHOR BOLTS	4 Nos. 20 DIA.
BASE PLATE	200 X 400 X 15 THK.

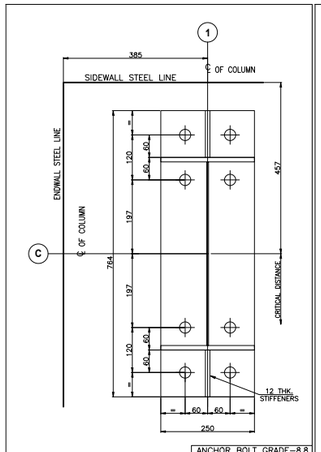
B14 (7 Nos.)



ANCHOR BOLT GRADE–A36

ANCHOR BOLTS	4 Nos. 20 DIA.
BASE PLATE	250 X 400 X 15 THK.

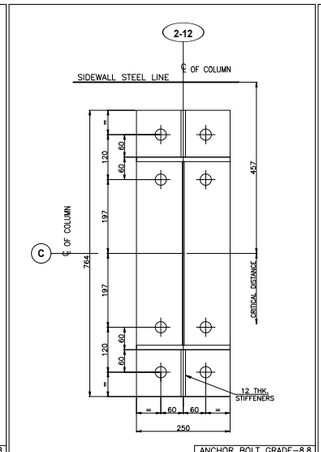
B15 (7 Nos.)



ANCHOR BOLT GRADE–8.8

ANCHOR BOLTS	8 Nos. 30 DIA.
BASE PLATE	250 X 764 X 40 THK.

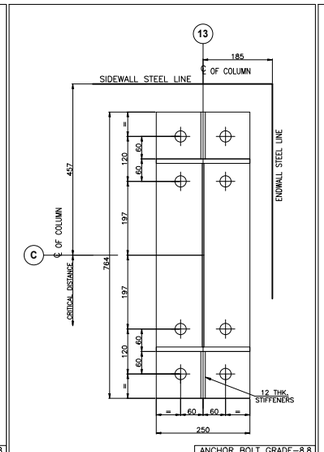
B6 (1 Nos.)



ANCHOR BOLT GRADE–8.8

ANCHOR BOLTS	8 Nos. 30 DIA.
BASE PLATE	250 X 764 X 40 THK.

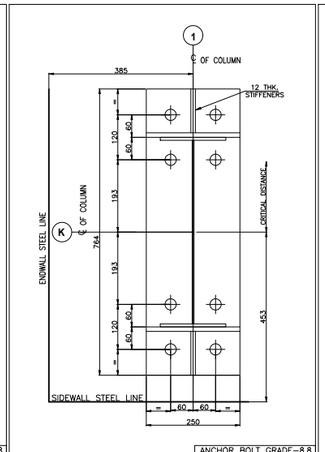
B7 (11 Nos.)



ANCHOR BOLT GRADE–8.8

ANCHOR BOLTS	8 Nos. 30 DIA.
BASE PLATE	250 X 764 X 40 THK.

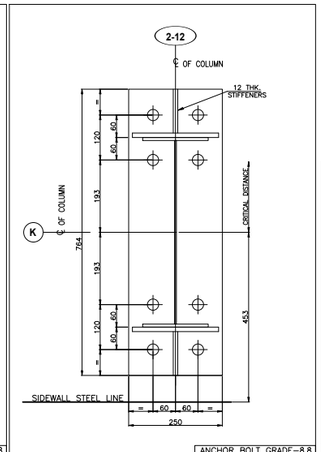
B8 (1 Nos.)



ANCHOR BOLT GRADE–8.8

ANCHOR BOLTS	8 Nos. 30 DIA.
BASE PLATE	250 X 764 X 40 THK.

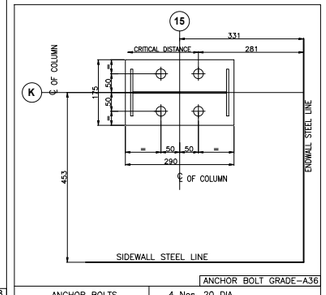
B9 (1 Nos.)



ANCHOR BOLT GRADE–8.8

ANCHOR BOLTS	8 Nos. 30 DIA.
BASE PLATE	250 X 764 X 40 THK.

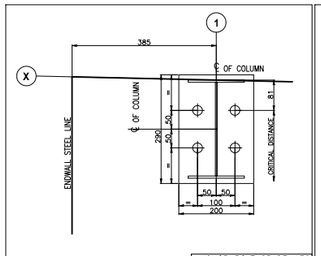
B10 (11 Nos.)



ANCHOR BOLT GRADE–A36

ANCHOR BOLTS	4 Nos. 20 DIA.
BASE PLATE	175 X 290 X 15 THK.

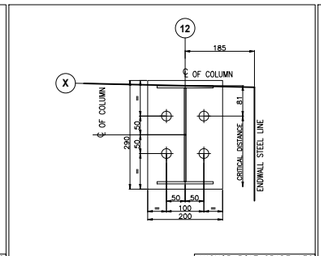
B20 (1 Nos.)



ANCHOR BOLT GRADE–A36

ANCHOR BOLTS	4 Nos. 20 DIA.
BASE PLATE	200 X 290 X 15 THK.

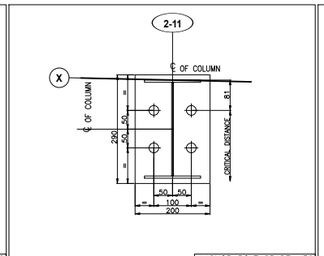
B1 (1 Nos.)



ANCHOR BOLT GRADE–A36

ANCHOR BOLTS	4 Nos. 20 DIA.
BASE PLATE	200 X 290 X 15 THK.

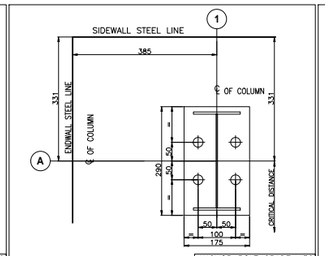
B2 (1 Nos.)



ANCHOR BOLT GRADE–A36

ANCHOR BOLTS	4 Nos. 20 DIA.
BASE PLATE	200 X 290 X 15 THK.

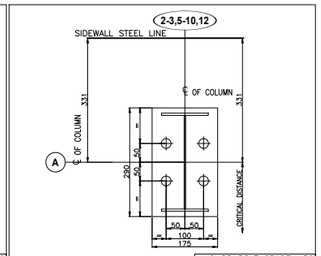
B3 (10 Nos.)



ANCHOR BOLT GRADE–A36

ANCHOR BOLTS	4 Nos. 20 DIA.
BASE PLATE	175 X 290 X 15 THK.

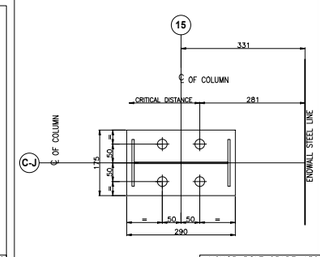
B4 (1 Nos.)



ANCHOR BOLT GRADE–A36

ANCHOR BOLTS	4 Nos. 20 DIA.
BASE PLATE	175 X 290 X 15 THK.

B5 (9 Nos.)



ANCHOR BOLT GRADE–A36

ANCHOR BOLTS	4 Nos. 20 DIA.
BASE PLATE	175 X 290 X 15 THK.

B19 (8 Nos.)

3

FULLY REVISED

APPROVAL DRAWING

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FOR APPROVAL

DATE	16.09.2025

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APPROVER : _____

SIGNATURE : _____

DATE : _____

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03	16.09.25	RE-ISSUED FOR APPROVAL	JJP	SSB	PBA
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01	01.08.25	RE-ISSUED FOR APPROVAL	SYA	SYA	PBA
00	13.06.25	ISSUED FOR APPROVAL	JJP	SSB	PBA

PROJECT

LOGISTICS WAREHOUSE GEORGIA

CUSTOMER

TBILISI DRY PORT LLC

STEEL SUPPLIER

ACERO

DRAWING TITLE

COLUMN BASE DETAILS

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	
BUILDING NO.	01	A02	
FILE NAME	A0997-01-A02-R03	REV. NO.	03

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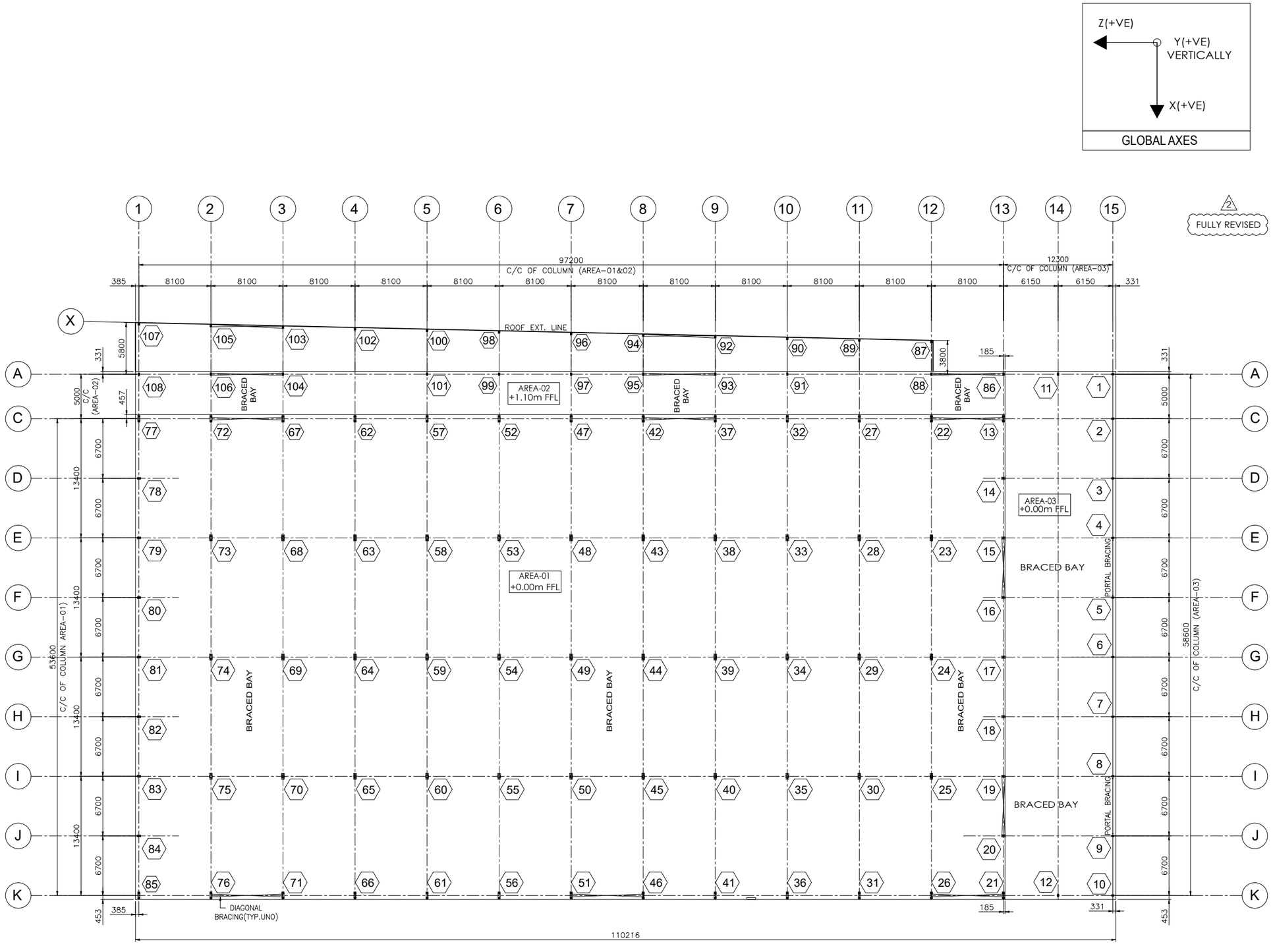

NODE NUMBERING PLAN

⬡ : DENOTES NODE NUMBERS.

ALL VALUES ARE UNFACTORED
ALL FORCES ARE IN kN

APPROVAL DRAWING

GENERAL NOTES :

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FOR APPROVAL

DATE	16.09.2025

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- ☐ APPROVED WITH COMMENTS (Production may proceed incorporating comments)
- ☐ RE-SUBMIT (Re-submit drawings incorporating comments)

APPROVER : _____

SIGNATURE : _____

DATE : _____

NOTE : THESE DRAWINGS ARE NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	DSN	DRN	CHK
02	16.09.25	RE-ISSUED FOR APPROVAL	JJP	JJP	PBA
01	01.08.25	RE-ISSUED FOR APPROVAL	SYA	SYA	PBA
00	13.06.25	ISSUED FOR APPROVAL	JJP	SSB	PBA

PROJECT
LOGISTICS WAREHOUSE GEORGIA

CUSTOMER
TBILISI DRY PORT LLC

STEEL SUPPLIER
ACERO

DRAWING TITLE
NODE NUMBERING PLAN

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	
BUILDING NO.	01	A03	
FILE NAME	A0997-01-A03-R02	REV. NO.	02

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	Support Node >>	1				2				3				4				5				6				7				8			
Load No.	Load Title	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz
1	ROOF DEAD LOAD	1	7	1	0	1	20	4	0	1	20	5	0	1	22	3	0	0	22	3	0	1	20	5	0	1	28	5	0	1	22	5	0
2	ROOF LIVE LOAD	1	7	1	0	1	31	6	0	1	28	7	0	1	29	6	0	0	29	6	0	1	28	6	0	1	28	6	0	1	28	7	0
3	WIND LOAD-1 (+X)	3	-9	4	0	1	-37	-2	0	1	-32	7	0	-2	-34	9	0	-3	-27	16	0	0	-28	12	0	0	-56	13	0	-3	-35	9	0
4	WIND LOAD-1 (-X)	1	-5	4	0	0	-37	-3	0	0	-32	7	0	3	-27	16	0	4	-34	9	0	0	-28	12	0	0	-56	13	0	3	-28	6	0
5	WIND LOAD-2 (+Y)	3	-4	2	0	1	-21	-2	0	1	-18	3	0	-2	-23	3	0	-2	-14	4	0	1	-17	8	0	1	-19	4	0	-2	-22	3	0
6	WIND LOAD-2 (-Y)	1	-4	2	0	0	-21	-2	0	0	-19	2	0	3	-14	4	0	3	-22	4	0	0	-17	5	0	0	-18	4	0	3	-15	3	0
7	WIND LOAD-3 (+Z)	1	-5	-4	0	0	-35	-13	0	0	-34	-12	0	0	-34	-11	0	1	-34	-11	0	0	-34	-11	0	0	-54	-11	0	0	-34	-11	0
8	WIND LOAD-3 (-Z)	1	-7	4	0	0	-37	-3	0	0	-31	7	0	1	-28	8	0	1	-21	8	0	0	-28	11	0	0	-56	9	0	0	-37	7	0
9	WIND LOAD-4 (+Z)	1	-5	-8	0	0	-10	-13	0	0	-21	-17	0	0	-21	-17	0	0	-21	-17	0	0	-22	-19	0	0	-22	-16	0	0	-21	-17	0
10	WIND LOAD-4 (-Z)	1	-5	2	0	0	-8	0	0	0	-7	4	0	1	-8	4	0	1	-7	4	0	0	-8	5	0	1	-7	5	0	1	-7	4	0
11	SNOW LOAD BALANCED	1	6	1	0	1	36	11	0	1	34	8	0	1	34	7	0	0	34	7	0	1	34	7	0	1	34	7	0	1	34	8	0
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13	SNOW LOAD UNBALANCED-2	3	1	1	0	1	0	0	0	1	1	1	0	0	0	0	0	0	1	1	0	1	1	1	0	1	0	0	0	0	0	0	0
14	SNOW LOAD DRIFT	1	0	0	0	1	10	7	0	1	20	6	0	1	20	6	0	0	20	6	0	1	20	6	0	1	20	6	0	1	20	6	0
15	SNOW LOAD SLIDING	1	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	1	0	0	0	0	0	0	0
16	SEISMIC LOAD (+X)	1	0	0	0	1	1	1	0	1	1	1	0	-6	-9	0	0	-6	10	1	0	1	1	1	0	1	0	0	0	-6	-6	0	0
17	SEISMIC LOAD (-X)	0	1	1	0	0	0	0	0	0	0	0	0	7	10	1	0	7	-9	0	0	0	0	0	0	0	1	1	0	7	10	1	0
18	SEISMIC LOAD (+Z)	1	0	0	0	1	0	-1	0	1	-2	-0	0	1	-3	-7	0	1	-3	-7	0	1	-4	-6	0	0	-4	-6	0	1	-2	-6	0
19	SEISMIC LOAD (-Z)	0	1	1	0	0	1	2	0	0	3	6	0	0	4	8	0	0	4	8	0	0	5	8	0	1	5	8	0	0	3	6	0
20	ROOF COLLATERAL LOAD	1	1	1	0	1	2	1	0	1	2	1	0	1	2	1	0	0	2	1	0	1	2	1	0	1	2	1	0	1	2	1	0

	Support Node >>	9				10				11				12				13				14				15				16			
Load No.	Load Title	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz
1	ROOF DEAD LOAD	3	22	3	0	1	7	1	0	0	10	1	0	0	16	0	0	1	32	-2	0	1	37	-1	0	1	37	-1	0	1	36	-1	0
2	ROOF LIVE LOAD	3	29	7	0	1	6	1	0	0	17	1	0	0	17	0	0	1	20	-7	-1	1	41	-3	0	1	46	-5	0	1	39	-3	0
3	WIND LOAD-1 (+X)	-2	-25	5	0	1	-6	4	0	-3	-20	1	0	-7	-20	1	0	-3	16	33	38	1	-52	17	0	-28	-63	19	0	1	-31	17	0
4	WIND LOAD-1 (-X)	3	-33	1	2	0	-6	4	0	6	-20	1	0	4	-22	1	0	2	35	37	-38	0	-68	17	0	0	-13	19	0	20	-72	16	0
5	WIND LOAD-2 (+Y)	-2	-15	3	0	1	-4	2	0	-9	-11	1	0	-1	-11	1	0	-4	4	22	48	1	-33	9	0	-28	-62	10	0	1	-8	9	0
6	WIND LOAD-2 (-Y)	3	-22	3	0	0	-4	2	0	2	-12	1	0	10	-11	1	0	1	21	16	-30	0	-39	9	0	0	3	10	0	28	-48	9	0
7	WIND LOAD-3 (+Z)	3	-34	-13	0	0	-6	-4	0	9	-28	0	0	-6	-28	0	0	0	-68	-14	-16	1	-64	-4	0	1	-97	-6	0	9	-52	-6	0
8	WIND LOAD-3 (-Z)	1	-31	T	0	0	-7	4	0	9	-16	1	0	-6	-17	1	0	1	76	43	-13	0	-48	17	0	0	-48	17	0	9	-56	14	0
9	WIND LOAD-4 (+Z)	3	-21	-17	0	0	-6	-8	0	4	-21	0	0	-3	-21	0	0	2	-102	-28	-6	1	-24	-4	0	1	-21	-3	0	4	-27	-2	0
10	WIND LOAD-4 (-Z)	1	-1	4	0	1	-4	2	0	0	-9	1	0	-3	-9	1	0	0	63	28	-6	0	-28	6	0	0	-19	6	0	4	-23	3	0
11	SNOW LOAD BALANCED	0	34	6	0	1	7	1	0	0	20	1	0	0	20	0	0	1	23	-5	-1	1	46	-5	0	1	47	-4	0	1	46	-5	0
12	SNOW LOAD UNBALANCED-1	3	0	1	0	0	0	1	0	0	0	1	0	0	1	1	0	1	2	-1	-1	0	1	1	0	0	1	1	0	2	1	0	0
13	SNOW LOAD UNBALANCED-2	3	1	1	0	1	1	1	0	0	0	0	0	0	1	1	0	1	7	-1	-1	1	23	0	0	0	28	0	0	1	28	1	0
14	SNOW LOAD DRIFT	3	23	0	0	1	-4	-1	0	0	1	0	0	0	31	0	0	0	56	-5	4	0	84	-4	0	0	83	-4	0	0	84	-3	0
15	SNOW LOAD SLIDING	0	1	1	0	1	1	1	0	0	1	0	0	0	0	0	0	0	16	1	2	0	1	1	0	0	0	0	0	1	1	1	0
16	SEISMIC LOAD (+X)	-6	9	1	0	1	0	1	0	0	1	0	0	0	1	1	0	10	-28	3	82	1	32	0	0	-79	-65	-1	0	1	-64	2	0
17	SEISMIC LOAD (-X)	7	-8	0	0	0	0	0	0	0	0	1	0	0	0	0	0	-11	26	-4	-73	0	-32	1	0	0	87	2	0	81	-66	-1	0
18	SEISMIC LOAD (+Z)	1	-5	-8	0	0	0	0	0	0	1	0	0	0	1	0	0	0	-282	-61	-3	1	8	0	0	-1	2	0	0	1	8	0	0
19	SEISMIC LOAD (-Z)	0	3	6	0	1	1	1	0	0	0	0	0	0	0	1	0	-2	247	78	3	0	-3	1	0	0	-1	2	0	2	-5	-2	0
20	ROOF COLLATERAL LOAD	0	2	1	0	1	1	1	0	0	1	1	0	0	1	0	0	1	1	0	0	1	3	0	0	1	3	0	0	1	2	0	0

