

GOVERNMENT OF KHYBER PAKHTUNKHWA

KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)

RURAL ACCESS/ FLOOD DAMAGED ROADS AND BRIDGES IN DISTRICTS KARAK AND KOHAT (PACKAGE-III LOT-2)

SUMMARY OF BILLS

Sr.N o	DESCRIPTION	N-KRK-R2 (L - 10.00KM)	KRK-NR-5 (L - 5.80KM)	KRK_R1 (L - 7.20KM)	KRK_R3 (L - 10.40KM)	KOHAT-03 (L - 5.50KM)	N-KOHAT-2 (L - 9.90KM)	KR-BR-112	KOHAT- BR-110	TOTAL AMOUNT (RS.)
1	BILL NO: 1 EARTH WORK	-	-	-	-	-	-		-	-
2	BILL NO: 2 ROAD WORK (SUB-BASE, BASE AND SURFACE COURSE)	-	-	-	-	-	-		-	-
3	BILL NO: 3 SLAB, BOX AND PIPE CULVERTS	-	-	-	-	-	-		-	-
4	BILL NO: 4 RETAINING WALLS AND TOE WALLS	-	-	-	-	-	-		-	-
5	BILL NO: 4a CONSTRUCTION OF RCC BRIDGES							-	-	-
6	BILL NO: 5 DRAINAGE AND ANTI EROSION WORK	-	-	-	-	-	-			-
7	BILL NO: 6 ANCILLARY WORKS	-	-	-	-	-	-		-	-
TOTAL AMOUNT OF CIVIL WORK (A) :		-	-	-	-	-	-	-	-	-
GRAND TOTAL AMOUNT (IN MILLIONS) :		-	-	-	-	-	-	-	-	-

Paul S

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



GOVERNMENT OF KHYBER PAKHTUNKHWA		
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)		
TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH ROAD IN DISTRICT KARAK (TOTAL LENGTH 10.00KM) (N-KRK-R2)		
PACKAGE III LOT-2		
SUMMARY OF BILLS		
S NO	DESCRIPTION	TOTAL AMOUNT IN FIGURES (RS)
1	BILL NO: 1 EARTH WORK	-
2	BILL NO: 2 ROAD WORK (SUB-BASE, BASE AND SURFACE COURSE)	-
3	BILL NO: 3 BOX AND PIPE CULVERTS	-
4	BILL NO: 4 RETAINING WALLS AND TOE WALLS	-
5	BILL NO: 5 DRAINAGE AND ANTI EROSION WORK	-
6	BILL NO: 6 ANCILLARY WORKS	-
TOTAL AMOUNT OF CIVIL WORK:		-
TOTAL AMOUNT OF CIVIL WORK IN MILLIONS:		-

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Deputy Director Construction-III
Provincial Road Development Project
Civil Department, Peshawar



GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH ROAD IN DISTRICT KARAK (TOTAL LENGTH 10.00KM) (N-KRK-R2)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specificati on Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL NO: 1 EARTH WORK						
101	Clearing and Grubbing.	SM	41,800.00			-
104	Compaction of Natural Ground.	SM	41,800.00			-
108c	Formation of Embankment from Barrow Excavation in Common Material	CM	52,282.00			-
108a	Formation of Embankment from Road way excavation in common material	CM	3,250.00			-
106a	Excavate Unsuitable Common Material	CM	1,850.00			-
110	Improved Subgrade CBR ≥ 20 %	CM	21,900.00			-
109a	Subgrade preparation in Earth Cut	SM	16,500.00			-
Total:						-

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Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

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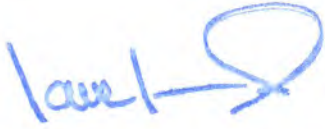


GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH ROAD IN DISTRICT KARAK (TOTAL LENGTH 10.00KM) (N-KRK-R2)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specificati on Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 2 ROAD WORK (SUB-BASE, BASE AND SURFACE COURSE)						
201	Granular Sub Base	CM	11,558.00			-
SIW-9 206b	Water Bound Macadam Base with Coarse Agg: Class B	CM	7,580.00			-
SIW-11	Grooving of Exsisting Road Pavement	SM	40,150.00			-
302a	Cut-Back Asphalt to Bituminous Prime Coat	SM	50,535.00			-
305b	Asphaltic Concrete for Wearing Course (Class B)	CM	2,527.00			-
401a1(ii)	Concrete Class A1 (ON GROUND)	CM	4,080.00			-
SIW-15 406a	Premoulded Joint Filler 20 mm Thick with Bitumastic joint seal	M	2,000.00			-
Total:						-


 Deputy Director Construction-III
 Provincial Government Project
 BSW Department, Peshawar



GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH ROAD IN DISTRICT KARAK (TOTAL LENGTH 10.00KM) (N-KRK-R2)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specificati on Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 3 (BOX AND PIPE CULVERTS)						
107a	Structural Excavation in Common Material.	CM	1,422.00			-
401f	Lean Concrete	CM	358.00			-
401a3 (ii)	Concrete Class A3 (ON GROUND)	CM	1,858.00			-
404b	Reinforcement as per AASHTO M 31 Grade 60	Ton	189.61			-
501d	R.C.C. Pipe Culvert AASHTO M 170 Class II Dia 610 mm	M	120.00			-
501f	R.C.C. Pipe Culvert AASHTO M 170 Class II Dia 910 mm	M	270.00			-
502 b	Concrete Class B in Bedding and Encasement of Concrete Pipe Culvert.	CM	828.75			-
510	Dismantling Of Structures And Obstructions	CM	650.00			-
SIW-10 SIW-13	Providing and filling sand behind abutment of culverts and causeways	CM	3,917.00			-
Total:						-


 Deputy Director, Construction-III
 Provincial Road Improvement Project
 C&W Department, Peshawar



GOVERNMENT OF KHYBER PAKHTUNKHWA						
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TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH ROAD IN DISTRICT KARAK (TOTAL LENGTH 10.00KM) (N-KRK-R2)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specificati on Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 4 (RETAINING WALLS AND TOE WALLS)						
107a	Structural Excavation in Common Material.	CM	12,665.00			-
SIW-10 107c	Common Backfill	CM	2,808.00			-
401b	Concrete Class B	CM	978.00			-
401a1 (ii)	Concrete Class A1 (ON GROUND)	CM	387.00			-
401f	Lean Concrete	CM	4,068.00			-
401h SIW-16	Plum Concrete (Class 'B' with 40% Boulders/ Rock) as per drawing & Engineer's Instructions	CM	25,231.00			-
Total:						-

Deputy Director Construction-III
Provincial Road Improvement Project
R&W Department, Peshawar

(Signature)



GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH ROAD IN DISTRICT KARAK (TOTAL LENGTH 10.00KM) (N-KRK-R2)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifcati on Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 5 (DRAINAGE AND ANTI EROSION WORK)						
107a	Structural Excavation in Common Material.	CM	10,296.00			-
SIW-10 107e	Common Backfill	CM	3,960.00			-
401b	Concrete Class B	CM	4,752.00			-
401a1ii	Concrete Class A1 (ON GROUND)	CM	113.00			-
404 b	Reinforcement as per AASHTO M 31 Grade 60	Ton	17.74			-
401f	Lean Concrete	CM	1,440.00			-
Total:						-



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PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specificati on Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 6 (ANCILLARY WORKS)						
610 c	Kilometer Post	EACH	15.00			-
607 a	Traffic Road Signs Category 1 Size 75 CM	EACH	8.00			-
607 b	Traffic Road Signs Category 2 Size dia 75 CM	EACH	2.00			-
607c	Traffic Road Signs Category 3 (a)	EACH	2.00			-
607 d	Traffic Road Signs Category 3 (b)	EACH	2.00			-
608 h	Pavement Marking in reflective TP paint for line of 15 cm width.	M	27,000.00			-
609 a	Reflectorised Pavement Stud (Flush Surface Type Single)	EACH	2,000.00			-
604 a	Metal Guard Rail	M	1,200.00			-
604 b	Guard Rail End pieces	EACH	26.00			-
604 d	Steel Post for Guard Rail	EACH	400.00			-
Total:						-



Lawal S
 Deputy Director Construction-III
 Provincial Road Development Project
 C&W Department Peshawar

GOVERNMENT OF KHYBER PAKHTUNKHWA		
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)		
HAMDAN TO INZAR MORE ROAD IN DISTRICT KARAK (TOTAL LENGTH 5.80KM) (KRK-NR-5)		
PACKAGE III LOT-2		
SUMMARY OF BILLS		
S NO	DESCRIPTION	TOTAL AMOUNT IN FIGURES (RS)
1	BILL NO: 1 EARTH WORK	-
2	BILL NO: 2 ROAD WORK (SUB-BASE, BASE AND SURFACE COURSE)	-
3	BILL NO: 3 BOX AND PIPE CULVERTS	-
4	BILL NO: 4 RETAINING WALLS AND TOE WALLS	-
5	BILL NO: 5 DRAINAGE AND ANTI EROSION WORK	-
6	BILL NO: 6 ANCILLARY WORKS	-
TOTAL AMOUNT OF CIVIL WORK:		-
TOTAL AMOUNT OF CIVIL WORK IN MILLIONS:		-



A handwritten signature in blue ink, appearing to read "Lawal S", is written above the official title.

Deputy Director Construction III
Provincial Road Development Project
C&W Department, Faisalabad

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
HAMDAN TO INZAR MORE ROAD IN DISTRICT KARAK (TOTAL LENGTH 5.80KM) (KRK-NR-5)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specificat ion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) In Words	Unit Rate (Rs) in Figures
BILL NO: 1 EARTH WORK						
101	Clearing and Grubbing.	SM	14,109.00			-
104	Compaction of Natural Ground.	SM	14,109.00			-
108c	Formation of Embankment from Barrow Excavation in Common Material	CM	3,138.00			-
108a	Formation of Embankment from Road way excavation in common material	CM	10,823.00			-
106a	Excavate Unsuitable Common Material	CM	620.00			-
110	Improved Subgrade CBR ≥ 20 %	CM	12,767.70			-
109a	Subgrade preparation in Earth Cut	SM	12,185.00			-
Total:						-



GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
HAMDAN TO INZAR MORE ROAD IN DISTRICT KARAK (TOTAL LENGTH 5.80KM) (KRK-NR-5)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specificat ion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 2 ROAD WORK (SUB-BASE, BASE AND SURFACE COURSE)						
201	Granular Sub Base	CM	5,256.00			-
SIW-9 206b	Water Bound Macadam Base with Coarse Agg: Class B	CM	3,726.00			-
SIW-11	Grooving of Existing Road Pavement	SM	21,279.50			-
302a	Cut-Back Asphalt for Bituminous Prime Coat	SM	24,837.00			-
305b	Asphaltic Concrete for Wearing Course (Class B)	CM	1,242.00			-
401a1(ii)	Concrete Class A1 (ON GROUND)	CM	2,040.00			-
SIW-15 406a	Premoulded Joint Filler 20 mm Thick with Bitumastic joint seal	M	1,166.00			-
Total:						-



Deputy Director Construction III
Provincial Road Development Project
C&W Department, Islamabad

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
HAMDAN TO INZAR MORE ROAD IN DISTRICT KARAK (TOTAL LENGTH 5.80KM) (KRK-NR-5)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specificat ion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 3 (BOX AND PIPE CULVERTS)						
107a	Structural Excavation in Common Material.	CM	771.00			-
401f	Lean Concrete	CM	196.00			-
401a3 (ii)	Concrete Class A3 (ON GROUND)	CM	817.00			-
404b	Reinforcement as per AASHTO M 31 Grade 60	Ton	96.20			-
501d	R.C.C. Pipe Culvert AASHTO M 170 Class II Dia 610 mm	M	150.00			-
501f	R.C.C. Pipe Culvert AASHTO M 170 Class II Dia 910 mm	M	60.00			-
502 b	Concrete Class B in Bedding and Encasement of Concrete Pipe Culvert.	CM	60.00			-
510	Dismantling Of Structures And Obstructions	CM	332.00			-
SIW-10 SIW-13	Providing and filling sand behind abutment of culverts and causeways	CM	2,103.00			-
Total:						-



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Deputy Director Construction-III
Provincial Road Development Project
CAW Department, Islamabad

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
HAMDAN TO INZAR MORE ROAD IN DISTRICT KARAK (TOTAL LENGTH 5.80KM) (KRK-NR-5)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifictat ion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 4 (RETAINING WALLS AND TOE WALLS)						
107a	Structural Excavation in Common Material.	CM	4,786.00			-
SIW-10 107e	Common Backfill	CM	1,124.00			-
401b	Concrete Class B	CM	404.00			-
401a1 (ii)	Concrete Class A1 (ON GROUND)	CM	179.00			-
401f	Lean Concrete	CM	1,057.00			-
401h SIW-16	Plum Concrete (Class 'B' with 40% Boulders/ Rock) as per drawing & Engineer's Instructions	CM	10,825.00			-
Total:						-



Lawal

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

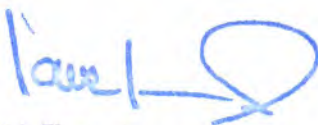
GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
HAMDAN TO INZAR MORE ROAD IN DISTRICT KARAK (TOTAL LENGTH 5.80KM) (KRK-NR-5)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specificat ion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL. # 5 (DRAINAGE AND ANTI EROSION WORK)						
107a	Structural Excavation in Common Material.	CM	2,693.00			-
SIW-10 107c	Common Backfill	CM	1,122.00			-
401b	Concrete Class B	CM	2,020.00			-
401a1ii	Concrete Class A1 (ON GROUND)	CM	45.00			-
404 b	Reinforcement as per AASHTO M 31 Grade 60	Ton	7.06			-
401f	Lean Concrete	CM	561.00			-
Total:						-



Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
HAMDAN TO INZAR MORE ROAD IN DISTRICT KARAK (TOTAL LENGTH 5.80KM) (KRK-NR-5)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specificat ion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 6 (ANCILLARY WORKS)						
610 c	Kilometer Post	EACH	6.00			-
607 a	Traffic Road Signs Category 1 Size 75 CM	EACH	6.00			-
607 b	Traffic Road Signs Category 2 Size dia 75 CM	EACH	2.00			-
607c	Traffic Road Signs Category 3 (a)	EACH	2.00			-
607 d	Traffic Road Signs Category 3 (b)	EACH	2.00			-
608 h	Pavement Marking in reflective TP paint for line of 15 cm width.	M	16,324.00			-
609 a	Reflectorised Pavement Stud (Flush Surface Type Single)	EACH	1,166.00			-
604 a	Metal Guard Rail	M	300.00			-
604 b	Guard Rail End pieces	EACH	10.00			-
604 d	Steel Post for Guard Rail	EACH	100.00			-
Total:						-




 Deputy Director Construction-III
 Provincial Road Development Project
 GAW Lepak 2-400, KHELAWAZ

GOVERNMENT OF KHYBER PAKHTUNKHWA

KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)

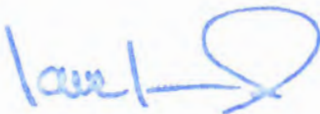
INDUS HIGHWAY TO NARI KHAWAR ROAD IN DISTRICT KARAK (TOTAL LENGTH 7.20KM) (KRK_R1)

PACKAGE III LOT-2

SUMMARY OF BILLS

S NO	DESCRIPTION	TOTAL AMOUNT IN FIGURES (RS)
1	BILL NO: 1 EARTH WORK	-
2	BILL NO: 2 ROAD WORK (SUB-BASE, BASE AND SURFACE COURSE)	-
3	BILL NO: 3 BOX AND PIPE CULVERTS	-
4	BILL NO: 4 RETAINING WALLS AND TOE WALLS	-
5	BILL NO: 5 DRAINAGE AND ANTI EROSION WORK	-
6	BILL NO: 6 ANCILLARY WORKS	-
TOTAL AMOUNT OF CIVIL WORK:		-
TOTAL AMOUNT OF CIVIL WORK IN MILLIONS:		-




Deputy Director Construction-III
Provincial Rural Roads Development Project
C&W Department

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
INDUS HIGHWAY TO NARI KHAWAR ROAD IN DISTRICT KARAK (TOTAL LENGTH 7.20KM) (KRK_R1)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifica tion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL NO: 1 EARTH WORK						
101	Clearing and Grubbing.	SM	16,632.00			-
104	Compaction of Natural Ground.	SM	16,632.00			-
108c	Formation of Embankment from Barrow Excavation in Common Material	CM	19,552.00			-
108a	Formation of Embankment from Road way excavation in common material	CM	9,361.20			-
106a	Excavate Unsuitable Common Material	CM	6,240.80			-
110	Improved Subgrade CBR ≥ 20 %	CM	15,768.00			-
109a	Subgrade preparation in Earth Cut	SM	16,632.00			-
Total:						-

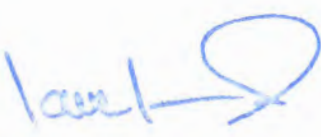


Paul S

Deputy Director Construction-III
Provincial Road Development Project
G&W Department, Peshawar

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
INDUS HIGHWAY TO NARI KHAWAR ROAD IN DISTRICT KARAK (TOTAL LENGTH 7.20KM) (KRK_R1)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifica tion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) In Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 2 ROAD WORK (SUB-BASE, BASE AND SURFACE COURSE)						
201	Granular Sub Base	CM	8,009.00			-
SIW-9 206b	Water Bound Macadam Base with Coarse Agg: Class B	CM	5,365.00			-
SIW-11	Grooving of Exsisting Road Pavement	SM	26,097.50			-
302a	Cut-Back Asphalt for Bituminous Prime Coat	SM	35,765.00			-
305b	Asphaltic Concrete for Wearing Course (Class B)	CM	1,788.00			-
401a1(ii)	Concrete Class A1 (ON GROUND)	CM	2,938.00			-
SIW-15 406a	Premoulded Joint Filler 20 mm Thick with Bitumastic joint scal	M	1,440.00			-
Total:						-




 Deputy Director Construction-III
 Provincial Road Development Project
 P.W.D.

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
INDUS HIGHWAY TO NARI KHAWAR ROAD IN DISTRICT KARAK (TOTAL LENGTH 7.20KM) (KRK_R1)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifica tion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 3 (BOX AND PIPE CULVERTS)						
107a	Structural Excavation in Common Material.	CM	556.00			-
401f	Lean Concrete	CM	141.00			-
401a3 (ii)	Concrete Class A3 (ON GROUND)	CM	595.00			-
404b	Reinforcement as per AASHTO M 31 Grade 60	Ton	70.06			-
501d	R.C.C. Pipe Culvert AASHTO M 170 Class II Dia 610 mm	M	150.00			-
501f	R.C.C. Pipe Culvert AASHTO M 170 Class II Dia 910 mm	M	60.00			-
502 b	Concrete Class B in Bedding and Encasement of Concrete Pipe Culvert.	CM	185.00			-
510	Dismantling Of Structures And Obstructions	CM	552.00			-
SIW-10 SIW-13	Providing and filling sand behind abutment of culverts and causeways	CM	1,519.00			-
Total:						-

Handwritten signature

Deputy Director Construction-III
Provincial Government Project
C&W Department, Peshawar



GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
INDUS HIGHWAY TO NARI KHAWAR ROAD IN DISTRICT KARAK (TOTAL LENGTH 7.20KM) (KRK_R1)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifica tion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 4 (RETAINING WALLS AND TOE WALLS)						
107a	Structural Excavation in Common Material.	CM	4,182.00			-
SIW-10 107c	Common Backfill	CM	1,086.00			-
401b	Concrete Class B	CM	288.00			-
401a1 (ii)	Concrete Class A1 (ON GROUND)	CM	178.00			-
401f	Lean Concrete	CM	968.00			-
401h SIW-16	Plum Concrete (Class 'B' with 40% Boulders/ Rock) as per drawing & Engineer's Instructions	CM	10,162.00			-
Total:						-



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Deputy Director Construction-III
Provincial Road Development Project
C&W Department, Peshawar

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
INDUS HIGHWAY TO NARI KHAWAR ROAD IN DISTRICT KARAK (TOTAL LENGTH 7.20KM) (KRK_R1)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifica tion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 5 (DRAINAGE AND ANTI EROSION WORK)						
107a	Structural Excavation in Common Material.	CM	1,810.00			-
SIW-10 107e	Common Backfill	CM	825.00			-
401b	Concrete Class B	CM	1,188.00			-
401a1ii	Concrete Class A1 (ON GROUND)	CM	45.00			-
404 b	Reinforcement as per AASHTO M 31 Grade 60	Ton	6.01			-
401f	Lean Concrete	CM	413.00			-
Total:						-



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Deputy Director Construction-III
 Provincial Engineer, Rural Roads and Project
 W Department, Peshawar

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
INDUS HIGHWAY TO NARI KHAWAR ROAD IN DISTRICT KARAK (TOTAL LENGTH 7.20KM) (KRK_R1)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifica tion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 6 (ANCILLARY WORKS)						
610 c	Kilometer Post	EACH	8.00			-
607 a	Traffic Road Signs Category 1 Size 75 CM	EACH	7.00			-
607 b	Traffic Road Signs Category 2 Size dia 75 CM	EACH	3.00			-
607c	Traffic Road Signs Category 3 (a)	EACH	3.00			-
607 d	Traffic Road Signs Category 3 (b)	EACH	3.00			-
608 h	Pavement Marking in reflective TP paint for line of 15 cm width.	M	18,720.00			-
609 a	Reflectorised Pavement Stud (Flush Surface Type Single)	EACH	880.00			-
604 a	Metal Guard Rail	M	300.00			-
604 b	Guard Rail End pieces	EACH	10.00			-
604 d	Steel Post for Guard Rail	EACH	100.00			-
Total:						-




 Deputy Director Construction-II
 Provisional
 C&W Department

GOVERNMENT OF KHYBER PAKHTUNKHWA		
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)		
PAYALA MORE TO SHAHIDAN BANDA ROAD IN DISTRICT KARAK (TOTAL LENGTH 10.40KM) (KRK-R3)		
PACKAGE III LOT-2		
SUMMARY OF BILLS		
S NO	DESCRIPTION	TOTAL AMOUNT IN FIGURES (RS)
1	BILL NO: 1 EARTH WORK	-
2	BILL NO: 2 ROAD WORK (SUB-BASE, BASE AND SURFACE COURSE)	-
3	BILL NO: 3 BOX AND PIPE CULVERTS	-
4	BILL NO: 4 RETAINING WALLS AND TOE WALLS	-
5	BILL NO: 5 DRAINAGE AND ANTI EROSION WORK	-
6	BILL NO: 6 ANCILLARY WORKS	-
TOTAL AMOUNT OF CIVIL WORK:		-
TOTAL AMOUNT OF CIVIL WORK IN MILLIONS:		-



Paul S

Deputy Director Construction-III
 Provincial Government of Khyber Pakhtunkhwa
 KANUN

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
PAYALA MORE TO SHAHIDAN BANDA ROAD IN DISTRICT KARAK (TOTAL LENGTH 10.40KM) (KRK-R3)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifica tion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL NO: 1 EARTH WORK						
101	Clearing and Grubbing.	SM	20,592.00			-
104	Compaction of Natural Ground.	SM	20,592.00			-
108c	Formation of Embankment from Barrow Excavation in Common Material	CM	38,463.70			-
108a	Formation of Embankment from Road way excavation in common material	CM	5,121.00			-
106a	Excavate Unsuitable Common Material	CM	4,120.00			-
110	Improved Subgrade CBR ≥ 20 %	CM	22,776.00			-
109a	Subgrade preparation in Earth Cut	SM	21,736.00			-
Total:						-



Paul S

Deputy Director Construction-I/II
Provincial Road Development Project
R&W Department, Peshawar

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
PAYALA MORE TO SHAHIDAN BANDA ROAD IN DISTRICT KARAK (TOTAL LENGTH 10.40KM) (KRK-R3)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifica tion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 2 ROAD WORK (SUB-BASE, BASE AND SURFACE COURSE)						
201	Granular Sub Base	CM	11,573.00			-
SIW-9 206b	Water Bound Macadam Base with Coarse Agg: Class B	CM	7,754.00			-
SIW-11	Grooving of Exsisting Road Pavement	SM	37,960.00			-
302a	Cut-Back Asphalt for Bituminous Prime Coat	SM	51,693.00			-
305b	Asphaltic Concrete for Wearing Course (Class B)	CM	2,585.00			-
401a1(ii)	Concrete Class A1 (ON GROUND)	CM	4,243.00			-
SIW-15 406a	Premoulded Joint Filler 20 mm Thick with Bitumastic joint seal	M	6,937.33			-
Total:						-

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Deputy Director Construction-III
Provincial Road Development Project
C&W

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
PAYALA MORE TO SHAHIDAN BANDA ROAD IN DISTRICT KARAK (TOTAL LENGTH 10.40KM) (KRK-R3)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifica tion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 3 (BOX AND PIPE CULVERTS)						
107a	Structural Excavation in Common Material.	CM	641.00			-
401f	Lean Concrete	CM	165.00			-
401a3 (ii)	Concrete Class A3 (ON GROUND)	CM	690.00			-
404b	Reinforcement as per AASHTO M 31 Grade 60	Ton	86.66			-
501d	R.C.C. Pipe Culvert AASHTO M 170 Class II Dia 610 mm	M	150.00			-
501f	R.C.C. Pipe Culvert AASHTO M 170 Class II Dia 910 mm	M	60.00			-
502 b	Concrete Class B in Bedding and Encasement of Concrete Pipe Culvert.	CM	195.00			-
510	Dismantling Of Structures And Obstructions	CM	650.00			-
SIW-10 SIW-13	Providing and filling sand behind abutment of culverts and causeways	CM	2,234.00			-
Total:						-

