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

To,
Engineer's Representative
NESPAK
Pakistan Kidney & Liver Institute and Research Center Hospital, Lahore (Package C - I, Phase – I)

Reference # CED/TFL **35018** (Dr. M Rizwan Riaz) Dated: 22-06-2020
Reference of the request letter # 3836/13/AA/10/C-1-MEP-HVAC-MTR-62Dated: 17-06-2020

Tension Test Report (Page – 1/3)

Date of Test 30-06-2020
Gauge length 2 inches
Description MS Seamless Pipe Steel Strip Tensile Test

Sr. No.	Designation		Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(inch)		(mm)	(mm^2)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	Pipe	3	25.50x5.00	127.50	5400	6500	415.48	500.12	0.50	25.00	
2			25.50x5.00	127.50	5200	6300	400.09	484.73	0.40	20.00	
-	Pipe	8	25.40x7.75	196.85	7000	10000	348.84	498.35	0.60	30.00	
-			25.40x7.75	196.85	7300	10000	363.79	498.35	0.50	25.00	
-	-		-	-	-	-	-	-	-	-	
-	-		-	-	-	-	-	-	-	-	

Only Four Samples for Tensile Test

Bend Test

To,
Engineer's Representative

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

NESPAK
Pakistan Kidney & Liver Institute and Research Center Hospital, Lahore (Package C - I, Phase – I)

Reference # CED/TFL **35018** (Dr. M Rizwan Riaz) Dated: 22-06-2020
Reference of the request letter # 3836/13/AA/10/C-1-MEP-HVAC-MTR-62Dated: 17-06-2020

Seamless/Flattening Test Report (Page – 2/3)

Date of Test 30-06-2020
Description MS Seamless Pipe Seamless Test as per ASTM-A53-02

Sr. No.	Designation	Test Type	Observation/Results
1	Pipe 3"	Ductility	No crack was observed
		Soundness	No evidence of lamination noticed
2	Pipe 8"	Ductility	No crack was observed
		Soundness	No evidence of lamination noticed
-	-	-	-
		-	-
-	-	-	-
		-	-
-	-	-	-
		-	-
-	-	-	-
		-	-
	Only Two Samples for Test		

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,
Engineer's Representative
NESPAK
Pakistan Kidney & Liver Institute and Research Center Hospital, Lahore (Package C - I, Phase – I)

Reference # CED/TFL **35018** (Dr. M Rizwan Riaz) Dated: 22-06-2020
Reference of the request letter # 3836/13/AA/10/C-1-MEP-HVAC-MTR-62Dated: 17-06-2020

Weight &Size Test Report (Page – 3/3)

Date of Test 30-06-2020
Gauge length -------
Description MS Seamless Pipe 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	**3**	**636**	**59.8**	**10.64**	**89.2**	**79.20**	**5.00**	
2	**8**	**2419**	**59.8**	**40.45**	**220**	**204.50**	**7.75**	
-	**-**	**-**	-	**-**	**-**	**-**	**-**	
-	**-**	**-**	-	**-**	**-**	**-**	**-**	
-	**-**	**-**	-	**-**	**-**	**-**	**-**	
-	**-**	**-**	-	**-**	**-**	**-**	**-**	
-	**-**	**-**	-	**-**	**-**	**-**	**-**	
-	**-**	**-**	-	**-**	**-**	**-**	**-**	
-	**-**	**-**	-	**-**	**-**	**-**	**-**	
Only Two Samples for Test								

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,
Resident Engineer
Dar Engineering
Punjab Agriculture Food and Durg Authority's Science Enclave, Lahore Pakistan

Reference # CED/TFL **35027** (Dr. M Rizwan Riaz) Dated: 23-06-2020
Reference of the request letter # DB-78/DAR/RE/ME/2020/0222 Dated: 22-06-2020

Tension Test Report (Page – 1/2)

Date of Test 30-06-2020
Gauge length 2 inches
Description Structural Pipe Steel Strip Tensile Test as per ASTM A-36

Sr. No.	Designation		Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	---		(mm)	(mm^2)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	Structural Pipe	4"x6"x5mm	25.30x5.10	129.03	5500	6400	418.16	486.58	0.70	35.00	
2			25.30x5.10	129.03	5500	6300	418.16	478.98	0.60	30.00	
-	-	-	-	-	-	-	-	-	-	-	
-		-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
-		-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
-		-	-	-	-	-	-	-	-	-	
Only Two Samples for Tensile Test											
Bend Test											

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,
Resident Engineer
Dar Engineering
Punjab Agriculture Food and Durg Authority's Science Enclave, Lahore Pakistan

Reference # CED/TFL **35027** (Dr. M Rizwan Riaz) Dated: 23-06-2020
Reference of the request letter # DB-78/DAR/RE/ME/2020/0222 Dated: 22-06-2020

Weight &Size Test Report (Page – 2/2)

Date of Test 30-06-2020
Gauge length -------
Description Structural Pipe Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Outer Dimension		Thickness	Remark
					X	Y		
	(inch)	(g)	(cm)	(kg/m)	(mm)	(mm)	(mm)	
1	**4"x6"x5mm**	**13000**	**61.30**	**21.21**	**159.00**	**100.00**	**5.10**	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
Only One Sample for Test								