	Support Node >>	17				18				19				20				21				22				23				24			
Load No.	Load Title	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz
1	ROOF DEAD LOAD	1	36	-1	0	1	35	-1	0	0	36	-1	0	1	37	-1	0	1	30	0	1	2	40	-3	-0	0	38	0	0	0	34	1	1
2	ROOF LIVE LOAD	1	40	-3	0	1	39	-3	0	0	40	-3	0	1	41	-3	0	1	8	-2	1	5	55	-7	-1	0	71	0	0	0	62	1	1
3	WIND LOAD-1 (+X)	1	-49	18	0	1	-43	16	0	-35	-70	16	0	1	-21	18	0	-13	50	-21	33	-12	-119	28	80	0	-94	1	1	0	-62	1	1
4	WIND LOAD-1 (-X)	3	-45	10	0	0	-57	10	0	0	-33	17	0	29	-81	18	0	0	32	28	-28	14	-91	24	-70	2	-52	1	-1	1	-60	1	-1
5	WIND LOAD-2 (+Y)	1	-29	10	0	1	-23	9	0	-24	-48	9	0	1	-3	10	0	-3	29	11	19	-16	-68	18	114	-1	-59	1	9	0	-32	1	0
6	WIND LOAD-2 (-Y)	3	-29	10	0	0	-37	9	0	0	-9	8	0	30	-63	8	0	19	10	10	-43	6	-42	14	-68	2	-19	1	-10	1	-32	1	-1
7	WIND LOAD-3 (+Z)	3	-51	6	0	0	-44	6	0	-1	-47	0	0	1	-41	5	0	-16	-73	-14	27	12	1	-12	-51	1	-51	0	-3	1	-57	1	-1
8	WIND LOAD-3 (-Z)	3	-30	16	0	0	-48	16	0	-2	-51	14	0	1	-44	16	0	-16	93	38	29	12	-192	44	-47	1	-61	1	-2	1	-60	1	-1
9	WIND LOAD-4 (+Z)	3	-34	-2	0	0	-33	-2	0	0	-33	-2	0	1	-24	-4	0	-8	-66	-24	13	8	61	-23	-33	1	-48	0	-2	1	-27	1	0
10	WIND LOAD-4 (-Z)	3	-6	4	0	0	-10	4	0	0	-21	4	0	1	-18	6	0	-7	66	24	11	6	-104	28	-20	1	-48	1	-1	1	-52	0	0
11	SNOW LOAD BALANCED	1	47	-3	0	1	46	-3	0	0	47	-3	0	1	46	-2	0	1	9	-2	1	5	64	-8	-23	0	83	0	0	0	72	1	1
12	SNOW LOAD UNBALANCED-1	3	30	0	0	0	29	0	0	0	21	1	0	1	22	0	0	1	10	1	0	3	15	-1	-12	0	19	1	0	3	68	1	-14
13	SNOW LOAD UNBALANCED-2	1	30	0	0	1	0	1	0	-1	0	0	0	1	7	1	0	1	9	1	0	4	33	-1	-16	2	195	1	-0	-2	59	1	16
14	SNOW LOAD DRIFT	3	82	-4	0	0	84	-4	0	0	83	-4	0	0	84	-4	0	0	26	-2	2	0	88	-9	-6	0	1	0	1	0	2	1	1
15	SNOW LOAD SLIDING	1	0	1	0	1	0	1	0	0	0	0	0	1	1	1	0	1	1	1	1	0	29	1	3	0	0	1	1	0	0	0	1
16	SEISMIC LOAD (+X)	1	1	0	0	1	-1	1	0	-75	-76	-1	0	1	82	2	0	16	32	2	13	-14	-8	0	168	-8	8	1	40	-2	1	1	30
17	SEISMIC LOAD (-X)	3	-1	1	0	0	2	0	0	0	77	2	0	77	-61	-1	0	-13	-33	-1	-18	14	13	-4	-164	6	-6	0	-29	4	2	0	-28
18	SEISMIC LOAD (+Z)	3	-42	2	0	0	-4	2	0	0	0	3	0	1	-4	-2	0	-2	-283	-60	0	1	259	-61	-0	1	0	0	-1	1	48	0	0
19	SEISMIC LOAD (-Z)	1	42	-1	0	1	-3	-1	0	0	-3	-1	0	1	-2	3	0	5	246	78	-4	0	-246	78	10	0	1	1	2	0	-47	1	1
20	ROOF COLLATERAL LOAD	1	2	0	0	1	2	0	0	0	2	0	0	1	2	0	0	1	1	0	1	1	2	0	-1	0	4	0	1	0	4	1	1

COLUMN REACTIONS - 1

2 FULLY REVISED

APPROVAL DRAWING

GENERAL NOTES :

1. All dimensions are in millimeters (mm), unless noted otherwise.
2. Reaction forces are in Kilo-Newton (kN) and Moments in Kilo-Newton Meter (kNm) units.
3. Bracing reactions should be added to the main frame reactions.
4. Foundations shall be designed for the given reactions as a minimum.
5. Anchor bolt must be set straight and to the given dimensions and the projections with a maximum allowable tolerance of 5mm.
6. Anchor bolt threads must be protected while pouring the concrete and must be thoroughly cleaned, and the templates are to be removed after pouring concrete.
7. The concrete edge beam / slab must be square and level to within 5 mm tolerances.
8. The customer / contractor is responsible for locating the building lines and bench marks at the site.
9. The following are the maximum allowable tolerances for setting up the anchor bolts.
   - 9.1. ± 2 mm between any two anchor bolts in any anchor bolt group.
   - 9.2. ± 3 mm between any two adjacent anchor bolt groups.
   - 9.3. ± 5 mm for the top of anchor bolts.
10. All the anchor bolts must be set perpendicular to the theoretical bearing surface unless noted otherwise.
11. Anchor bolts shall be set by the owner (or his civil contractor) in accordance with the "Issued for Construction" Anchor Bolt setting Plan.
12. When required for design, ACERO assumes the compressive strength of concrete fc' = 30 N/mm2 (Cylindrical).
13. ACERO shall not be responsible for any consequences arising from casting the anchor bolts on the basis of the "Approval drawings".
14. ACERO will not accept any responsibility for the liability of the foundations or slab construction.
15. The steel structure or part thereof is designed to be structurally dependent on the concrete structural work. It is the customer's responsibility to verify the adequacy of the concrete for structural soundness and strength.

FOR APPROVAL

DATE	16.09.25

In order to establish the most effective schedule for this project, kindly return these documents with your comments within two weeks of the issued date.

The fabrication and delivery schedules of these building may be impacted if changes are made to these drawings after they have been approved.

- ☐ APPROVED (Submitted drawings approved for production)
- ☐ APPROVED WITH COMMENTS (Production may proceed incorporating comments)
- ☐ RE-SUBMIT (Re-Submit drawings incorporating comments)

APPROVER : _____

SIGNATURE : _____

DATE : _____

NOTE : THESE DRAWINGS ARE NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	DSN	DRN	CHK
02	16.09.25	RE-ISSUED FOR APPROVAL	JJP	JJP	PBA
01	01.08.25	RE-ISSUED FOR APPROVAL	SYA	SYA	PBA
00	13.06.25	ISSUED FOR APPROVAL	JJP	SSB	PBA

PROJECT
LOGISTICS WAREHOUSE GEORGIA

CUSTOMER
TBILISI DRY PORT LLC

STEEL SUPPLIER
ACERO

DRAWING TITLE
COLUMN REACTIONS - 1

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	A04
BUILDING NO.	01		
FILE NAME	A0997-01-A04-R02	REV. NO.	02

This drawing, and any materials associated with this project, are confidential, may contain information that is classified or otherwise restricted from disclosure, and are intended solely for the intended recipient. Without the written consent of ACERO Building Systems, no portion of the contents of these documents may be duplicated or transmitted in any form or by any means.

	Support Node >>	25				26				27				28				29				30				31				32			
Load No.	Load Title	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz
1	ROOF DEAD LOAD	1	38	0	0	-2	48	-1	12	1	37	0	-1	0	39	1	2	0	38	1	1	0	37	0	1	-2	37	1	14	3	33	0	-8
2	ROOF LIVE LOAD	1	72	0	-1	-5	87	-2	28	3	69	0	-7	0	71	1	5	0	61	1	3	1	72	0	1	-4	80	1	34	6	60	0	-22
3	WIND LOAD-1 (+X)	-1	-51	1	19	-25	-63	21	78	-5	-58	1	91	-1	-83	0	11	0	-55	0	7	-1	-52	1	14	-26	-23	0	67	-17	-48	1	122
4	WIND LOAD-1 (-X)	1	166	1	-1	23	-69	22	-94	18	-41	1	-122	3	-62	0	-20	2	-58	0	-11	3	-65	1	-19	29	-38	0	-138	23	-26	1	-139
5	WIND LOAD-2 (+X)	-1	-16	1	19	-7	-38	11	38	-15	-55	1	100	-1	-50	0	12	0	-29	0	7	-1	-18	1	13	-8	-8	0	44	-35	-28	1	104
6	WIND LOAD-2 (-X)	1	103	1	-1	41	-42	10	134	12	-17	1	98	3	-20	0	-10	2	-29	0	-12	3	-52	1	-19	44	-19	0	-161	11	-6	1	80
7	WIND LOAD-3 (+Z)	0	-62	0	1	-26	13	-14	55	13	-62	1	-58	1	-62	0	-2	1	-65	0	-2	1	-61	0	0	-25	-38	1	51	18	-47	0	-70
8	WIND LOAD-3 (-Z)	0	-62	1	0	-25	-147	39	52	13	-62	1	-58	1	-62	1	-3	1	-65	0	-2	1	-61	1	0	-25	-39	0	91	18	-47	1	-71
9	WIND LOAD-4 (+Z)	0	-48	0	1	-10	66	-34	18	6	-38	0	-36	1	-46	1	-2	1	-38	1	-2	1	-48	0	-1	-8	-22	1	13	7	-27	0	-32
10	WIND LOAD-4 (-Z)	0	-48	1	0	-8	-68	34	17	6	-38	1	-36	1	-46	1	-2	1	-38	1	-2	1	-48	1	-1	-8	-22	0	13	7	-27	1	-33
11	SNOW LOAD BALANCED	1	84	0	-1	-6	63	-2	33	3	67	0	-8	0	63	1	5	0	71	1	3	1	84	0	1	-7	88	1	36	7	66	0	-26
12	SNOW LOAD UNBALANCED-1	-1	105	1	0	-4	30	1	22	4	13	0	-17	0	16	1	4	0	69	1	-14	-1	105	1	0	-4	30	0	21	-4	13	0	-16
13	SNOW LOAD UNBALANCED-2	1	18	1	-3	-3	12	1	17	6	30	0	-19	2	106	1	-4	0	69	1	18	1	18	0	-2	-3	13	1	25	6	31	1	-19
14	SNOW LOAD DRIFT	0	0	0	1	0	16	-2	2	-4	81	0	22	0	1	1	2	0	0	1	2	0	0	0	2	0	1	1	8	0	45	0	5
15	SNOW LOAD SLIDING	0	0	0	1	0	0	1	1	-4	44	1	22	0	0	1	2	0	0	0	2	0	0	0	2	0	1	1	5	0	20	1	4
16	SEISMIC LOAD (+X)	-5	-5	0	38	-13	3	2	116	-21	-3	1	240	-7	11	1	66	-6	1	0	62	-7	-7	0	56	-18	10	1	109	-24	-11	1	263
17	SEISMIC LOAD (-X)	6	6	1	-56	14	-1	-1	-116	22	4	0	-239	8	-10	0	-65	5	0	0	-41	6	6	1	-54	19	-9	0	-158	28	12	0	-262
18	SEISMIC LOAD (+Z)	0	0	0	2	0	281	80	4	0	1	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	1	-1	1	0	0	0	1
19	SEISMIC LOAD (-Z)	1	1	1	-1	1	-348	76	-5	1	0	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	0	2	0	1	1	1	0
20	ROOF COLLATERAL LOAD	1	4	0	0	0	2	0	2	1	3	0	0	0	5	1	1	1	4	1	0	0	4	0	1	0	2	1	2	1	3	0	-1

	Support Node >>	33				34				35				36				37				38				39				40			
Load No.	Load Title	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz
1	ROOF DEAD LOAD	0	38	0	0	1	38	0	1	1	37	0	1	-3	37	1	12	2	34	0	-6	0	38	0	0	0	32	1	1	1	36	0	0
2	ROOF LIVE LOAD	0	71	0	0	0	61	0	2	1	72	0	0	-5	30	1	30	0	22	-2	-21	0	71	0	0	0	61	1	2	1	72	0	0
3	WIND LOAD-1 (+X)	-1	-63	1	14	0	-59	1	8	-2	-52	1	17	-27	-23	0	86	-18	-34	0	118	-1	-63	1	14	0	-59	0	8	-2	-52	1	16
4	WIND LOAD-1 (-X)	0	-66	1	-20	0	-56	1	-12	0	-58	1	-17	28	-39	0	-121	16	-16	0	-127	0	-66	1	-20	0	-56	0	-12	0	-58	1	-16
5	WIND LOAD-2 (+X)	-2	-50	1	19	-1	-28	1	10	-2	-19	1	65	-10	-8	0	59	-24	-17	4	155	-1	-50	1	19	0	-29	0	10	-2	-19	1	17
6	WIND LOAD-2 (-X)	0	-20	1	-19	0	-28	1	-11	0	-52	1	-18	-44	-19	0	-160	11	0	3	-82	0	-20	1	-19	0	-28	0	-11	0	-52	1	-16
7	WIND LOAD-3 (+Z)	1	-51	0	-4	1	-55	1	-2	1	-51	0	-1	-25	-30	1	49	13	-100	-15	-56	1	-52	0	-4	1	-55	0	-2	1	-51	0	0
8	WIND LOAD-3 (-Z)	1	-51	1	-4	1	-59	1	-2	1	-51	1	-1	-28	-39	0	49	14	38	27	-68	1	-51	1	-4	1	-59	0	-2	1	-51	1	-1
9	WIND LOAD-4 (+Z)	1	-40	0	-3	1	-38	0	-1	1	-48	0	-1	-9	-22	1	14	8	-63	-17	-20	1	-48	0	-2	1	-38	1	-1	1	-48	0	0
10	WIND LOAD-4 (-Z)	1	-48	1	-3	1	-38	0	-1	1	-48	1	-1	-9	-22	0	14	7	48	24	-26	1	-48	1	-2	1	-38	0	-1	1	-48	1	0
11	SNOW LOAD BALANCED	0	63	0	4	0	71	0	2	1	84	0	-1	-6	35	1	35	8	38	-2	-33	0	63	0	4	0	71	1	2	1	84	0	-1
12	SNOW LOAD UNBALANCED-1	0	18	1	4	0	59	1	-14	-1	105	1	6	-4	30	1	21	4	13	0	-16	0	18	1	4	0	59	1	-14	-1	105	1	6
13	SNOW LOAD UNBALANCED-2	0	108	1	-4	-2	89	0	18	1	18	0	-2	-3	13	1	30	9	35	0	-19	0	108	1	-4	-2	89	1	18	1	18	0	-2
14	SNOW LOAD DRIFT	0	1	0	1	0	0	0	1	0	0	0	1	0	1	1	1	0	38	-2	5	0	1	0	1	0	0	1	1	0	0	0	1
15	SNOW LOAD SLIDING	0	1	1	1	0	0	0	1	0	0	0	1	0	1	1	1	0	29	0	-4	0	1	0	1	0	0	1	1	0	0	0	1
16	SEISMIC LOAD (+X)	-7	11	1	58	-5	1	1	94	-7	-7	0	31	-18	11	1	166	-27	-7	2	306	-7	10	1	58	-4	1	1	82	-7	-7	0	55
17	SEISMIC LOAD (-X)	8	-10	0	-57	6	0	1	-43	6	8	1	-56	19	-10	0	-165	28	6	-1	-305	8	-9	0	-58	5	0	0	-41	6	8	1	-85
18	SEISMIC LOAD (+Z)	0	0	0	1	0	0	0	1	0	0	0	1	0	1	-1	1	-2	-276	-69	15	0	0	0	2	0	0	0	1	0	0	0	2
19	SEISMIC LOAD (-Z)	1	1	1	0	1	1	1	0	1	1	1	0	1	0	2	0	3	358	84	-10	1	1	1	0	1	1	1	0	1	1	1	0
20	ROOF COLLATERAL LOAD	0	0	0	1	1	0	0	0	0	0	0	1	0	2	1	2	1	2	0	-1	0	0	0	1	0	0	0	1	1	0	0	0

	Support Node >>	41				42				43				44				45				46				47				48			
Load No.	Load Title	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz
1	ROOF DEAD LOAD	-2	37	1	12	3	42	-1	-8	0	41	1	-2	1	39	1	1	1	39	0	0	-2	46	1	12	3	34	1	-8	0	42	0	2
2	ROOF LIVE LOAD	-5	38	1	31	6	47	-2	-23	0	71	1	-4	0	60	1	2	1	72	0	-1	-5	24	-1	26	6	46	1	-23	0	71	0	3
3	WIND LOAD-1 (+X)	-27	-23	0	86	-16	-62	6	1 99	-1	-83	3	14	0	-54	0	9	-2	-92	1	17	-27	-19	0	86	-16	-48	0	117	-1	-83	1	14
4	WIND LOAD-1 (-X)	28	-39	0	-118	19	-39	5	-128	0	-53	0	-20	2	-54	0	-12	3	-65	1	-16	30	-28	0	-118	19	-27	0	-128	0	-53	1	-20
5	WIND LOAD-2 (+X)	-8	-6	0	54	-24	-37	4	152	-1	-56	0	11	0	-25	0	10	-2	-19	1	17	-8	0	0	55	-24	-27	0	151	-1	-56	1	11
6	WIND LOAD-2 (-X)	64	-18	0	-160	11	-19	0	-164	0	-26	0	-18	0	-21	0	-11	0	-53	1	-19	64	-13	0	-160	11	-9	0	-163	0	-26	1	-18
7	WIND LOAD-3 (+Z)	-28	-39	1	51	13	8	-15	-57	1	-51	0	-3	1	-76	0	-2	1	-61	0	-1	-28	-30	-16	50	14	-47	0	-61	1	-52	0	-4
8	WIND LOAD-3 (-Z)	-28	-59	0	91	14	-139	37	-91	1	-52	1	-4	1	-49	0	-3	0	-61	1	0	-29	41	34	-52	13	-47	0	-57	1	-51	0	-3
9	WIND LOAD-4 (+Z)	-9	-22	1	15	6	30	-17	-28	1	-48	1	-2	1	-49	1	-1	1	-48	0	-1	-9	-78	-16	14	7	-28	1	-33	1	-48	0	-3
10	WIND LOAD-4 (-Z)	-9	-22	0	18	7	-101	34	-38	1	-48	1	-3	1	-23	1	-1	0	-48	1	0	-9	62	21	18	6	-27	0	-28	1	-48	0	-2
11	SNOW LOAD BALANCED	-9	38	1	38	7	54	-2	-27	0	63	1	4	0	70	1	2	1	84	0	-1	-9	38	-1	39	7	56	1	-39	0	63	0	4
12	SNOW LOAD UNBALANCED-1	-4	39	1	21	4	14	0	-18	0	18	1	4	3	89	1	-14	-1	105	1	6	-4	39	0	21	4	13	1	-18	0	18	1	4
13	SNOW LOAD UNBALANCED-2	-3	13	1	29	5	31	0	-19	2	105	1	-4	-2	89	1	18	1	18	0	-2	-3	13	0	29	5	30	1	-19	2	105	1	-4
14	SNOW LOAD DRIFT	0	1	1	1	0	53	-2	5	0	1	1	-1	0	-1	1	1	0	0	0	1	0	-5	-1	1	0	45	1	4	0	1	0	1
15	SNOW LOAD SLIDING	0	1	1	1	0	30	0	4	0	1	0	1	0	0	0	1	0	0	0	1	0	1	1	1	0	30	1	4	0	1	0	1
16	SEISMIC LOAD (+X)	-19	19	1	100	-24	-13	2	269	-6	-12	1	82	-5	1	1	40	-8	-0	0	61	-20	12	1	176	-26	-12	1	270	-6	-12	1	82
17	SEISMIC LOAD (-X)	16	-9	0	-159	25	19	-1	-288	9	-11	0	-81	6	0	1	-45	9	9	1	-80	21	-11	0	-177	27	15	0	-277	9	-11	0	-81
18	SEISMIC LOAD (+Z)	0	1	-1	4	2	278	-83	-1	0	1	0	2	1	-52	0	0	1	1	0	-2	1	-272	-84	-6	1	1	0	-8	1	0	0	-2
19	SEISMIC LOAD (-Z)	1	0	2	-2	-1	-357	84	2	1	0	1	-1	0	52	1	1	0	0	1	2	0	272	84	6	0	0	1	12	0	1	1	2
20	ROOF COLLATERAL LOAD	0	2	1	2	1	3	0	-1	0	0	1	1	1	0	1	0	0	0	0	1	0	2	0	2	1	0	1	-1	0	1	0	1

COLUMN REACTIONS - 2

2 FULLY REVISED

APPROVAL DRAWING

GENERAL NOTES :

1. All dimensions are in millimeters (mm), unless noted otherwise.
2. Reaction forces are in Kilo-Newton (kN) and Moments in Kilo-Newton Meter (kNm) units.
3. Bracing reactions should be added to the main frame reactions.
4. Foundations shall be designed for the given reactions as a minimum.
5. Anchor bolt must be set straight and to the given dimensions and the projections with a maximum allowable tolerance of 5mm.
6. Anchor bolt threads must be protected while pouring the concrete and must be thoroughly cleaned, and the templates are to be removed after pouring concrete.
7. The concrete edge beam / slab must be square and level to within 5 mm tolerances.
8. The customer / contractor is responsible for locating the building lines and bench marks at the site.
9. The following are the maximum allowable tolerances for setting up the anchor bolts.
   - 9.1. ± 2 mm between any two anchor bolts in any anchor bolt group.
   - 9.2. ± 3 mm between any two adjacent anchor bolt groups.
   - 9.3. ± 5 mm for the top of anchor bolts.
10. All the anchor bolts must be set perpendicular to the theoretical bearing surface unless noted otherwise.
11. Anchor bolts shall be set by the owner (or his civil contractor) in accordance with the "Issued for Construction" Anchor Bolt setting Plan.
12. When required for design, ACERO assumes the compressive strength of concrete fc' = 30 N/mm2 (Cylindrical).
13. ACERO shall not be responsible for any consequences arising from casting the anchor bolts on the basis of the "Approval drawings".
14. ACERO will not accept any responsibility for the liability of the foundations or slab construction.
15. The steel structure or part thereof is designed to be structurally dependent on the concrete structural work. It is the customer's responsibility to verify the adequacy of the concrete for structural soundness and strength.

FOR APPROVAL

DATE	16.09.25

In order to establish the most effective schedule for this project, kindly return these documents with your comments within two weeks of the issued date.

The fabrication and delivery schedules of these building may be impacted if changes are made to these drawings after they have been approved.