Paul S

Deputy Director Construction-III
Provincial Road & Transport Project
GSDP 2015-2019



GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
PAYALA MORE TO SHAHIDAN BANDA ROAD IN DISTRICT KARAK (TOTAL LENGTH 10.40KM) (KRK-R3)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifica tion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 4 (RETAINING WALLS AND TOE WALLS)						
107a	Structural Excavation in Common Material.	CM	10,857.00			-
SIW-10 107e	Common Backfill	CM	2,467.00			-
401b	Concrete Class B	CM	682.00			-
401a1 (ii)	Concrete Class A1 (ON GROUND)	CM	370.00			-
401f	Lean Concrete	CM	3,556.00			-
401h SIW-16	Plum Concrete (Class 'B' with 40% Boulders/ Rock) as per drawing & Engineer's Instructions	CM	25,128.00			-
Total:						-




 Deputy Director Construction-II
 Provincial Government of Khyber Pakhtunkhwa
 C&W Department

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
PAYALA MORE TO SHAHIDAN BANDA ROAD IN DISTRICT KARAK (TOTAL LENGTH 10.40KM) (KRK-R3)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifica tion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 5 (DRAINAGE AND ANTI EROSION WORK)						
107a	Structural Excavation in Common Material.	CM	3,622.00			-
SIW-10 107e	Common Backfill	CM	1,650.00			-
401b	Concrete Class B	CM	2,970.00			-
401a1ii	Concrete Class A1 (ON GROUND)	CM	56.00			-
404 b	Reinforcement as per AASHTO M 31 Grade 60	Ton	8.79			-
401f	Lean Concrete	CM	825.00			-
Total:						-

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Deputy Director Construction-II
Provincial Rural Road Development Project
G&N Department, Government of Khyber Pakhtunkhwa

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
PAYALA MORE TO SHAHIDAN BANDA ROAD IN DISTRICT KARAK (TOTAL LENGTH 10.40KM) (KRK-R3)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifica tion Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 6 (ANCILLARY WORKS)						
610 c	Kilometer Post	EACH	10.00			-
607 a	Traffic Road Signs Category 1 Size 75 CM	EACH	6.00			-
607 b	Traffic Road Signs Category 2 Size dia 75 CM	EACH	2.00			-
607c	Traffic Road Signs Category 3 (a)	EACH	2.00			-
607 d	Traffic Road Signs Category 3 (b)	EACH	2.00			-
608 h	Pavement Marking in reflective TP paint for line of 15 cm width.	M	26,015.00			-
609 a	Reflectorised Pavement Stud (Flush Surface Type Single)	EACH	2,081.20			-
604 a	Metal Guard Rail	M	900.00			-
604 b	Guard Rail End pieces	EACH	26.00			-
604 d	Steel Post for Guard Rail	EACH	300.00			-
Total:						-



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Deputy Director Construction-III
Provisional Director of Construction Project
Karak District

GOVERNMENT OF KHYBER PAKHTUNKHWA		
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)		
FROM MUKARAB KHAN KORONA TO KOT ROAD IN DISTRICT KOHAT (TOTAL LENGTH 5.50KM)(KOHAT-03)		
PACKAGE III LOT-2		
SUMMARY OF BILLS		
S NO	DESCRIPTION	TOTAL AMOUNT IN FIGURES (RS)
1	BILL NO: 1 EARTH WORK	-
2	BILL NO: 2 ROAD WORK (SUB-BASE, BASE AND SURFACE COURSE)	-
3	BILL NO: 3 BOX AND PIPE CULVERTS	-
4	BILL NO: 4 RETAINING WALLS AND TOE WALLS	-
5	BILL NO: 5 DRAINAGE AND ANTI EROSION WORK	-
6	BILL NO: 6 ANCILLARY WORKS	-
TOTAL AMOUNT OF CIVIL WORK:		-
TOTAL AMOUNT OF CIVIL WORK IN MILLIONS:		-



Deputy Director Construction-III
Provincial Road Development Project
C&W Department

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
FROM MUKARAB KHAN KORONA TO KOT ROAD IN DISTRICT KOHAT (TOTAL LENGTH 5.50KM)(KOHAT-03)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifcati on Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL NO: 1 EARTH WORK						
101	Clearing and Grubbing.	SM	12,626.00			-
104	Compaction of Natural Ground.	SM	12,626.00			-
108c	Formation of Embankment from Barrow Excavation in Common Material	CM	6,862.50			-
108a	Formation of Embankment from Road way excavation in common material	CM	3,723.60			-
106a	Excavate Unsuitable Common Material	CM	5,585.40			-
110	Improved Subgrade CBR ≥ 20 %	CM	11,935.50			-
109a	Subgrade preparation in Earth Cut	SM	15,032.00			-
Total:						-

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Deputy Director Construction-III
Provincial IT-W. Road Project
C&W Department, Peshawar



GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
FROM MUKARAB KHAN KORONA TO KOT ROAD IN DISTRICT KOHAT (TOTAL LENGTH 5.50KM)(KOHAT-03)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specificati on Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 2 ROAD WORK (SUB-BASE, BASE AND SURFACE COURSE)						
201	Granular Sub Base	CM	6,900.00			-
SIW-9 206b	Water Bound Macadam Base with Coarse Agg: Class B	CM	4,113.00			-
SIW-11	Grooving of Exsisting Road Pavement	SM	21,945.99			-
302a	Cut-Back Asphalt for Bituminous Prime Coat	SM	27,418.00			-
305b	Asphaltic Concrete for Wearing Course (Class B)	CM	1,371.00			-
401a1(ii)	Concrete Class A1 (ON GROUND)	CM	2,252.00			-
SIW-15 406a	Premoulded Joint Filler 20 mm Thick with Bitumastic joint seal	M	3,633.33			-
Total:						-



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Deputy Director Construction III
Provincial Road Improvement Project
C&W Department, Peshawar

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
FROM MUKARAB KHAN KORONA TO KOT ROAD IN DISTRICT KOHAT (TOTAL LENGTH 5.50KM)(KOHAT-03)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifi- cation on Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 3 (BOX AND PIPE CULVERTS)						
107a	Structural Excavation in Common Material.	CM	313.00			-
401f	Lean Concrete	CM	81.00			-
401a3 (ii)	Concrete Class A3 (ON GROUND)	CM	328.00			-
404b	Reinforcement as per AASHTO M 31 Grade 60	Ton	51.50			-
501d	R.C.C. Pipe Culvert AASHTO M 170 Class II Dia 610 mm	M	120.00			-
501f	R.C.C. Pipe Culvert AASHTO M 170 Class II Dia 910 mm	M	60.00			-
502 b	Concrete Class B in Bedding and Encasement of Concrete Pipe Culvert.	CM	215.00			-
510	Dismantling Of Structures And Obstructions	CM	650.00			-
SIW-10 SIW-13	Providing and filling sand behind abutment of culverts and causeways	CM	859.00			-
Total:						-



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Deputy Director Construction-III
Provincial Road Development Project
G&W Department, Peshawar

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
FROM MUKARAB KHAN KORONA TO KOT ROAD IN DISTRICT KOHAT (TOTAL LENGTH 5.50KM)(KOHAT-03)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifcati on Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 4 (RETAINING WALLS AND TOE WALLS)						
107a	Structural Excavation in Common Material.	CM	3,080.00			-
SIW-10 107e	Common Backfill	CM	853.00			-
401b	Concrete Class B	CM	336.00			-
401a1 (ii)	Concrete Class A1 (ON GROUND)	CM	180.00			-
401f	Lean Concrete	CM	738.00			-
401h SIW-16	Plum Concrete (Class 'B' with 40% Boulders/ Rock) as per drawing & Engineer's Instructions	CM	6,133.00			-
Total:						-



Deputy Director Construction III
Provincial Government of Khyber Pakhtunkhwa
C&W Department, Peshawar

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
FROM MUKARAB KHAN KORONA TO KOT ROAD IN DISTRICT KOHAT (TOTAL LENGTH 5.50KM)(KOHAT-03)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifcati on Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 5 (DRAINAGE AND ANTI EROSION WORK)						
107a	Structural Excavation in Common Material.	CM	3,615.00			-
SIW-10 107e	Common Backfill	CM	1,650.00			-
401b	Concrete Class B	CM	2,970.00			-
401a1ii	Concrete Class A1 (ON GROUND)	CM	68.00			-
404 b	Reinforcement as per AASHTO M 31 Grade 60	Ton	8.01			-
401f	Lean Concrete	CM	825.00			-
Total:						-



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Deputy Director Construction-III
Provincial Road Development Project
Kohat

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
FROM MUKARAB KHAN KORONA TO KOT ROAD IN DISTRICT KOHAT (TOTAL LENGTH 5.50KM)(KOHAT-03)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifi cati on Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) In Words	Unit Rate (Rs) In Figures
BILL # 6 (ANCILLARY WORKS)						
610 c	Kilometer Post	EACH	6.00			-
607 a	Traffic Road Signs Category 1 Size 75 CM	EACH	2.00			-
607 b	Traffic Road Signs Category 2 Size dia 75 CM	EACH	1.00			-
607c	Traffic Road Signs Category 3 (a)	EACH	1.00			-
607 d	Traffic Road Signs Category 3 (b)	EACH	1.00			-
608 h	Pavement Marking in reflective TP paint for line of 15 cm width.	M	15,260.00			-
609 a	Reflectorised Pavement Stud (Flush Surface Type Single)	EACH	1,090.00			-
Total:						-



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Deputy Director Construction-III
Provincial Government of Khyber Pakhtunkhwa
C&M Development

GOVERNMENT OF KHYBER PAKHTUNKHWA		
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)		
KHUSAL GARH ROAD TO KAMAR DOK ROAD IN DISTRICT KOHAT (TOTAL LENGTH 9.90KM) (N-KOHAT-2)		
PACKAGE III LOT-2		
SUMMARY OF BILLS		
S NO	DESCRIPTION	TOTAL AMOUNT IN FIGURES (RS)
1	BILL NO: 1 EARTH WORK	-
2	BILL NO: 2 ROAD WORK (SUB-BASE, BASE AND SURFACE COURSE)	-
3	BILL NO: 3 BOX AND PIPE CULVERTS	-
4	BILL NO: 4 RETAINING WALLS AND TOE WALLS	-
5	BILL NO: 5 DRAINAGE AND ANTI EROSION WORK	-
6	BILL NO: 6 ANCILLARY WORKS	-
TOTAL AMOUNT OF CIVIL WORK:		-
TOTAL AMOUNT OF CIVIL WORK IN MILLIONS:		-




 Deputy Director Construction-III
 Provincial Road Development Project
 C&W Division

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
KHUSAL GARH ROAD TO KAMAR DOK ROAD IN DISTRICT KOHAT (TOTAL LENGTH 9.90KM) (N-KOHAT-2)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specific ation Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) In Figures	Unit Rate (Rs) In Words	Unit Rate (Rs) In Figures
BILL NO: 1 EARTH WORK						
101	Clearing and Grubbing.	SM	43,560.00			-
104	Compaction of Natural Ground.	SM	43,560.00			-
108c	Formation of Embankment from Barrow Excavation in Common Material	CM	31,445.20			-
108a	Formation of Embankment from Road way excavation in common material	CM	668.80			-
106a	Excavate Unsuitable Common Material	CM	1,003.20			-
110	Improved Subgrade CBR ≥ 20 %	CM	22,331.00			-
109a	Subgrade preparation in Earth Cut	SM	4,650.00			-
Total:						-



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Deputy Director Construction III
Providing Technical Support to the Project
G&M Division

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
KHUSAL GARH ROAD TO KAMAR DOK ROAD IN DISTRICT KOHAT (TOTAL LENGTH 9.90KM) (N-KOHAT-2)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specific ation Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 2 ROAD WORK (SUB-BASE, BASE AND SURFACE COURSE)						
201	Granular Sub Base	CM	11,426.00			-
SIW-9 206b	Water Bound Macadam Base with Coarse Agg: Class B	CM	7,449.00			-
302a	Cut-Back Asphalt for Bituminous Prime Coat	SM	49,659.00			-
305b	Asphaltic Concrete for Wearing Course (Class B)	CM	2,483.00			-
401a1(ii)	Concrete Class A1 (ON GROUND)	CM	4,079.00			-
SIW-15 406a	Premoulded Joint Filler 20 mm Thick with Bitumastic joint seal	M	1,980.00			-
Total:						-



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 Deputy Director Construction-III
 Provincial Road Development Project
 C&W Division

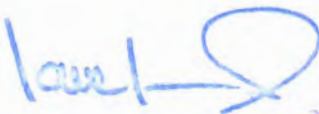
GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
KHUSAL GARH ROAD TO KAMAR DOK ROAD IN DISTRICT KOHAT (TOTAL LENGTH 9.90KM) (N-KOHAT-2)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifi- cation Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 3 (BOX AND PIPE CULVERTS)						
107a	Structural Excavation in Common Material.	CM	1,169.00			-
401f	Lean Concrete	CM	294.00			-
401a3 (ii)	Concrete Class A3 (ON GROUND)	CM	1,276.00			-
404b	Reinforcement as per AASHTO M 31 Grade 60	Ton	160.27			-
501d	R.C.C. Pipe Culvert AASHTO M 170 Class II Dia 610 mm	M	80.00			-
501f	R.C.C. Pipe Culvert AASHTO M 170 Class II Dia 910 mm	M	60.00			-
502 b	Concrete Class B in Bedding and Encasement of Concrete Pipe Culvert.	CM	125.00			-
510	Dismantling Of Structures And Obstructions	CM	331.00			-
SIW-10 SIW-13	Providing and filling sand behind abutment of culverts and causeways	CM	3,130.00			-
Total:						-



Deputy Director Construction-III
Provincial Government Project
D&W Department, Peshawar

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
KHUSAL GARH ROAD TO KAMAR DOK ROAD IN DISTRICT KOHAT (TOTAL LENGTH 9.90KM) (N-KOHAT-2)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Speciflc ation Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) In Figures	Unit Rate (Rs) In Words	Unit Rate (Rs) In Figures
BILL # 4 (RETAINING WALLS AND TOE WALLS)						
107a	Structural Excavation in Common Material.	CM	9,167.00			-
SIW-10 107e	Common Backfill	CM	2,110.00			-
401b	Concrete Class B	CM	725.00			-
401a1 (ii)	Concrete Class A1 (ON GROUND)	CM	399.00			-
401f	Lean Concrete	CM	1,837.00			-
401h SIW-16	Plum Concrete (Class 'B' with 40% Boulders/ Rock) as per drawing & Engineer's Instructions	CM	21,056.00			-
Total:						-




 Deputy Director Construction-III
 Provincial Road Improvement Project
 C&W Department, Peshawar

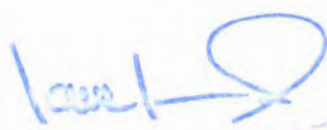
GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
KHUSAL GARH ROAD TO KAMAR DOK ROAD IN DISTRICT KOHAT (TOTAL LENGTH 9.90KM) (N-KOHAT-2)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specific ation Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 5 (DRAINAGE AND ANTI EROSION WORK)						
107a	Structural Excavation in Common Material.	CM	1,188.00			-
SIW-10 107e	Common Backfill	CM	495.00			-
401b	Concrete Class B	CM	891.00			-
401a1ii	Concrete Class A1 (ON GROUND)	CM	23.00			-
404 b	Reinforcement as per AASHTO M 31 Grade 60	Ton	3.07			-
401f	Lean Concrete	CM	225.00			-
Total:						-



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Deputy Director Construction-III
Provincial Road Development Project
C&W Department, Peshawar

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
KHUSAL GARH ROAD TO KAMAR DOK ROAD IN DISTRICT KOHAT (TOTAL LENGTH 9.90KM) (N-KOHAT-2)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specifi- cation Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 6 (ANCILLARY WORKS)						
610 c	Kilometer Post	EACH	10.00			-
607 a	Traffic Road Signs Category 1 Size 75 CM	EACH	5.00			-
607 b	Traffic Road Signs Category 2 Size dia 75 CM	EACH	2.00			-
607c	Traffic Road Signs Category 3 (a)	EACH	2.00			-
607 d	Traffic Road Signs Category 3 (b)	EACH	2.00			-
608 h	Pavement Marking in reflective TP paint for line of 15 cm width.	M	27,720.00			-
609 a	Reflectorised Pavement Stud (Flush Surface Type Single)	EACH	2,260.00			-
604 a	Metal Guard Rail	M	240.00			-
604 b	Guard Rail End pieces	EACH	10.00			-
604 d	Steel Post for Guard Rail	EACH	80.00			-
Total:						-


 Deputy Director Construction-III
 Provincial Road Improvement Project
 C&W Department, Peshawar



GOVERNMENT OF KHYBER PAKHTUNKHWA		
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)		
CONSTRUCTION OF RCC BRIDGE AT LATAMBAR KASHO IN DISTRICT KARAK (KR-BR-112)		
PACKAGE III LOT-2		
SUMMARY OF BILLS		
S NO	DESCRIPTION	TOTAL AMOUNT IN FIGURES (RS)
4a	BILL NO: 4c (RETROFITTING OF EXISTING STRUCTURE)	-
TOTAL AMOUNT OF CIVIL WORK:		-
TOTAL AMOUNT OF CIVIL WORK IN MILLIONS:		-

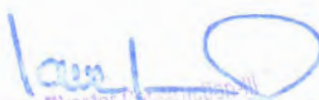


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Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
CONSTRUCTION OF RCC BRIDGE AT LATAMBAR KASHO IN DISTRICT KARAK (KR-BR-112)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specification Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures

BILL # 4a (RETROFITTING OF EXISTING STRUCTURE)

407i	Pile Load Tests to 2 times the design load	Each	1.00			-
SIW 10 (Item 407)	Exploratory/Confirmatory Boring and Soil testing, including soil investigation report					-
SIW-11	Exploratory/Confirmatory Boring	M	30.00			-
SIW-12	Soil testing, / investigation report	L.Sum	1.00			-
407d	Cast-in-place, Reinforced Concrete Cylindrical Piles dia 910 to 1200 mm	M	1,470.00			-
107a	Structural Excavation in Common Material.	CM	271.49			-
401f	Lean Concrete	CM	41.52			-
401a3 (ii)	Concrete Class 'A 3' (ON GROUND)	CM	298.32			-
404b	Reinforcement as per AASHTO M 31 Grade 60	Ton	325.00			-
SIW-9	Providing and filling sand behind abutment of bridges	CM	739.20			-
510	Dismantling Of Structures And Obstructions	CM	850.00			-
406 c	Elastomeric Bearing Pads & as per approved drawing	Cu.cm	79,200.00			-
SIW-14 (Item 405b)	Launching of Girders in place including lifting, handling and temporary works	M	240.00			-
SIW-15	Delaunching of Girders in place including lifting, handling and temporary works	M	240.00			-
SIW-15	Galvanized Iron Drain Pipe, 75 mm Diameter	Each	40.00			-
303a	Cut-Back Asphalt for Bituminous Tack Coat	SM	1,168.00			-
305b	Asphaltic Concrete for Wearing Course (Class B)	CM	58.40			-
401a3 (iii)	Concrete Class 'A 3' (ELEVATED)	CM	267.77			-
SIW 16 (Item 406 c)	Supply and place in position expansion joint assemblies as specified & as per approved drawing	M	55.80			-
SIW 17	Drilling for Nailing, 32mm Steel Bar with all respect, as per approved Drawing	m	140.00			-
SIW-17	PVC Pipe sched. 40 200 mm Dia. for Services.	M	260.00			-
Total:						-


 Deputy Director
 Provincial Road, Improvement Project
 C&W Department, Peshawar



GOVERNMENT OF KHYBER PAKHTUNKHWA		
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)		
CONSTRUCTION OF RCC BRIDGE KHARMATOO ROAD BILLITANG IN DISTRICT KOHAT (KOHAT-BR-110)		
PACKAGE III LOT-2		
SUMMARY OF BILLS		
S NO	DESCRIPTION	TOTAL AMOUNT IN FIGURES (RS)
1	BILL NO: 1 EARTH WORK	-
2	BILL NO: 2 ROAD WORK (SUB-BASE, BASE AND SURFACE COURSE)	-
4	BILL NO: 4 RETAINING WALLS AND TOE WALLS	-
5	BILL NO: 4c CONSTRUCTION OF RCC BRIDGES	-
6	BILL NO: 6 ANCILLARY WORKS	-
TOTAL AMOUNT OF CIVIL WORK:		-
TOTAL AMOUNT OF CIVIL WORK IN MILLIONS:		-

Paul S

Deputy Director Construction-III
Provincial Road Improvement Project
G&W Dtd: 14/01/2018, Peshawar



GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
CONSTRUCTION OF RCC BRIDGE KHARMATOO ROAD BILLITANG IN DISTRICT KOHAT (KOHAT-BR-110)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specification Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL NO: 1 EARTH WORK						
101	Clearing and Grubbing.	SM	4,750.00			-
104	Compaction of Natural Ground.	SM	4,750.00			-
108a	Formation of Embankment from Road way excavation in common material	CM	800.00			-
108c	Formation of Embankment from Barrow Excavation in Common Material	CM	26,600.00			-
107a	Structural Excavation in Common Material.	CM	1,050.00			-
Total:						-


 Deputy Director Construction-III
 Provincial Road Improvement Project
 C&W Department, Peshawar



GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
CONSTRUCTION OF RCC BRIDGE KHARMATOO ROAD BILLITANG IN DISTRICT KOHAT (KOHAT-BR-110)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specification Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 2 ROAD WORK (SUB-BASE, BASE AND SURFACE COURSE)						
201	Granular Sub Base	CM	1,205.00			-
SIW-9 206b	Water Bound Macadam Base with Coarse Agg: Class B	CM	1,205.00			-
302a	Cut-Back Asphalt for Bituminous Prime Coat	SM	8,030.00			-
303a	Cut-Back Asphalt for Bituminous Tack Coat	SM	321.00			-
305b	Asphaltic Concrete for Wearing Course (Class B)	CM	418.00			-
401a1(ii)	Concrete Class A1 (ON GROUND)	CM	660.00			-
SIW-15 406a	Premoulded Joint Filler 20 mm Thick with Bitumastic joint seal	M	333.33			-
Total:						-

Paul S

Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Peshawar



GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
CONSTRUCTION OF RCC BRIDGE KHARMATOO ROAD BILLITANG IN DISTRICT KOHAT (KOHAT-BR-110)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specificatio n Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 4 (RETAINING WALLS AND TOE WALLS)						
107a	Structural Excavation in Common Material.	CM	1,610.00			-
SIW-10 107e	Common Backfill	CM	251.00			-
401b	Concrete Class B	CM	479.00			-
401a1 (ii)	Concrete Class A1 (ON GROUND)	CM	38.00			-
401f	Lean Concrete	CM	443.00			-
401h SIW-16	Plum Concrete (Class 'B' with 40% Boulders/ Rock) as per drawing & Engineer's Instructions	CM	4,785.00			-
SIW 8 (Item 511 b)	Grouted Stone Pitching (C.S. 1:6)	CM	152.38			-
Total:						-


 Deputy Director Construction-III
 Provincial Road Improvement Project
 C&W Department, Peshawar



GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
CONSTRUCTION OF RCC BRIDGE KHARMATOO ROAD BILLITANG IN DISTRICT KOHAT (KOHAT-BR-110)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specification Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures

BILL # 4a (CONSTRUCTION OF RCC BRIDGES)

SUB STRUCTURE						
407i	Pile Load Tests to 2 times the design load	Each	1.00			-
SIW 10 (Item 407)	Exploratory/Confirmatory Boring and Soil testing, including soil investigation report					-
SIW-11	Exploratory/Confirmatory Boring	M	30.00			-
SIW-12	Soil testing, / investigation report	L.Sum	1.00			-
407d	Cast-in-place, Reinforced Concrete Cylindrical Piles dia 910 to 1200 mm	M	425.00			-
107a	Structural Excavation in Common Material.	CM	223.44			-
401f	Lean Concrete	CM	36.14			-
401a3 (ii)	Concrete Class 'A 3' (ON GROUND)	CM	286.05			-
404b	Reinforcement as per AASHTO M 31 Grade 60	Ton	81.25			-
SIW-9	Providing and filling sand behind abutment of bridges	CM	312.00			-
510	Dismantling Of Structures And Obstructions	CM / Kg	1,260.00			-
406 e	Elastomeric Bearing Pads & as per approved drawing	Cu.cm	94,500.00			-
Sub Total (A):						-

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Deputy Director Construction-III
Provincial Infrastructure Development Project
R&W Department, Peshawar



GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
CONSTRUCTION OF RCC BRIDGE KHARMATOO ROAD BILLITANG IN DISTRICT KOHAT (KOHAT-BR-110)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specification Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures

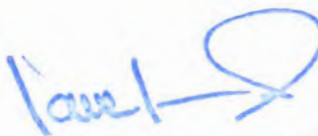
BILL # 4a (CONSTRUCTION OF RCC BRIDGES)

SUPER STRUCTURE						
SIW-15	Galvanized Iron Drain Pipe, 75 mm Diameter	Each	32.00			-
401a3 (iii)	Concrete Class 'A 3' (ELEVATED)	CM	325.24			-
404 b	Reinforcement as per AASHTO M 31 Grade 60	Ton	53.62			-
SIW 16 (Item 406 c)	Supply and place in position expansion joint assemblies as specified & as per approved drawing	M	46.50			-
SIW-17	PVC Pipe sched. 40 200 mm Dia. for Services.	M	104.00			-
Total: (B):						-
Grand Total: (A+B)						-


 Deputy Director Construction-III
 Provincial Road Improvement Project
 C&W Department, Faisalabad



GOVERNMENT OF KHYBER PAKHTUNKHWA						
KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)						
CONSTRUCTION OF RCC BRIDGE KHARMATOO ROAD BILLITANG IN DISTRICT KOHAT (KOHAT-BR-110)						
PACKAGE III LOT-2						
BILLS OF QUANTITIES						
NHA Specification n Item No.	DESCRIPTION	Unit	BOQ			
			QTY	Unit Rate (Rs) in Figures	Unit Rate (Rs) in Words	Unit Rate (Rs) in Figures
BILL # 6 (ANCILLARY WORKS)						
610 c	Kilometer Post	EACH	2.00			-
607 a	Traffic Road Signs Category 1 Size 75 CM	EACH	2.00			-
607 b	Traffic Road Signs Category 2 Size dia 75 CM	EACH	1.00			-
607c	Traffic Road Signs Category 3 (a)	EACH	1.00			-
607 d	Traffic Road Signs Category 3 (b)	EACH	2.00			-
608 h	Pavement Marking in reflective TP paint for line of 15 cm width.	M	285.71			-
609 a	Reflectorised Pavement Stud (Flush Surface Type Single)	EACH	200.00			-
604 a	Metal Guard Rail	M	210.00			-
604 b	Guard Rail End pieces	EACH	8.00			-
604 d	Steel Post for Guard Rail	EACH	70.00			-
Total:						-


 Deputy Director Construction-III
 Provincial Road Development Project
 C&W Department, Peshawar



PROJECT:

**KHYBER PAKHTUNKHWA
RURAL ROAD DEVELOPMENT PROJECT
(KP-RRDP)**

TENDER DRAWINGS

**N-KOHAT-2
KHUSHAL GARH ROAD TO KAMAR DHOKE**

SEPTEMBER, 2024

Lawal S

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



**GOVERNMENT OF KHYBER
PAKHTUNKHWA**

**COMMUNICATION & WORKS
DEPARTMENT**

PROJECT IMPLEMENTATION UNIT(PIU)

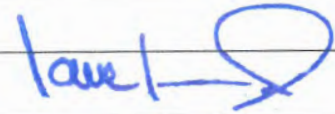


MINCONSULT SDN BHD
(Company No : 58835-P)



CREATIVE ENGINEERING CONSULTANTS
CREATIVE HOUSE, PHASE 3 CHOWK MAIN JAMRUD ROAD,
PESHAWAR.