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

Reference # CED/TFL **35028** (Dr. M Rizwan Riaz) Dated: 23-06-2020
Reference of the request letter # 408/241/E/Lab/889/1183 Dated: 22-06-2020

Tension Test Report (Page – 1/1)

Date of Test 30-06-2020
Gauge length 2 inches
Description MS Pipe 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
	(inch)		(mm)	(mm^2)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	MS Pipe	8	25.60x4.50	115.20	4300	5400	366.17	459.84	0.50	25.00	
2			25.60x4.50	115.20	4300	5500	366.17	468.36	0.50	25.00	
3	MS Pipe	10	25.60x5.00	128.00	4500	5500	344.88	421.52	0.65	32.50	
4			25.60x5.00	128.00	4500	5500	344.88	421.52	0.70	35.00	
-	-	-	-	-	-	-	-	-	-	-	
-			-	-	-	-	-	-	-	-	

Only Four Samples for Tensile and Two Samples for Bend Test

Bend Test

Strip Taken from MS Pipe (8") Bend Test Through 180º is Satisfactory

Strip Taken from MS Pipe (10") 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,
Site Engineer
Construction of Mr. Khizzer Sajjad Residence - 344 Phase-1 Gujranwala Cantt

Reference # CED/TFL **35054** (Dr. M Rizwan Riaz) Dated: 29-06-2020
Reference of the request letter # KSR-344/ST/01 Dated: 29-06-2020

Tension Test Report (Page -1/1)

Date of Test 30-06-2020
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	0.413	3	0.393	0.11	0.121	4900	6000	98200	88990	120300	109000	1.00	12.5	
2	0.412	3	0.393	0.11	0.121	4300	5600	86200	78280	112300	102000	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.

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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 C/R & M (Engineering Cell)
Allied Bank Limited
Renovation Cum Construction of B/O Industrial Area Branch (0333) & Regional Office, Rahim Yar Khan
Reference # CED/TFL **35057** (Dr. M Rizwan Riaz) Dated: 29-06-2020
Reference of the request letter # Nil Dated: 23-06-2020

Tension Test Report (Page -1/1)

Date of Test 30-06-2020
Gauge length 8 inches
Description Deformed Steel Bar Tensile 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	0.374	3	0.374	0.11	0.110	3300	4900	66200	66090	98200	98200	1.20	15.0	
2	0.374	3	0.374	0.11	0.110	3300	4900	66200	66180	98200	98300	1.40	17.5	
3	0.376	3	0.375	0.11	0.110	3300	5000	66200	65840	100200	99800	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only three samples for tensile test														
Bend Test														

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,
Chief Resident Engineer
NESPAK
Widening Improvement of Road from Lodhran to Jalal Pur Road Connection KLM via Bahadur Pur Length 39.80km District Lodhran

Reference # CED/TFL **35058** (Dr. M Rizwan Riaz) Dated: 29-06-2020
Reference of the request letter # 4108/CRE/MZ/L-J/142 Dated: 24-06-2020

Tension Test Report (Page -1/1)

Date of Test 30-06-2020
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	0.373	3	0.373	0.11	0.110	3600	4900	72200	72450	98200	98700	1.00	12.5	Mioz Steel
2	0.370	3	0.372	0.11	0.109	3600	4800	72200	73020	96200	97400	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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.

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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,
Chief Engineer
University of the Punjab
Construction of Institute of Energy and Environmental Engineering at QAC

Reference # CED/TFL **35059** (Dr. M Rizwan Riaz) Dated: 29-06-2020
Reference of the request letter # D-497-99-C.E Dated: 25-06-2020

Tension Test Report (Page -1/1)

Date of Test 30-06-2020
Gauge length 8 inches
Description Deformed Steel Bar Tensile 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	0.358	3	0.366	0.11	0.105	2400	3300	48100	50280	66200	69200	1.90	23.8	
2	0.354	3	0.364	0.11	0.104	2300	3100	46100	48680	62200	65700	1.80	22.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile test														
Bend Test														

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,
Resident Engineer - I
NESPAK
Construction Underpass at Firdous Market, Lahore

Reference # CED/TFL **35060** (Dr. M Rizwan Riaz) Dated: 29-06-2020
Reference of the request letter # 3772/FMU/103/MWA/04/54 Dated: 27-06-2020

Tension Test Report (Page -1/1)

Date of Test 30-06-2020
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	0.405	3	0.389	0.11	0.119	3900	5300	78200	72210	106200	98200	1.00	12.5	Pak Steel
2	0.407	3	0.391	0.11	0.120	3900	5200	78200	71770	104200	95700	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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.

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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 QC
Country Developers (Pvt) Ltd.
Punjab Group of Colleges (PGC) – Gujrat

Reference # CED/TFL **35061** (Dr. M Rizwan Riaz) Dated: 29-06-2020
Reference of the request letter #Nil Dated: 29-06-2020

Tension Test Report (Page -1/1)

Date of Test 30-06-2020
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	0.368	3	0.371	0.11	0.108	3900	5200	78200	79560	104200	106100	1.00	12.5	Afco 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.

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