- ☐ APPROVED (Submitted drawings approved for production)
- ☐ APPROVED WITH COMMENTS (Production may proceed incorporating comments)
- ☐ RE-SUBMIT (Re-Submit drawings incorporating comments)

APPROVER : _____

SIGNATURE : _____

DATE : _____

NOTE : THESE DRAWINGS ARE NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	DSN	DRN	CHK
02	16.09.25	RE-ISSUED FOR APPROVAL	JJP	JJP	PBA
01	01.08.25	RE-ISSUED FOR APPROVAL	SYA	SYA	PBA
00	13.06.25	ISSUED FOR APPROVAL	JJP	SSB	PBA

PROJECT
LOGISTICS WAREHOUSE GEORGIA

CUSTOMER
TBILISI DRY PORT LLC

STEEL SUPPLIER
ACERO

DRAWING TITLE
COLUMN REACTIONS - 2

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	
BUILDING NO.	01	A05	
FILE NAME	A0997-01-A05-R02	REV. NO.	02

This drawing, and any materials associated with this project, are confidential, may contain information that is classified or otherwise restricted from disclosure, and are intended solely for the intended recipient. Without the written consent of ACERO Building Systems, no portion of the contents of these documents may be duplicated or transmitted in any form or by any means.

	Support Node >>	29				30				31				32				33				34				35				36			
Load No.	Load Title	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx
1	ROOF DEAD LOAD	1	37	0	1	1	39	0	1	-2	44	-1	15	3	33	1	-8	0	36	0	2	0	32	1	1	1	36	0	0	-2	37	1	12
2	ROOF LIVE LOAD	0	62	0	2	1	72	0	-1	-5	55	-1	30	6	39	1	-22	0	71	0	4	0	61	1	2	1	72	0	0	-5	30	1	30
3	WIND LOAD-1 (+X)	0	-66	1	9	-2	-62	1	17	-27	-31	3	99	-19	-46	0	119	-1	-63	0	14	0	-49	1	9	-2	-62	0	17	-27	-23	1	99
4	WIND LOAD-1 (-X)	0	66	1	-12	0	65	1	-16	28	43	0	-120	19	39	0	-129	0	63	0	-20	0	55	1	-12	0	65	0	-16	28	38	1	-120
5	WIND LOAD-2 (+X)	0	-30	1	10	-2	-19	1	17	-9	-12	2	55	-24	-27	0	100	-1	-50	0	15	0	-29	1	10	-2	-19	1	17	-9	-8	0	54
6	WIND LOAD-2 (-X)	2	-32	1	-11	0	-53	1	-16	44	-24	2	-180	11	-8	0	-84	0	-20	0	-19	2	-29	1	-11	0	-52	1	-16	44	-19	0	-180
7	WIND LOAD-3 (+Z)	1	-54	1	-2	1	-61	0	0	-25	15	-15	52	14	-47	0	-80	1	-61	0	-4	1	-45	0	-2	1	-61	0	-1	-25	-30	1	51
8	WIND LOAD-3 (-Z)	1	-61	0	-2	1	-61	1	-1	-29	-119	28	88	14	-47	0	-80	1	-61	1	-4	1	-60	0	-2	1	-61	1	-1	-29	-38	0	91
9	WIND LOAD-4 (+Z)	1	-27	0	-1	1	-46	0	0	-9	34	-16	16	7	-30	1	-30	1	-46	0	-2	1	-36	1	-1	1	-46	0	0	-9	-22	1	13
10	WIND LOAD-4 (-Z)	1	-53	0	-1	1	-46	1	-1	-9	-86	23	13	7	-26	0	-29	1	-46	1	-2	1	-39	0	-1	1	-46	1	0	-9	-22	0	19
11	SNOW LOAD-BALANCED	0	72	0	2	1	84	0	-1	-6	47	-1	33	7	46	1	-26	0	83	0	4	0	71	1	2	1	84	0	-1	-6	33	1	33
12	SNOW LOAD-UNBALANCED-1	3	89	1	-14	-1	105	1	6	-4	31	0	21	4	13	1	-16	0	16	1	4	3	89	1	-14	-1	105	1	6	-4	30	1	21
13	SNOW LOAD-UNBALANCED-2	-2	89	0	16	1	16	0	-2	-3	13	0	30	6	31	1	-16	-2	105	1	-4	-2	89	0	16	1	16	0	-2	-3	13	1	30
14	SNOW LOAD-DRIFT	0	0	0	1	0	0	1	1	0	0	-1	1	0	45	1	5	0	1	0	1	0	0	1	1	0	0	0	1	0	1	1	1
15	SNOW LOAD-SLIDING	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	1
16	SEISMIC LOAD (+X)	-5	1	0	45	-3	-6	0	61	-22	10	1	-178	-23	-10	1	248	-7	10	1	55	-4	1	0	41	-7	-7	0	54	-17	10	0	155
17	SEISMIC LOAD (-X)	0	0	0	-45	0	0	1	-60	21	-9	0	177	24	11	0	-247	0	-8	0	-54	0	0	0	-40	0	0	1	-53	18	-8	0	154
18	SEISMIC LOAD (+Z)	1	33	0	0	0	1	0	1	0	273	-84	-3	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	1	-1	1
19	SEISMIC LOAD (-Z)	0	-51	1	1	1	1	1	-1	1	-271	84	-5	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	0	2	0
20	ROOF COLLATERAL LOAD	1	6	0	0	0	0	0	1	0	0	0	0	1	0	1	-1	0	-4	1	1	0	4	1	1	1	4	0	0	0	0	1	0

	Support Node >>	37				50				59				60				61				62				63				64			
Load No.	Load Title	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx
1	ROOF DEAD LOAD	3	33	1	-8	0	39	1	2	1	36	1	1	0	37	0	1	-2	37	1	12	1	38	1	1	0	39	0	3	0	36	0	1
2	ROOF LIVE LOAD	9	59	1	-22	0	71	1	4	0	61	1	2	1	72	0	0	-5	30	1	30	2	51	1	0	0	71	0	5	0	61	0	3
3	WIND LOAD-1 (+X)	-17	-48	0	100	-1	-63	0	14	0	-65	0	9	-2	-52	0	17	-27	-23	1	99	-7	-63	0	68	-1	-63	1	10	0	-65	1	8
4	WIND LOAD-1 (-X)	21	-35	0	-139	4	-53	0	-21	2	-55	0	-13	3	-85	0	-17	28	-36	1	-122	21	-44	0	-137	4	-53	1	-21	2	-55	1	-12
5	WIND LOAD-2 (+X)	-28	-27	0	162	-2	-80	0	18	-1	-29	0	10	-2	-19	0	18	-12	-8	1	97	-13	-39	0	86	-1	-80	1	11	0	-28	1	8
6	WIND LOAD-2 (-X)	12	-5	0	-87	3	-20	0	-19	2	-29	0	-12	3	-52	0	-16	44	-10	1	-161	14	-20	0	-112	3	-20	1	-21	2	-29	1	-12
7	WIND LOAD-3 (+Z)	18	-46	1	-73	1	-82	0	-8	1	-85	0	-3	1	-81	0	-2	-28	-39	1	46	18	-86	0	-73	1	-82	1	-9	1	-85	1	-3
8	WIND LOAD-3 (-Z)	18	-46	0	-73	1	-81	1	-5	1	-85	1	-3	1	-81	1	-2	-25	-39	0	46	16	-86	1	-73	1	-82	1	-5	1	-85	0	-9
9	WIND LOAD-4 (+Z)	8	-28	1	-35	1	-48	0	-3	1	-36	1	-1	1	-49	0	-1	-9	-22	1	14	11	-42	1	-50	1	-48	0	-4	1	-36	0	-2
10	WIND LOAD-4 (-Z)	8	-28	1	-35	1	-48	1	-2	1	-36	1	-3	1	-49	1	-1	-9	-22	0	14	11	-42	1	-50	1	-48	0	-4	1	-36	0	-2
11	SNOW LOAD-BALANCED	8	46	1	-26	0	83	1	4	0	71	1	2	1	84	0	-1	-6	33	1	33	2	60	1	0	0	83	0	6	0	71	0	3
12	SNOW LOAD-UNBALANCED-1	4	13	1	-19	0	16	0	4	0	89	1	-14	-1	105	1	6	-4	30	1	21	4	13	1	-17	0	16	0	4	0	89	1	-14
13	SNOW LOAD-UNBALANCED-2	5	30	1	-15	2	105	1	-4	-2	89	0	16	1	16	0	-2	-3	13	1	20	5	30	1	-15	2	105	1	-4	-2	89	0	16
14	SNOW LOAD-DRIFT	0	46	1	6	0	1	1	1	0	0	1	1	0	0	0	1	0	1	1	1	-4	83	1	28	0	1	0	2	0	0	0	2
15	SNOW LOAD-SLIDING	0	30	1	4	0	1	0	1	0	0	0	1	0	0	0	1	0	1	1	1	-4	46	1	25	0	0	0	2	0	0	0	2
16	SEISMIC LOAD (+X)	-28	-11	1	268	-8	11	1	86	-5	1	0	48	-7	-8	0	66	-18	11	0	168	-22	-8	1	261	-7	11	1	88	-9	1	1	43
17	SEISMIC LOAD (-X)	28	12	0	-269	8	-10	0	-88	6	0	0	-44	8	9	1	-67	23	9	0	-169	23	9	0	-250	8	-10	0	-87	8	0	1	-42
18	SEISMIC LOAD (+Z)	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	1	-1	1	0	1	0	1	0	0	0	1	0	0	0	1
19	SEISMIC LOAD (-Z)	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	0	2	0	1	0	1	0	1	1	1	0	1	1	1	0
20	ROOF COLLATERAL LOAD	1	0	1	-1	0	0	1	1	1	0	1	0	0	5	0	1	0	2	1	2	1	0	1	1	0	0	0	1	1	0	0	0

	Support Node >>	65				66				67				68				69				70				71				72			
Load No.	Load Title	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx
1	ROOF DEAD LOAD	3	37	0	1	-2	37	1	14	3	36	1	-9	0	35	0	2	3	33	1	1	1	38	1	0	-2	40	1	15	3	40	-1	-8
2	ROOF LIVE LOAD	1	72	0	1	-6	30	1	33	0	33	-1	-21	0	71	0	4	0	60	1	2	1	72	1	0	-5	29	-1	30	0	44	-1	-22
3	WIND LOAD-1 (+X)	-1	-51	0	10	-28	-24	1	84	-15	-66	-14	118	-1	-63	0	14	0	-60	0	9	-2	-52	0	16	-27	-61	-11	94	-15	-6	-14	115
4	WIND LOAD-1 (-X)	3	-63	0	-17	28	-36	1	-121	20	-66	-16	-133	4	-63	0	-21	2	-60	0	-13	3	-63	0	-17	28	-73	-11	-122	21	10	-14	-138
5	WIND LOAD-2 (+X)	-1	-16	0	12	-8	-7	1	42	-25	-43	-6	158	-1	-50	0	15	0	-30	0	10	-2	-19	0	17	-13	-20	-4	55	-24	-10	-6	153
6	WIND LOAD-2 (-X)	3	-53	0	-17	44	-19	1	-164	11	-21	-9	86	3	-20	0	-19	2	-30	0	-13	3	-52	0	-16	44	-32	-5	-167	13	11	-8	-89
7	WIND LOAD-3 (+Z)	1	-81	0	-2	-25	-26	1	40	15	-102	-27	60	1	-81	0	-4	1	-76	0	-2	1	-81	0	-2	-25	-121	-24	47	13	40	-27	-67
8	WIND LOAD-3 (-Z)	1	-81	1	-2	-29	-39	0	46	19	62	32	-89	1	-82	1	-5	1	-80	0	-2	1	-81	1	-1	-25	62	28	90	19	-145	32	-87
9	WIND LOAD-4 (+Z)	1	-48	0	-3	-9	-22	1	10	8	-68	-19	-20	1	-49	0	-2	1	-49	1	-1	1	-48	0	-1	-9	-62	-17	13	7	31	-19	-33
10	WIND LOAD-4 (-Z)	1	-45	1	-2	-9	-22	0	10	8	54	18	-36	1	-45	1	-3	1	-21	0	-1	1	-46	1	0	-9	89	34	15	7	-146	38	-31
11	SNOW LOAD-BALANCED	1	66	0	1	-7	35	1	41	6	41	-1	-23	0	63	0	4	0	70	1	2	1	66	1	-1	-6	30	-1	35	7	31	-1	-26
12	SNOW LOAD-UNBALANCED-1	-1	105	1	6	-4	30	1	21	4	13	0	-16	0	16	1	4	0	89	0	-14	-1	105	1	6	-4	30	0	21	4	13	0	-16
13	SNOW LOAD-UNBALANCED-2	1	16	0	-2	-3	13	1	-20	0	30	0	-19	0	106	1	-4	-2	89	0	16	1	16	0	-3	-3	13	0	-20	0	31	0	-16
14	SNOW LOAD-DRIFT	0	0	0	0	0	1	1	0	0	40	-1	5	0	1	0	1	0	-1	1	1	0	0	1	1	0	-4	-1	1	0	31	-1	0
15	SNOW LOAD-SLIDING	0	0	0	0	0	1	1	0	0	30	0	4	0	1	0	1	0	0	1	1	0	0	1	1	0	1	0	1	0	30	0	4
16	SEISMIC LOAD (+X)	-7	-1	0	37	-18	11	0	165	-24	-9	1	201	-7	11	1	88	-5	1	0	43	-7	-1	0	57	-19	11	1	166	-28	-12	1	268
17	SEISMIC LOAD (-X)	8	6	1	-56	19	-10	0	-164	25	11	0	-280	8	-10	0	-87	8	0	0	-42	8	8	1	-86	23	-8	1	-167	27	12	0	-287
18	SEISMIC LOAD (+Z)	0	0	0	1	0	1	-1	1	0	-273	-85	9	0	1	0	2	1	80	0	0	1	1	0	-1	1	-282	-88	-9	1	273	-85	-9
19	SEISMIC LOAD (-Z)	1	1	1	0	1	0	2	0	1	206	93	-5	1	0	1	-1	1	55	1	0	0	0	1	2	0	265	-57	4	0	-257	93	9
20	ROOF COLLATERAL LOAD	0	0	0	1	0	2	1	2	1	0	0	-1	0	4	0	1	0	4	1	1	1	4	1	0	0	3	0	2	1	3	0	-1

COLUMN REACTIONS - 3

APPROVAL DRAWING

GENERAL NOTES :

1. All dimensions are in millimeters (mm), unless noted otherwise.
2. Reaction forces are in Kilo-Newton (kN) and Moments in Kilo-Newton Meter (kNm) units.
3. Bracing reactions should be added to the main frame reactions.
4. Foundations shall be designed for the given reactions as a minimum.
5. Anchor bolt must be set straight and to the given dimensions and the projections with a maximum allowable tolerance of 5mm.
6. Anchor bolt threads must be protected while pouring the concrete and must be thoroughly cleaned, and the templates are to be removed after pouring concrete.
7. The concrete edge beam / slab must be square and level to within 5 mm tolerances.
8. The customer / contractor is responsible for locating the building lines and bench marks at the site.
9. The following are the maximum allowable tolerances for setting up the anchor bolts.
   - 9.1. ± 2 mm between any two anchor bolts in any anchor bolt group.
   - 9.2. ± 3 mm between any two adjacent anchor bolt groups.
   - 9.3. ± 5 mm for the top of anchor bolts.
10. All the anchor bolts must be set perpendicular to the theoretical bearing surface unless noted otherwise.
11. Anchor bolts shall be set by the owner (or his civil contractor) in accordance with the "Issued for Construction" Anchor Bolt setting Plan.
12. When required for design, ACERO assumes the compressive strength of concrete fc' = 30 N/mm2 (Cylindrical).
13. ACERO shall not be responsible for any consequences arising from casting the anchor bolts on the basis of the "Approval drawings".
14. ACERO will not accept any responsibility for the liability of the foundations or slab construction.
15. The steel structure or part thereof is designed to be structurally dependent on the concrete structural work. It is the customer's responsibility to verify the adequacy of the concrete for structural soundness and strength.

FOR APPROVAL

DATE	16.09.25

In order to establish the most effective schedule for this project, kindly return these documents with your comments within two weeks of the issued date.

The fabrication and delivery schedules of these building may be impacted if changes are made to these drawings after they have been approved.

- ☐ APPROVED (Submitted drawings approved for production)
- ☐ APPROVED WITH COMMENTS (Production may proceed incorporating comments)
- ☐ RE-SUBMIT (Re-Submit drawings incorporating comments)

APPROVER : _____

SIGNATURE : _____

DATE : _____

NOTE : THESE DRAWINGS ARE NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	DSN	DRN	CHK
00	16.09.25	ISSUED FOR APPROVAL	JJP	JJP	PBA

PROJECT
LOGISTICS WAREHOUSE GEORGIA

CUSTOMER
TBILISI DRY PORT LLC

STEEL SUPPLIER
ACERO

DRAWING TITLE
COLUMN REACTIONS - 3

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	
BUILDING NO.	01	A06	
FILE NAME	A0997-01-A06-R00	REV. NO.	00

This drawing, and any materials associated with this project, are confidential, may contain information that is classified or otherwise restricted from disclosure, and are intended solely for the intended recipient. Without the written consent of ACERO Building Systems, no portion of the contents of these documents may be duplicated or transmitted in any form or by any means.

	Support Node >>	73				74				75				76				77				78				79				80			
Load No.	Load Title	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx
1	ROOF DEAD LOAD	0	38	0	2	0	33	-1	1	-1	38	0	0	-2	44	-1	13	-1	24	0	0	0	22	-1	0	0	22	-1	0	0	22	-1	0
2	ROOF LIVE LOAD	0	71	0	4	0	62	-1	2	-1	72	-1	0	-3	34	-1	31	-1	14	0	0	0	19	-1	0	0	19	-1	0	0	17	-1	0
3	WIND LOAD-1 (+X)	-1	-83	0	15	0	-80	-1	9	-2	-92	0	17	-27	15	-71	89	-13	-29	-9	80	0	-24	-24	0	0	-31	-29	0	0	-29	-28	0
4	WIND LOAD-1 (-X)	4	53	0	-21	2	60	-1	-12	3	65	0	-17	28	2	-11	-121	19	-3	-9	-124	-1	-34	-28	0	-1	-17	-15	0	-1	-15	-28	0
5	WIND LOAD-2 (+X)	-1	-80	0	15	0	-27	-1	10	-2	-19	0	17	-13	6	-4	95	-18	-19	-8	109	0	-17	-13	0	0	-22	-18	0	0	-21	-11	0
6	WIND LOAD-2 (-X)	3	-20	0	-19	2	-27	-1	-12	3	-82	0	-16	44	-9	-5	-161	14	3	-6	-151	-1	-17	-10	0	-1	-8	-13	0	-1	-7	-11	0
7	WIND LOAD-3 (+Z)	-1	-82	0	-5	-1	-81	-1	-2	-1	-91	0	-1	-25	43	-24	-50	-18	-17	-7	-46	-1	-19	-26	0	-1	-22	-28	0	-1	-19	-21	0
8	WIND LOAD-3 (-Z)	-1	-81	-1	-4	-1	-80	0	-2	-1	-91	0	-2	-28	-100	28	67	-11	-17	8	-66	-1	-19	23	0	-1	-22	11	0	-1	-18	12	0
9	WIND LOAD-4 (+Z)	-1	-46	0	-3	-1	-27	-1	-1	-1	-46	0	-1	-9	37	-17	15	8	-8	-2	-20	-1	-11	-12	0	-1	-12	-6	0	-1	-11	-6	0
10	WIND LOAD-4 (-Z)	-1	-48	-1	-2	-1	-50	0	-1	-1	-46	-1	-1	-9	-133	34	11	9	-8	13	-26	-1	-11	34	0	-1	-12	28	0	-1	-11	27	0
11	SNOW LOAD-BALANCED	0	83	0	4	0	72	-1	2	-1	84	-1	-1	-6	39	-1	36	-1	16	0	0	0	22	-1	0	0	22	-1	0	0	20	-1	0
12	SNOW LOAD-UNBALANCED-1	0	16	0	4	0	60	-1	-14	-1	108	-1	6	-4	30	0	21	-1	4	-1	-2	-1	-7	-1	0	-1	-6	-1	0	-1	-5	-1	0
13	SNOW LOAD-UNBALANCED-2	-2	109	-1	-4	-2	85	0	16	-1	16	0	-2	-3	73	0	-30	-1	10	-1	0	0	23	-1	0	0	20	-1	0	0	38	-1	0
14	SNOW LOAD-DRIFT	0	-1	0	-1	0	0	-1	-1	0	0	-1	-1	0	5	-1	2	0	25	0	3	0	-1	-1	0	0	0	-1	0	0	-1	-1	0
15	SNOW LOAD-SLIDING	0	-1	0	-1	0	0	0	-1	0	0	-1	-1	0	5	-1	2	0	25	0	3	0	-1	-1	0	0	0	-1	0	0	-1	-1	0
16	SEISMIC LOAD (+X)	-7	11	-1	55	-5	-1	0	43	-7	-7	0	57	-19	10	-1	166	-37	-35	0	334	0	39	0	0	0	-3	0	0	0	5	0	0
17	SEISMIC LOAD (-X)	8	-10	0	-87	6	0	0	-42	8	6	-1	-86	28	-10	-1	-167	38	36	-1	-333	-1	-38	-1	0	-1	-4	-1	0	-1	-3	-1	0
18	SEISMIC LOAD (+Z)	-1	0	0	-1	-1	31	0	0	0	0	0	-2	0	269	-68	-4	0	0	0	-1	0	-1	0	0	0	0	0	0	0	-1	0	0
19	SEISMIC LOAD (-Z)	0	-1	-1	2	-1	-52	-1	0	-1	-1	-1	-1	-1	-282	67	-8	-1	-1	0	-1	0	-1	-1	0	-1	-1	-1	0	-1	-1	-1	0
20	ROOF COLLATERAL LOAD	0	-4	0	-1	0	-4	-1	-1	-1	-4	-1	0	0	-2	0	-2	-1	-1	0	0	0	-1	-1	0	0	-1	-1	0	0	-1	-1	0

