

# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, M/S The Lake City Developers (Pvt.) Limited Lahore

Reference # CED/TFL **2146** (Dr. Usman Akmal)

Reference of the request letter # LCRG/Test/007

Dated: 19-10-2022

**Tension Test Report** (Page -1/1)

Date of Test 24-10-2022 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No.    | Weight   |             | neter/<br>ze  |         | rea<br>1 <sup>2</sup> ) | Yield load | Breaking<br>Load |         | Stress<br>si) |         | te Stress<br>si) | Elongation | % Elongation | Remarks |
|------------|----------|-------------|---------------|---------|-------------------------|------------|------------------|---------|---------------|---------|------------------|------------|--------------|---------|
| <b>3</b> 2 | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual                  | (kg)       | (kg)             | Nominal | Actual        | Nominal | Actual           | (inch)     | H %          | R       |
| 1          | 0.366    | 3           | 0.370         | 0.11    | 0.108                   | 3600       | 4800             | 72200   | 73760         | 96200   | 98400            | 1.00       | 12.5         |         |
| 2          | 0.367    | 3           | 0.371         | 0.11    | 0.108                   | 3700       | 4900             | 74200   | 75560         | 98200   | 100100           | 1.00       | 12.5         |         |
| -          | -        | -           | -             |         | -                       | -          | -                | -       | -             | -       | -                | -          | -            |         |
| -          | -        | -           | -             | -       | -                       | -          | -                | -       | -             | -       | -                | -          | -            |         |
| -          | •        | -           | ı             | ı       | -                       | -          | -                | •       | -             | -       | -                | -          | •            |         |
| -          | -        | -           | -             | -       | -                       | -          | -                | -       | -             | -       | -                | -          | -            |         |
|            |          | T           | N             | ote: on | ly two s                | amples f   | or tensile       | and one | sample f      | or bend | test             | I          | Ī            |         |
|            |          |             |               |         |                         |            | D 1 T            | \       |               |         |                  |            |              |         |
|            |          |             |               |         |                         |            | Bend T           | est     |               |         |                  |            |              |         |

#3 Bar Bend Test Through 180° is Satisfactory

Witness by M. Bilal (Site Inspector Unison Pvt) To,

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

Procurement Manager Premier Developers & Builders Lyallpur Galleria-II near Four Season Colony Samundri Road, Faisalabad

Reference # CED/TFL <u>2155 (Dr. Usman Akmal)</u>

Reference of the request letter # LG-II/029

Dated: 21-10-2022

Dated: 19-10-2022

**Tension Test Report** (Page -1/1)

Date of Test 24-10-2022 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight   |                | neter/<br>ze  |         | rea<br>n²) | Yield load | Breaking<br>Load |         | Stress<br>si) |            | e Stress<br>si) | Elongation | % Elongation | Remarks         |
|---------|----------|----------------|---------------|---------|------------|------------|------------------|---------|---------------|------------|-----------------|------------|--------------|-----------------|
| S       | (lbs/ft) | Nominal<br>(#) | Actual (inch) | Nominal | Actual     | (kg)       | (kg)             | Nominal | Actual        | Nominal    | Actual          | (inch)     | % E          | Re              |
| 1       | 0.376    | 3              | 0.375         | 0.11    | 0.111      | 4300       | 5000             | 86200   | 85720         | 100200     | 99700           | 1.10       | 13.8         | el              |
| -       | -        | -              | -             | -       | -          | -          | -                | -       | -             | -          | -               | -          | -            | Amreli<br>Steel |
| -       | -        | -              | -             | -       | -          | -          | -                | -       | -             | -          | -               | -          | -            |                 |
| -       | -        | -              | -             | -       | -          | -          | -                | -       | -             | -          | _               | -          | -            |                 |
| -       | -        | -              | -             | -       | -          | -          | -                | -       | -             | -          | -               | -          | -            |                 |
| -       | -        | -              | -             | -       | -          | -          | -                | -       | -             | -          | -               | -          | -            |                 |
|         |          | I              | N             | ote: on | ly one s   | sample fo  | or tensile       | and one | sample f      | or bend to | est             | 1          |              |                 |
|         |          |                |               |         |            |            | D 17             |         |               |            |                 |            |              |                 |
| #3      | Bar Ben  | d Test         | Γhrough       | 180° is | s Satisfa  | ictory     | Bend T           | est     |               |            |                 |            |              |                 |

I/C Testing Laboratoires UET Lahore, Pakistan.