SR.NO	TITLE	DWG NO.	SR.NO	TITLE	DWG NO.
1	TITLE PAGE				
2	LIST OF DRAWINGS	CEC/HW/KP-RRDP/N-KOHAT-2/LD-01			
3	PROJECT LOCATION MAP				
4	GENERAL & TYPICAL DRAWINGS				
5	SYMBOLS & ABBREVIATIONS	CEC/HW/KP-RRDP/N-KOHAT-2/SA-03(a&b)			
6	GENERAL NOTES FOR ROAD CONSTRUCTION	CEC/HW/KP-RRDP/N-KOHAT-2/GN-04			
7	TYPICAL MINOR ROAD JUNCTION	CEC/HW/KP-RRDP/N-KOHAT-2/MJD-05(a-b)			
8	TYPICAL SUPER ELEVATION DETAILS	CEC/HW/KP-RRDP/N-KOHAT-2/SE-06			
9	TRAFFIC SIGNS DETAILS	CEC/HW/KP-RRDP/N-KOHAT-2/TSD-07(a-g)			
10	PAVEMENT MARKING DETAILS	CEC/HW/KP-RRDP/N-KOHAT-2/PM-08			
11	KILOMETER POST DETAILS	CEC/HW/KP-RRDP/N-KOHAT-2/KM-09			
12	GUARD RAIL DETAILS	CEC/HW/KP-RRDP/N-KOHAT-2/GR-10			
13	TYPICAL CROSS SECTIONS				
14					
15	TYPICAL CROSS SECTIONS	CEC/HW/KP-RRDP/N-KOHAT-2/TCS-01			
16	CENTER LINE DATA				
17	CENTER LINE DATA	CEC/HW/KP-RRDP/N-KOHAT-2/CL-01-03			
18	HORIZONTAL CURVE DATA				
19	HORIZONTAL CURVE DATA	CEC/HW/KP-RRDP/N-KOHAT-2/HCD-01-04			
20	LIST OF BENCH MARKS	CEC/HW/KP-RRDP/N-KOHAT-2/BM-01			
	PLAN & PROFILE DRAWINGS				
21	PLAN & PROFILE DRAWINGS	CEC/HW/KP-RRDP/N-KOHAT-2/P&P-01-26			


 Deputy Director Construction
 Provincial Road Development Project
 C&W Department, Peshawar



CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	AAMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	KHUSHAL GARH ROAD TO KAMAR DHOK	N-KOHAT-2	N.T.S	LIST OF DRAWINGS		
		a			DRAWN	IMRAN TARIQ							
		b			CHECKED	SHAHZAD DURRANI							
		c			APPROVED	AQEEL YOUNIS			ACCESS ROAD	SEP, 2024.		DWG NO: CEC/KP-RRDP/HWN-KOHAT-2/ LD - 01	

DESIGN CENTERLINE

PROPOSED RIGHT OF WAY

TOE OF PROPOSED EMBANKMENT

EXISTING ROAD EDGE

GARDEN / TREES

BUSHES

MOSQUE

BUILT-UP AREA (BUILDING/HOUSE)

HUT / MUD HOUSE (KACHA)

GRAVES / GRAVE YARD

LIMIT OF AGRICULTURAL FIELDS

H.T / L.T POWER TRANSMISSION LINE

500 KV TRANSMISSION LINE

TELEPHONE / TELEGRAPH LINE

EXISTING KATCHA TRACK

DYKE

NORTH

TRAVERSE POINT

BENCH MARK

TUBE WELL / WELL

EXISTING EMBANKMENT SLOPE

POINT OF INTERSECTION

CAUSEWAY (IN PLAN)

PARAPET WALL

RETAINING WALL

DEPRESSION / DITCH / POND

RIVER / NULLAH

STONE MASONRY SIDE WALL

EXISTING/PROPOSED BOX
CULVERT (IN PLAN)

PIPE CULVERT (IN PLAN)

EXISTING/PROPOSED BRIDGE
(IN PLAN)

BRICK WALL / BOUNDARY WALL

BOX CULVERT (IN PROFILE)

PIPE CULVERT (IN PROFILE)

EXISTING GROUND LEVEL (N.S.L)
AT DESIGN CENTRELINE

FORMATION ROAD LEVEL(F.R.L)

SUB GRADE LINE (S.G.L)
AT DESIGN CENTRELINE

BRIDGE (IN PROFILE)

EXISTING CULVERT SIZE

EXISTING CULVERT EXTENSION
TO LEFT (L) RIGHT (R)

WATER COURSE (EXISTING)
(LINED)

WATER COURSE (UNLINED)

RELOCATED WATER COURSE

GRID CORNER

GROUTED RIPRAP

LOOSE RIPRAP

RAILWAY LINE

ROAD SIGN (IN PLAN)

CAUSEWAY (IN PROFILE)

P. WALL

R. WALL

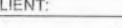
S. WALL

EXIS.

EXT. ()

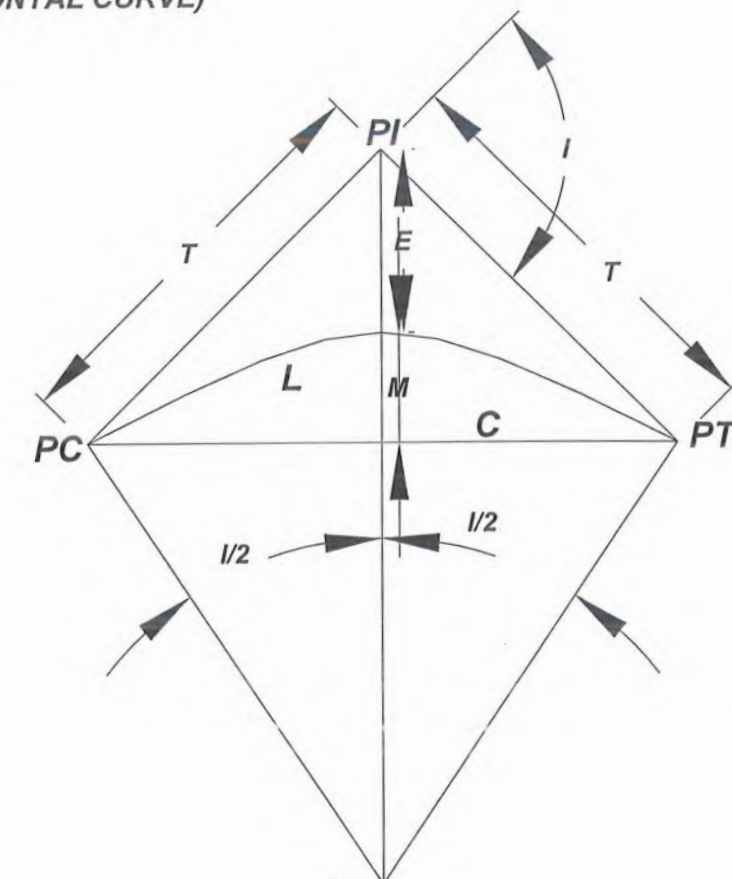
No.

ROAD SIGN NUMBER

CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. 	CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	AAMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	N.T.S	SYMBOLS & ABBREVIATOIN
					a			DRAWN	IMRAN TARIQ			DATE:	
					b			CHECKED	SHAHZAD DURRANI		SEP, 2024.		
					c			APPROVED	AQEEL YOUNIS				
DWG NO: CEC/KP-RRDP/HWN-KOHAT-2/ SA - 03a													

A	AREA
B	BREADTH
BC	REINFORCED CONCRETE BOX CULVERT
B.M	BENCH MARK
BOP	BEGINNING OF PROJECT
C	CHORD LENGTH
C.B.R	CALIFORNIA BEARING RATIO
C/C	CENTER TO CENTER
CHD	CHECKED
C/L	CENTER LINE
CM	CENTIMETER
CONC	CONCRETE
CONST/JT	CONSTRUCTION JOINT
CUL	CULVERT
Cu.m	CUBIC METER
CURVE LEN	VERTICAL CURVE LENGTH
D	DEPTH
Da	DEGREE OF CURVE (BY ARC)
Dc	DEGREE OF CURVE (BY CHORD)
DEG	DEGREE
DIA	DIAMETER
DIM	DIMENSION
D/S	DOWNSTREAM
D.S.T	DOUBLE SURFACE TREATMENT
DRG	DRAWING
E	EASTING , EAST
E	EXTERNAL DISTANCE (SHIFT)
ELEV./EL	ELEVATION
EOP	END OF PROJECT
EXIS	EXISTING
EXT/JT	EXPANSION JOINT
F.R.L	FORMATION ROAD LEVEL
G.I	GALVANIZED IRON
H	HORIZONTAL
H.T/L.T	HIGH TENSION/LOW TENSION
HF	HEIGHT OF FILL
HWY	HIGHWAY
I	DEFLECTION ANGLE (HORIZONTAL CURVE)
Ic	CIRCULAR DEFLECTION ANGLE
I.L	INVERT LEVEL
K	K-FACTOR (VERTICAL CURVE)
Kg	KILOGRAM
KM/km	KILOMETER
L	LENGTH OF HORIZONTAL CURVE
LIN.M	LINEAR METER
LHS	LEFT HAND SIDE
LT	LEFT
M/m	METER
M	MIDDLE ORDINATE
MAX	MAXIMUM
M.H	MAN HOLE
MIN	MINIMUM
MM	MILLIMETER

MSE	CROSS SLOPE AT MAXIMUM SUPERELEVATION
N	NORTHING, NORTH
No	NUMBER
N.T.S	NOT TO SCALE
NSL	NATURAL SURFACE LEVEL
PROP:	PROPOSED
PC	POINT OF HORIZONTAL CURVATURE (START OF HORIZONTAL CURVE)
PC	REINFORCED CONCRETE PIPE CULVERT
PGL	PROFILE GRADE LINE
PI	POINT OF HORIZONTAL INTERSECTION
PR	POINT OF ROTATION
PT	POINT OF HORIZONTAL TANGENCY (END OF HORIZONTAL CURVE)
P.C.C	PLAN CEMENT CONCRERE
R	RADIUS OF HORIZONTAL CURVE
R.C.C	REINFORCED CONCRETE
REINF	REINFORCEMENT
REV	REVISION
RHS	RIGHT HAND SIDE
R.O.W	RIGHT OF WAY
R.R	RIP RAP
RT	RIGHT
R/W	RETAINING WALL
RWC ()	RELOCATION WATER COURSE (TYPE)
S.G.L	SUB GRADE LEVEL
S	SLOPE GRADIENT (PERCENT)
SE	SUPERELEVATION
S.B.P	SHOULDER BREAK POINT
SC	SLAB CULVERT
SHLD	SHOULDER
Sq.m	SQUARE METER
STA./STA	STATION
STRUCT	STRUCTURE
S'WALL	SIDE WALL
T	TANGENT LENTH OF HORIZONTAL CURVE
T.D	TOE DITCH
T.S.T	TRIPPLE SURFASE TREATMENT
TAN	TANGENT
TH	THICKNESS
TR	TRANSITION
TR	(TANGENT RUN OUT) = DISTANCE FROM BS TO THE PC
TYP	TYPICAL
U/S	UPSTREAM
V	VERTICAL
VAR	VARIABLE
VER	VERIFIED
VPC	VERTICAL POINT OF CURVATURE (START OF VERTICAL CURVE)
VPI	VERTICAL POINT INTERSECTION OF PROFILE GRADE.
VPT	VERTICAL POINT OF TANGENCY (END OF VERTICAL CURVE)
W	WEST,WIDTH OF ROADWAY
W.B.M	WATER BOUND MACADAM
WC	WATER COURSE
Ø	SKEW ANGLE



Handwritten signature

Deputy Director Construction-III
Government Project
C&W Department, Peshawar



CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	AAMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	SYMBOLS & ABBREVIATOIN
		a			DRAWN	IMRAN TARIQ			
		b			CHECKED	SHAHZAD DURRANI			
		c			APPROVED	AQEEL YOUNIS			
							ACCESS ROAD	SEP, 2024.	DWG NO: CEC/KP-RRDP/HWN-KOHAT 2/ SA - 03b

GENERAL NOTES FOR ROAD CONSTRUCTION

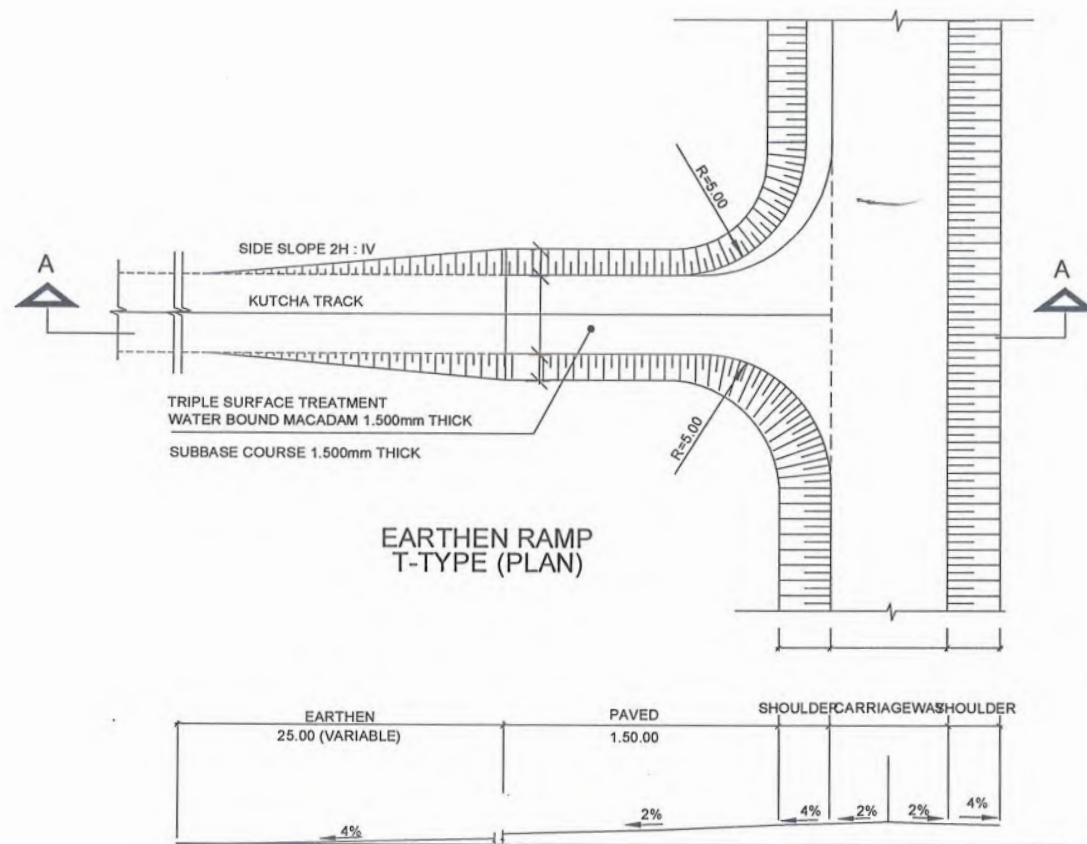
1. GRID COORDINATES & ELEVATIONS FOR THE PROJECT ARE BASED ON UNIVERSAL TRANSVERSE MERCATOR (UTM WGS84).
2. EACH DRAWING SHALL BE READ IN CONJUNCTION WITH OTHER DRAWINGS.
3. NOTES GIVEN ON DRAWINGS ADJACENT TO A SECTION OR DETAIL PERTAIN TO THAT PARTICULAR DETAIL ONLY.
4. THE CONTRACTOR SHALL ENDEAVOR MAXIMUM TO MAINTAIN UNINTERRUPTED FLOW OF TRAFFIC AT ITS ADJOINING CROSS ROADS AND SUBMIT A COMPREHENSIVE DIVERSION PLAN TO ENGINEER FOR APPROVAL.
5. ANY DAMAGE CAUSED TO THE UTILITIES DURING EXCAVATION/EXECUTION OF WORK SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXTRA COST TO THE EMPLOYER IN CONSULTATION WITH THE CONCERNED UTILITY PROVIDER.
6. CONTRACTOR SHALL PREPARE AND SUBMIT, FOR ENGINEER'S REPRESENTATIVE APPROVAL, CROSS-SECTION @25m INTERVAL DULY DESIGN TEMPLATES, SHOP DRAWINGS FOR STRUCTURES, PAVEMENT MARKINGS (LOCATION, TYPE AND SIZE), ROAD SIGNS ETC. ON THE PLAN SHEETS FOR THE APPROVAL OF ENGINEER/ENGINEER'S REPRESENTATIVE BEFORE EXECUTION OF RELATED WORKS WITHOUT ANY EXTRA COST TO THE EMPLOYER.
7. SERVICE DUCTS SHALL BE PROVIDED AT JUNCTION LOCATIONS OR AT AN INTERVAL AS DIRECTED BY THE ENGINEER.
8. STRUCTURES SHOWN ON PLAN ARE SYMBOLIC. THE LENGTHS, SIZES, SLOPE, INVERT LEVELS, SKEW ANGLE AND OTHERS DETAILS OF THE PROPOSED STRUCTURES AS SHOWN ON DRAWINGS ARE TENTATIVE. THE CONTRACTOR SHALL PREPARE SHOP DRAWINGS OF EACH STRUCTURE LOCATIONS WITH THE REQUIRED SKEW ANGLE AND OTHER DETAILS AS PER SITE REQUIREMENTS AND SHALL SUBMIT THEM TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION EXECUTION.
9. THE CONTRACTOR SHALL BE RESPONSIBLE TO CATER FOR ALL TEMPORARY TRAFFIC DIVERSION DURING CONSTRUCTION TO THE SATISFACTION OF THE ENGINEER INCLUDING DETOUR ROAD AND ITS MAINTENANCE, SPRINKLING OF WATER, GRADING AND COMPACTION WHEN AND WHERE REQUIRED WITHOUT ANY EXTRA COST TO EMPLOYER.
10. ROADWAY EXCAVATION MATERIAL SHALL BE UTILIZED IN THE MOST EFFECTIVE MANNER IN THE EMBANKMENT EVEN WITH BLENDING/ MIXING THE SUPERIOR MATERIALS (WHERE REQUIRED WITHOUT AT ANY EXTRA COST).ROADWAY SUITABLE EXCAVATION SHALL NOT BE DISPOSED OFF OUTSIDE RIGHT OF WAY WITHOUT WRITTEN APPROVAL OF THE ENGINEER BY EMPLOYER.

Lawal S
Deputy Director Construction-III
Provincial Road Development Project
C&W Department, Peshawar

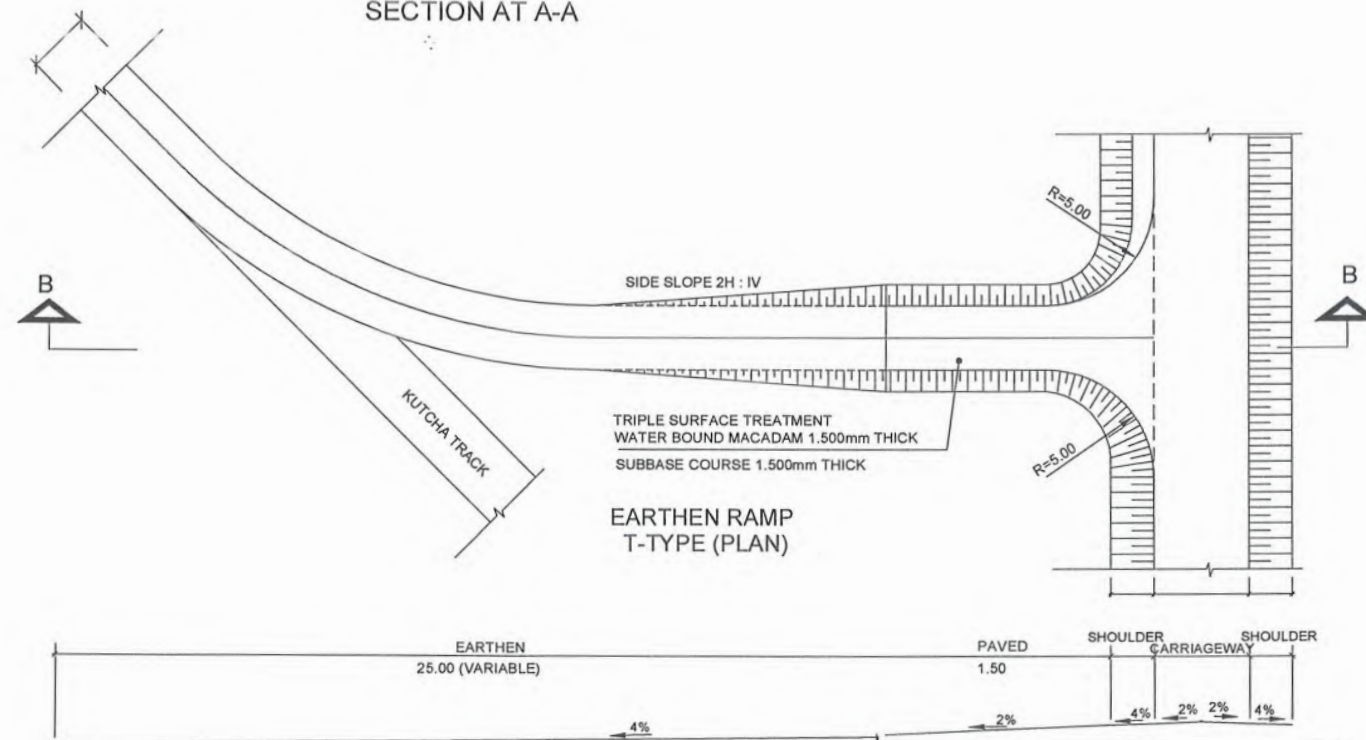


CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
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		a			DRAWN	IMRAN TARIQ			
		b			CHECKED	SHAHZAD DURRANI	ACCESS ROAD	DATE:	
		c			APPROVED	AQEEL YOUNIS		SEP, 2024.	