	Support Node >>	81				82				83				84				85				86				87				88			
Load No.	Load Title	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx
1	ROOF DEAD LOAD	0	34	0	0	0	32	-1	0	0	32	-1	0	0	22	-1	0	0	25	-1	2	-1	12	0	0	-1	5	0	0	-1	30	-1	0
2	ROOF LIVE LOAD	0	20	0	0	0	17	-1	0	0	19	-1	0	0	19	-1	0	0	9	-1	4	-1	14	0	0	-1	6	0	0	-1	25	0	0
3	WIND LOAD-1 (+X)	0	-23	-27	0	0	-15	-28	0	0	-17	-25	0	0	-20	-24	0	-21	-7	-1	86	-7	-14	3	0	-1	-11	0	0	-7	-31	0	0
4	WIND LOAD-1 (-X)	1	-24	-27	0	1	-29	-28	0	1	-31	-25	0	1	-27	-24	0	28	-17	1	-85	10	-4	3	0	2	-8	0	0	13	-36	12	0
5	WIND LOAD-2 (+X)	0	-10	-11	0	0	-7	-11	0	0	-8	-10	0	0	-12	-10	0	-12	0	1	62	-12	-11	-1	0	-2	-11	1	0	-18	-18	0	0
6	WIND LOAD-2 (-X)	1	-10	-11	0	0	-21	-11	0	1	-22	-13	0	1	-20	-13	0	28	-10	1	-111	-4	-2	3	0	1	-8	0	0	5	-25	7	0
7	WIND LOAD-3 (+Z)	1	-16	-22	0	1	-16	-21	0	1	-22	-23	0	1	-17	-28	0	-18	-14	1	97	10	-17	-1	0	1	-11	0	0	18	-34	3	0
8	WIND LOAD-3 (-Z)	1	-16	12	0	1	-16	12	0	1	-22	11	0	1	-17	23	0	-15	-14	0	37	10	-4	3	0	1	-11	1	0	15	-45	15	0
9	WIND LOAD-4 (+Z)	1	-11	-7	0	1	-11	-8	0	1	-12	-9	0	1	-10	-12	0	-6	-8	1	14	-4	-10	-6	0	1	-10	0	0	7	-21	0	0
10	WIND LOAD-4 (-Z)	1	-11	28	0	1	-11	27	0	1	-12	28	0	1	-10	34	0	-9	-8	0	14	-3	-1	3	0	1	-11	1	0	7	-30	9	0
11	SNOW LOAD-BALANCED	0	23	0	0	0	20	-1	0	0	22	-1	0	0	22	-1	0	0	10	-1	5	-1	15	3	0	-1	9	0	0	-1	20	2	0
12	SNOW LOAD-UNBALANCED-1	1	33	0	0	1	29	-1	0	1	30	-1	0	1	23	-1	0	0	10	-1	2	-1	-1	0	0	-1	-1	0	0	-1	-1	2	0
13	SNOW LOAD-UNBALANCED-2	0	30	0	0	0	5	-1	0	0	6	-1	0	0	7	-1	0	0	4	0	5	0	2	0	0	-1	-1	0	0	-1	-1	2	0
14	SNOW LOAD-DRIFT	0	0	0	0	0	0	-1	0	0	1	-1	0	0	0	-1	0	0	1	-1	1	0	19	-1	0	0	-8	-1	0	0	43	0	0
15	SNOW LOAD-SLIDING	0	0	0	0	0	0	-1	0	0	1	-1	0	0	0	-1	0	0	1	0	1	0	19	-1	0	0	-5	-1	0	0	41	0	0
16	SEISMIC LOAD (+X)	0	3	-1	0	0	-1	0	0	0	3	0	0	0	-26	0	0	-28	26	0	210	-1	-7	-1	0	-3	-8	-1	0	-3	16	0	0
17	SEISMIC LOAD (-X)	1	-1	1	0	1	2	0	0	1	-2	0	0	1	27	0	0	27	-23	0	-209	2	9	0	0	4	10	0	0	4	-12	0	0
18	SEISMIC LOAD (+Z)	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	-11	-15	0	1	1	0	0	1	11	0	0
19	SEISMIC LOAD (-Z)	1	1	1	0	1	1	1	0	1	0	1	0	1	1	1	0	1	0	1	0	1	33	1	0	0	0	1	0	0	-6	13	0
20	ROOF COLLATERAL LOAD	0	1	0	0	0	1	-1	0	0	1	-1	0	0	1	-1	0	0	1	-1	1	-1	1	0	0	-1	1	0	0	-1	2	-1	0

	Support Node >>	89				90				91				92				93				94				95				96			
Load No.	Load Title	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx	Fx	Fy	Fz	Mx
1	ROOF DEAD LOAD	3	15	1	0	1	7	0	0	1	21	1	0	1	7	1	0	1	21	1	0	1	7	1	0	1	21	1	0	1	7	1	0
2	ROOF LIVE LOAD	1	26	1	0	1	9	0	0	1	27	1	0	1	10	1	0	1	28	1	0	1	10	1	0	1	29	1	0	1	10	1	0
3	WIND LOAD-1 (+X)	-11	-40	0	0	-3	-16	0	0	-7	-35	1	0	-3	-19	0	0	-5	-37	-1	0	-3	-21	1	0	-5	-37	2	0	-3	-21	0	0
4	WIND LOAD-1 (-X)	1	-36	1	0	2	-13	0	0	14	-27	1	0	2	-14	0	0	11	-34	1	0	2	-13	1	0	11	-41	0	0	2	-16	1	0
5	WIND LOAD-2 (+X)	-11	-35	0	0	-3	-15	0	0	-18	-27	0	0	-3	-20	0	0	-11	-29	-1	0	-3	-21	1	0	-11	-28	1	0	-3	-22	0	0
6	WIND LOAD-2 (-X)	1	-30	1	0	2	-13	0	0	8	-28	1	0	2	-14	0	0	8	-27	1	0	1	-19	1	0	8	-32	0	0	1	-16	1	0
7	WIND LOAD-3 (+Z)	-4	-41	0	0	1	-16	0	0	18	-41	0	0	1	-23	-9	0	11	-45	-5	0	0	-12	0	0	11	-30	0	0	0	-19	0	0
8	WIND LOAD-3 (-Z)	-4	-41	1	0	1	-16	1	0	18	-41	1	0	1	-10	1	0	11	-34	1	0	0	-24	18	0	11	-50	11	0	0	-19	1	0
9	WIND LOAD-4 (+Z)	-4	-39	0	0	0	-17	0	0	7	-32	0	0	0	-23	-9	0	0	-37	-6	0	0	-13	0	0	0	-29	0	0	0	-19	0	0
10	WIND LOAD-4 (-Z)	-4	-36	1	0	0	-17	1	0	7	-32	1	0	0	-11	1	0	0	-27	1	0	0	-25	11	0	0	-40	0	0	0	-19	1	0
11	SNOW LOAD-BALANCED	0	20	1	0	1	10	0	0	1	33	1	0	1	11	1	0	1	33	1	0	1	11	1	0	1	33	1	0	1	32	1	0
12	SNOW LOAD-UNBALANCED-1	1	1	1	0	1	1	0	0	1	0	1	0	1	1	0	0	1	0	1	0	1	1	1	0	1	0	1	0	1	1	1	0
13	SNOW LOAD-UNBALANCED-2	1	1	1	0	1	1	0	0	1	0	1	0	1	1	0	0	1	1	1	0	1	1	1	0	1	0	1	0	1	1	0	0
14	SNOW LOAD-DRIFT	0	21	0	0	0	-5	-1	0	2	43	0	0	0	-5	0	0	2	42	0	0	0	-5	1	0	2	42	0	0	0	-4	1	0
15	SNOW LOAD-SLIDING	0	20	0	0	0	-5	-1	0	2	40	0	0	0	-4	0	0	2	40	0	0	0	-4	1	0	2	40	0	0	0	-4	1	0
16	SEISMIC LOAD (+X)	-13	-6	0	0	-5	-13	0	0	-5	11	0	0	-5	-13	-1	0	-5	9	-2	0	-5	-10	0	0	-5	-13	-1	0	-5	-11	0	0
17	SEISMIC LOAD (-X)	14	10	1	0	6	13	1	0	6	-30	1	0	6	13	1	0	6	-7	0	0	6	11	2	0	6	13	0	0	6	12	1	0
18	SEISMIC LOAD (+Z)	0	0	0	0	0	0	0	0	0	1	0	0	1	-7	-18	0	0	-11	-18	0	0	6	0	0	0	13	0	0	1	1	0	0
19	SEISMIC LOAD (-Z)	1	1	1	0	1	1	1	0	1	0	1	0	1	6	1	0	1	12	1	0	0	-7	11	0	1	-11	18	0	0	0	1	0
20	ROOF COLLATERAL LOAD	1	0	1	0	1	1	0	0	1	0	1	0	1	1	0	0	1	0	1	0	1	1	1	0	1	0	1	0	1	1	1	0

COLUMN REACTIONS - 4

APPROVAL DRAWING

GENERAL NOTES :

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7. The concrete edge beam / slab must be square and level to within 5 mm tolerances.
8. The customer / contractor is responsible for locating the building lines and bench marks at the site.
9. The following are the maximum allowable tolerances for setting up the anchor bolts.
   - 9.1. ± 2 mm between any two anchor bolts in any anchor bolt group.
   - 9.2. ± 3 mm between any two adjacent anchor bolt groups.
   - 9.3. ± 5 mm for the top of anchor bolts.
10. All the anchor bolts must be set perpendicular to the theoretical bearing surface unless noted otherwise.
11. Anchor bolts shall be set by the owner (or his civil contractor) in accordance with the "Issued for Construction" Anchor Bolt setting Plan.
12. When required for design, ACERO assumes the compressive strength of concrete fc' = 30 N/mm2 (Cylindrical).
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FOR APPROVAL

DATE	16.09.25

In order to establish the most effective schedule for this project, kindly return these documents with your comments within two weeks of the issued date.

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- ☐ APPROVED (Submitted drawings approved for production)
- ☐ APPROVED WITH COMMENTS (Production may proceed incorporating comments)
- ☐ RE-SUBMIT (Re-Submit drawings incorporating comments)

APPROVER : _____

SIGNATURE : _____

DATE : _____

NOTE : THESE DRAWINGS ARE NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	DSN	DRN	CHK
00	16.09.25	ISSUED FOR APPROVAL	JJP	JJP	PBA

PROJECT
LOGISTICS WAREHOUSE GEORGIA

CUSTOMER
TBILISI DRY PORT LLC

STEEL SUPPLIER
ACERO

DRAWING TITLE
COLUMN REACTIONS - 4

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	
BUILDING NO.	01	A07	
FILE NAME	A0997-01-A07-R00	REV. NO.	00

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	Support Node >>	97				98				99				100				101				102				103				104			
Load No.	Load Title	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz
1	ROOF DEAD LOAD	1	21	1	0	1	7	1	0	1	21	1	0	1	7	1	0	1	21	1	0	3	19	1	0	1	8	1	0	1	22	1	0
2	ROOF LIVE LOAD	1	29	1	0	1	11	1	0	1	29	1	0	1	11	1	0	1	28	1	0	7	31	0	0	2	13	1	0	1	30	1	0
3	WIND LOAD-1 (+X)	-5	-39	0	0	-3	-22	0	0	-5	-40	0	0	-5	-23	0	0	-7	-41	0	0	-14	-52	1	0	-3	-24	0	0	-7	-40	-4	0
4	WIND LOAD-1 (-X)	11	38	0	0	2	17	1	0	11	40	0	0	1	18	1	0	18	41	0	0	2	42	1	0	1	20	0	0	15	45	3	0
5	WIND LOAD-2 (+Y)	-11	-38	0	0	-3	-22	0	0	-11	-31	0	0	-4	-23	0	0	-15	-32	1	0	-13	-48	0	0	-4	-23	0	0	-16	-30	-2	0
6	WIND LOAD-2 (-Y)	3	-21	0	0	1	-17	1	0	3	-21	0	0	1	-18	1	0	8	-33	0	0	-1	-36	1	0	1	-20	0	0	6	-35	-1	0
7	WIND LOAD-3 (+Z)	11	-43	0	0	0	-19	0	0	11	-44	0	0	0	-20	0	0	18	-44	0	0	-7	-48	0	0	0	-28	-8	0	16	-44	-9	0
8	WIND LOAD-3 (-Z)	11	-43	1	0	0	-19	1	0	11	-44	1	0	0	-20	1	0	18	-45	1	0	-7	-48	1	0	0	-16	1	0	16	-40	1	0
9	WIND LOAD-4 (+Z)	9	-39	0	0	0	-20	0	0	9	-36	0	0	0	-21	0	0	9	-37	0	0	-6	-44	0	0	0	-28	-8	0	9	-44	-7	0
10	WIND LOAD-4 (-Z)	9	-39	1	0	0	-20	1	0	9	-36	1	0	0	-21	1	0	9	-37	1	0	-6	-44	1	0	-1	-16	1	0	8	-31	1	0
11	SNOW LOAD BALANCED	1	33	1	0	1	13	1	0	1	34	1	0	2	13	1	0	1	34	1	0	8	34	0	0	2	14	1	0	1	35	1	0
12	SNOW LOAD UNBALANCED-1	1	0	1	0	1	1	1	0	1	0	1	0	1	1	1	0	1	0	1	0	1	1	1	0	1	1	1	0	1	0	0	0
13	SNOW LOAD UNBALANCED-2	1	0	1	0	1	1	0	0	1	0	1	0	1	1	1	0	1	0	1	0	1	1	1	0	1	1	1	0	1	0	1	0
14	SNOW LOAD DRIFT	2	62	0	0	0	-4	1	0	2	61	0	0	0	-4	1	0	2	61	0	0	7	59	0	0	0	-4	0	0	2	61	0	0
15	SNOW LOAD BLDING	2	59	0	0	0	-4	1	0	2	59	0	0	0	-3	1	0	2	58	0	0	8	55	0	0	0	-3	0	0	2	58	0	0
16	SEISMIC LOAD (+X)	-5	10	1	0	-4	-8	0	0	-4	9	1	0	-5	-10	0	0	-5	9	1	0	-13	-8	0	0	-3	-9	0	0	-4	7	-1	0
17	SEISMIC LOAD (-X)	8	-9	1	0	6	10	1	0	6	-8	1	0	8	11	1	0	8	-9	0	0	14	8	1	0	6	10	1	0	6	-6	0	0
18	SEISMIC LOAD (+Z)	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	-8	-8	0	0	-11	-16	0
19	SEISMIC LOAD (-Z)	0	1	1	0	1	1	1	0	1	0	1	0	1	1	1	0	1	0	1	0	1	1	1	0	1	0	1	0	1	14	1	0
20	ROOF COLLATERAL LOAD	1	2	1	0	1	1	1	0	1	2	1	0	1	1	1	0	1	2	1	0	1	2	0	0	1	1	1	0	1	2	1	0

	Support Node >>	105				106				107				108			
Load No.	Load Title	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz
1	ROOF DEAD LOAD	1	8	1	0	1	22	1	0	1	5	1	0	0	14	1	0
2	ROOF LIVE LOAD	2	11	1	0	1	31	1	0	1	7	1	0	0	18	1	0
3	WIND LOAD-1 (+X)	-4	-25	2	0	-5	-41	0	0	-3	-16	1	0	-4	-32	0	0
4	WIND LOAD-1 (-X)	1	-25	1	0	12	-41	1	0	1	-14	1	0	8	-31	0	0
5	WIND LOAD-2 (+Y)	-4	-28	2	0	-11	-33	1	0	-2	-18	1	0	-6	-28	0	0
6	WIND LOAD-2 (-Y)	1	-28	1	0	5	-35	1	0	1	-14	1	0	5	-27	0	0
7	WIND LOAD-3 (+Z)	8	-17	8	0	12	-47	9	0	-1	-16	0	0	7	-31	0	0
8	WIND LOAD-3 (-Z)	-1	-28	10	0	12	-55	11	0	-1	-16	1	0	7	-31	1	0
9	WIND LOAD-4 (+Z)	-1	-17	8	0	8	-34	9	0	-1	-16	0	0	4	-27	0	0
10	WIND LOAD-4 (-Z)	-1	-38	11	0	8	-48	12	0	-1	-16	1	0	4	-27	1	0
11	SNOW LOAD BALANCED	2	15	1	0	1	35	1	0	1	8	1	0	0	25	1	0
12	SNOW LOAD UNBALANCED-1	1	1	1	0	1	8	1	0	1	1	0	0	1	0	1	0
13	SNOW LOAD UNBALANCED-2	1	1	1	0	1	0	1	0	0	0	0	0	0	1	1	0
14	SNOW LOAD DRIFT	2	-3	1	0	2	40	0	0	0	-3	1	0	1	22	0	0
15	SNOW LOAD BLDING	2	-3	1	0	2	38	0	0	0	-1	0	0	1	21	0	0
16	SEISMIC LOAD (+X)	-5	-8	5	0	-5	9	1	0	-5	-10	0	0	-5	9	1	0
17	SEISMIC LOAD (-X)	9	9	1	0	6	-8	3	0	9	11	1	0	6	-7	0	0
18	SEISMIC LOAD (+Z)	1	7	8	0	1	12	0	0	0	0	0	0	0	1	0	0
19	SEISMIC LOAD (-Z)	8	-7	10	0	6	-13	10	0	1	1	1	0	1	0	1	0
20	ROOF COLLATERAL LOAD	1	1	1	0	1	2	1	0	1	1	1	0	0	1	1	0

COLUMN REACTIONS - 5

APPROVAL DRAWING

GENERAL NOTES :

1. All dimensions are in millimeters (mm), unless noted otherwise.
2. Reaction forces are in Kilo-Newton (kN) and Moments in Kilo-Newton Meter (kNm) units.
3. Bracing reactions should be added to the main frame reactions.
4. Foundations shall be designed for the given reactions as a minimum.
5. Anchor bolt must be set straight and to the given dimensions and the projections with a maximum allowable tolerance of 5mm.
6. Anchor bolt threads must be protected while pouring the concrete and must be thoroughly cleaned, and the templates are to be removed after pouring concrete.
7. The concrete edge beam / slab must be square and level to within 5 mm tolerances.
8. The customer / contractor is responsible for locating the building lines and bench marks at the site.
9. The following are the maximum allowable tolerances for setting up the anchor bolts.
   - 9.1. ± 2 mm between any two anchor bolts in any anchor bolt group.
   - 9.2. ± 3 mm between any two adjacent anchor bolt groups.
   - 9.3. ± 5 mm for the top of anchor bolts.
10. All the anchor bolts must be set perpendicular to the theoretical bearing surface unless noted otherwise.
11. Anchor bolts shall be set by the owner (or his civil contractor) in accordance with the "Issued for Construction" Anchor Bolt setting Plan.
12. When required for design, ACERO assumes the compressive strength of concrete fc' = 30 N/mm2 (Cylindrical).
13. ACERO shall not be responsible for any consequences arising from casting the anchor bolts on the basis of the "Approval drawings".
14. ACERO will not accept any responsibility for the liability of the foundations or slab construction.
15. The steel structure or part thereof is designed to be structurally dependent on the concrete structural work. It is the customer's responsibility to verify the adequacy of the concrete for structural soundness and strength.

FOR APPROVAL

DATE	16.09.25

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- ☐ APPROVED (Submitted drawings approved for production)
- ☐ APPROVED WITH COMMENTS (Production may proceed incorporating comments)
- ☐ RE-SUBMIT (Re-Submit drawings incorporating comments)

APPROVER : _____

SIGNATURE : _____

DATE : _____

NOTE : THESE DRAWINGS ARE NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	DSN	DRN	CHK
00	16.09.25	ISSUED FOR APPROVAL	JJP	JJP	PBA

PROJECT
LOGISTICS WAREHOUSE GEORGIA

CUSTOMER
TBILISI DRY PORT LLC

STEEL SUPPLIER
ACERO

DRAWING TITLE
COLUMN REACTIONS - 5

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	
BUILDING NO.	01	A08	
FILE NAME	A0997-01-A08-R00	REV. NO.	00

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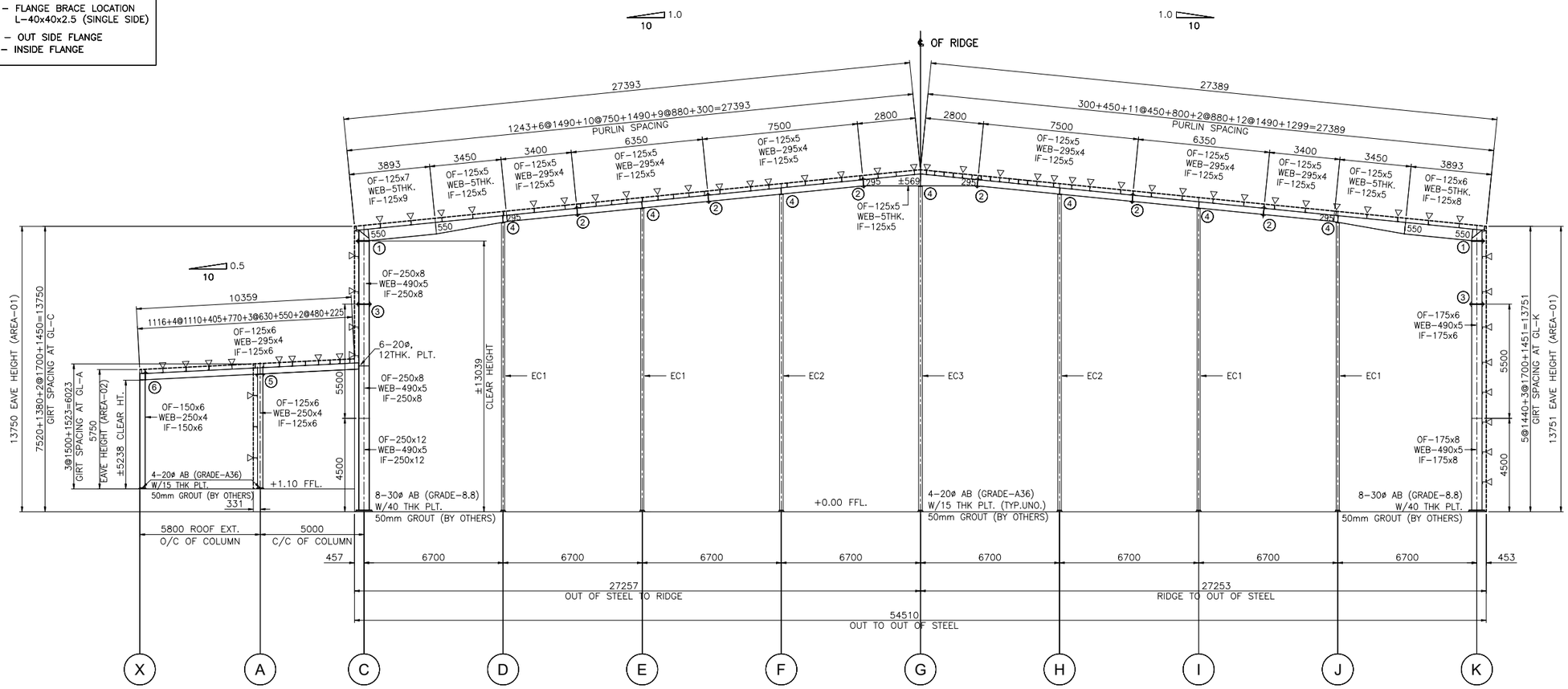
LEGEND / ABBREVIATION