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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan, Ph: 92-42-99029202

To,

Sub Divisional Officer

Public Health Engg: Sub Division

Faisalabad

(Provision of Sewerage System at Dijkot District Faisalabad)

Reference # CED/TFL **2156** (Dr. Usman Akmal)

Reference of the request letter # 967

Dated: 21-10-2022

Dated: 13-09-2022

**Tension Test Report** (Page -1/1)

Date of Test 24-10-2022 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

| Sr. No. | Weight   | Si      | neter/<br>ize<br>ch) |   | rea<br>1 <sup>2</sup> ) | Yield load | Breaking<br>Load |            | Stress<br>si) |         | te Stress<br>si) | Elongation | % Elongation | Remarks |
|---------|----------|---------|----------------------|---|-------------------------|------------|------------------|------------|---------------|---------|------------------|------------|--------------|---------|
| S       | (lbs/ft) | Nominal | 6 0.301              |   | Actual                  | (kg)       | (kg)             | Nominal    | Actual        | Nominal | Actual           | (inch)     | ∃ %          | Re      |
| 1       | 0.242    | 3/16    | 0.301                |   | 0.071                   | 2100       | 3100             |            | 65170         |         | 96200            | 1.20       | 15.0         |         |
| 2       | 0.240    | 3/16    | 0.300                |   | 0.071                   | 2080       | 3040             |            | 64940         |         | 95000            | 1.30       | 16.3         |         |
| -       | -        | -       | -                    | - | -                       | -          | -                | -          | -             | -       | -                | -          | -            |         |
| -       | -        | -       | -                    | - | -                       | -          | -                | -          | -             | -       | -                | -          | -            |         |
| -       | -        | -       | -                    | - | -                       | -          | -                | -          | -             | -       | -                | -          | -            |         |
| -       | -        | -       | -                    | - | -                       | -          | -                | -          | -             | -       | -                | -          | -            |         |
|         |          |         | 1                    |   | No                      | te: only t | wo samp          | le for ten | sile test     |         |                  |            |              |         |
|         |          |         |                      |   |                         |            |                  |            |               |         |                  |            |              |         |
|         |          |         |                      |   |                         |            | Bend T           | est        |               |         |                  |            |              |         |
|         |          |         |                      |   |                         |            |                  |            |               |         |                  |            |              |         |
|         |          |         |                      |   |                         |            |                  |            |               |         |                  |            |              |         |

I/C Testing Laboratoires UET Lahore, Pakistan.

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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, M/S Prime Steel Re-Rolling Mills Sheikhupura

Reference # CED/TFL **2159** (Dr. Usman Akmal)

Reference of the request letter # Nil

Dated: 21-10-2022

**Tension Test Report** (Page -1/1)

Date of Test 24-10-2022 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight   | Diam<br>Si     | neter/<br>ze  |         | rea<br>n²) | Yield load | Breaking<br>Load |          | Stress<br>si) |          | e Stress<br>si) | Elongation | % Elongation | Remarks     |
|---------|----------|----------------|---------------|---------|------------|------------|------------------|----------|---------------|----------|-----------------|------------|--------------|-------------|
| S       | (lbs/ft) | Nominal<br>(#) | Actual (inch) | Nominal | Actual     | (kg)       | (kg)             | Nominal  | Actual        | Nominal  | Actual          | (inch)     | % E          | R           |
| 1       | 0.389    | 3              | 0.381         | 0.11    | 0.114      | 3400       | 4900             | 68200    | 65610         | 98200    | 94600           | 1.50       | 18.8         |             |
| 2       | 0.392    | 3              | 0.383         | 0.11    | 0.115      | 3500       | 4900             | 70200    | 66980         | 98200    | 93800           | 1.40       | 17.5         | -           |
| 3       | 0.407    | 3              | 0.390         | 0.11    | 0.120      | 3700       | 5500             | 74200    | 68200         | 110200   | 101400          | 1.40       | 17.5         | Prime Steel |
| 4       | 0.408    | 3              | 0.391         | 0.11    | 0.120      | 3600       | 5000             | 72200    | 66180         | 100200   | 92000           | 1.50       | 18.8         | rime        |
| -       | -        | -              | -             | -       | -          | -          | -                | -        | -             | -        | -               | -          | -            | Ъ           |
| -       | -        | -              | -             | -       | -          | -          | -                | -        | -             | -        | -               | -          | -            |             |
|         |          | Note: only fo  |               |         | four sa    | amples fo  | r tensile        | and four | samples       | for bend | test            |            |              |             |
|         |          |                |               |         |            |            |                  |          |               |          |                 |            |              |             |
|         |          |                |               |         |            |            | Bend T           | est      |               |          |                 |            |              |             |

#3 Bar Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires UET Lahore, Pakistan.

