

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

To, Resident Engineer EGC (pvt) Ltd

Kuchlak Bypass Additional work under USAID for Kalat-Quetta-Chaman Section N-25 (Toll Plazas (Kalat, Baleli & Chaman))

Reference # CED/TFL **33700** (Dr. Safeer Abbas)

Reference of the request letter # KQC/Add/RE/266

Dated: 06-08-2019

Dated: 20-04-2019

Tension Test Report (Page -1/1)

Date of Test 26-08-2019 Gauge length 2 inches

Description Steel Structure Steel Strip Tensile and Bend Test as per ASTM A36

Sr. No.		Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(n	nm)	(mm)	(mm^2)	(kg)	(kg)	(MPa)	(MPa)	(in)	%	
1	Section	380x64	26.00x12.40	322.40	10300	16900	313.41	514.23	0.80	40.00	
2	W	380x64	26.00x12.30	319.80	10800	17500	331.29	536.82	0.70	35.00	
3	Section	38x38x5	13.25x5.85	77.51	3000	4600	379.68	582.18	0.45	22.50	
4	L	38x38x5	13.25x5.85	77.51	2800	4400	354.37	556.87	0.45	22.50	
5	Section	100x10x8	13.25x5.75	76.19	3100	4900	399.16	630.93	0.50	25.00	
6	C	100x10x8	13.25x5.75	76.19	3000	5000	386.28	643.81	0.50	25.00	
7	Gusset	150x200x9	25.60x10.00	256.00	8000	12700	306.56	486.67	0.80	40.00	
8	Plate	150x200x9	25.60x10.00	256.00	8700	13200	333.39	505.83	0.80	40.00	
9	Box	381x381x8	25.80x8.00	206.40	5900	9800	280.42	465.78	0.80	40.00	
10			25.80x8.00	206.40	6400	9800	304.19	465.78	0.80	40.00	
		Onl	ly Ten Sample	es for Ten	sile and	Five Sam	ples for B	end Test			
]	Bend Te	st					

Strip Taken from Section W 380x64mm Bend Test Through 180° is Satisfactory

Strip Taken from Section L 38x38x5mm Bend Test Through 180° is Satisfactory

Strip Taken from Section C 100x10x8mm Bend Test Through 180° is Satisfactory

Strip Taken from Gusset Plate150x200x9mm Bend Test Through 180° is Satisfactory

Strip Taken from Box Section 381x381x8mm Bend Test Through 180° is Satisfactory

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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- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

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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 Progress Dynamics (Pvt) Ltd Lahore (Tower Crane)

Reference # CED/TFL **33724** (Dr. Safeer Abbas)

Reference of the request letter # Nil

Dated: 21-08-2019

Dated: 16-08-2019

Tension Test Report (Page – 1/2)

Date of Test 26-08-2019 Gauge length 2 inches

Description Pipe & Sq. Pipe Steel Strip Tensile Test

Sr. No.	Designation	(mm) Size of Strip	X Section Area	xy Yield load	Breaking Co Co Co Co Co Co Co Co Co C	(MPa)	Ultimate Stress	(ui) Elongation	% Elongation	Remarks
1	Pipe	26.00x3.00	78.00	3700	4700	465.35	591.12	0.40	20.00	
2	Sq. Pipe	26.10x5.75	150.08	6400	8400	418.35	549.09	0.60	30.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	•	-	-	-	-	-	•	•	-	
-	-	-	-	-	-	-	-	-	-	
		<u> </u>	Only Two	Sample	s for Ten	sile Test		Γ	ı	
				Bend	Test					
					_ +22					

I/C Testing Laboratoires UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION

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To, M/S Progress Dynamics (Pvt) Ltd Lahore (Tower Crane)

Reference # CED/TFL **33724** (Dr. Safeer Abbas)

Reference of the request letter # Nil

Dated: 21-08-2019

Dated: 16-08-2019

Tension Test Report (Page - 2/2)

Date of Test 26-08-2019 Gauge length 8 inches

Description Rod Tensile Test

Sr. No.	Weight		neter/ ize	A (n	Area nm²)	Yield load	Breaking Load	Yield Stress (MPa)	Ultimate Stress (MPa)	Elongation	% Elongation	Remarks
	(kg/m)	Nominal (mm)	Actual (mm)	Nominal	Actual	(kg)	(kg)	Actual	Actual	(inch)	%	4
1	10.976		42.19		1398.2	48800	79600	342	559	2.50	31.3	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
					Note: o	nly one sa	mple for	tensile tes	st	· I	1	
						Bei	nd Test					

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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 Defence Housing Authority.
Lahore Cantt
(Infra Dev Works (Pkg-II, III & IV), DHA Ph-IX)(M/s NLC)