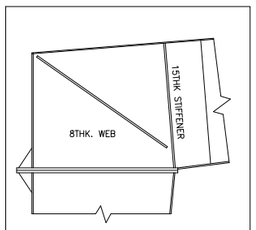
▽ – FLANGE BRACE LOCATION L–40x40x2.5 (SINGLE SIDE)

OF – OUT SIDE FLANGE
IF – INSIDE FLANGE

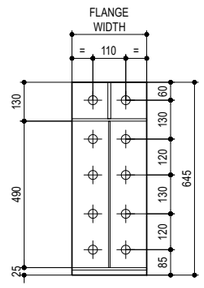


RIGID FRAME CROSS SECTION AT GL - 1

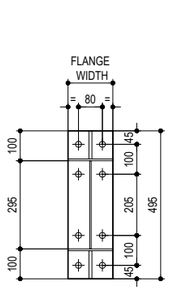
2 FULLY REVISED



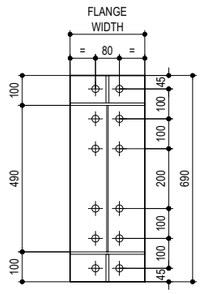
HORIZONTAL KNEE DETAIL AT GL-C & K



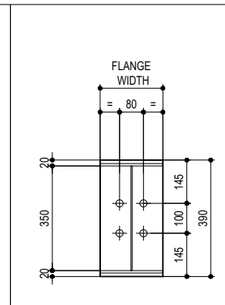
1 HSF-6-4-27Ø HSB, 25 THK. PLT
H - HORIZONTAL
S - STIFFENED ON TOP
F - FLUSH AT BOTTOM



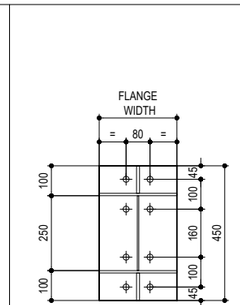
2 SSS-4-4-20Ø HSB, 15 THK. PLT.
S - SLOPED
S - STIFFENED ON TOP
S - STIFFENED AT BOTTOM



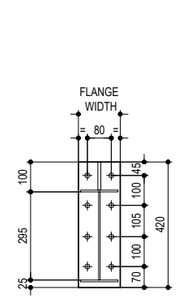
3 CSS-6-6-24Ø HSB,20THK. PLT.
C - COLUMN
S - STIFFENED ON TOP
S - STIFFENED AT BOTTOM



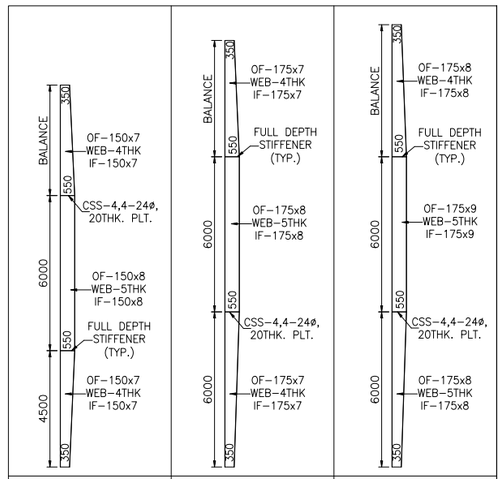
4 CW-4-20Ø HSB,15THK. PLT.



5 CR-4-4-20Ø HSB, 15THK. PLT.
C - COLUMN
R - RIGID CONNECTION



6 VSF-4-4-20Ø-HSB, 15THK, PLT.
V - VERTICAL
S - STIFFENED ON TOP
F - FLUSH AT BOTTOM



APPROVAL DRAWING

GENERAL NOTES :
1. All dimensions are in millimeters (mm), unless noted otherwise.
2. All connection bolts are High Strength Bolts with Hot Dipped Galvanized Finish. Bolts to be lubricated and free from dust / debris. If the lubrication on any bolt is inadequate, the erector must apply suitable lubricant at the site before tightening the bolt.
3. All bolted connections are classified to be in non-slip-critical category.
4. It is the erector's responsibility to use the correct bolts exactly as specified in the erection drawings. Wrong usage may cause failure of the building.
5. Continuous machine submerged arc welding (SAW) meets the applicable requirements of the American Welding Society (A.W.S) D1.1/D1.1M.
6. Web-to-flange welds are 'SINGLE' side fillet welds in accordance with the 13th edition of the AISC Table J2.4 Page 16.1-96 unless noted otherwise.
7. Endplate to flange welds are both sides, thickness greater than 12 mm are CJP welds with appropriate preparation.
8. Refer "Anchor Bolt Setting Plan" for base details of column.

FOR APPROVAL

DATE	19.09.2025

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APPROVER : _____

SIGNATURE : _____

DATE : _____

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REV.	DATE	DESCRIPTION	DSN	DRN	CHK
02	19.09.25	RE-ISSUED FOR APPROVAL	JJP	JJP	PBA
01	07.08.25	RE-ISSUED FOR APPROVAL	SYA	SYA	PBA
00	13.06.25	ISSUED FOR APPROVAL	JJP	JJP	PBA

PROJECT
LOGISTICS WAREHOUSE GEORGIA

CUSTOMER
TBILISI DRY PORT LLC

STEEL SUPPLIER
ACERO

DRAWING TITLE
RIGID FRAME CROSS SECTION AT GL - 1

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	
BUILDING NO.	01		S01
FILE NAME	A0997-01-S01-R02	REV. NO.	02

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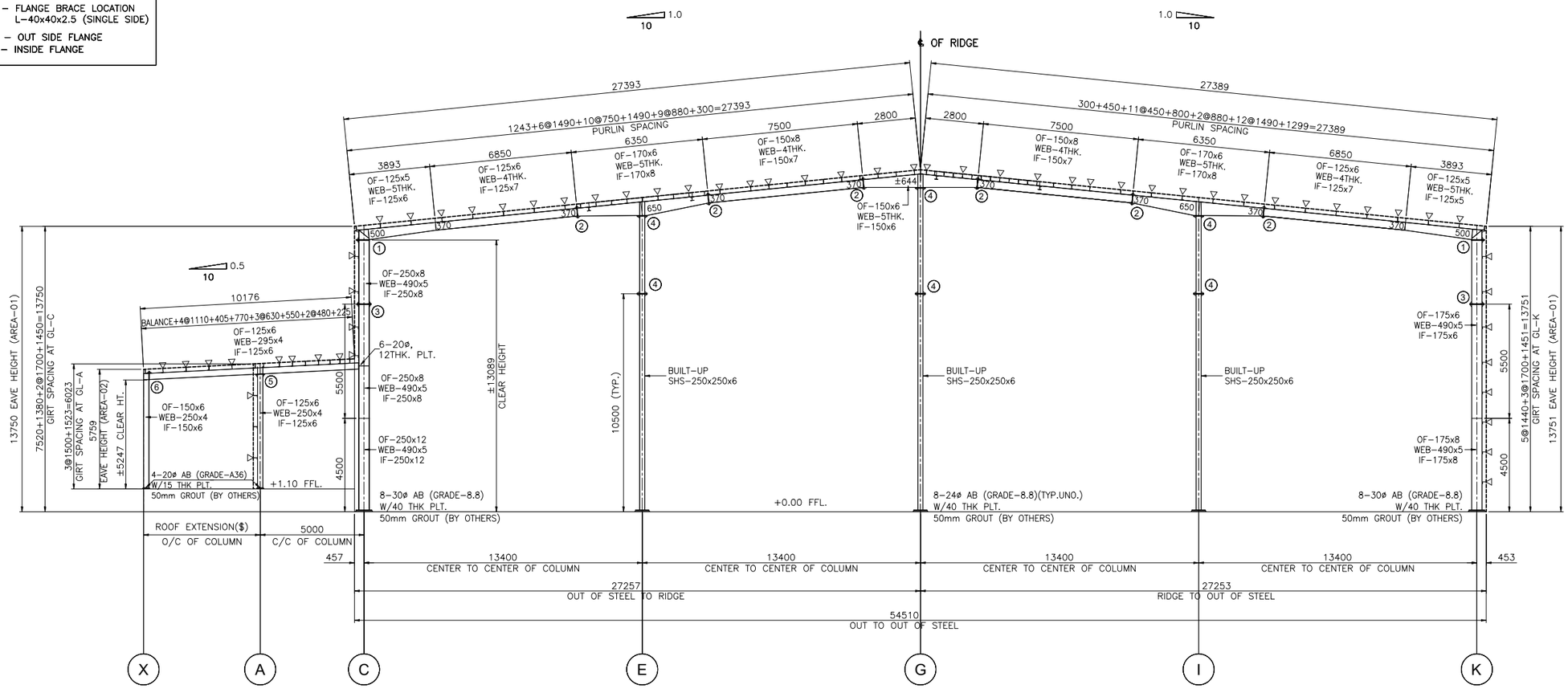
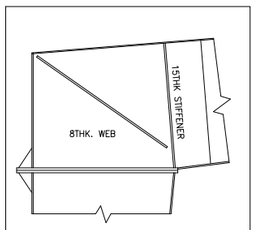
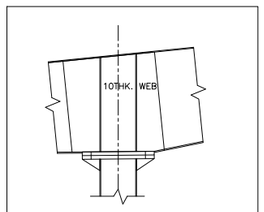
IF – INSIDE FLANGE



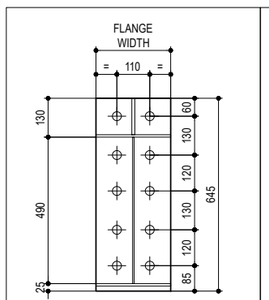
RIGID FRAME CROSS SECTION AT GL - 2, 3, 5 TO 10 & 12



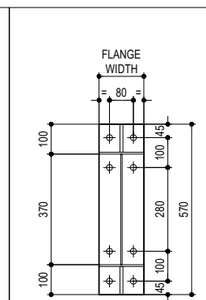
HORIZONTAL KNEE DETAIL AT GL-C & K



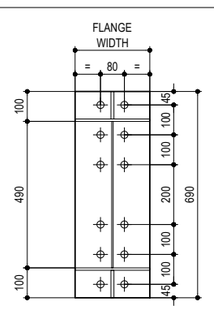
COLUMN RAFTER CONNECTION AT GL-E,G & I



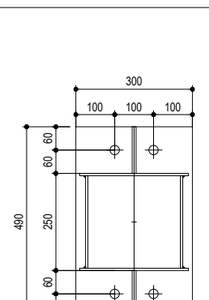
1 HSF-6-4-27Ø HSB, 25 THK. PLT
H - HORIZONTAL
S - STIFFENED ON TOP
F - FLUSH AT BOTTOM



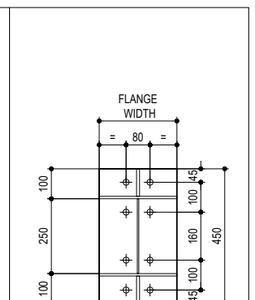
2 SSS-4-4-20Ø HSB, 15 THK. PLT.
S - SLOPED
S - STIFFENED ON TOP
S - STIFFENED AT BOTTOM



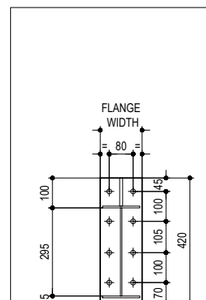
3 CSS-6-6-24Ø HSB,20THK. PLT.
C - COLUMN
S - STIFFENED ON TOP
S - STIFFENED AT BOTTOM



4 CR-2-2-24Ø HSB, 25THK. PLT.
C - COLUMN
R - RIGID CONNECTION



5 CR-4-4-20Ø HSB, 15THK. PLT.
C - COLUMN
R - RIGID CONNECTION



6 VSF-4-4-20Ø-HSB, 15THK, PLT.
V - VERTICAL
S - STIFFENED ON TOP
F - FLUSH AT BOTTOM

RIGID FRAME GRIDLINE	WIDTH OF ROOF EXTENSION ($)	EAVE HEIGHT
2	5618 mm	5759 mm
3	5436 mm	5768 mm
5	5073 mm	5786 mm
6	4891 mm	5795 mm
7	4709 mm	5805 mm
8	4527 mm	5814 mm
9	4345 mm	5823 mm
10	4164 mm	5832 mm
12	3800 mm	5850 mm

2 FULLY REVISED

APPROVAL DRAWING

GENERAL NOTES :
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8. Refer "Anchor Bolt Setting Plan" for base details of column.

FOR APPROVAL

DATE	19.09.2025

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SIGNATURE : _____
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REV.	DATE	DESCRIPTION	DSN	DRN	CHK
02	19.09.25	RE-ISSUED FOR APPROVAL	JJP	JJP	PBA
01	07.08.25	RE-ISSUED FOR APPROVAL	SYA	SYA	PBA
00	13.06.25	ISSUED FOR APPROVAL	JJP	JJP	PBA

PROJECT
LOGISTICS WAREHOUSE GEORGIA

CUSTOMER
TBILISI DRY PORT LLC

STEEL SUPPLIER
ACERO

DRAWING TITLE
RIGID FRAME CROSS SECTION AT GL - 2, 3, 5 TO 10 & 12

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	
BUILDING NO.	01		S02
FILE NAME	A0997-01-S02-R02	REV. NO.	02

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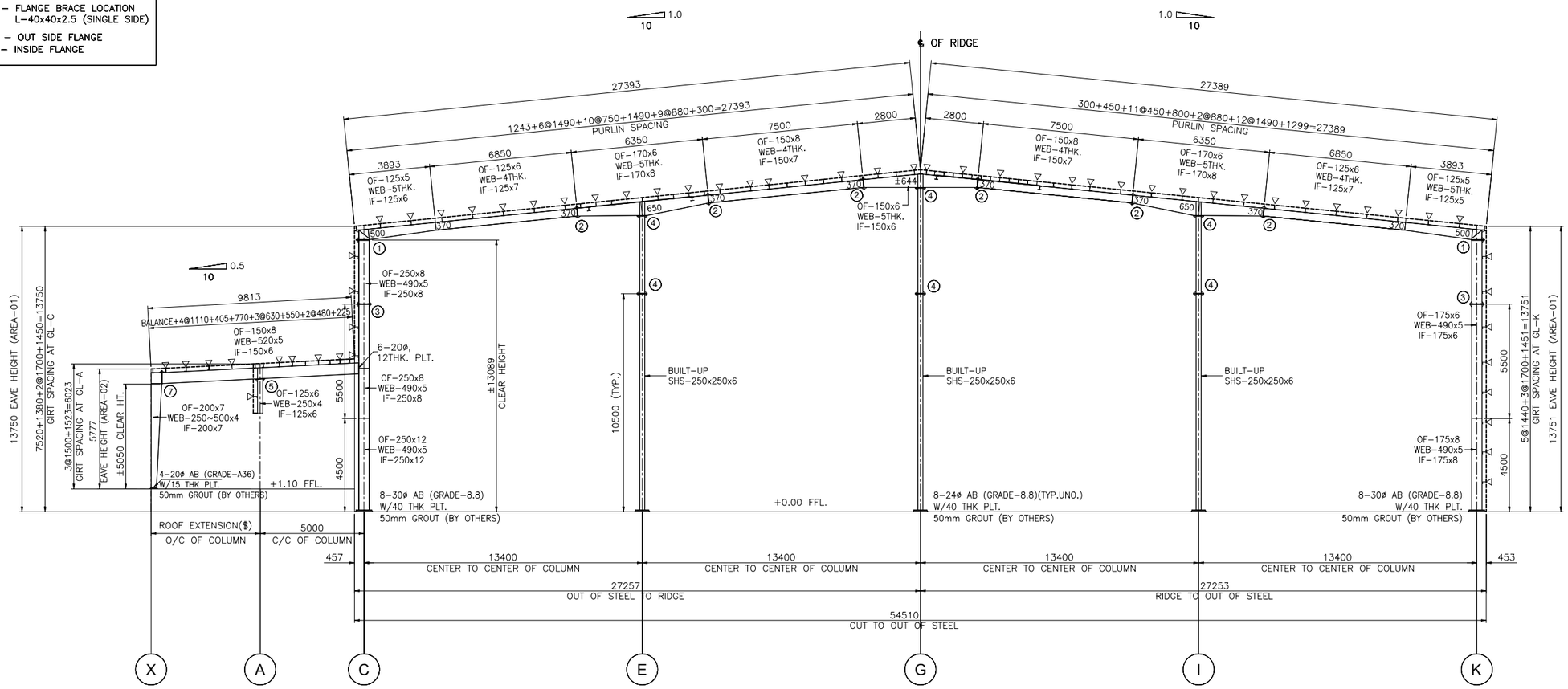
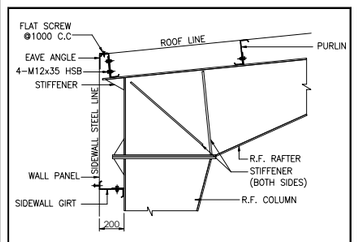
LEGEND / ABBREVIATION

▽ – FLANGE BRACE LOCATION L–40x40x2.5 (SINGLE SIDE)

OF – OUT SIDE FLANGE
IF – INSIDE FLANGE

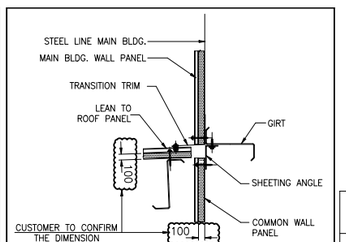


RIGID FRAME CROSS SECTION AT GL - 4 & 11



WITH HORIZONTAL KNEE

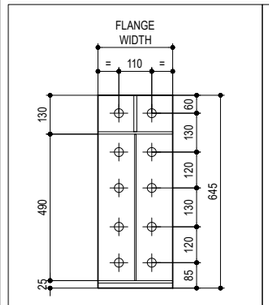
TYPICAL EAVE DETAIL



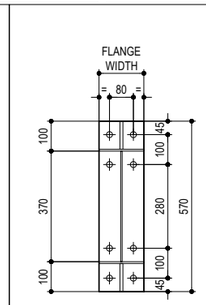
CLADDING AND ITS ACCESSORIES ARE BY OTHERS

TRANSITION DETAIL w/ SHEETED COMMON WALL

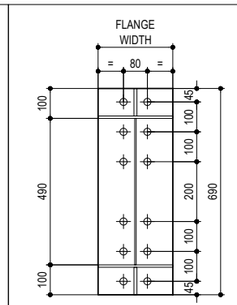
RIGID FRAME GRIDLINE	WIDTH OF ROOF EXTENSION ($)	EAVE HEIGHT
4	5255 mm	5777 mm
11	3982 mm	5841 mm



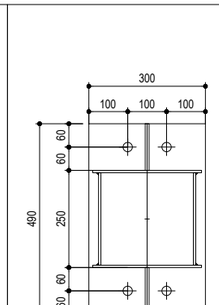
1 HSF-6-4-27Ø HSB, 25 THK. PLT
H - HORIZONTAL
S - STIFFENED ON TOP
F - FLUSH AT BOTTOM



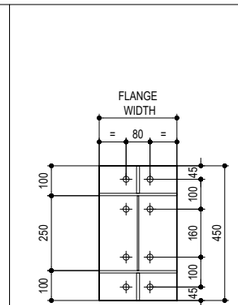
2 SSS-4-4-20Ø HSB, 15 THK. PLT.
S - SLOPED
S - STIFFENED ON TOP
S - STIFFENED AT BOTTOM



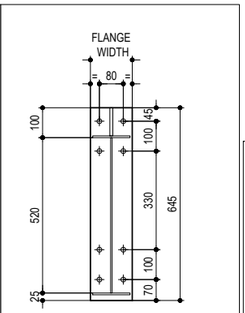
3 CSS-6-6-24Ø HSB,20THK. PLT.
C - COLUMN
S - STIFFENED ON TOP
S - STIFFENED AT BOTTOM



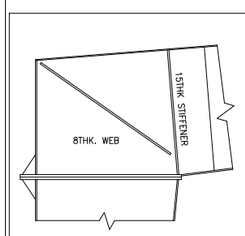
4 CR-2-2-24Ø HSB, 25THK. PLT.
C - COLUMN
R - RIGID CONNECTION



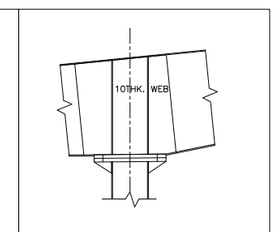
5 CR-4-4-20Ø HSB, 15THK. PLT.
C - COLUMN
R - RIGID CONNECTION



7 VSF-4-4-20Ø-HSB, 15THK, PLT.
V - VERTICAL
S - STIFFENED ON TOP
F - FLUSH AT BOTTOM



HORIZONTAL KNEE DETAIL AT GL-C & K



COLUMN RAFTER CONNECTION AT GL-E,G & I

2 FULLY REVISED

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APPROVAL DRAWING

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8. Refer "Anchor Bolt Setting Plan" for base details of column.