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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, M/s Power Tracks

Reference # CED/TFL **2160** (Dr. Rizwan Azam)

Reference of the request letter # Nil

Dated: 21-10-2022

**Tension Test Report** (Page -1/1)

Date of Test 24-10-2022 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight   |             | neter/<br>ze  | Aı<br>(iı | rea<br>1 <sup>2</sup> ) | Yield load | Breaking<br>Load |         | Stress<br>si) |           | te Stress<br>si) | Elongation | % Elongation | Remarks |
|---------|----------|-------------|---------------|-----------|-------------------------|------------|------------------|---------|---------------|-----------|------------------|------------|--------------|---------|
| S       | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal   | Actual                  | (kg)       | (kg)             | Nominal | Actual        | Nominal   | Actual           | (inch)     | <b>3</b> %   | R       |
| 1       | 0.373    | 3           | 0.374         | 0.11      | 0.110                   | 3700       | 4600             | 74200   | 74300         | 92200     | 92400            | 1.10       | 13.8         |         |
| 2       | 0.375    | 3           | 0.374         | 0.11      | 0.110                   | 3600       | 4600             | 72200   | 72060         | 92200     | 92100            | 1.20       | 15.0         |         |
| -       | -        | -           | -             | -         | -                       | -          | -                | -       | -             | -         | -                | -          | -            |         |
| -       | -        | -           | -             | -         | -                       | -          | -                | -       | -             | -         | -                | -          | -            |         |
| -       | -        | -           | -             | -         | -                       | -          | -                | -       | -             | -         | -                | -          | -            |         |
| -       | -        | -           | -             | -         | -                       | -          | -                | -       | -             | -         | -                | -          | -            |         |
|         |          |             | N             | ote: on   | ly two s                | sample fo  | or tensile       | and one | sample f      | or bend t | est              | 1          |              |         |
|         |          |             |               |           |                         |            |                  |         |               |           |                  |            |              |         |
|         |          |             |               |           |                         |            | Bend T           | est     |               |           |                  |            |              |         |
| #3      | Bar Ben  | d Test      | Γhrough       | 180° is   | s Satisfa               | ctory      |                  |         |               |           |                  |            |              |         |

I/C Testing Laboratoires UET Lahore, Pakistan.

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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, Resident Engineer (QA/QC Department) Bahria Town Private Limited Muhammad Ali Jinnah Masjid Block "D" Bahria Orchard.

Reference # CED/TFL <u>2161 (Dr. Usman Akmal)</u>
Reference of the request letter # QA/QC/Steel/2861
Dated: 21-10-2022

**Tension Test Report** (Page -1/1)

Date of Test 24-10-2022 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight   |             | neter/<br>ze  |           | rea<br>1 <sup>2</sup> ) | Yield load | Breaking<br>Load |         | Stress<br>si) |           | e Stress<br>si) | Elongation | % Elongation | Remarks |
|---------|----------|-------------|---------------|-----------|-------------------------|------------|------------------|---------|---------------|-----------|-----------------|------------|--------------|---------|
| S       | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal   | Actual                  | (kg)       | (kg)             | Nominal | Actual        | Nominal   | Actual          | (inch)     | ∃ %          | Re      |
| 1       | 0.363    | 3           | 0.369         | 0.11      | 0.107                   | 3500       | 5000             | 70200   | 72240         | 100200    | 103200          | 1.30       | 16.3         |         |
| 2       | 0.359    | 3           | 0.366         | 0.11      | 0.105                   | 3600       | 5000             | 72200   | 75230         | 100200    | 104500          | 1.30       | 16.3         |         |
| -       | -        | -           | -             | -         | -                       | -          | -                | -       | -             | -         | -               | -          | -            |         |
| -       | -        | -           | -             | -         | -                       | -          | -                | -       | -             | -         | -               | -          | -            |         |
| -       | -        | -           | -             | -         | -                       | -          | -                | -       | -             | -         | -               | -          | -            |         |
| -       | -        | -           | -             | -         | -                       | -          | -                | -       | -             | -         | -               | -          | -            |         |
|         |          | ı           | No            | ote: on   | ly two s                | amples f   | or tensile       | and one | sample f      | or bend t | test            |            |              |         |
|         |          |             |               |           |                         |            |                  |         |               |           |                 |            |              |         |
| 112     | D D      | 100 45      | T1 1          | 1000      | G 1; C                  |            | Bend T           | est     |               |           |                 |            |              |         |
| #3      | Bar Ben  | a Test      | Ihrough       | 1 180° 18 | s Satista               | ctory      |                  |         |               |           |                 |            |              |         |
|         |          |             |               |           |                         |            |                  |         |               |           |                 |            |              |         |