Reference # CED/TFL **33730** (Dr. Ali Ahmed) Dated: 22-08-2019 Reference of the request letter # 408/241/E/Lab/659/1444 Dated: 31-07-2019

Tension Test Report (Page -1/1)

Date of Test 26-08-2019 Gauge length 8 inches

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

Sr. No.	Weight	Diam si:	neter/ ze		Area (in²)		Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.375	3	0.374	0.11	0.110	3500	4900	70200	70080	98200	98200	1.20	15.0	
2	0.373	3	0.374	0.11	0.110	3400	4900	68200	68380	98200	98600	1.10	13.8	11
3	4.386	10	1.281	1.27	1.289	35800	60800	62200	61200	105600	104000	1.00	12.5	Kisan Steell
4	4.403	10	1.284	1.27	1.294	36000	61600	62500	61320	107000	105000	1.00	12.5	isan
5	5.356	11	1.416	1.56	1.574	44400	73000	62800	62160	103200	102200	1.20	15.0	K
6	5.298	11	1.408	1.56	1.557	45400	73000	64200	64260	103200	103400	1.30	16.3	
			No	te: only	y six saı	nples for	tensile a	nd three	samples	for bend	test			
							Bend T	<u>'est</u>						
#3	Bar Ben	d Test	Through	180° i	s Satisfa	ctory								
#10) Bar Be	nd Test	Throug	gh 180°	is Satist	factory								
#11	l Bar Be	nd Test	Throug	gh 180°	is Satist	factory								

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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,
Resident Engineer (PMD)
AL-Imam Enterprises Pvt.Ltd
Construction of Penta Square, Phase-V, DHA, Lahore

Reference # CED/TFL 33731 (Dr. Safeer Abbas)

Reference of the request letter # Am-Imam/746/PS-1/DHA/LHE/919

Dated: 22-08-2019

Dated: 22-08-2019

Seamless/Flattening Test Report (Page – 1/2)

Date of Test 26-08-2019

Description MS Pipe Seamless Test as per ASTM A 106

Sr. No.	Designation	Test Type	Observation/Results
1	Pipe (1")	Ductility	No crack was observed
1	ripe(1)	Soundness	No evidence of lamination noticed
2	Di (2.52)	Ductility	No crack was observed
2	Pipe(2.5")	Soundness	No evidence of lamination noticed
2	D: (49)	Ductility	No crack was observed
3	Pipe (4")	Soundness	No evidence of lamination noticed
		-	-
_	-	-	-
		-	-
-	-	-	-
		-	•
-	-	-	•
		Only Three	Samples for Test

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

To,
Resident Engineer (PMD)
AL-Imam Enterprises Pvt.Ltd
Construction of Penta Square, Phase-V, DHA, Lahore

Reference # CED/TFL 33731 (Dr. Safeer Abbas)

Reference of the request letter # Am-Imam/746/PS-1/DHA/LHE/919

Dated: 22-08-2019

Dated: 22-08-2019

Weight &Size Test Report (Page – 2/2)

Date of Test 26-08-2019

Gauge length -----

Description MS Pipes Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	External Diameter	Internal Diameter	Wall Thickness	Remark
	inch	(g)	(mm)	(kg/m)	(mm)	(mm)	(mm)	
1	Pipe(1)	156	60.0	2.60	33.40	26.00	3.70	
2	Pipe(2.5)	524	60.0	8.73	73.20	63.20	5.00	
3	Pipe(4)	948	60.0	15.80	114.3	102.70	5.80	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
			Only Thre	e Samples	for Test			

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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
RENARDET S.A ((M-4), Package-II & III)

Construction of Faisalabad – Khanewal Motorway (M-4) Project Pckage-III, Dinpur-Khanewal, Section-3B (D & L International)(M/s Xinjiang Beixin Road & Bridge Group Co, Ltd)

Reference # CED/TFL **33732** (Dr. Waseem Abbas)

Reference of the request letter # RE/M-4/3B/2019/478

Dated: 22-08-2019

Dated: 21-08-2019

Tension Test Report (Page -1/1)

Date of Test 21-06-2019 Gauge length 2 inches

Description W-Section Steel Strip Tensile and Bend Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	. Elongation	Remarks
		(cm)	(cm ²)	(kg)	(kg)	(kg/cm ²)	(kg/cm ²)	(in)	%	
1	W Cootion	2.99x0.295	0.88	3700	5300	4194.77	6008.73	0.50	25.00	
2	W-Section	2.99x0.295	0.88	3700	5300	4194.77	6008.73	0.55	27.50	
-		-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-		-	-	-	-	-	-	-	-	
-	•	-	-	-	-	-	-	-	-	
		Only Two S	amples fo	or Tensile a	and Two S	amples for	Bend Test		1	
				Bend	l Test					