MINOR JUNCTION DETAIL



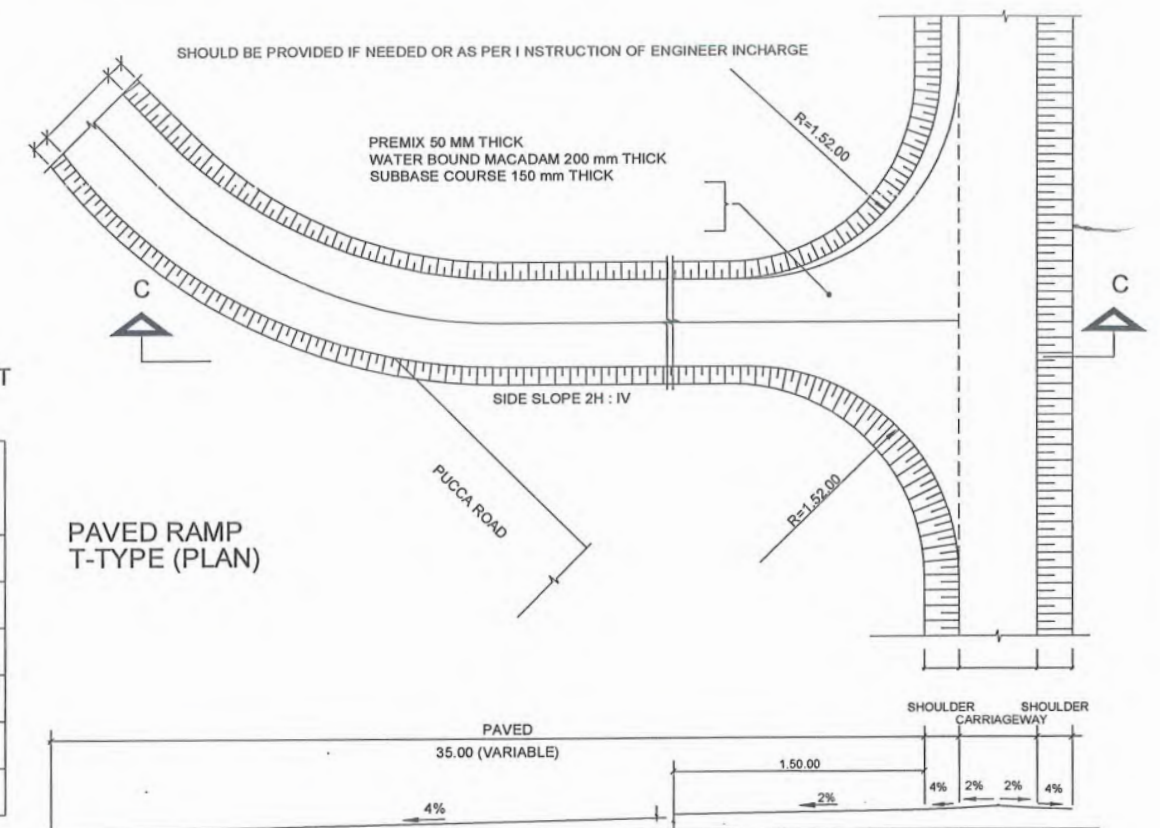
SECTION AT A-A



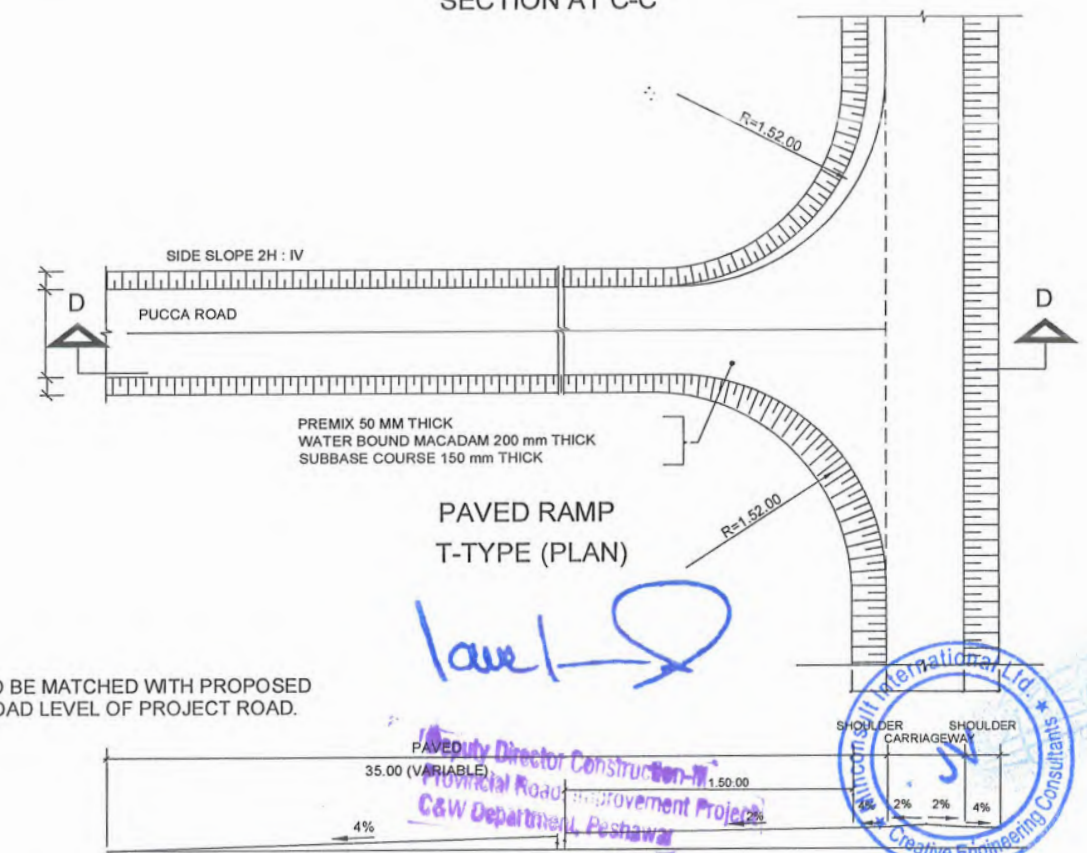
SECTION AT B-B

RECOMMENDED CURVE RADII FOR DIFFERENT ANGLES OF TURN

ANGLE OF TURN (DEGREES)	SIMPLE CURVE RADIUS (R) (METRES)
30	30
45	23
60	1.58
75	1.56
90	1.52 TO 1.55
>90	VARIABLE

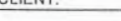


SECTION AT C-C

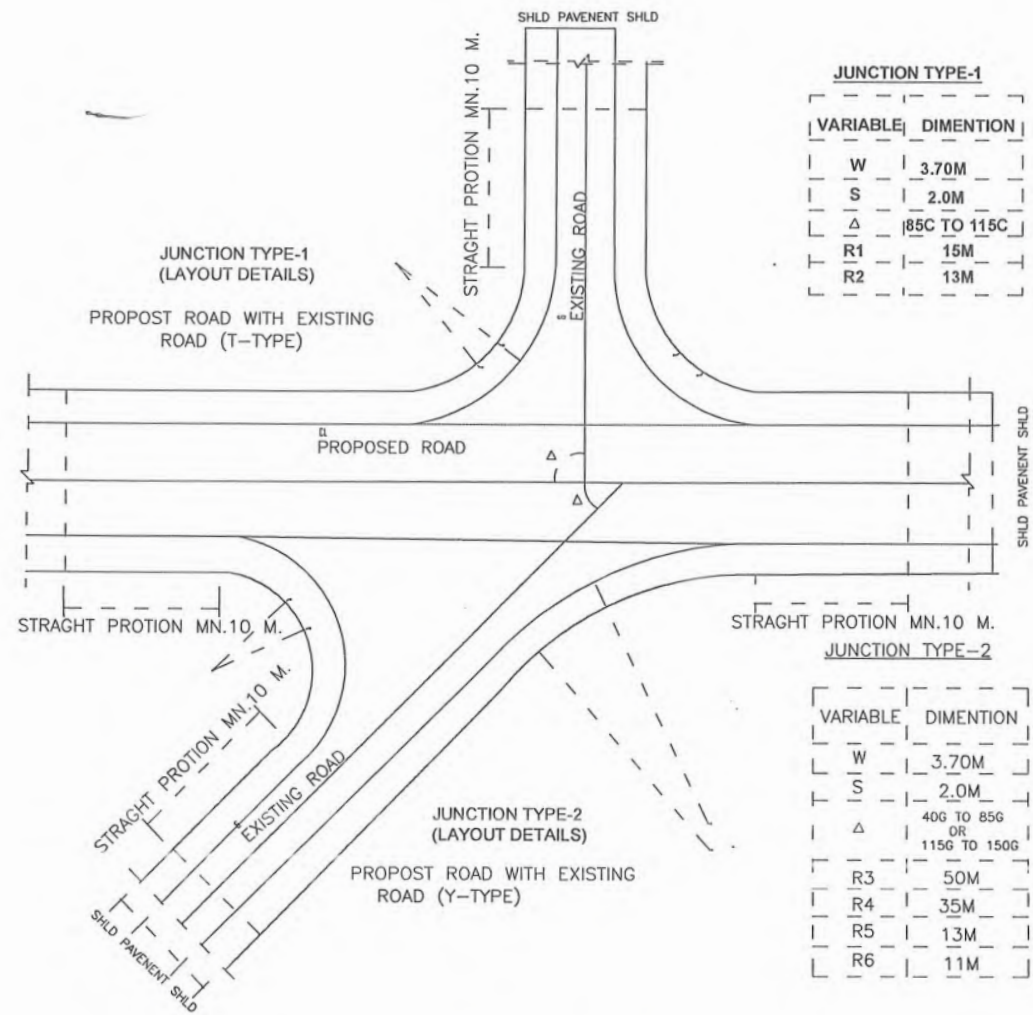


SECTION AT D-D

NOTE:
1.5- RAMPS ARE TO BE MATCHED WITH PROPOSED
FINISHED ROAD LEVEL OF PROJECT ROAD.

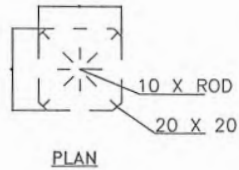
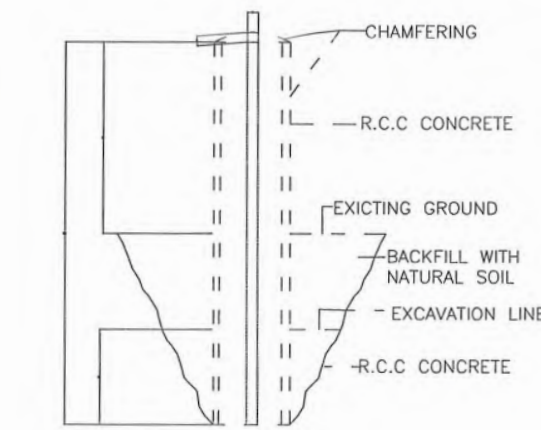
CLIENT:	DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 56835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	AAMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2	KHUSHAL GARH ROAD TO KAMAR DHOK	N.T.S	MINOR JUNCTION DETAILS
		a			DRAWN	IMRAN TARIQ					
		b			CHECKED	SHAHZAD DURRANI					
		c			APPROVED	AQEEL YOUNIS					
									ACCESS ROAD	SEP, 2024.	DWG NO: CEC/KP-RRDP/HWN-KOHAT-2/ MJD - 05a

MINOR JUNCTION DETAIL



VARIABLE	DIMENTION
W	3.70M
S	2.0M
Δ	85C TO 115C
R1	15M
R2	13M

VARIABLE	DIMENTION
W	3.70M
S	2.0M
Δ	40G TO 85G OR 115G TO 150G
R3	50M
R4	35M
R5	13M
R6	11M



ELEVATION
(RIGHT OF WAY MARKER)

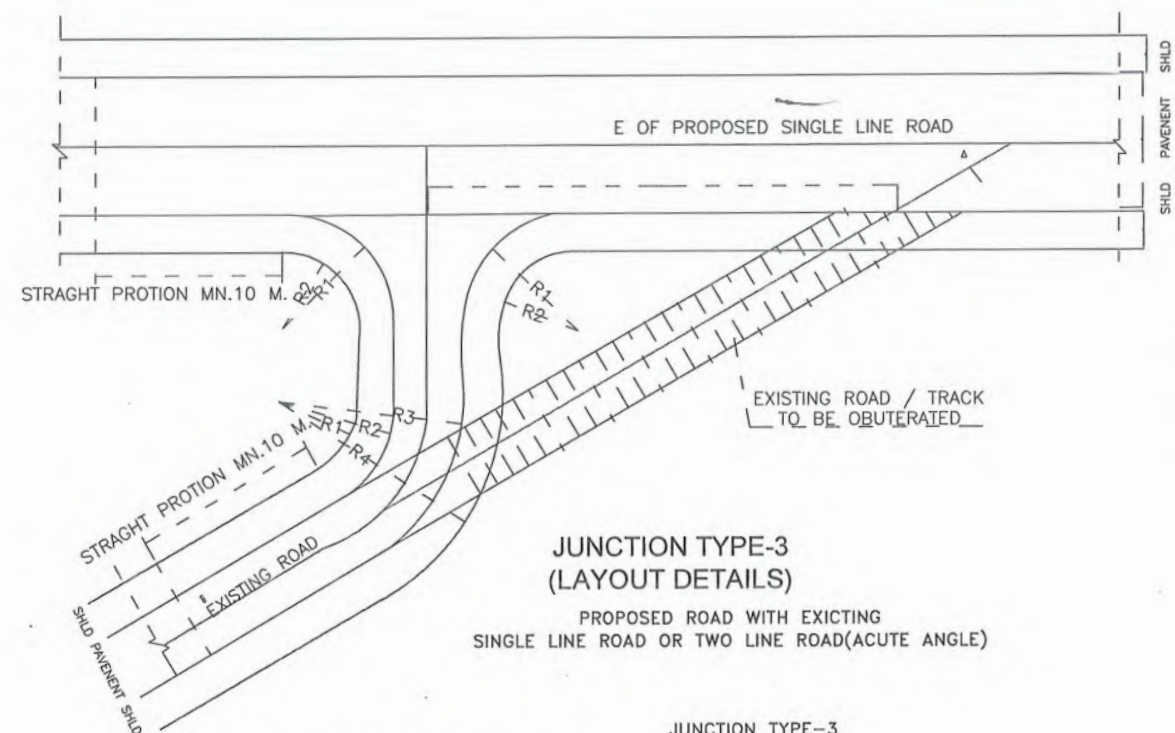
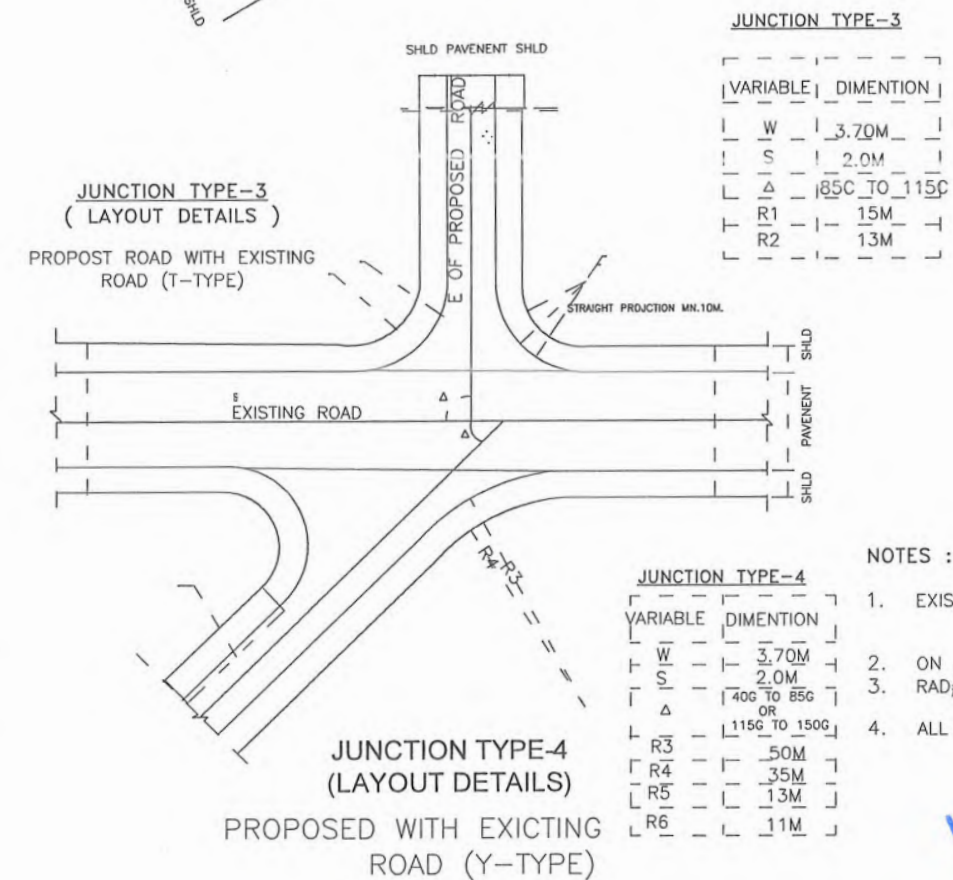


TABLE NO.5 APPLICABLE WHEN
1 <50G OR >150G
(JUNCTION WITH 2 LINE ROAD)
(2) 40G OR 150G
(JUNCTION WITH SINGLE ROAD)

VARIABLE	DIMENTION FOR JUSTIFICATION SINGLE LINE ROAD
W	3.70M
S	2.0M
R1	15M
R2	13M
R3	25M
R4	27M



VARIABLE	DIMENTION
W	3.70M
S	2.0M
Δ	85C TO 115C
R1	15M
R2	13M

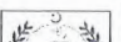
VARIABLE	DIMENTION
W	3.70M
S	2.0M
Δ	40G TO 85G OR 115G TO 150G
R3	50M
R4	35M
R5	13M
R6	11M

NOTES :

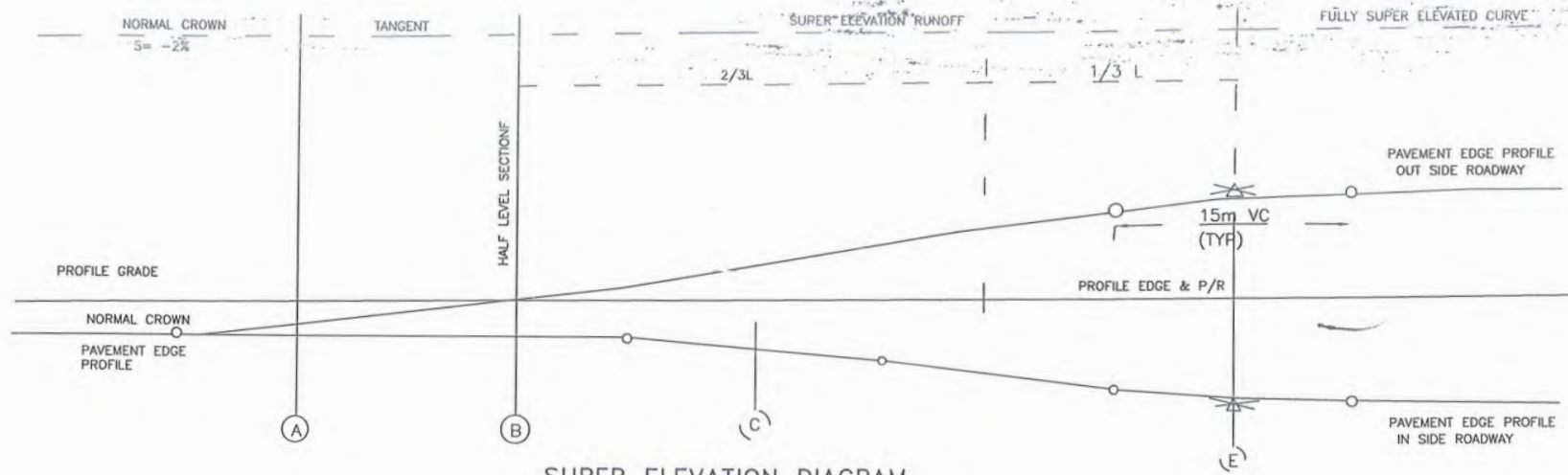
- EXISTING ROAD TO BE DISMANTLED WHERE IT MEETS PROPOSED ROAD AT THE JUNCTION LOCATION ONLY AND WILL BE RECONSTRUCTED ACCORDING TO JUNCTION DETAIL AND LIMITS.
- ON JUNCTION MIN. 10 METER STRAIGHT PORTION SHOULD BE PROVIDED.
- RAD# SHOWN ARE TYPICAL AND MAY BE ADJUSTED AS PER SITE CONDITIONS AS APPROVED BY THE ENGINEER.
- ALL DIMENSIONS ARE IN MILLI-METER UNLESS OTHERWISE SPECIFIED.

Signature
Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

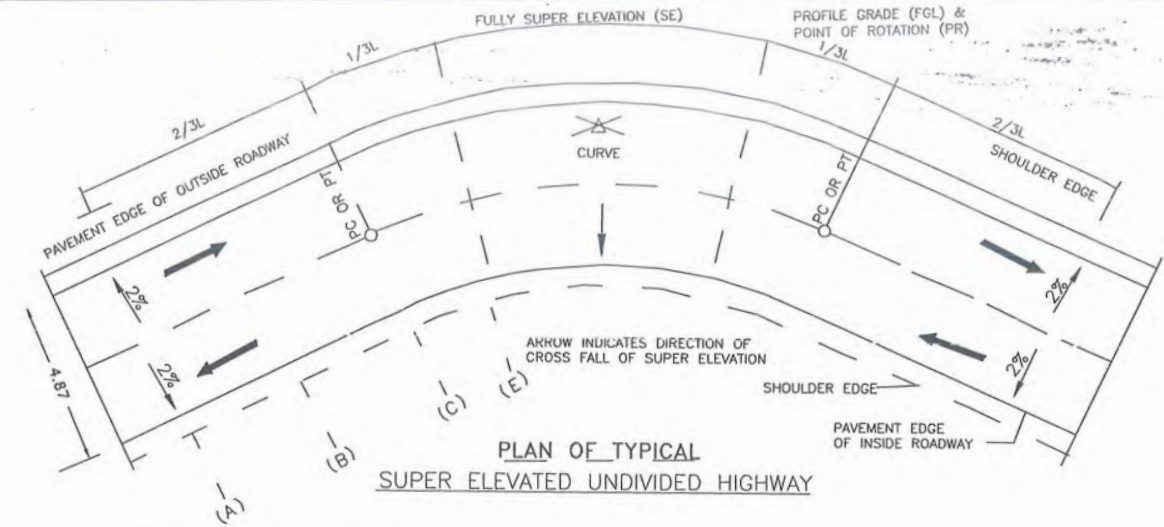


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	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWNGS	G.DESIGNED	AAMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	N.T.S	MINOR JUNCTION DETAILS
				a			DRAWN	IMRAN TARIQ			DATE:	
				b			CHECKED	SHAHZAD DURRANI		ACCESS ROAD	SEP, 2024.	
				c			APPROVED	AQEEL YOUNIS				

DWG NO: CEC/KP-RRDP/HWIN-KOHAT-2/ MJD - 05b



SUPER ELEVATION DIAGRAM
ON SIMPLE RIGHT AND CURVES



PLAN OF TYPICAL
SUPER ELEVATED UNDIVIDED HIGHWAY

COMPUTATION OF SUPER ELEVATION

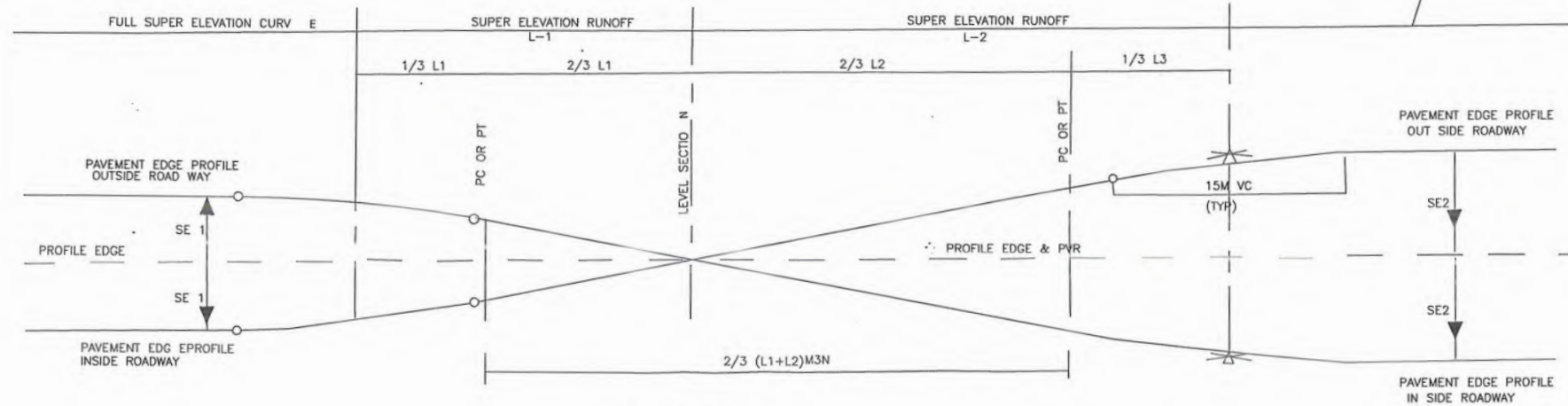
RADIUS	40 KPH		60 KPH	
	SE (m/m)	L (m/m)	SE (m/m)	L (m/m)
950				
900				
850	NC			
800	NC			
750	RC			
700	RC			
650	RC			
600	RC			
550	0.020	10	NC	
500	0.021	10	NC	
450	0.022	11	RC	
400	0.023	12	RC	
350	0.027	15	RC	
300	0.030	15	0.020	10
250	0.033	17	0.023	12
200	0.036	19	0.027	13
150	0.047	25	0.037	18
100	0.050	26	0.039	19
80	0.052	27	0.040	19
70	0.054	28	0.042	20
60	0.056	29	0.044	21
50	0.057	30	0.048	23
40	0.060	31	0.052	25
30			0.057	28
21			0.060	29

