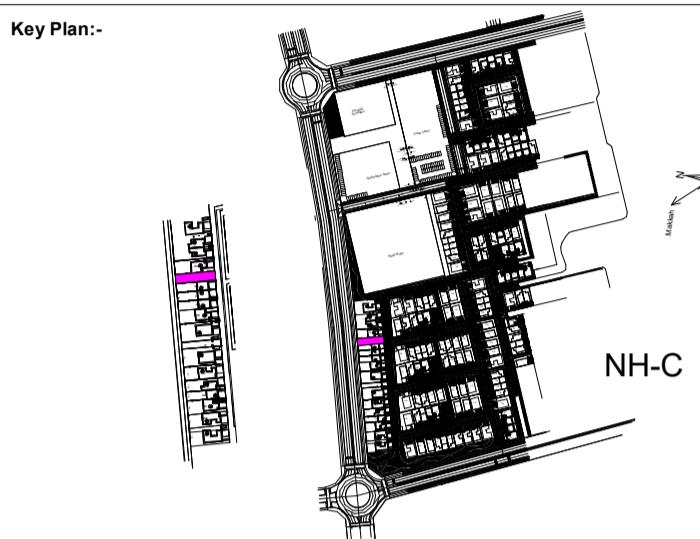


VILLA TYPE E01 - SB STYLE - BIM PACKAGE  
PLOT NO. 0255

| Sheet List                                 |                 |                    |                  |                   |                        |                    |   |
|--|-----------------|--------------------|------------------|-------------------|------------------------|--------------------|---|
| Sheet Name                                 | 01_Project Code | 02_Originator Code | 03_Volume/System | 04_Level/Location | 05_Type of Information | 06_Role/Discipline | Sheet Number                                  |
| COVER SHEET                                | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-00002  |
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| GENERAL NOTES 02                           | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-003019 |
| GENERAL DRAWINGS 01                        | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-003020 |
| GENERAL DRAWINGS 02                        | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-003021 |
| GENERAL DRAWINGS 03                        | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-003022 |
| GENERAL DRAWINGS 04                        | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-003023 |
| GENERAL DRAWINGS 05                        | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-003024 |
| GENERAL DRAWINGS 06                        | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-003025 |
| GENERAL DRAWINGS 07                        | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-003026 |
| GENERAL DETAILS 08                         | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-003027 |
| OVERALL PLAN LAYOUT                        | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-010014 |
| PEDESTAL COLUMNS AND WALLS LAYOUT          | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-010015 |
| GROUND FLOOR COLUMNS AND WALLS SETTING OUT | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-010016 |
| GROUND FLOOR FRAMING LAYOUT                | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-010017 |
| FIRST FLOOR FRAMING PLAN                   | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-010018 |
| EXCAVATION PLAN                            | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-010019 |
| FOUNDATION FRAMING LAYOUT                  | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-010020 |
| FOUNDATION REINFORCEMENT - 01              | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-080025 |
| FOUNDATION REINFORCEMENT - 02              | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-080026 |
| FOUNDATION REINFORCEMENT - 03              | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-080027 |
| FOUNDATION REINFORCEMENT - 04              | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-080028 |
| SWIMMING POOL DETAILS 01                   | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-080029 |
| SWIMMING POOL DETAILS 02                   | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-080030 |
| SWIMMING POOL DETAILS 03                   | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-080031 |
| BUILDER WORK 1                             | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-080032 |
| BUILDERS WORK 02                           | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-080033 |
| TIE BEAMS DETAILS - 01                     | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-080034 |

**NOTE:**  
**GENERAL NOTES:**  
1- DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING.  
2- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS IN METERS UNLESS NOTED OTHERWISE.  
3- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE.  
4- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DOCUMENTATION FORMING THE CONSTRUCTION CONTRACT.  
5- ALL EXISTING DIMENSIONS/LEVELS ETC. INDICATED ON DRAWINGS ARE TO BE VERIFIED ON SITE.



| ABBREVIATIONS: |           |          |
|----------------|-----------|----------|
| MDL TYP        | MDL DISC. | MDL NAME |
|                |           |          |
|                |           |          |
|                |           |          |

| REVISION |                     |             |
|----------|---------------------|-------------|
| Rev      | Description         | Date        |
| 00       | ISSUED FOR APPROVAL | 26.Jan.2025 |
|          |                     |             |
|          |                     |             |
|          |                     |             |

| PEER REVIEW CONSULTANT APPROVAL |                     |  |
|---------------------------------|---------------------|--|
| SHOP DRAWING REVIEW / APPROVAL  |                     |  |
| A                               | APPROVED            |  |
| B                               | APPROVED AS NOTED   |  |
| C                               | REVISE & RESUBMIT   |  |
| D                               | REJECTED            |  |
| E                               | RECEIPT ACKNOWLEDGE |  |

PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT RIYADH KINGDOM OF SAUDI ARABIA



Roshn Real Estate

الرّوشن العقاريّة



MAIN CONTRACTOR:



PEER REVIEW CONSULTANT:



STRUCTURAL CONSULTANT :



BUILDING: VILLA E01-SB-NO STYLE(0255) ZONE: NHC

STAGE: Shop Drawing DISC:

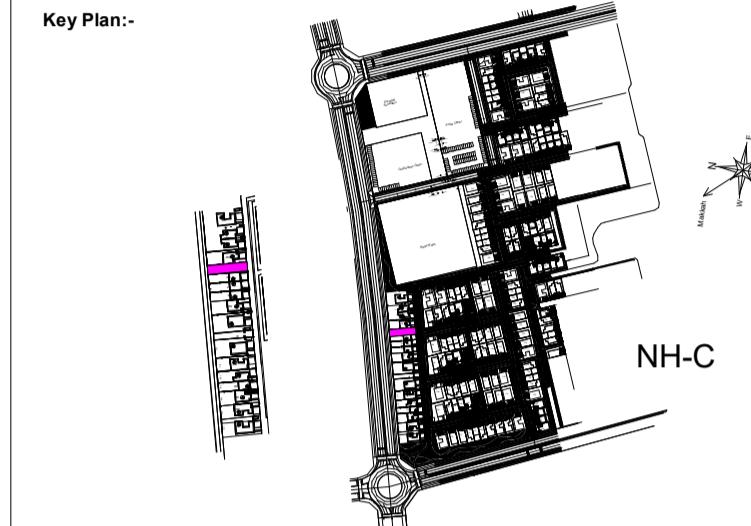
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LIST OF DRAWINGS

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| DATE:       | 26.Jan.2025                     | CHECKED BY | REVISION |

**NOTE:**  
GENERAL NOTES:  
1- DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING.  
2- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS IN METERS UNLESS NOTED OTHERWISE.  
3- THE DRAWINGS ARE FOR INFORMATION ONLY. FURTHER WRITTEN DIMENSIONS AND SITE DIMENSIONS OR WITHIN THESE DRAWINGS SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT BEFORE EXECUTING THE WORKS.  
4- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DOCUMENTATION FORMING THE CONSTRUCTION CONTRACT.  
5- ALL EXISTING DIMENSIONS/LEVELS ETC. INDICATED ON DRAWINGS ARE TO BE VERIFIED ON SITE.

| Sheet List              |                 |                    |                  |                   |                        |                    |  |
|-------------------------|-----------------|--------------------|------------------|-------------------|------------------------|--------------------|--|
| Sheet Name              | 01_Project Code | 02_Originator Code | 03_Volume/System | 04_Level/Location | 05_Type of Information | 06_Role/Discipline | Sheet Number                                   |
| GROUND BEAMS DETAILS 01 | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-080 035 |
| GROUND BEAMS DETAILS 02 | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-080 036 |
| SECTION AND DETAILS 01  | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-082 008 |
| SECTION AND DETAILS 02  | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-082 009 |
| SECTION AND DETAILS 03  | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-082 010 |
| SECTION AND DETAILS 04  | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-082 012 |
| BBS-01                  | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-090 008 |
| BBS-02                  | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-090 009 |
| BBS-03                  | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-090 010 |
| BBS-04                  | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-090 011 |
| BBS-05                  | 00101           | IDS                | E01              | ZZZ               | DWG                    | SE                 | 00101-IDS-E01-00101-IDS-E01-ZZZ-SHD-SE-090 012 |



#### ABBREVIATIONS:

| MDL TYP | MDL DISC. | MDL NAME |
|---------|-----------|----------|
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|         |           |          |
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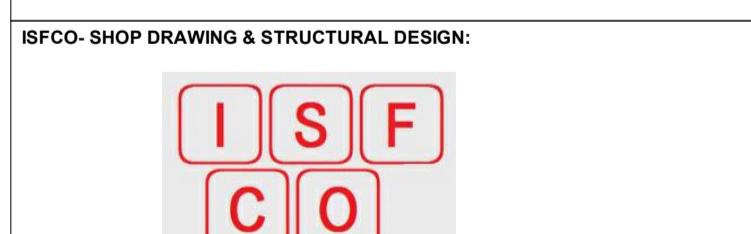
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| Rev      | Description         | Date        |
| 00       | ISSUED FOR APPROVAL | 26.Jan.2025 |
|          |                     |             |
|          |                     |             |
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|          |                     |             |

| PEER REVIEW CONSULTANT APPROVAL |                     |
|---------------------------------|---------------------|
| SHOP DRAWING REVIEW / APPROVAL  |                     |
| A                               | APPROVED            |
| B                               | APPROVED AS NOTED   |
| C                               | REVERSE & RESUBMIT  |
| D                               | REJECTED            |
| E                               | RECEIPT ACKNOWLEDGE |

PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT  
RIYADH KINGDOM OF SAUDI ARABIA



Roshn Real Estate



BUILDING: VILLA E01-SB-NO STYLE(0255) ZONE: NHC  
STAGE: Shop Drawing DISC:

DRAWING TITLE:

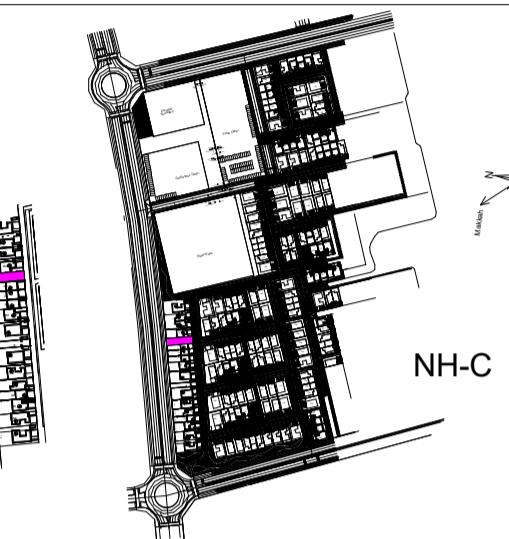
LIST OF DRAWINGS

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| SCALE:      | DRAWN BY                        | PAPER SIZE | A1       |
| DATE:       | CHECKED BY                      |            | REVISION |

26.Jan.2025

**NOTE:**  
GENERAL NOTES:  
 1- DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING.  
 2- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS IN METERS UNLESS NOTED OTHERWISE.  
 3- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.  
 4- THE CONTRACTOR IS RESPONSIBLE FOR CHECKING THAT THE DRAWINGS ARE CONSISTENT WITH THE GEO-TECHNICAL REPORT RECOMMENDATIONS.  
 5- ALL EXISTING DIMENSIONS/LEVELS ETC. INDICATED ON DRAWINGS ARE TO BE VERIFIED ON SITE.

| GENERAL NOTES   | EXCAVATION & FILL   | SHORING  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
|---|---|--|----------------------|----------------------|------------------|----------------|----------------|----------------|--|-------------------------|-------------------|--------------------|---|-----------------------------------|----|---------------|------------------------------|----------|------------------|--|--|--|--------------------|--------------------|--|----------------------|------|-----------------|-----|-----|------|-----|-----|---------------|------|-----|-----|
| <ul style="list-style-type: none"> <li>ALL DIMENSIONS ARE IN (m) UNLESS OTHERWISE NOTED AND/ OR COMPUTED. DON'T SCALE DRAWINGS. DRAWN LINES AND DETAILS NEED NOT TO BE DRAWN TO SCALE. RELATED DIMENSIONS SHALL ACCORDINGLY BE READ</li> <li>ALL DRAWINGS AND DETAILS ARE TO BE READ IN CONJUNCTION WITH THE RELATED APPROVED ARCHITECTURAL AND ELECTRO-MECHANICAL DRAWINGS FOR THE DIFFERENT ARCHITECTURAL FEATURES AND THE ELECTRO-MECHANICAL INSTALLATIONS DRAWINGS FOR THE OPENING SIZES AND LOCATIONS IN SLABS , WALLS, SLAB-ON-GRADES</li> <li>ALL CONCRETE PARTS ARE TO BE VERIFIED UPON THE APPROVED ELECTRO-MECHANICAL</li> <li>CONTRACTOR IS REQUIRED TO PREPARE AND SUBMIT STRUCTURAL SHOP DRAWINGS FOR THE DIFFERENT CONCRETE AND STEEL PARTS. THESE DRAWINGS ARE TO BE APPROVED BY THE ENGINEER PRIOR TO ANY CONSTRUCTIONS WORKS.</li> <li>FOR ANY NEW CONDITIONS AND/OR DISCREPANCIES THAT MAY OCCUR ON SITE OR INTRODUCED BY OTHER CONTRACTORS AND SUPPLIERS DIFFERENT THAN THE DESIGN PROPOSALS SHOWN ON THESE DRAWINGS, THE CONTRACTOR IS REQUIRED TO INFORM THE ENGINEER PRIOR TO ANY CONSTRUCTION WORKS.</li> <li>BLOCK WORK SHALL BE TIED INTO VERTICAL CONCRETE MEMBERS WITH GALVANIZED IRON TIES OF 150mm LENGTH BUILT INTO BLOCK WALL AND ANCHORED TO CONCRETE EVERY ALTERNATE COURSE. INTEGRITY OF MASONRY WALLS SHALL BE SATISFIED USING APPROVED ACCESSORIES.</li> <li>SLEEVES AND OPENINGS SMALLER THAN (200mm*200mm) ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS, FOR REQUIRED OPENINGS REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS</li> <li>CHAMFERS FOR FAIR FACED CONCRETE ARE NOT SHOWN ON STRUCTURAL DRAWINGS REFERENCE SHOULD BE MADE TO ARCHITECTURAL DETAILS FOR SUCH PROPOSE.</li> <li>IN COMPLIANCE WITH SAUDI LAWS REGULATIONS, THE STRUCTURAL DETAILS FOR STEEL SECTIONS HAVE BEEN PROVIDED</li> <li>FOR NEW STRUCTURAL ELEMENTS THAT ARE PLACED CLOSE TO EACH OTHER, SHORING IS NOT REQUIRED. WE SHOULD ENSURE THE CORRECT ARRANGEMENT BY STARTING WITH THE LOWEST ELEMENT, SECURING ITS SUPPORT, AND THEN PROCEEDING WITH THE OTHER ELEMENTS.</li> </ul> <p>(SPECIFICALLY FOR THE PUMP ROOM AND POOL HOUSE FOUNDATION, WE SHOULD START WITH THE PUMP ROOM AND CASTS ITS WALLS FIRST, THEN PROCEED WITH THE POOL HOUSE FOUNDATION)</p> | <ul style="list-style-type: none"> <li>EXCAVATION WORKS ARE TO BE ACHIEVED USING APPROVED MEANS AND TO THE LIMITS THAT SATISFY THE REQUIRED SAFETY FOR THE FOUNDATION AND OTHER UNDER-GROUND STRUCTURES TO THE REQUIRED LEVELS AND SIZES</li> <li>BURIED SERVICES (CABLES, PIPES,...) ARE TO BE HIGHLY CONSIDERED DURING EXCAVATION WORKS WITH THE PROPER COORDINATION WITH THE RELATED OFFICIAL PARTIES.</li> <li>THE CONTRACTOR IS REQUIRED TO CAREFULLY MONITOR THE EXCAVATION PROCESS. FOR ANY DISCREPANCIES CHECKS, FOR ANY RELATIVELY LARGE HOLES OR CAVITIES THAT MAY OCCUR DURING EXCAVATION WORKS, MASS CONCRETE (OR AS PER APPROVED BY THE ENGINEER) SHOULD BE USED TO FILL SUCH CAVITIES PRIOR TO ANY CONSTRUCTION WORKS OF FOOTINGS</li> <li>FOR ANY BACK FILL MATERIAL, SELECTION SHOULD BE AS PER RECOMMENDED AND VERIFIED BY THE APPROVED SOIL ENGINEERS. FILL MATERIAL SHALL BE APPLIED AT LAYERS OF MAXIMUM 200mm THICKNESS AND COMPAKTED TO AT LEAST 95% OF THE MAXIMUM PROCTOR TEST DRY DENSITY.</li> <li>FOR BASEMENT REINFORCED WALLS DESIGNED PROPPED BY SUSPENDED SLABS, BACK FILL IS NOT TO BE PROVIDED BEHIND UNTIL THESE RELATED SLABS ARE BEING COMPLETELY CAST.</li> <li>IF REQUIRED, APPROVED DE-WATERING SYSTEM SHOULD BE PROVIDED BY THE CONTRACTOR TO ENSURE WATER FREE EXCAVATION PRIOR TO AND DURING ANY CONSTRUCTION WORKS</li> <li>IF REQUIRED, APPROVED SHORING SYSTEM IS TO BE PROVIDED BY THE CONTRACTOR TO STABILIZE THE SIDES OF THE EXCAVATED AREAS OF THE RELATED PROJECT BUILDING BLOCKS</li> </ul> | <ul style="list-style-type: none"> <li>FOR SHALLOW FOUNDATIONS THE EXCAVATION OF SOIL IS RECOMMENDED TO BE WITH SLOPE 1:2 "UNLESS RECOMMENDED OTHERWISE IN GEOTECHNICAL STUDY".</li> <li>IN CASES WHERE THE SLOPED EXCAVATION NOT APPLICABLE FOR BOUDARIES LIMITATION OR EXISTING STRUCTURAL ELEMENT, EXCAVATE THE SOIL VERTICALLY, WITH PROPOER SHORING SYSTEM.</li> <li>THE MOST APPROPRIATE SHORING SYSTEM FOR SHALLOW FOUNDATIONS IS SHOTCRETE WITH NAILING ANHRS</li> <li>IN DEEPER FOUNDATION LEVELS SPECIAL SHORING SYSTEMS TO BE RECOMMENDED.</li> </ul> <h3>Soil Improvement of Foundation</h3> <p>Soil improvement should be carried out below the foundation elevation as shown in Table 3: Foundation Design Parameters</p> <p>step-1: Remove any debris and loose soils from the structure's location, and Depth of Excavation level from the existing ground level as shown in Table (3) and the excavation should extend at least 1.0m beyond the perimeters of the foundation.</p> <p>step-2: Replacement Below the Foundation of the Rooms (0.5) m thick of subbase well-compacted material consisting of 1.5' to 2.0' Well-Graded Gravel. The Gravel should be having low contents of (less than 1000 PPM) and Chloride (less than 500 PPM). It should be compacted to negligible settlement. The Well-Graded Gravel should be spread layers not exceeding 25 cm thickness and compacted to negligible settlement and satisfying minimum relative compaction of 95% as determined by the modified ASTM D 698-12e1 test. Plate Load test as determined by Standard ASTM D 1194 test designation should be conducted on soil improvement, to meet the Settlement of Required Bearing Resistance.</p> <p>step-3: Replacement Below the Foundation of Swimming pool (0.5) m thick of suitable (A-1-a) According to AASHTO. It should be compacted to negligible settlement. The Well-Graded Gravel should be spread layers not exceeding 25 cm thickness and compacted to negligible settlement and satisfying minimum relative compaction of 95% as determined by the modified ASTM D 698-12e1 test. Plate Load test as determined by Standard ASTM D 1194 test designation should be conducted on soil improvement, to meet the Settlement of Required Bearing Resistance.</p> |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| CODE OF PRACTICE & LOADS  | REINFORCING STEEL BARS  | SWIMMING POOL TESTING  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| <table border="1"> <thead> <tr> <th colspan="2">STRUCTURAL DESIGN CODES</th> </tr> </thead> <tbody> <tr> <td>1</td><td>SBC 2018</td></tr> <tr> <td>2</td><td>ASCE 7-10</td></tr> <tr> <td>3</td><td>ACI 318 - 14</td></tr> <tr> <td>4</td><td>AISC 360-10</td></tr> <tr> <td>5</td><td>ASTM</td></tr> </tbody> </table>   | STRUCTURAL DESIGN CODES   |  | 1                    | SBC 2018             | 2                | ASCE 7-10      | 3              | ACI 318 - 14   | 4  | AISC 360-10             | 5                 | ASTM               | <table border="1"> <thead> <tr> <th colspan="2">REINFORCEMENT STEEL BARS STRENGTH</th> </tr> </thead> <tbody> <tr> <td>STRAIGHT BARS</td><td>MINIMUM HIGH STRENGTH 420MPa</td></tr> <tr> <td>STIRRUPS</td><td>420MPa</td></tr> </tbody> </table> <ul style="list-style-type: none"> <li>SPICE LENGTH, DEVELOPMENT LENGTHS, BAR BENDING SPECIFICATIONS AND CUT OFF POINTS OF STEEL BARS ARE TO COMPLY WITH THE REQUIREMENTS OF SAUDI BUILDING CODE (SBC).</li> <li>FOR BARS LOCATED IN WIDE CONCRETE STRUCTURES, SPLICES (IF REQUIRED) ARE TO BE ARRANGED IN STAGGERED PATTERN.</li> <li>TOP BARS AT INTERIOR SUPPORTS SHALL BE PLACED CENTRALLY ON THE SUPPORT AXIS LINES UNLESS OTHERWISE IS MENTIONED, AND THEY EXTEND A LENGTH EQUAL TO (60 TIMES BAR SIZE) WHICH IS GREATER.</li> </ul> | REINFORCEMENT STEEL BARS STRENGTH |    | STRAIGHT BARS | MINIMUM HIGH STRENGTH 420MPa | STIRRUPS | 420MPa           | <ul style="list-style-type: none"> <li>AFTER 28-DAYS OF CASTING THE SWIMMING POOL FOUNDATIONS AND WALLS WITH A PROPER CURING, AS PER SPECIFICATIONS AND STANDARDS, THE SWIMMING POOL TO BE FILLED WITH WATER FOR LEAKAGE TESTING.</li> <li>THE WATER STOP SHOULD BE PRESENCE IN.</li> <li>THE TEST SHOULD BE DONE BEFORE BACKFILLING THE SWIMMING POOL WALL SIDES.</li> <li>IF LEAKAGE OCCURRED, A PROPER MAINTENANCE SHOULD BE DONE WITH AN ACCEPTED GROUTING MATERIALS.</li> </ul> |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| STRUCTURAL DESIGN CODES   |   |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| 1   | SBC 2018  |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| 2   | ASCE 7-10   |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| 3   | ACI 318 - 14  |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| 4   | AISC 360-10   |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| 5   | ASTM  |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| REINFORCEMENT STEEL BARS STRENGTH   |   |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| STRAIGHT BARS   | MINIMUM HIGH STRENGTH 420MPa  |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| STIRRUPS  | 420MPa  |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| INSULATION & SOIL TEST REPORT RECOMMENDATIONS   | SOIL IMPROVEMENT OF FOUNDATION  |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| <table border="1"> <thead> <tr> <th colspan="2">SOIL TEST REPORT INFORMATION</th> </tr> </thead> <tbody> <tr> <td>SOIL TEST OFFICE</td><td>QUALITY PATH COMPANY</td></tr> <tr> <td>SOIL TEST NUMBER</td><td>QPC-GTR-230614</td></tr> <tr> <td>SOIL TEST DATE</td><td>13 / 11 / 2023</td></tr> <tr> <td>ALLOWABLE BEARING CAPACITY, kg/cm<sup>2</sup></td><td>1.50 kg/cm<sup>2</sup></td></tr> <tr> <td>Site Seismic Zone</td><td>Seismic Region (4)</td></tr> <tr> <td>Site class</td><td>C</td></tr> <tr> <td>Ss</td><td>0.8</td></tr> <tr> <td>S1</td><td>0.2</td></tr> <tr> <td>DEPTH OF FOOTING</td><td>ROOMS: ISOLATED FOOTING: 2 m<br/>RAFT: 1.5 m<br/>SWIMMING POOL : RAFT: 2.5 m</td></tr> </tbody> </table>  | SOIL TEST REPORT INFORMATION  |  | SOIL TEST OFFICE     | QUALITY PATH COMPANY | SOIL TEST NUMBER | QPC-GTR-230614 | SOIL TEST DATE | 13 / 11 / 2023 | ALLOWABLE BEARING CAPACITY, kg/cm <sup>2</sup> | 1.50 kg/cm <sup>2</sup> | Site Seismic Zone | Seismic Region (4) | Site class  | C                                 | Ss | 0.8           | S1                           | 0.2      | DEPTH OF FOOTING | ROOMS: ISOLATED FOOTING: 2 m<br>RAFT: 1.5 m<br>SWIMMING POOL : RAFT: 2.5 m   | <ul style="list-style-type: none"> <li>THE CONTRACTOR RESPONSIBILITY TO CHECK THAT BEARING CAPACITY AND MIN. FOUNDATION DEPTH ARE CONSISTENT WITH THE GEO-TECHNICAL REPORT RECOMMENDATIONS.</li> <li>GEO-TECHNICAL CONSULTANT SHOULD BE INFORMED AFTER FINISHING THE EXCAVATION WORK TO VERIFY THE INFORMATION STATED IN THE SOIL TEST REPORT AND TO CONFIRM THE BEARING CAPACITY AT FOUNDATIONS LEVELS AT THE CONTRACTOR'S COST.</li> <li>INSULATION SYSTEM SHOWN ON THE ATTACHED DESIGN DRAWINGS ARE TO BE VERIFIED BY APPROVED INSULATION SUPPLIER INSULATION MATERIALS, RELATED DETAILS AND PROCEDURES OF APPLICATIONS ARE TO BE SUBMITTED TO THE ENGINEER AND APPROVED PRIOR TO ANY CONSTRUCTION WORKS.</li> <li>INSULATION SYSTEM FOR ALL EXTERNAL SIDE SUBSTRUCTURE CONCRETE ELEMENTS THAT ARE IN DIRECT CONTACT WITH NATURAL SOIL IS THREE COATS OF HOT BITUMINOUS PAINT AND THEN CANVAS LAYER AND 10CM SOLID BLOCK.</li> <li>INSULATION SYSTEM FOR ALL INTERNAL SUBSTRUCTURE CONCRETE ELEMENTS IS TWO COATS OF COLD BITUMINOUS PAINT LAYER.</li> <li>INSULATION SYSTEM FOR EACH SIDE OF RETAINING WALLS THAT ARE IN DIRECT CONTACT WITH SOIL IS 4mm BITUMEN MEMBRANE ROLL AND THEN CARTONAL.</li> </ul> | <table border="1"> <thead> <tr> <th>TYPE OF STRUCTURE:</th><th>TYPE OF FOUNDATION</th><th>COMPACTED Eng. FILL BELOW THE FOUNDATION (M)</th><th>BEARING CAPACITY KPA</th></tr> </thead> <tbody> <tr> <td rowspan="2">ROOM</td><td>ISOLATE FOOTING</td><td>0.5</td><td>150</td></tr> <tr> <td>RAFT</td><td>0.3</td><td>150</td></tr> <tr> <td>SWIMMING POOL</td><td>RAFT</td><td>0.5</td><td>150</td></tr> </tbody> </table> | TYPE OF STRUCTURE: | TYPE OF FOUNDATION | COMPACTED Eng. FILL BELOW THE FOUNDATION (M) | BEARING CAPACITY KPA | ROOM | ISOLATE FOOTING | 0.5 | 150 | RAFT | 0.3 | 150 | SWIMMING POOL | RAFT | 0.5 | 150 |
| SOIL TEST REPORT INFORMATION  |   |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| SOIL TEST OFFICE  | QUALITY PATH COMPANY  |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| SOIL TEST NUMBER  | QPC-GTR-230614  |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| SOIL TEST DATE  | 13 / 11 / 2023  |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| ALLOWABLE BEARING CAPACITY, kg/cm <sup>2</sup>  | 1.50 kg/cm <sup>2</sup>   |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| Site Seismic Zone   | Seismic Region (4)  |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| Site class  | C   |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| Ss  | 0.8   |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| S1  | 0.2   |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| DEPTH OF FOOTING  | ROOMS: ISOLATED FOOTING: 2 m<br>RAFT: 1.5 m<br>SWIMMING POOL : RAFT: 2.5 m  |  |                      |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| TYPE OF STRUCTURE:  | TYPE OF FOUNDATION  | COMPACTED Eng. FILL BELOW THE FOUNDATION (M)   | BEARING CAPACITY KPA |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| ROOM  | ISOLATE FOOTING   | 0.5  | 150                  |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
|   | RAFT  | 0.3  | 150                  |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |
| SWIMMING POOL   | RAFT  | 0.5  | 150                  |                      |                  |                |                |                |  |                         |                   |                    |   |                                   |    |               |                              |          |                  |  |  |  |                    |                    |  |                      |      |                 |     |     |      |     |     |               |      |     |     |

| <b>Key Plan:-</b>  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---------------------|---------------------------------|--|------------|--|--|---------|-----------|----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|   |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>ABBREVIATIONS:</b>  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <table border="1"> <thead> <tr> <th colspan="3">REFERENCES</th> </tr> <tr> <th>MDL TYP</th><th>MDL DISC.</th><th>MDL NAME</th> </tr> </thead> <tbody> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> </tbody> </table> |                     |                                 |  | REFERENCES |  |  | MDL TYP | MDL DISC. | MDL NAME |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| REFERENCES   |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MDL TYP  | MDL DISC.           | MDL NAME                        |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>REVISION</b>  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rev  | Description         | Date                            |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 00   | ISSUED FOR APPROVAL | 26.Jan.2025                     |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>PEER REVIEW CONSULTANT APPROVAL</b>   |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SHOP DRAWING REVIEW / APPROVAL   |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A  | APPROVED            |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| B  | APPROVED AS NOTED   |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| C  | REVISE & RESUBMIT   |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| D  | REJECTED            |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| E  | RECEIPT ACKNOWLEDGE |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT RIYADH KINGDOM OF SAUDI ARABIA   |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CLIENT (DEVELOPMENT MANAGER):  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <br><b>Roshn Real Estate</b> روشن العقارية  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MAIN CONTRACTOR:   |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <br><b>360 interiors</b>  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PEER REVIEW CONSULTANT:  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <br><b>DAR AL RIYADH</b>  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ISFCO- SHOP DRAWING & STRUCTURAL DESIGN:   |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <br><b>ISCO</b>   |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| STRUCTURAL CONSULTANT :  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <br><b>DAR International Engineering Consultancy</b>  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BUILDING: VILLA E01-SB-NO STYLE(0255) ZONE: NHC  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| STAGE: Shop Drawing DISC:  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| DRAWING TITLE: GENERAL NOTES 01  |                     |                                 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| DRAWING NO.  |                     | 00101-IDS-E01-ZZZ-SHD-SE-003018 |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SCALE:   | 1 : 25              | DRAWN BY                        |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| DATE:  | 26.Jan.2025         | CHECKED BY                      |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PAPER SIZE   | A1                  | REVISION                        |  |            |  |  |         |           |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

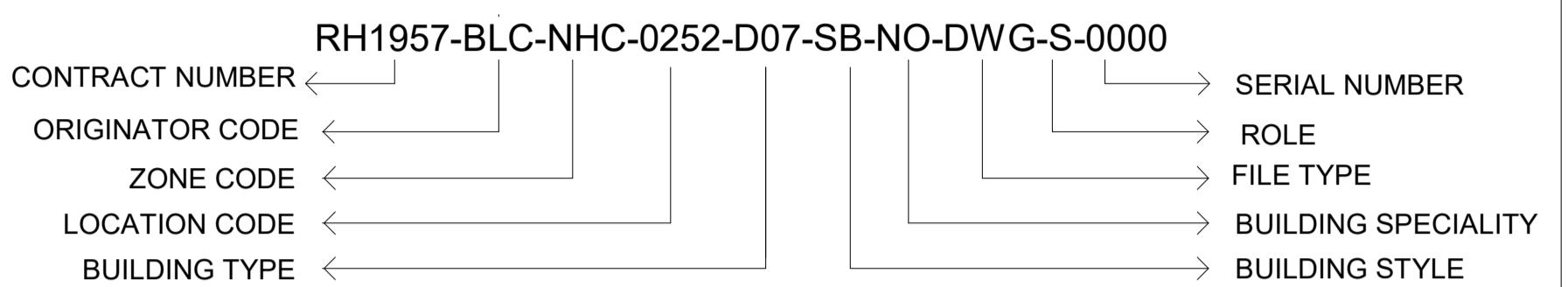
## JOINTS

- LOCATIONS OF CONSTRUCTION JOINTS (CJ) IN REINFORCED CONCRETE SLABS AND WALL ARE TO BE PROPOSED BY THE CONTRACTOR WITHOUT AFFECTING THE STRUCTURAL SAFETY AND INTEGRITY OF THESE ELEMENTS. LOCATIONS AND EXECUTION OF THESE JOINTS SHALL BE UPON THE APPROVAL OF THE SUPERVISOR ENGINEER.
- FOR REINFORCED WALLS, EXPANSION JOINTS WITHIN RELATED SLABS ARE TO BE EXTENDED IN THESE WALLS. IN NO CONDITION SHALL THE EJ IN WALLS BE LOCATED FURTHER THAN 100m FROM THE ADJACENT ONE.
- CONTRACTION JOINTS ARE TO BE CONSTRUCTED IN WALLS USING RUBBER RODS OF APPROVED PROFILE OF MINIMUM 20mm THICKNESS AT SPACING NOT GREATER THAN 5m C/C.
- FOR SLAB-ON-GRADE, SAW-CUT TYPE CONTRACTION JOINTS SHALL BE PROVIDED AT MAXIMUM OF 5x5m SQUARE PANELS. EJ SHALL BE PROVIDED ALONG LINES OF CONTACT WITH COLUMNS AND REINFORCED WALLS AND AT DISTANCES NOT GREATER THAN 50 TO 60m. CONTRACTOR IS REQUIRED TO SUBMIT PROPER RELATED SHOP DRAWINGS FOR THESE JOINTS FOR APPROVAL.

## ANALYSIS AND DESIGN

- THE ANALYSIS AND DESIGN OF THE STRUCTURE IS DONE USING POROKON AND ETABS, SAFE, STAAD AND AN EXTRA FLOORS HAVE BEEN TAKEN INTO CONSIDERATION IN THE ANALYSIS.
- DESIGN AND DETAILING WERE DONE ACCORDING TO THE SAUDI BUILDING CODE FOR STRUCTURAL USE OF CONCRETE.

## DRAWING NUMBERING SYSTEM



## ABBREVIATIONS & SYMBOLS

|                                |                                 |
|--------------------------------|---------------------------------|
| B                              | BOTTOM BARS                     |
| T                              | TOP BARS                        |
| BOF                            | BOTTOM LEVEL OF FOOTING         |
| BW                             | BOTH WAY                        |
| EF                             | EACH FACE                       |
| E.J                            | EXPANSION JOINT                 |
| C.J                            | CONSTRUCTION JOINT              |
| H                              | HORIZONTAL BARS                 |
| L                              | LENGTH DESIGNATION              |
| S                              | STIRRUPS                        |
| SOG                            | SLAB ON GRADE                   |
| S.S.L.                         | TOP LEVEL OF STRUCTURAL SURFACE |
| TOF                            | TOP LEVEL OF FOOTING            |
| TOW                            | TOP LEVEL OF WALL               |
| TOC                            | TOP OF CONCRETE                 |
| PC                             | PLANTED COLUMN                  |
| U.N.O.                         | UNLESS NOTED OTHERWISE          |
| C                              | COLUMN MARK                     |
| UGC                            | UNDER GROUND COLUMN             |
| F                              | FOOTING MARK                    |
| DB                             | DROP BEAM                       |
| INV B                          | INVERTED BEAM                   |
| HB                             | HIDDEN BEAM                     |
| TB                             | TIE BEAM                        |
| GB                             | GROUND BEAM                     |
| CR                             | CROSS RIB MARK                  |
| DR                             | DOUBLE RIB MARK                 |
| CW                             | CORE WALL MARK                  |
| W                              | WALL MARK                       |
| RW                             | RETAINING WALL MARK             |
| BTW                            | BASEMENT WALL MARK              |
| R.S                            | RIBBED SLAB                     |
| S.S                            | SOLID SLAB                      |
| F.S                            | FLAT SLAB                       |
| TAG OF BAR                     | 4-T20@200 B L=1000              |
| 4                              | NUMBER OF BARS                  |
| T20                            | BAR DIAMETER DESIGNATION IN mm  |
| @200                           | SPACING (mm)                    |
| B                              | LAYER TYPE (B/T/V/H/BW)         |
| L=1000                         | BAR LENGTH (mm)                 |
| EARTH                          | EARTH                           |
| REINFORCED CONCRETE OF WALLS   | REINFORCED CONCRETE OF WALLS    |
| REINFORCED CONCRETE OF COLUMNS | REINFORCED CONCRETE OF COLUMNS  |
| BLOCK WALL                     | BLOCK WALL                      |
| PLAIN CONCRETE                 | PLAIN CONCRETE                  |
| WATER PROOFING MEMBRANE        | WATER PROOFING MEMBRANE         |

## REINFORCED CONCRETE

THE MINIMUM CYLINDER CRUSHING STRENGTH OF THE DIFFERENT REINFORCED STRUCTURAL CONCRETE PARTS SHALL NOT BE LESS THAN THE FOLLOWINGS

| ELEMENT                  | FC' (MPa) | Fcu (MPa) |
|--------------------------|-----------|-----------|
| FOUNDATIONS              | 25        | 31.3      |
| COLUMNS & WALLS          | 25        | 31.3      |
| TIE BEAMS                | 25        | 31.3      |
| SLABS AND BEAMS          | 25        | 31.3      |
| SLABS ON GRADE           | 20        | 25        |
| BLINDING                 | 15        | 18.75     |
| WATER TANK & SEPTIC TANK | 25        | 31.3      |

THE CLEAR CONCRETE COVER FOR THE DIFFERENT STRUCTURAL ELEMENTS SHALL COMPLY WITH THOSE SPECIFIED IN THE JORDANIAN CODE THAN THE FOLLOWINGS:

| ELEMENT                        | COVER (mm) |
|--------------------------------|------------|
| FOUNDATIONS WITH PROTECTION    | 75         |
| FOUNDATIONS WITHOUT PROTECTION | 50         |
| COLUMNS & WALL NICKS           | 40         |
| COLUMNS & WALLS                | 40         |
| SLABS & BEAMS                  | 25         |

CEMENT TYPES AND TO BE USED IN THE DIFFERENT REINFORCED CONCRETE PARTS SHALL BE AS FOLLOWS:

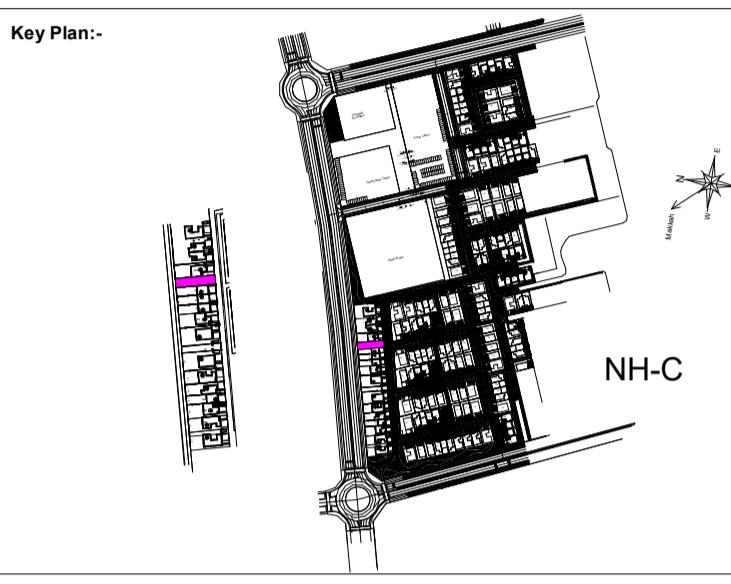
| ELEMENT                | CEMENT TYPE               |
|------------------------|---------------------------|
| FOUNDATIONS            | SULFATE RESISTANCE CEMENT |
| COLUMNS AND WALL NICKS | SULFATE RESISTANCE CEMENT |
| TIE BEAMS              | SULFATE RESISTANCE CEMENT |
| COLUMNS AND WALL       | ORDINARY CEMENT           |
| SLAB ON GRADE          | ORDINARY CEMENT           |
| SLABS AND BEAMS        | ORDINARY CEMENT           |
| SWIMMING POOL          | SULFATE RESISTANCE CEMENT |

ADMIXTURES TO BE USED IN CONCRETE ARE SUBJECT TO THE APPROVAL OF THE ENGINEER AND AS PER THE PREVAILING CONDITIONS DURING CONCRETE CASTING.