Strip Taken from W-Section Bend Test Through 180° is Satisfactory

Strip Taken from W-Section 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 Defence Housing Authority.
Lahore Cantt
(Infra Dev Works Sector-M (Extn), DHA Ph-V)(M/s AAJ Engrs)

Reference # CED/TFL **33733** (Dr. Waseem Abbas) Dated: 23-08-2019 Reference of the request letter # 408/241/E/Lab/676/256 Dated: 23-08-2019

Tension Test Report (Page -1/1)

Date of Test 26-08-2019 Gauge length 8 inches

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

Sr. No.	Weight	Diam si:			Area (in²)		Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.380	3	0.377	0.11	0.112	3500	4900	70200	68980	98200	96600	1.10	13.8	
2	0.386	3	0.380	0.11	0.113	3100	4700	62200	60270	94200	91400	1.20	15.0	
3	0.387	3	0.381	0.11	0.114	3200	4900	64200	61980	98200	94900	1.20	15.0	Steel
4	0.437	3	0.405	0.11	0.129	3600	5300	72200	61740	106200	90900	1.20	15.0	S.J.S
5	0.386	3	0.380	0.11	0.114	3300	4700	66200	64060	94200	91300	1.30	16.3	
6	0.392	3	0.383	0.11	0.115	3300	4800	66200	63120	96200	91900	1.30	16.3	
			No	te: only	y six sar	nples for	tensile a	nd three	samples	for bend	test			
							Bend T	<u>'est</u>						
#3	Bar Ben	d Test	Through	180° is	s Satisfa	ctory								
#3	Bar Ben	d Test 7	Through	180° is	s Satisfa	ctory								
#3	Bar Ben	d Test	Through	180° is	s Satisfa	ctory								

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

To,
Manager C, R & M
Allied Bank Limited, Multan
Allied Bank Limited Grain Market, Bahawalnagar Branch

Reference # CED/TFL **33735** (Dr. Waseem Abbas) Dated: 23-08-2019 Reference of the request letter # GHQ/S2/ENGG.CELL.MTN/MA/2019/582Dated: 23-08-2019

Tension Test Report (Page -1/1)

Date of Test 26-08-2019 Gauge length 8 inches

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

Sr. No.	Weight	Diam Si	neter/ ze		rea n²)	Yield load	Breaking Load		Stress si)	Ultimat (p	e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	No A O A						₩ E	Ř
1	0.417	3	0.395	0.11	0.123	4600	6100	92200	82630	122300	109600	0.90	11.3	
-	-	•		•	-	-	-	-	-	-	•	-	ı	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	•	•	-	-	-	-	-	-	-	-	•	
-		-		•	-	-	-	-	-	-	•	1		
			N	ote: on	ly one s	ample fo	r tensile	and one	sample f	or bend t	est	Π		
#3	Bar Ben	d Test T	Chrough	180° i	Satisfa	ctory	Bend T	est						

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 Munir Industries Lahore

Reference # CED/TFL **33736** (Dr. Safeer Abbas)

Reference of the request letter # Nil

Dated: 24-08-2019

Dated: 24-08-2019

Tension Test Report (Page - 1/1)

Date of Test 26-08-2019 Gauge length 2 inches

Description M.S Pipe Plate for Sing Pole Steel Strip Tensile Test as per ASTM A36

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)	(mm)	(mm^2)	(kg)	(kg)	(MPa)	(MPa)	(in)	0	
1	6.5	26.10x5.30	138.33	5100	6500	361.68	460.96	0.35	17.50	
2	12	25.80x12.10	312.18	7800	12900	245.11	405.37	0.70	35.00	
3	16	26.00x15.40	400.40	12500	18500	306.26	453.26	0.70	35.00	
4	20	25.80x20.40	526.32	13500	23000	251.62	428.69	0.80	40.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
		(Only Fou	r Sample	es for Ter	nsile Test			1	
				Bend	Test					

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 Highway Sub Division, T.T. Singh (Rural Accessibility Programme 2018-19)

Reference # CED/TFL **33737** (Dr. Waseem Abbas)

Reference of the request letter # 82

Dated: 23-08-2019

Dated: 10-08-2019

Tension Test Report (Page -1/1)

Date of Test 26-08-2019 Gauge length 8 inches

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

Sr. No.	Weight	Si	neter/ ze ch)	Area (in²)		Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal							Actual	(inch)	E %	Ŗ
1	0.375	3/8	0.375	0.11	0.110	3500	4800	70200	69970	96200	96000	1.10	13.8	
2	0.378	3/8	0.376	0.11	0.111	3400	4800	68200	67410	96200	95200	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test			
2/0	" D: a D =	n Dar 1	To at T1		1000:- 6	Notinfort	Bend T	est						
3/8	" Dia Ba	ır Bend	Test II	nrough	180° 18 S	Satisfacto	ory							

I/C Testing Laboratoires UET Lahore, Pakistan.

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