ROADWAY WIDENING

RADIUS (M)	SE (m/m)	L(M)	W(M)
15.00	0.06	32.00	1.20
20.00	0.060	32.00	1.20
25.00	0.060	32.00	1.20
10.00	0.060	32.00	1.20
35.00	0.060	32.00	1.20
40.00	0.060	32.00	1.20
45.00	0.060	32.00	1.20
15.00	0.060	32.00	1.20
55.00	0.060	32.00	1.20
60.00	0.060	32.00	1.20
70.00	0.060	32.00	1.20

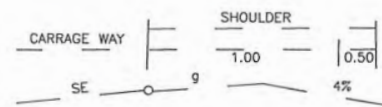
RADIUS (M)	SE (m/m)	L(M)	W(M)
80.00	0.060	32.00	1.00
90.00	0.060	32.00	0.80
100.00	0.060	32.00	0.80
120.00	0.060	32.00	0.60
150.00	0.060	32.00	0.60
200.00	0.058	30.00	-
300.00	0.050	25.00	-
400.00	0.043	22.00	-
500.00	-	-	-
600.00	-	-	-
700.00	-	-	-

FULLY SUPER ELEVATION CURVE



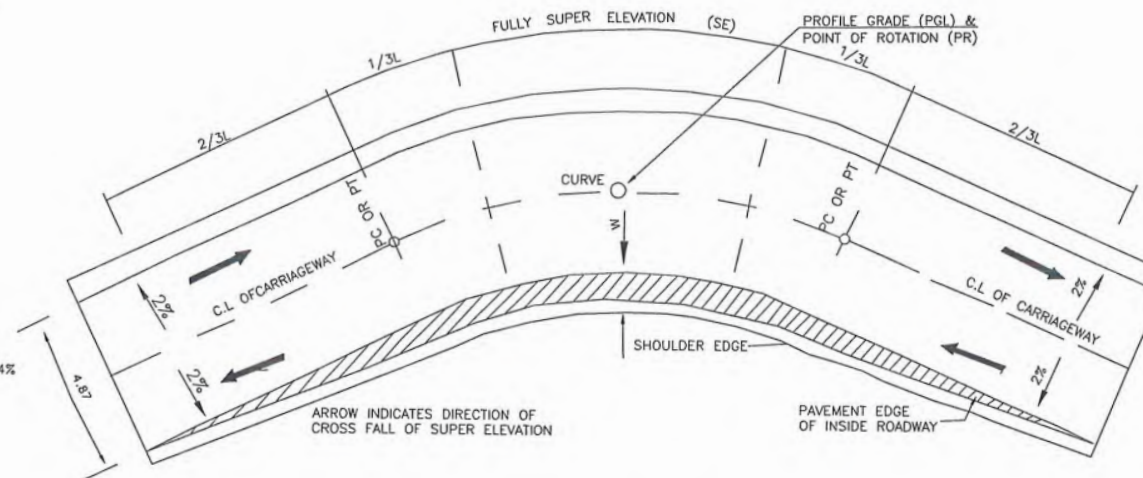
SUPER ELEVATION DIAGRAM
ON REVERSE CURVES

SHOULDER	4.87	CARRIAGEWAY	SHOULDER
2.00	2.435	2.435	2.00
-4%	-2%	-2%	-4%
-4%	0%	-2%	-4%
-3%	+2%	+2%	-4%
-2%	+2%	+2%	-4%
-1%	+3%	-3%	-4%
+0%	+4%	+4%	-4%
+1%	+5%	-5%	-3%
+2%	+6%	-6%	-4%



CROWNING AND ROUNDING
OF OUTER SHOULDER WHERE > 4%

- 1 ROLL OVER ALGEBRAIC DIFFERENCE SE AND NORMAL SHOULDER SLOPE i.e 4% AT PAVEMENTEDGE NOT TO BE EXCEED 6%
- 2 WHERE THE DIFFERENCE EXCEED 6% THE ABOVE CROWNING OF SHOULDERS SHOULD BE USED WITH $g = (6 - SE)\%$

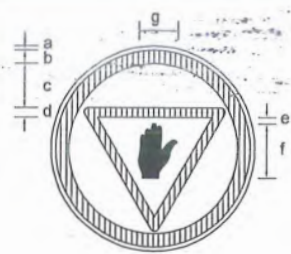


ROAD WIDENING AND
SUPER ELEVATED UNDIVIDED HIGHWAY

Level 9
Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

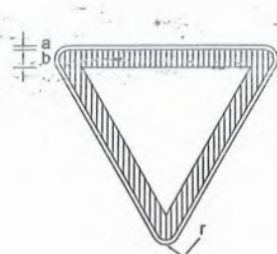


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GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED: AAMIR KHAN DRAWN: IMRAN TARIQ CHECKED: SHAHZAD DURRANI APPROVED: AQEEL YOUNIS	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK ACCESS ROAD	N.T.S SEP, 2024.	SUPER ELEVATION DETAILS DWG NO: CEC/KP-RRDP/HWN-KOHAT-2/ SE - 06



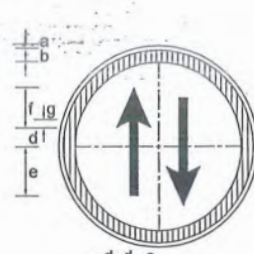
STOP SIGN
R-1
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	16.0	18.70
d	5.5	6.4
e	3.5	4.1
f	30.0	35.0
g	18.5	21.60



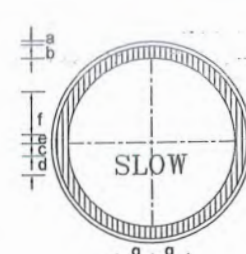
GIVE WAY SIGN
R-2
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
r	3.5	4.1



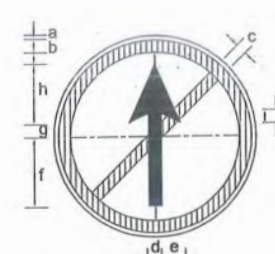
PRIORITY ROAD
SIGN R-3
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	10.5	12.20
d	7.0	8.2
e	26.0	30.3
f	19.0	22.2
g	2.0	2.3



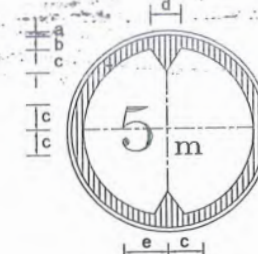
SLOW SIGN
R-4
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	14.5	16.9
e	2.0	2.3
f	24.5	28.6
g	27.6	31.5



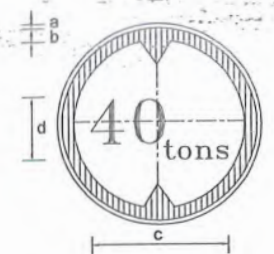
NO ENTRY SIGN
R-6
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	8.0	9.3
e	9.0	10.5
f	30.5	35.6
g	7.0	8.2
h	23.5	27.4
i	4.5	5.2



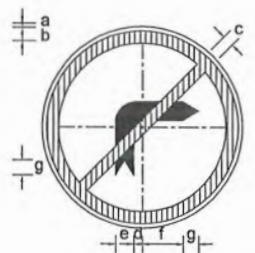
HEIGHT LIMIT SIGN
R-16
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	16.5	19.2
d	26.0	30.3
e	20.0	23.3



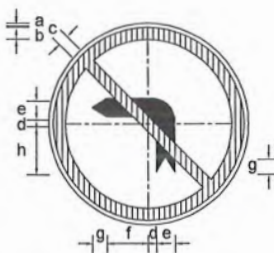
GROSS WEIGHT LIMIT SIGN
R-18
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	49.0	57.2
d	40.0	46.7



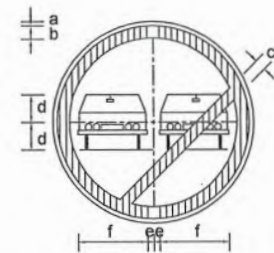
NO RIGHT TURN SIGN
R-20
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	6.0	7.0
e	10.0	11.6
f	25.0	29.2
g	5.0	5.8
h	30.0	35.0



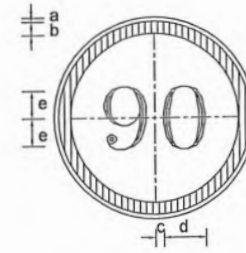
NO LEFT TURN SIGN
R-21
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	6.0	7.0
e	10.0	11.6
f	25.0	29.2
g	5.0	5.8
h	30.0	35.0



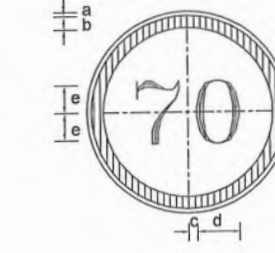
OVERTAKING PROHIBITED SIGN
R-23
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	12.0	14.0
e	3.0	3.5
f	29.5	34.4



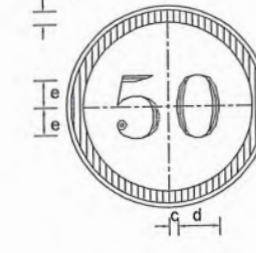
SPEED LIMIT SIGN
R-25-1
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	23.0	26.8
e	20.0	23.3



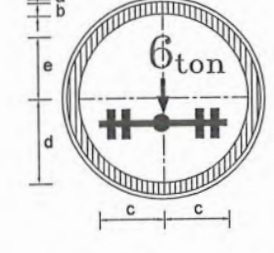
SPEED LIMIT SIGN
R-25-2
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	23.0	26.8
e	20.0	23.3



SPEED LIMIT SIGN
R-25-3
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	23.0	26.8
e	20.0	23.3



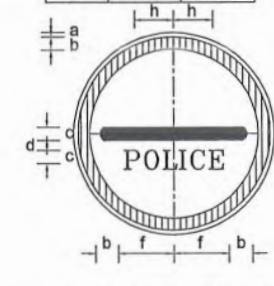
AXLE WEIGHT LIMIT SIGN
R-19
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	28.0	32.7
d	23.0	26.8
e	32.0	37.3



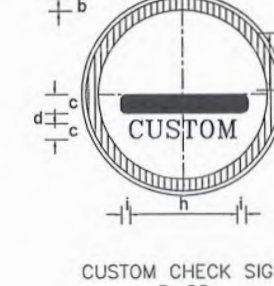
SPEED LIMIT SIGN
R-25-4
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	23.0	26.8
e	20.0	23.3



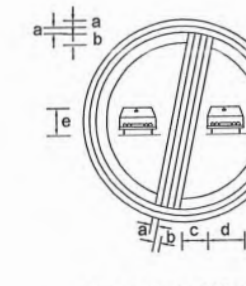
POLICE CHECK POST SIGN
R-27
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	7.5	8.8
d	3.0	3.5
e	10.0	11.7
f	27.5	32.1
g	29.0	33.8
h	28.0	32.7



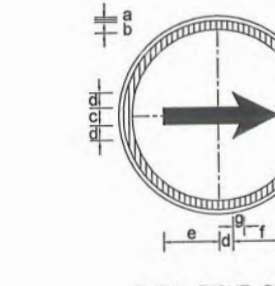
CUSTOM CHECK SIGN
R-28
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	8.0	9.3
d	4.0	4.7
e	11.0	12.8
f	31.0	36.2
g	41.0	47.8
h	52.0	60.7
i	7.5	8.7



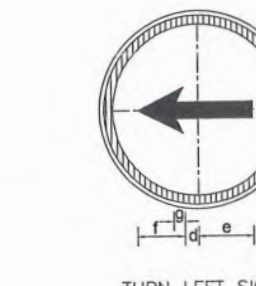
END OF OVERTAKING
RESTRICTION SIGN
R-31
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	1.7	7.6
c	10.0	11.7
d	25.0	29.2
e	21.0	24.5



TURN RIGHT SIGN
R-34
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	4.0	4.7
c	8.0	9.3
d	9.0	10.5
e	32.0	37.3
f	23.0	26.8
g	4.5	5.2

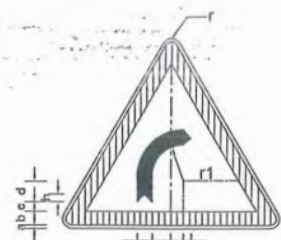


TURN LEFT SIGN
R-35
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	4.0	4.7
c	8.0	9.3
d	9.0	10.5
e	32.0	37.3
f	23.0	26.8
g	4.5	5.2

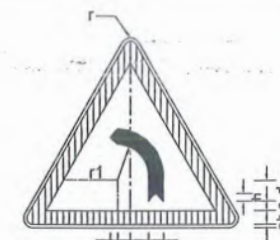
- NOTES :
- 1 - For Sign Locations Refer To Plan Sheets.
 - 2 - Final Location To Be Decide By The Engineer. As Per Site.
 - 3 - Some Of The Sign Faces As Shown Are Reversible And The Actual Face Detail Shall Be Identified Prior To Placing Any
 - 4 - All Signs To Have High Intensity Reflective Sheatings In Accordance With The Relevant Clause In The Specification.
 - 5 - Sign Legends Shall Be Approved By Engineer And Client.

CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION		NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	AAMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK ACCESS ROAD	N.T.S DATE: SEP, 2024.	TRAFFIC SIGNS DETAILS		
							DRAWN	IMRAN TARIQ						
							CHECKED	SHAHZAD DURRANI						
							APPROVED	AQEEL YOUNIS						
DWG NO: CEC/KP-RRDP/HWN-KOHAT-2/ TSD - 07a														



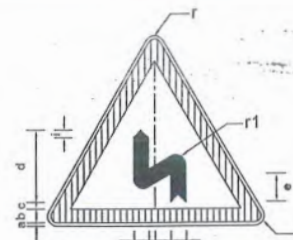
CURVE TOWARDS RIGHT
W-1

DIMENSIONS (cm)		
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	11.5	13.4
e	8.5	9.9
f	7.0	8.2
g	6.0	7.0
h	3.5	4.1
r1	12.5	14.6



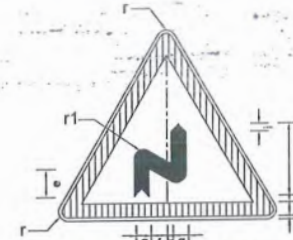
CURVE TOWARDS LEFT
W-2

DIMENSIONS (cm)		
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	11.5	13.4
e	8.5	9.9
f	7.0	8.2
g	6.0	7.0
h	3.5	4.1
r1	12.5	14.6



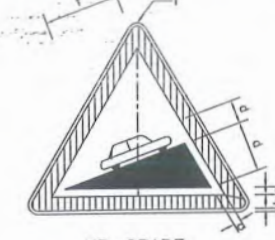
LEFT REVERSE CURVE
W-3

DIMENSIONS (cm)		
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	33.0	38.5
e	14.0	16.3
f	8.0	9.3
g	7.0	8.2
h	2.0	2.3
i	3.5	4.1
r1	4.5	5.2



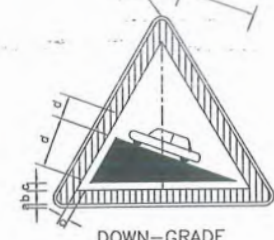
RIGHT REVERSE CURVE
W-4

SIGN SIZE		
PARTS	90cm	105cm
	3.5	4.1
	1.0	1.2
	6.5	7.6
	3.0	3.5
	33.0	38.5
	14.0	16.3
	8.0	9.3
	7.0	8.2
	2.0	2.3
	3.5	4.1
R1	4.5	5.2



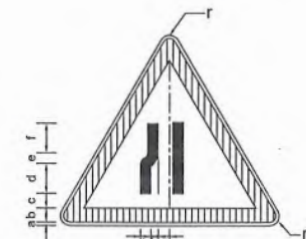
UP-GRADE
W-5

SIGN SIZE		
PARTS	90cm	105cm
r	3.5	4.1
	1.0	1.2
	6.5	7.6
	3.5	4.1
	23.5	27.4
	11.5	13.4
	33.0	38.5



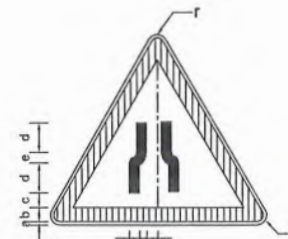
DOWN-GRADE
W-6

SIGN SIZE		
PARTS	90cm	105cm
r	3.5	4.1
	1.0	1.2
	6.5	7.6
	3.5	4.1
	23.5	27.4
	11.5	13.4
	33.0	38.5



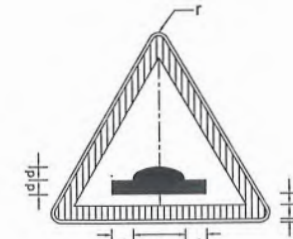
LANE ENDS
W-8

SIGN SIZE		
PARTS	90cm	105cm
r	3.5	4.1
	1.0	1.2
	6.5	7.6
	3.0	3.5
	14.0	16.3
	7.2	8.4
	11.3	13.2
	3.5	4.1
	33.0	5.8



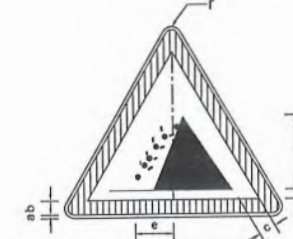
CARRIAGE WAY
NARROWS
W-8

SIGN SIZE		
PARTS	90cm	105cm
r	3.5	4.1
	1.0	1.2
	6.5	7.6
	3.5	4.1
	10.0	11.7
	14.0	16.3
	2.5	2.9
	5.0	5.8



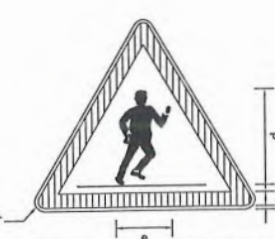
HUMP SIGN
W-12

SIGN SIZE		
PARTS	90cm	105cm
r	3.5	4.1
	1.0	1.2
	6.5	7.6
	4.0	4.7
	7.0	8.2
	32.0	37.3



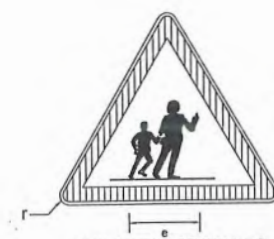
FALLING ROCK
W-16

SIGN SIZE		
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.5	4.1
d	38.0	44.3
e	12.0	14.3



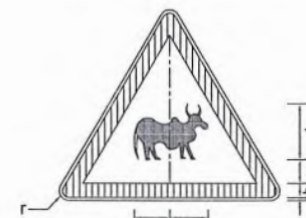
PEDESTRIAN CROSSING
W-17

SIGN SIZE		
PARTS	90cm	105cm
r	2.9	3.5
a	0.8	1.0
b	5.4	6.5
c	2.1	2.5
d	35.8	43.0
e	19.2	23.0



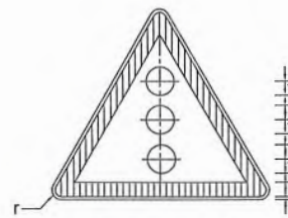
CHILDREN CROSSING
W-18

SIGN SIZE		
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.5	5.3
d	28.5	33.3
e	37.5	43.8



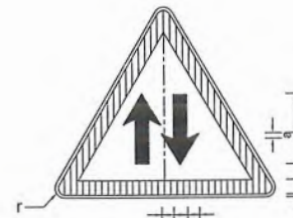
CATTLE CROSSING
W-20

SIGN SIZE		
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	2.0	2.3
d	22.0	25.7
e	18.5	21.6
f	17.5	20.4



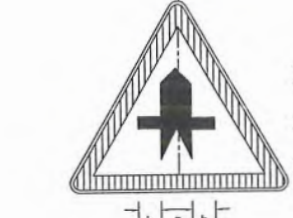
SINGAL AHEAD
W-23

SIGN SIZE		
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	2.5	2.9
R1	6.5	7.6



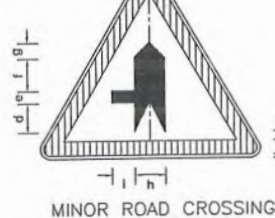
TWO WAY
W-26

SIGN SIZE		
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	9.0	10.5
e	19.0	22.2
f	5.0	5.8
g	3.5	4.1



MINOR ROAD CROSSING
AT RIGHT ANGLE
W-27

SIGN SIZE		
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	15.0	17.5
e	6.0	7.0
f	11.0	12.8
g	13.5	15.7
h	8.5	9.9



MINOR ROAD CROSSING
ONE SIDE ONLY
W-29

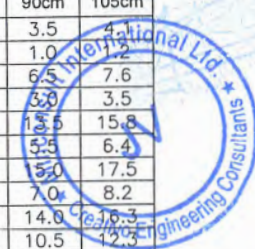
SIGN SIZE		
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	13.5	15.8
e	5.5	6.4
f	15.0	17.5
g	7.0	8.2
h	14.0	16.3
i	10.5	12.3

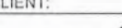


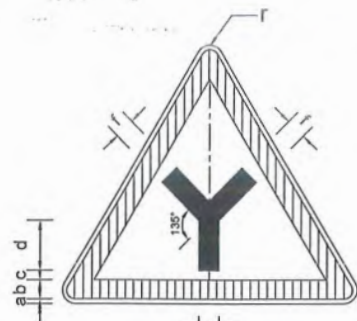
MINOR ROAD CROSSING
ONE SIDE ONLY
W-29A

SIGN SIZE		
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	13.5	15.8
e	5.5	6.4
f	15.0	17.5
g	7.0	8.2
h	14.0	16.3
i	10.5	12.3

Deputy Director Construction
Provincial Road Improvement Projects
C&W Department, Peshawar

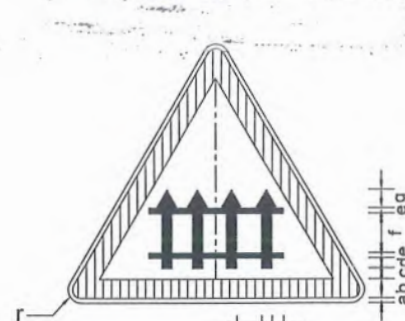


CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	AAMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	KHUSHAL GARH ROAD TO KAMAR DHOK	N-KOHAT-2	N.T.S	TRAFFIC SIGNS DETAILS
				a			DRAWN	IMRAN TARIQ				DATE:	
				b			CHECKED	SHAHZAD DURRANI			SEP, 2024.	DWG NO: CEC/KP-RRDP/HWN-KOHAT/80 - 07b	
				c			APPROVED	AGEEL YOUNIS			ACCESS ROAD		



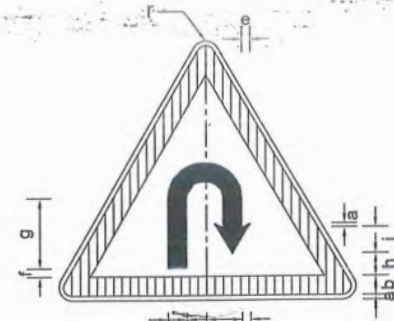
JUNCTION SIGN
W-31

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	17.0	19.8
e	13.0	15.2
f	7.0	8.2



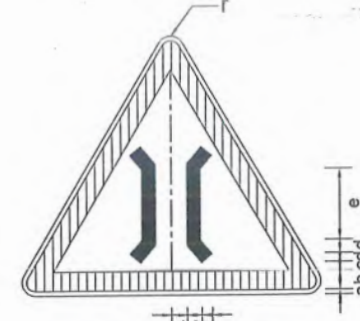
LEVEL CROSSING
WITH GATES
W-33

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	1.5	1.8
d	2.5	2.9
e	3.0	3.5
f	7.5	8.8
g	3.5	4.1
h	2.0	2.3
i	4.0	4.7



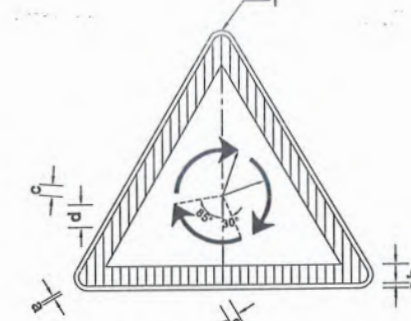
U-TURN
W-34

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	7.0	8.2
e	5.0	5.8
f	2.5	2.9
g	23.0	26.8
h	7.5	8.8
i	12.0	14.0



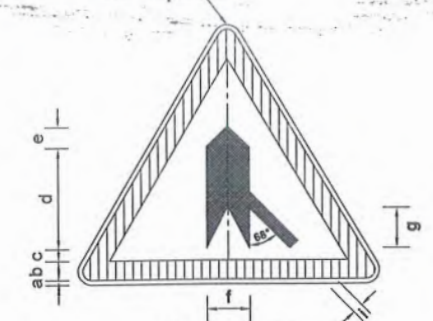
NARROW BRIDGE
W-35

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	6.0	7.0
d	2.5	2.9
e	15.0	17.5
f	4.0	4.7
g	3.0	3.5



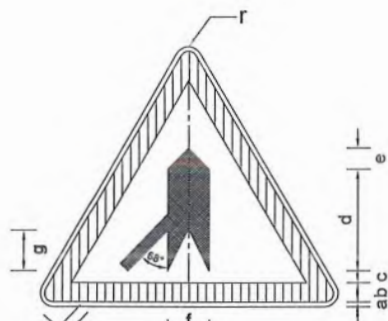
ROUNDBOUT AHEAD
W-36

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	9.0	10.5
R1	12.0	14.0
R2	16.0	18.7



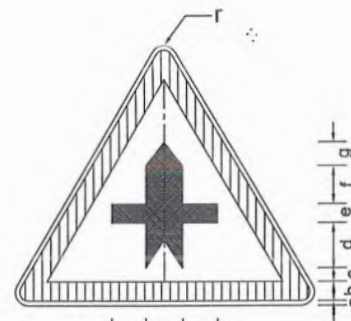
MERGE SIGN
W-37

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.5	4.1
d	33.0	38.5
e	7.0	8.2
f	14.0	16.3
g	15.0	17.5
h	3.0	3.5
i	5.5	6.4