F. CURING OF CAST CONCRETE ELEMENTS SHALL BE AS PER SPECIFIED IN APPROVED CODES AND AS PER APPROVED BY THE ENGINEER.

ALL MATERIALS AND CONCRETE PARTS ARE TO BE SUBJECT TO APPROVED TESTING AS PER SPECIFIED IN ACI 318 THESE TESTS ARE TO BE MONITORED AND APPROVED BY THE ENGINEER WITH THE APPROVED SOIL REPORT, THE ENGINEER SHOULD BE INFORMED FOR ANY REQUIRED DESIGN

**NOTE:**  
GENERAL NOTES:  
1- DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING.  
2- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS IN METERS UNLESS NOTED OTHERWISE.  
3- DIMENSIONS AND LEVELS ARE TO BE TAKEN FROM THESE DRAWINGS AND SITE DIMENSIONS OR WITHIN THESE DRAWINGS SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT BEFORE EXECUTING THE WORKS.  
4- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DOCUMENTATION FORMING THE CONSTRUCTION CONTRACT.  
5- ALL EXISTING DIMENSIONS/LEVELS ETC. INDICATED ON DRAWINGS ARE TO BE VERIFIED ON SITE.



|                                 |                     |             |
|---------------------------------|---------------------|-------------|
| ABBREVIATIONS:                  | REFERENCES          |             |
| MDL TYP                         | MDL DISC.           | MDL NAME    |
| REVISION                        |                     |             |
| Rev                             | Description         | Date        |
| 00                              | ISSUED FOR APPROVAL | 26.Jan.2025 |
| PEER REVIEW CONSULTANT APPROVAL |                     |             |
| SHOP DRAWING REVIEW / APPROVAL  |                     |             |
| A                               | APPROVED            |             |
| B                               | APPROVED AS NOTED   |             |
| C                               | REVISE & RESUBMIT   |             |
| D                               | REJECTED            |             |
| E                               | RECEIPT ACKNOWLEDGE |             |

PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT  
RIYADH KINGDOM OF SAUDI ARABIA



Roshn Real Estate روشن العقارية

MAIN CONTRACTOR:



BUILDING: VILLA E01-SB-NO STYLE(0255) ZONE: NHC

STAGE: Shop Drawing DISC:

DRAWING TITLE: GENERAL NOTES 02

|             |                                 |            |               |
|-------------|---------------------------------|------------|---------------|
| DRAWING NO. | 00101-IDS-E01-ZZZ-SHD-SE-003019 |            |               |
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| DATE:       | 26.Jan.2025                     | CHECKED BY | REVISION      |



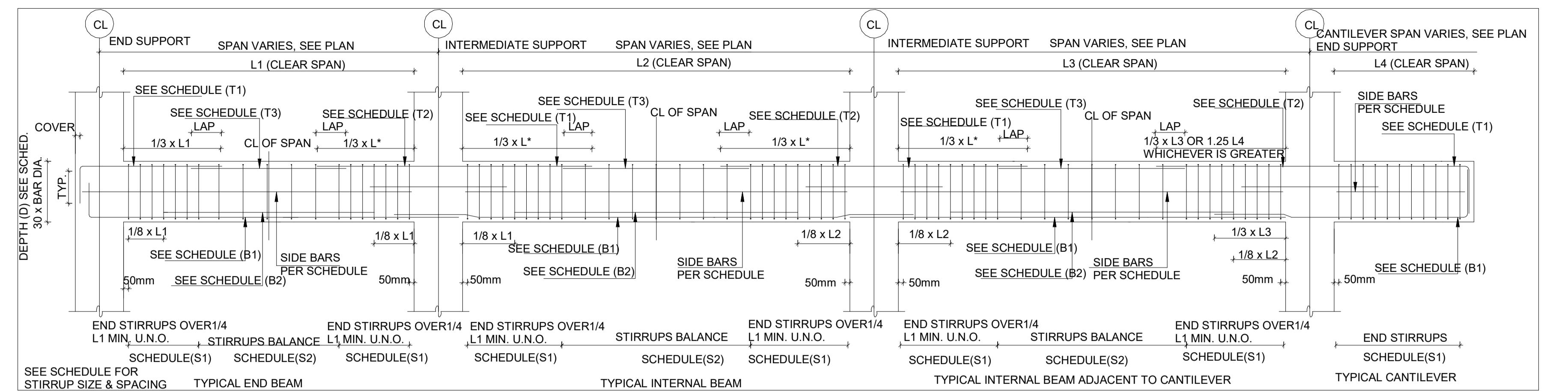
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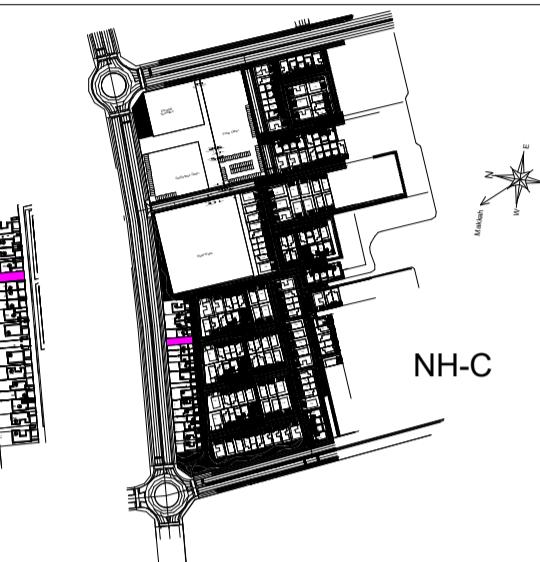
Y DISCREPANCIES, EITHER BETWEEN WRITTEN  
NSIONS AND SITE DIMENSIONS OR WITHIN THESE  
WINGS SHOULD BE BROUGHT TO THE IMMEDIATE  
ENTION OF THE ARCHITECT BEFORE EXECUTING THE  
KS.

IS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL  
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TRACT.

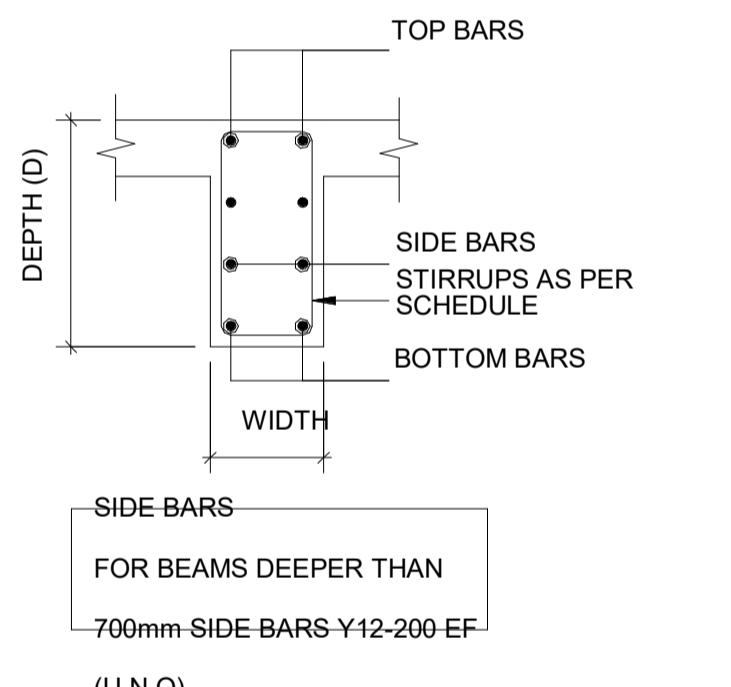
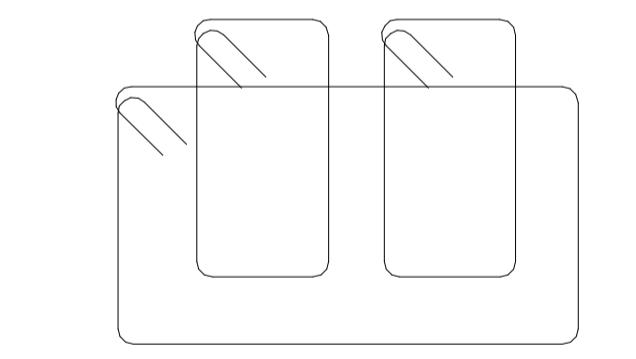
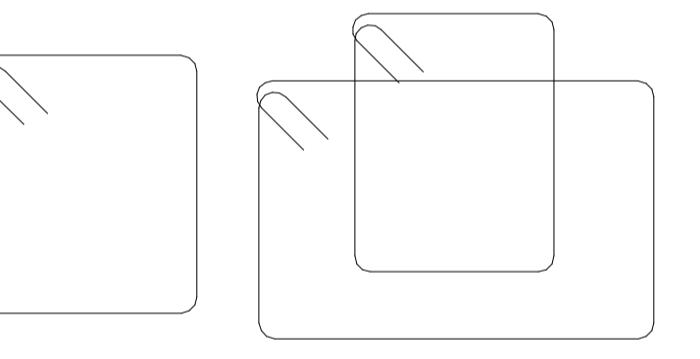
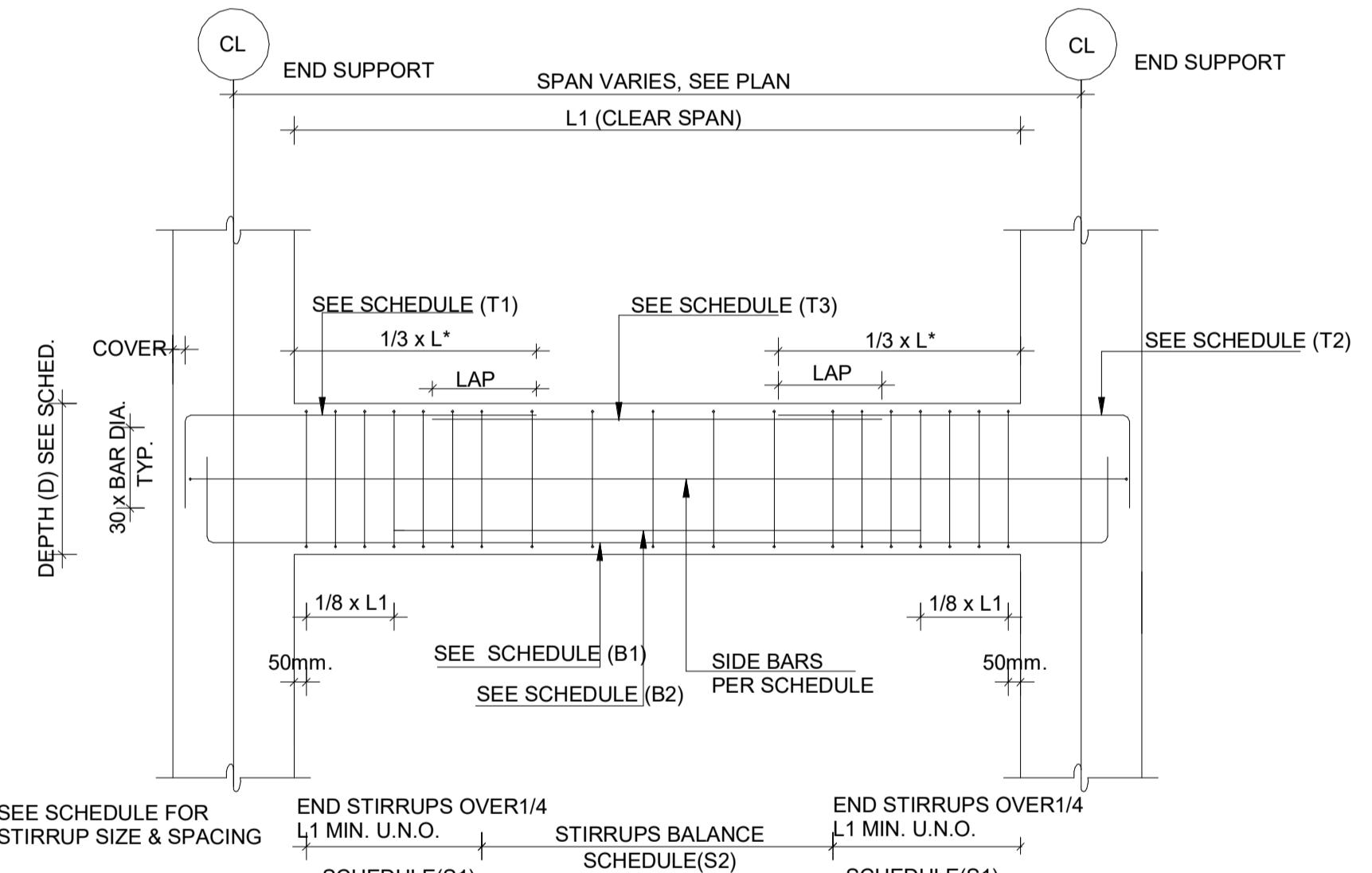
L EXISTING DIMENSIONS/ LEVELS ETC. INDICATED ON  
WINGS ARE TO BE VERIFIED ON SITE.



**1 | TYPICAL GRAVITY RC. BEAM ELEVATION**  
NTS Ref."00101-IDS-E01-ZZZ-SHD-SE-003021"



**2** | TYPICAL GRAVITY RC SIMPLE BEAM ELEVATION  
NTS Ref."00101-IDS-E01-ZZZ-SHD-SE-003021"

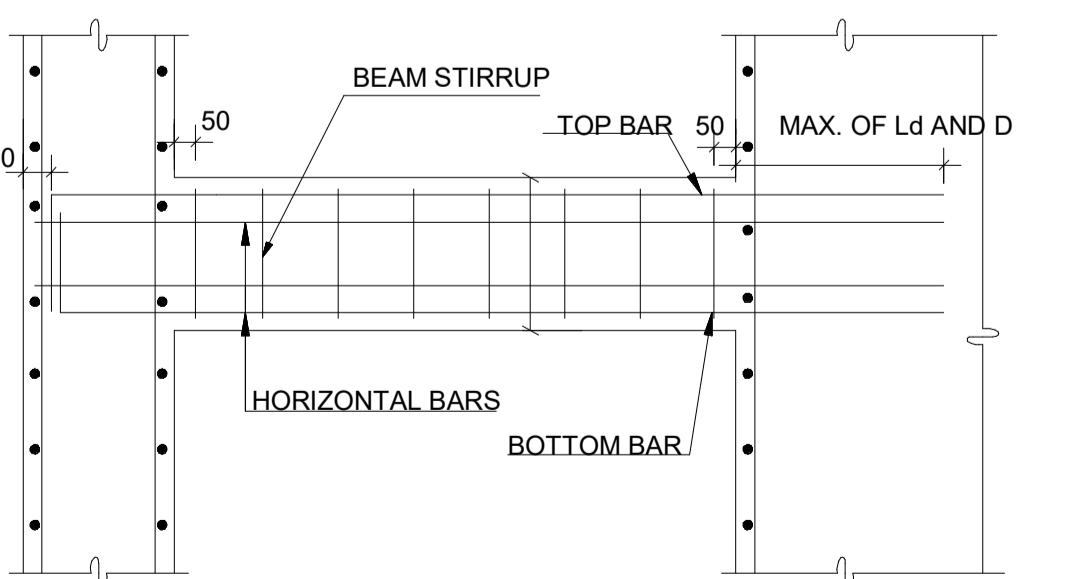


Roshn Real Estate روشن العقارية



**MAIN CONTRACTOR:**

**TYPICAL STIRRUP ARRANGEMENT**  
NTS Ref."00101-IDS-E01-ZZZ-SHD-SE-003021"



**LINTEL BEAM TYPICAL DETAILS**  
NTS Ref."00101-IDS-E01-ZZZ-SHD-SE-003021"

## REINFORCED CONCRETE BEAM NOTES

1. ALL DIMENSIONS ARE IN MILLIMETER, U.N.C.

### 3. L\* IS GREATER OF ADJACENT CLEAR SPAN

### 3. WHERE TOP REINFORCING VARIES IN ADJACENT SPANS

WHERE A NEW SPANNING MEMBER IS ADDED, USE THE GREATER VOLUME OF REINFORCING IN BOTH SPANS.

4- PLACEMENT OF CONTINUOUS AND DISCONTINUOUS REBARS IN EACH LAYER SHOULD BE IN ACCORDANCE WITH ACI 318-11M RECOMMENDATIONS.

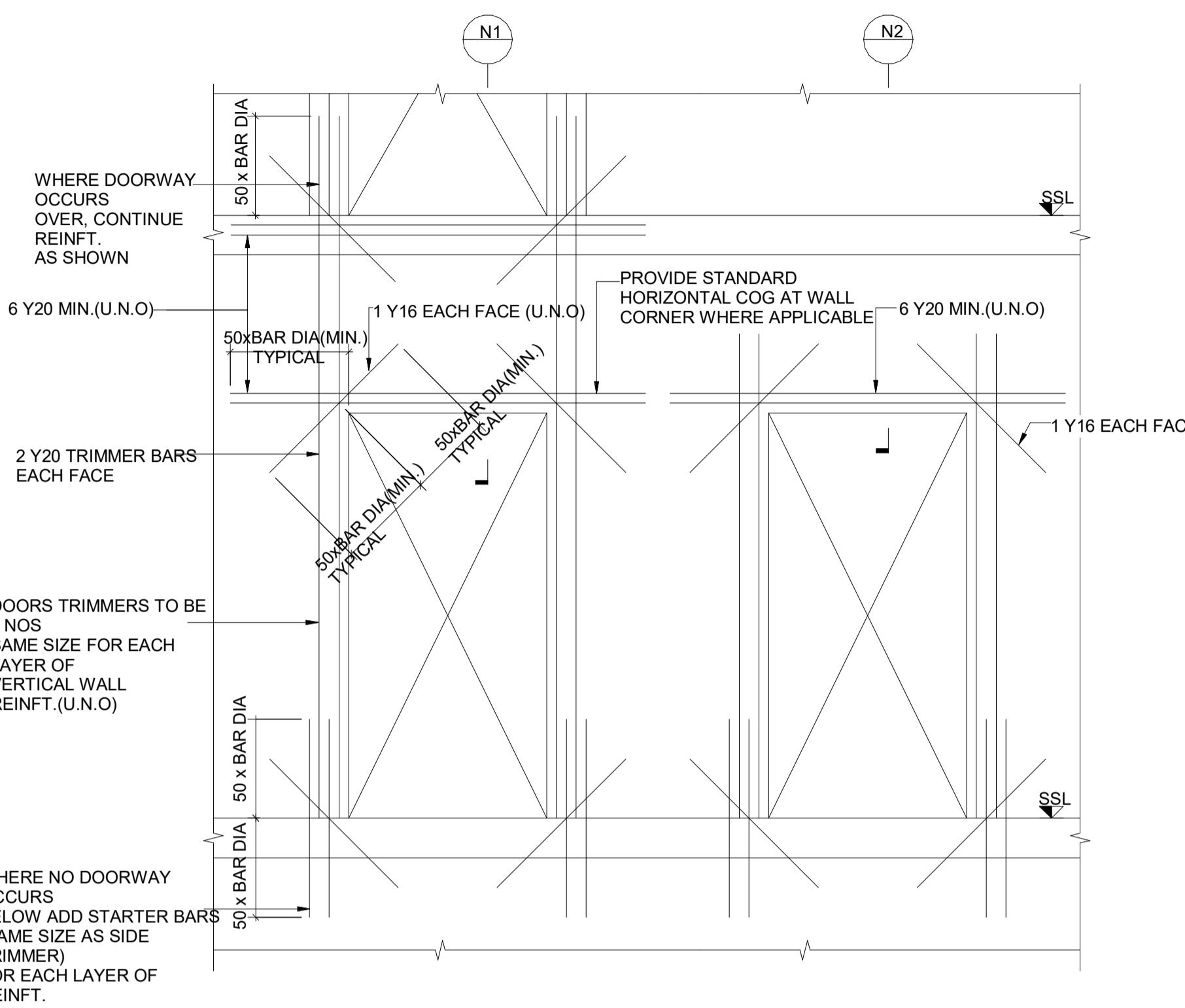
5- STIRRUP ARRANGEMENT TO BE BASED ON EXAMPLES SHOWN ON THIS SHEET

# ISFCO- SHOP DRAWING & STRUCTURAL DESIGN:

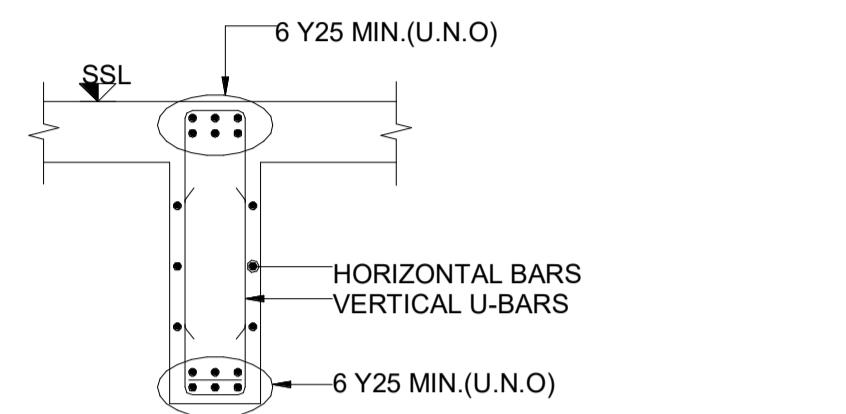
**STRUCTURAL CONSULTANT :**  
**DAR** International  
Engineering  
Consultancy

|                            |                                 |           |            |   |
|----------------------------|---------------------------------|-----------|------------|---|
| BUILDING:                  | VILLA E01-SB-NO STYLE(0255)     | ZONE: NHC |            |   |
| STAGE:                     | Shop Drawing                    | DISC:     |            |   |
| <b>DRAWING TITLE:</b>      |                                 |           |            |   |
| <b>GENERAL DRAWINGS 02</b> |                                 |           |            |   |
| DRAWING NO.                | 00101-IDS-E01-ZZZ-SHD-SE-003021 |           |            |   |
| SCALE:                     | DRAWN BY                        |           | PAPER SIZE | A |
| As indicated               |                                 |           |            |   |
| DATE:                      | CHECKED BY                      |           | REVISION   |   |
| 26-Jan-2025                |                                 |           |            |   |

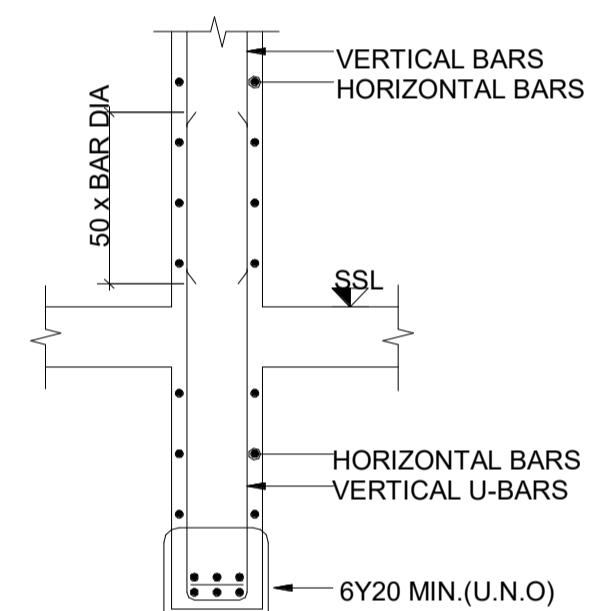
**NOTE:**  
GENERAL NOTES:  
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3- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.  
4- ALL DIMENSIONS AND SPACINGS ARE IN MILLIMETERS.  
5- ALL EXISTING DIMENSIONS/LEVELS ETC. INDICATED ON DRAWINGS ARE TO BE VERIFIED ON SITE.



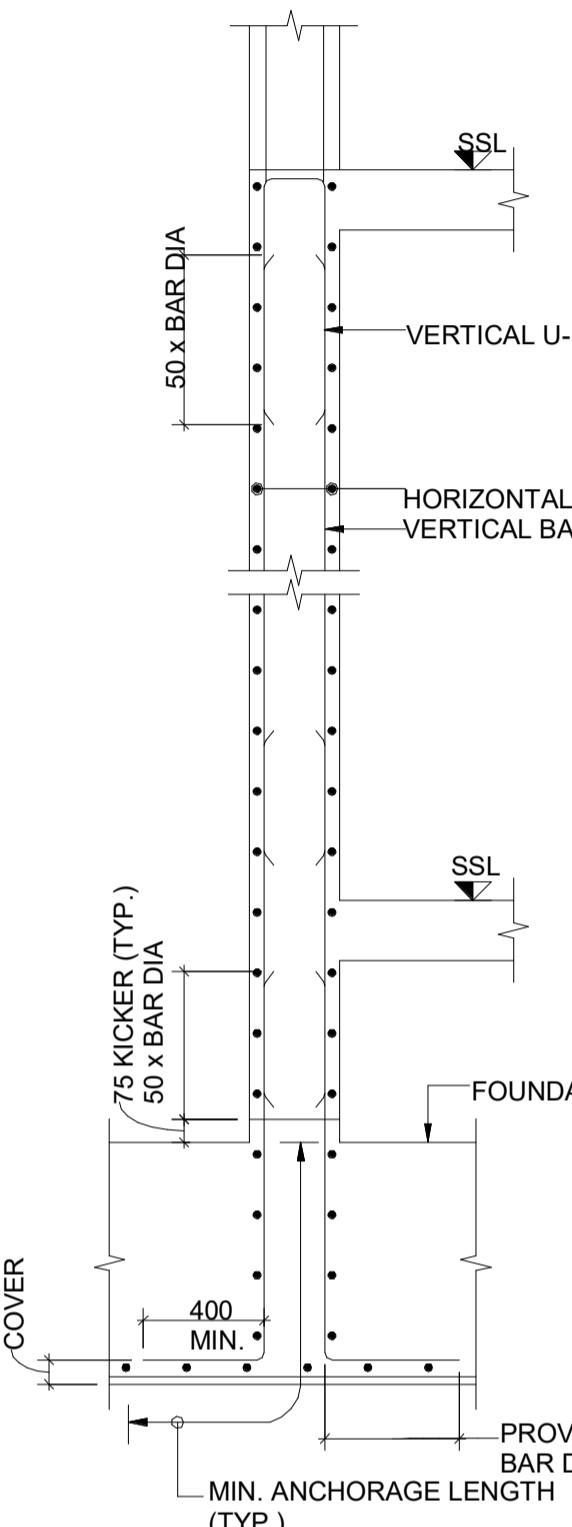
**1 | TYPICAL REINF. DETAILS FOR DOOR OPENING**  
NTS Ref."00101-IDS-E01-ZZZ-SHD-SE-003022"



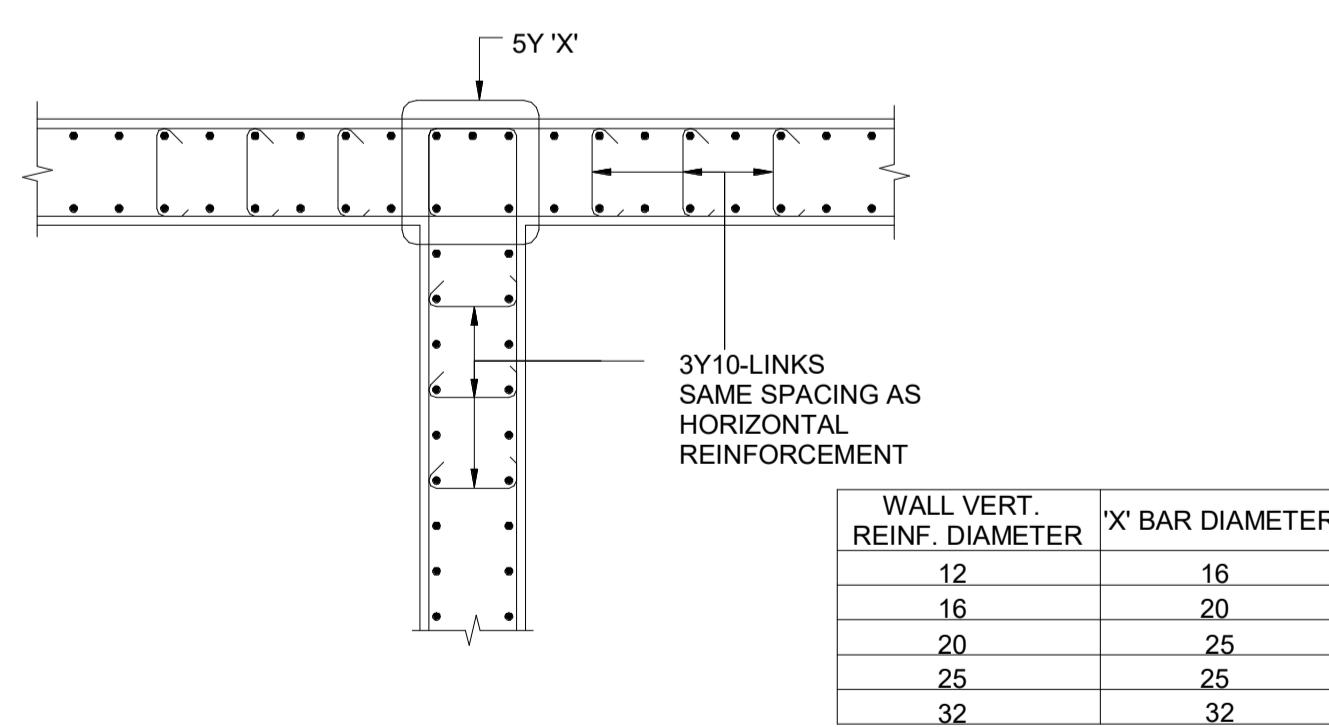
**2 | SECTION-N1**  
NTS Ref."00101-IDS-E01-ZZZ-SHD-SE-003022"



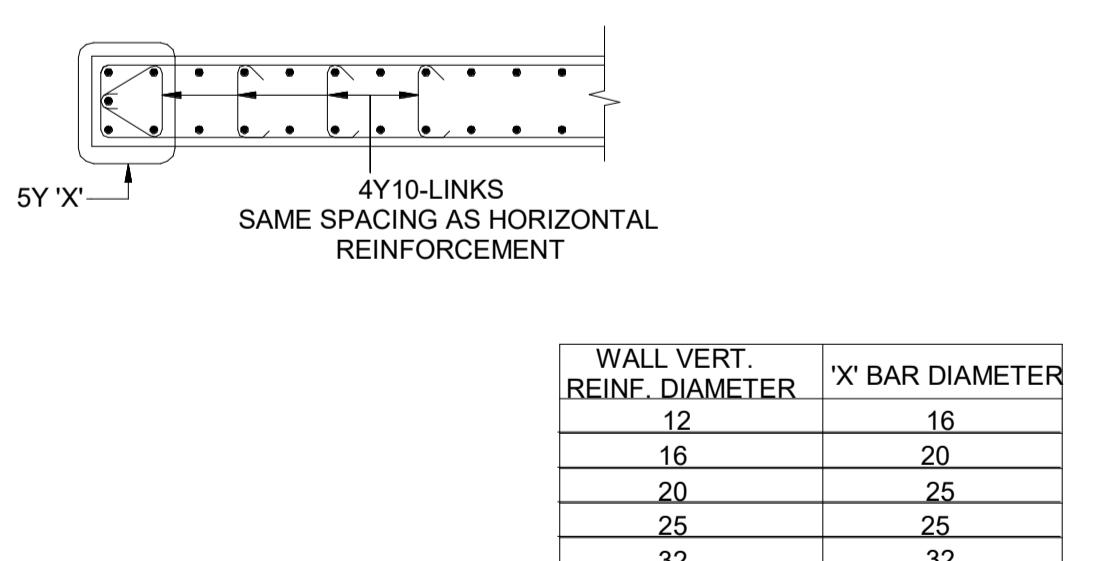
**3 | SECTION-N2**  
NTS Ref."00101-IDS-E01-ZZZ-SHD-SE-003022"



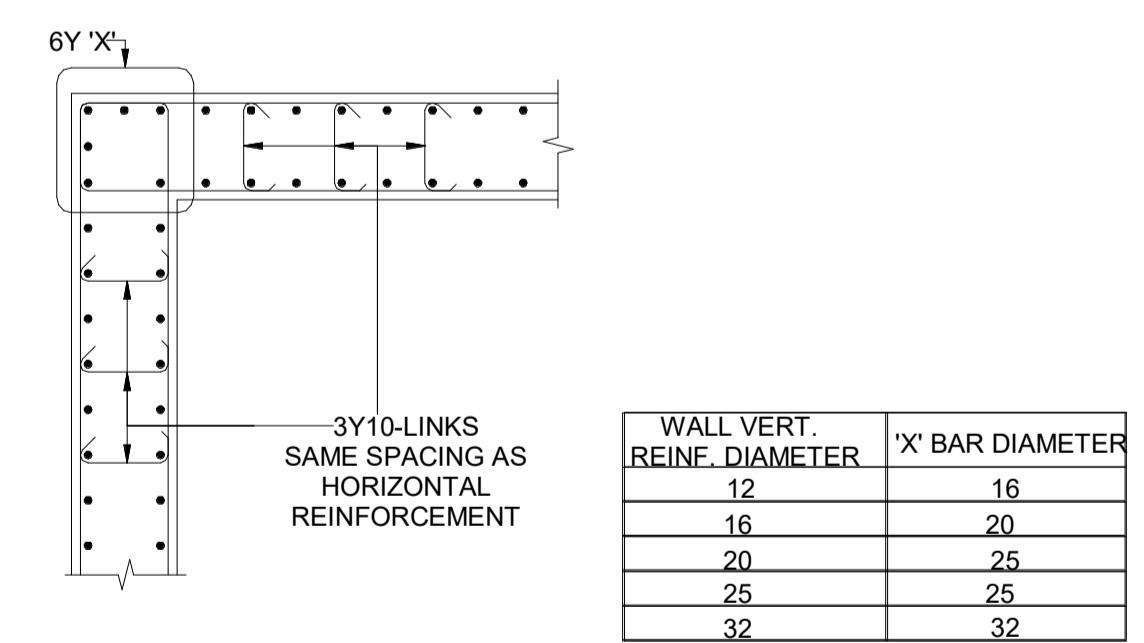
**4 | TYPICAL RC WALL SECTION**  
NTS Ref."00101-IDS-E01-ZZZ-SHD-SE-003022"



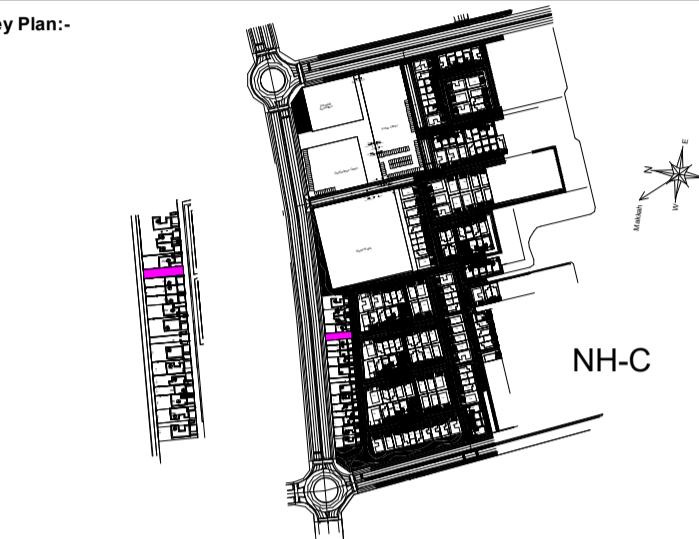
**5 | TYPICAL 'T' JUNCTION DETAIL**  
NTS Ref."00101-IDS-E01-ZZZ-SHD-SE-003022"



**6 | TYPICAL WALL EDGE DETAIL FOR VERTICAL BARS SPACING 150 mm**  
NTS Ref."00101-IDS-E01-ZZZ-SHD-SE-003022"



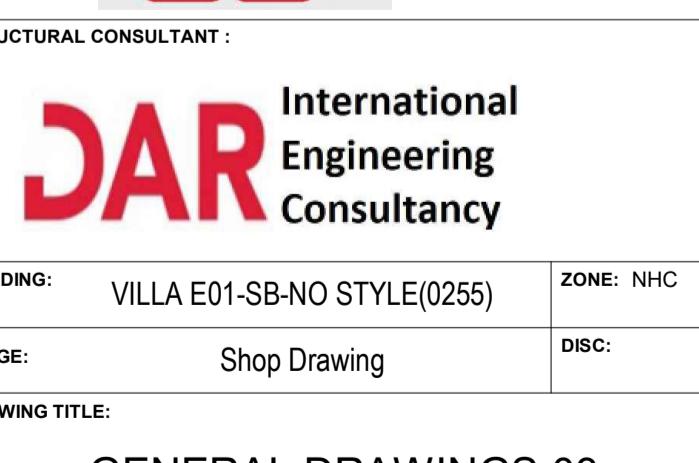
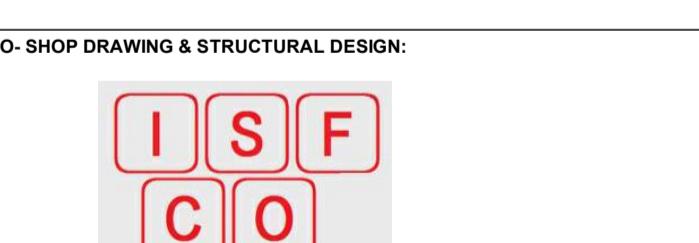
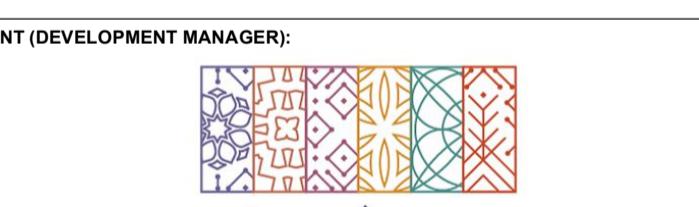
**7 | TYPICAL WALL CORNER DETAIL FOR VERTICAL BARS SPACING 150mm**  
NTS Ref."00101-IDS-E01-ZZZ-SHD-SE-003022"



| ABBREVIATIONS: |                                 |                  |
|----------------|---------------------------------|------------------|
| REFERENCES     |                                 |                  |
| MDL TYP        | MDL DISC.                       | MDL NAME         |
| REVISION       |                                 |                  |
| Rev 00         | Description ISSUED FOR APPROVAL | Date 26.Jan.2025 |

| PEER REVIEW CONSULTANT APPROVAL |                     |
|---------------------------------|---------------------|
| SHOP DRAWING REVIEW / APPROVAL  |                     |
| A                               | APPROVED            |
| B                               | APPROVED AS NOTED   |
| C                               | REVISE & RESUBMIT   |
| D                               | REJECTED            |
| E                               | RECEIPT ACKNOWLEDGE |

PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT RIYADH KINGDOM OF SAUDI ARABIA

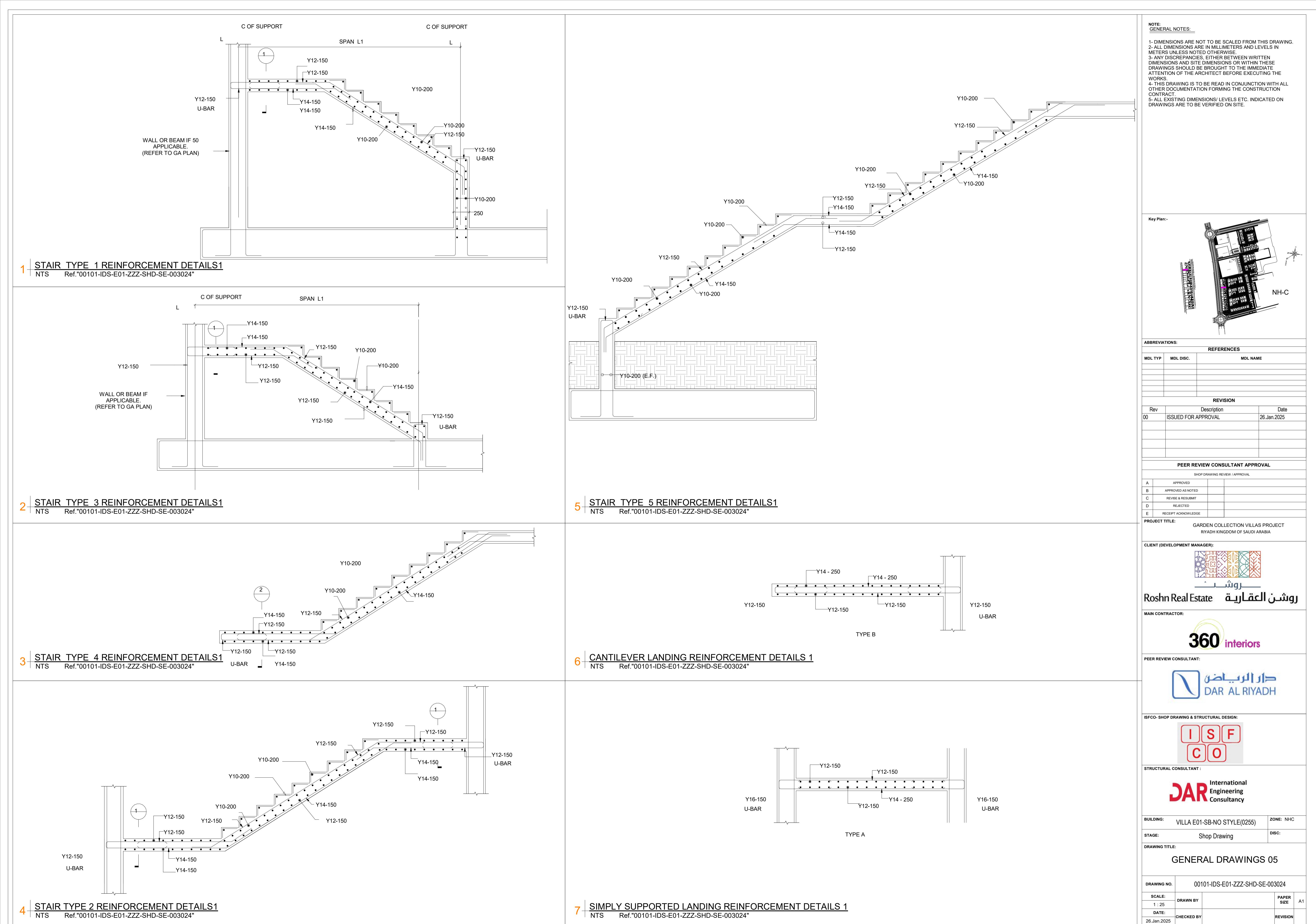


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| BUILDING:      | VILLA E01-SB-NO STYLE(0255) | ZONE: | NHC |
| STAGE:         | Shop Drawing                | DISC: |     |
| DRAWING TITLE: |                             |       |     |

GENERAL DRAWINGS 03

|             |                                 |            |          |
|-------------|---------------------------------|------------|----------|
| DRAWING NO. | 00101-IDS-E01-ZZZ-SHD-SE-003022 |            |          |
| SCALE:      | 1 : 25                          | DRAWN BY   |          |
| DATE:       | 26.Jan.2025                     | CHECKED BY | REVISION |





**NOTE:**  
GENERAL NOTES:  
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2- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS IN METERS UNLESS NOTED OTHERWISE.  
3- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.  
4- ALL EXISTING DIMENSIONS/LEVELS ETC. INDICATED ON DRAWINGS ARE TO BE VERIFIED ON SITE.