I/C Testing Laboratoires UET Lahore, Pakistan.

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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,
Resident Engineer
ACE Limited, Sambrial Sialkot
Establishment of University of Applied Engineering and Emerging Technologies (UAEET)
Sambrial, Sialkot

Reference # CED/TFL **2162** (Dr. Usman Akmal) Dated: 21-10-2022

Reference of the request letter # TE/UAEET/ACE/2022/53 Dated: 20-10-2022

**Tension Test Report** (Page -1/1)

Date of Test 24-10-2022 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight   |             | neter/<br>ze  |          | rea<br>1 <sup>2</sup> ) | Yield load | Breaking<br>Load |         | Stress<br>si) |         | te Stress<br>si) | Elongation | % Elongation | Remarks      |
|---------|----------|-------------|---------------|----------|-------------------------|------------|------------------|---------|---------------|---------|------------------|------------|--------------|--------------|
| S       | (lbs/ft) | Nominal (#) | Actual (inch) |          |                         | (kg)       | (kg)             | Nominal | Actual        | Nominal | Actual           | (inch)     | ∃%           | Re           |
| 1       | 0.377    | 3           | 0.376         | 0.11     | 0.111                   | 4000       | 5000             | 80200   | 79550         | 100200  | 99500            | 0.80       | 10.0         | F<br>el      |
| 2       | 0.384    | 3           | 0.379         | 0.11     | 0.11 0.111              |            | 5200             | 76200   | 74200         | 104200  | 101600           | 0.90       | 11.3         | A.F<br>Steel |
| -       | -        | -           | -             | -        | -                       | -          | -                | -       | -             | -       | -                | -          | -            |              |
| -       | -        | -           | -             | -        | -                       | -          | -                | -       | -             | -       | -                | -          | -            |              |
| -       | -        | -           | -             | -        | -                       | -          | -                | -       | -             | -       | -                | -          | -            |              |
| -       | -        | -           | -             | -        | -                       | -          | -                | -       | -             | -       | -                | -          | -            |              |
|         |          |             | No            | ote: onl | ly two s                | amples f   | or tensile       | and one | sample f      | or bend | test             | •          |              |              |
|         |          |             |               |          |                         |            |                  |         |               |         |                  |            |              |              |
|         |          |             |               |          |                         |            | Bend T           | est     |               |         |                  |            |              |              |
| #3      | Bar Ben  | d Test      | Γhrough       | 180° is  | s Satisfa               | ctory      |                  |         |               |         |                  |            |              |              |

I/C Testing Laboratoires UET Lahore, Pakistan.

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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, Resident Engineer ESAC

Civil Infrastructure Works Sector U (Part-2) Including MC between Sector L & P, and Service Road along MC Sector T & X (Package 3) in DHA, Multan (DHAM)

Reference # CED/TFL **2163** (Dr. Usman Akmal)