FOR APPROVAL

DATE	19.09.2025

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01	07.08.25	RE-ISSUED FOR APPROVAL	SYA	SYA	PBA
00	13.06.23	ISSUED FOR APPROVAL	JJP	JJP	PBA

PROJECT
LOGISTICS WAREHOUSE GEORGIA

CUSTOMER
TBILISI DRY PORT LLC

STEEL SUPPLIER
ACERO

DRAWING TITLE
RIGID FRAME CROSS SECTION AT GL - 4 & 11

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	
BUILDING NO.	01		S03
FILE NAME	A0997-01-S03-R02	REV. NO.	02

LEGEND / ABBREVIATION

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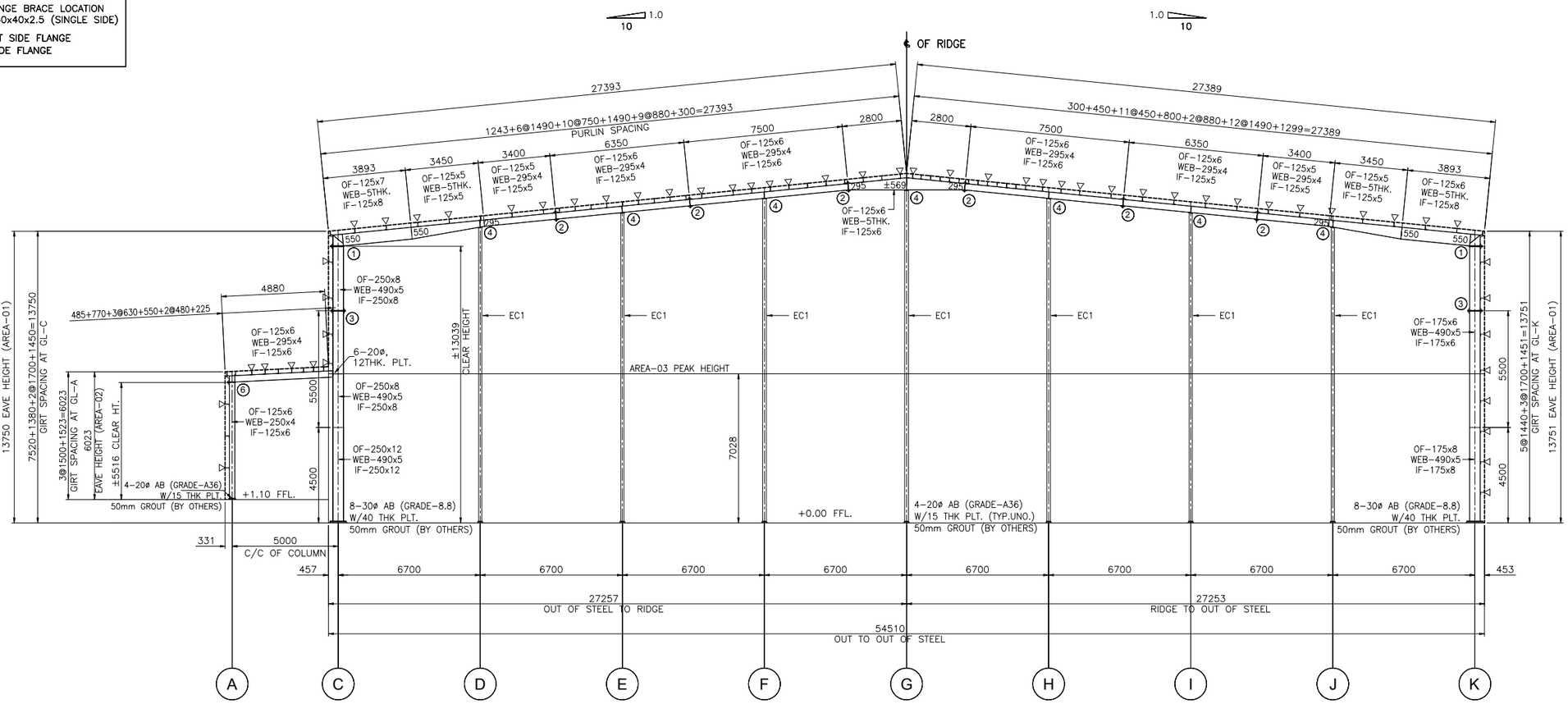
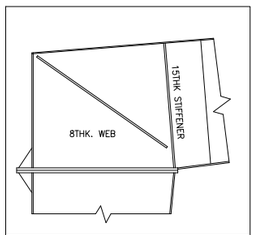
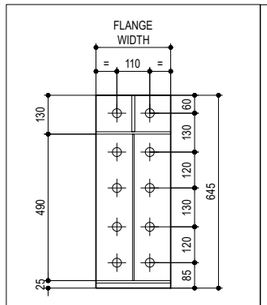


RIGID FRAME CROSS SECTION AT GL - 13

2 FULLY REVISED



HORIZONTAL KNEE DETAIL AT GL-C & K



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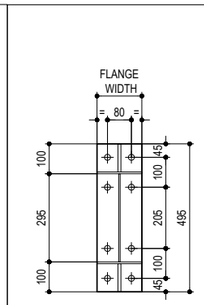

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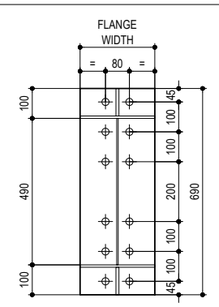

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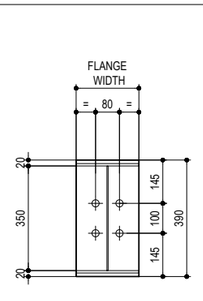
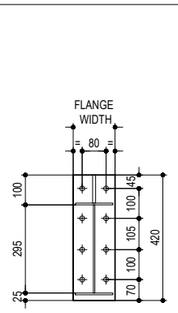


4 CW-4-20Ø HSB,15THK. PLT.



6 VSF-4-4-20Ø-HSB, 15THK, PLT.
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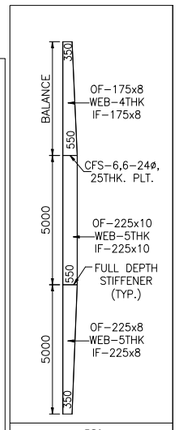

EC1

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FOR APPROVAL

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00	13.06.25	ISSUED FOR APPROVAL	JJP	JJP	PBA

PROJECT
LOGISTICS WAREHOUSE
GEORGIA

CUSTOMER
TBILISI DRY PORT LLC

STEEL SUPPLIER
ACERO

DRAWING TITLE
RIGID FRAME CROSS SECTION AT GL - 13

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	
BUILDING NO.	01		S04
FILE NAME	A0997-01-S04-R02	REV. NO.	02

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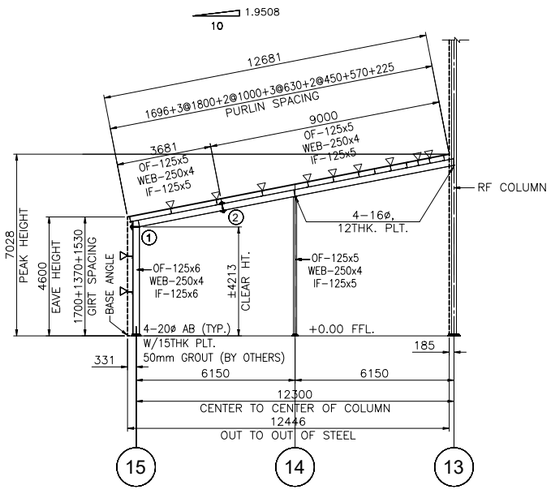
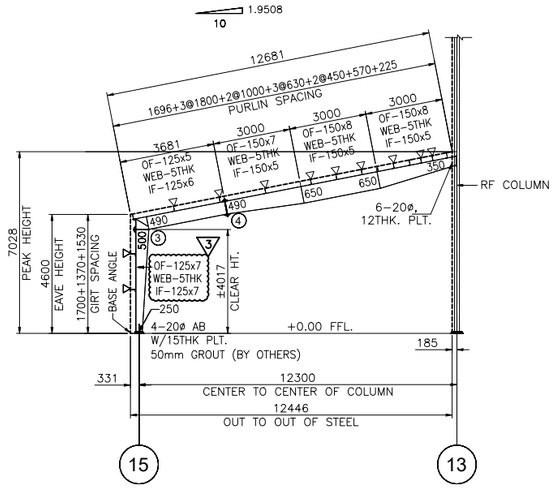
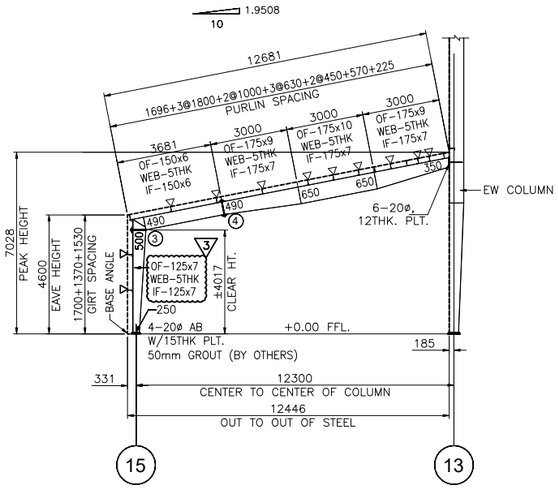


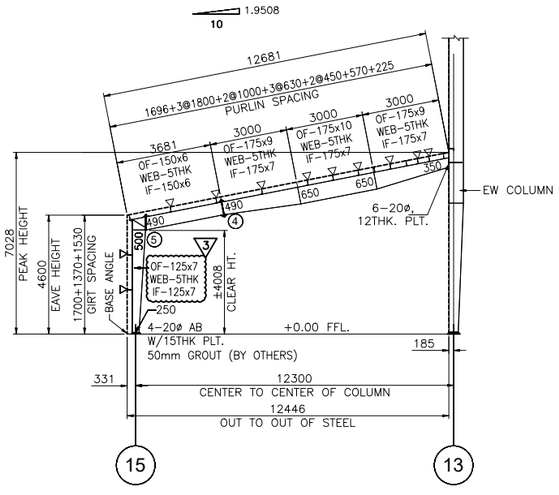
RIGID FRAME CROSS SECTION AT GL - A (AREA-03)



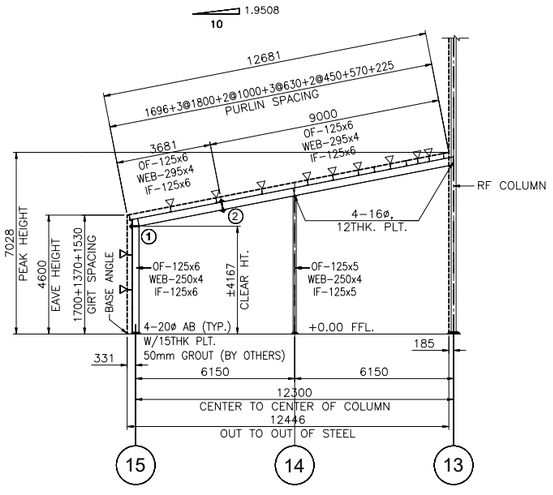
RIGID FRAME CROSS SECTION AT GL - C (AREA-03)



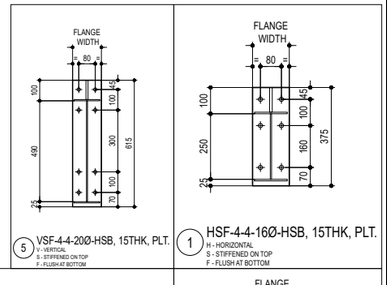
RIGID FRAME CROSS SECTION AT GL - D, G & H (AREA-03)

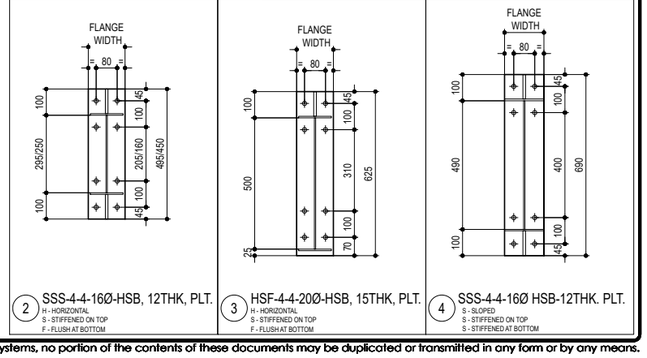


RIGID FRAME CROSS SECTION AT GL - E, F, I & J (AREA-03)



RIGID FRAME CROSS SECTION AT GL - K (AREA-03)





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FOR APPROVAL

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03	23.10.25	RE-ISSUED FOR APPROVAL	JJP	JJP	PBA
02	19.09.25	RE-ISSUED FOR APPROVAL	JJP	JJP	PBA
01	07.08.25	RE-ISSUED FOR APPROVAL	SYA	SYA	PBA
00	13.06.25	ISSUED FOR APPROVAL	JJP	JJP	PBA

PROJECT

LOGISTICS WAREHOUSE GEORGIA

CUSTOMER

TBILISI DRY PORT LLC

STEEL SUPPLIER

ACERO

DRAWING TITLE

RIGID FRAME CROSS SECTION AT GL - A, C, D, E, F, G, H, I, J & K (AREA-03)

BUILDING USAGE	LOGISTICS WAREHOUSE	
JOB NO.	GE-A0997	DRAWING NO.
BUILDING NO.	01	S05
FILE NAME	A0997-01-S05-R03	REV. NO. 03

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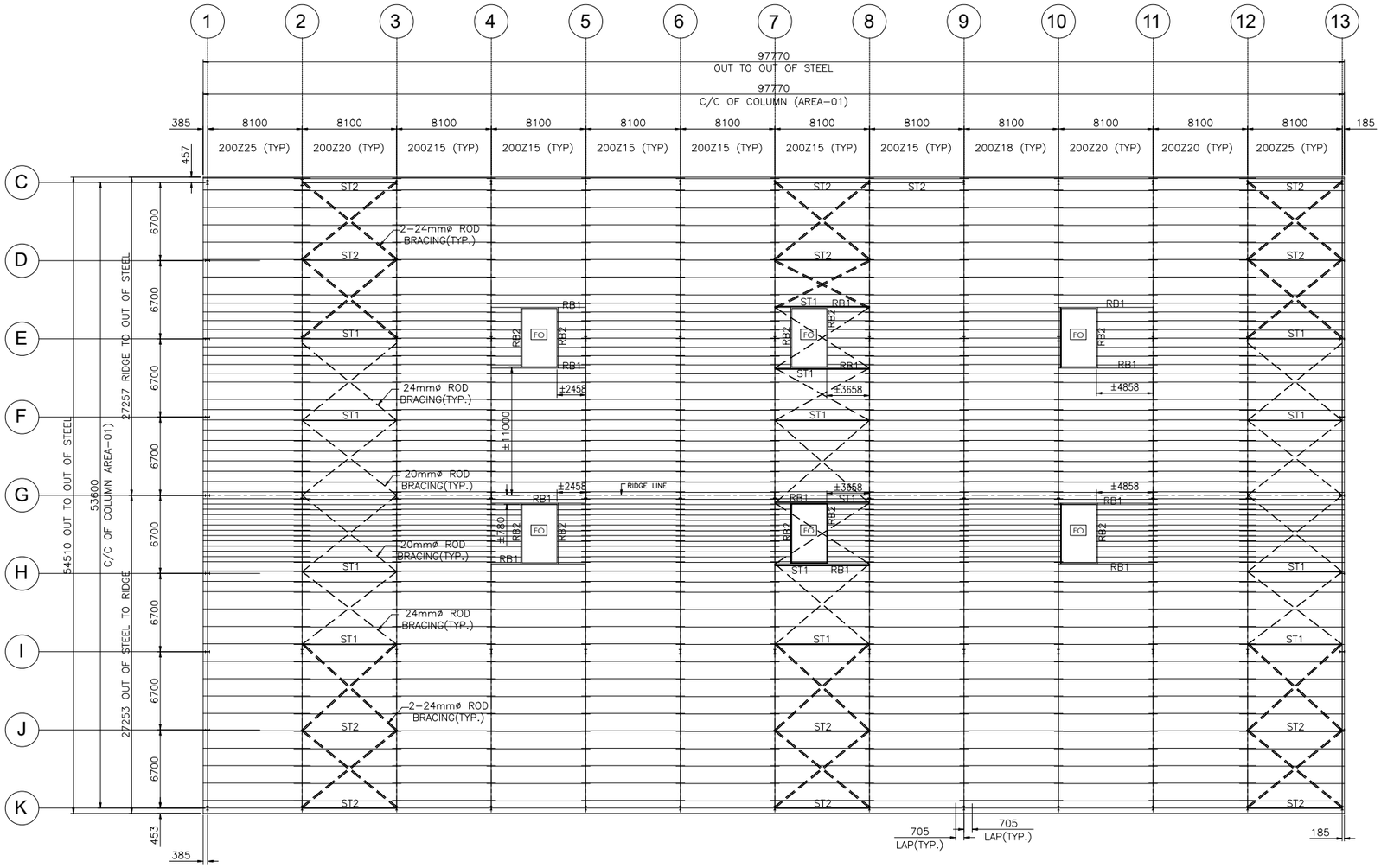


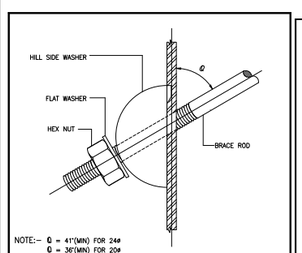
ROOF FRAMING PLAN (AREA-01)

ALL PURLINS ARE WITH 705mm LAP (TYP.)
ST2 :-DENOTES STRUT TUBE SHS150x150x4.5 W/6-20ø HSB, 18 THK. PLT.
ST1 :-DENOTES STRUT TUBE SHS125x125x3.2 W/3-20ø HSB, 12 THK. PLT.
RB1 :-DENOTES ROOF BEAM OF SIZE 180x4(WEB)+170x6(FLANGE) W/4-16ø HSB (RESTING ON RAFTER)
RB2 :-DENOTES ROOF BEAM OF SIZE 180x4(WEB)+125x5(FLANGE) W/4-16ø HSB (RESTING ON RAFTER)
FO :-DENOTES ROOF FRAMED OPENING FOR SMOKE EXHAUST ROOF LIGHTS(BY OTHERS) OF SIZE 3000mm x 5000mm(WEIGHT-125kgx4=500kg)

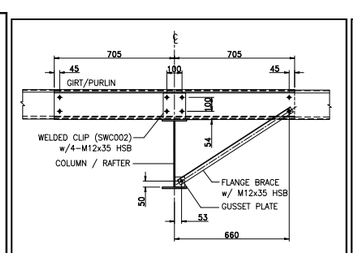
CUSTOMER TO CONFIRM ROOF OPENING LOCATIONS

NOTES :
1. ROOF AND WALL PANEL WEIGHT IS ASSUMED TO BE 15 Kg/m².
2. APPROVER TO CHECK THE PANEL CAPACITY FOR THE GIVEN GIRT AND PURLIN SPACING.
3. PANELS, GUTTERS, DOWNSPOUTS, TRIMS AND ITS SUPPORTING ACCESSORIES ARE NOT IN ACERO SCOPE OF SUPPLY.
4. PANELS MUST BE STITCHED TO PURLINS & GIRTS AT 250MM C/C

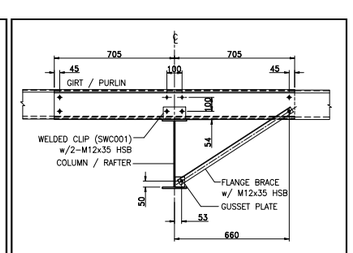
2 FULLY REVISED



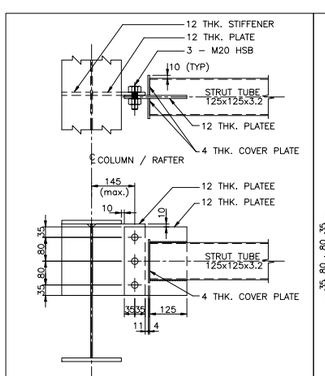
BRACE ROD DETAIL
BRD-001



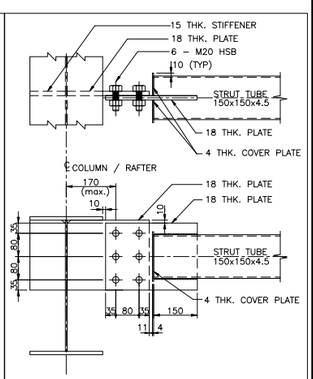
PURLIN LAP DETAIL WITH SINGLE SIDE FLANGE BRACE @ EAVE, RIDGE & BRACING LOCATION (200 Z) FBD-007



PURLIN / GIRT LAP DETAIL WITH SINGLE SIDE FLANGE BRACE (200 Z) FBD-005



STRUT TUBE 125x125 WEB CONNECTION SST022



STRUT TUBE 150x150 WEB CONNECTION SST026

APPROVAL DRAWING

GENERAL NOTES :
1. All dimensions are in millimeters (mm), unless noted otherwise.
2. All connection bolts are High Strength Bolts with Hot Dipped Galvanized Finish.
3. Purlins are galvanized.
4. This building has been designed to support the following loads in addition to the self weight of the structure:
 4.1. Live Load on Roof = 0.60 kN / m²
 4.2. Live Load on Frame = 0.60 kN / m²
 4.3. Snow Load on Roof = 0.70 kN / m²
 4.4. Basic wind speed = 160 kmph (Exposure B, 3 sec Gust, As per MBMA-2006)
 4.5. Seismic parameters = ZONE-4 as per UBC 1997
 4.6. Collateral Load = 0.03kN / m² (For roof suspended MEP sprinkler pipes)
5. Do not apply any live loads on the purlins before the sheeting is complete.
6. The structure covered in this drawing has been designed and detailed for the loads mentioned and shown on this drawing. Any alterations to the structural system or the removal of any component parts or the addition of other construction materials or loads must not be done without the prior consent of Engineering Department at ACERO.
7. Bracing is to be installed as per the erection drawings and must remain tight during the life of the building.
8. Do not remove, change location or modify any bracings in the entire building without prior written consent of the Engineering Department at ACERO.
9. Additional bracings and guy ropes may be required during erection for stability of the structure during erection, it is the responsibility of the erector to determine the quantity of such bracing, and to procure, and install as required.