- E- FABRICATION/ERCTION**
- ALL DIMENSIONS GIVEN ON CONTRACT DRAWINGS ARE TO BE CHECKED BY THE STEEL FABRICATOR PRIOR TO FABRICATION.
  - THE CONTRACTOR SHALL PROVIDE ALL HOLES IN THE STEELWORK REQUIRED BY OTHER TRADES, SUBJECT TO THE APPROVAL OF ENGINEER.
  - THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AND SUPPORTS REQUIRED DURING ERECTION FOR THE PROPER ALIGNMENT, ALSO AS NECESSARY TO GIVE AND MAINTAIN THE PROPER STABILITY OF THE WHOLE STRUCTURE.
  - THE THREADING OF THE PRESET ANCHOR BOLTS IS TO BE TESTED TO GUARANTEE THAT NO SLIP OF NUTS OCCURS BEFORE THE FAILURE OF ANCHOR BOLTS MATERIAL.
  - FABRICATION, ERECTION AND QUALITY CONTROL (INCLUDING TOLERANCES) OF STEEL CONSTRUCTION TO BE AS INDICATED BY ASTM A6/A6M, AWS D1.1 AND AISC MANUAL OF STEEL CONSTRUCTION.
  - ALL HOLES FOR STEEL BOLTS ARE WITH STANDARD DIAMETER SIZE AS PER AISI 15TH EDITION 2017, UNLESS NOTED OTHERWISE.
  - ALL CONNECTIONS OF HEAD PLATE AND BOLTED SPLICE, IN ADDITION TO TRUSSES AND ROOF BEAMS SUPPORTING ME EQUIPMENTS, ARE SLIP CRITICAL CONNECTIONS THAT REQUIRE FULL BOLT PRE-TENSIONING AND CLASS "B" FAYING SURFACE AS PER THE REQUIREMENTS OF RCSC SPECIFICATIONS FOR STRUCTURAL JOINTS.
  - MINIMUM SIZE OF FILLET WELDS IS  $S=0.7$  OF MINIMUM WELDED THICKNESS OR 6 MM, WHICHEVER IS BIGGER, UNLESS NOTED OTHERWISE. ALL WELDS BETWEEN FLANGES AND WEBS OF BUILT-UP MEMBERS ARE CONTINUOUS FILLET WELDS FROM BOTH SIDES, UNLESS SHOWN OTHERWISE.
  - NON-SHRINK GROUT TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 600 KG/CM<sup>2</sup> AT 28 DAYS HAVING A WORKING TIME OF 2 HOURS.
  - CONTRACTOR IS TO SUBMIT WORKSHOP DETAIL DRAWINGS FOR ENGINEER'S APPROVAL PRIOR TO EXECUTION.
  - CONTRACTOR SHALL REVIEW AND COORDINATE SHOP DRAWINGS WITH ALL STEEL FRAMING ELEMENTS SHOWN HEREIN AND AS DETAILED ON OTHER TRADES DRAWINGS. COORDINATION WITH EXISTING STRUCTURES AND CONDITIONS IS ALSO REQUIRED.
  - ERECTION METHOD STATEMENT ILLUSTRATING SEQUENCE OF ERECTION AND THE ADEQUATE PROTECTION OF WORKS DURING CONSTRUCTION SHALL BE SUBMITTED FOR DESIGNER'S APPROVAL SUPPORTED BY CLEAR CALCULATIONS "AS NEEDED" PRIOR TO COMMENCEMENT OF ERECTION WORKS. FABRICATION AND INSTALLATION LOADS SUCH AS LIFTING FORCES AND LOAD-OUT FORCES ARE TO BE EVALUATED BY THE CONTRACTOR AND SHOWN CLEARLY IN THE ERECTION METHOD STATEMENT WITH ALL THE REQUIRED PRECAUTIONS TO ENSURE THE STRUCTURE, MEMBERS, AND CONNECTIONS SAFETY.
  - PREHEAT AND COOLING TREATMENT: THE PREHEAT AND INTERPASS TEMPERATURE MUST BE SUFFICIENT TO PREVENT CRACKING. FLANGES AT LOCATION OF WEB WELD SHALL BE PREHEATED TO A TOTAL WIDTH OF 200 MM. MAINTAIN SPECIFIED TEMPERATURE DURING WELDING. AVOID OVERHEATING. COOLING RATE SHALL BE SLOW TO AVOID CRACKING, AND TO ENSURE WELDED JOINT DUCTILITY. THE CONTRACTOR SHALL SUBMIT A METHOD STATEMENT ON PREHEATING/COOLING PROCEDURES AND TECHNIQUES BASED ON AWS D1.1 REGULATIONS FOR THE ENGINEER'S APPROVAL PRIOR TO FABRICATION.
  - COMPOSITE STEEL/CONCRETE FLOORING IS NOT TO BE SUBJECT TO CUTS/OPENINGS OTHER THAN THOSE SHOWN ON DRAWINGS PRIOR TO OBTAINING THE ENGINEER'S APPROVAL.
  - TIE PLATES ARE TO BE PROVIDED FOR ALL DOUBLE ANGLES WITH MAXIMUM SPACING EQUAL TO ONE THIRD OF THE MEMBER LENGTH.
  - CONTRACTOR/STEEL DETAILER IS RESPONSIBLE FOR ALL MEMBERS SHOWN ON THESE DRAWINGS INCLUDING, BUT NOT LIMITED TO, OUTRIGGERS, STRUTS, ANGLES, PLATES, FASTENERS, ETC.
  - CONTRACTOR/STEEL DETAILER IS RESPONSIBLE FOR COORDINATING ALL MEMBERS AND STRUCTURAL GEOMETRY IN ALL DIRECTIONS (X, Y, Z) AND REVIEWING THE SAME AGAINST THE INFORMATION SHOWN ON THE ARCHITECTURAL DRAWINGS PRIOR TO FABRICATION. STEEL FRAMING SHALL BE COORDINATED THOROUGHLY WITH ARCHITECTURAL WALL SECTIONS.
  - ALL SECONDARY MEMBERS NOT SHOWN ON STRUCTURAL DRAWINGS ARE PART OF THE SKIN, FINISHES, MEP SUPPORTS, ETC., AND SHALL BE DESIGNED/PROVIDED BY THEIR RESPECTIVE SUPPLIERS AND SHALL BE SUBMITTED FOR ENGINEER'S REVIEW AND APPROVAL.
  - CONTRACTOR/FABRICATOR SHALL INSPECT AND APPROVE THE FINAL ANCHOR BOLTS AND EMBEDDED PLATES LAYOUT PRIOR TO CONCRETE POURING.
  - ALL STEEL MEMBERS ARE TO BE PROTECTED AGAINST CORROSION IN ACCORDANCE WITH PROJECT SPECIFICATIONS EVEN IF NOT SUBJECT TO FIRE PROTECTION.
  - FOR HIGH PERFORMANCE COATING (CORROSION PROTECTION PAINTING), REFER TO AR SPECIFICATIONS.
  - ALL STEEL ELEMENTS SHOWN IN THIS PACKAGE EXCEPT SIDE GIRTS AND PURLINS ARE TO BE FIRE RATED PROTECTED AS PER ARCHITECTURAL DRAWINGS/DOCUMENTS.
  - INTUMESCENT FIRE PROTECTION HAVING 1 HR FIRE RATE IS TO BE APPLIED TO ALL STEEL MEMBERS. REFER TO ARCHITECTURAL DOCUMENTS AND LIFE SAFETY REPORT FOR MORE INFORMATION AND DIFFERENT FIRE RATE FOR SPECIAL CONDITIONS

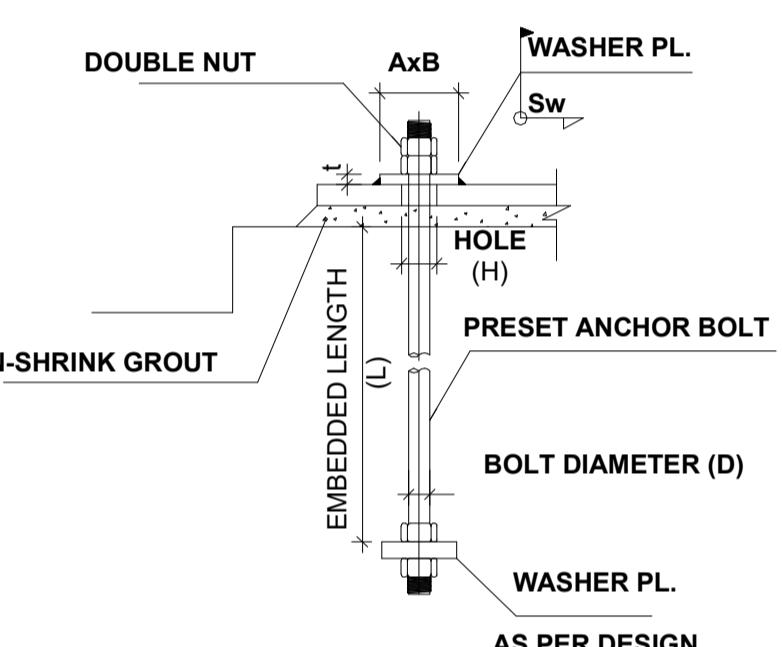
- 24- FOR PAINTING AND FIRE PROOFING OF STEEL STRUCTURE REFER TO ARCH. DOCUMENTS:  
- REFER TO "APPLIED FIREPROOFING" FOR REQUIREMENTS OF FIREPROOFING ON STEEL. FIRE PROTECTION TO ANY STEEL SURFACES THAT ARE PROTECTED ABOVE OR BEHIND OTHER FINISH WORK. WORK ASSEMBLIES SIMILAR TO FURRED CEILINGS, SUSPENDED CEILINGS, AND PARTITIONS OR LINING OR APPLIED ON EXPOSED STEEL IN BACK OF HOUSE SPACES.
- REFER TO "INTUMESCENT FIRE PROTECTION" FOR REQUIREMENTS OF INTUMESCENT FIREPROOFING ON STEEL. APPLICATIONS OF FIREPROOF INTUMESCENT PAINT INCLUDES, BUT SHALL NOT BE LIMITED TO, ANY STRUCTURAL STEEL SURFACE INDICATED TO BE FIRE RESISTANT RATED AND IS EXPOSED TO VIEW AND NOT CONCEALED BEYOND ANY OTHER WORK ITEM SIMILAR TO CLADDING, SUSPENDED CEILING OR LINING.

- 25- NO SAND BEDDING IS ALLOWED IN DIRECT CONTACT WITH COLUMNS AND THE BASE PLATES AT THE GRADE TO AVOID CORROSION OF STEEL SURFACES. ONLY ADHESIVES ON SAND CEMENT SCREED SUCH AS EPOXIES OR CEMENT BASED ADHESIVE (TO BE CONSIDERED BY CONTRACTOR FOR CORE AND SHELL/TENANT SCOPE).

- 26- UNLESS SHOWN ON THE DRAWINGS SITE WELDING WILL BE PERMITTED ONLY FOR MINOR CONNECTIONS SUBJECT TO WRITTEN APPROVAL FROM THE ENGINEER. ALL SITE WELDS ARE TO BE SUBJECT TO 100% NON DESTRUCTIVE TESTING (ULTRASONIC OR X-RAY).

- 27- DOUBLE SIDE FILLET WELD IS REQUIRED FOR FLANGE TO CENTRAL WEB ( $t_w$ ) WELDING THAT SHOULD BE CALCULATED BASED ON SHEAR FLOW OF SHEAR CAPACITY OF THE WEB OR 6MM WHICHEVER IS GREATER.  
28- PARTIAL PENETRATION WELD IS REQUIRED FOR FLANGE TO SIDE WEBS ( $t_w$ ) WELDING THAT SHOULD BE CALCULATED BASED ON SHEAR FLOW OF SHEAR CAPACITY OF THE SIDE WEBS BUT NOT LESS THAN 0.7XTHICKNESS OF THE SIDE WEB.

#### F- ANCHOR BOLTS GENERAL DETAILS



TYPICAL DETAILS FOR PRESET ANCHOR BOLTS  
UNLESS NOTED OTHERWISE ON DRAWINGS

| D<br>(MM) | H<br>(MM) | Ax B<br>(MM) | ASTM F1554 GR.    |               | L<br>(MM) | (Sw) <sub>x</sub><br>(MM) | AS PER DETAILS |
|-----------|-----------|--------------|-------------------|---------------|-----------|---------------------------|----------------|
|           |           |              | 36 & 55<br>t (MM) | 105<br>t (MM) |           |                           |                |
| 16        | 28        | 45 X 45      | 6                 | 10            | 5         |                           |                |
| 20        | 35        | 55 X 55      | 8                 | 12            | 5         |                           |                |
| 22        | 40        | 65 X 65      | 10                | 15            | 6         |                           |                |
| 24        | 45        | 70 X 70      | 10                | 15            | 6         |                           |                |
| 27        | 48        | 75 X 75      | 12                | 15            | 8         |                           |                |
| 30        | 50        | 80 X 80      | 15                | 20            | 8         |                           |                |
| 36        | 55        | 100 X 100    | 15                | 20            | 10        |                           |                |
| 42        | 65        | 115 X 115    | 20                | 25            | 12        |                           |                |
| 48        | 80        | 130 X 130    | 20                | 30            | 12        |                           |                |
| 52        | 90        | 145 X 145    | 20                | 30            | 12        |                           |                |
| 56        | 95        | 160 X 160    | 20                | 30            | 12        |                           |                |

- WASHER PLATES SHOULD NOT BE WELDED TO BASE PLATE WHEN SHEAR KEYS ARE USED, OR IN CASE OF SLOTTED HOLES FOR SLIDING SUPPORTS.
- THE SHEAR POCKET SHALL BE FILLED TOTALLY WITH NON-SHRINKAGE GROUT AFTER THE INSTALLATION OF THE COLUMN. THE AIR BUBBLES ARE NOT ALLOWED INSIDE THE POCKETS TO ENSURE FULL BEARING CONTACT FOR TRANSFERRING THE SHEAR FORCE TO CONCRETE.
- CONTRACTOR HAS TO PROVIDE THE NECESSARY HOLES IN THE BASE PLATE WITH MINIMUM DIAMETER FOR GROUTING PROCESS AFTER GETTING THE ENGINEER'S APPROVAL.
- CONTRACTOR TO ENSURE THAT THE LOCATION OF THE ANCHOR BOLTS IS AT CENTER OF THE SLOTTED AND OVERSIZED HOLES AFTER ERECTION, ANY DEVIATION MUST BE REPORTED TO THE ENGINEER FOR APPROVAL.
- GROUT THICKNESS IS CONSIDERED 40 MM TO ENSURE HIDING THE GROUT UNDER THE FINISHES AS FFL IS 40 MM ABOVE TOP OF CONCRETE PEDESTALS.

- 6- THE APPROPRIATE THROUGH THICKNESS TENSION PROPERTIES (Z-QUALITY) MATERIAL IS TO BE UTILIZED TO DIMINISH POSSIBILITY OF LAMELLAR TEARING AND CRACKS.
- 7- HEADED STUDS TYPE SHEAR CONNECTORS ARE TO CONFORM TO AWS D1.1, TYPE B, HAVING A MINIMUM YIELD STRESS OF 345 N/MM<sup>2</sup> (51000 PSI) AT 0.2% AND MINIMUM TENSILE STRENGTH OF 450N/MM<sup>2</sup> (65000 PSI), MADE FROM STEEL TO ASTM A108, WITH MECHANICAL PROPERTIES TO ASTM A370, AND APPLIED

#### G- ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS)

- 1- ARCHITECTURALLY EXPOSED STRUCTURAL STEEL IS TO BE ERECTED, AND DETAILED TO ACHIEVE THE REQUIRED CLASS SPECIFIED ON THE ARCHITECTURAL DRAWINGS AND PROJECT DOCUMENTS

- 2- ALL EXPOSED STEEL ELEMENTS DESIGNATED AS ARCHITECTURALLY EXPOSED STRUCTURAL STEEL MUST BE FABRICATED AND ERECTED AS PER THE REQUIREMENTS OF AISC 303-16 AND THE RELEVANT ARCHITECTURAL DOCUMENTS AND SPECIFICATIONS.
- 3- FOR AESS ELEMENTS, REFER TO ARCHITECTURAL DOCUMENTS. AESS 04 IS TO BE USED FOR STEEL STRUCTURE OF HYDROPONICS (JORDAN). THE VALUES INDICATED ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS AND DOCUMENTS.

#### H- PERFORMANCE REQUIREMENTS

- ALL STEEL - TO - STEEL CONNECTION DETAILS SHOULD BE DESIGNED AND DETAILED BY THE STEEL FABRICATOR, BASED ON STRAINING ACTIONS SUPPLIED BY THE ENGINEER, SUBJECT TO THE ENGINEER APPROVAL BEFORE STARTING FABRICATION.
- FABRICATOR TO ENGINEER ALL SECONDARY STEEL ELEMENTS REQUIRED BY THE CONTRACT DOCUMENTS, INCLUDES BUT NOT LIMITED TO: CATWALKS, HANDRAILS, LADDERS, AND ALL SUBSTRUCTURES FOR CEILING AND CLADDING AND ELECTRO - MECHANICAL INSTALLATION.
- ENGINEERING RESPONSIBILITY: ENGAGE A FABRICATOR WHO UTILIZES A QUALIFIED PROFESSIONAL ENGINEER TO PREPARE CALCULATIONS, SHOP DRAWINGS, AND OTHER STRUCTURAL DATA FOR STRUCTURAL STEEL CONNECTIONS.

#### I- LIST OF ABBREVIATIONS & SYMBOLS

|       |                         |
|-------|-------------------------|
| EXP   |                         |
| FL    | FLANGE                  |
| GA    | GAUGE                   |
| H     | HINGED CONNECTION       |
| M     | RIGID MOMENT CONNECTION |
| P. P  | PARTIAL PENETRATION     |
| PL    | PLATE                   |
| S     | SLOTTED CONNECTION      |
| STIFF | STIFFENER               |

Note:  
Steel fabrication drawings for steel elements and connection details to be done by a specialist and submitted for the consultant engineer for approval prior construction.

|                |                     |             |
|----------------|---------------------|-------------|
| Key Plan:-     |                     |             |
|                |                     |             |
| ABBREVIATIONS: |                     |             |
| REFERENCES     |                     |             |
| MDL TYP        | MDL DISC.           | MDL NAME    |
| REVISION       |                     |             |
| Rev            | Description         | Date        |
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| B                               | APPROVED AS NOTED   |
| C                               | REVISE & RESUBMIT   |
| D                               | REJECTED            |
| E                               | RECEIPT ACKNOWLEDGE |

PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT  
RIYADH KINGDOM OF SAUDI ARABIA

CLIENT (DEVELOPMENT MANAGER):

MAIN CONTRACTOR: 360 interiors  
PEER REVIEW CONSULTANT: DAR AL RIYADH

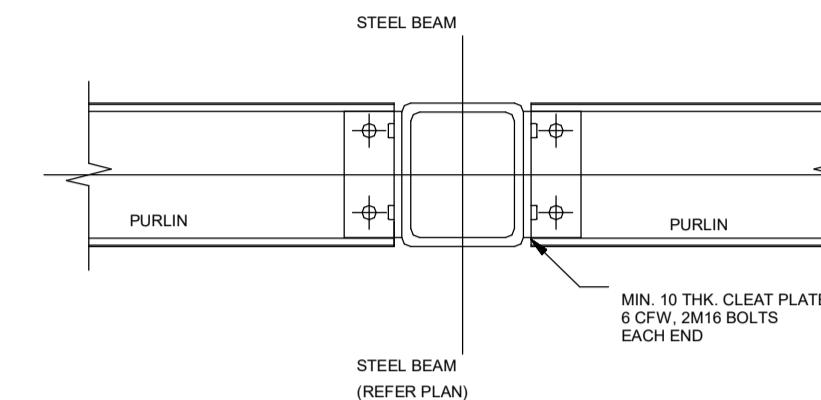
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STRUCTURAL CONSULTANT :

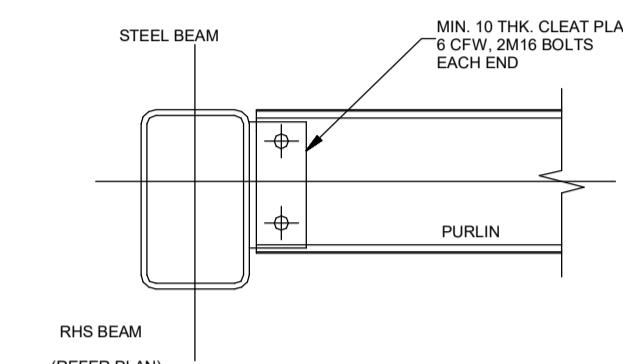
International DAR Engineering Consultancy

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| DATE:               | 26.Jan.2025                     |           |
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GENERAL NOTES:  
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4- THESE DRAWINGS SHOULD BE REFERRED TO THE IMMEDIATE ATTENTION OF THE ARCHITECT BEFORE EXECUTING THE WORKS.  
5- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DOCUMENTATION FORMING THE CONSTRUCTION CONTRACT.  
6- ALL EXISTING DIMENSIONS/LEVELS ETC. INDICATED ON DRAWINGS ARE TO BE VERIFIED ON SITE.



PURLIN ON SHALLOW BEAM  
WITH FULL DEPTH FIN PLATE

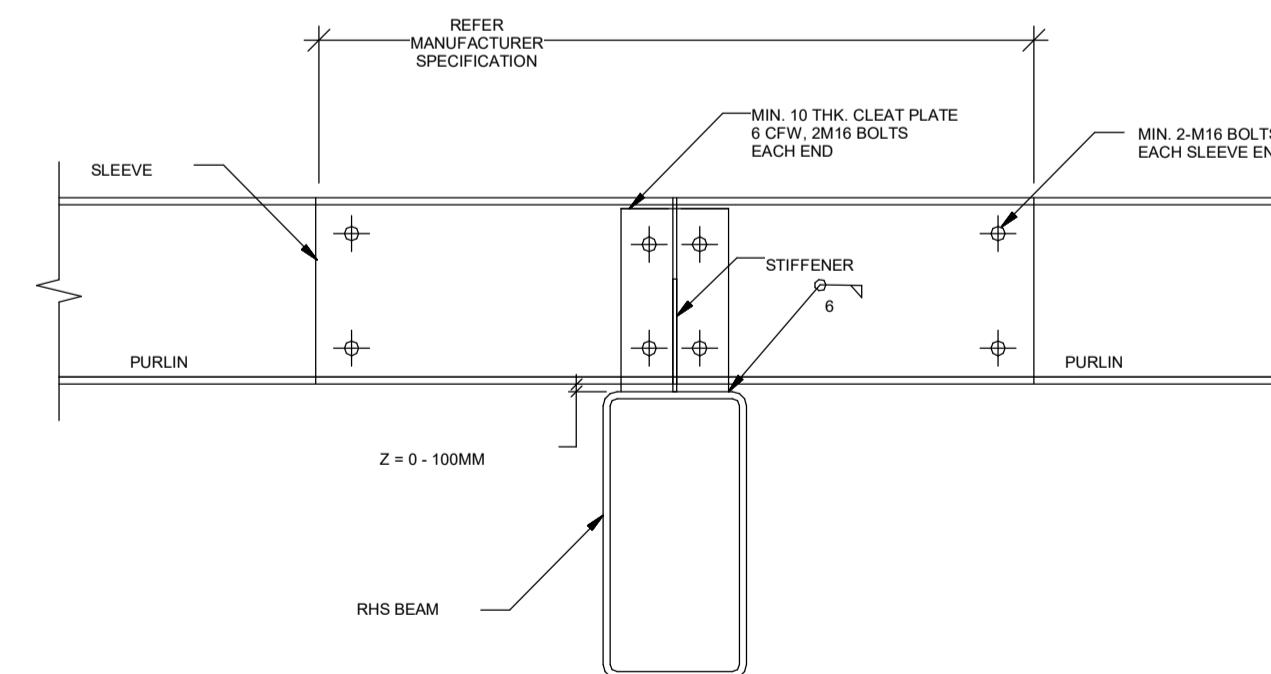


PURLIN ON RHS  
BEAM WITH FULL DEPTH FIN PLATE

**C | TYPICAL PURLIN DETAIL (BUTT SYSTEM) - TYPE 1**  
NTS Ref."00101-IDS-E01-ZZZ-SHD-SE-003026"

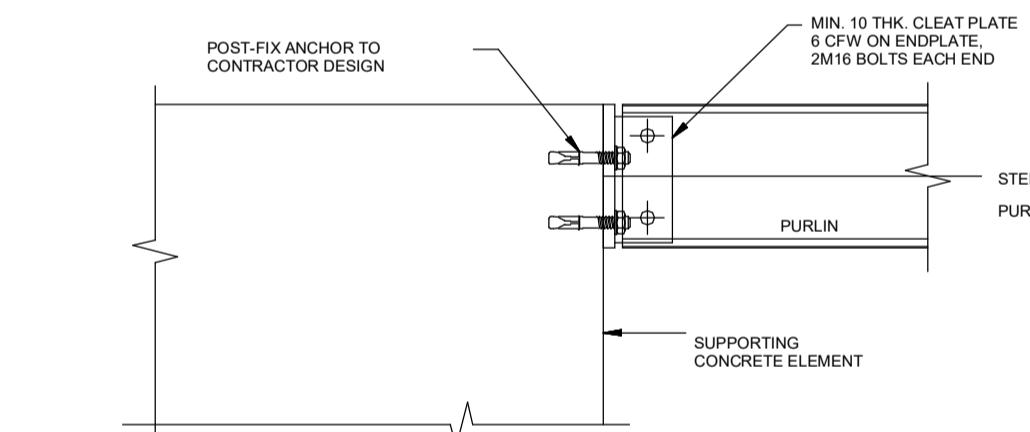
NOTE:  
HOLES, EDGE DISTANCE & TOLERANCES AS PER  
PURLIN MANUFACTURER SPECIFICATION (TYP).

**A | TYPICAL PURLIN DETAIL (BUTT SYSTEM) - TYPE 3**  
NTS Ref."00101-IDS-E01-ZZZ-SHD-SE-003026"

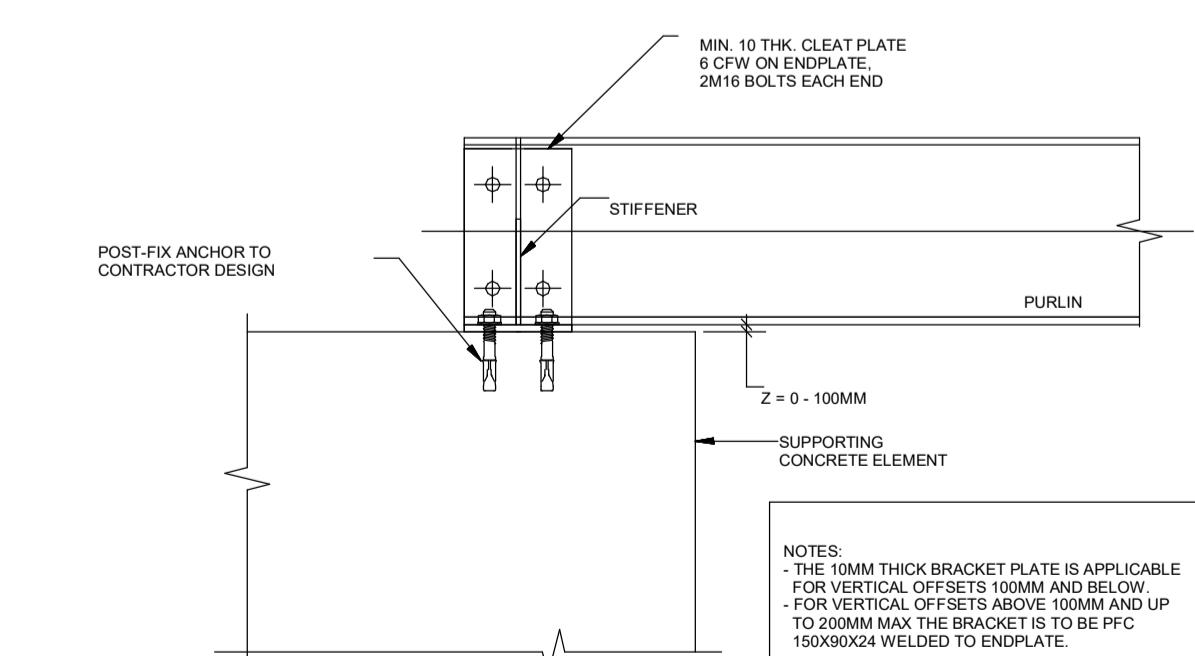


PURLIN WITH VERTICAL OFFSET OF 100MM AND BELOW

**G | TYPICAL PURLIN DETAIL (SLEEVE SYSTEM ON RHS BEAM) - TYPE 3**  
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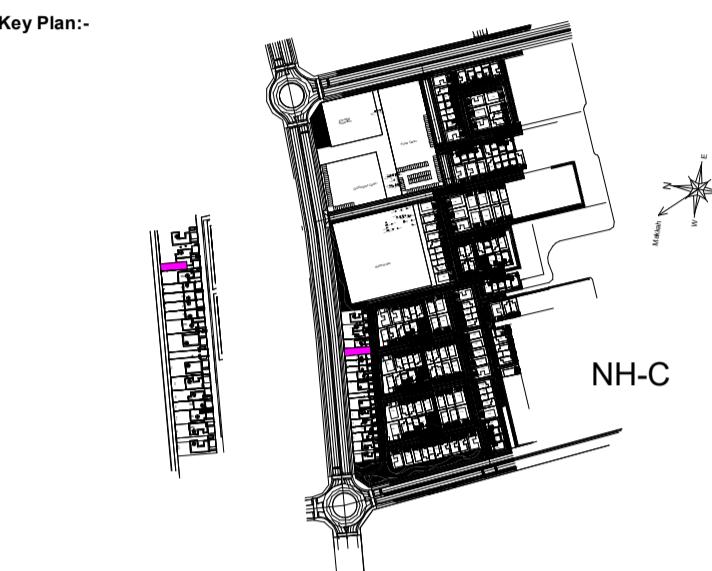


PURLIN SIDE FIXED  
TO CONCRETE ELEMENT



PURLIN TOP FIXED  
TO CONCRETE ELEMENT

**D | TYPICAL PURLIN DETAIL (BUTT SYSTEM) - TYPE 5**  
NTS Ref."00101-IDS-E01-ZZZ-SHD-SE-003026"



| ABBREVIATIONS: |           |          |
|----------------|-----------|----------|
| REFERENCES     |           |          |
| MDL TYP        | MDL DISC. | MDL NAME |
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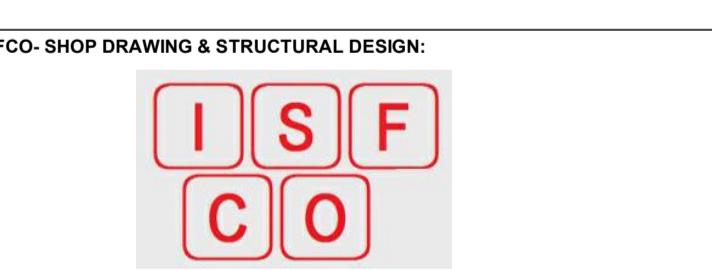
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| C                               | REVISE & RESUBMIT   |  |
| D                               | REJECTED            |  |
| E                               | RECEIPT ACKNOWLEDGE |  |

PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT RIYADH KINGDOM OF SAUDI ARABIA



Roshn Real Estate

MAIN CONTRACTOR:



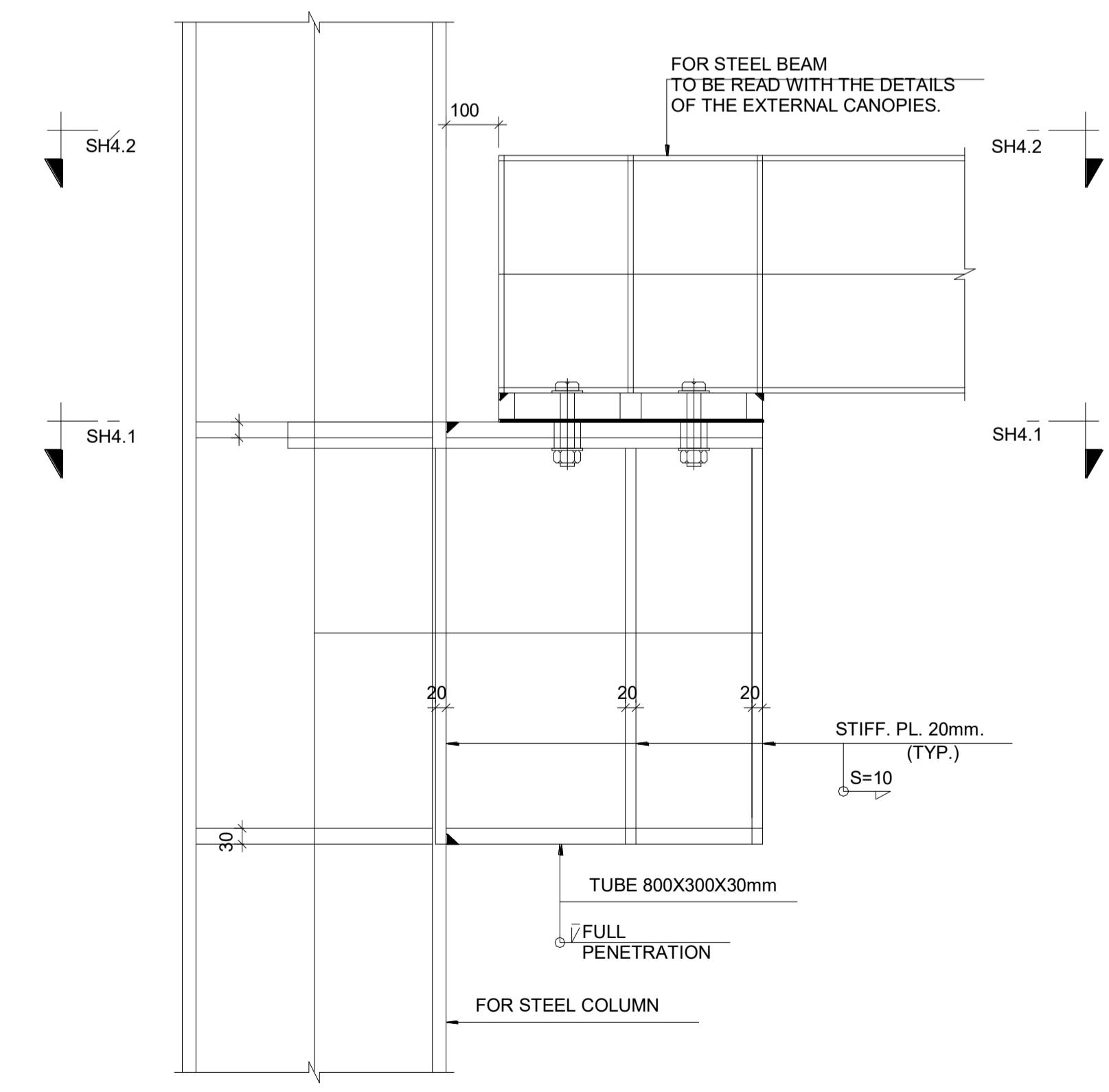
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STAGE: Shop Drawing DISC:

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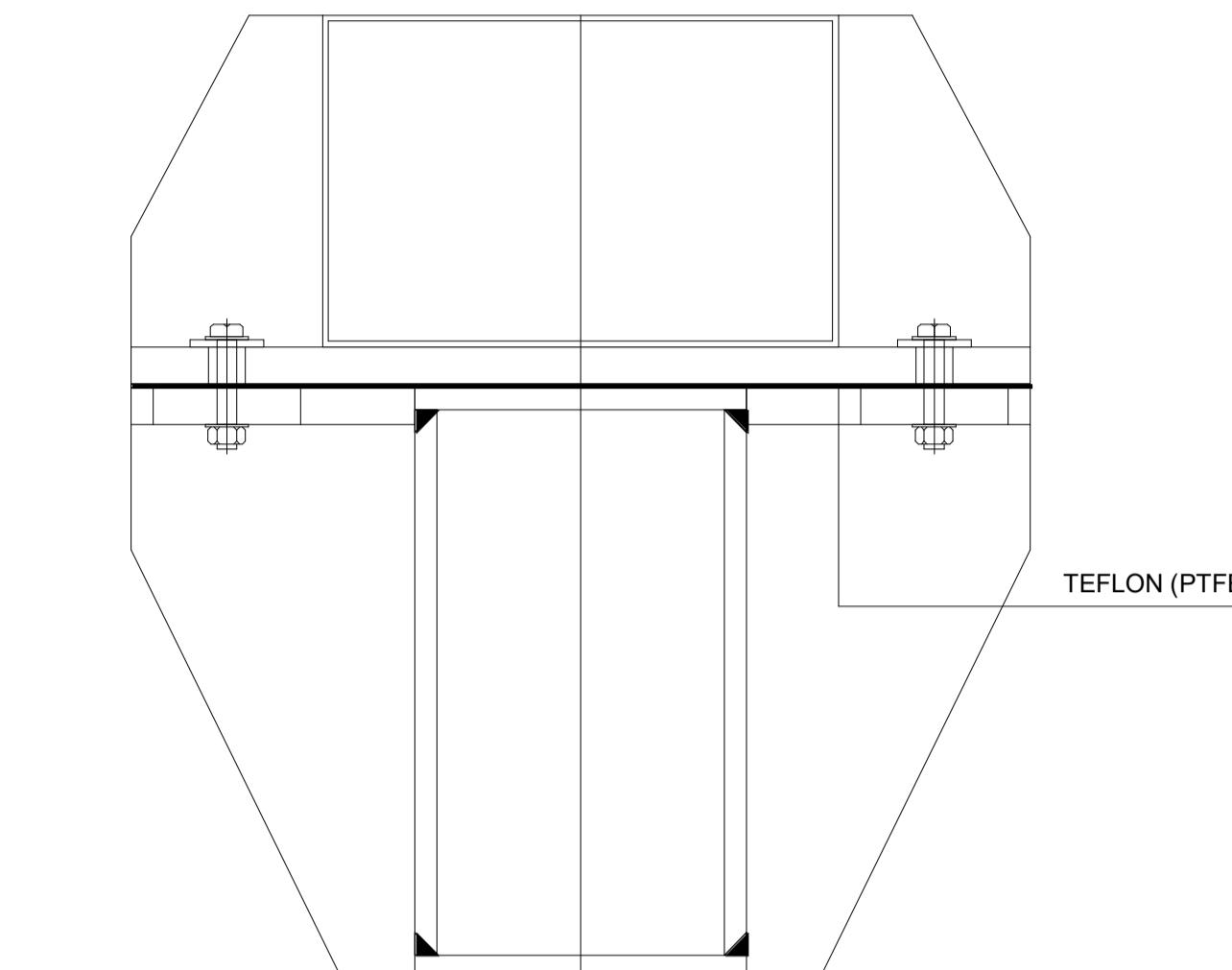
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| DATE:       |                                 |            |          |
| 26.Jan.2025 | CHECKED BY                      |            | REVISION |