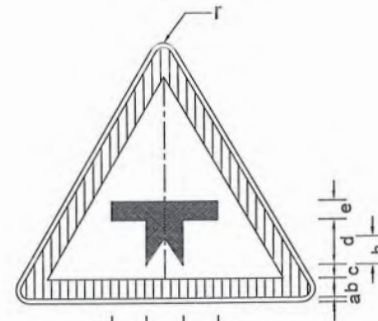
MERGE SIGN
W-37A

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.5	4.1
d	33.0	38.5
e	7.0	8.2
f	14.0	16.3
g	15.0	17.5
h	3.0	3.5
i	5.5	6.4



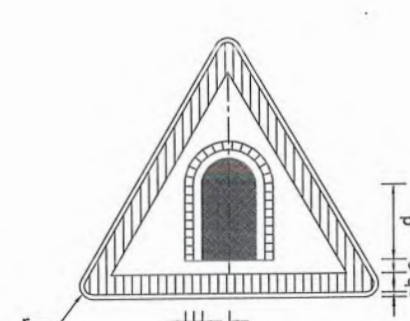
MAJOR ROAD AHEAD
W-38

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	13.0	15.2
e	7.0	8.2
f	10.0	11.7
g	2.5	2.9
h	5.0	5.8



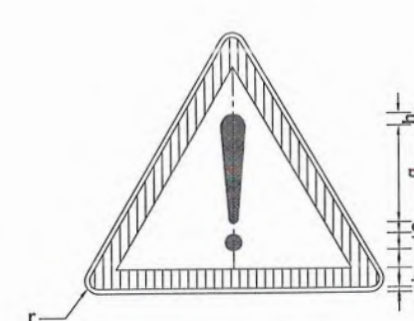
MAJOR ROAD AHEAD
W-39

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	15.5	18.1
e	7.0	8.2
f	5.0	5.8
g	11.0	12.8
h	2.5	2.9



TUNNEL SIGN
W-40

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	2.5	2.9
d	17.0	19.8
e	9.0	10.5
f	2.0	2.3
g	4.0	4.7



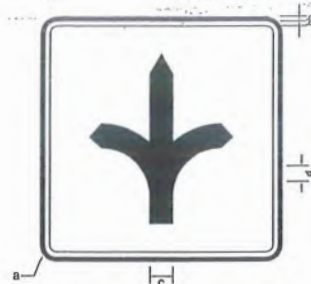
OTHER DANGER WARNING
W-40

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	2.5	2.9
d	10.0	11.7
e	2.0	2.3
f	1.7	2.0
g	25.0	29.2
h	5.0	5.8

Amir Khan
Deputy Director Construction-III
Provincial Road Development Project
CSW Department, Peshawar

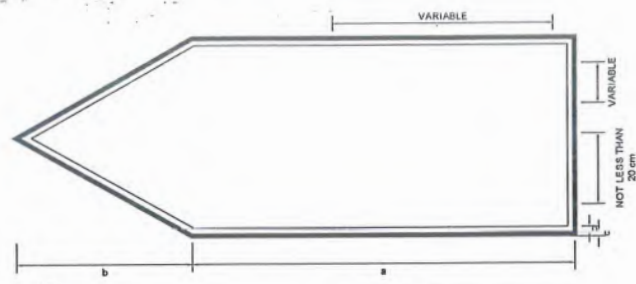


CLIENT:	DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	AAMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	N.T.S	TRAFFIC SIGNS DETAILS	
		a			DRAWN	IMRAN TARIQ			DATE:		
		b			CHECKED	SHAHZAD DURRANI		SEP, 2024.	ACCESS ROAD		DWG NO: CEC/KP-RRDP/HWN-KOHAT80 - 07c
		c			APPROVED	AQEEL YOUNIS					



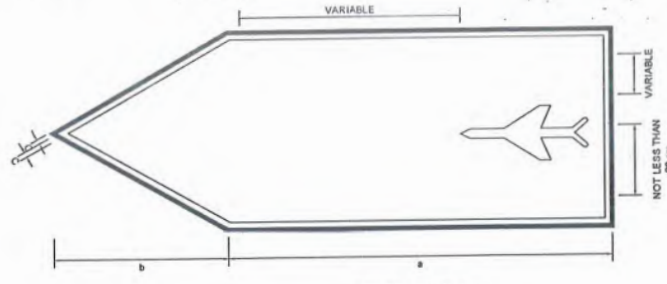
DESTINATION SIGN
I-1

PARTS	SIGN SIZE	
	120 x 120	240 x 240
a	4.5	6.0
b	1.8	2.4
c	12.0	16.0
d	22.5	30.0



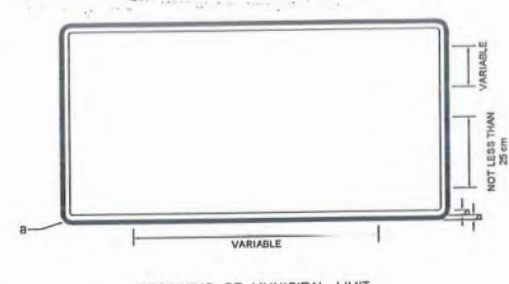
DIRECTION SIGN
I-3

PARTS	SIGN SIZE	
	225 x 90	300 x 120
a	180.0	240.0
b	45.0	60.0
c	1.8	2.4



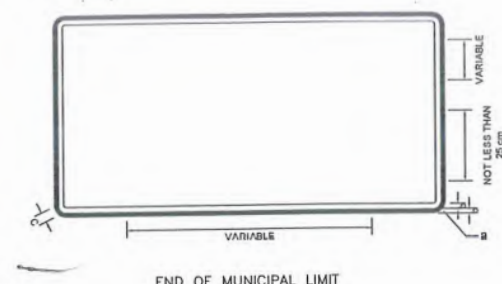
DIRECTION SIGN
I-4

PARTS	SIGN SIZE	
	225 x 90	300 x 120
a	180.0	240.0
b	45.0	60.0
c	1.8	2.4



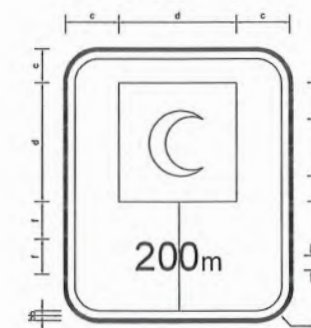
BEGINNING OF MUNICIPAL LIMIT
I-5

PARTS	SIGN SIZE	
	225 x 135	300 x 180
a	4.5	6.0
b	1.8	2.4



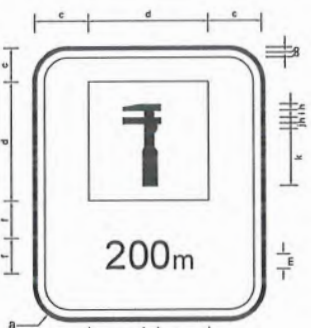
END OF MUNICIPAL LIMIT
I-6

PARTS	SIGN SIZE	
	225 x 135	300 x 180
a	4.5	6.0
b	1.8	2.4
c	20.3	27.0



FIRST AID STATION
I-9

PARTS	SIGN SIZE	
	120 x 180	
a	6.0	
b	2.4	
c	20.0	
d	80.0	
e	40.0	
f	26.0	
g	14.0	



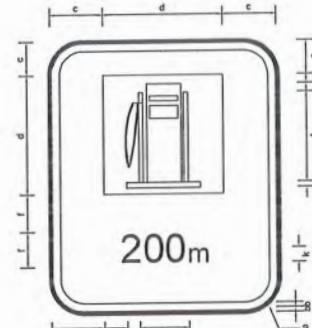
AUTO REPAIR SHOP
I-10

PARTS	SIGN SIZE	
	120 x 180	
a	6.0	
b	2.4	
c	20.0	
d	80.0	
e	30.0	
f	15.0	
g	35.0	
h	5.0	
i	11.0	
j	7.0	
k	44.0	
l	26.0	
m	14.0	



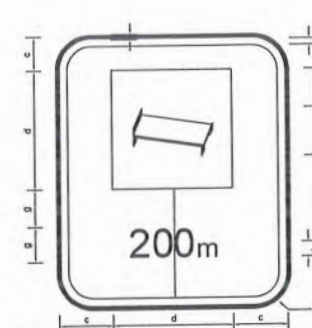
PHONE SERVICE
I-11

PARTS	SIGN SIZE	
	120 x 180	
a	6.0	
b	2.4	
c	20.0	
d	80.0	
e	26.0	
f	14.0	



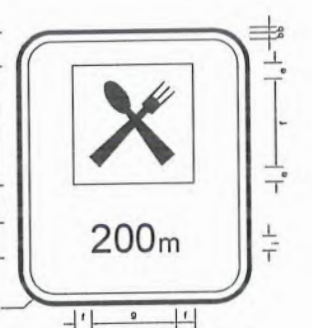
PETROL PUMP
I-12

PARTS	SIGN SIZE	
	120 x 180	
a	6.0	
b	2.4	
c	20.0	
d	80.0	
e	4.0	
f	60.0	
g	8.0	
h	12.0	
i	17.0	
j	26.0	
k	14.0	



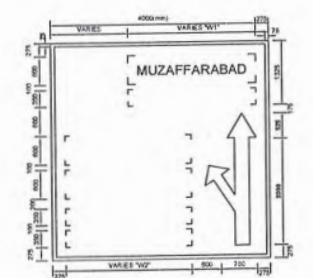
HOTEL / MOTEL
I-13

PARTS	SIGN SIZE	
	90 x 135	120 x 180
a	4.5	6.0
b	1.8	2.4
c	15.0	20.0
d	60.0	80.0
e	18.8	25.0
f	24.0	32.0
g	19.5	26.0
h	10.5	14.0

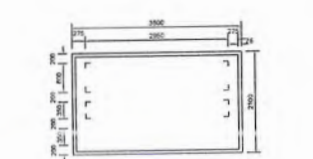


RESTAURANT
I-14

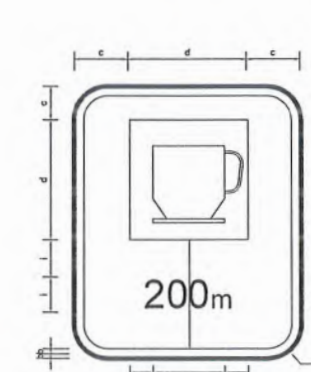
PARTS	SIGN SIZE	
	90 x 135	120 x 180
a	4.5	6.0
b	1.8	2.4
c	15.0	20.0
d	60.0	80.0
e	51.0	68.0
f	12.0	16.0
g	36.0	48.0
h	19.5	26.0
i	10.5	14.0



JUNCTION SIGN
(250m SHORT OF JUNCTION)

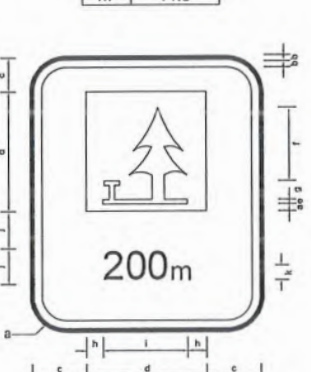


DESTINATION SIGN
(200m OF LIMITS OF TOWN)



CAFETERIA
I-15

PARTS	SIGN SIZE	
	120 x 180	
a	6.0	
b	2.4	
c	20.0	
d	80.0	
e	16.0	
f	34.0	
g	8.0	
h	64.0	
i	26.0	
j	14.0	



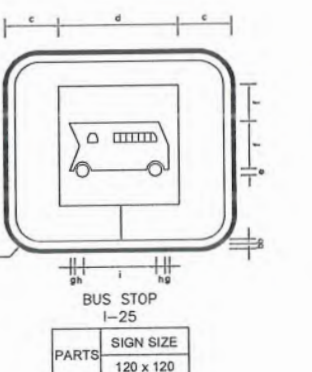
PICNIC SITE
I-16

PARTS	SIGN SIZE	
	90 x 135	120 x 180
a	4.5	6.0
b	1.8	2.4
c	15.0	20.0
d	60.0	80.0
e	3.0	4.0
f	42.0	56.0
g	11.3	15.0
h	6.0	8.0
i	48.0	64.0
j	19.5	26.0
k	10.5	14.0



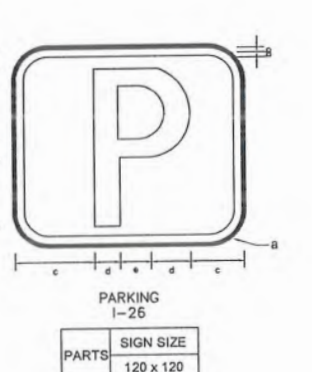
HOSPITAL SIGN
I-22

PARTS	SIGN SIZE	
	90 x 90	120 x 120
a	4.5	6.0
b	1.8	2.4
c	67.5	90.0
d	18.0	24.0
e	22.5	30.0
f	30.0	40.0



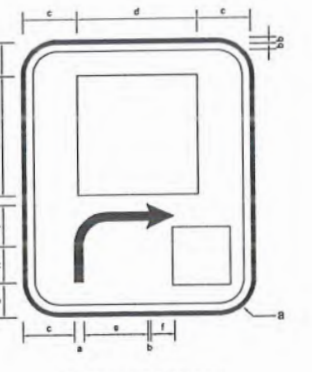
BUS STOP
I-25

PARTS	SIGN SIZE	
	120 x 120	
a	6.0	
b	2.4	
c	20.0	
d	80.0	
e	8.0	
f	26.0	
g	4.0	
h	12.0	
i	48.0	



PARKING
I-26

PARTS	SIGN SIZE	
	120 x 120	
a	6.0	
b	2.4	
c	30.0	
d	13.0	
e	34.0	
f	29.0	
g	40.0	



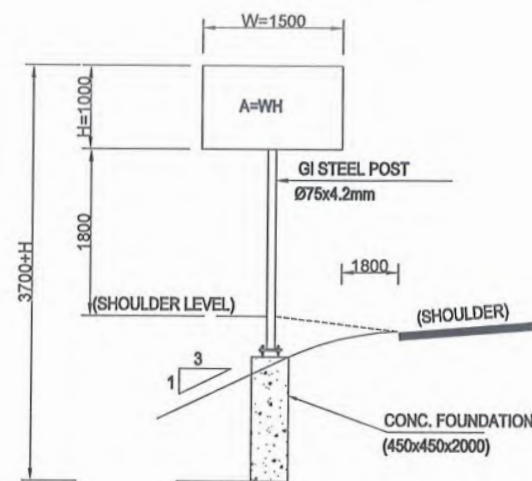
GENERAL INFORMATION
I-27

PARTS	SIGN SIZE	
	90 x 135	120 x 180
a	4.5	6.0
b	1.8	2.4
c	15.0	20.0
d	60.0	80.0
e	12.0	16.0
f	20.3	27.0
g	10.5	14.0
h	28.5	38.0
i	18.0	24.0

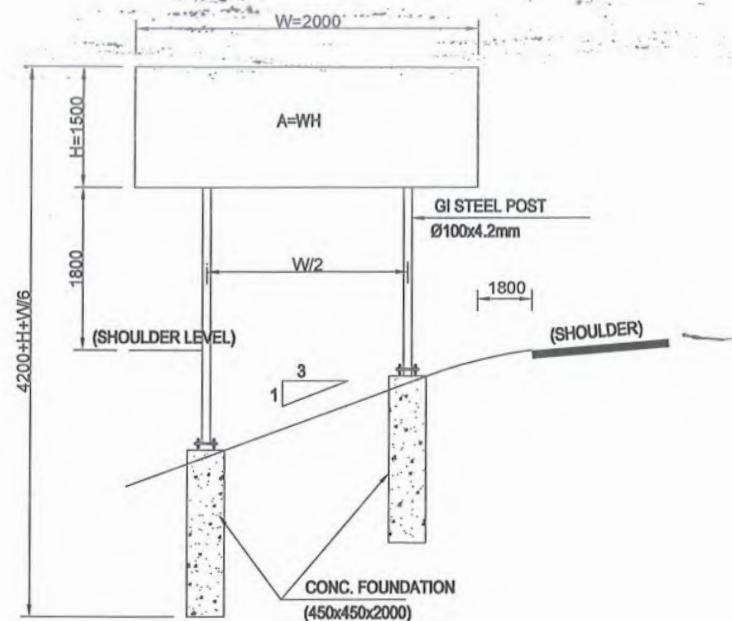
Law 1-9



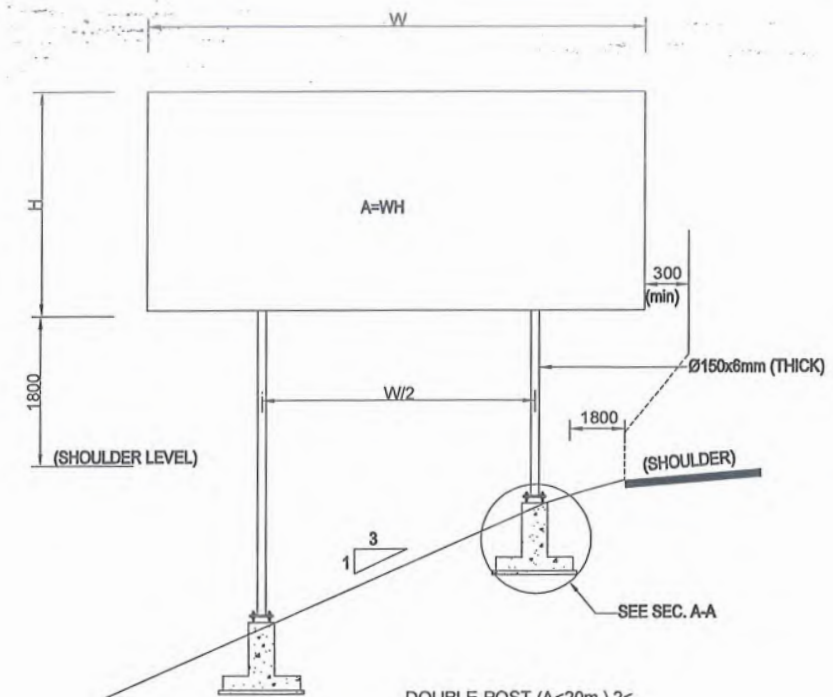
CLIENT:	DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	AAMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	N.T.S	TRAFFIC SIGNS DETAILS	
		a			DRAWN	IMRAN TARIQ			DATE:		
		b			CHECKED	SHAHZAD DURRANI		SEP, 2024.			
		c			APPROVED	AOEEL YOUNIS			ACCESS ROAD		DWG NO: CEC/KP-RRDP/HWN-KOHAT80 - 07d



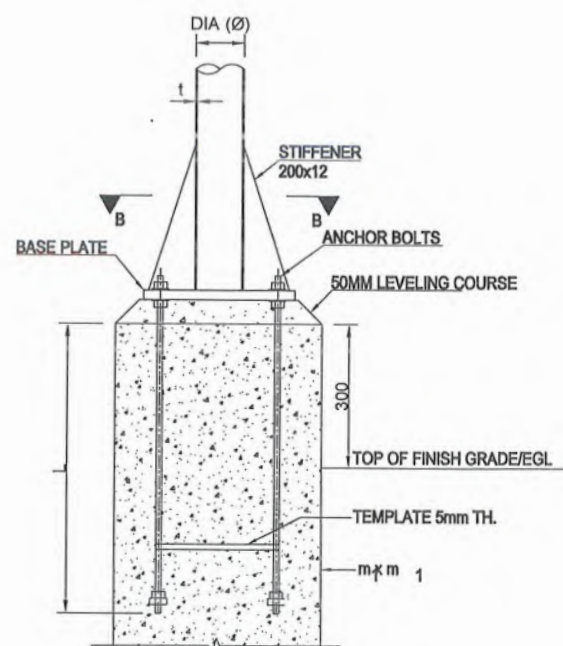
2 SINGLE POST
(A<1.5m.) 2<
FOUNDATION TYPE-1



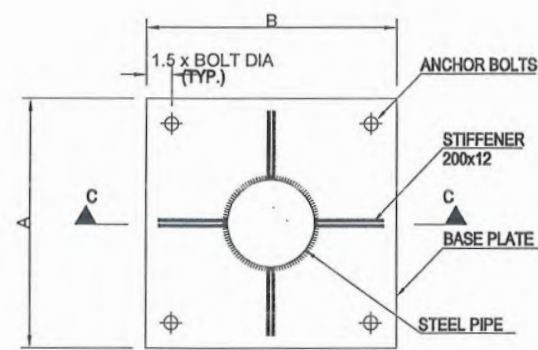
DOUBLE POST (A<3m.)
2<FOUNDATION TYPE-2



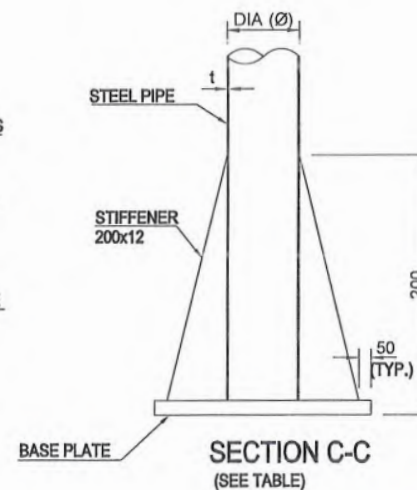
DOUBLE POST (A<20m.) 2<
FOUNDATION TYPE-3



BASE PLATE &
ANCHORAGE ELEVATION



SECTION B-B
(SEE TABLE)



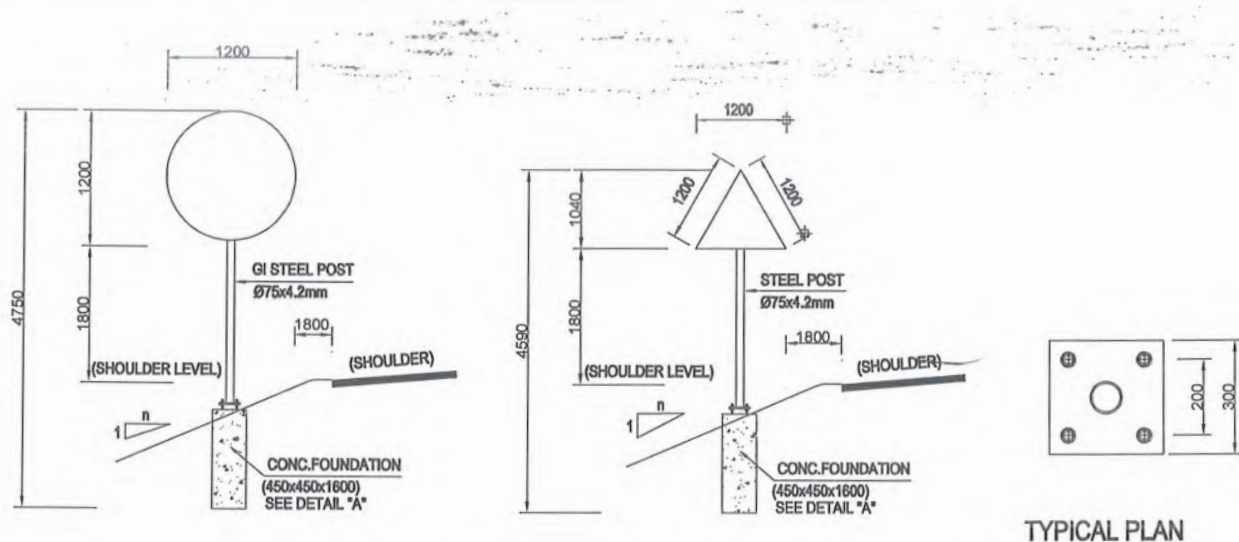
SECTION C-C
(SEE TABLE)

NOTES:-

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.
- FABRICATION GALVANIZING AND ERECTION TO BE IN ACCORDANCE WITH AISC SPECIFICATIONS.
- AFTER FABRICATION AND BEFORE GALVANIZING THE TRAIL ASSEMBLY OF COMPLETE STRUCTURE SHALL BE DONE.
- ALL COMPONENTS TO BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123. GALVANIZATION THICKNESS SHALL NOT BE LESS THAN 90 MICRONS.
- BASE PLATES SHALL BE SET LEVEL TO CORRECT ELEVATION WITH THE HELP OF LEVELING NUTS.
- STEEL STRUCTURE SHALL BE ASTM A36, OR EQUIVALENT.
- BOLTS (GALVANIZED) SHALL BE ISO 898-1, GRADE 8.8, OR EQUIVALENT.
- NUTS (GALVANIZED) SHALL BE ISO 896-2, GRADE 8, OR EQUIVALENT.
- PLAIN WASHERS (GALVANIZED) SHALL BE ISO 7089, GRADE A CLASS 200, OR EQUIVALENT. ALL BOLTS SHALL BE FIXED WITH ONE PLAIN WASHER.
- ANCHOR RODS SHALL BE G60 DEFORMED BARS IN ACCORDANCE WITH ASTM A615.
- WELDING ELECTRODES SHALL BE E 60 XX.
- SIGN PANELS SHALL BE MADE OF ALUMINUM ALLOY PLATES OF MIN. 3mm TH.
- SIGN PANELS SHOULD BE RIVETED TO STEEL MEMBER OF SUPPORTING FRAME.
- ALL STRUCTURAL CONCRETE SHALL HAVE MINIMUM CYLINDER STRENGTH EQUAL TO 3000psi AT 28 DAYS.
- ALL REINFORCEMENT SHALL BE GRADE 60 DEFORMED IN ACCORDANCE WITH ASTM A-615 SPECIFICATION.