FOR APPROVAL

DATE	19.09.2025

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- ☐ APPROVED (Submitted drawings approved for production)
- ☐ APPROVED WITH COMMENTS (Production may proceed incorporating comments)
- ☐ RE-SUBMIT (Re-Submit drawings incorporating comments)

APPROVER : _____
SIGNATURE : _____
DATE : _____

NOTE : THESE DRAWINGS ARE NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	DSN	DRN	CHK
02	19.09.25	RE-ISSUED FOR APPROVAL	JJP	JJP	PBA
01	07.08.25	RE-ISSUED FOR APPROVAL	SYA	SYA	PBA
00	13.06.25	ISSUED FOR APPROVAL	JJP	SSB	PBA

PROJECT
LOGISTICS WAREHOUSE GEORGIA

CUSTOMER
TBILISI DRY PORT LLC

STEEL SUPPLIER
ACERO

DRAWING TITLE
ROOF FRAMING PLAN AND DETAILS (AREA-01)

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	
BUILDING NO.	01		S06
FILE NAME	A0997-01-S06-R02	REV. NO.	02

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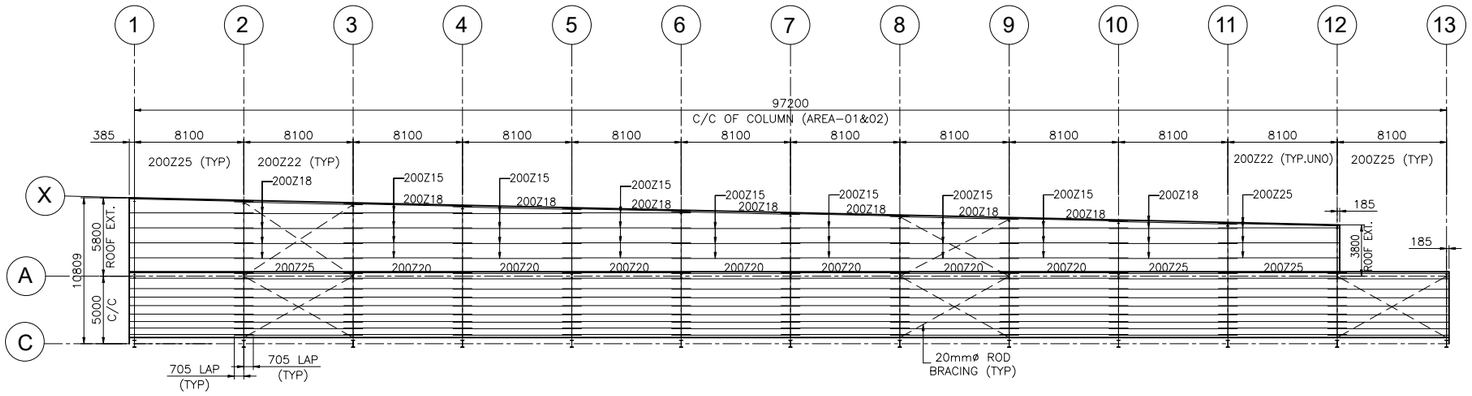
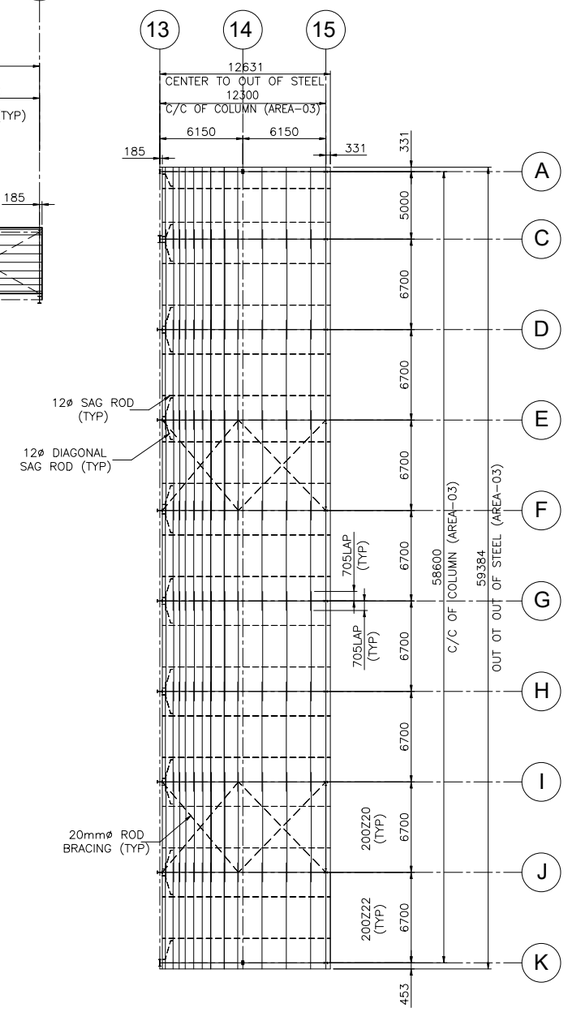


ROOF FRAMING PLAN(AREA-02)

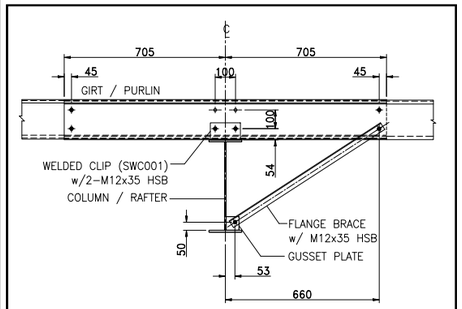
ALL PURLINS ARE 200Z18 (TYP.U.N.O)
ALL PURLINS ARE WITH 705 mm LAP (TYP.)



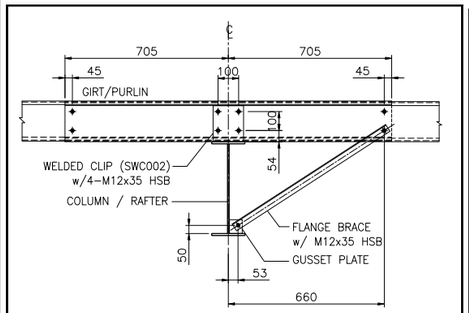
ROOF FRAMING PLAN(AREA-03)

ALL PURLINS ARE 200Z15 (TYP.U.N.O)
ALL PURLINS ARE WITH 705 mm LAP (TYP.)
ALL PURLINS ARE WITH 4-M12 HSB (TYP.)

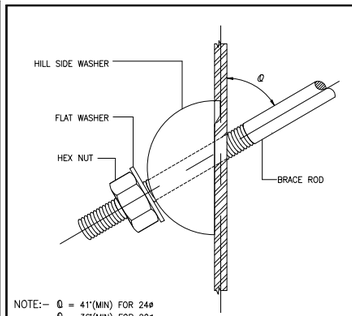
2 FULLY REVISED



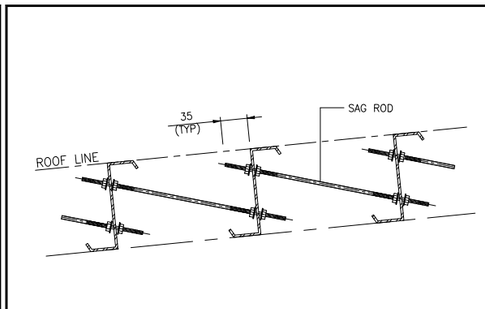
PURLIN / GIRT LAP DETAIL
WITH SINGLE SIDE FLANGE BRACE (200 Z) FBD-005



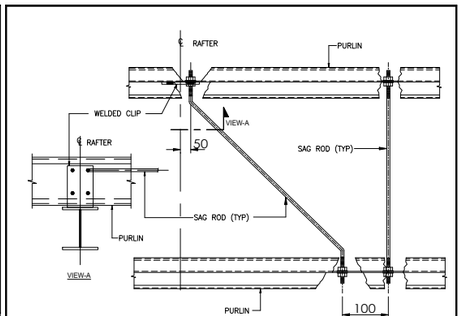
PURLIN LAP DETAIL WITH SINGLE SIDE FLANGE BRACE (200 Z)



BRACE ROD DETAIL BRD-001



SAG ROD DETAIL (AT INTERMEDIATE) SRD-001



DIAGONAL SAG ROD CONNECTION DETAIL

APPROVAL DRAWING

GENERAL NOTES :
1. All dimensions are in millimeters (mm), unless noted otherwise.
2. All connection bolts are High Strength Bolts with Hot Dipped Galvanized Finish.
3. Purlins are galvanized.
4. This building has been designed to support the following loads in addition to the self weight of the structure:
   4.1. Live Load on Roof = 0.60 kN / m²
   4.2. Live Load on Frame = 0.60 kN / m²
   4.3. Snow Load on Roof = 0.70 kN / m²
   4.4. Basic wind speed = 160 kmph (Exposure B, 3 sec Gust, As per MBMA-2006)
   4.5. Seismic parameters = ZONE-4 as per UBC 1997
   4.6. Collateral Load = 0.03kN / m² (For roof suspended MEP sprinkler pipes)
5. Do not apply any live loads on the purlins before the sheeting is complete.
6. The structure covered in this drawing has been designed and detailed for the loads mentioned and shown on this drawing. Any alterations to the structural system or the removal of any component parts or the addition of other construction materials or loads must not be done without the prior consent of Engineering Department at ACERO.
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8. Do not remove, change location or modify any bracings in the entire building without prior written consent of the Engineering Department at ACERO.
9. Additional bracings and guy ropes may be required during erection for stability of the structure during erection, it is the responsibility of the erector to determine the quantity of such bracing, and to procure, and install as required.

FOR APPROVAL

DATE	19.09.2025

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- ☐ APPROVED WITH COMMENTS (Production may proceed incorporating comments)
- ☐ RE-SUBMIT (Re-Submit drawings incorporating comments)

APPROVER : _____
SIGNATURE : _____
DATE : _____

NOTE : THESE DRAWINGS ARE NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	DSN	DRN	CHK
02	19.09.25	RE-ISSUED FOR APPROVAL	JJP	JJP	PBA
01	07.08.25	RE-ISSUED FOR APPROVAL	SYA	SYA	PBA
00	13.06.25	ISSUED FOR APPROVAL	JJP	SSB	PBA

PROJECT
LOGISTICS WAREHOUSE GEORGIA

CUSTOMER
TBILISI DRY PORT LLC

STEEL SUPPLIER
ACERO

DRAWING TITLE
ROOF FRAMING PLAN AND DETAILS (AREA-02&03)

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	
BUILDING NO.	01		S07
FILE NAME	A0997-01-S07-R02	REV. NO.	02

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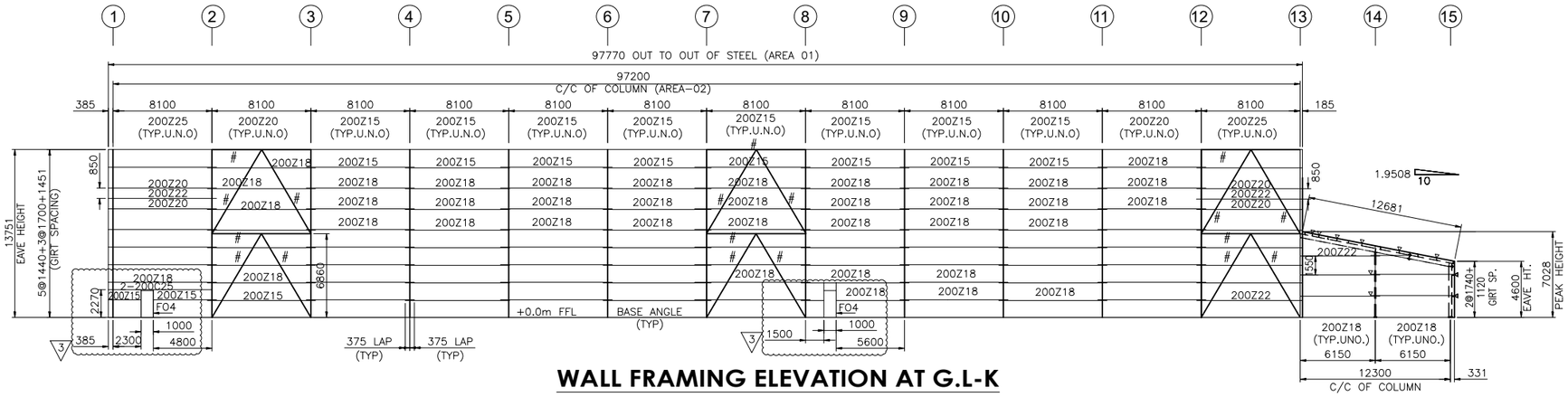
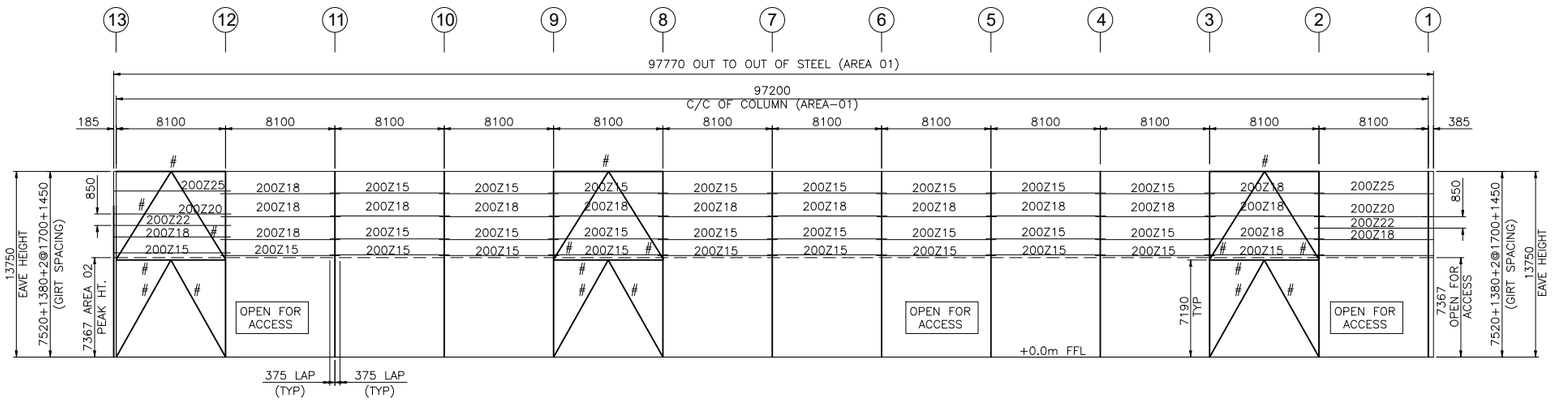


WALL FRAMING ELEVATION AT G.L-K

ALL GIRTS ARE W/375 mm LAP (TYP.)

:-DENOTES STRUT TUBE SHS150x150x4.5 W/6-20ø HSB, 18 THK. PLT.

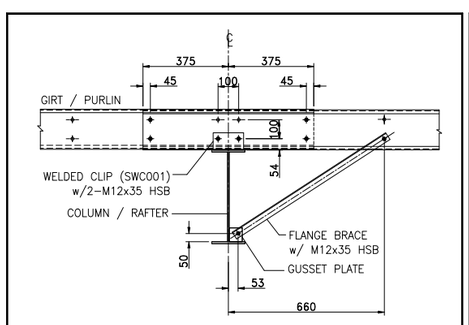
F04 - DENOTES WALL FRAMED OPENING FOR SPD (BY OTHERS) OF SIZE 1000mm(W) x2200mm(H) - 2 NOS.



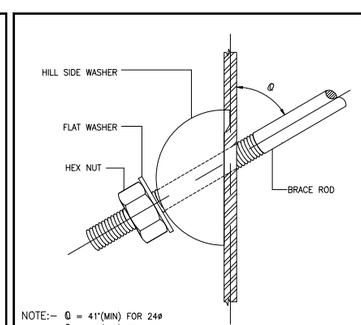
WALL FRAMING ELEVATION AT G.L-C

ALL GIRTS ARE W/375 mm LAP (TYP.)

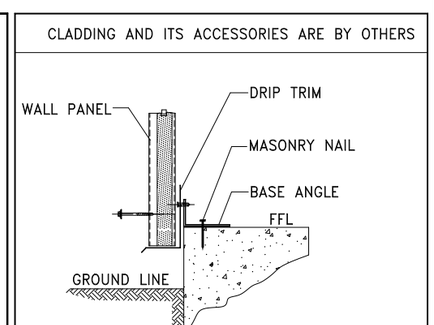
:-DENOTES STRUT TUBE SHS150x150x4.5 W/6-20ø HSB, 18 THK. PLT.



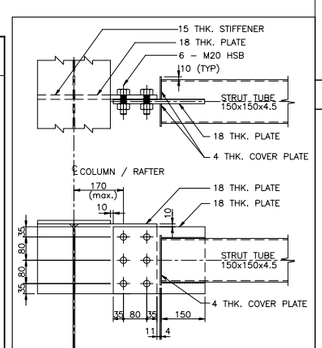
PURLIN / GIRT LAP DETAIL
WITH SINGLE SIDE FLANGE BRACE (200 Z) FBD-001



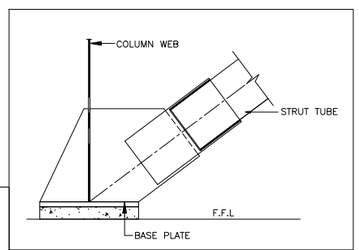
BRACE ROD DETAIL BRD-001



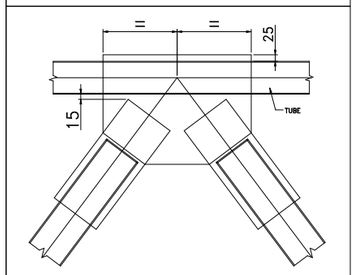
BASE DETAIL (FULLY SHEETED)



STRUT TUBE 150x150 WEB CONNECTION



TUBE BRACING TO BASE PLATE DETAIL



TYPICAL DETAIL FOR SHS CONNECTION

APPROVAL DRAWING

GENERAL NOTES :

1. All dimensions are in millimeters (mm), unless noted otherwise.
2. All connection bolts are High Strength Bolts with Hot Dipped Galvanized Finish.
3. Girts are galvanized.
4. Bracing is to be installed as per the erection drawings and must remain tight during the life of the building.
5. At the time of erection, girts shall be aligned by means of wood blocking (By the erector) one above the other between the girts at mid bay.
6. Do not remove, change location or modify any bracings in the entire building without prior written consent of the Engineering Department at ACERO.
7. Additional bracings and guy ropes may be required during erection for stability of the structure during erection, it is the responsibility of the erector to determine the quantity of such bracing, and to procure, and install as required.
8. Sidewall Girts are not designed to take any wind/ seismic load from blockwalls.
9. Construction of blockwork is the responsibility of the civil contractor. It is assumed that the blockwalls are self supporting.
10. Before the construction of blockwork, civil contractor should ensure that all the flange braces for main frame column shown in the erection drawing, are in place and fixed to the sidewall girts.

FOR APPROVAL

DATE	23.10.25

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APPROVER : _____

SIGNATURE : _____

DATE : _____

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REV.	DATE	DESCRIPTION	DSN	DRN	CHK
03	23.10.25	RE-ISSUED FOR APPROVAL	JJP	JJP	PBA
02	19.09.25	RE-ISSUED FOR APPROVAL	JJP	SWS	PBA
01	07.08.25	RE-ISSUED FOR APPROVAL	SYA	SYA	PBA
00	13.06.25	ISSUED FOR APPROVAL	JJP	SSB	PBA

PROJECT
LOGISTICS WAREHOUSE GEORGIA

CUSTOMER
TBILISI DRY PORT LLC

STEEL SUPPLIER
ACERO

DRAWING TITLE
WALL FRAMING ELEVATION AT G.L - C & K AND DETAILS

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	
BUILDING NO.	01		S08
FILE NAME	A0997-01-S08-R03	REV. NO.	03

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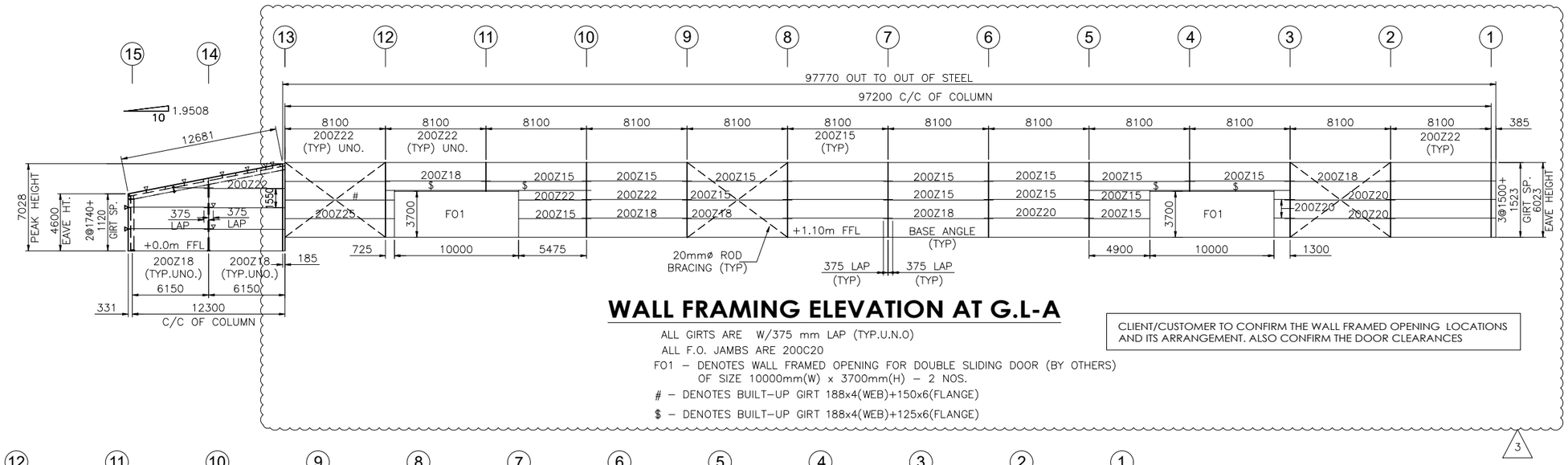
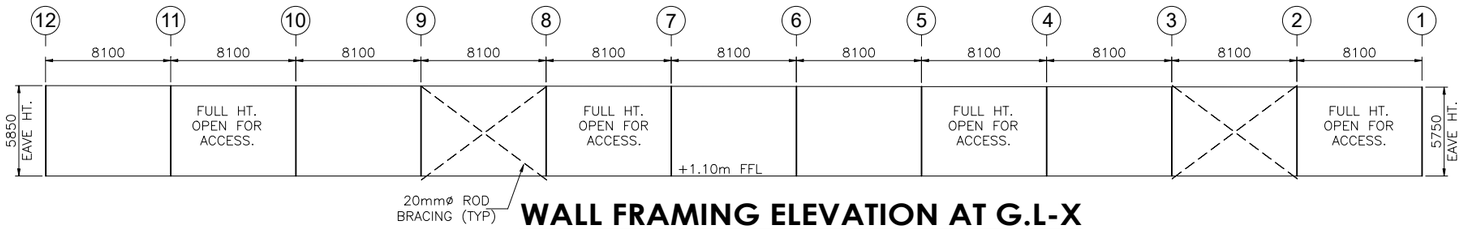