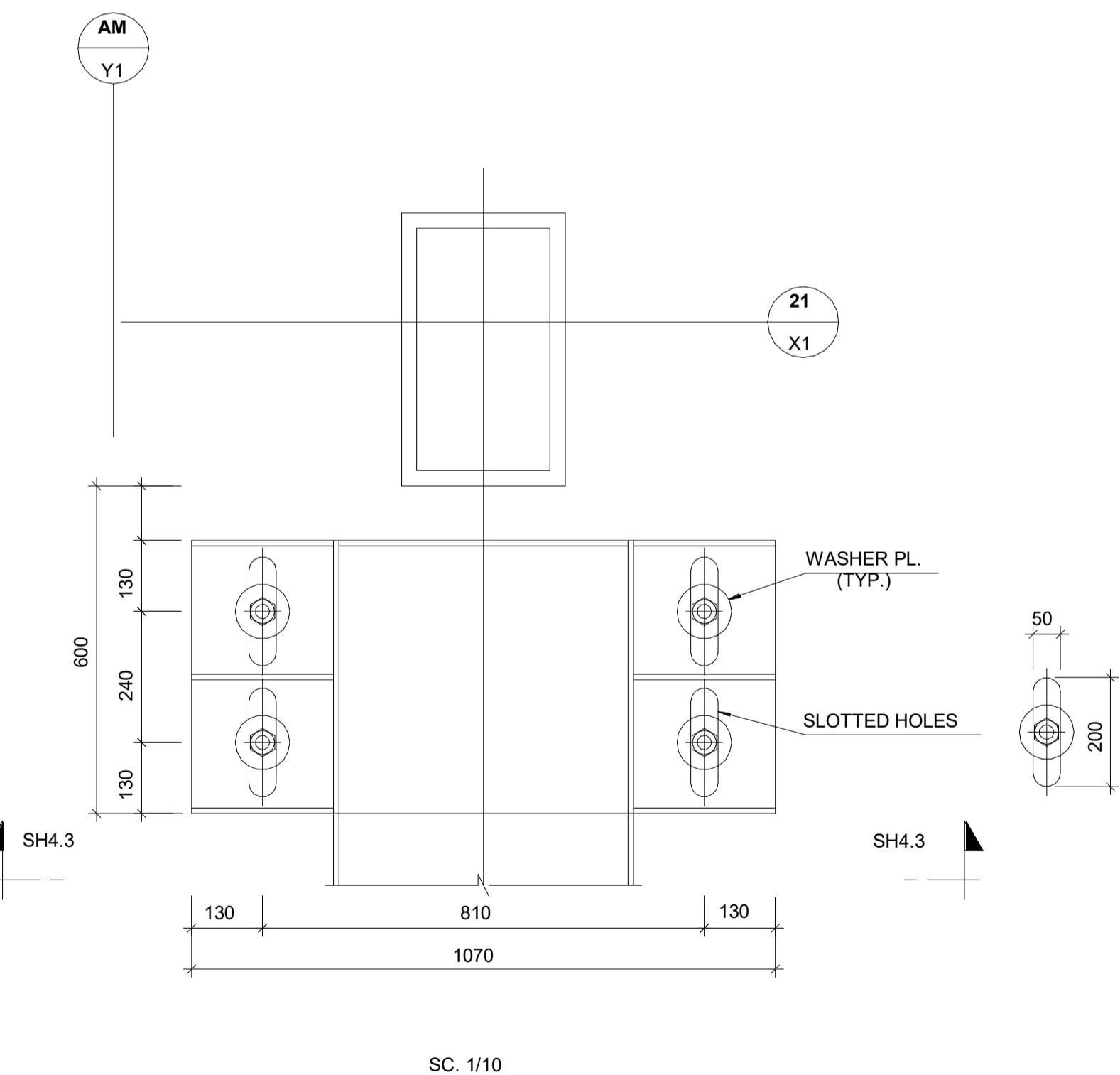
SECT. SH4.3-S  
SC. 1/10

S



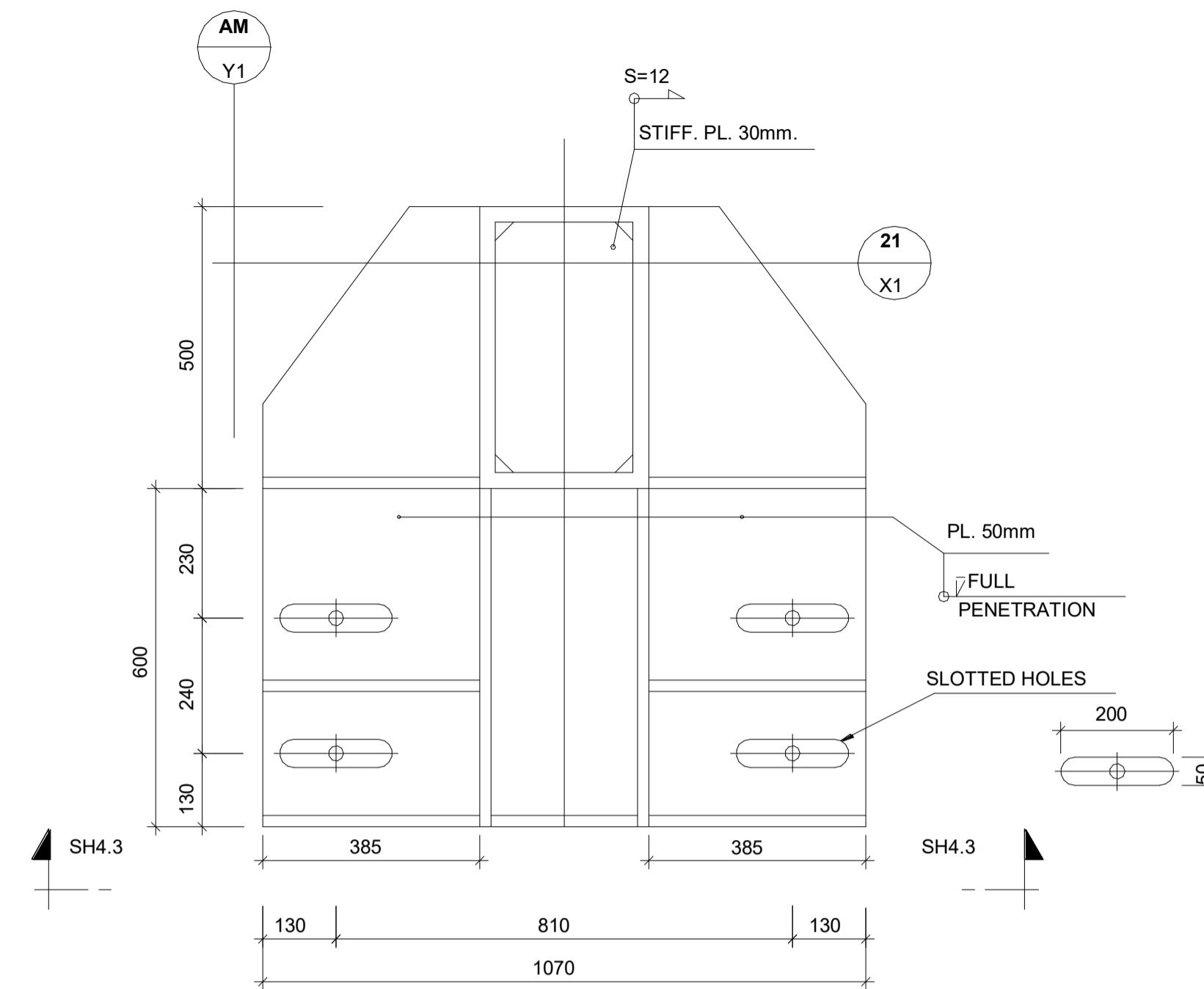
SECT. SH4.3-S

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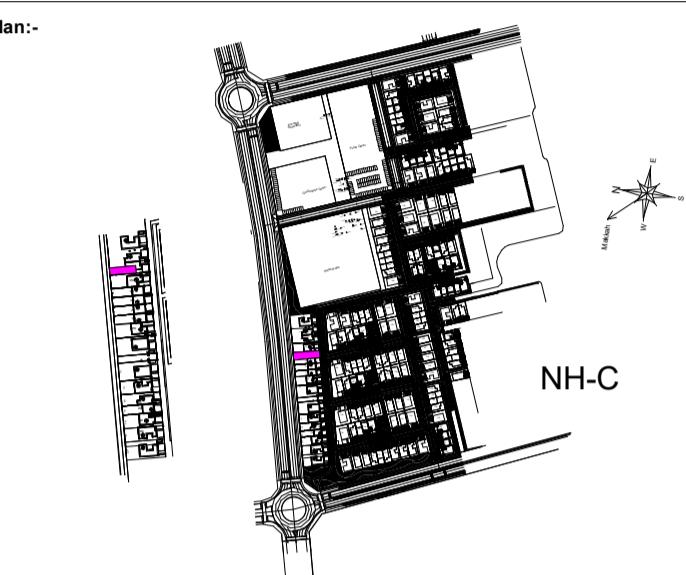
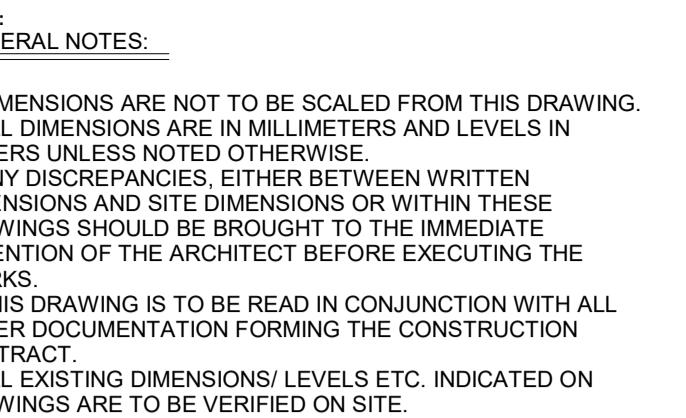
SC. 1/10

**Note:**  
Steel fabrication drawings for steel elements and connection details to be done by a specialist and submitted for the consultant engineer for approval prior construction.



SECT. SH4.1-SH4.1

SC. 1/10



#### **VARIATIONS:**

**PEER REVIEW CONSULTANT APPROVAL**

#### **SHOP DRAWING REVIEW / APPROVAL**

|                     |  |  |
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| APPROVED            |  |  |
| APPROVED AS NOTED   |  |  |
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| REJECTED            |  |  |
| RECEIPT ACKNOWLEDGE |  |  |

**TITLE:** GARDEN COLLECTION VILLAS PROJECT  
RIYADH KINGDOM OF SAUDI ARABIA

## (DEVELOPMENT MANAGER):

روشن العقارية Roshn Real Estate



• 100 •



Journal of Oral Rehabilitation 2013; 40(12): 937-944



TURAL CONSULTANT :



G: VII LA E01-SB-NO STYL E(0255) ZONE: NHC

**Shop Drawing**

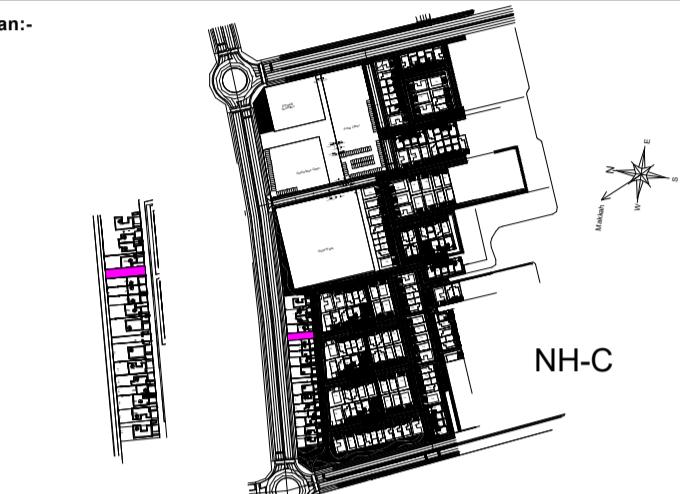
**FIGURE 1**

## GENERAL DETAILS 08

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| /50    |                                 |  |            |   |
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| LEGENDS: |                     |
|----------|---------------------|
|          | COLUMNS CONTINUE    |
|          | WALL CONTINUE       |
|          | COLUMN / WALL BELOW |
|          | PLANTED COLUMN      |
|          | SLAB OPENING        |



**ABBREVIATIONS:**

**REFERENCES**

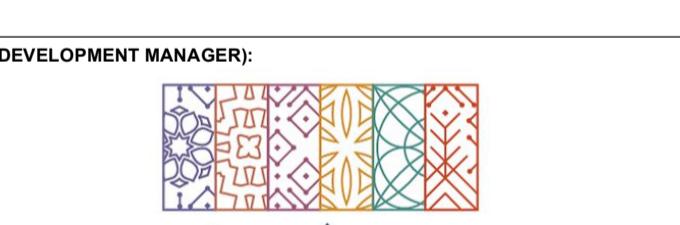
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| D                               | REJECTED            |
| E                               | RECEIPT ACKNOWLEDGE |

**PROJECT TITLE:** GARDEN COLLECTION VILLAS PROJECT  
RIYADH KINGDOM OF SAUDI ARABIA



**MAIN CONTRACTOR:**



**PEER REVIEW CONSULTANT:**



**ISFCO- SHOP DRAWING & STRUCTURAL DESIGN:**



**STRUCTURAL CONSULTANT :**



**BUILDING:** VILLA E01-SB-NO STYLE(0255) **ZONE:** NHC

**STAGE:** Shop Drawing **DISC:**

**DRAWING TITLE:**

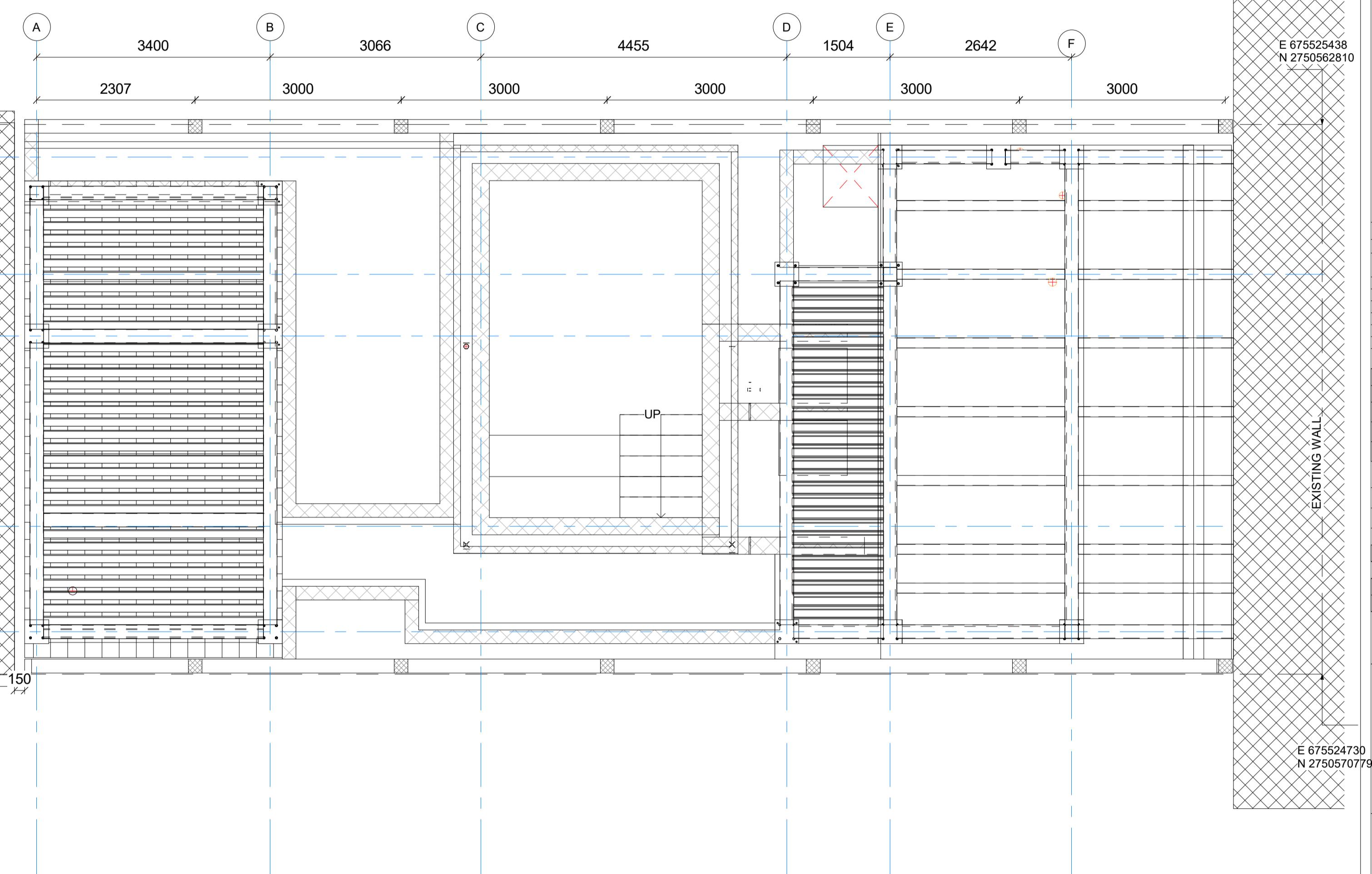
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**DRAWING NO.** 00101-IDS-E01-ZZZ-SHD-SE-010014

**SCALE:** 1 : 50 **DRAWN BY:** [Blank] **PAPER SIZE:** A1

**As indicated** **DATE:** 26.Jan.2025 **CHECKED BY:** [Blank] **REVISION:**

26.Jan.2025



1 | OVERALL PLAN LAYOUT  
1 : 50 Ref."00101-IDS-E01-ZZZ-SHD-SE-010014"

GERAL NOTES:

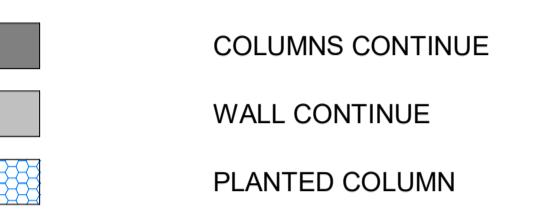
MENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING.  
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Y DISCREPANCIES, EITHER BETWEEN WRITTEN  
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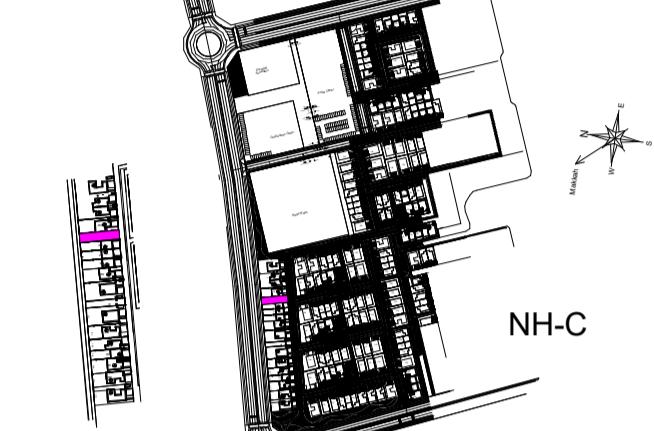
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TRACT.

L EXISTING DIMENSIONS/ LEVELS ETC. INDICATED ON  
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#### **GENDS:**



**Plan:-**



## **VIATIONS:**

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| APPROVED                        |  |  |
| APPROVED AS NOTED               |  |  |
| REVISE & RESUBMIT               |  |  |
| REJECTED                        |  |  |
| RECEIPT ACKNOWLEDGE             |  |  |

**TITLE:** GARDEN COLLECTION VILLAS PROJECT  
RIYADH KINGDOM OF SAUDI ARABIA

## (DEVELOPMENT MANAGER):

روشن العقارية | Roshn Real Estate



روشن العقارية Roshn Real Estate

CONTRACTOR:



200



SHOP DRAWING & STRUCTURAL DESIGN:



**TURAL CONSULTANT :**

**DAR** International  
Engineering  
Consultancy

**Fonte:** NHC

VILLA E01-SB-NO STYLE(0255) ESR: N/A

Shop Drawing

# EDESTAL COLUMNS AND WALLS

## LAYOUT

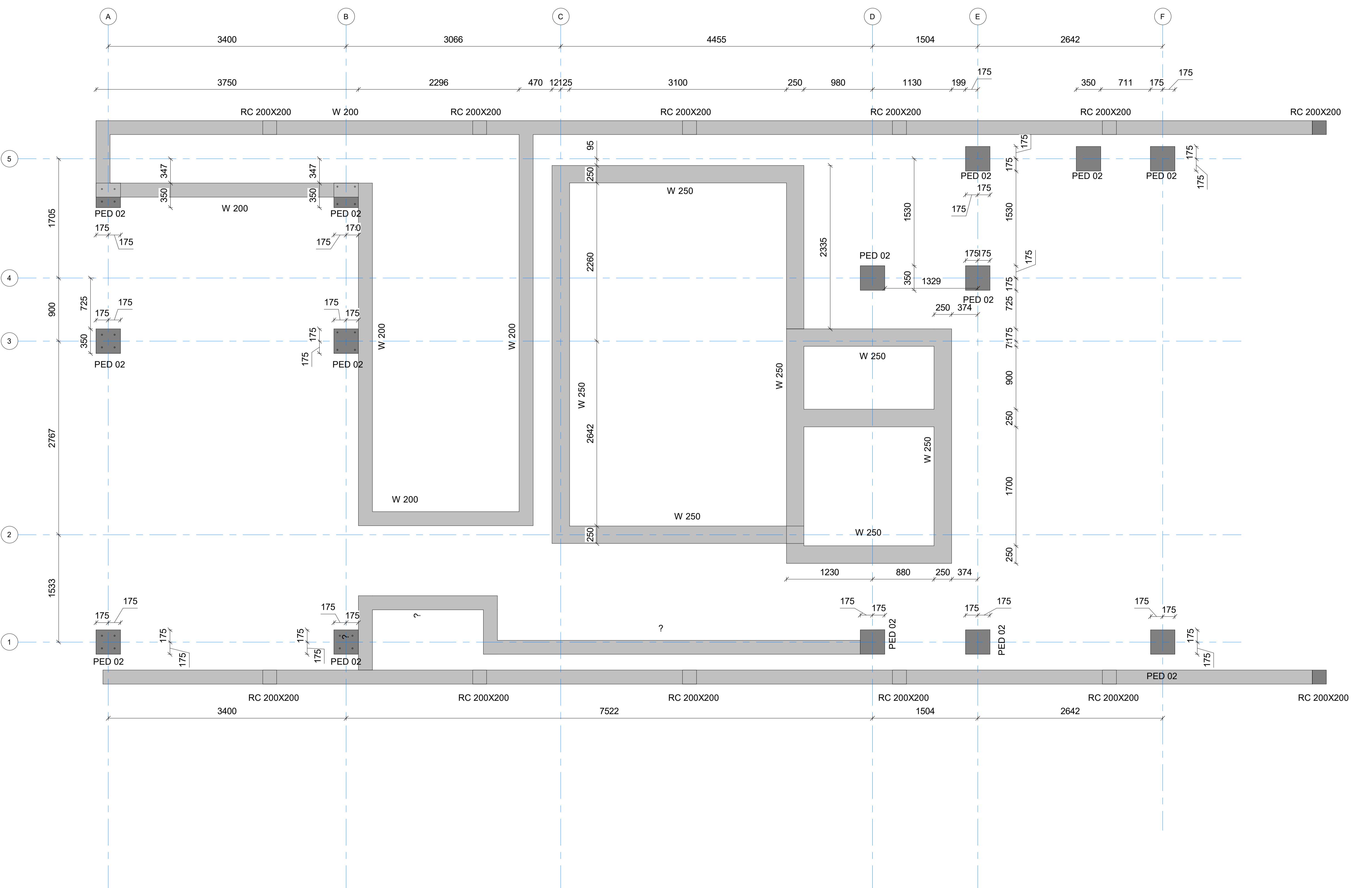
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EE-1001405 E01 EEE CND SE 010010

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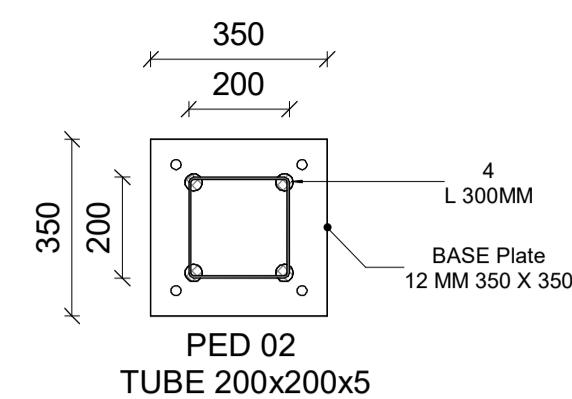
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- FOR BASE PLATES AND ANCHORS  
PLEASE CHECK THESE ENLARGEMENTS:

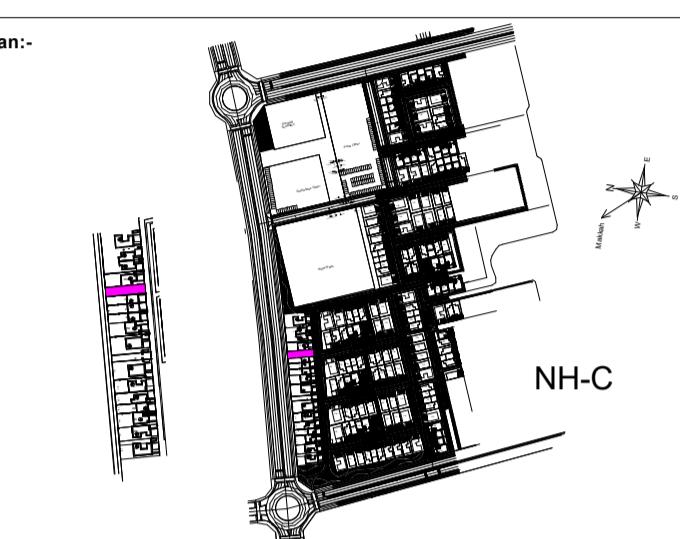


2 | CONNECTION DETAILS OF TUBE 200X200X5

1 : 15 Ref."00101-IDS-E01-ZZZ-SHD-SE-010016"

**LEGENDS:**

- COLUMNS CONTINUE
- WALL CONTINUE
- PLANTED COLUMN



| ABBREVIATIONS: |                     |             |
|----------------|---------------------|-------------|
| REFERENCES     |                     |             |
| MDL TYP        | MDL DISC.           | MDL NAME    |
|                |                     |             |
|                |                     |             |
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| C                               | REVISE & RESUBMIT   |
| D                               | REJECTED            |
| E                               | RECEIPT ACKNOWLEDGE |

PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT  
RIYADH KINGDOM OF SAUDI ARABIA



Roshn Real Estate

MAIN CONTRACTOR:



ISFCO - SHOP DRAWING & STRUCTURAL DESIGN:



STRUCTURAL CONSULTANT :



BUILDING: VILLA E01-SB-NO STYLE(0255) ZONE: NHC

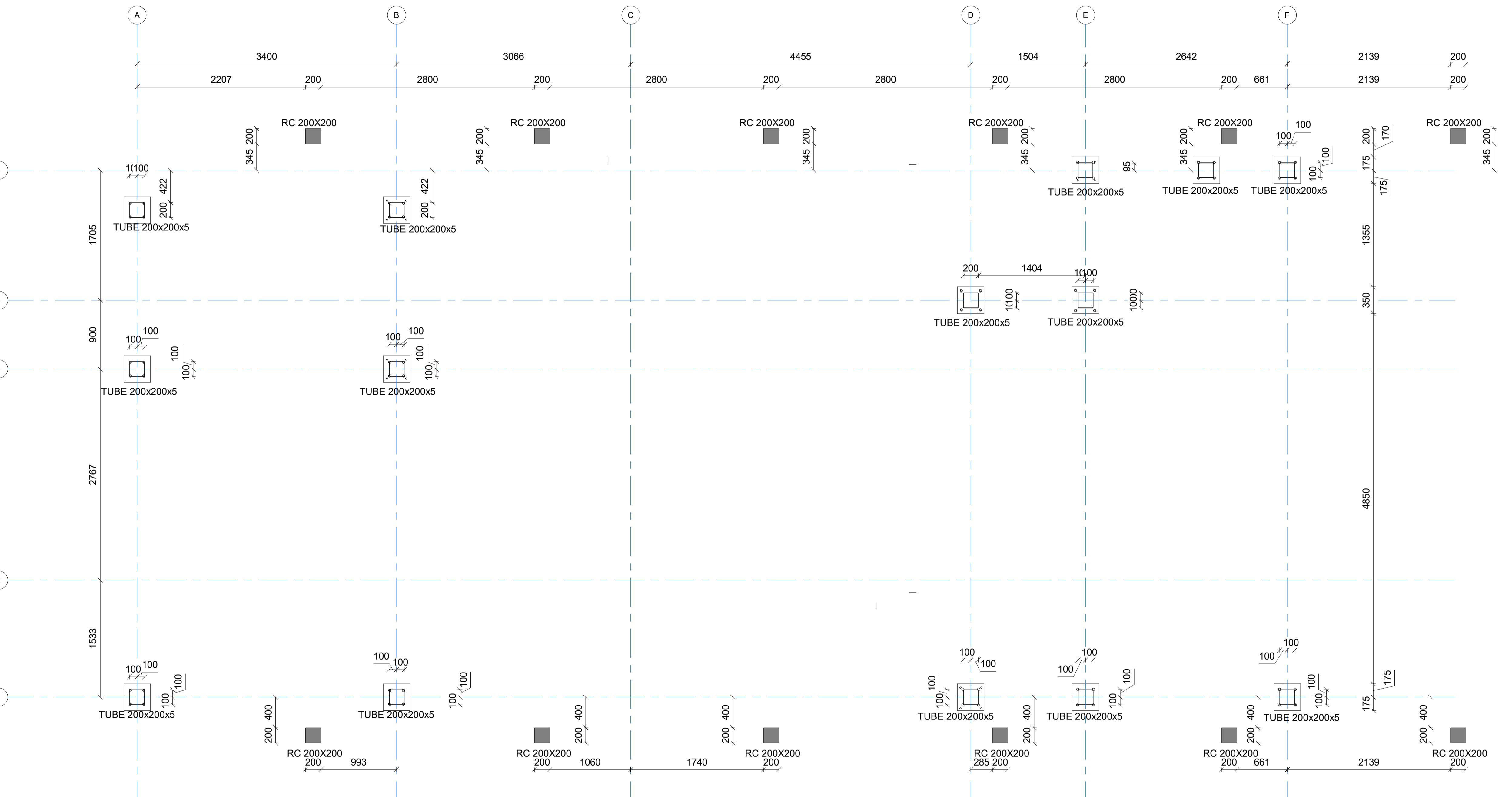
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DRAWING TITLE: GROUND FLOOR COLUMNS AND WALLS SETTING OUT

DRAWING NO.: 00101-IDS-E01-ZZZ-SHD-SE-010016

SCALE: As indicated DRAWN BY: PAPER SIZE: A1

DATE: 26.Jan.2025 CHECKED BY: REVISION:

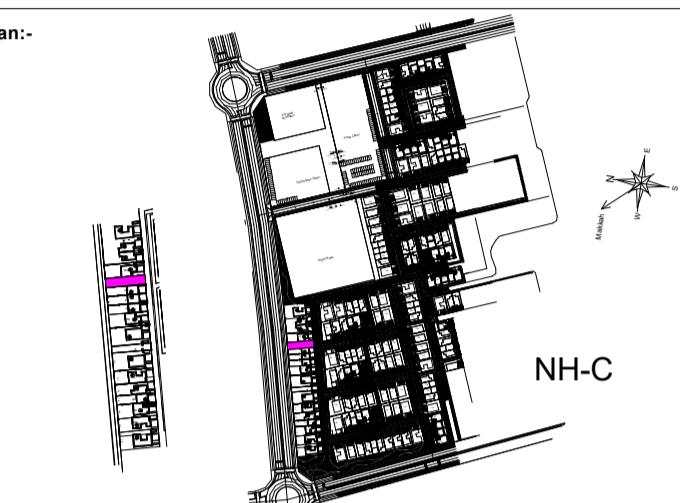


1 | GROUND FLOOR STEEL COLUMNS AND WALLS SETTING OUT

1 : 30 Ref."00101-IDS-E01-ZZZ-SHD-SE-010016"

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| LEGENDS: |                     |
|----------|---------------------|
|          | COLUMNS CONTINUE    |
|          | WALL CONTINUE       |
|          | COLUMN / WALL BELOW |
|          | PLANTED COLUMN      |
|          | SLAB OPENING        |



| ABBREVIATIONS: |           |          |
|----------------|-----------|----------|
| REFERENCES     |           |          |
| MDL TYP        | MDL DISC. | MDL NAME |
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| C                               | REVISE & RESUBMIT   |
| D                               | REJECTED            |
| E                               | RECEIPT ACKNOWLEDGE |

PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT  
RIYADH KINGDOM OF SAUDI ARABIA

CLIENT (DEVELOPMENT MANAGER):

MAIN CONTRACTOR:

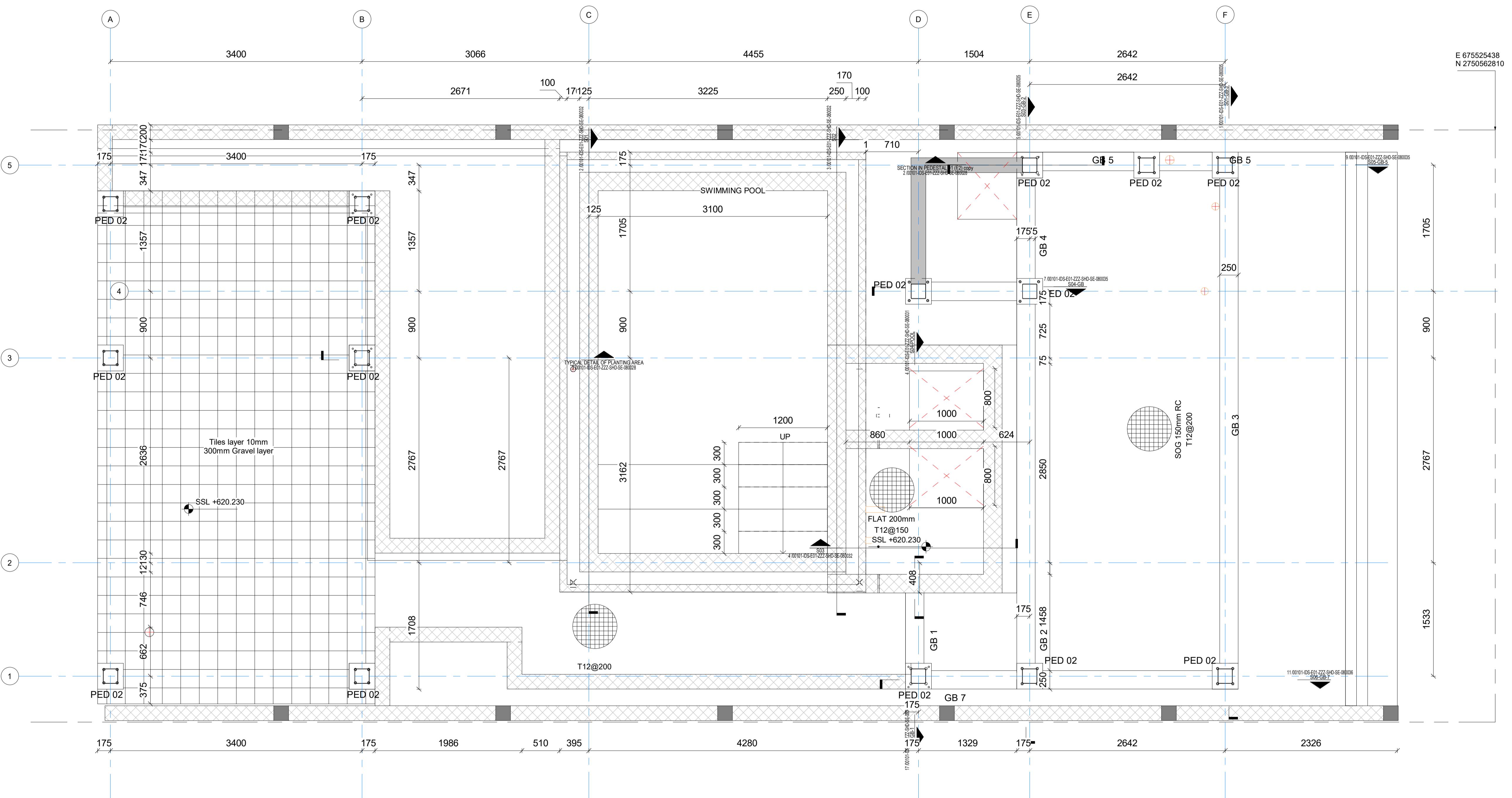
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ISFCO- SHOP DRAWING & STRUCTURAL DESIGN:

STRUCTURAL CONSULTANT :

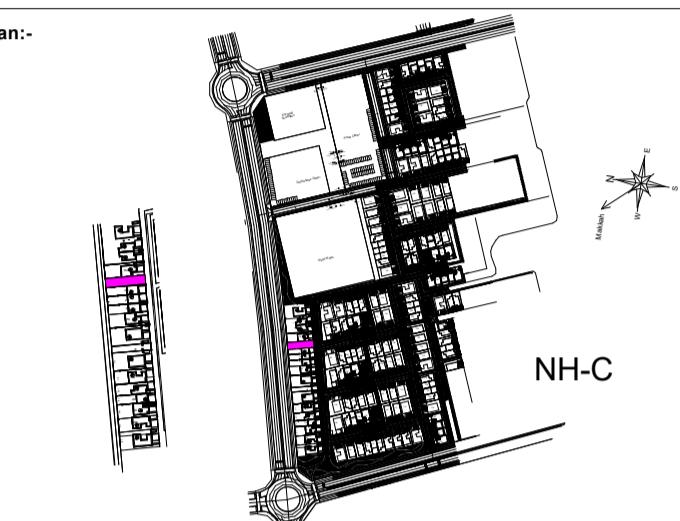
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| STAGE:         | Shop Drawing                    | DISC:    |               |
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| DRAWING NO.    | 00101-IDS-E01-ZZZ-SHD-SE-010017 |          |               |
| SCALE:         | As indicated                    | DRAWN BY | PAPER SIZE A1 |
| DATE:          | 26.Jan.2025                     |          |               |
| REVISION:      | CHECKED BY                      |          |               |

1 | GROUND FLOORS FRAMING PLAN  
1 : 30 Ref."00101-IDS-E01-ZZZ-SHD-SE-010017"



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| LEGENDS: |                     |
|----------|---------------------|
|          | COLUMNS CONTINUE    |
|          | WALL CONTINUE       |
|          | COLUMN / WALL BELOW |
|          | PLANTED COLUMN      |
|          | SLAB OPENING        |



ABBREVIATIONS:

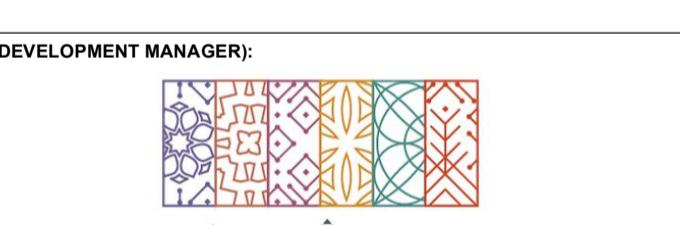
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| B                               | APPROVED AS NOTED   |  |  |  |
| C                               | REVISE & RESUBMIT   |  |  |  |
| D                               | REJECTED            |  |  |  |
| E                               | RECEIPT ACKNOWLEDGE |  |  |  |

PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT  
RIYADH KINGDOM OF SAUDI ARABIA



Roshn Real Estate

MAIN CONTRACTOR:



PEER REVIEW CONSULTANT:



ISFCO- SHOP DRAWING & STRUCTURAL DESIGN:



STRUCTURAL CONSULTANT :



BUILDING: VILLA E01-SB-NO STYLE(0255) ZONE: NHC

STAGE: Shop Drawing DISC:

DRAWING TITLE:

FIRST FLOOR FRAMING PLAN

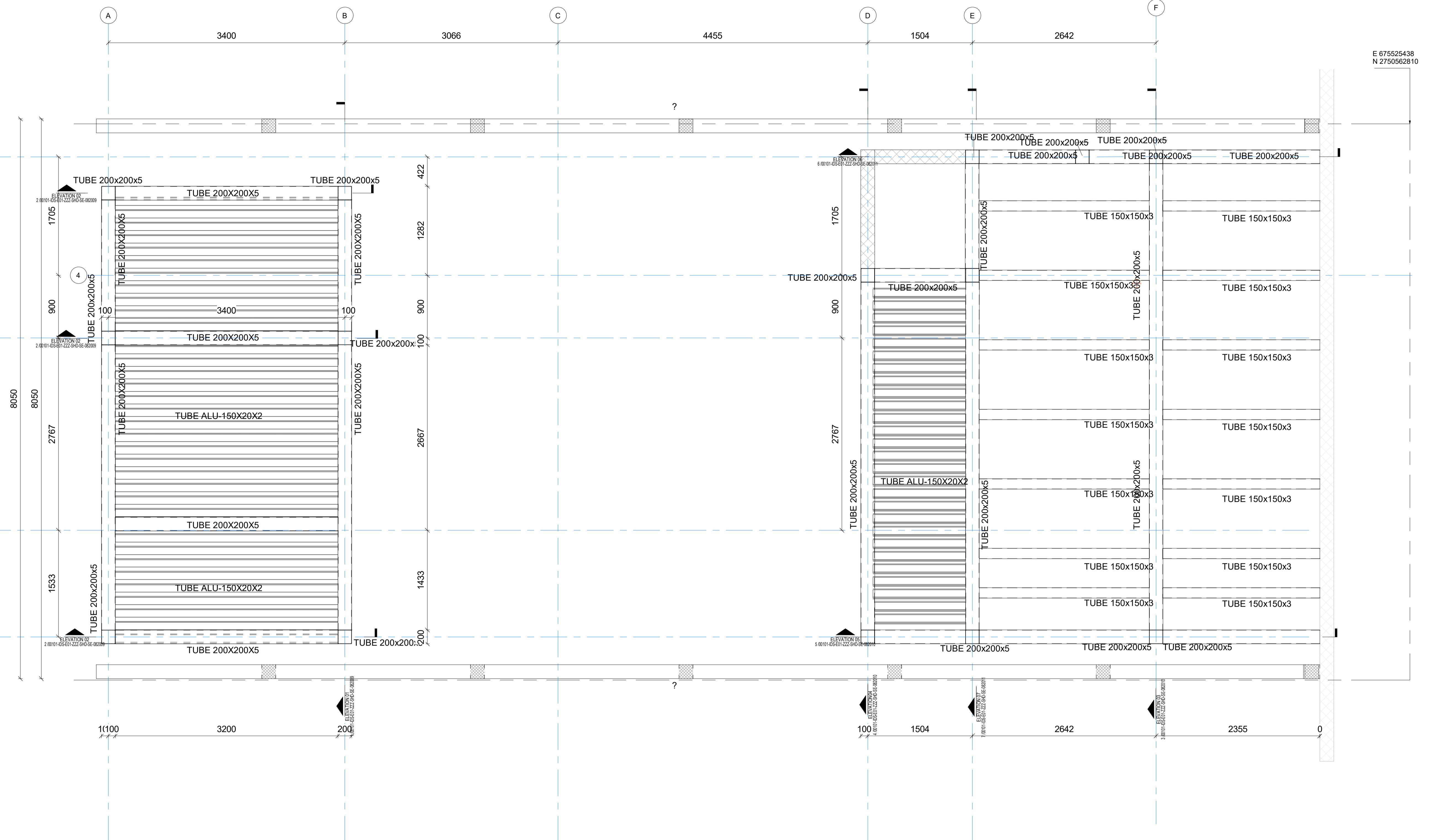
DRAWING NO. 00101-IDS-E01-ZZZ-SHD-SE-010018

SCALE: As indicated DRAWN BY \_\_\_\_\_

DATE: 26.Jan.2025 CHECKED BY \_\_\_\_\_

PAPER SIZE A1

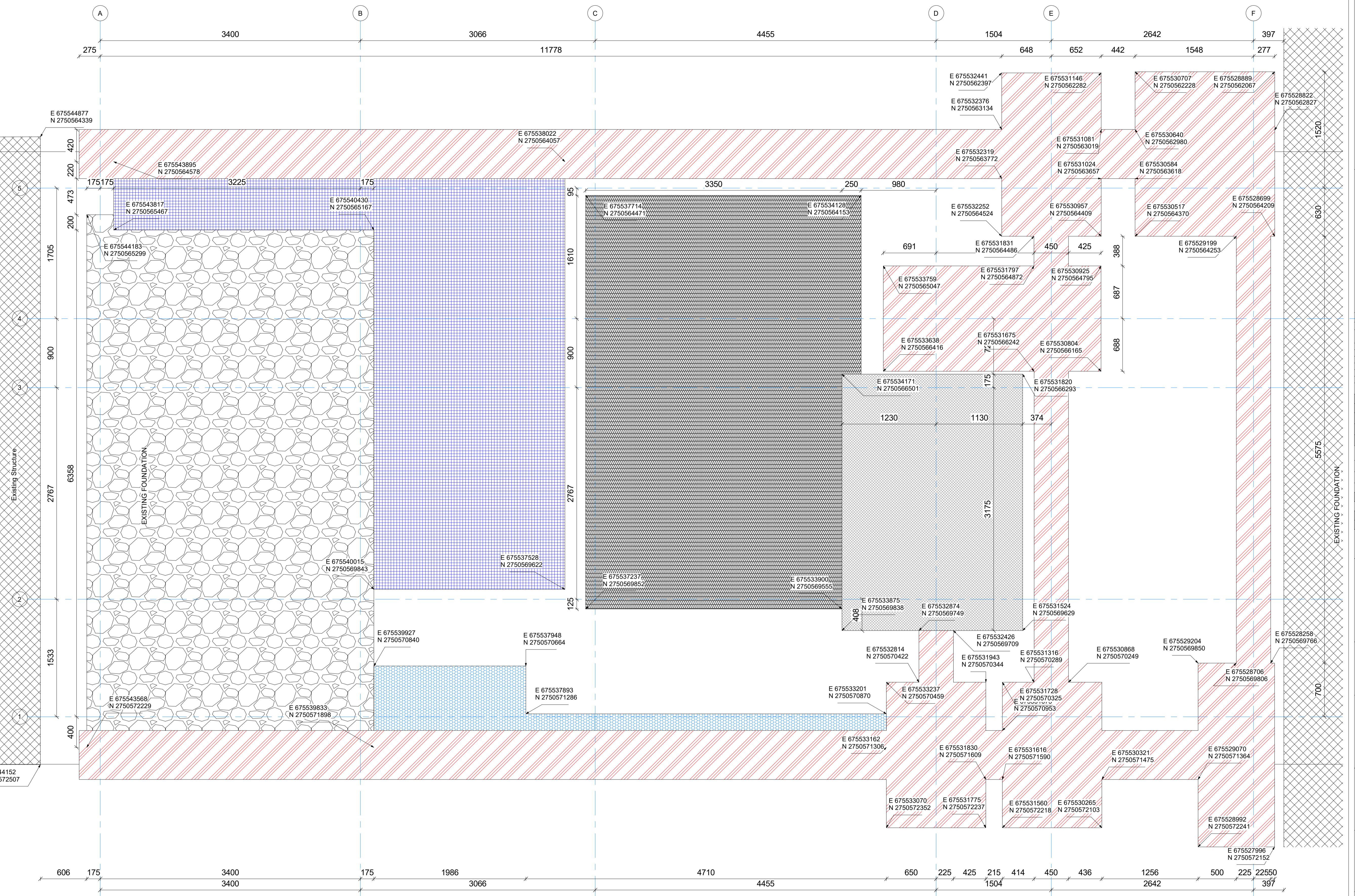
REVISION



1 | FIRST FLOOR FRAMING PLAN

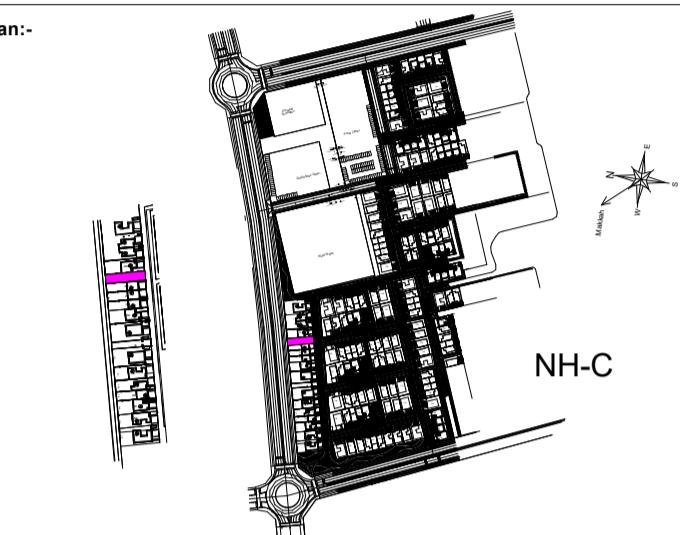
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**NOTE:**  
GENERAL NOTES:  
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 3- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS IN METERS UNLESS NOTED OTHERWISE.  
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 5- ALL EXISTING DIMENSIONS/LEVELS ETC. INDICATED ON DRAWINGS ARE TO BE VERIFIED ON SITE.