Reference of the request letter # ESAC/CW/CP/017

Dated: 21-10-2022

**Tension Test Report** (Page -1/1)

Date of Test 24-10-2022 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test

| Sr. No. | Weight   | Si      | neter/<br>ze<br>m) |                        | rea<br>n²) | Yield load | Breaking<br>Load |         | Stress<br>osi) |          | te Stress<br>si) | Elongation | % Elongation | Remarks   |
|---------|----------|---------|--------------------|------------------------|------------|------------|------------------|---------|----------------|----------|------------------|------------|--------------|-----------|
| S       | (lbs/ft) | Nominal | Actual             | Nominal Notinal Actual |            | (kg)       | (kg)             | Nominal | Actual         | Nominal  | Actual           | (inch)     | <b>3</b> %   | Re        |
| 1       | 0.169    | 6       | 6.39               |                        | 0.050      | 1160       | 1660             |         | 51460          |          | 73700            | 1.60       | 20.0         | 16        |
| 2       | 0.168    | 6       | 6.37               |                        | 0.049      | 1160       | 1660             |         | 51800          |          | 74200            | 1.70       | 21.3         | Ali Steel |
| -       | -        | -       | -                  | -                      | -          | -          | -                | -       | -              | -        | -                | -          | -            | Ali       |
| -       | -        | -       | -                  | -                      | -          | -          | _                | -       | -              | -        | -                | -          | -            |           |
| -       | -        | -       | -                  | -                      | -          | -          | _                | -       | -              | -        | -                | -          | -            |           |
| -       | -        | -       | -                  | -                      | -          | -          | _                | -       | -              | -        | -                | -          | -            |           |
|         |          |         | N                  | ote: on                | ly two s   | amples f   | or tensile       | and one | sample f       | for bend | test             |            |              |           |
|         |          |         |                    |                        |            |            |                  |         |                |          |                  |            |              |           |
|         |          |         |                    |                        |            |            | Bend T           | est     |                |          |                  |            |              |           |
| 6m      | m Dia B  | ar Beno | d Test T           | hrough                 | 180° is    | Satisfact  | ory              |         |                |          |                  |            |              |           |

I/C Testing Laboratoires UET Lahore, Pakistan.

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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, Resident Engineer NESPAK

Construction Supervision of Infrastructure Development Works of GEPCO Employees Housing

Foundation (GEHF Town, Phase-1) Gujranwala

Reference # CED/TFL <u>2164 (Dr. Usman Akmal)</u> Reference of the request letter # P2465/22/MA/117

**Tension Test Report** (Page -1/1)

Date of Test 24-10-2022 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight   |             | neter/<br>ze  |          | rea<br>1 <sup>2</sup> ) | Yield load | Breaking<br>Load |         | Stress<br>si) |           | te Stress<br>si) | Elongation | % Elongation | Remarks         |
|---------|----------|-------------|---------------|----------|-------------------------|------------|------------------|---------|---------------|-----------|------------------|------------|--------------|-----------------|
| S       | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal  | Actual                  | (kg)       | (kg)             | Nominal | Actual        | Nominal   | Actual           | (inch)     | <b>3</b> %   | Re              |
| 1       | 0.362    | 3           | 0.368         | 0.11     | 0.107                   | 3600       | 4800             | 72200   | 74490         | 96200     | 99400            | 0.90       | 11.3         | ala<br>el       |
| 2       | 0.370    | 3           | 0.372         | 0.11     | 0.109                   | 3700       | 5000             | 74200   | 75000         | 100200    | 101400           | 0.90       | 11.3         | Batala<br>Steel |
| -       | ı        | ı           | ı             | -        | -                       | -          | -                | -       | -             | -         | -                | -          | ı            |                 |
| -       | ı        | ı           | ı             | -        | -                       | -          | -                | -       | -             | -         | -                | -          | 1            |                 |
| -       | -        | 1           | 1             | -        | -                       | -          | -                | -       | -             | -         | -                | _          | •            |                 |
| -       | -        | -           | -             | -        | -                       | -          | -                | -       | -             | -         | -                | -          | -            |                 |
|         |          |             | No            | ote: onl | ly two s                | amples f   | or tensile       | and one | sample f      | or bend t | test             | ı          |              |                 |
|         |          |             |               |          |                         |            |                  |         |               |           |                  |            |              |                 |
|         |          |             |               |          |                         |            | Bend T           | est     |               |           |                  |            |              |                 |
| #3      | Bar Ben  | d Test      | Γhrough       | 180° is  | s Satisfa               | ctory      |                  |         |               |           |                  |            |              |                 |

Witness by Syed Bilal Ghazi (Chief M.S. NESPAK)