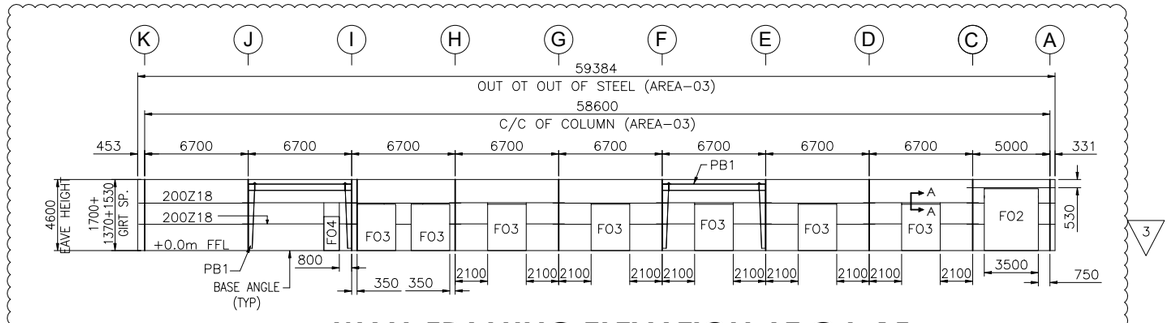
WALL FRAMING ELEVATION AT G.L-A

ALL GIRTS ARE W/375 mm LAP (TYP.U.N.O)
ALL F.O. JAMBS ARE 200C20
FO1 – DENOTES WALL FRAMED OPENING FOR DOUBLE SLIDING DOOR (BY OTHERS) OF SIZE 10000mm(W) x 3700mm(H) – 2 NOS.
– DENOTES BUILT–UP GIRT 188x4(WEB)+150x6(FLANGE)
$ – DENOTES BUILT–UP GIRT 188x4(WEB)+125x6(FLANGE)

CLIENT/CUSTOMER TO CONFIRM THE WALL FRAMED OPENING LOCATIONS AND ITS ARRANGEMENT. ALSO CONFIRM THE DOOR CLEARANCES

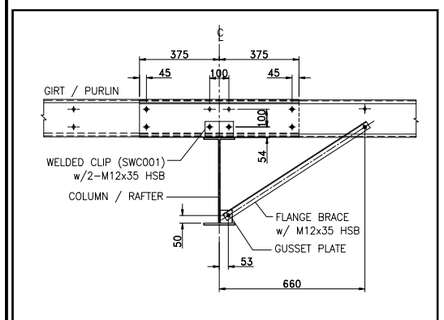


WALL FRAMING ELEVATION AT G.L-X

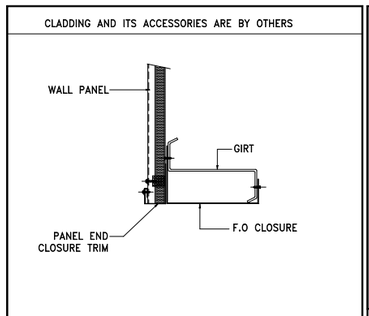


WALL FRAMING ELEVATION AT G.L-15

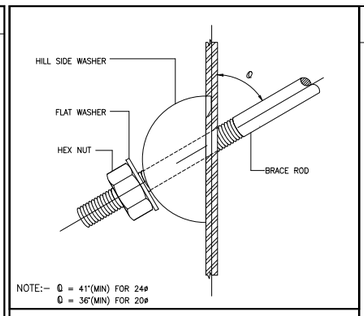
ALL GIRTS ARE 200Z15 (TYP.U.N.O)
ALL GIRTS ARE W/375 mm LAP (TYP.U.N.O)
ALL F.O. JAMBS ARE 200C20
FO2 - DENOTES WALL FRAMED OPENING FOR OHSD-1 (BY OTHERS) OF SIZE 3500mm(W) x4000mm(H) - 1 NOS.
FO3 - DENOTES WALL FRAMED OPENING FOR OHSD-2 (BY OTHERS) OF SIZE 2500mm(W) x3000mm(H) - 7 NOS.
FO4 - DENOTES WALL FRAMED OPENING FOR SPD (BY OTHERS) OF SIZE 1000mm(W) x2200mm(H) - 1 NOS.



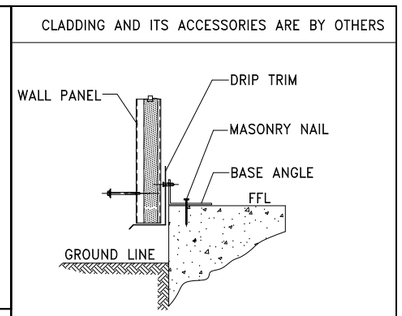
PURLIN / GIRT LAP DETAIL WITH SINGLE SIDE FLANGE BRACE (200 Z) FBD–001



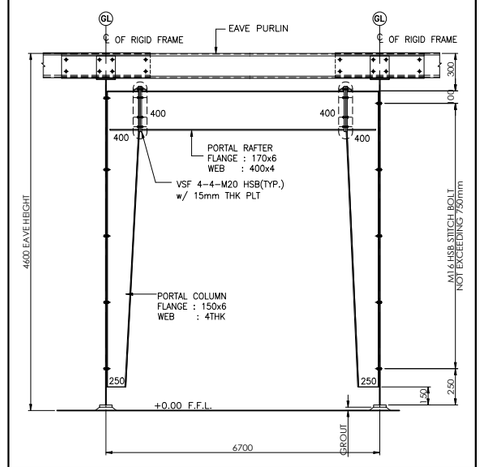
FO2 CLOSURE DETAIL (SECTION-AA)



BRACE ROD DETAIL BRD–001



BASE DETAIL (FULLY SHEETED)



PORTAL FRAME DETAILS (PB1)

APPROVAL DRAWING

GENERAL NOTES :
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3. Girts are galvanized.
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5. At the time of erection, girts shall be aligned by means of wood blocking (By the erector) one above the other between the girts at mid bay.
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8. Sidewall Girts are not designed to take any wind/ seismic load from blockwalls.
9. Construction of blockwork is the responsibility of the civil contractor. It is assumed that the blockwalls are self supporting.
10. Before the construction of blockwork, civil contractor should ensure that all the flange braces for main frame column shown in the erection drawing, are in place and fixed to the sidewall girts.

FOR APPROVAL

DATE	23.10.25

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- ☐ APPROVED WITH COMMENTS (Production may proceed incorporating comments)
- ☐ RE-SUBMIT (Re-Submit drawings incorporating comments)

APPROVER : _____
SIGNATURE : _____
DATE : _____

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REV.	DATE	DESCRIPTION	DSN	DRN	CHK
03	23.10.25	RE-ISSUED FOR APPROVAL	JJP	JJP	PBA
02	19.09.25	RE-ISSUED FOR APPROVAL	JJP	SWS	PBA
01	07.08.25	RE-ISSUED FOR APPROVAL	SYA	SYA	PBA
00	13.06.25	ISSUED FOR APPROVAL	JJP	SSB	PBA

PROJECT
LOGISTICS WAREHOUSE GEORGIA

CUSTOMER
TBILISI DRY PORT LLC

STEEL SUPPLIER
ACERO

DRAWING TITLE
WALL FRAMING ELEVATION AT G.L - A, X & 15 AND DETAILS

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	
BUILDING NO.	01	S09	
FILE NAME	A0997-01-S09-R03	REV. NO.	03

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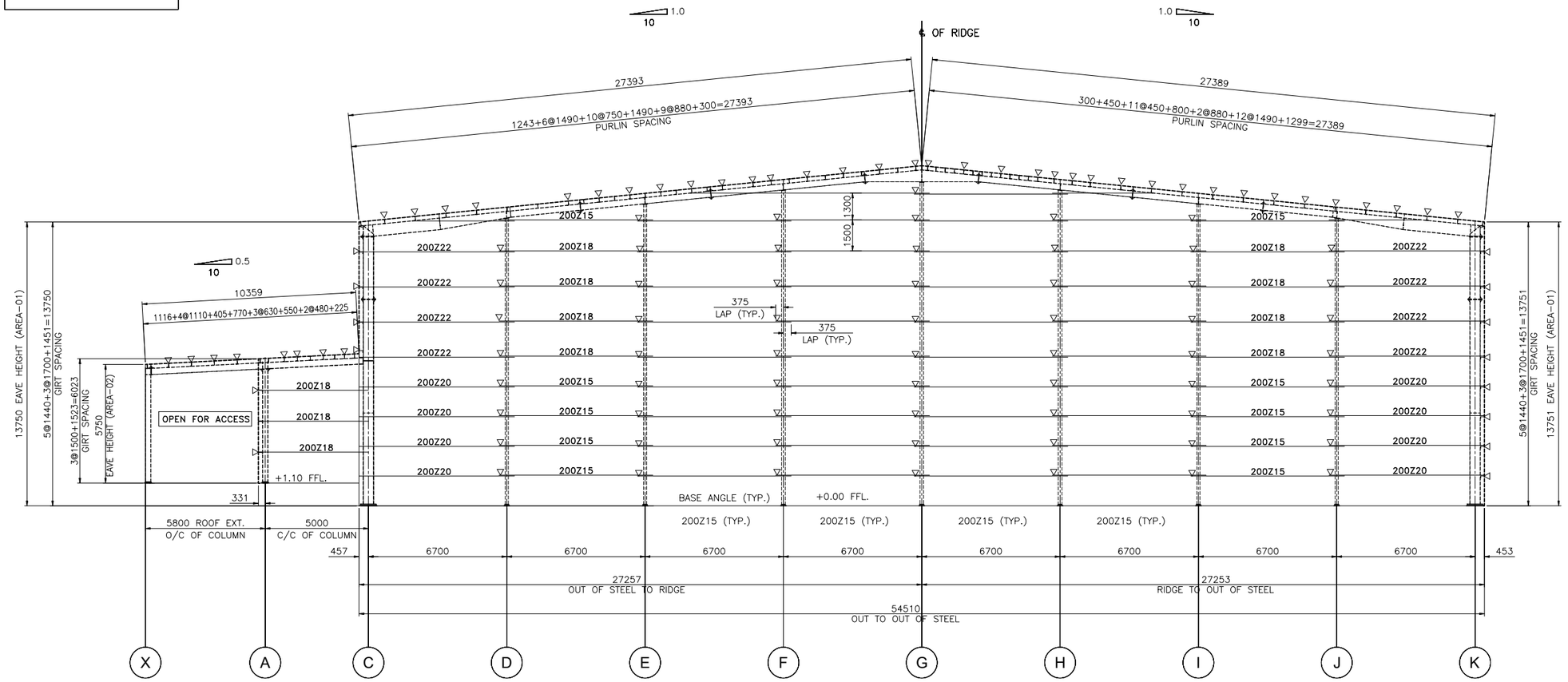
LEGEND / ABBREVIATION

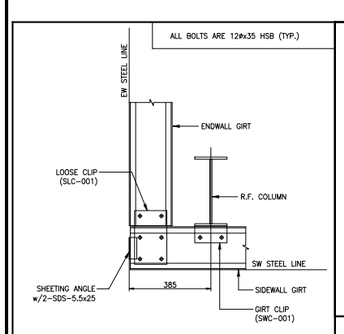
▽ – FLANGE BRACE LOCATION
L–40x40x2.5 (SINGLE SIDE)



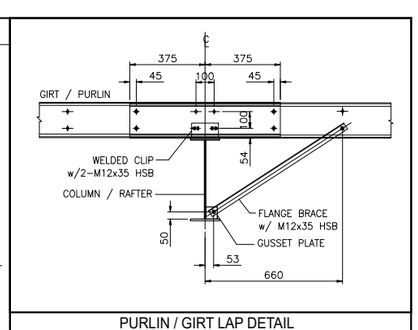
ENDWALL FRAMING ELEVATION AT GL - 1

ALL GIRTS ARE WITH 375mm LAP (TYP.)

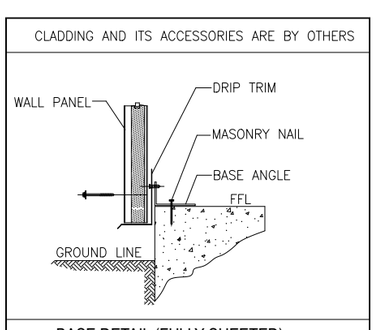
2
FULLY REVISED



EW CORNER DETAIL@ GL-A, C & K



PURLIN / GIRT LAP DETAIL
WITH SINGLE SIDE FLANGE BRACE (200 Z)



BASE DETAIL (FULLY SHEETED)

APPROVAL DRAWING

GENERAL NOTES :

1. All dimensions are in millimeters (mm), unless noted otherwise.
2. All connection bolts are High Strength Bolts with Hot Dipped Galvanized Finish.
3. Girts are galvanized.
4. Bracing is to be installed as per the erection drawings and must remain tight during the life of the building.
5. At the time of erection, girts shall be aligned by means of wood blocking (By the erector) one above the other between the girts at mid bay.
6. Do not remove, change location or modify any bracings in the entire building without prior written consent of the Engineering Department at ACERO.
7. Additional bracings and guy ropes may be required during erection for stability of the structure during erection, it is the responsibility of the erector to determine the quantity of such bracing, and to procure, and install as required.
8. Endwall Girts are not designed to take any wind/ seismic load from blockwalls.
9. Construction of blockwork is the responsibility of the civil contractor. It is assumed that the blockwalls are self supporting.
10. Civil Contractor must tie endwall columns to blockwork at locations shown on the erection drawings using clips provided by and 12 mm tie rods. (by Civil Contractor).
11. Before the construction of blockwork, civil contractor should ensure that all the flange braces for endwall column shown in the erection drawing, are in place and fixed to the endwall girts.

FOR APPROVAL

DATE	19.09.2025

In order to establish the most effective schedule for this project, kindly return these documents with your comments within two weeks of the issued date.

The fabrication and delivery schedules of these building may be impacted if changes are made to these drawings after they have been approved.

- ☐ APPROVED (Submitted drawings approved for production)
- ☐ APPROVED WITH COMMENTS (Production may proceed incorporating comments)
- ☐ RE-SUBMIT (Re-submit drawings incorporating comments)

APPROVER : _____

SIGNATURE : _____

DATE : _____

NOTE : THESE DRAWINGS ARE NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	DSN	DRN	CHK
02	19.09.25	RE-ISSUED FOR APPROVAL	JJP	JJP	PBA
01	07.08.25	RE-ISSUED FOR APPROVAL	SYA	SYA	PBA
00	13.06.25	ISSUED FOR APPROVAL	JJP	JJP	PBA

PROJECT
LOGISTICS WAREHOUSE GEORGIA

CUSTOMER
TBILISI DRY PORT LLC

STEEL SUPPLIER
ACERO

DRAWING TITLE
ENDWALL FRAMING ELEVATION AT GL - 1 AND DETAILS

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	
BUILDING NO.	01	S11	
FILE NAME	A0997-01-S11-R02	REV. NO.	02

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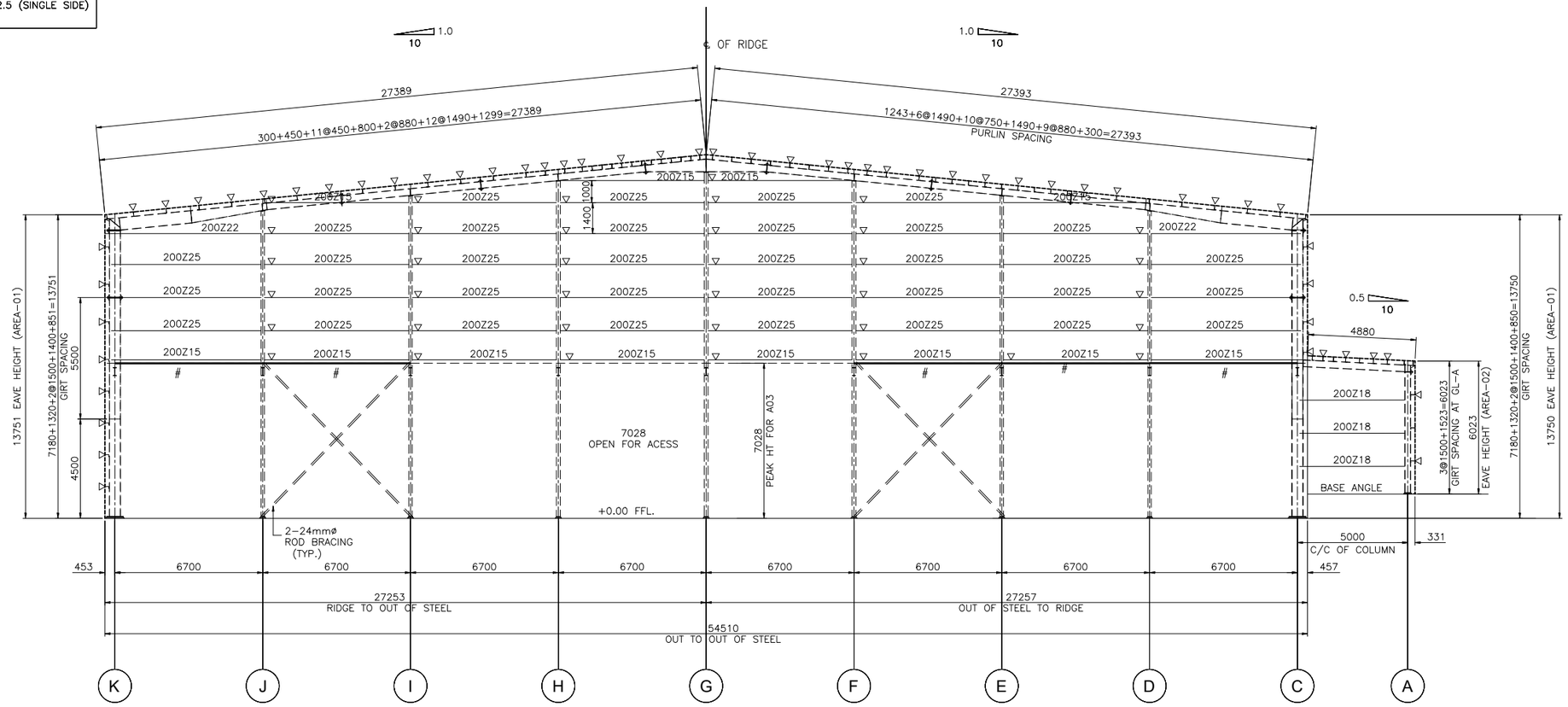
LEGEND / ABBREVIATION

▽ – FLANGE BRACE LOCATION
L–40x40x2.5 (SINGLE SIDE)

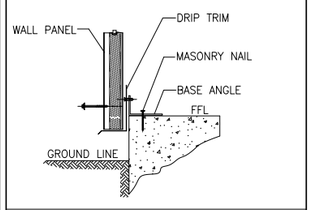


ENDWALL FRAMING ELEVATION AT GL - 13

ALL GIRTS ARE FLUSH GIRTS

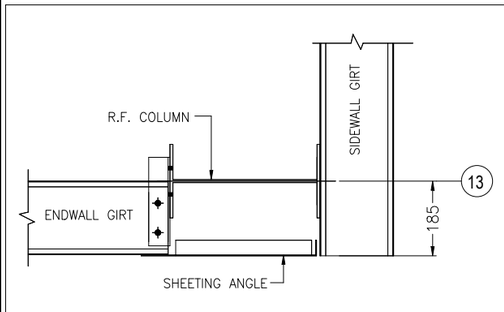
#– DENOTES STRUT TUBE SHS 125x125x3.2 w/ 3–20Ø, 15THK PLT(SST022)

CLADDING AND ITS ACCESSORIES ARE BY OTHERS

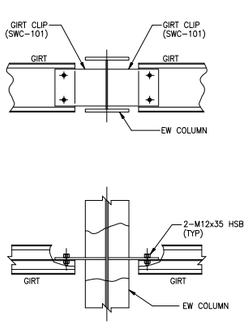


BASE DETAIL (FULLY SHEETED)

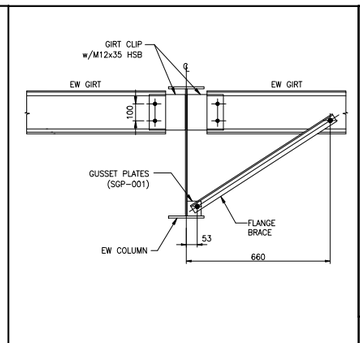
2
FULLY REVISED



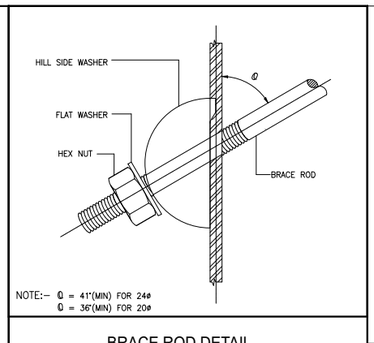
CORNER DETAIL



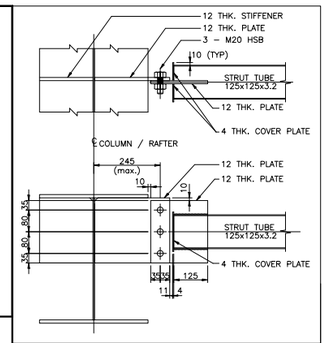
EW GIRT DETAIL (FLUSH) EWD019



EW COLUMN FLANGE BRACE DETAIL EWD026



BRACE ROD DETAIL BRD–001



STRUT TUBE 125x125 WEB CONNECTION SST021

APPROVAL DRAWING

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FOR APPROVAL

DATE	19.09.25

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APPROVER : _____

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REV.	DATE	DESCRIPTION	DSN	DRN	CHK
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01	07.08.25	RE-ISSUED FOR APPROVAL	SYA	SYA	PBA
00	13.06.25	ISSUED FOR APPROVAL	JJP	JJP	PBA

PROJECT
LOGISTICS WAREHOUSE GEORGIA

CUSTOMER
TBILISI DRY PORT LLC

STEEL SUPPLIER
ACERO

DRAWING TITLE
ENDWALL FRAMING ELEVATION AT GL - 13 AND DETAILS

BUILDING USAGE	LOGISTICS WAREHOUSE		
JOB NO.	GE-A0997	DRAWING NO.	
BUILDING NO.	01		S12
FILE NAME	A0997-01-S12-R02	REV. NO.	02

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