#### EXCAVATION LEGEND

|  |              |
|--|--------------|
|  | LVL +618.180 |
|  | LVL +618.480 |
|  | LVL +617.180 |



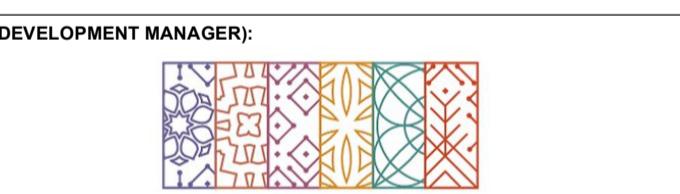
#### ABBREVIATIONS:

| MDL TYP | MDL DISC. | MDL NAME |
|---------|-----------|----------|
|         |           |          |

| REVISION |                                 |                  |
|----------|---------------------------------|------------------|
| Rev 00   | Description ISSUED FOR APPROVAL | Date 26.Jan.2025 |

| PEER REVIEW CONSULTANT APPROVAL |  |
|---------------------------------|--|
| SHOP DRAWING REVIEW / APPROVAL  |  |
| A APPROVED                      |  |
| B APPROVED AS NOTED             |  |
| C REVISE & RESUBMIT             |  |
| D REJECTED                      |  |
| E RECEIPT ACKNOWLEDGE           |  |

PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT RIYADH KINGDOM OF SAUDI ARABIA



Roshn Real Estate

MAIN CONTRACTOR:



PEER REVIEW CONSULTANT:



STRUCTURAL CONSULTANT :



BUILDING: VILLA E01-SB-NO STYLE(0255) ZONE: NHC

STAGE: Shop Drawing DISC:

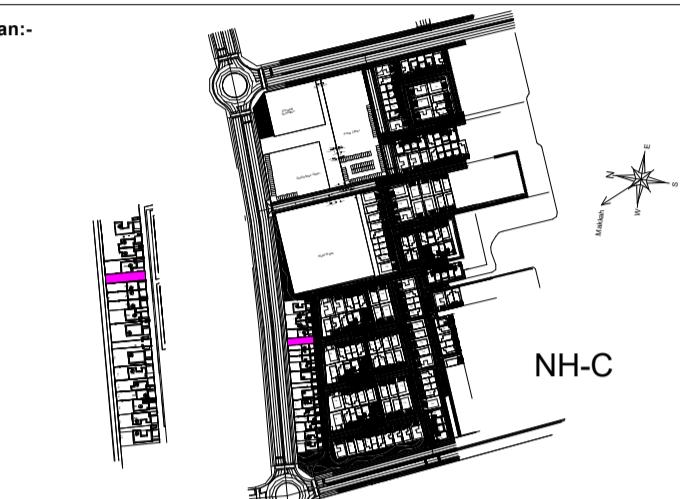
DRAWING TITLE:

#### EXCAVATION PLAN

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| SCALE:      | DRAWN BY                        | PAPER SIZE | A1       |
| 1 : 25      |                                 |            |          |
| DATE:       | 26.Jan.2025                     | CHECKED BY | REVISION |

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| LEGENDS: |                     |
|----------|---------------------|
|          | COLUMNS CONTINUE    |
|          | WALL CONTINUE       |
|          | COLUMN / WALL BELOW |
|          | PLANTED COLUMN      |
|          | SLAB OPENING        |



ABBREVIATIONS:

| REFERENCES |           |          |
|------------|-----------|----------|
| MDL TYP    | MDL DISC. | MDL NAME |

| REVISION |                                 |                  |
|----------|---------------------------------|------------------|
| Rev 00   | Description ISSUED FOR APPROVAL | Date 26.Jan.2025 |

| PEER REVIEW CONSULTANT APPROVAL |                     |  |
|---------------------------------|---------------------|--|
| SHOP DRAWING REVIEW / APPROVAL  |                     |  |
| A                               | APPROVED            |  |
| B                               | APPROVED AS NOTED   |  |
| C                               | REVISE & RESUBMIT   |  |
| D                               | REJECTED            |  |
| E                               | RECEIPT ACKNOWLEDGE |  |

PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT  
RIYADH KINGDOM OF SAUDI ARABIA

CLIENT (DEVELOPMENT MANAGER):

MAIN CONTRACTOR:

PEER REVIEW CONSULTANT:

ISFCO- SHOP DRAWING & STRUCTURAL DESIGN:

STRUCTURAL CONSULTANT :

BUILDING: VILLA E01-SB-NO STYLE(0255) ZONE: NHC

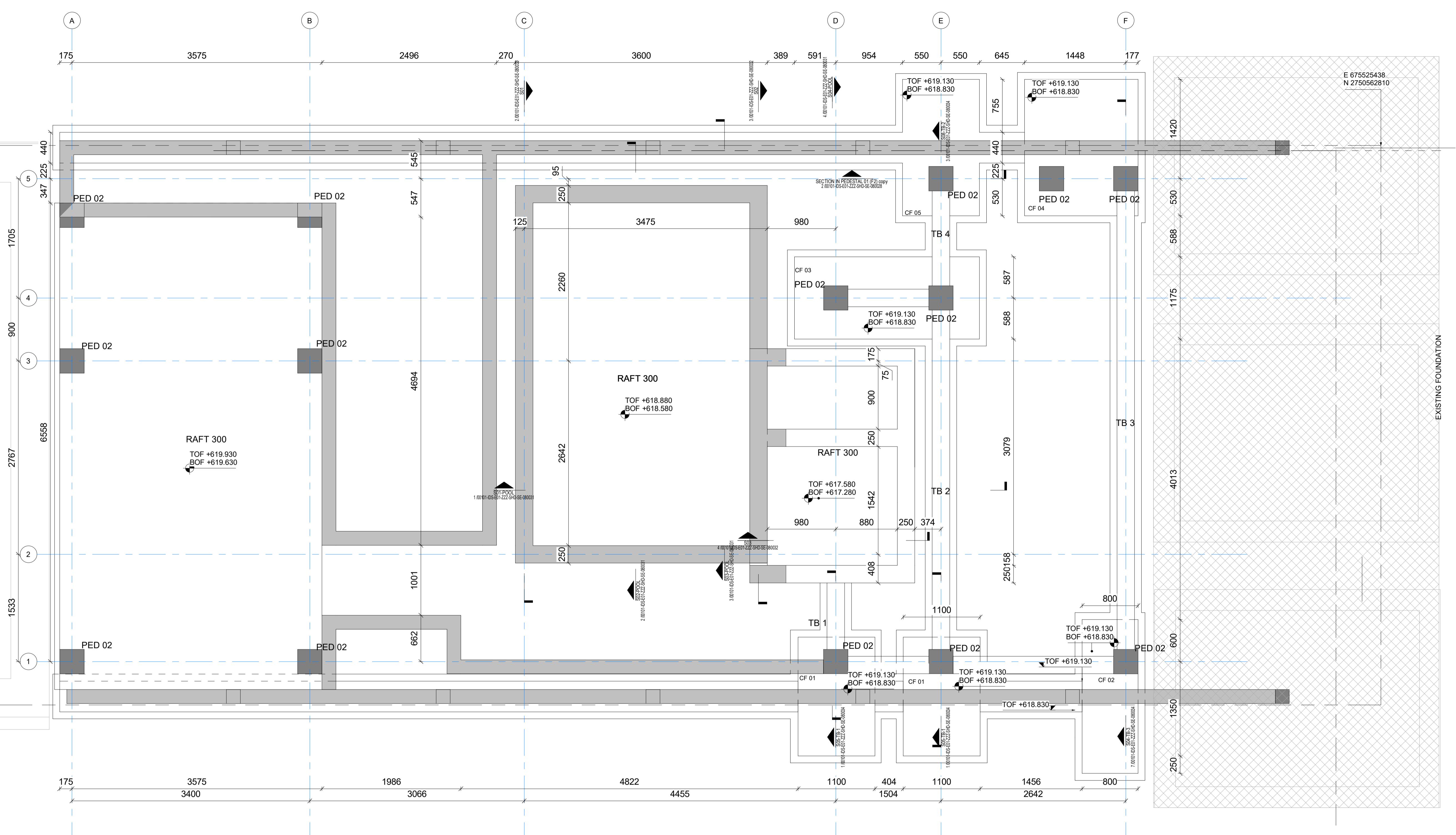
STAGE: Shop Drawing DISC:

DRAWING TITLE:

FOUNDATION FRAMING LAYOUT

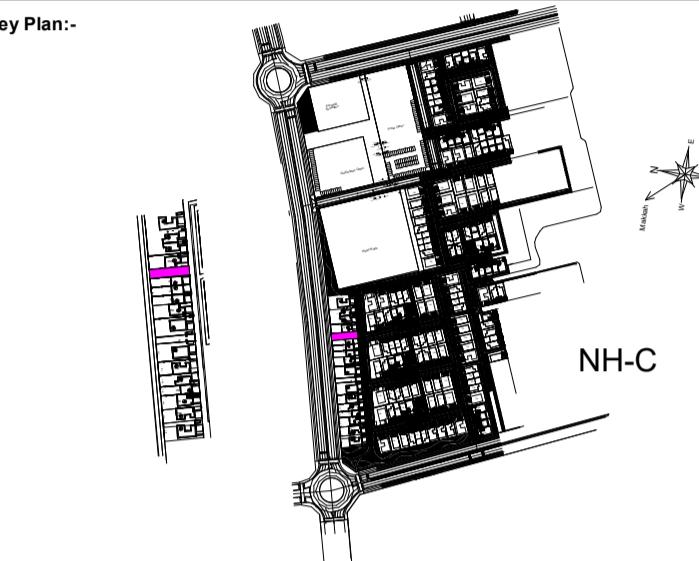
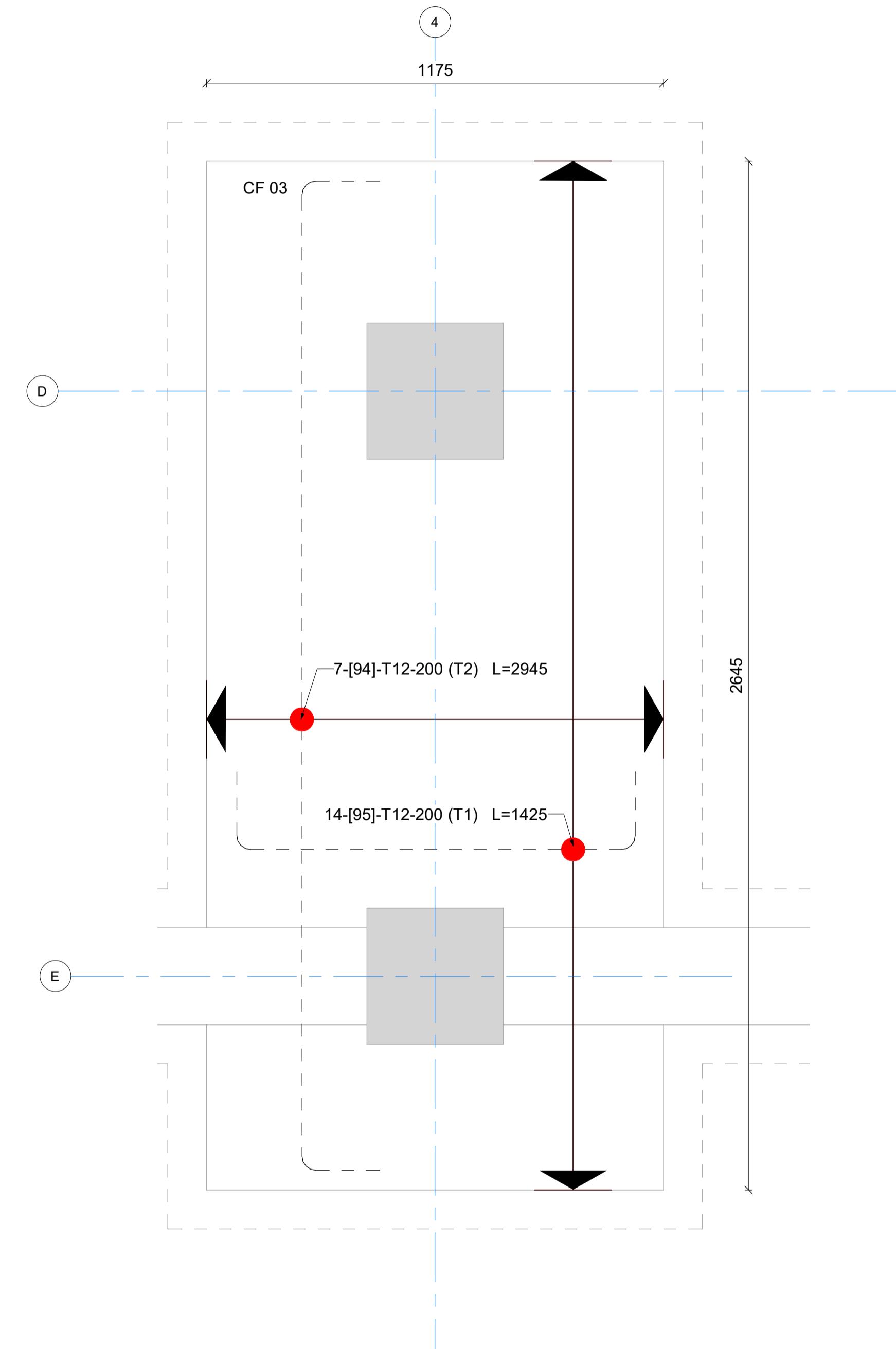
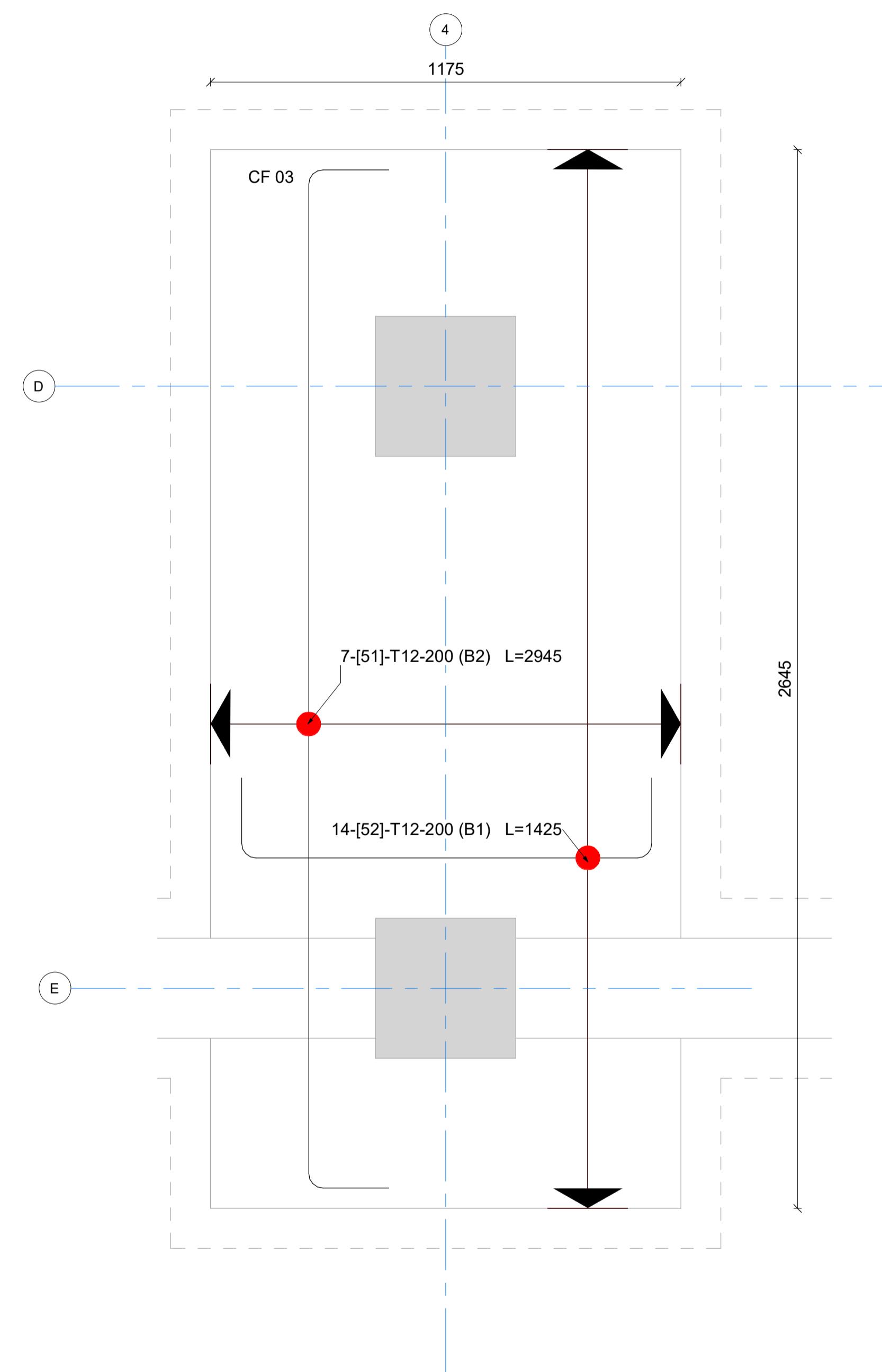
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| As indicated      |                                 |            |          |
| DATE: 26.Jan.2025 | CHECKED BY                      |            | REVISION |

1 FOUNDATION PLAN  
1 : 30 Ref."00101-IDS-E01-ZZZ-SHD-SE-010020"





**NOTE:**  
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 3- ALL DIMENSIONS ARE IN MILLIMETERS.  
 4- ALL DIMENSIONS ARE IN MILLIMETERS.  
 5- ALL EXISTING DIMENSIONS/LEVELS ETC. INDICATED ON DRAWINGS ARE TO BE VERIFIED ON SITE.



ABBREVIATIONS:

| REFERENCES |           |          |
|------------|-----------|----------|
| MDL TYP    | MDL DISC. | MDL NAME |
|            |           |          |
|            |           |          |
|            |           |          |
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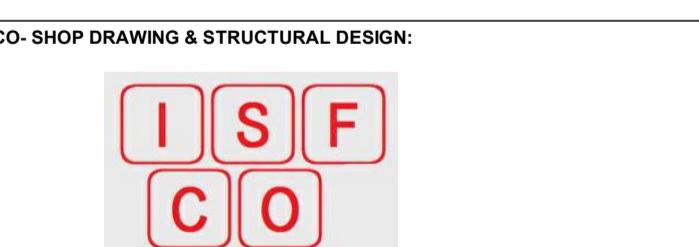
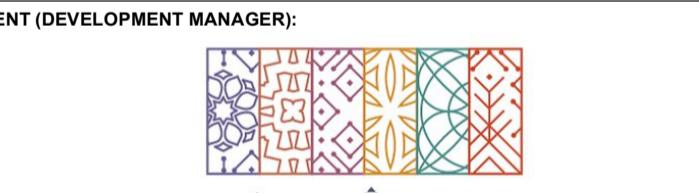
REVISION

| Rev | Description         | Date        |
|-----|---------------------|-------------|
| 00  | ISSUED FOR APPROVAL | 26.Jan.2025 |
|     |                     |             |
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|     |                     |             |
|     |                     |             |

PEER REVIEW CONSULTANT APPROVAL

| SHOP DRAWING REVIEW / APPROVAL |                     |
|--------------------------------|---------------------|
| A                              | APPROVED            |
| B                              | APPROVED AS NOTED   |
| C                              | REVISE & RESUBMIT   |
| D                              | REJECTED            |
| E                              | RECEIPT ACKNOWLEDGE |

PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT  
RIYADH KINGDOM OF SAUDI ARABIA



BUILDING: VILLA E01-SB-NO STYLE(0255) ZONE: NHC

STAGE: Shop Drawing DISC:

DRAWING TITLE:

FOUNDATION REINFORCEMENT - 02

DRAWING NO. 00101-IDS-E01-ZZZ-SHD-SE-080026

| SCALE:      | DRAWN BY   | PAPER SIZE | A1       |
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| DATE:       |            |            |          |
| 26.Jan.2025 | CHECKED BY |            | REVISION |

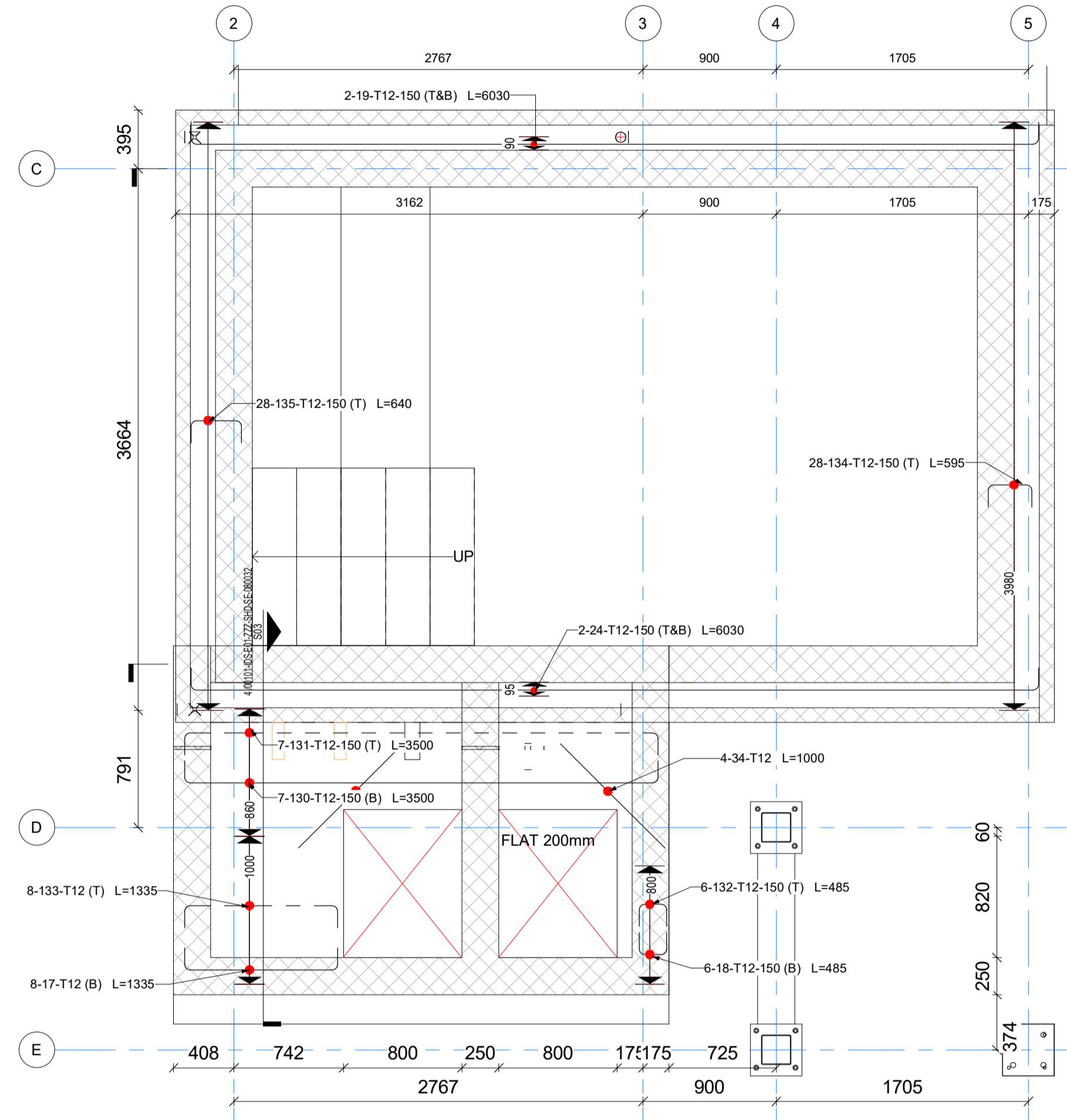




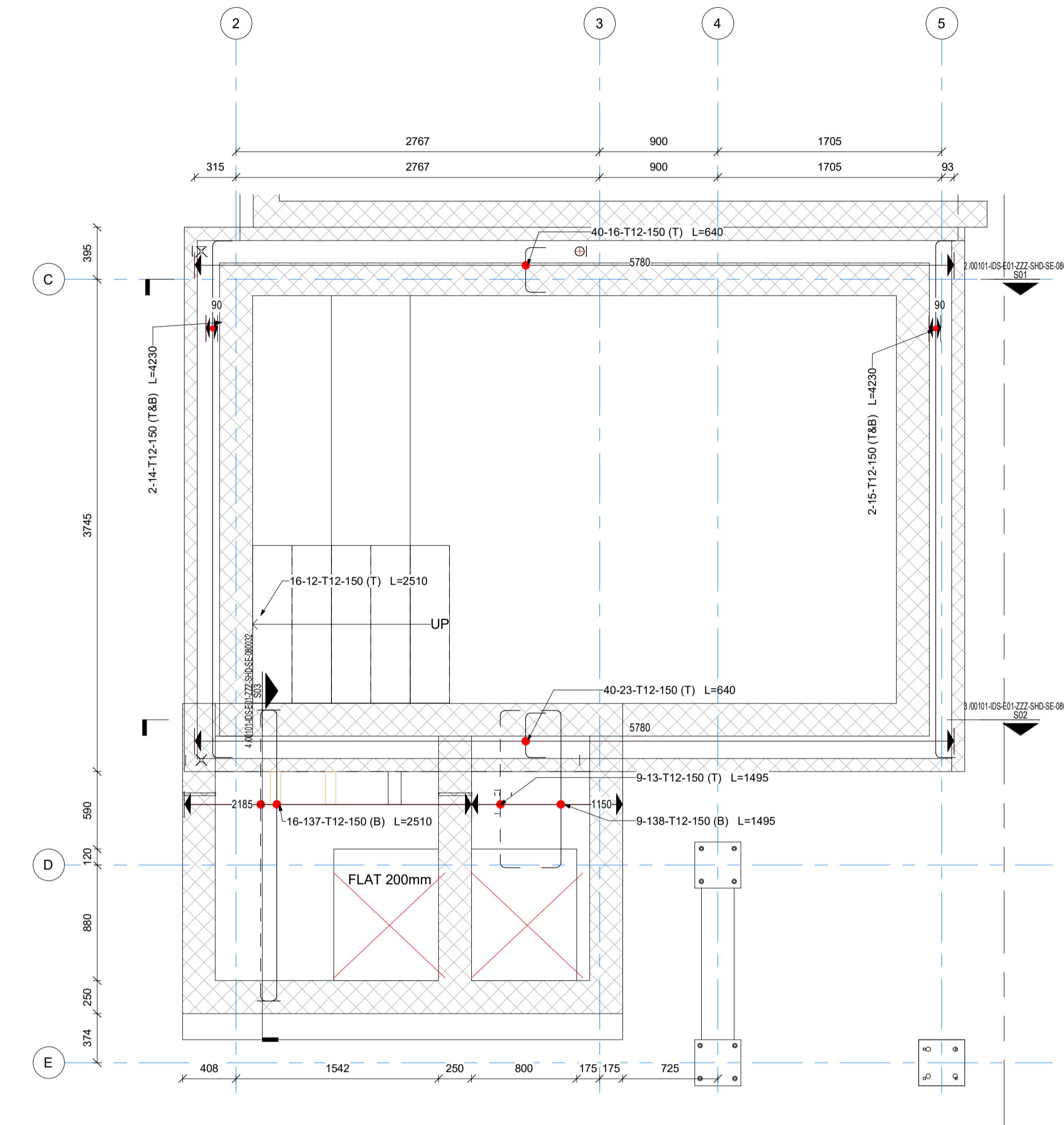


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**1** | **FLOORS REINFORCEMENT PLAN (x-axis)**  
1 : 30 Ref."00101-IDS-E01-ZZZ-SHD-SE-080030"



**2** | FLOOR REINFORCEMENT PLAN (y-axis)  
1 : 30 Ref."00101-IDS-E01-ZZZ-SHD-SE-080030"

The logo for 360 interiors features the number "360" in a large, bold, black font. To the right of "360" is the word "interiors" in a smaller, pink, lowercase sans-serif font. Above the "360" text, there are three overlapping circles in light green, yellow, and orange.

R REVIEW CONSULTANT:

---

CO- SHOP DRAWING & STRUCTURAL DESIGN:



STRUCTURAL CONSULTANT : 

**DAR** International  
Engineering  
Consultancy

DING - TONG - NHC

VILLA E01-SB-NO STYLE(0255)

**GE:** Shop Drawing **DSC:**

DRAWING TITLE:

## SWIMMING POOL DETAILS 02

AWING NO. 00101-IDS-E01-ZZZ-SHD-SE-080030

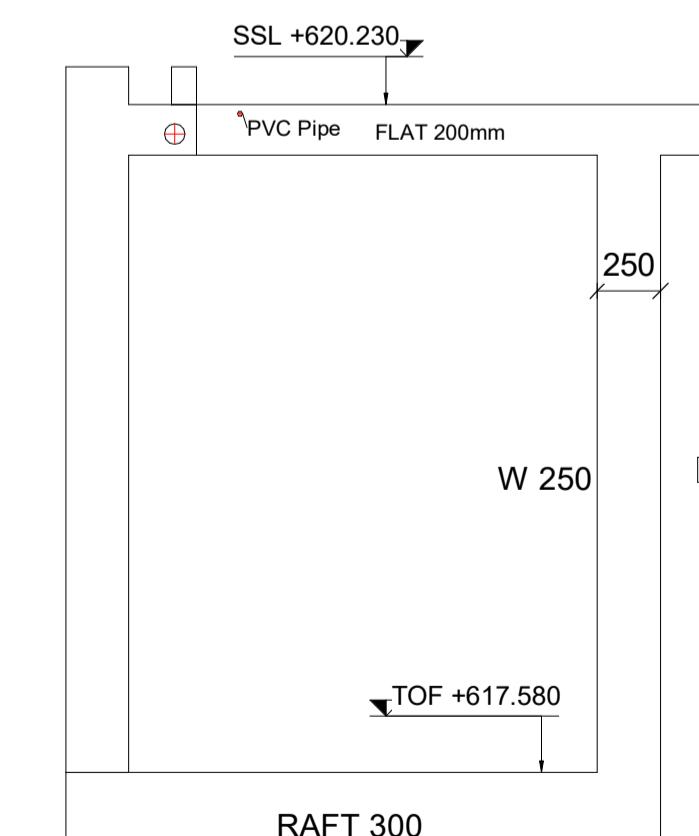
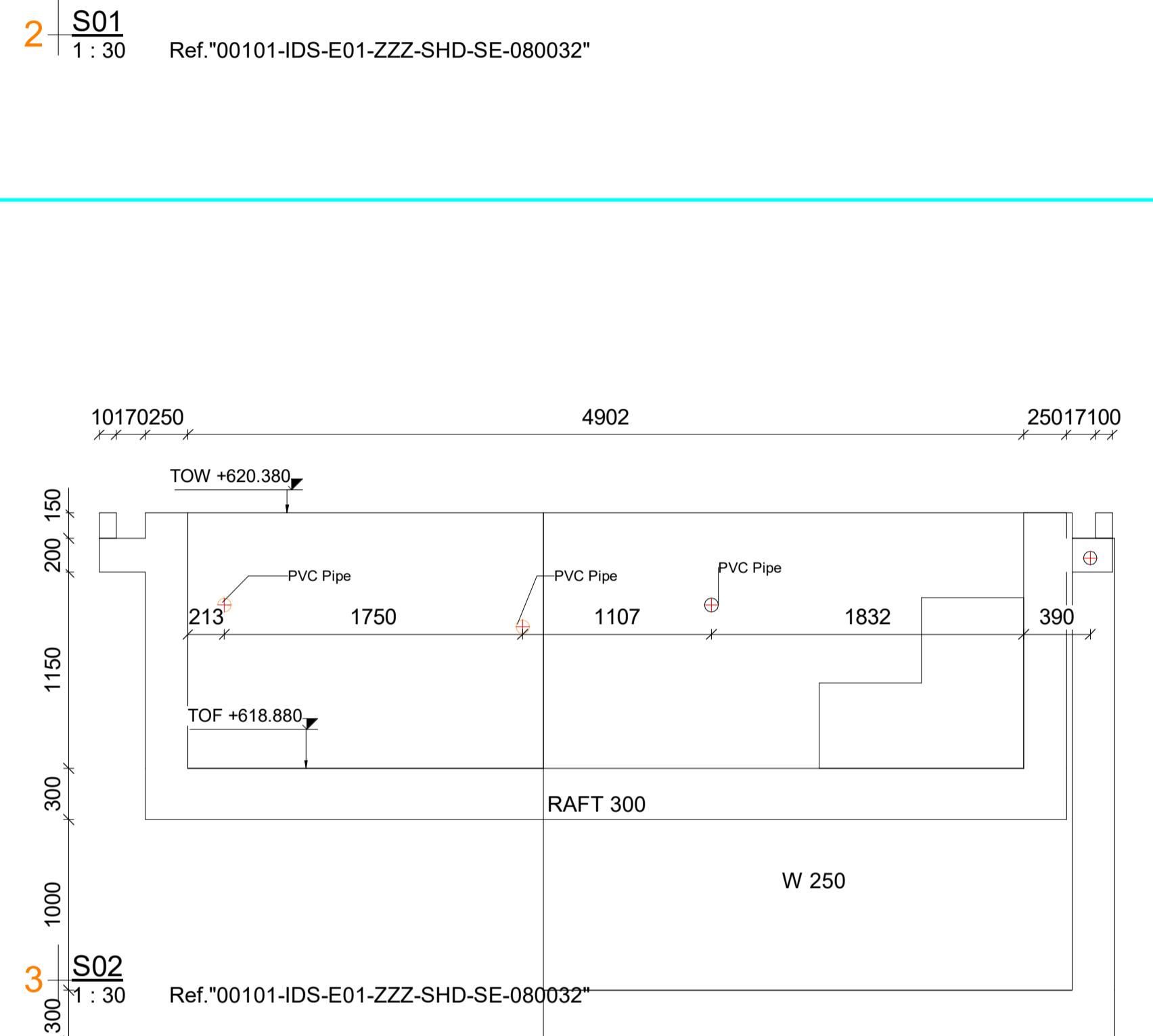
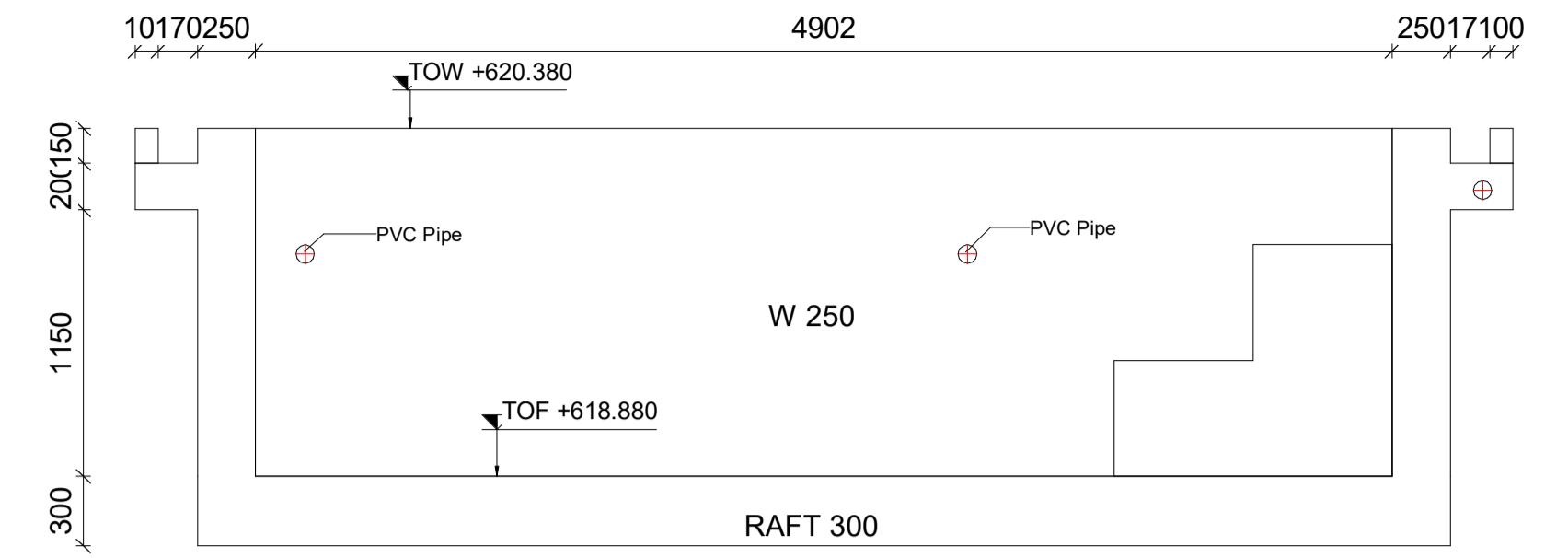
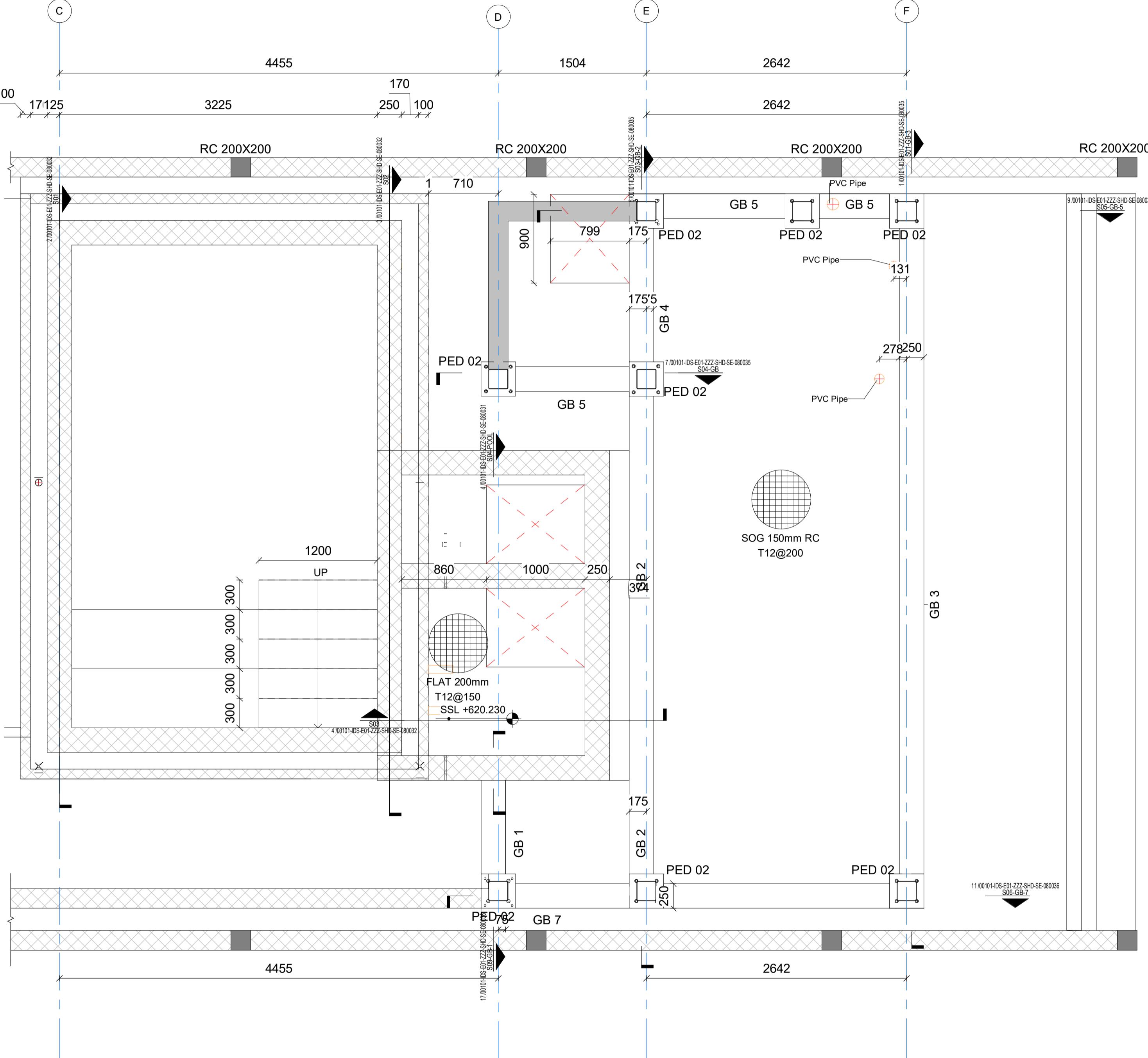
SCALE: DRAWN BY PAPER  
1 : 30