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 21-10-2022

Dated: 21-10-2022

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, Project Coordinator Senior Engineer NESPAK

Construction of Flyover at Rajjar Railway crossing Sarai Alamgir District Gujrat

Reference # CED/TFL 2165 (Dr. Usman Akmal)

Reference of the request letter # SA-4376F/103/Raj/ML/Lab/05

Dated: 21-10-2022

Dated: 21-10-2022

**Tension Test Report** (Page -1/1)

Date of Test 24-10-2022 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight   | Diam<br>Si     | neter/<br>ze  |         | rea<br>n²) | Yield load | Breaking<br>Load |         | Stress<br>si) |           | te Stress<br>si) | Elongation | % Elongation | Remarks |
|---------|----------|----------------|---------------|---------|------------|------------|------------------|---------|---------------|-----------|------------------|------------|--------------|---------|
| S       | (lbs/ft) | Nominal<br>(#) | Actual (inch) | Nominal | Actual     | (kg)       | (kg)             | Nominal | Actual        | Nominal   | Actual           | (inch)     | <b>3</b> %   | Re      |
| 1       | 0.371    | 3              | 0.372         | 0.11    | 0.109      | 3200       | 4900             | 64200   | 64730         | 98200     | 99200            | 1.40       | 17.5         |         |
| 2       | 0.377    | 3              | 0.376         | 0.11    | 0.111      | 3200       | 4900             | 64200   | 63650         | 98200     | 97500            | 1.40       | 17.5         |         |
| -       | ı        | -              | ı             | 1       | -          | -          | -                | 1       | -             | -         | -                | -          | -            |         |
| -       | ı        | -              | ı             | ı       | -          | -          | -                | ı       | -             | •         | -                | -          | -            |         |
| -       | -        | -              | 1             | -       | -          | -          | -                | -       | -             | -         | -                | -          | -            |         |
| -       | -        | -              | -             | -       | -          | -          | -                | -       | -             | -         | -                | -          | -            |         |
|         |          | I              | No            | ote: on | ly two s   | amples f   | or tensile       | and one | sample f      | or bend 1 | test             | 1          |              |         |
| #3      | Bar Ben  | d Test T       | Through       | 180° i  | Satisfa    | etory      | Bend T           | est     |               |           |                  |            |              |         |

Witness by Abrar Hussain (SLT Asghar & Co.)

I/C Testing Laboratoires UET Lahore, Pakistan.

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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, Project Director Overseas Construction Co. (Pvt) Ltd Gulberg City Centre, Lahore

Reference # CED/TFL **2170** (Dr. Rizwan Azam)

Reference of the request letter # Nil

Dated: 24-10-2022

**Tension Test Report** (Page -1/1)

Date of Test 24-10-2022 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight   | Diam<br>Si  | neter/<br>ze  |         | rea<br>1 <sup>2</sup> ) | Yield load | Breaking<br>Load |         | Stress<br>si) |           | te Stress<br>si) | Elongation | % Elongation | Remarks |
|---------|----------|-------------|---------------|---------|-------------------------|------------|------------------|---------|---------------|-----------|------------------|------------|--------------|---------|
| S       | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual                  | (kg)       | (kg)             | Nominal | Actual        | Nominal   | Actual           | (inch)     | % E          | Re      |
| 1       | 4.267    | 10          | 1.264         | 1.27    | 1.254                   | 43200      | 65000            | 75000   | 75910         | 112900    | 114300           | 0.30       | 3.8          |         |
| 2       | 4.259    | 10          | 1.262         | 1.27    | 1.252                   | 43600      | 65400            | 75700   | 76770         | 113500    | 115200           | 0.30       | 3.8          |         |
| -       | -        | -           |               | -       | -                       | -          | -                | -       | -             | -         | -                | -          | -            |         |
| -       | -        | -           | 1             | -       | -                       | -          | -                | -       | -             | -         | -                | -          | -            |         |
| -       | -        | -           | -             | -       | -                       | -          | -                | -       | -             | -         | -                | -          | -            |         |
| -       | -        | -           | -             | -       | -                       | -          | -                | -       | -             | -         | -                | -          | -            |         |
|         |          |             | N             | ote: on | ly two s                | sample fo  | r tensile        | and one | sample f      | or bend t | est              |            |              |         |
|         |          |             |               |         |                         |            |                  |         |               |           |                  |            |              |         |
|         |          |             |               |         |                         |            | Bend T           | est     |               |           |                  |            |              |         |
| #10     | ) Bar Be | nd Test     | Throug        | gh 180° | is Faile                | d          |                  |         |               |           |                  |            |              |         |
|         |          |             |               |         |                         |            |                  |         |               |           |                  |            |              |         |

I/C Testing Laboratoires UET Lahore, Pakistan.

