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

Ref: CED/TFL/03/4831 Dated: 20-03-2024

Dated of Test: 26-03-2024

To

Resident Engineer
Engineering Consultancy Services Punjab (Pvt) Limited.
Resident Supervision for Revamping of Lahore Zoo.

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 – 08a]** (Page # 1/1)

Reference to your letter No. ECSP/RE/ZOO/14, dated 02.01.2024 on the subject cited above. One R.C.C. Pipe as received by us has been tested. The results are tabulated as under.

Sr. No.	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	12	7.77	7.31	15.83	11.89	1.97	7000	13500	2132	4111

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:
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
2. The above results pertain to sample /samples supplied to this laboratory.
3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

STRUCTURAL ENGINEERING DIVISION

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

Ref: CED/TFL/03/4832 Dated: 20-03-2024

Dated of Test: 26-03-2024

To

Asstt: Executive Engineer-I
Central Civil Division No. II
Pak P.W.D., Lahore
(Construction of PCC, Tuff Tile, Sewerage, Nallah in UC-248 Shahzada, District Lahore.)

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 – 08a]** (Page # 1/1)

Reference to your letter No. AEE-I/LCCD-II/SAP/121-A, dated 10.04.2023 on the subject cited above. One R.C.C. Pipe as received by us has been tested.

The results are tabulated as under.

Sr. No.	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	12	7.79	7.30	15.94	11.92	2.01	10000	15500	3041	4713

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION

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

To,

Project Director SIE
Punjab Industrial Estates
Framework Contract for Construction for Boundary Wall at Sundar Industrial Estate.

Reference # CED/TFL **4841** (Dr. Usman Akmal) Dated: 25-03-2024
Reference of the request letter # PIE/SIE/BWL/0619 Dated: 21-03-2024

Tension Test Report (Page -1/1)

Date of Test 26-03-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.372	3	0.373	0.11	0.109	3330	4810	66800	67090	96400	96900	1.40	17.5	Hunza Steel
2	0.373	3	0.374	0.11	0.110	3330	4860	66800	66890	97400	97700	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Note: only two samples for tensile and one sample for bend test

Bend Test

#3 Bar Bend Test Through 180º is Satisfactory

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:
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STRUCTURAL ENGINEERING DIVISION

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

To,

Project Incharge
Ijaz Cotton Pvt Ltd.
At 34 km Nabi Baksh Derozpur Road Lahore.

Reference # CED/TFL **4842** (Dr. Usman Akmal) Dated: 25-03-2024
Reference of the request letter # MST./Ground Floor Lantor + Beams and First floor Coulmn's
Dated: 21-03-2024

Tension Test Report (Page -1/1)

Date of Test 26-03-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.360	3	0.367	0.11	0.106	3230	4710	64800	67210	94400	98100	1.50	18.8	
2	0.361	3	0.368	0.11	0.106	3210	4690	64400	66620	94000	97400	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180º is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:
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STRUCTURAL ENGINEERING DIVISION

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

To,

Manager Operations
ZS Associates / ZAS Construction Services
"Tauheed Heights for UGWT, Domestic Tank, Sumpits, Raft, Retaining Wallsand Columns of Basement, Bahria Town Lahore via ZS Associates."

Reference # CED/TFL **4846** (Dr. Usman Akmal) Dated: 25-03-2024
Reference of the request letter # ZSA/TH/UET/S/001 Dated: 25-03-2024

Tension Test Report (Page -1/1)

Date of Test 26-03-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.379	3	0.377	0.11	0.111	--------	4760	--------	--------	95400	94200	0.50	6.3	
2	0.377	3	0.375	0.11	0.111	4660	5220	93400	92750	104600	103900	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180º is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:
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STRUCTURAL ENGINEERING DIVISION

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

To,

M/S Beacon Impex Private Limited.
Construction of Fabric Storage Godowns & Dye House Extension at Beacon Impex.
Beacon Impex, 35 – km Sheikhupura Road, Faisalabad
(M/s M. Saleem Construction Company.)

Reference # CED/TFL **4848** (Dr. Usman Akmal) Dated: 25-03-2024
Reference of the request letter # B.I/I/CIVIL/24-112 Dated: 25-03-2024

Tension Test Report (Page -1/1)

Date of Test 26-03-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.391	3	0.382	0.11	0.115	3380	4740	67800	64890	95000	91000	1.50	18.8	SJ Steel
2	0.391	3	0.383	0.11	0.115	3410	4710	68400	65390	94400	90400	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180º is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:
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STRUCTURAL ENGINEERING DIVISION

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

To,

Assistant Project Manager
Damaan Group
Construction of Damaan City Houses
Ali Construction and Engineering Company Strength Test.

Reference # CED/TFL **4850** (Dr. Usman Akmal) Dated: 25-03-2024
Reference of the request letter # 0004/DAMAAN CITY/24 Dated: 25-03-2024

Tension Test Report (Page -1/1)

Date of Test 26-03-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (inch)		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.376	3/8	0.375	0.11	0.111	4030	4940	80800	80270	99000	98400	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile and one sample for bend test														
Bend Test														
3/8" Dia Bar Bend Test Through 180º is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION

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 **4851** (Dr. Usman Akmal) Dated: 26-03-2024
Reference of the request letter # Nil Dated: 26-05-2023

Tension Test Report (Page -1/1)

Date of Test 26-03-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.409	3	0.391	0.11	0.120	3430	5350	68800	62900	107200	98200	1.20	15.0	Prime Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180º is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:
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