**DATE:** \_\_\_\_\_ **CHECKED BY:** \_\_\_\_\_ **REVISION:** \_\_\_\_\_

Jan.2025

Digitized by srujanika@gmail.com

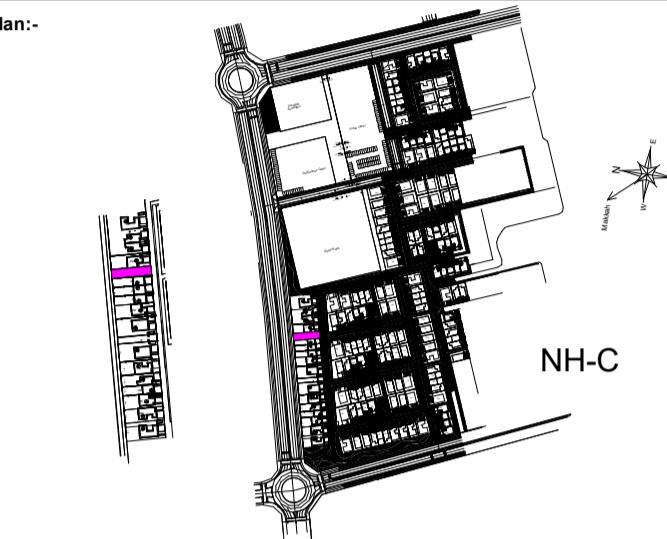




**4 | S03** Ref."00101-IDS-E01-ZZZ-SHD-SE-080032"

**NOTE:**  
**GENERAL NOTES:**

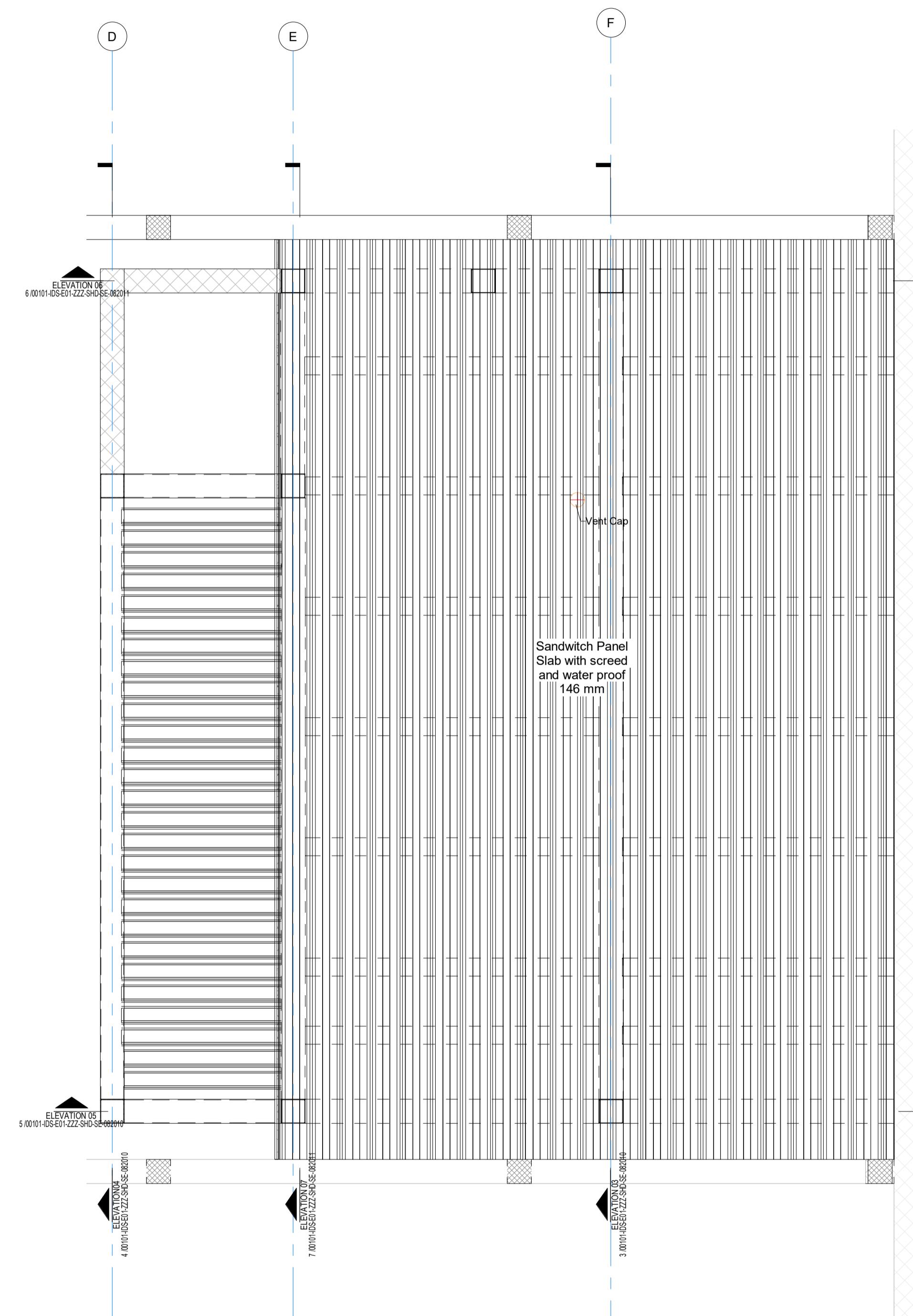
- 1- DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING.
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- 3- ALL DIMENSIONS ARE TO CENTER LINE BETWEEN WRITTEN DIMENSIONS AND SITE DIMENSIONS OR WITHIN THESE DRAWINGS SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT BEFORE EXECUTING THE WORKS.
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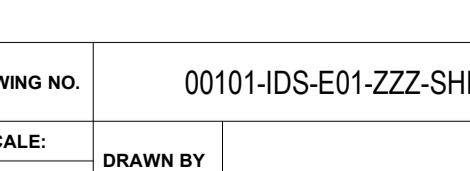
| ABBREVIATIONS:   |                                 |                      |
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| <b>REFERENCES</b>  |                                 |                      |
| MDL TYP  | MDL DISC.                       | MDL NAME             |
| <b>REVISION</b>  |                                 |                      |
| Rev 00   | Description ISSUED FOR APPROVAL | Date 26.Jan.2025     |
| <b>PEER REVIEW CONSULTANT APPROVAL</b>                             |                                 |                      |
| SHOP DRAWING REVIEW / APPROVAL                                     |                                 |                      |
| A  | APPROVED                        |                      |
| B  | APPROVED AS NOTED               |                      |
| C  | REVISE & RESUBMIT               |                      |
| D  | REJECTED                        |                      |
| E  | RECEIPT ACKNOWLEDGE             |                      |
| <b>PROJECT TITLE:</b>  |                                 |                      |
| GARDEN COLLECTION VILLAS PROJECT<br>RIYADH KINGDOM OF SAUDI ARABIA |                                 |                      |
| <b>CLIENT (DEVELOPMENT MANAGER):</b>                               |                                 |                      |
|  |                                 |                      |
| <b>Roshn Real Estate</b> روشن العقارية                             |                                 |                      |
| <b>MAIN CONTRACTOR:</b>  |                                 |                      |
|  |                                 |                      |
| <b>PEER REVIEW CONSULTANT:</b>                                     |                                 |                      |
|  |                                 |                      |
| <b>ISFCO- SHOP DRAWING &amp; STRUCTURAL DESIGN:</b>                |                                 |                      |
|  |                                 |                      |
| <b>STRUCTURAL CONSULTANT :</b>                                     |                                 |                      |
|  |                                 |                      |
| <b>BUILDING:</b> VILLA E01-SB-NO STYLE(0255) <b>ZONE:</b> NHC      |                                 |                      |
| <b>STAGE:</b> Shop Drawing <b>DISC:</b>                            |                                 |                      |
| <b>DRAWING TITLE:</b>  |                                 |                      |
| <b>BUILDER WORK 1</b>  |                                 |                      |
| <b>DRAWING NO.</b>   | 00101-IDS-E01-ZZZ-SHD-SE-080032 |                      |
| <b>SCALE:</b>  | 1 : 30                          | <b>DRAWN BY</b>      |
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| <b>REVISION:</b>   | CHECKED BY                      |                      |

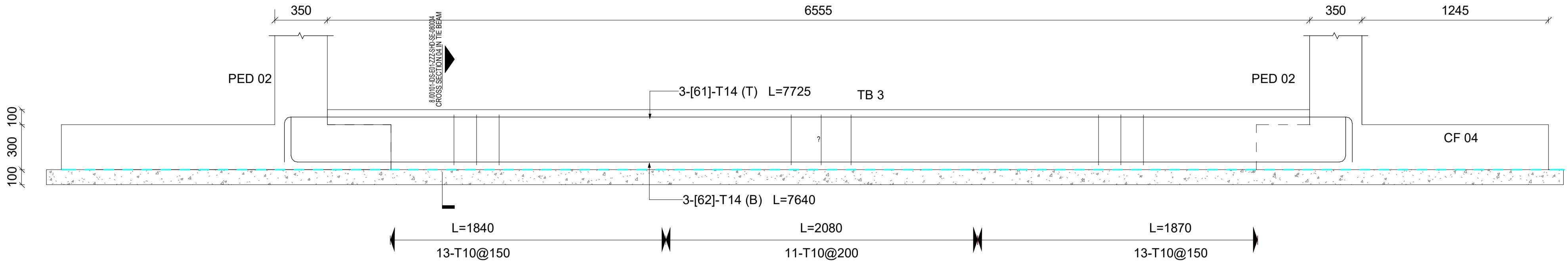
**NOTE:**  
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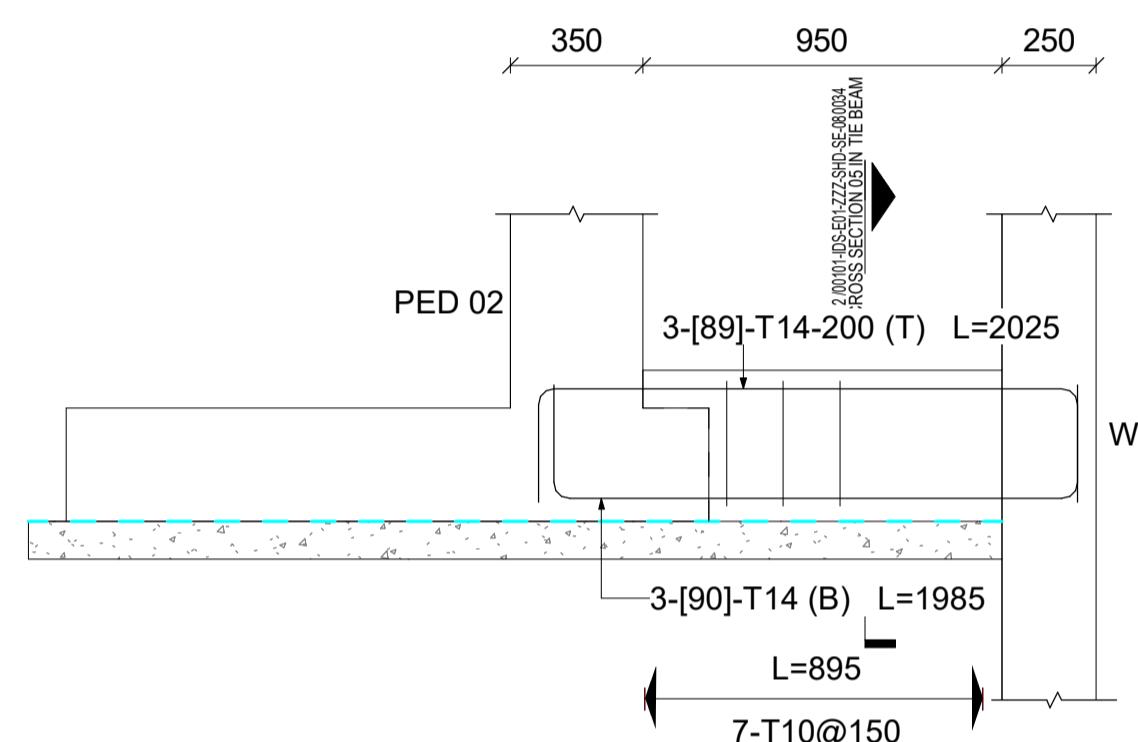


**1 | FIRST FLOOR PLAN VIEW (BUILDERS WORK)**

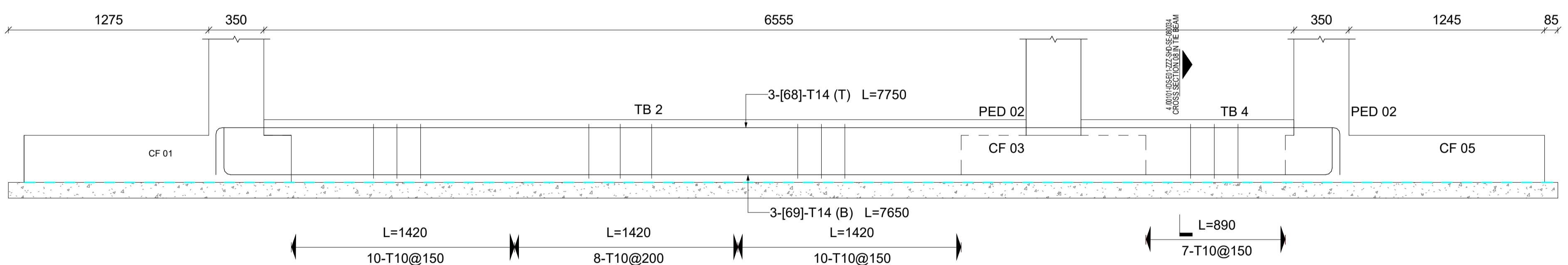
| Site Plan:-   |                                 |                          |   |
|---|---------------------------------|--------------------------|---|
|   |                                 | NH-C                     |   |
| ABBREVIATIONS:  |                                 |                          |   |
| REFERENCES  |                                 |                          |   |
| REF. TYP  | MDL DISC.                       | MDL NAME                 |   |
| REVISION  |                                 |                          |   |
| Rev   | Description                     | Date                     |   |
|   | ISSUED FOR APPROVAL             | 26.Jan.2025              |   |
| PEER REVIEW CONSULTANT APPROVAL   |                                 |                          |   |
| SHOP DRAWING REVIEW / APPROVAL  |                                 |                          |   |
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| <input type="checkbox"/>  | REJECTED                        | <input type="checkbox"/> |   |
| <input type="checkbox"/>  | RECEIPT ACKNOWLEDGE             | <input type="checkbox"/> |   |
| PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT<br>RIYADH KINGDOM OF SAUDI ARABIA   |                                 |                          |   |
| CLIENT (DEVELOPMENT MANAGER):<br><br>Roshn Real Estate |                                 |                          |   |
| GENERAL CONTRACTOR:<br>                                |                                 |                          |   |
| PEER REVIEW CONSULTANT:<br>                            |                                 |                          |   |
| CO- SHOP DRAWING & STRUCTURAL DESIGN:<br>              |                                 |                          |   |
| STRUCTURAL CONSULTANT :<br>                            |                                 |                          |   |
| REFIDING:   | VILLA E01-SB-NO STYLE(0255)     | ZONE: NHC                |   |
| REFGE:  | Shop Drawing                    | DISC:                    |   |
| DRAWING TITLE:<br><b>BUILDERS WORK 02</b>   |                                 |                          |   |
| DRAWING NO.   | 00101-IDS-E01-ZZZ-SHD-SE-080033 |                          |   |
| SCALE:  | DRAWN BY                        | PAPER SIZE               | A |
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| DATE:   | CHECKED BY                      | REVISION                 |   |
| Jan. 2025   |                                 |                          |   |



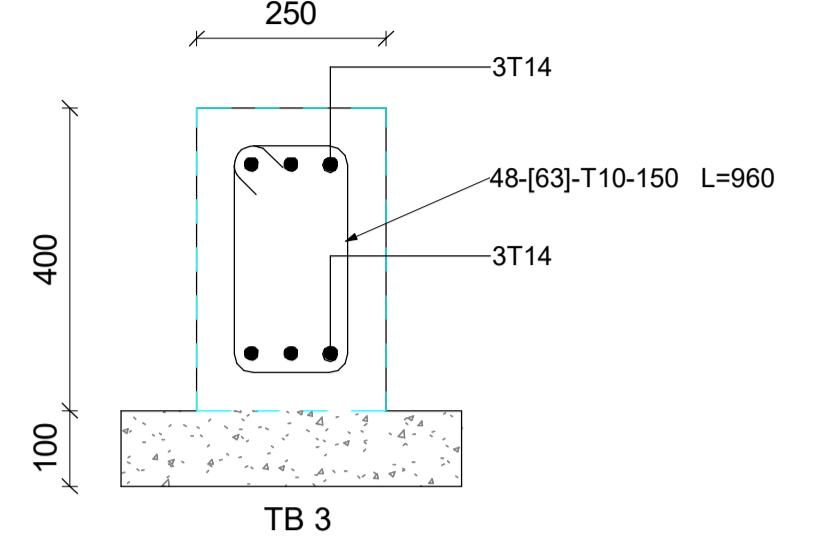
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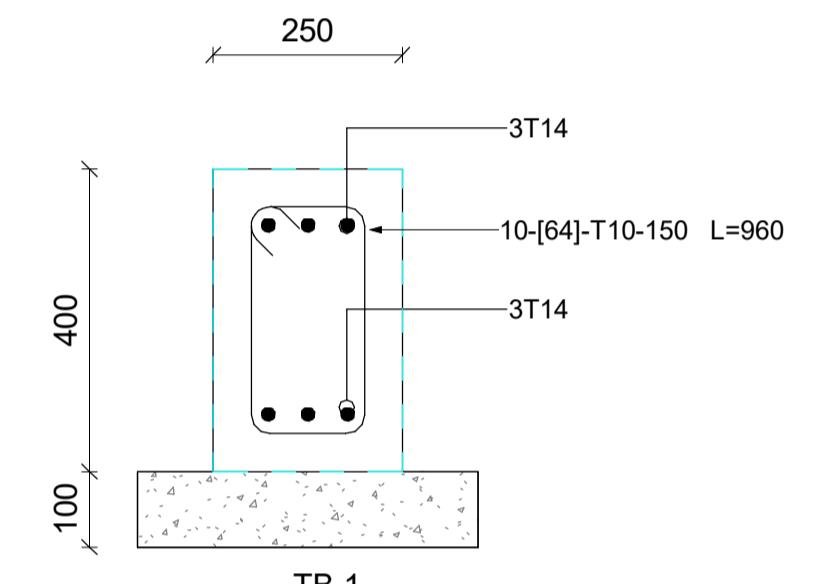
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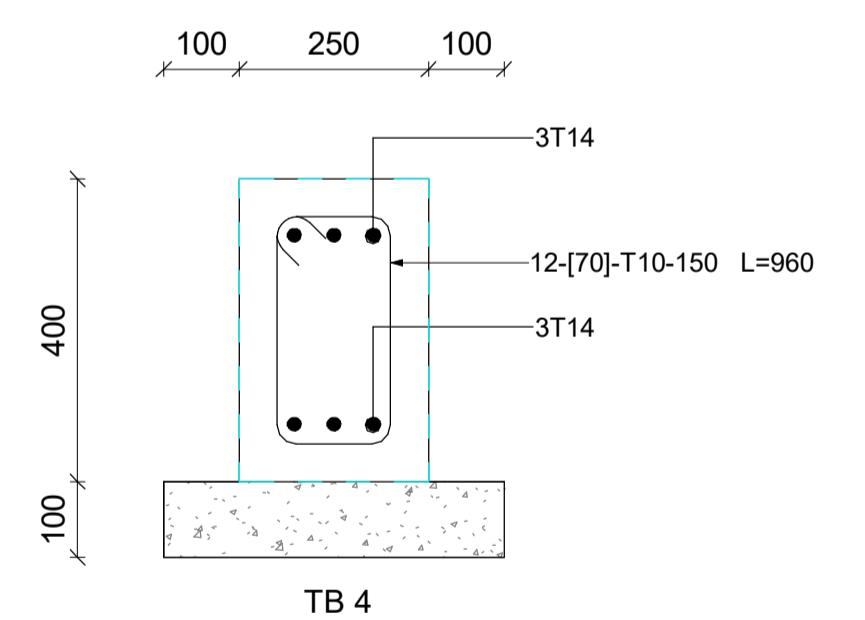
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1 : 20 Ref."00101-IDS-E01-ZZZ-SHD-SE-08003



**8** | CROSS SECTION 04 IN TIE BEAM  
1 : 10 Ref."00101-IDS-E01-ZZZ-SHD-SE-080034"



**CROSS SECTION 05 IN TIE BEAM**



**4** | CROSS SECTION 08 IN TIE BEAM  
1 : 10 Ref."00101-IDS-E01-ZZZ-SHD-SE-080034"

NOTE:  
GENERAL NOTES:

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DIMENSIONS AND SITE DIMENSIONS OR WITHIN THESE  
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ATTENTION OF THE ARCHITECT BEFORE EXECUTING THE  
WORKS.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL  
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CONTRACT.

ALL EXISTING DIMENSIONS/ LEVELS ETC. INDICATED ON  
DRAWINGS ARE TO BE VERIFIED ON SITE.

The site plan illustrates the layout of NH-C, featuring several building footprints. A prominent feature is a building highlighted with a thick pink border. The plan includes a compass rose indicating North, South, East, and West directions, with 'Mahanagar' labeled near the center. The label 'NH-C' is positioned in the bottom right corner.

| REVISIONS: |                     |             |
|------------|---------------------|-------------|
| REFERENCES |                     |             |
| TYP        | MDL DISC.           | MDL NAME    |
|            |                     |             |
|            |                     |             |
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|            |                     |             |
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|            |                     |             |
| REVISION   |                     |             |
| ev         | Description         | Date        |
|            | ISSUED FOR APPROVAL | 26.Jan.2025 |
|            |                     |             |
|            |                     |             |
|            |                     |             |
|            |                     |             |
|            |                     |             |

| <b>PEER REVIEW CONSULTANT APPROVAL</b> |  |  |
|--|--|--|
| SHOP DRAWING REVIEW / APPROVAL         |  |  |
| APPROVED                               |  |  |
| APPROVED AS NOTED                      |  |  |
| REVISE & RESUBMIT                      |  |  |
| REJECTED                               |  |  |
| RECEIPT ACKNOWLEDGE                    |  |  |

GARDEN COLLECTION VILLAS PROJECT  
RIYADH KINGDOM OF SAUDI ARABIA

**روشن**  
Roshn Real Estate روشن العقارية  
CONTRACTOR:

The logo for 360 interiors features the number '360' in a large, bold, black sans-serif font. To the left of '360' are three concentric circles in light green, yellow, and orange. To the right of '360' is the word 'interiors' in a smaller, pink, lowercase sans-serif font.

3. SHOT DRAWING & STRUCTURAL DESIGN



 **INTERNAL CONSULTANT**

DAR International  
Engineering

**D&R Consultancy**

DING: VILLA E01-SB-NO STYLE(0255) ZONE: NHC

**GE:** Shop Drawing **DISC:**

**WING TITLE:**

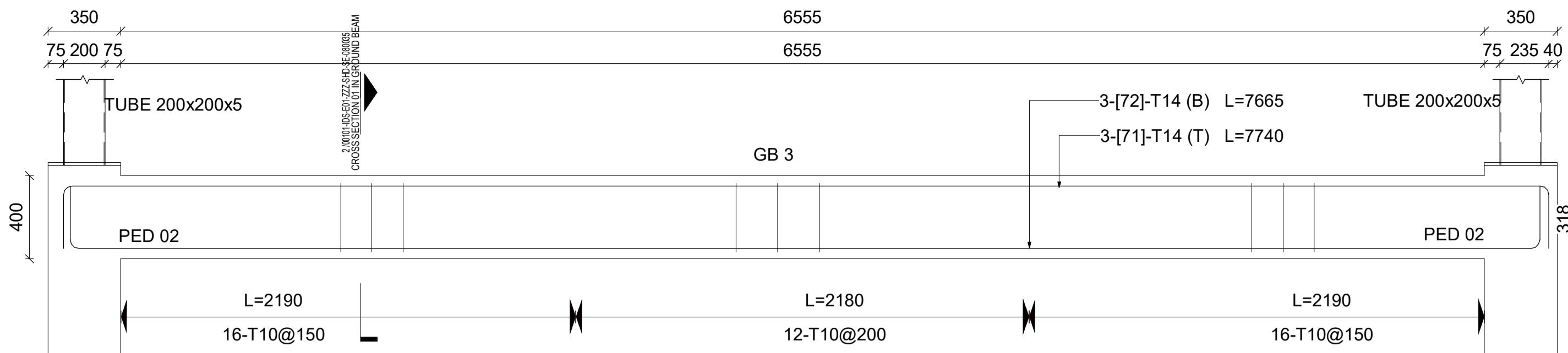
## TIE BEAMS DETAILS - 01

Page 10 of 10

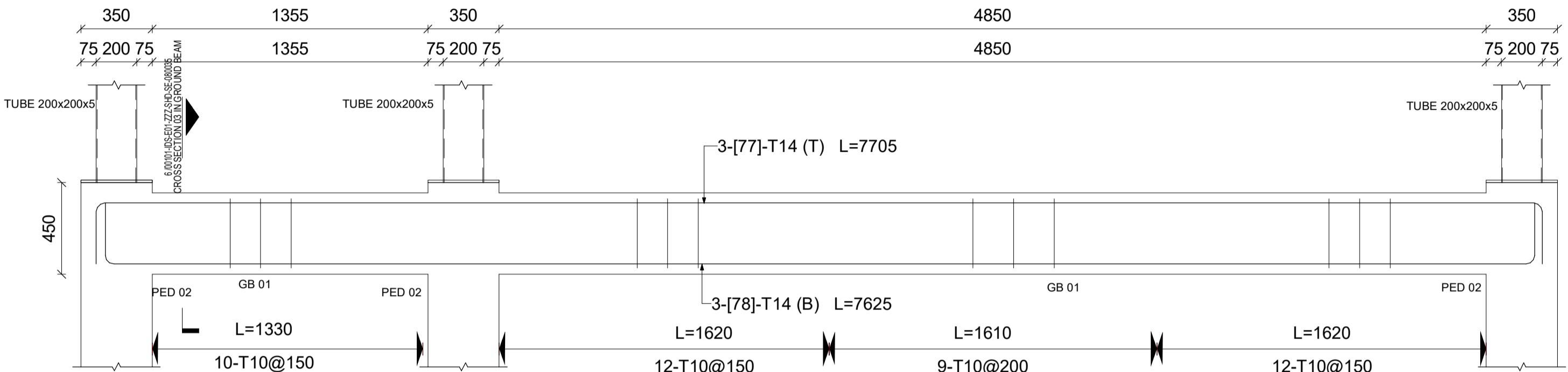
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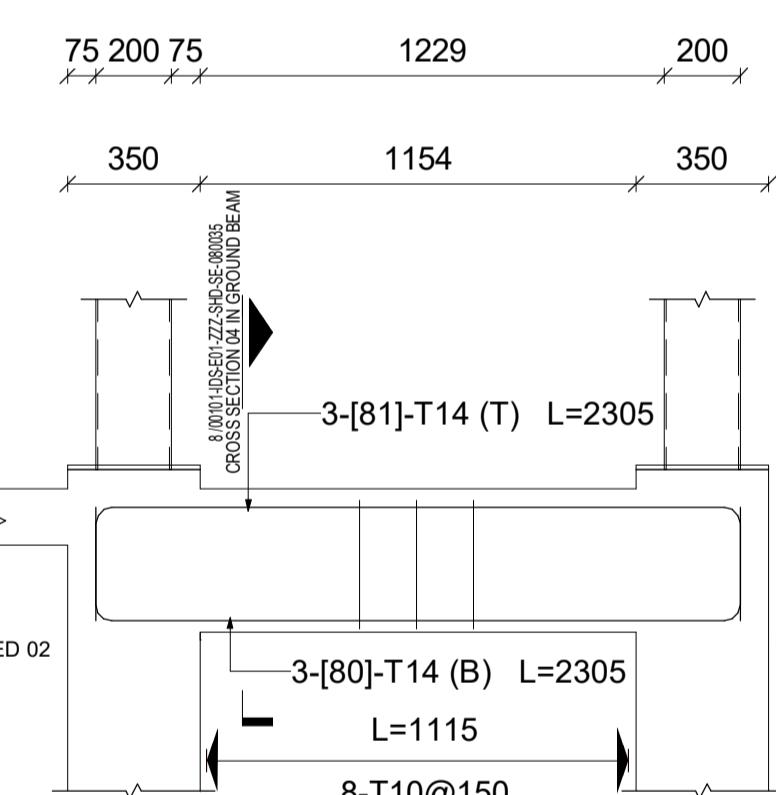
**DATE:** \_\_\_\_\_ **CHECKED BY** \_\_\_\_\_ **REVISION** \_\_\_\_\_



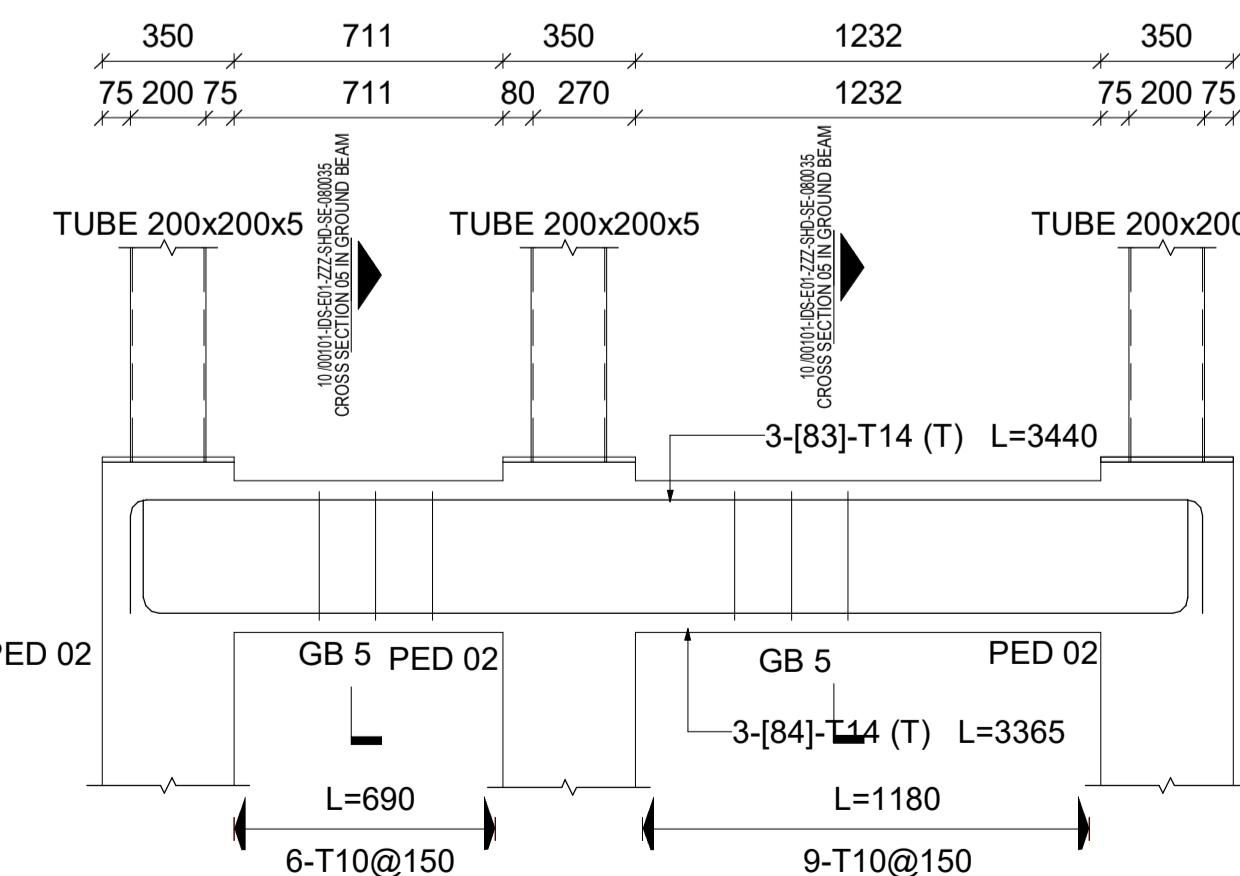
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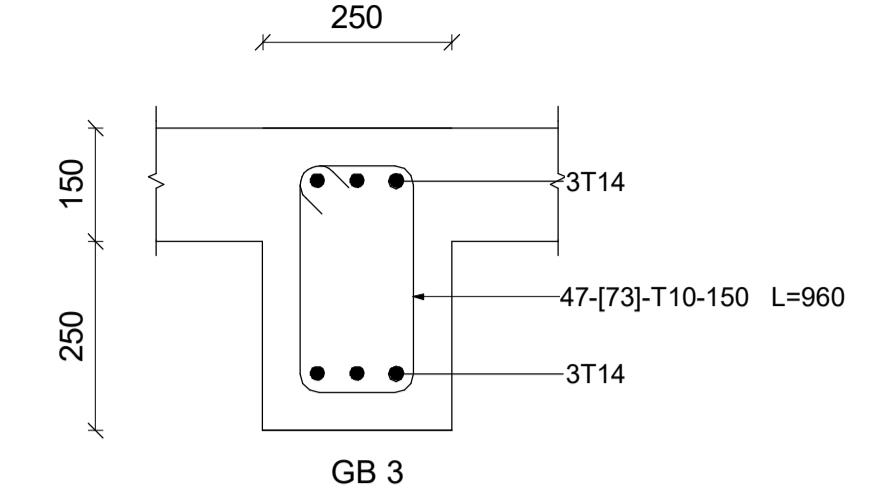
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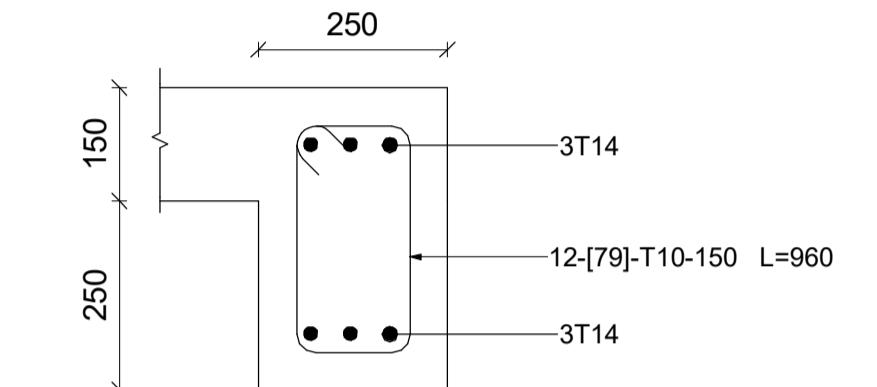


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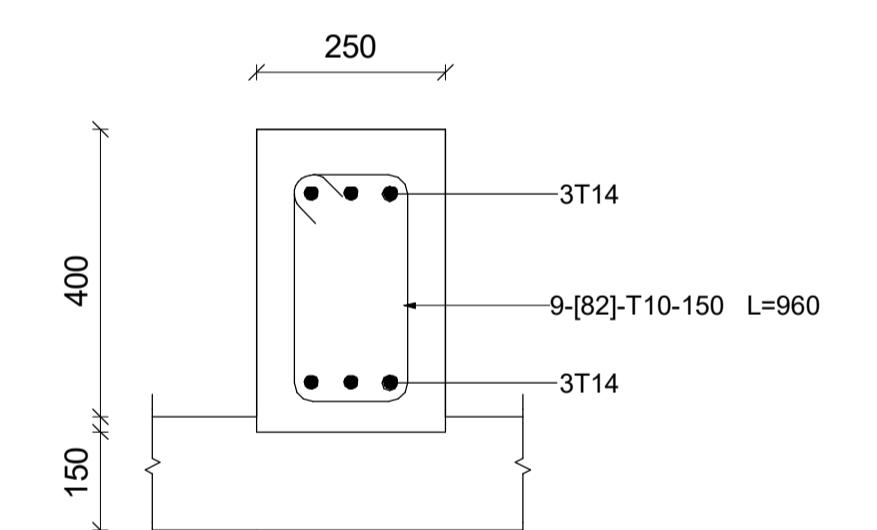


# **CROSS SECTION 01 IN GROUND BEAM**

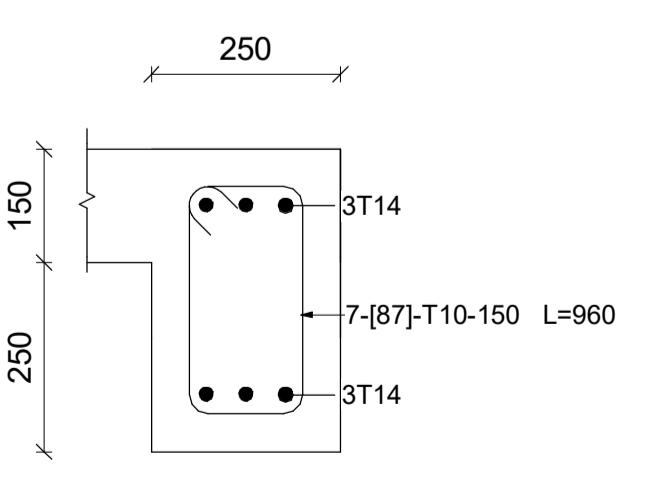
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**CROSS SECTION 03 IN GROUND BEAM**



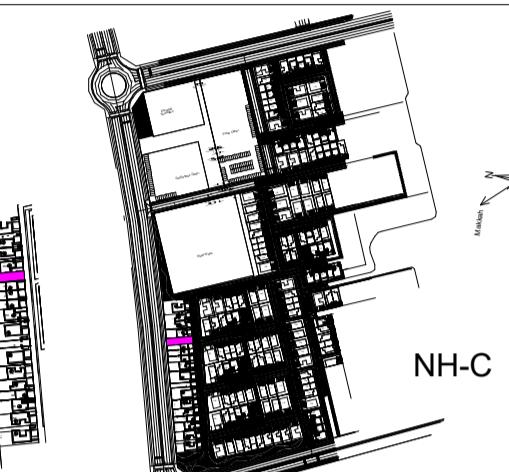
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1 : 10 Ref."00101-IDS-E01-ZZZ-SHD-SE-080035"



**CROSS SECTION 05 IN GROUND BEAM**

**NOTE:**  
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DIMENSIONS AND SITE DIMENSIONS OR WITHIN THESE  
DRAWINGS SHOULD BE BROUGHT TO THE IMMEDIATE  
ATTENTION OF THE ARCHITECT BEFORE EXECUTING THE  
WORKS.  
THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL  
OTHER DOCUMENTATION FORMING THE CONSTRUCTION  
CONTRACT.  
ALL EXISTING DIMENSIONS/ LEVELS ETC. INDICATED ON  
DRAWINGS ARE TO BE VERIFIED ON SITE.