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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, Resident Engineer, Orbit Housing The Spring Apartment Homes

Reference # CED/TFL 2171 (Dr. Qasim Khan)

Reference of the request letter# NIL Dated: 24-10-2022

**Tension Test Report** (Page -1/1)

Date of Test 24-10-2022 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight   | Si      | neter/<br>ize<br>ch) |           | rea<br>n²) | Yield load | Breaking<br>Load |         | Stress<br>si) |         | e Stress<br>si) | Elongation | % Elongation | Remarks  |
|---------|----------|---------|----------------------|-----------|------------|------------|------------------|---------|---------------|---------|-----------------|------------|--------------|----------|
| S       | (lbs/ft) | Nominal |                      |           |            | (kg)       | (kg)             | Nominal | Actual        | Nominal | Actual          | (inch)     | % E          | Re       |
| 1       | 0.384    | 3       | 0.379                | 0.11      | 0.113      | 3700       | 4600             | 74200   | 72320         | 92200   | 90000           | 1.30       | 16.3         |          |
| 2       | 0.381    | 3       | 0.378                | 0.11      | 0.112      | 3700       | 4600             | 74200   | 72730         | 92200   | 90500           | 1.40       | 17.5         |          |
| -       | -        | -       | -                    | -         | -          | -          | -                | -       | -             | -       | -               | -          | 1            |          |
| -       | -        | -       | -                    | -         | -          | -          | -                | -       | -             | -       | -               | -          | •            |          |
| -       | -        | -       | -                    | -         | -          | -          | -                | -       | -             | -       | -               | -          | -            |          |
| -       | -        | -       | -                    | -         | -          | -          | -                | -       | -             | -       | -               | -          | -            |          |
|         |          |         | N                    | ote: on   | ly two s   | amples f   | or tensile       | and one | sample f      | or bend | test            |            |              |          |
|         |          |         |                      |           |            |            | Bend T           | `est    |               |         |                 |            |              | <u> </u> |
| #3      | Bar Ben  | d Test  | Through              | n 180° is | s Satisfa  | ctory      | Delid I          | CSI     |               |         |                 |            |              |          |

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 24-10-2022

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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

Ref: <u>CED/TFL/10/2175</u> Dated: <u>24-10-2022</u>

Dated of Test: 24-10-2022

To

M/s Kudai RCC Pipe Factory Faisalabad

## Subject: - CALIBRATION OF HYDRAULIC JACK WITH GAUGE (MARK: TFL/10/2175)

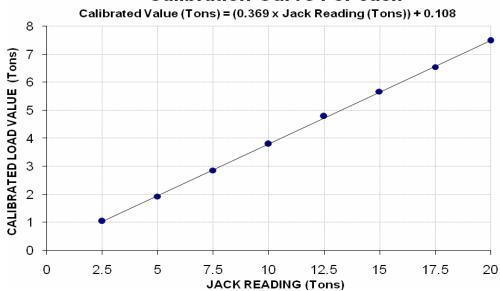
Reference to your Letter No. Nil, Dated: 24/10/2022 on the subject cited above. One Hydraulic Jack with Gauge as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 23 (Ton) Calibrated Range : Zero - 20 (Ton)

| Hydraulic Jack Reading (Ton) |       | 2.50 | 5.00 | 7.50 | 10.00 | 12.50 | 15.00 | 17.50 | 20.00 |
|------------------------------|-------|------|------|------|-------|-------|-------|-------|-------|
| Calibrated Load              | (kg)  | 950  | 1750 | 2600 | 3450  | 4350  | 5150  | 5950  | 6800  |
|                              | (Ton) | 1.05 | 1.93 | 2.86 | 3.80  | 4.79  | 5.67  | 6.55  | 7.49  |

1000 kg = 1.1011 Ton

### **Calibration Curve For Jack**



I/C Testing Laboratoires UET Lahore, Pakistan.

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