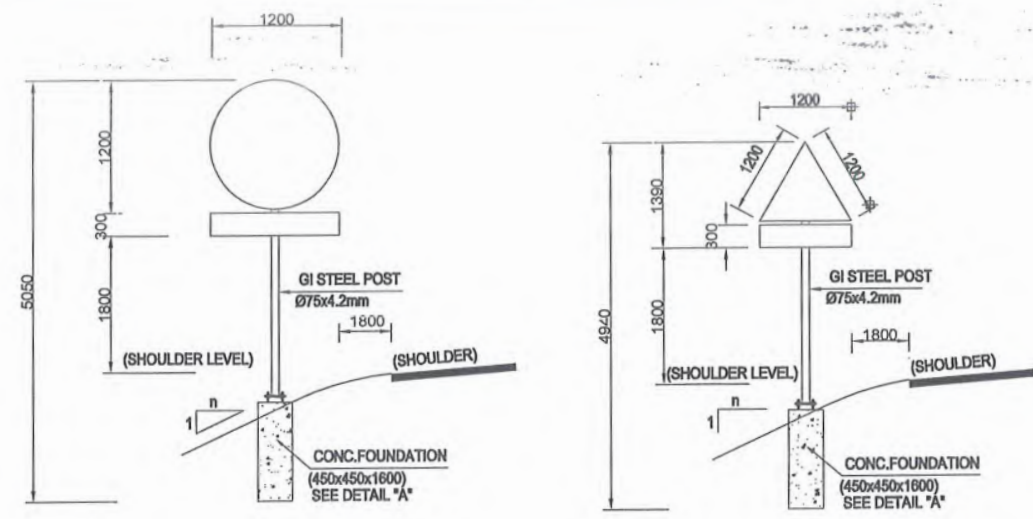


CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED AAMIR KHAN DRAWN IMRAN TARIQ CHECKED SHAHZAD DURRANI APPROVED AQEEL YOUNIS	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK ACCESS ROAD	N.T.S DATE: SEP, 2024.	TRAFFIC SIGNS FOUNDATION DETAILS DWG NO: CEC/KP-RRDP/HWN-KOHAT/3D - 07e

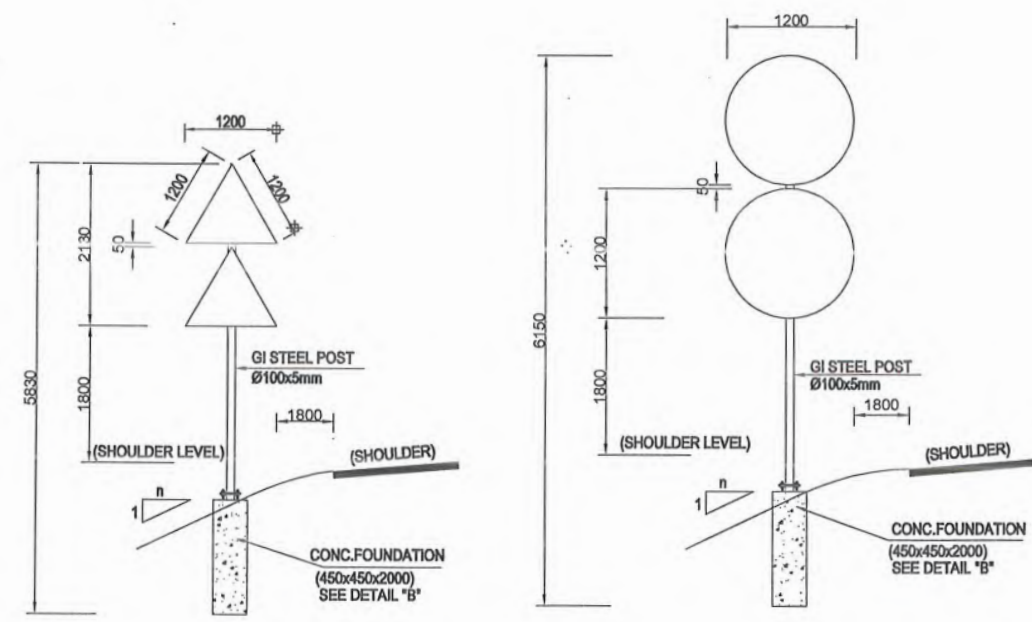


TYPICAL PLAN

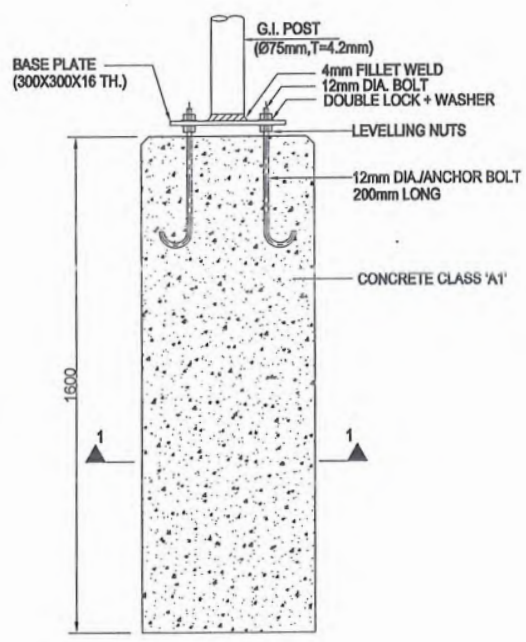
SINGLE SIGNS
FOUNDATION TYPE-1



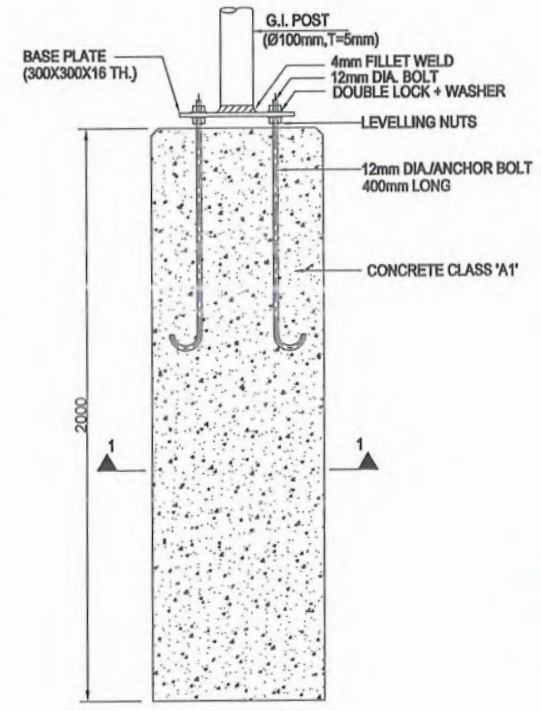
SINGLE SIGNS WITH ADDITIONAL PLATE
FOUNDATION TYPE-1



DOUBLE SIGNS
FOUNDATION TYPE-2



DETAIL 'A'
CONCRETE FOUNDATION
(TYPE-1)



DETAIL 'B'
CONCRETE FOUNDATION
(TYPE-2)

Lawal S
Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

NOTE:-

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.
- ALL STRUCTURAL CONCRETE SHALL HAVE MINIMUM CYLINDER STRENGTH EQUAL TO 3000psi AT 28 DAYS.
- SIGN PANELS SHALL BE MADE OF ALUMINUM ALLOY PLATES OF MIN. 3mm TH.
- SIGN PANELS SHOULD BE RIVETED TO STEEL MEMBER OF SUPPORTING FRAME.



CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:	
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		a			DRAWN	IMRAN TARIQ					DATE:
		b			CHECKED	SHAHZAD DURRANI					SEP, 2024.
		c			APPROVED	AQEEL YOUNIS			ACCESS ROAD		DWG NO: CEC/KP-RRDP/HWN-KOHAT/20 - 071

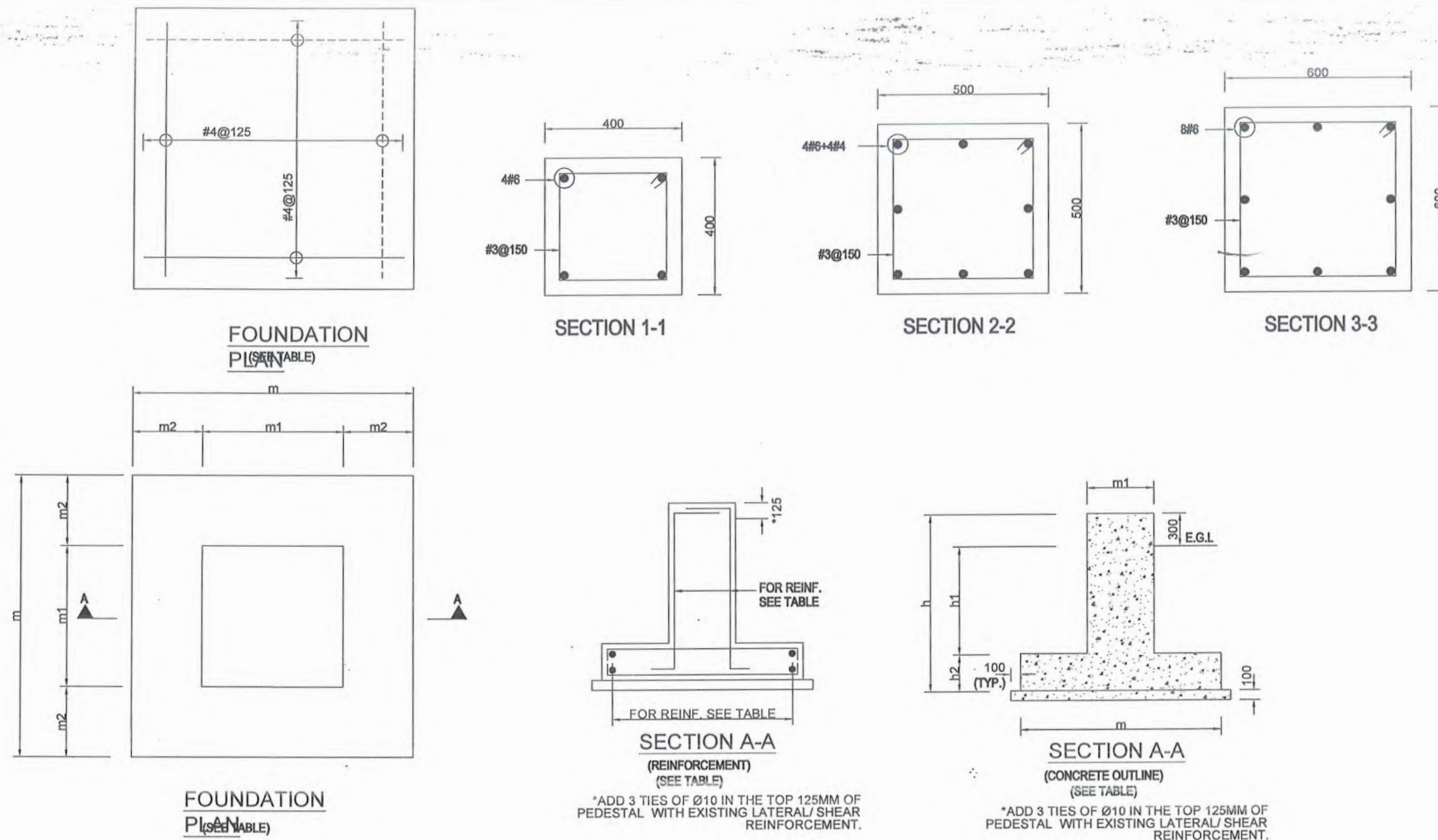


TABLE - 1

AREA OF SIGN BOARD A ² (M)	STRUCTURAL CONCRETE SIZING (mm)						STRUCTURAL STEEL SIZING (mm)							REINFORCEMENT	
	PEDESTAL m ₁ x m ₁	FOUNDATION PAD m x m	m ₂	h ₁	h ₂	h	PIPE		BASE PLATE		ANCHOR BOLTS (J-TYPE)			PEDESTAL	PAD
							DIA (Ø)	THICKNESS (t)	PLAN SIZE (AxB)	THICKNESS (T)	DIA.	EMBEDMENT (L)	Number		
3 < A < 5	400x400	1000x1000	400	1250	350	1600	125	6	300x300	22	16	400	4	SEE SEC. 1-1	SEE FOUNDATION PLAN
5 < A < 10	500x500	1350x1350	525	1175	425	1600	150	10	400x400	25	20	450	4	SEE SEC. 2-2	
10 < A < 15	500x500	1500x1500	525	1125	475	1600	175	10	400x400	28	22	500	4	SEE SEC. 2-2	
15 < A < 20	600x600	1750x1750	625	1050	550	1600	200	10	500x500	32	25	600	4	SEE SEC. 3-3	

TABLE - 2

INFORMATION	
FOUNDATION TYPE-1	FOR SINGLE SIGNS AND SINGLE SIGNS WITH ADDITIONAL PLATE
FOUNDATION TYPE-2	FOR DOUBLE SIGNS, FOR SINGLE POST SIGNS WITH AREA <1.5m ² & FOR DOUBLE POST SIGNS WITH AREA <3m ²
FOUNDATION TYPE-3	FOR DOUBLE SIGNS WITH 3 < AREA <20m ²

Label

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



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		a			DRAWN	IMRAN TARIQ		DATE:	
		b			CHECKED	SHAHZAD DURRANI	ACCESS ROAD	SEP, 2024.	DWG NO: CEC/KP-RRDP/HWN-KOHAT&D - 07g
		c			APPROVED	AQEEL YOUNIS			

PAVEMENT MARKING LINES

FOR DIMENSIONS L & W1 TO W5, SEE TABLE-1



L1 - BROKEN GUIDE LINE - WHITE

AT CENTERLINE OF DIVIDED 2-LANE



L2 - BROKEN WARNING LINE - WHITE

LANE MARKING FOR MIX TRAFFIC



L3 - CONTINUOUS LINE - WHITE

AT NO PASSING ZONES



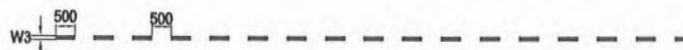
L4 - CONTINUOUS EDGE LINE - YELLOW

AT EDGE OF PAVEMENT AT ALL LOCATIONS



L5 - DASHED LINE - WHITE

AT SEPARATION OF THROUGH LANES FROM ACCELERATION LANE



L6 - DOTTED LINE - WHITE

FOR DEFINING VEHICLE PATHS WITHIN INTERSECTIONS



L7 - STOP LINE - WHITE

AT INTERSECTIONS ACROSS PAVEMENT



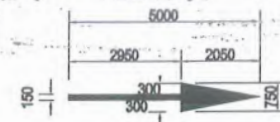
L8 - TRANSVERSE YIELD LINE - WHITE

AT INTERSECTIONS ACROSS PAVEMENT IN THE SAME POSITION AS L7 LINE TO INDICATE GIVE WAY

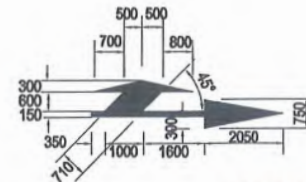
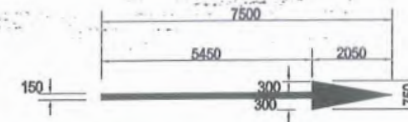


L9 - DOTTED LINE - YELLOW

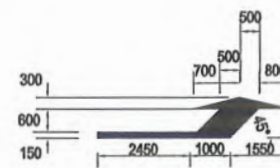
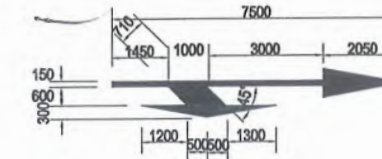
FOR EDGE LINE WHERE PARKING BAYS ARE PROVIDED OUTSIDE THE LANE



ARROWS TYPE-I (STRAIGHT)



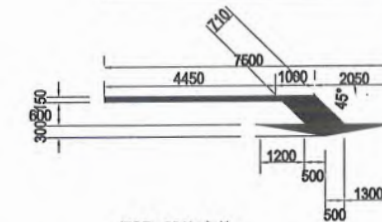
ARROWS TYPE-II (COMBINED)



(FOR ≤60 Km/hr)

ARROWS TYPE-III (DEFLECTION)

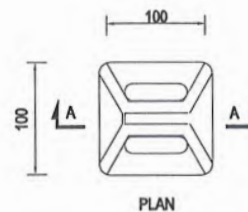
LANE SELECTION ARROWS - WHITE



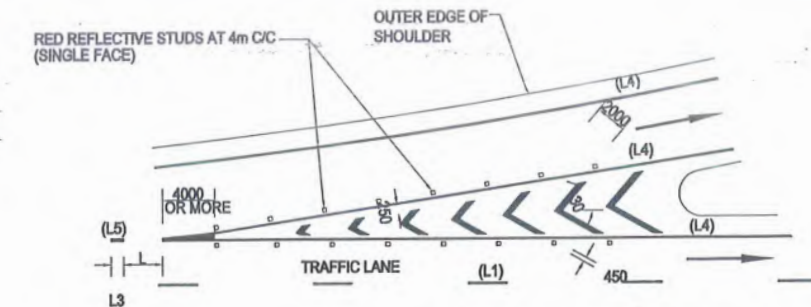
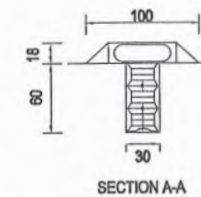
(FOR >60 Km/hr)*

TABLE - 1

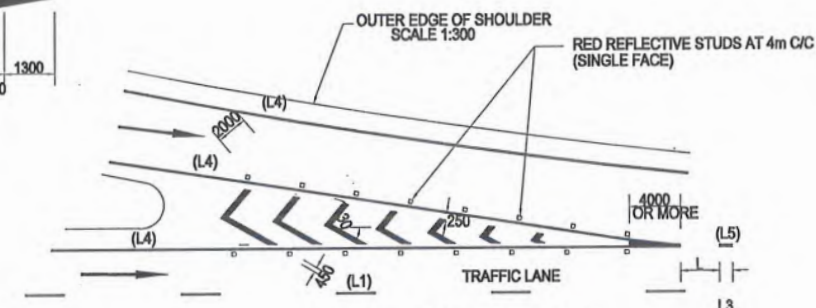
ROADWAY SPEED	L (mm)	W1	W2	W3	W4	W5
≤50 Km/hr	2000	100	100	100	300	100
60-80 Km/hr*	3000	120	120	150	300	100
>80 Km/hr	4000	150	150	150	300	120
SERVICE ROAD	2000	100	120	100	300	100



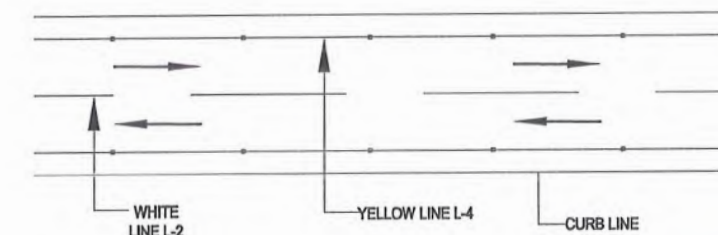
REFLECTORISED PAVEMENT STUD
(RAISED PROFILE TYPE)



ENTRANCE NOSE DETAIL



EXIT NOSE DETAIL
SCALE 1:300



PROJECT ROAD

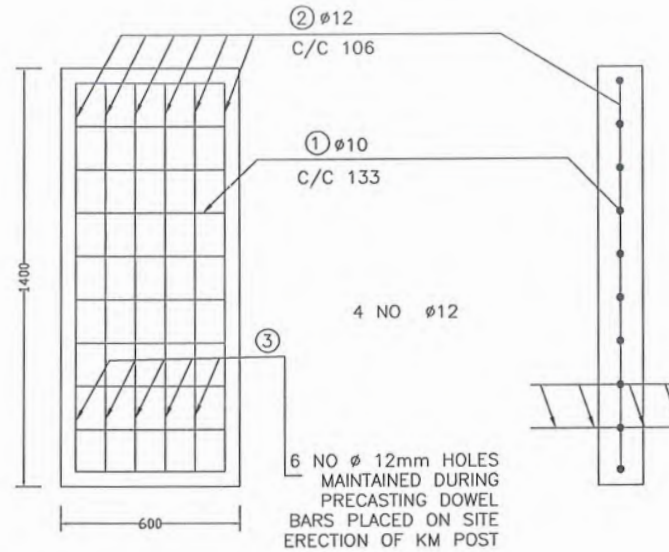
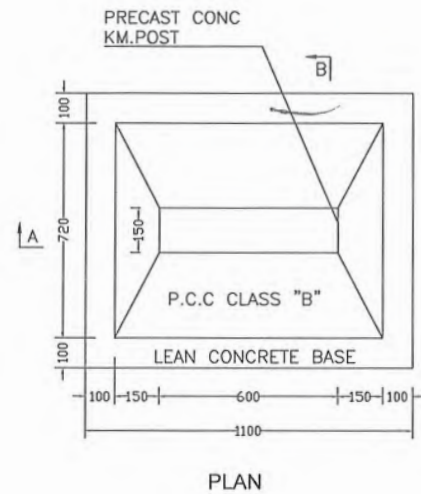
Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Peshawar



CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED AAMIR KHAN DRAWN IMRAN TARIQ CHECKED SHAHZAD DURRANI APPROVED AQEEL YOUNIS	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK ACCESS ROAD	N.T.S DATE: SEP, 2024.	TYPICAL PAVEMENT MARKING DETAILS DWG NO: CEC/KP-RRDP/HWIN-KOHAT-2/ PM-08

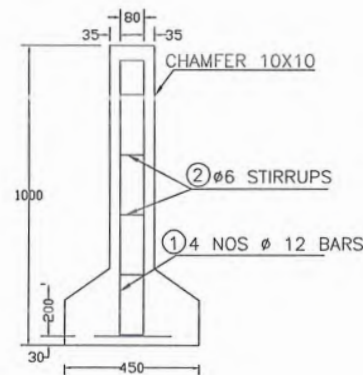
BAR NO	DESCRIPTION	DIA. (mm)	NO
①	530mm	10	11
②	1330mm	10	6
③	620mm	12	6
④	620mm	12	4

TABLE-1
REINFORCEMENT SCHEDULE

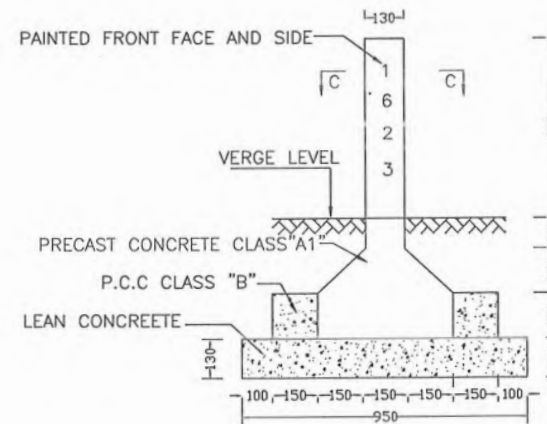


SEE TABLE-1 OF REINFORCEMENT SCHEDULE

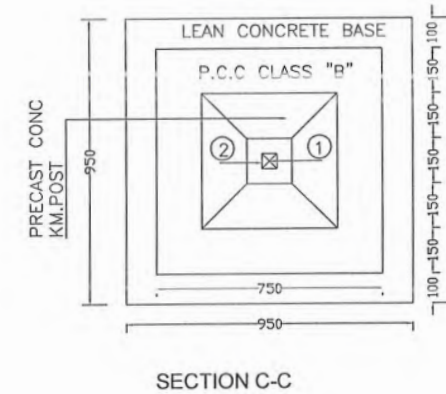
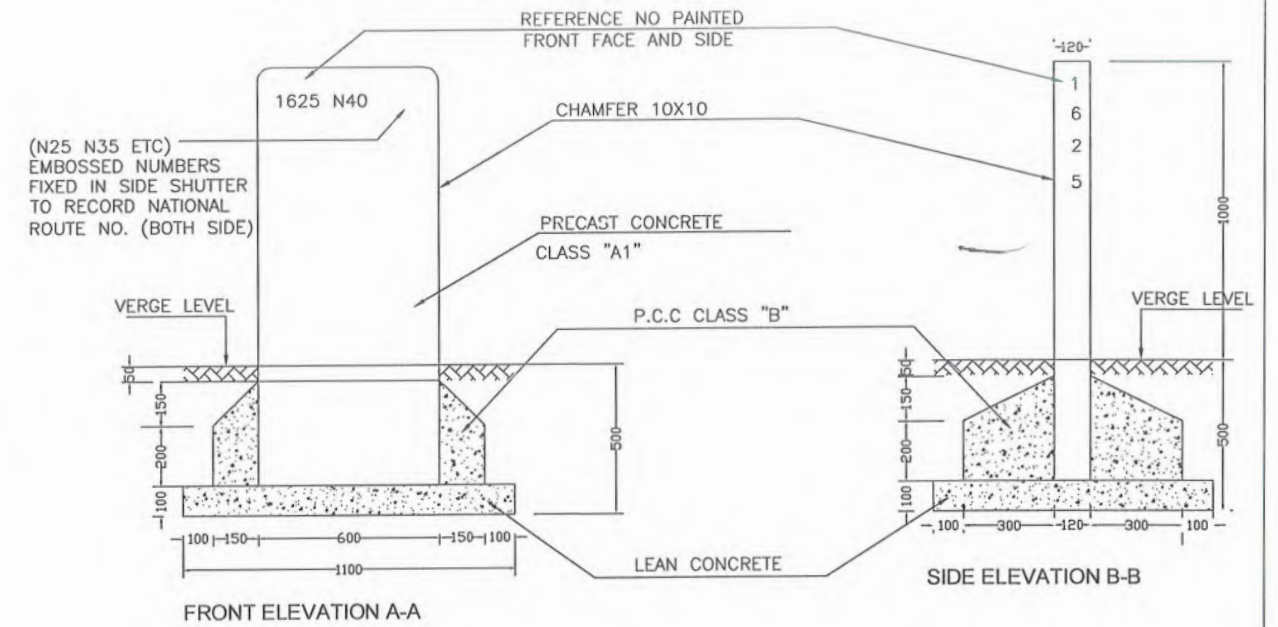
FIVE KILOMETER POST