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|--|--|--|
| SHOP DRAWING REVIEW / APPROVAL         |  |  |
| APPROVED                               |  |  |
| APPROVED AS NOTED                      |  |  |
| REVISE & RESUBMIT                      |  |  |
| REJECTED                               |  |  |
| RECEIPT ACKNOWLEDGE                    |  |  |

**PROJECT TITLE:** GARDEN COLLECTION VILLAS PROJECT  
**LOCATION:** RIYADH KINGDOM OF SAUDI ARABIA

Roshn Real Estate روشن العقارية

**I CONTRACTOR:**



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ICTURAL CONSULTANT :

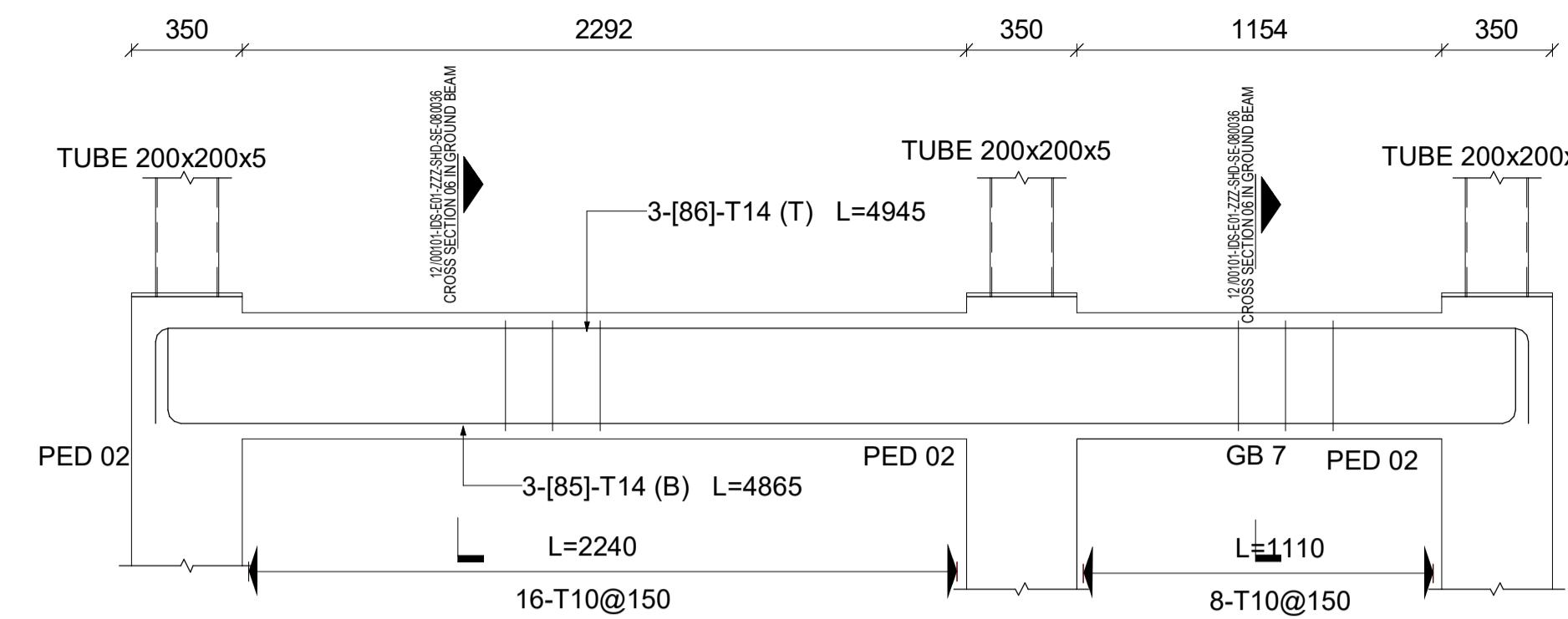


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| GE: | Shop Drawing | DISC: |
|-----|--------------|-------|

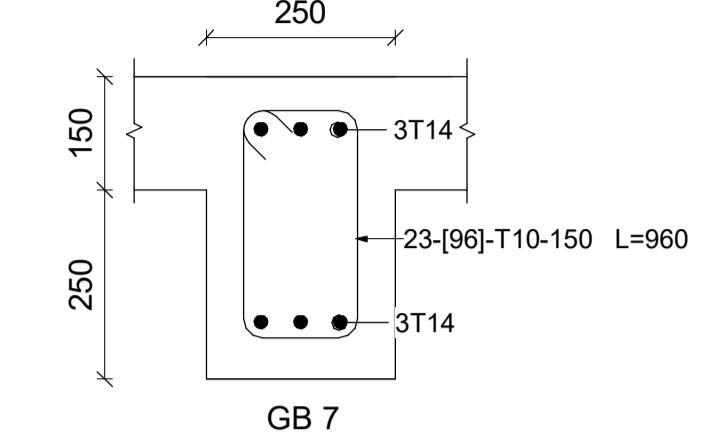
**WING TITLE:**

## GROUND BEAMS DETAILS 01

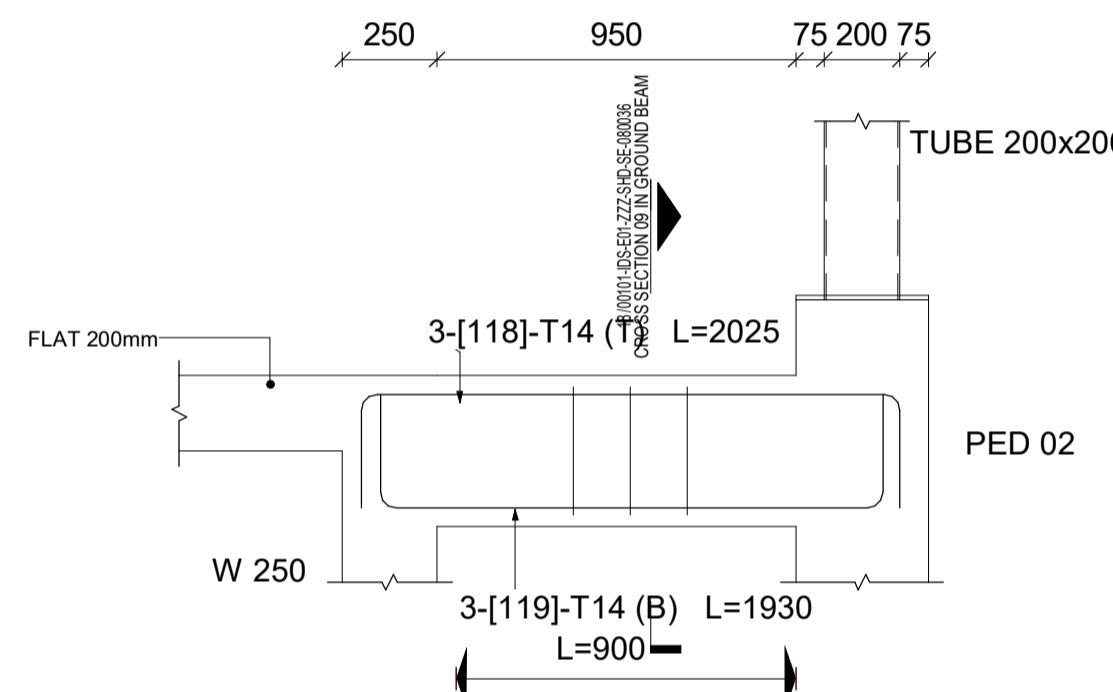
**NOTE:**  
GENERAL NOTES:  
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 3- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS IN METERS UNLESS NOTED OTHERWISE.  
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 5- ALL EXISTING DIMENSIONS/LEVELS ETC. INDICATED ON DRAWINGS ARE TO BE VERIFIED ON SITE.



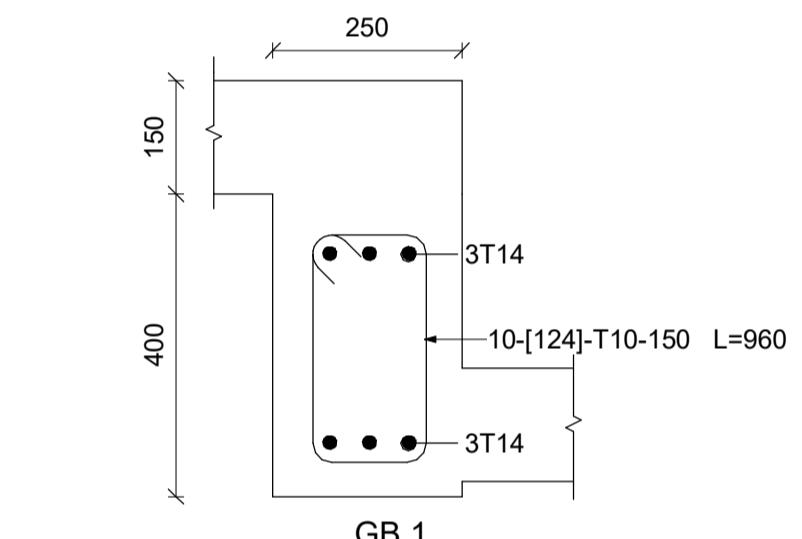
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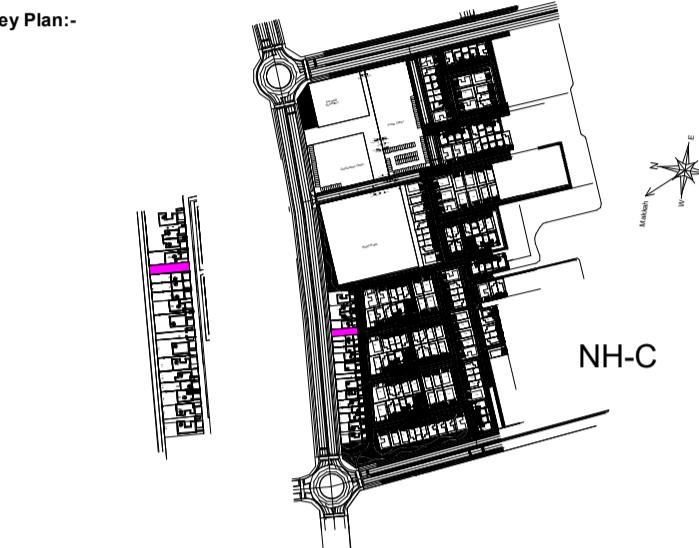
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17 | S09-GB-1  
1 : 20 Ref."00101-IDS-E01-ZZZ-SHD-SE-080036"



18 | CROSS SECTION 09 IN GROUND BEAM  
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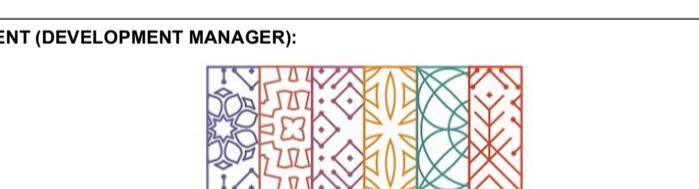


| ABBREVIATIONS: |           |          |
|----------------|-----------|----------|
| REFERENCES     |           |          |
| MDL TYP        | MDL DISC. | MDL NAME |
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|                |           |          |
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|                |           |          |
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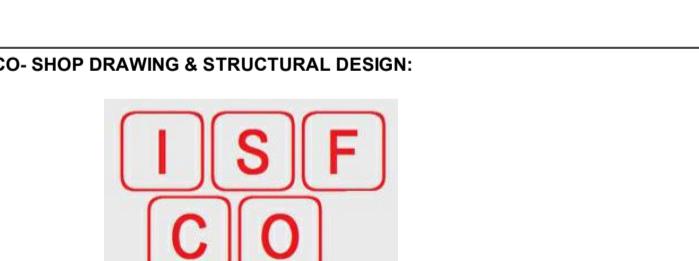
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|----------|---------------------|-------------|
| Rev      | Description         | Date        |
| 00       | ISSUED FOR APPROVAL | 26.Jan.2025 |
|          |                     |             |
|          |                     |             |
|          |                     |             |
|          |                     |             |
|          |                     |             |
|          |                     |             |

| PEER REVIEW CONSULTANT APPROVAL |                     |  |
|---------------------------------|---------------------|--|
| SHOP DRAWING REVIEW / APPROVAL  |                     |  |
| A                               | APPROVED            |  |
| B                               | APPROVED AS NOTED   |  |
| C                               | REVERSE & RESUBMIT  |  |
| D                               | REJECTED            |  |
| E                               | RECEIPT ACKNOWLEDGE |  |

PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT  
RIYADH KINGDOM OF SAUDI ARABIA



Roshn Real Estate



BUILDING: VILLA E01-SB-NO STYLE(0255) ZONE: NHC

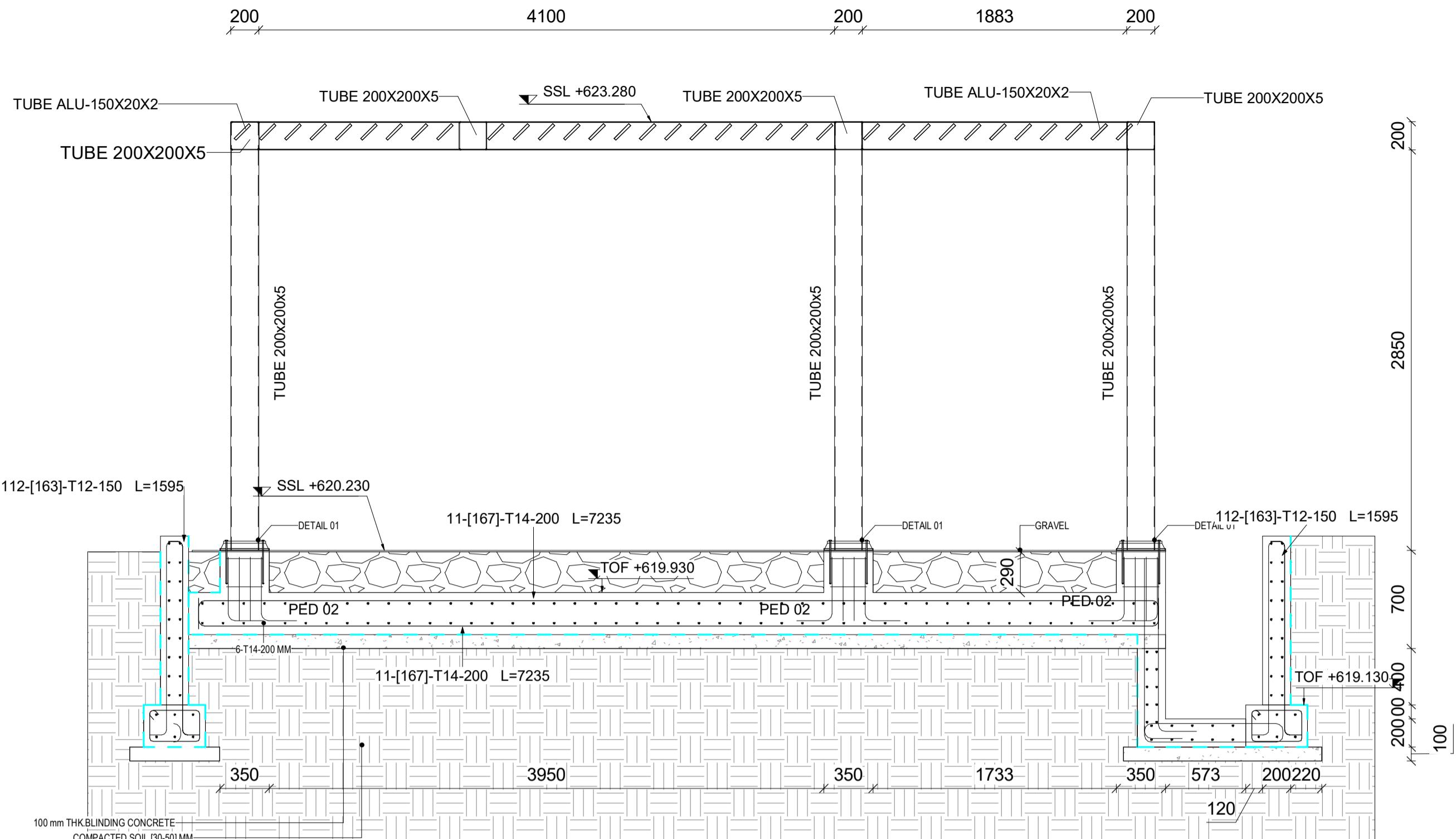
STAGE: Shop Drawing DISC:

DRAWING TITLE:

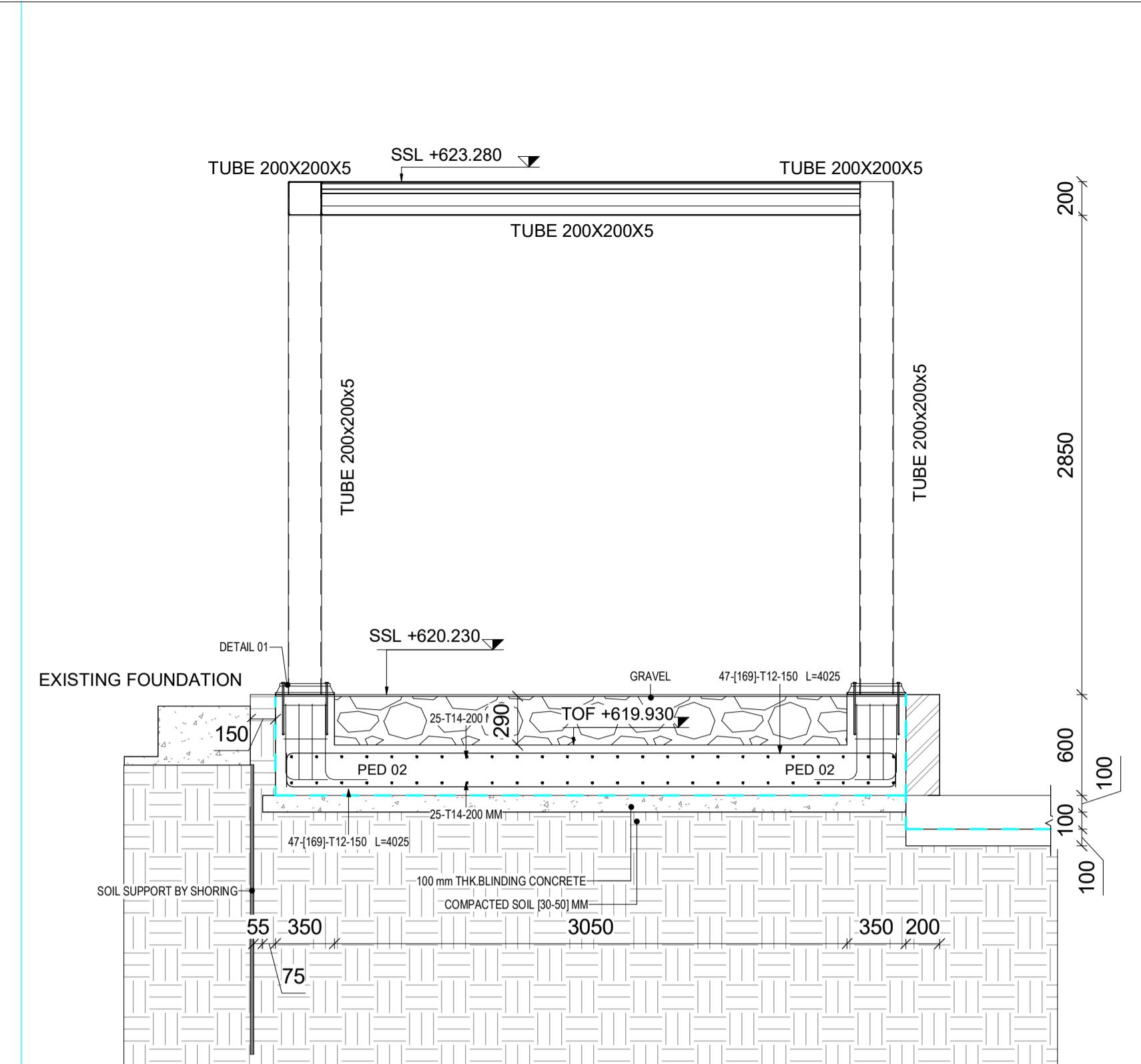
GROUND BEAMS DETAILS 02

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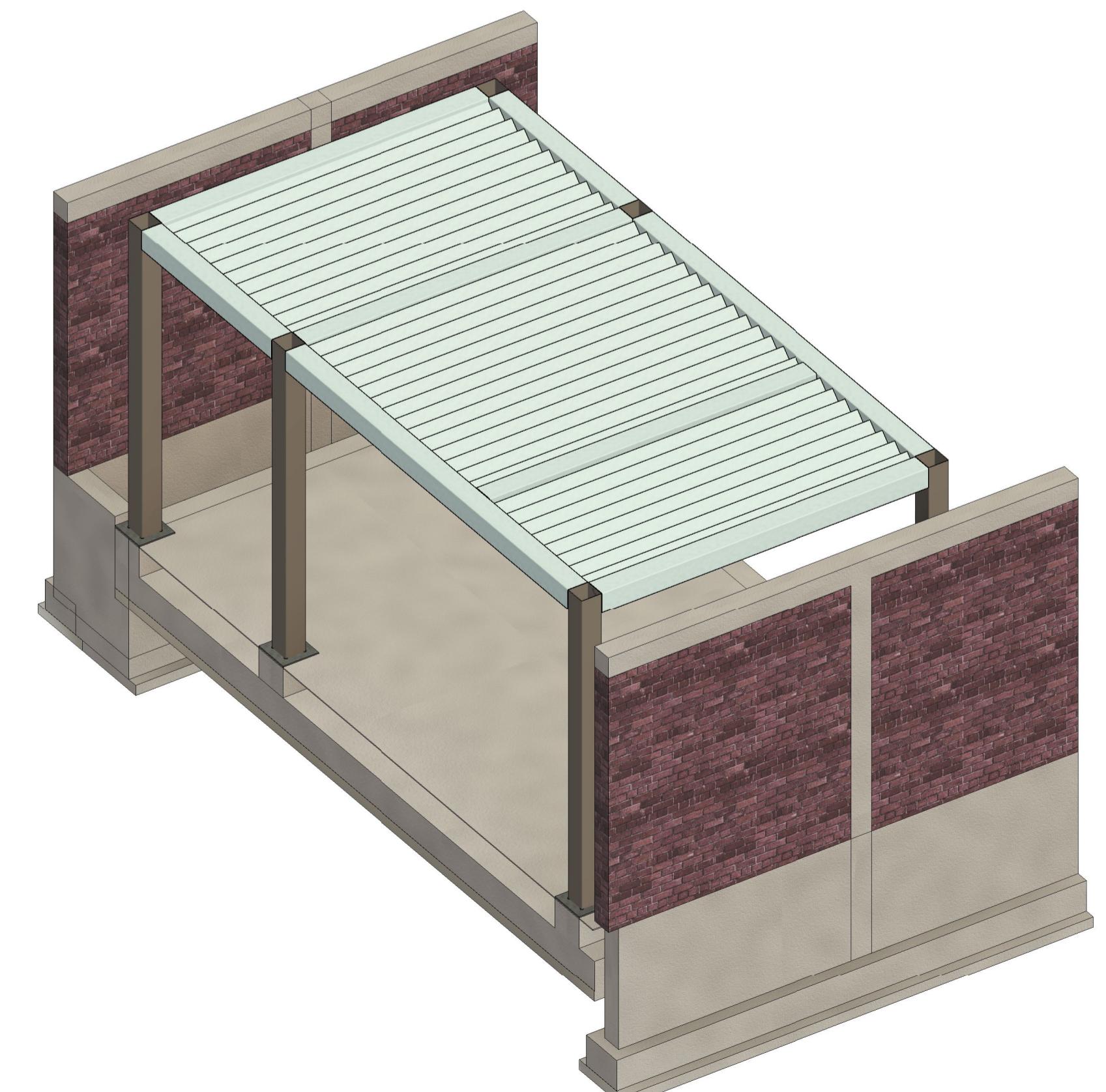




1 | ELEVATION 01  
1 : 30 Ref."00101-IDS-E01-ZZZ-SHD-SE-082



**ELEVATION 02**  
2 | 1 : 30 Ref."00101-IDS-E01-ZZZ-SHD-SE-082009"



**A** | 3D-VIEW A  
Ref."00101-IDS-E01-ZZZ-SHD-SE-082009

**NOTE:**  
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The Key Plan illustrates the layout of a residential complex. A vertical cross-section on the left shows a building with multiple floors and a pink horizontal band indicating the NH-C area. The main plan on the right shows several buildings arranged in a grid pattern. A specific area, labeled 'NH-C', is highlighted with a pink rectangle. A north arrow in the top right corner indicates the cardinal directions.

| <b>PEER REVIEW CONSULTANT APPROVAL</b> |  |  |
|--|--|--|
| SHOP DRAWING REVIEW / APPROVAL         |  |  |
| APPROVED                               |  |  |
| APPROVED AS NOTED                      |  |  |
| REVISE & RESUBMIT                      |  |  |
| REJECTED                               |  |  |
| RECEIPT ACKNOWLEDGE                    |  |  |

GARDEN COLLECTION VILLAS PROJECT  
RIYADH KINGDOM OF SAUDI ARABIA

The logo for 360 Interiors features the number "360" in a large, bold, black font. The "0" is partially overlaid by three concentric circles in light green, yellow, and orange. To the right of "360", the word "interiors" is written in a smaller, lowercase, pink font.

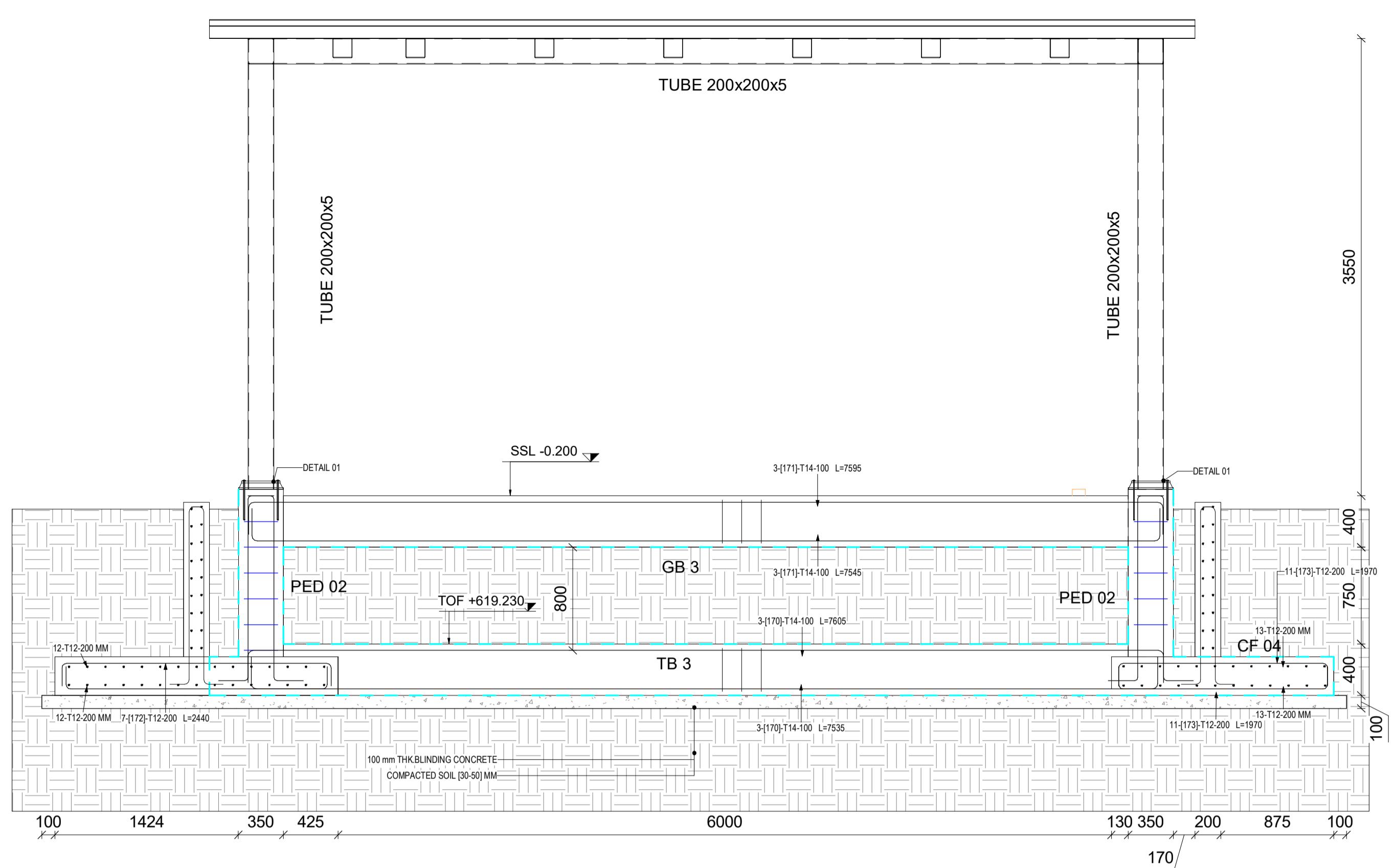
ER REVIEW CONSULTANT:

## CO- SHOP DRAWING & STRUCTURAL DESIGN:

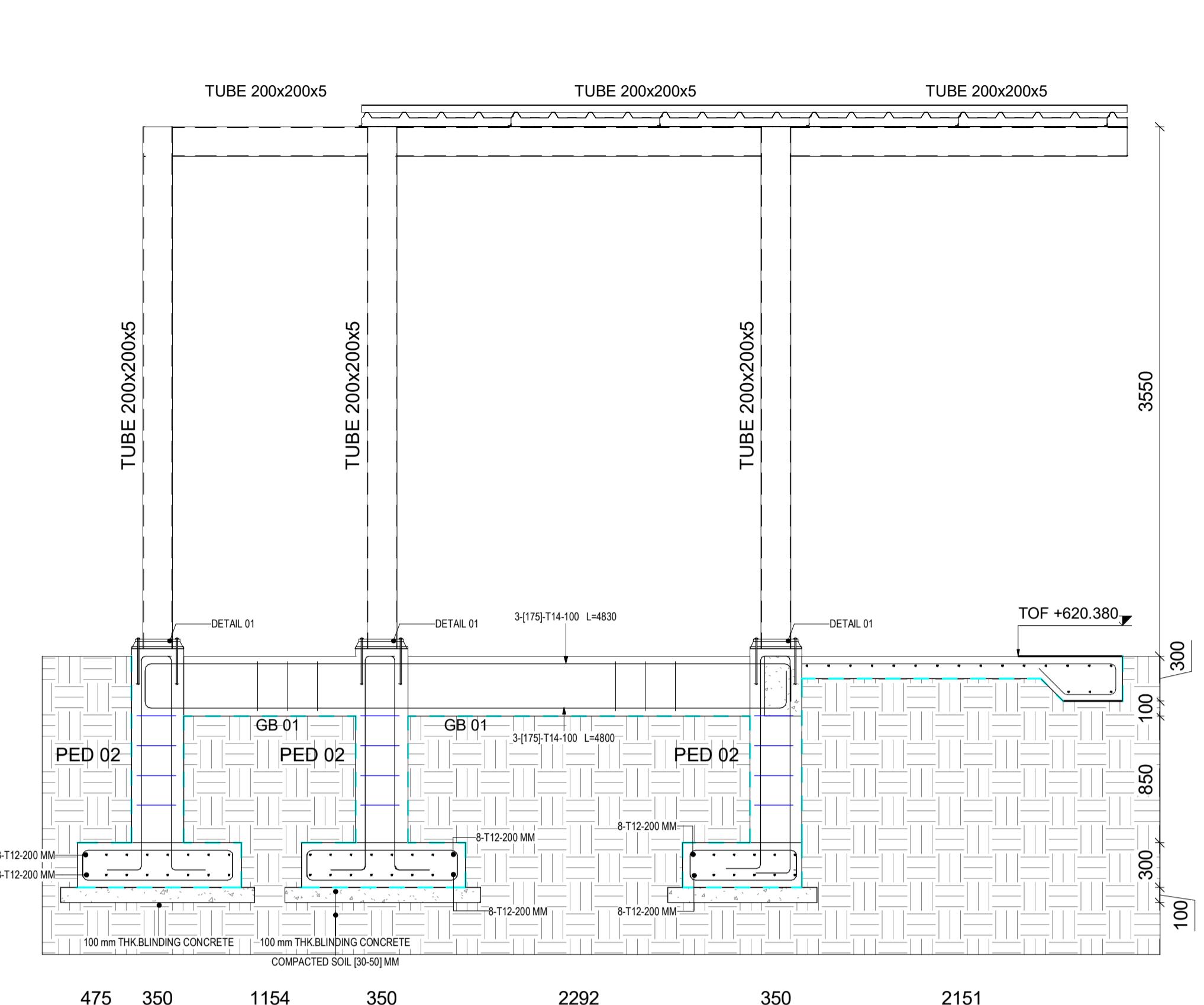
**DAR** International  
Engineering  
Consultancy

|                |                             |       |     |
|----------------|-----------------------------|-------|-----|
| BUILDING:      | VILLA E01-SB-NO STYLE(0255) | ZONE: | NHC |
| PAGE:          | Shop Drawing                | DISC: |     |
| DRAWING TITLE: |                             |       |     |

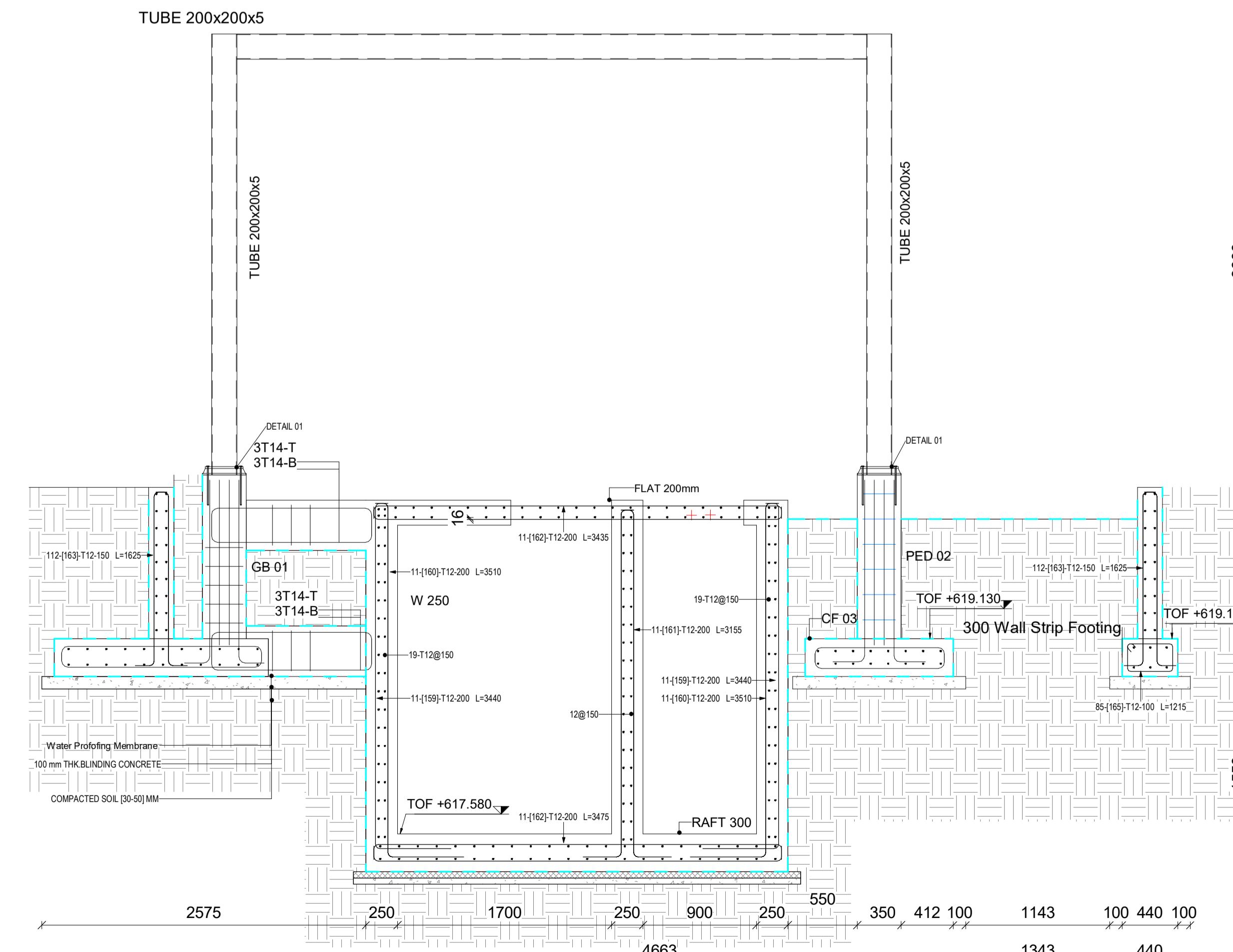
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| SCALE:                 | DRAWN BY                        |  |  | PAPER SIZE |
| 1 : 30                 |                                 |  |  |            |
| DATE:                  | CHECKED BY                      |  |  | REVISION   |
| 0.Jan.2025             |                                 |  |  |            |



**3** | ELEVATION 03  
1 : 30 Ref."00101-IDS-E01-ZZZ-SHD-SE-08201



5 | ELEVATION 05  
1 : 30 Ref."00101-IDS-E01-ZZZ-SHD-SE-082010"



**ELEVATION04**  
4 | 1 : 30 Ref."00101-IDS-E01-ZZZ-SHD-SE-082010"

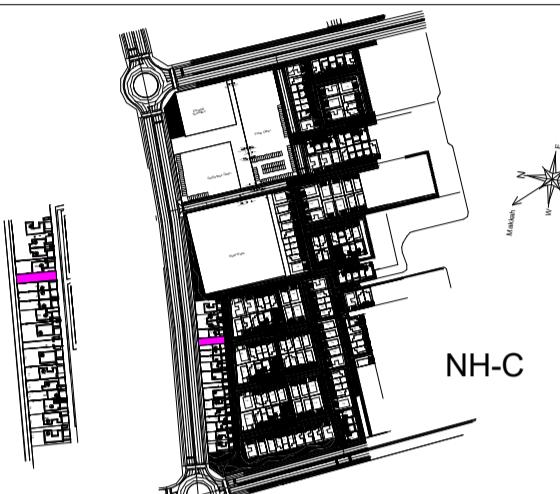
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#### **ABBREVIATIONS:**

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PEER REVIEW CONSULTANT APPROVAL

| SHOP DRAWING REVIEW / APPROVAL |                     |  |  |
|--------------------------------|---------------------|--|--|
| A                              | APPROVED            |  |  |
| B                              | APPROVED AS NOTED   |  |  |
| C                              | REVISE & RESUBMIT   |  |  |
| D                              | REJECTED            |  |  |
| E                              | RECEIPT ACKNOWLEDGE |  |  |

**PROJECT TITLE:** GARDEN COLLECTION VILLAS PROJECT  
RIYADH KINGDOM OF SAUDI ARABIA

**CLIENT (DEVELOPMENT MANAGER):**



Roshn Real Estate روشن العقارية

**MAIN CONTRACTOR:**



**PEER REVIEW CONSULTANT:**



For more information about the study, please contact the study team at 1-800-258-4929 or visit [www.cancer.gov](http://www.cancer.gov).



STRUCTURAL CONSULTANT :



**BUILDING:** VILLA E-01, SR NO. CTYLE/0055

VILLA EUT-SD-NO STYLER(0209) DISC:

#### STAGE: SH

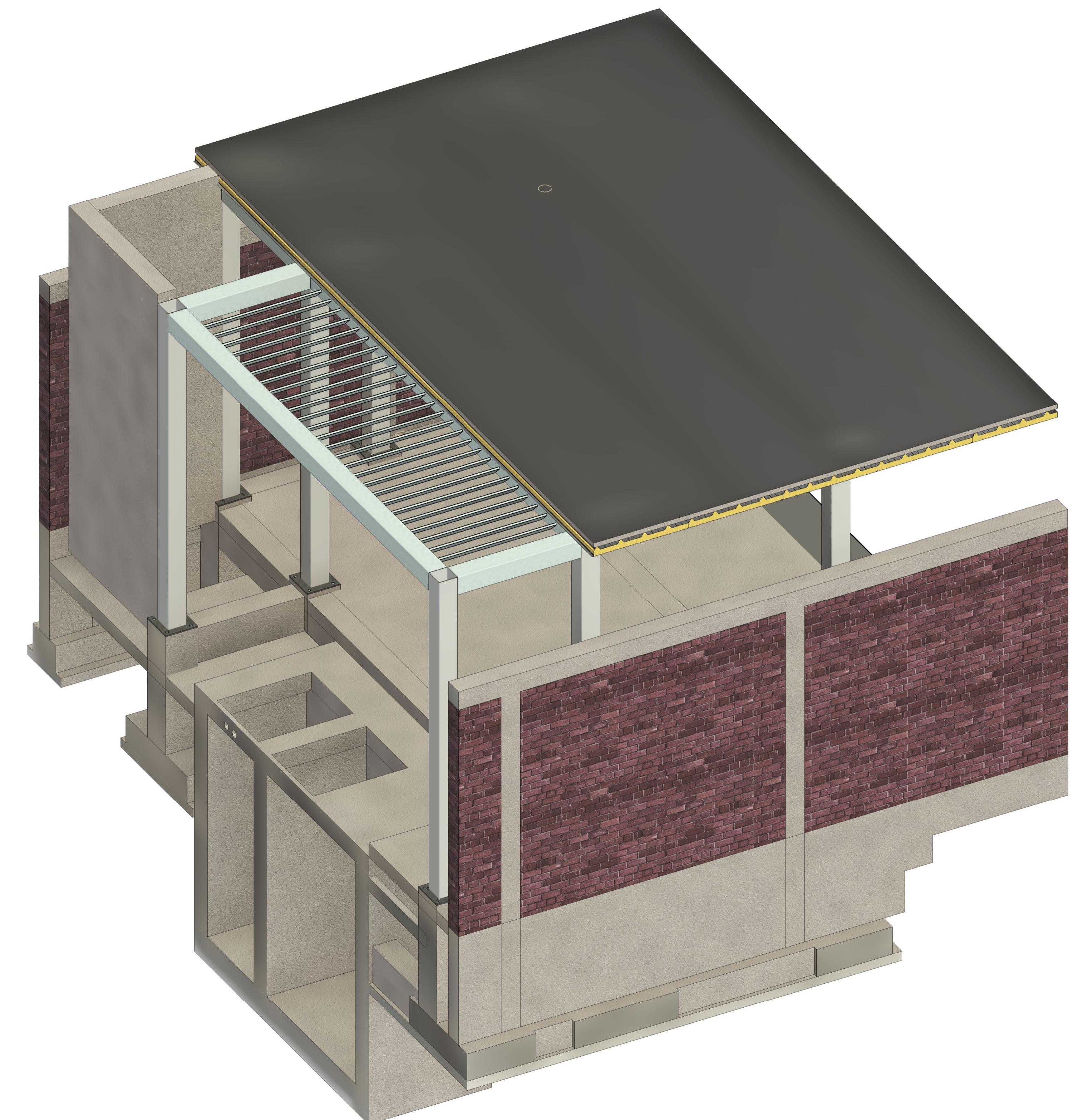
SECTION AND DETAILS 03

## SECTION AND DETAIL S 03

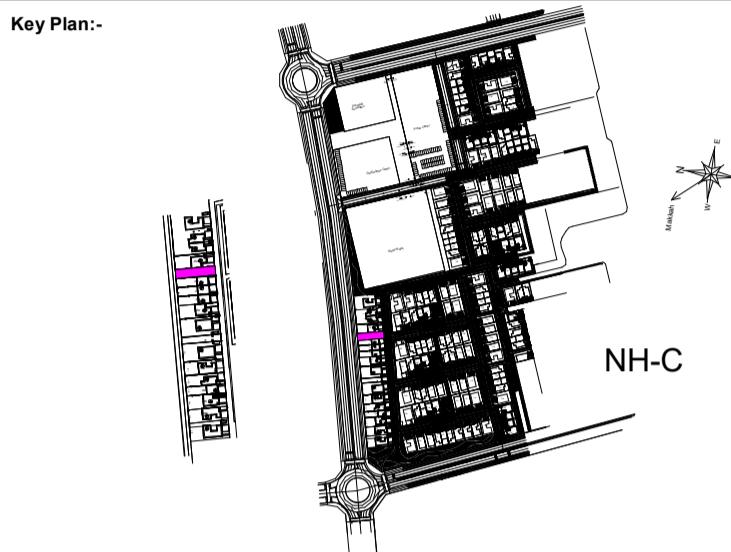
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| DRAWING NO. | 00101-IDS-E01-ZZZ-SHD-SE-082010 |  |            |
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B | 3D-VIEW B  
Ref."00101-IDS-E01-ZZZ-SHD-SE-082012"



ABBREVIATIONS: REFERENCES

| MDL TYP | MDL DISC. | MDL NAME |
|---------|-----------|----------|
|         |           |          |
|         |           |          |
|         |           |          |
|         |           |          |
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REVISION

| Rev | Description         | Date        |
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| 00  | ISSUED FOR APPROVAL | 26.Jan.2025 |
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|     |                     |             |
|     |                     |             |
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|     |                     |             |
|     |                     |             |

PEER REVIEW CONSULTANT APPROVAL

SHOP DRAWING REVIEW / APPROVAL

|   |                     |
|---|---------------------|
| A | APPROVED            |
| B | APPROVED AS NOTED   |
| C | REVISE & RESUBMIT   |
| D | REJECTED            |
| E | RECEIPT ACKNOWLEDGE |

PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT  
RIYADH KINGDOM OF SAUDI ARABIA

CLIENT (DEVELOPMENT MANAGER):

MAIN CONTRACTOR:

PEER REVIEW CONSULTANT:

ISFCO- SHOP DRAWING & STRUCTURAL DESIGN:

STRUCTURAL CONSULTANT :

BUILDING: VILLA E01-SB-NO STYLE(0255) ZONE: NHC

STAGE: Shop Drawing DISC:

DRAWING TITLE: 00101-IDS-E01-ZZZ-SHD-SE-082012

SECTION AND DETAILS 04

|             |                                 |            |          |
|-------------|---------------------------------|------------|----------|
| DRAWING NO. | 00101-IDS-E01-ZZZ-SHD-SE-082012 |            |          |
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| DATE:       | 26.Jan.2025                     | CHECKED BY | REVISION |

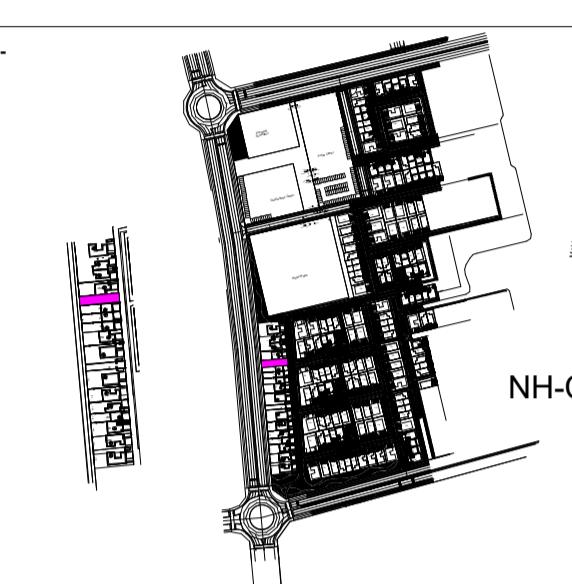
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|----------|--------------|----------------|-------|------|------|------|----|-----|------------|-------------------|--|
| BAR MARK | BAR DIAMETER | TOTAL QUANTITY | IMAGE | A    | B    | C    | D  | E   | BAR LENGTH | TOTAL WEIGHT (KG) |  |
| 1        | 12           | 35             |       | 100  | 1560 | 600  | 0  | 0   | 2260       | 70.246            |  |
| 2        | 12           | 35             |       | 100  | 1560 | 600  | 0  | 0   | 2260       | 70.246            |  |
| 2        | 12           | 35             |       | 100  | 1560 | 600  | 0  | 0   | 2260       | 70.246            |  |
| 3        | 12           | 38             |       | 195  | 330  | 300  | 50 | 245 | 1120       | 37.784            |  |
| 4        | 12           | 38             |       | 195  | 435  | 300  | 50 | 245 | 1225       | 41.327            |  |
| 4        | 12           | 38             |       | 195  | 435  | 300  | 50 | 245 | 1225       | 41.327            |  |
| 5        | 12           | 25             |       | 150  | 5250 | 150  | 0  | 0   | 5550       | 123.181           |  |
| 6        | 12           | 37             |       | 150  | 3450 | 150  | 0  | 0   | 3750       | 123.181           |  |
| 7        | 12           | 11             |       | 500  | 5185 | 500  | 0  | 0   | 6185       | 60.387            |  |
| 8        | 12           | 11             |       | 2860 | 3420 | 2860 | 0  | 0   | 9135       | 89.220            |  |
| 9        | 12           | 11             |       | 500  | 3350 | 500  | 0  | 0   | 4350       | 42.481            |  |
| 10       | 12           | 35             |       | 485  | 1620 | 100  | 0  | 0   | 2205       | 68.453            |  |
| 11       | 12           | 35             |       | 485  | 1620 | 100  | 0  | 0   | 2205       | 68.453            |  |
| 12       | 12           | 16             |       | 150  | 2210 | 150  | 0  | 0   | 2510       | 35.688            |  |
| 13       | 12           | 9              |       | 150  | 1195 | 150  | 0  | 0   | 1495       | 11.954            |  |
| 14       | 12           | 4              |       | 150  | 3930 | 150  | 0  | 0   | 4230       | 15.021            |  |
| 15       | 12           | 4              |       | 150  | 3930 | 150  | 0  | 0   | 4230       | 15.021            |  |
| 16       | 12           | 40             |       | 150  | 340  | 150  | 0  | 0   | 640        | 22.728            |  |
| 17       | 12           | 8              |       | 150  | 1035 | 150  | 0  | 0   | 1335       | 9.481             |  |
| 18       | 12           | 6              |       | 150  | 185  | 150  | 0  | 0   | 485        | 2.585             |  |

| BBS      |              |                |       |      |      |      |    |     |            |                   |  |
|----------|--------------|----------------|-------|------|------|------|----|-----|------------|-------------------|--|
| BAR MARK | BAR DIAMETER | TOTAL QUANTITY | IMAGE | A    | B    | C    | D  | E   | BAR LENGTH | TOTAL WEIGHT (KG) |  |
| 19       | 12           | 4              |       | 150  | 5730 | 150  | 0  | 0   | 6030       | 21.413            |  |
| 20       | 12           | 11             |       | 2860 | 3420 | 2860 | 0  | 0   | 9135       | 89.220            |  |
| 21       | 12           | 11             |       | 500  | 3350 | 500  | 0  | 0   | 4350       | 42.481            |  |
| 22       | 12           | 11             |       | 500  | 5185 | 500  | 0  | 0   | 6185       | 60.387            |  |
| 23       | 12           | 40             |       | 150  | 340  | 150  | 0  | 0   | 640        | 22.728            |  |
| 24       | 12           | 4              |       | 150  | 5730 | 150  | 0  | 0   | 6030       | 21.414            |  |
| 25       | 10           | 15             |       | 330  | 360  | 0    | 0  | 0   | 690        | 6.381             |  |
| 26       | 10           | 5              |       | 1090 | 0    | 0    | 0  | 0   | 1090       | 3.360             |  |
| 27       | 12           | 23             |       | 100  | 1560 | 600  | 0  | 0   | 2260       | 46.161            |  |
| 28       | 12           | 26             |       | 195  | 430  | 300  | 50 | 245 | 1220       | 28.161            |  |
| 29       | 12           | 23             |       | 100  | 1560 | 600  | 0  | 0   | 2260       | 46.161            |  |
| 30       | 12           | 23             |       | 485  | 1620 | 100  | 0  | 0   | 2205       | 44.984            |  |
| 31       | 12           | 23             |       | 485  | 1620 | 100  | 0  | 0   | 2205       | 44.984            |  |
| 32       | 10           | 6              |       | 560  | 630  | 0    | 0  | 0   | 1190       | 4.402             |  |
| 33       | 10           | 6              |       | 1850 | 0    | 0    | 0  | 0   | 1850       | 6.843             |  |
| 34       | 12           | 4              |       | 1000 | 0    | 0    | 0  | 0   | 1000       | 3.551             |  |
| 35       | 12           | 21             |       | 200  | 1625 | 200  | 0  | 0   | 2025       | 37.781            |  |
| 35       | 12           | 21             |       | 200  | 1630 | 200  | 0  | 0   | 2030       | 37.821            |  |
| 35       | 12           | 15             |       | 200  | 2125 | 200  | 0  | 0   | 2525       | 33.633            |  |
| 35       | 12           | 15             |       | 200  | 2125 | 200  | 0  | 0   | 2525       | 33.626            |  |

**NOTE:**  
GENERAL NOTES:

1- DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING.  
 2- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS IN METERS UNLESS NOTED OTHERWISE.  
 3- ALL DIMENSIONS ARE IN MILLIMETERS AND ARE TO BE READ BETWEEN WRITTEN DIMENSIONS AND SITE DIMENSIONS OR WITHIN THESE DRAWINGS SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT BEFORE EXECUTING THE WORKS.  
 4- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DOCUMENTATION FORMING THE CONSTRUCTION CONTRACT.  
 5- ALL EXISTING DIMENSIONS/LEVELS ETC. INDICATED ON DRAWINGS ARE TO BE VERIFIED ON SITE.

**Key Plan:-**



**ABBREVIATIONS:**

|         |           |          |
|---------|-----------|----------|
| MDL TYP | MDL DISC. | MDL NAME |
|---------|-----------|----------|

**REFERENCES**

|     |                     |             |
|-----|---------------------|-------------|
| Rev | Description         | Date        |
| 00  | ISSUED FOR APPROVAL | 26.Jan.2025 |

**REVISION**

|     |             |      |
|-----|-------------|------|
| Rev | Description | Date |
|-----|-------------|------|

**PEER REVIEW CONSULTANT APPROVAL**

SHOP DRAWING REVIEW / APPROVAL

|   |                     |
|---|---------------------|
| A | APPROVED            |
| B | APPROVED AS NOTED   |
| C | REVISE & RESUBMIT   |
| D | REJECTED            |
| E | RECEIPT ACKNOWLEDGE |

PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT RIYADH KINGDOM OF SAUDI ARABIA

CLIENT (DEVELOPMENT MANAGER):



Roshn Real Estate

MAIN CONTRACTOR:



360 interiors

PEER REVIEW CONSULTANT:



DAR AL RIYADH

ISFCO - SHOP DRAWING & STRUCTURAL DESIGN:



ISCO

STRUCTURAL CONSULTANT :



DAR International Engineering Consultancy

BUILDING: VILLA E01-SB-NO STYLE(0255) ZONE: NHC

STAGE: Shop Drawing DISC:

DRAWING TITLE: BBS-01

DRAWING NO. 00101-IDS-E01-ZZZ-SHD-SE-090008

SCALE: DRAWN BY PAPER SIZE A1

DATE: 26.Jan.2025 CHECKED BY REVISION

| BBS      |              |                |       |     |      |     |   |   |            |                   |  |
|----------|--------------|----------------|-------|-----|------|-----|---|---|------------|-------------------|--|
| BAR MARK | BAR DIAMETER | TOTAL QUANTITY | IMAGE | A   | B    | C   | D | E | BAR LENGTH | TOTAL WEIGHT (KG) |  |
| 36       | 12           | 30             |       | 200 | 1030 | 200 | 0 | 0 | 1430       | 38.039            |  |
| 36       | 12           | 30             |       | 200 | 1030 | 200 | 0 | 0 | 1430       | 38.039            |  |
| 36       | 12           | 36             |       | 200 | 730  | 200 | 0 | 0 | 1130       | 36.118            |  |
| 36       | 12           | 36             |       | 200 | 730  | 200 | 0 | 0 | 1130       | 36.118            |  |
| 37       | 12           | 18             |       | 200 | 520  | 200 | 0 | 0 | 920        | 14.714            |  |
| 38       | 12           | 12             |       | 200 | 1000 | 200 | 0 | 0 | 1400       | 14.912            |  |
| 39       | 12           | 36             |       | 200 | 850  | 200 | 0 | 0 | 1250       | 39.951            |  |
| 40       | 12           | 36             |       | 200 | 850  | 200 | 0 | 0 | 1250       | 39.951            |  |
| 41       | 12           | 36             |       | 200 | 850  | 200 | 0 | 0 | 1250       | 39.951            |  |
| 42       | 12           | 36             |       | 200 | 850  | 200 | 0 | 0 | 1250       | 39.951            |  |
| 43       | 12           | 7              |       | 200 | 1850 | 200 | 0 | 0 | 2250       | 13.984            |  |
| 43       | 12           | 7              |       | 200 | 1850 | 200 | 0 | 0 | 2250       | 13.984            |  |
| 44       | 12           | 11             |       | 200 | 995  | 200 | 0 | 0 | 1395       | 13.633            |  |
| 44       | 12           | 11             |       | 200 | 995  | 200 | 0 | 0 | 1395       | 13.633            |  |
| 47       | 12           | 9              |       | 200 | 1830 | 200 | 0 | 0 | 2230       | 17.804            |  |
| 47       | 12           | 9              |       | 200 | 1830 | 200 | 0 | 0 | 2230       | 17.804            |  |
| 48       | 12           | 11             |       | 200 | 1475 | 200 | 0 | 0 | 1875       | 18.305            |  |
| 48       | 12           | 11             |       | 200 | 1475 | 200 | 0 | 0 | 1875       | 18.305            |  |
| 51       | 12           | 7              |       | 200 | 2545 | 200 | 0 | 0 | 2945       | 18.295            |  |
| 52       | 12           | 14             |       | 200 | 1025 | 200 | 0 | 0 | 1425       | 17.712            |  |

| BBS      |              |                |       |     |      |     |    |   |            |                   |  |
|----------|--------------|----------------|-------|-----|------|-----|----|---|------------|-------------------|--|
| BAR MARK | BAR DIAMETER | TOTAL QUANTITY | IMAGE | A   | B    | C   | D  | E | BAR LENGTH | TOTAL WEIGHT (KG) |  |
| 55       | 10           | 63             |       | 150 | 300  | 30  | 30 | 0 | 960        | 37.287            |  |
| 56       | 14           | 6              |       | 300 | 7550 | 300 | 0  | 0 | 8150       | 59.090            |  |
| 57       | 14           | 6              |       | 300 | 7550 | 300 | 0  | 0 | 8150       | 59.090            |  |
| 58       | 10           | 90             |       | 150 | 300  | 30  | 30 | 0 | 960        | 53.268            |  |
| 59       | 14           | 3              |       | 300 | 5185 | 300 | 0  | 0 | 5785       | 20.979            |  |
| 60       | 14           | 3              |       | 300 | 5185 | 300 | 0  | 0 | 5785       | 20.979            |  |
| 61       | 14           | 3              |       | 300 | 7125 | 300 | 0  | 0 | 7725       | 28.012            |  |
| 62       | 14           | 3              |       | 300 | 7040 | 300 | 0  | 0 | 7640       | 27.687            |  |
| 63       | 10           | 48             |       | 150 | 300  | 30  | 30 | 0 | 960        | 28.409            |  |
| 64       | 10           | 20             |       | 150 | 300  | 30  | 30 | 0 | 960        | 11.837            |  |
| 65       | 14           | 3              |       | 300 | 2480 | 300 | 0  | 0 | 3080       | 11.171            |  |
| 66       | 14           | 3              |       | 300 | 2480 | 300 | 0  | 0 | 3080       | 11.171            |  |
| 67       | 10           | 14             |       | 150 | 300  | 30  | 30 | 0 | 960        | 8.286             |  |
| 68       | 14           | 3              |       | 300 | 7150 | 300 | 0  | 0 | 7750       | 28.102            |  |
| 69       | 14           | 3              |       | 300 | 7050 | 300 | 0  | 0 | 7650       | 27.737            |  |
| 70       | 10           | 12             |       | 150 | 300  | 30  | 30 | 0 | 960        | 7.102             |  |
| 71       | 14           | 3              |       | 300 | 7140 | 300 | 0  | 0 | 7740       | 28.060            |  |
| 72       | 14           | 3              |       | 300 | 7065 | 300 | 0  | 0 | 7665       | 27.786            |  |
| 73       | 10           | 47             |       | 150 | 300  | 30  | 30 | 0 | 960        | 27.818            |  |
| 74       | 12           | 3              |       | 300 | 2625 | 300 | 0  | 0 | 3225       | 8.591             |  |

**NOTE:**  
GENERAL NOTES:

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5- ALL EXISTING DIMENSIONS/LEVELS ETC. INDICATED ON DRAWINGS ARE TO BE VERIFIED ON SITE.

**Key Plan:-**

**ABBREVIATIONS:**

|         |           |          |
|---------|-----------|----------|
| MDL TYP | MDL DISC. | MDL NAME |
|---------|-----------|----------|

**REFERENCES**

|     |                     |             |
|-----|---------------------|-------------|
| Rev | Description         | Date        |
| 00  | ISSUED FOR APPROVAL | 26.Jan.2025 |

**PEER REVIEW CONSULTANT APPROVAL**

SHOP DRAWING REVIEW / APPROVAL

|   |                     |
|---|---------------------|
| A | APPROVED            |
| B | APPROVED AS NOTED   |
| C | REVERSE & RESUBMIT  |
| D | REJECTED            |
| E | RECEIPT ACKNOWLEDGE |

PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT RIYADH KINGDOM OF SAUDI ARABIA

CLIENT (DEVELOPMENT MANAGER):

Roshn Real Estate

MAIN CONTRACTOR:

360 interiors

PEER REVIEW CONSULTANT:

DAR AL RIYADH

ISFCO- SHOP DRAWING & STRUCTURAL DESIGN:

International Engineering Consultancy

BUILDING: VILLA E01-SB-NO STYLE(0255) ZONE: NHC

STAGE: Shop Drawing DISC:

DRAWING TITLE: BBS-02

DRAWING NO. 00101-IDS-E01-ZZZ-SHD-SE-090009

SCALE: DRAWN BY PAPER SIZE A1

DATE: 26.Jan.2025 CHECKED BY REVISION

| BBS      |              |                |       |     |      |     |    |   |            |                   |
|----------|--------------|----------------|-------|-----|------|-----|----|---|------------|-------------------|
| BAR MARK | BAR DIAMETER | TOTAL QUANTITY | IMAGE | A   | B    | C   | D  | E | BAR LENGTH | TOTAL WEIGHT (KG) |
| 75       | 12           | 3              |       | 300 | 2625 | 300 | 0  | 0 | 3225       | 8.589             |
| 76       | 10           | 12             |       | 150 | 300  | 30  | 30 | 0 | 960        | 7.102             |
| 77       | 14           | 3              |       | 300 | 7105 | 300 | 0  | 0 | 7705       | 27.932            |
| 78       | 14           | 3              |       | 300 | 7025 | 300 | 0  | 0 | 7625       | 27.634            |
| 79       | 10           | 12             |       | 150 | 300  | 30  | 30 | 0 | 960        | 7.102             |
| 80       | 14           | 3              |       | 300 | 1705 | 300 | 0  | 0 | 2305       | 8.355             |
| 81       | 14           | 3              |       | 300 | 1705 | 300 | 0  | 0 | 2305       | 8.352             |
| 82       | 10           | 9              |       | 150 | 300  | 30  | 30 | 0 | 960        | 5.327             |
| 83       | 14           | 3              |       | 300 | 2840 | 300 | 0  | 0 | 3440       | 12.462            |
| 84       | 14           | 3              |       | 300 | 2765 | 300 | 0  | 0 | 3365       | 12.194            |
| 85       | 14           | 3              |       | 300 | 4265 | 300 | 0  | 0 | 4865       | 17.644            |
| 86       | 14           | 3              |       | 300 | 4345 | 300 | 0  | 0 | 4945       | 17.932            |
| 87       | 10           | 7              |       | 150 | 300  | 30  | 30 | 0 | 960        | 4.143             |
| 88       | 10           | 30             |       | 150 | 300  | 30  | 30 | 0 | 960        | 17.756            |
| 89       | 14           | 6              |       | 300 | 1425 | 300 | 0  | 0 | 2025       | 14.692            |
| 90       | 14           | 6              |       | 300 | 1385 | 300 | 0  | 0 | 1985       | 14.392            |
| 91       | 14           | 3              |       | 300 | 2625 | 300 | 0  | 0 | 3225       | 11.691            |
| 92       | 14           | 3              |       | 300 | 2625 | 300 | 0  | 0 | 3225       | 11.691            |
| 93       | 10           | 14             |       | 150 | 300  | 30  | 30 | 0 | 960        | 8.286             |
| 94       | 12           | 7              |       | 200 | 2545 | 200 | 0  | 0 | 2945       | 18.295            |

| BBS      |              |                |       |      |      |      |    |   |            |                   |
|----------|--------------|----------------|-------|------|------|------|----|---|------------|-------------------|
| BAR MARK | BAR DIAMETER | TOTAL QUANTITY | IMAGE | A    | B    | C    | D  | E | BAR LENGTH | TOTAL WEIGHT (KG) |
| 95       | 12           | 14             |       | 200  | 1025 | 200  | 0  | 0 | 1425       | 17.712            |
| 96       | 10           | 23             |       | 150  | 300  | 30   | 30 | 0 | 960        | 13.613            |
| 99       | 10           | 63             |       | 150  | 300  | 30   | 30 | 0 | 960        | 37.287            |
| 100      | 14           | 6              |       | 300  | 7550 | 300  | 0  | 0 | 8150       | 59.085            |
| 101      | 14           | 6              |       | 300  | 7550 | 300  | 0  | 0 | 8150       | 59.101            |
| 102      | 10           | 90             |       | 150  | 300  | 30   | 30 | 0 | 960        | 53.268            |
| 103      | 12           | 25             |       | 150  | 5250 | 150  | 0  | 0 | 5550       | 123.181           |
| 104      | 12           | 37             |       | 150  | 3450 | 150  | 0  | 0 | 3750       | 123.181           |
| 105      | 12           | 17             |       | 150  | 3200 | 150  | 0  | 0 | 3500       | 52.824            |
| 106      | 12           | 17             |       | 150  | 3200 | 150  | 0  | 0 | 3500       | 52.824            |
| 107      | 12           | 23             |       | 150  | 2210 | 150  | 0  | 0 | 2510       | 51.279            |
| 108      | 12           | 23             |       | 150  | 2210 | 150  | 0  | 0 | 2510       | 51.279            |
| 109      | 12           | 2              |       | 3100 | 3900 | 3100 | 0  | 0 | 10100      | 17.933            |
| 110      | 12           | 2              |       | 3100 | 3900 | 3100 | 0  | 0 | 10100      | 17.933            |
| 111      | 12           | 11             |       | 500  | 5185 | 500  | 0  | 0 | 6185       | 60.387            |
| 112      | 12           | 19             |       | 1835 | 2180 | 1835 | 0  | 0 | 5850       | 98.665            |
| 113      | 12           | 19             |       | 1835 | 2180 | 1835 | 0  | 0 | 5850       | 98.665            |
| 114      | 12           | 19             |       | 500  | 3125 | 500  | 0  | 0 | 4125       | 69.551            |
| 115      | 12           | 19             |       | 500  | 2160 | 500  | 0  | 0 | 3160       | 53.343            |
| 116      | 12           | 19             |       | 500  | 2160 | 500  | 0  | 0 | 3160       | 53.343            |

**NOTE:**  
GENERAL NOTES:  
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 3- ALL DIMENSIONS ARE IN MILLIMETERS OR IN METERS AS INDICATED ON THE DRAWINGS.  
 4- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DOCUMENTATION FORMING THE CONSTRUCTION CONTRACT.  
 5- ALL EXISTING DIMENSIONS/LEVELS ETC. INDICATED ON DRAWINGS ARE TO BE VERIFIED ON SITE.

**Key Plan:-**  
  
**ABBREVIATIONS:**  
**REFERENCES**  

| MDL TYP | MDL DISC. | MDL NAME |
|---------|-----------|----------|
|---------|-----------|----------|

**REVISION**

| Rev | Description         | Date        |
|-----|---------------------|-------------|
| 00  | ISSUED FOR APPROVAL | 26.Jan.2025 |

**PEER REVIEW CONSULTANT APPROVAL**  
 SHOP DRAWING REVIEW / APPROVAL

| A | APPROVED            |
|---|---------------------|
| B | APPROVED AS NOTED   |
| C | REVISE & RESUBMIT   |
| D | REJECTED            |
| E | RECEIPT ACKNOWLEDGE |

**PROJECT TITLE:** GARDEN COLLECTION VILLAS PROJECT  
 RIYADH KINGDOM OF SAUDI ARABIA

**CLIENT (DEVELOPMENT MANAGER):**

**MAIN CONTRACTOR:**

**PEER REVIEW CONSULTANT:**

**ISFCO- SHOP DRAWING & STRUCTURAL DESIGN:**

**STRUCTURAL CONSULTANT :**

**BUILDING:** VILLA E01-SB-NO STYLE(0255) **ZONE:** NHC

**STAGE:** Shop Drawing **DISC:**

**DRAWING TITLE:** BBS-03

**DRAWING NO.** 00101-IDS-E01-ZZZ-SHD-SE-090010  
**SCALE:** DRAWN BY \_\_\_\_\_ **PAPER SIZE:** A1  
**DATE:** 26.Jan.2025 **REVISION:** \_\_\_\_\_

| BBS      |              |                |       |     |      |     |      |     |            |                   |
|----------|--------------|----------------|-------|-----|------|-----|------|-----|------------|-------------------|
| BAR MARK | BAR DIAMETER | TOTAL QUANTITY | IMAGE | A   | B    | C   | D    | E   | BAR LENGTH | TOTAL WEIGHT (KG) |
| 117      | 12           | 19             |       | 500 | 3125 | 500 | 0    | 0   | 4125       | 69.551            |
| 118      | 14           | 6              |       | 300 | 1425 | 300 | 0    | 0   | 2025       | 14.682            |
| 119      | 14           | 6              |       | 300 | 1330 | 300 | 0    | 0   | 1930       | 13.989            |
| 121      | 10           | 9              |       | 280 | 280  | 30  | 30   | 0   | 1185       | 6.570             |
| 122      | 10           | 9              |       | 280 | 115  | 30  | 30   | 0   | 850        | 4.714             |
| 123      | 10           | 9              |       | 280 | 120  | 30  | 30   | 0   | 865        | 4.791             |
| 124      | 10           | 20             |       | 150 | 300  | 30  | 30   | 0   | 960        | 11.837            |
| 125      | 16           | 36             |       | 200 | 1790 | 480 | 0    | 0   | 2470       | 140.342           |
| 126      | 16           | 18             |       | 480 | 1790 | 200 | 0    | 0   | 2470       | 70.109            |
| 127      | 10           | 39             |       | 200 | 200  | 30  | 30   | 0   | 860        | 20.678            |
| 128      | 10           | 39             |       | 200 | 90   | 30  | 30   | 0   | 640        | 15.388            |
| 129      | 10           | 39             |       | 200 | 90   | 30  | 30   | 0   | 640        | 15.388            |
| 130      | 12           | 7              |       | 150 | 3200 | 150 | 0    | 0   | 3500       | 21.751            |
| 131      | 12           | 7              |       | 150 | 3200 | 150 | 0    | 0   | 3500       | 21.751            |
| 132      | 12           | 6              |       | 150 | 185  | 150 | 0    | 0   | 485        | 2.585             |
| 133      | 12           | 8              |       | 150 | 1035 | 150 | 0    | 0   | 1335       | 9.481             |
| 134      | 12           | 28             |       | 150 | 295  | 150 | 0    | 0   | 595        | 14.763            |
| 135      | 12           | 28             |       | 150 | 340  | 150 | 0    | 0   | 640        | 15.899            |
| 136      | 16           | 36             |       | 480 | 2020 | 220 | 2005 | 480 | 5205       | 295.699           |

| BBS      |              |                |       |     |      |     |    |     |            |                   |
|----------|--------------|----------------|-------|-----|------|-----|----|-----|------------|-------------------|
| BAR MARK | BAR DIAMETER | TOTAL QUANTITY | IMAGE | A   | B    | C   | D  | E   | BAR LENGTH | TOTAL WEIGHT (KG) |
| 137      | 12           | 16             |       | 150 | 2210 | 150 | 0  | 0   | 2510       | 35.688            |
| 138      | 12           | 9              |       | 150 | 1195 | 150 | 0  | 0   | 1495       | 11.954            |
| 139      | 10           | 42             |       | 200 | 200  | 30  | 30 | 0   | 860        | 22.269            |
| 139      | 10           | 49             |       | 250 | 250  | 30  | 30 | 0   | 1060       | 32.022            |
| 140      | 10           | 42             |       | 200 | 90   | 30  | 30 | 0   | 640        | 16.572            |
| 140      | 10           | 49             |       | 250 | 90   | 30  | 30 | 0   | 740        | 22.355            |
| 141      | 10           | 42             |       | 200 | 90   | 30  | 30 | 0   | 640        | 16.572            |
| 141      | 10           | 49             |       | 250 | 90   | 30  | 30 | 0   | 740        | 22.355            |
| 143      | 10           | 49             |       | 250 | 250  | 30  | 30 | 0   | 1060       | 32.022            |
| 144      | 10           | 49             |       | 250 | 90   | 30  | 30 | 0   | 740        | 22.355            |
| 145      | 10           | 49             |       | 250 | 90   | 30  | 30 | 0   | 740        | 22.355            |
| 146      | 12           | 23             |       | 100 | 2755 | 600 | 0  | 0   | 3455       | 70.571            |
| 147      | 12           | 23             |       | 485 | 2810 | 100 | 0  | 0   | 3395       | 69.336            |
| 148      | 12           | 26             |       | 195 | 435  | 300 | 50 | 245 | 2945       | 67.978            |
| 149      | 12           | 23             |       | 100 | 2855 | 600 | 0  | 0   | 3555       | 72.638            |
| 150      | 12           | 23             |       | 485 | 2810 | 100 | 0  | 0   | 3395       | 69.336            |
| 151      | 12           | 19             |       | 500 | 2160 | 500 | 0  | 0   | 3160       | 53.343            |
| 152      | 12           | 19             |       | 500 | 2160 | 500 | 0  | 0   | 3160       | 53.343            |
| 153      | 12           | 13             |       | 485 | 2725 | 100 | 0  | 0   | 3310       | 38.190            |

| BBS                             |                                 |                |          |            |      |       |            |          |            |                   |
|---------------------------------|---------------------------------|----------------|----------|------------|------|-------|------------|----------|------------|-------------------|
| BAR MARK                        | BAR DIAMETER                    | TOTAL QUANTITY | IMAGE    | A          | B    | C     | D          | E        | BAR LENGTH | TOTAL WEIGHT (KG) |
| 154                             | 12                              | 13             |          | 485        | 2715 | 100   | 0          | 0        | 3300       | 38.086            |
| 155                             | 12                              | 13             |          | 485        | 2725 | 100   | 0          | 0        | 3310       | 38.190            |
| 156                             | 12                              | 13             |          | 100        | 2785 | 600   | 0          | 0        | 3485       | 40.225            |
| 157                             | 12                              | 13             |          | 485        | 2725 | 100   | 0          | 0        | 3310       | 38.190            |
| 158                             | 12                              | 13             |          | 100        | 2785 | 600   | 0          | 0        | 3485       | 40.225            |
| 163                             | 12                              | 13             |          | 120        | 1375 | 100   | 0          | 0        | 1595       | 158.744           |
| 167                             | 12                              | 13             |          | 200        | 6835 | 200   | 0          | 0        | 7235       | 96.181            |
| 167                             | 12                              | 13             |          | 200        | 6835 | 200   | 0          | 0        | 7235       | 96.181            |
| 169                             | 12                              | 47             |          | 200        | 3625 | 200   | 0          | 0        | 4025       | 167.873           |
| 169                             | 12                              | 47             |          | 200        | 3625 | 200   | 0          | 0        | 4025       | 167.873           |
| Grand total: 168                |                                 |                |          |            |      |       |            |          |            |                   |
| 00101-IDS-E01-ZZZ-SHD-SE-090011 |                                 |                |          |            |      |       |            |          |            |                   |
| DRAWING NO:                     | 00101-IDS-E01-ZZZ-SHD-SE-090011 | SCALE:         | DRAWN BY | PAPER SIZE | A1   | DATE: | CHECKED BY | REVISION |            |                   |
| 26-Jan-2025                     |                                 |                |          |            |      |       |            |          |            |                   |

**Roshn Real Estate**  
MAIN CONTRACTOR:  
**360 interiors**  
PEER REVIEW CONSULTANT:  
**DAR AL RIYADH**  
ISFCO - SHOP DRAWING & STRUCTURAL DESIGN:  
**I S F C O**  
STRUCTURAL CONSULTANT:  
**DAR International Engineering Consultancy**  
BUILDING: VILLA E01-SB-NO STYLE(0255) ZONE: NHC  
STAGE: Shop Drawing DISC:  
DRAWING TITLE: BBS-04  
DRAWING NO: 00101-IDS-E01-ZZZ-SHD-SE-090011  
SCALE: DRAWN BY PAPER SIZE A1  
DATE: CHECKED BY REVISION  
26-Jan-2025

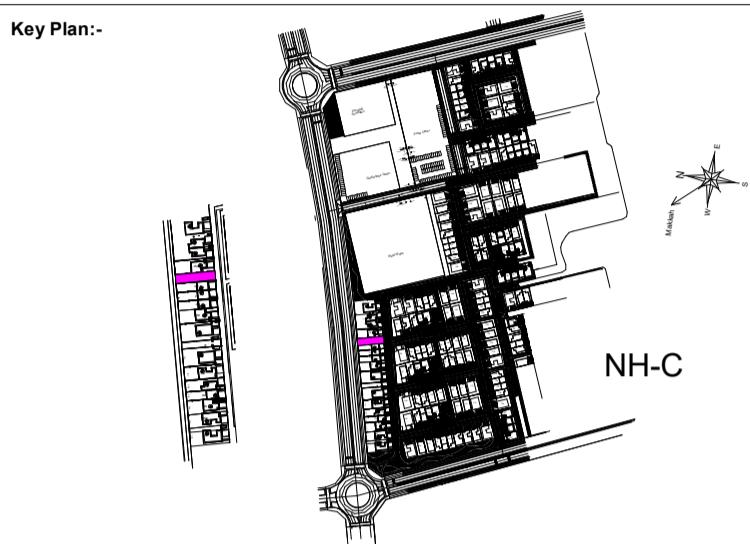
NOTE:  
ATTENTION OF THE ARCHITECT BEFORE WORKS  
THIS DRAWING IS TO BE READ IN  
OTHER DOCUMENTATION FORMING  
CONTRACT.  
DIMMING DIMENSIONS LEVEL  
DRAWINGS ARE TO

| BBS      |              |                |       |     |      |     |   |   |            |                   |
|----------|--------------|----------------|-------|-----|------|-----|---|---|------------|-------------------|
| BAR MARK | BAR DIAMETER | TOTAL QUANTITY | IMAGE | A   | B    | C   | D | E | BAR LENGTH | TOTAL WEIGHT (KG) |
| 154      | 12           | 13             |       | 485 | 2715 | 100 | 0 | 0 | 3300       | 38.086            |
| 155      | 12           | 13             |       | 485 | 2725 | 100 | 0 | 0 | 3310       | 38.190            |
| 156      | 12           | 13             |       | 100 | 2785 | 600 | 0 | 0 | 3485       | 40.225            |
| 157      | 12           | 13             |       | 485 | 2725 | 100 | 0 | 0 | 3310       | 38.190            |
| 158      | 12           | 13             |       | 100 | 2785 | 600 | 0 | 0 | 3485       | 40.225            |
| 163      | 12           | 112            |       | 120 | 1375 | 100 | 0 | 0 | 1595       | 158.744           |
| 167      | 14           | 11             |       | 200 | 6835 | 200 | 0 | 0 | 7235       | 96.181            |
| 167      | 14           | 11             |       | 200 | 6835 | 200 | 0 | 0 | 7235       | 96.181            |
| 169      | 12           | 47             |       | 200 | 3625 | 200 | 0 | 0 | 4025       | 167.873           |
| 169      | 12           | 47             |       | 200 | 3625 | 200 | 0 | 0 | 4025       | 167.873           |

Grand total: 168

6517.185

**NOTE:**  
**GENERAL NOTES:**  
1- DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING.  
2- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS IN METERS UNLESS NOTED OTHERWISE.  
3- ALL DIMENSIONS ARE IN MILLIMETERS. OTHER BETWEEN WRITTEN DIMENSIONS AND SITE DIMENSIONS OR WITHIN THESE DRAWINGS SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT BEFORE EXECUTING THE WORKS.  
4- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DOCUMENTATION FORMING THE CONSTRUCTION CONTRACT.  
5- ALL EXISTING DIMENSIONS/LEVELS ETC. INDICATED ON DRAWINGS ARE TO BE VERIFIED ON SITE.



| ABBREVIATIONS: |           |          |
|----------------|-----------|----------|
| REFERENCES     |           |          |
| MDL TYP        | MDL DISC. | MDL NAME |
|                |           |          |
|                |           |          |
|                |           |          |
|                |           |          |
|                |           |          |

| REVISION |                     |             |
|----------|---------------------|-------------|
| Rev      | Description         | Date        |
| 00       | ISSUED FOR APPROVAL | 26.Jan.2025 |
|          |                     |             |
|          |                     |             |
|          |                     |             |
|          |                     |             |

| PEER REVIEW CONSULTANT APPROVAL |                     |  |
|---------------------------------|---------------------|--|
| SHOP DRAWING REVIEW / APPROVAL  |                     |  |
| A                               | APPROVED            |  |
| B                               | APPROVED AS NOTED   |  |
| C                               | REVERSE & RESUBMIT  |  |
| D                               | REJECTED            |  |
| E                               | RECEIPT ACKNOWLEDGE |  |

PROJECT TITLE: GARDEN COLLECTION VILLAS PROJECT  
RIYADH KINGDOM OF SAUDI ARABIA

CLIENT (DEVELOPMENT MANAGER):

MAIN CONTRACTOR:

PEER REVIEW CONSULTANT:

ISFCO- SHOP DRAWING & STRUCTURAL DESIGN:

STRUCTURAL CONSULTANT :

BUILDING: VILLA E01-SB-NO STYLE(0255) ZONE: NHC

STAGE: Shop Drawing DISC:

DRAWING TITLE:

BBS-05

|             |                                 |            |          |
|-------------|---------------------------------|------------|----------|
| DRAWING NO. | 00101-IDS-E01-ZZZ-SHD-SE-090012 |            |          |
| SCALE:      | DRAWN BY                        | PAPER SIZE | A1       |
| DATE:       | 26.Jan.2025                     | CHECKED BY | REVISION |