SEE TABLE-2 OF REINFORCEMENT SCHEDULE



ONE KILOMETER POST



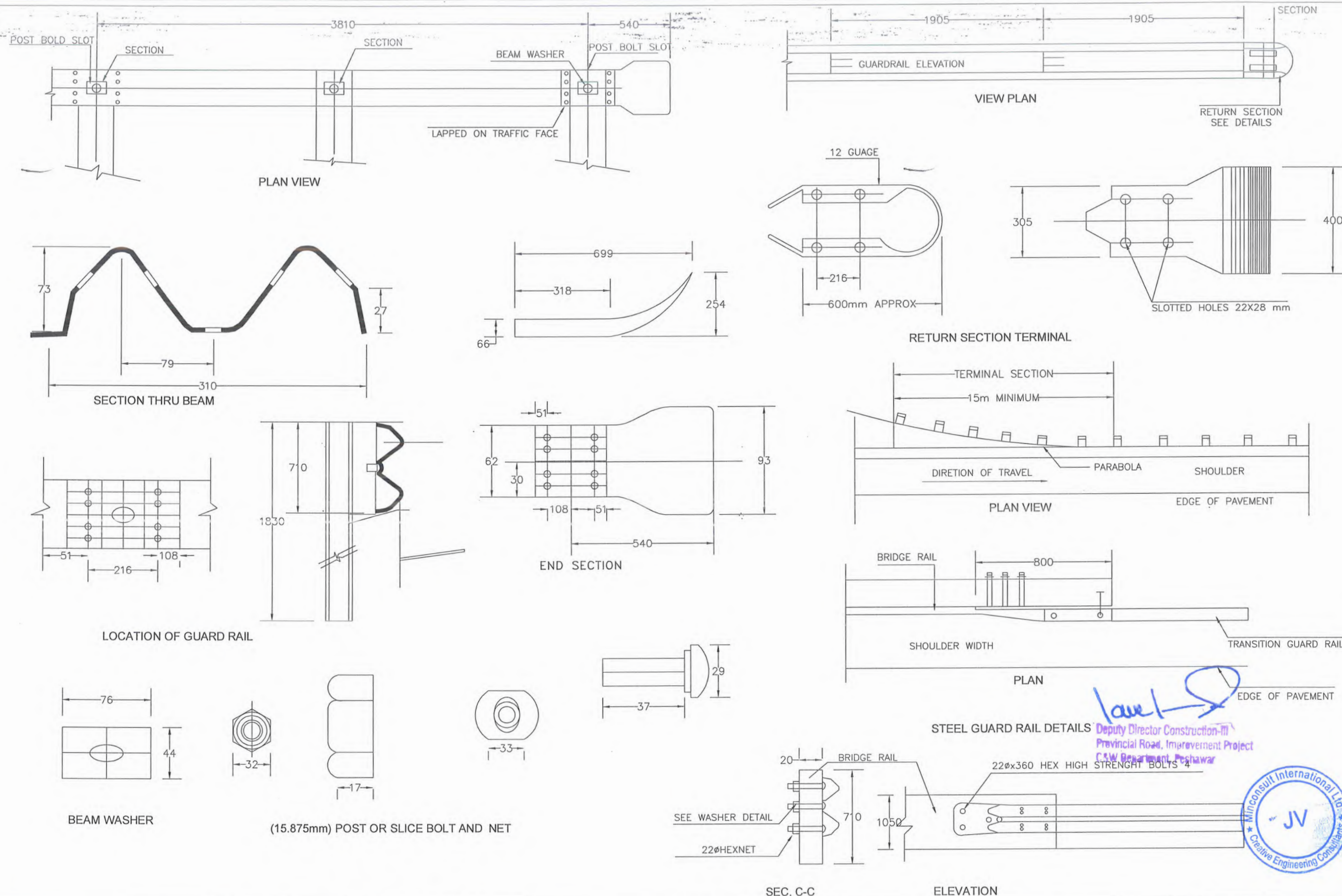
BAR NO	DESCRIPTION	DIA. (mm)	NO
①	230	12	4
②	40/80	6	9

TABLE-2
REINFORCEMENT SCHEDULE

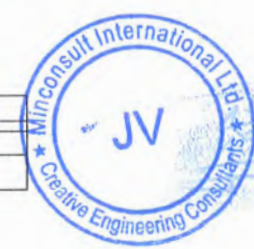
NOTES:-

1. PRECAST CONCRETE SHALL BE CLASS "A1" AS PER G.S.I 401
2. CONCRETE COVER 35mm
3. P.C.C CLASS "B" AS PER G.S.I 401
4. LEAN CONCRETE SHALL BE AS PER G.S.I 401
5. REINFORCEMENT DEFORMED GRADE 40 AS PER AASHTO M-31
6. BACKGROUND COLOUR WILL BE WHITE WHILE LETTERING COLOUR WILL BE BLACK.
7. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED AAMIR KHAN DRAWN IMRAN TARIQ CHECKED SHAHZAD DURRANI APPROVED AQEEL YOUNIS	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK ACCESS ROAD	N.T.S DATE: SEP, 2024.	KM POST DETAILS DWG NO: CEC/KP-RRDP/HWN-KOHAT-2/ KMP 09



CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	AAMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP) N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK ACCESS ROAD	N.T.S	GUARD RAIL DETAILS DWG NO: CEC/KP-RRDP/MIN-KOHAT-2/ GR-10
		a			DRAWN	IMRAN TARIQ		DATE:	
		b			CHECKED	SHAHZAD DURRANI		SEP, 2024.	
		c			APPROVED	AQEEL YOUNIS			



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Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Peshawar

TYPICAL SECTIONS

Lawal S

Deputy Director Construction III
Provincial Road Improvement Project
CSW Department, Peshawar



The diagram illustrates a cross-section of a road pavement structure. The top layer is the Carriage Way, which is 4.87 units wide. The width of the shoulders on either side varies up to 1.0 unit. The pavement structure consists of several layers: a 50mm AC Wearing Course, a 150mm Water Bound Macadam, a 150mm Sub Base, and a 300mm Improved Subgrade. The road surface has a 4% slope on the outer edges and a 2% slope towards the center. The subgrade is shown as a hatched area below the pavement layers.

Dimensions and labels:

- VARIES UPTO 1.0 (Shoulder width)
- CARRIAGE WAY 4.87
- 4% (Outer slope)
- 2% (Inner slope)
- 200mm CLASS A1 CONCRETE
- 150mm SUB BASE
- 50mm AC WEARING COURSE
- 150mm WATER BOUND MACADAM
- 150mm SUB BASE
- 300mm IMPROVED SUBGRADE

The diagram illustrates the cross-section of a road pavement structure. The top layer is the Carriage Way, which is 4.87 units wide. The shoulders on either side vary up to 1.0 unit. The pavement structure consists of several layers: a 50mm AC Wearing Course, a 150mm Water Bound Macadam, a 150mm Sub Base, and a 300mm Improved Subgrade. The subgrade is shown with a hatched pattern. The sub base is shown with a dotted pattern. The water bound macadam is shown with a pattern of small circles. The AC wearing course is shown with a solid black pattern. The concrete base is shown with a pattern of small squares. The sub base is shown with a dotted pattern. The improved subgrade is shown with a hatched pattern. The diagram also shows the cross-slopes of the pavement: 4% on the outer shoulders and 2% on the inner sections. A centerline symbol (C with a vertical line) is shown at the top center. A blue signature is visible in the bottom right corner.

VARIES UPTO 1.0

CARRIAGE WAY
4.87

VARIES UPTO 1.0

4%

2%

2%

4%

200mm CLASS A1 CONCRETE

150mm SUB BASE

50mm AC WEARING COURSE

150mm WATER BOUND MACADAM

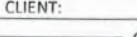
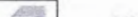
150mm SUB BASE

300mm IMPROVED SUBGRADE

100

Lawyer



CLIENT:		DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MIN CONSULT J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	a	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	AAMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH TO KAMAR DHOK ROAD	N.T.S	TYPICAL SECTION DETAILS
				b			DRAWN	IMRAN TARIQ		DATE:		
				c			CHECKED	SHAHZAD DURRANI		SEP, 2024		
				d			APPROVED	AQEEL YOUNIS		FLOOD AFFECTED ROAD	DWG NO: CEC/KP-RRDP/HW/N-KOHAT-2/TCS-01	

CENTER LINE DATA

Lawal S

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



CENTER LINE COORDINATES				CENTER LINE COORDINATES				CENTER LINE COORDINATES			
SNO	Station	Northing	Easting	SNO	Station	Northing	Easting	SNO	Station	Northing	Easting
1	0+000.00	3,709,561.04	768,789.89	41	1+000.00	3,710,276.98	769,397.42	81	2+000.00	3,710,967.26	770,011.46
2	0+025.00	3,709,565.76	768,814.44	42	1+025.00	3,710,296.44	769,411.73	82	2+025.00	3,710,990.69	770,020.10
3	0+050.00	3,709,572.06	768,838.60	43	1+050.00	3,710,319.61	769,402.70	83	2+050.00	3,711,013.49	770,029.91
4	0+075.00	3,709,581.96	768,861.55	44	1+075.00	3,710,344.03	769,397.71	84	2+075.00	3,711,031.72	770,046.81
5	0+100.00	3,709,592.46	768,884.22	45	1+100.00	3,710,368.89	769,395.08	85	2+100.00	3,711,046.39	770,066.14
6	0+125.00	3,709,614.79	768,892.01	46	1+125.00	3,710,393.83	769,393.24	86	2+125.00	3,711,071.27	770,068.09
7	0+150.00	3,709,639.71	768,892.18	47	1+150.00	3,710,418.04	769,397.48	87	2+150.00	3,711,096.23	770,069.56
8	0+175.00	3,709,659.99	768,905.83	48	1+175.00	3,710,435.07	769,415.32	88	2+175.00	3,711,119.95	770,064.99
9	0+200.00	3,709,674.64	768,926.09	49	1+200.00	3,710,449.21	769,435.91	89	2+200.00	3,711,136.27	770,046.06
10	0+225.00	3,709,689.49	768,946.19	50	1+225.00	3,710,468.44	769,451.79	90	2+225.00	3,711,152.65	770,027.19
11	0+250.00	3,709,713.25	768,947.20	51	1+250.00	3,710,488.94	769,466.10	91	2+250.00	3,711,175.78	770,019.72
12	0+275.00	3,709,737.85	768,942.83	52	1+275.00	3,710,509.53	769,480.28	92	2+275.00	3,711,200.73	770,019.55
13	0+300.00	3,709,762.82	768,943.05	53	1+300.00	3,710,527.78	769,497.27	93	2+300.00	3,711,224.50	770,011.97
14	0+325.00	3,709,787.23	768,946.89	54	1+325.00	3,710,543.62	769,516.61	94	2+325.00	3,711,248.41	770,005.16
15	0+350.00	3,709,801.85	768,966.69	55	1+350.00	3,710,559.45	769,535.96	95	2+350.00	3,711,272.63	770,010.89
16	0+375.00	3,709,813.74	768,988.68	56	1+375.00	3,710,575.28	769,555.31	96	2+375.00	3,711,297.13	770,015.42
17	0+400.00	3,709,825.62	769,010.68	57	1+400.00	3,710,591.11	769,574.66	97	2+400.00	3,711,322.11	770,015.16
18	0+425.00	3,709,837.66	769,032.58	58	1+425.00	3,710,604.75	769,595.58	98	2+425.00	3,711,346.76	770,011.05
19	0+450.00	3,709,853.11	769,052.17	59	1+450.00	3,710,617.35	769,617.17	99	2+450.00	3,711,371.32	770,006.39
20	0+475.00	3,709,871.13	769,069.49	60	1+475.00	3,710,627.91	769,639.75	100	2+475.00	3,711,395.10	769,998.78
21	0+500.00	3,709,891.39	769,084.09	61	1+500.00	3,710,643.62	769,659.03	101	2+500.00	3,711,419.62	769,998.22
22	0+525.00	3,709,912.47	769,097.53	62	1+525.00	3,710,657.05	769,679.91	102	2+525.00	3,711,433.76	770,016.94
23	0+550.00	3,709,933.53	769,111.00	63	1+550.00	3,710,666.65	769,702.99	103	2+550.00	3,711,441.42	770,040.70
24	0+575.00	3,709,954.10	769,125.20	64	1+575.00	3,710,676.26	769,726.08	104	2+575.00	3,711,458.15	770,059.11
25	0+600.00	3,709,973.94	769,140.42	65	1+600.00	3,710,685.86	769,749.16	105	2+600.00	3,711,479.71	770,071.52
26	0+625.00	3,709,993.33	769,156.19	66	1+625.00	3,710,697.03	769,771.39	106	2+625.00	3,711,502.22	770,082.26
27	0+650.00	3,710,012.76	769,171.92	67	1+650.00	3,710,717.64	769,785.19	107	2+650.00	3,711,516.90	770,102.18
28	0+675.00	3,710,032.64	769,187.09	68	1+675.00	3,710,736.59	769,800.76	108	2+675.00	3,711,530.14	770,123.17
29	0+700.00	3,710,052.64	769,202.08	69	1+700.00	3,710,747.04	769,823.47	109	2+700.00	3,711,554.42	770,121.75
30	0+725.00	3,710,072.65	769,217.07	70	1+725.00	3,710,757.43	769,846.21	110	2+725.00	3,711,577.29	770,111.73
31	0+750.00	3,710,092.82	769,231.83	71	1+750.00	3,710,768.02	769,868.85	111	2+750.00	3,711,602.04	770,109.80
32	0+775.00	3,710,113.11	769,246.45	72	1+775.00	3,710,786.08	769,885.69	112	2+775.00	3,711,627.03	770,110.47
33	0+800.00	3,710,133.39	769,261.06	73	1+800.00	3,710,807.06	769,899.28	113	2+800.00	3,711,652.02	770,110.95
34	0+825.00	3,710,153.67	769,275.68	74	1+825.00	3,710,827.32	769,913.89	114	2+825.00	3,711,676.85	770,112.97
35	0+850.00	3,710,173.90	769,290.37	75	1+850.00	3,710,850.47	769,923.27	115	2+850.00	3,711,698.82	770,124.74
36	0+875.00	3,710,193.43	769,305.97	76	1+875.00	3,710,873.89	769,932.00	116	2+875.00	3,711,720.15	770,137.77
37	0+900.00	3,710,212.80	769,321.78	77	1+900.00	3,710,893.78	769,946.69	117	2+900.00	3,711,743.94	770,143.11
38	0+925.00	3,710,232.16	769,337.60	78	1+925.00	3,710,909.74	769,965.93	118	2+925.00	3,711,768.58	770,143.35
39	0+950.00	3,710,248.07	769,356.73	79	1+950.00	3,710,925.69	769,985.18	119	2+950.00	3,711,788.94	770,157.82
40	0+975.00	3,710,261.70	769,377.69	80	1+975.00	3,710,944.38	770,001.38	120	2+975.00	3,711,806.51	770,175.45

Deputy Director Construction-II
Provincial Road, Improvement Project
C&W Department, Peshawar



CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings.	G.DESIGNED	AMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	NTS	CENTRE LINE COORDINATES			
		a			DRAWN	IMRAN TARIQ			DATE:				
		b			CHECKED	SHAHZAD DURANI			SEP, 2024.				
		c			APPROVED	AQEEL YOUNIS			DWG NO:CEC/KP-RRDP/HW/II/N-KOHAT-2/CLD-01				

CENTER LINE COORDINATES				CENTER LINE COORDINATES				CENTER LINE COORDINATES			
SNO	Station	Northing	Easting	SNO	Station	Northing	Easting	SNO	Station	Northing	Easting
121	3+000.00	3,711,823.58	770,193.57	161	4+000.00	3,712,251.22	771,045.12	201	5+000.00	3,713,147.15	771,190.06
122	3+025.00	3,711,847.44	770,200.09	162	4+025.00	3,712,268.14	771,063.51	202	5+025.00	3,713,171.54	771,184.58
123	3+050.00	3,711,871.68	770,205.14	163	4+050.00	3,712,284.72	771,082.22	203	5+050.00	3,713,196.17	771,180.41
124	3+075.00	3,711,875.57	770,228.81	164	4+075.00	3,712,301.30	771,100.93	204	5+075.00	3,713,220.82	771,176.74
125	3+100.00	3,711,874.45	770,253.78	165	4+100.00	3,712,317.88	771,119.65	205	5+100.00	3,713,244.74	771,169.60
126	3+125.00	3,711,872.12	770,278.67	166	4+125.00	3,712,335.25	771,137.61	206	5+125.00	3,713,269.64	771,168.74
127	3+150.00	3,711,869.73	770,303.55	167	4+150.00	3,712,354.39	771,153.68	207	5+150.00	3,713,293.87	771,174.61
128	3+175.00	3,711,868.67	770,328.51	168	4+175.00	3,712,374.33	771,168.73	208	5+175.00	3,713,317.52	771,182.72
129	3+200.00	3,711,870.24	770,353.46	169	4+200.00	3,712,396.26	771,180.70	209	5+200.00	3,713,341.08	771,191.08
130	3+225.00	3,711,875.66	770,377.82	170	4+225.00	3,712,418.54	771,192.04	210	5+225.00	3,713,363.44	771,202.20
131	3+250.00	3,711,885.92	770,400.57	171	4+250.00	3,712,441.79	771,201.20	211	5+250.00	3,713,385.28	771,214.37
132	3+275.00	3,711,897.71	770,422.62	172	4+275.00	3,712,465.94	771,207.04	212	5+275.00	3,713,408.94	771,221.84
133	3+300.00	3,711,907.77	770,445.50	173	4+300.00	3,712,489.80	771,200.66	213	5+300.00	3,713,433.90	771,223.15
134	3+325.00	3,711,919.41	770,467.58	174	4+325.00	3,712,512.06	771,189.85	214	5+325.00	3,713,458.87	771,224.41
135	3+350.00	3,711,932.41	770,488.94	175	4+350.00	3,712,537.02	771,189.88	215	5+350.00	3,713,483.85	771,225.46
136	3+375.00	3,711,944.60	770,510.74	176	4+375.00	3,712,561.80	771,186.85	216	5+375.00	3,713,508.85	771,225.39
137	3+400.00	3,711,953.57	770,534.06	177	4+400.00	3,712,586.40	771,182.40	217	5+400.00	3,713,533.83	771,224.40
138	3+425.00	3,711,961.95	770,557.62	178	4+425.00	3,712,611.02	771,178.10	218	5+425.00	3,713,558.79	771,223.11
139	3+450.00	3,711,970.32	770,581.18	179	4+450.00	3,712,635.95	771,176.48	219	5+450.00	3,713,583.66	771,220.61
140	3+475.00	3,711,978.69	770,604.73	180	4+475.00	3,712,660.90	771,177.25	220	5+475.00	3,713,608.43	771,217.21
141	3+500.00	3,711,987.12	770,628.27	181	4+500.00	3,712,684.67	771,184.74	221	5+500.00	3,713,633.35	771,216.01
142	3+525.00	3,711,997.20	770,651.13	182	4+525.00	3,712,707.68	771,194.50	222	5+525.00	3,713,657.97	771,220.18
143	3+550.00	3,712,008.92	770,673.22	183	4+550.00	3,712,730.69	771,204.29	223	5+550.00	3,713,682.68	771,223.81
144	3+575.00	3,712,020.69	770,695.27	184	4+575.00	3,712,753.55	771,214.41	224	5+575.00	3,713,707.29	771,227.82
145	3+600.00	3,712,032.51	770,717.30	185	4+600.00	3,712,776.30	771,224.77	225	5+600.00	3,713,730.65	771,236.72
146	3+625.00	3,712,044.65	770,739.15	186	4+625.00	3,712,799.05	771,235.13	226	5+625.00	3,713,753.53	771,246.78
147	3+650.00	3,712,056.93	770,760.93	187	4+650.00	3,712,821.80	771,245.50	227	5+650.00	3,713,776.17	771,257.39
148	3+675.00	3,712,068.95	770,782.85	188	4+675.00	3,712,844.79	771,255.30	228	5+675.00	3,713,798.81	771,267.99
149	3+700.00	3,712,080.62	770,804.96	189	4+700.00	3,712,868.55	771,263.05	229	5+700.00	3,713,821.45	771,278.60
150	3+725.00	3,712,092.26	770,827.09	190	4+725.00	3,712,892.44	771,270.42	230	5+725.00	3,713,843.98	771,289.41
151	3+750.00	3,712,103.74	770,849.29	191	4+750.00	3,712,916.45	771,277.33	231	5+750.00	3,713,865.39	771,302.30
152	3+775.00	3,712,114.85	770,871.69	192	4+775.00	3,712,940.90	771,274.12	232	5+775.00	3,713,886.26	771,316.07
153	3+800.00	3,712,125.91	770,894.11	193	4+800.00	3,712,963.93	771,264.38	233	5+800.00	3,713,907.20	771,329.71
154	3+825.00	3,712,136.97	770,916.53	194	4+825.00	3,712,986.97	771,254.67	234	5+825.00	3,713,928.69	771,342.49
155	3+850.00	3,712,148.03	770,938.95	195	4+850.00	3,713,010.35	771,245.83	235	5+850.00	3,713,950.38	771,354.93
156	3+875.00	3,712,159.17	770,961.33	196	4+875.00	3,713,033.80	771,237.16	236	5+875.00	3,713,972.07	771,367.36
157	3+900.00	3,712,176.40	770,979.12	197	4+900.00	3,713,056.64	771,227.17	237	5+900.00	3,713,993.56	771,380.11
158	3+925.00	3,712,196.65	770,993.78	198	4+925.00	3,713,075.76	771,211.10	238	5+925.00	3,714,013.00	771,395.80
159	3+950.00	3,712,215.69	771,009.94	199	4+950.00	3,713,098.37	771,201.04	239	5+950.00	3,714,031.45	771,412.66
160	3+975.00	3,712,233.49	771,027.49	200	4+975.00	3,713,122.76	771,195.55	240	5+975.00	3,714,043.65	771,434.36

CLIENT:		DESIGN CONSULTANT: (MIN - JV - CEC)		REV	DATE	DESCRIPTION	NAMES:		PROJECT:		ROAD NAME:		SCALE	SHEET CONTENT:
	GOVERNMENT OF KHYBER PAKHTUNKHWA			0	SEP, 2024.	Tender Drawings.	G.DESIGNED	AMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	ACCESS ROAD	NTS	CENTRE LINE COORDINATES	
	COMMUNICATION & WORKS DEPARTMENT			a			DRAWN	IMRAN TARIQ						
	PROJECT IMPLEMENTATION UNIT (PIU)			b			CHECKED	SHAHZAD DURANI						
				c			APPROVED	AQEEL YOUNIS						
												SEP, 2024.	DWG NO:CEC/KP-RRDP/HW/N-KOHAT-2/CLD-02	



Minconsult International Ltd.
JV
Engineering Consultants

CENTER LINE COORDINATES				CENTER LINE COORDINATES				CENTER LINE COORDINATES				CENTER LINE COORDINATES			
SNO	Station	Northing	Easting	SNO	Station	Northing	Easting	SNO	Station	Northing	Easting	SNO	Station	Northing	Easting
241	6+000.00	3,714,039.92	771,457.19	281	7+000.00	3,713,779.15	772,376.54	321	8+000.00	3,713,944.12	773,325.47	361	9+000.00	3,713,853.94	774,284.55
242	6+025.00	3,714,022.44	771,475.05	282	7+025.00	3,713,770.67	772,399.82	322	8+025.00	3,713,945.09	773,350.45	362	9+025.00	3,713,866.02	774,306.44
243	6+050.00	3,714,006.21	771,494.01	283	7+050.00	3,713,771.73	772,424.76	323	8+050.00	3,713,946.07	773,375.43	363	9+050.00	3,713,878.10	774,328.32
244	6+075.00	3,713,994.69	771,516.16	284	7+075.00	3,713,771.72	772,449.73	324	8+075.00	3,713,947.05	773,400.42	364	9+075.00	3,713,889.58	774,350.52
245	6+100.00	3,713,984.01	771,538.76	285	7+100.00	3,713,767.40	772,474.32	325	8+100.00	3,713,945.89	773,425.36	365	9+088.69	3,713,895.04	774,363.07
246	6+125.00	3,713,972.13	771,560.76	286	7+125.00	3,713,761.50	772,498.61	326	8+125.00	3,713,942.19	773,450.08				
247	6+150.00	3,713,960.12	771,582.68	287	7+150.00	3,713,755.60	772,522.91	327	8+150.00	3,713,931.46	773,472.35				
248	6+175.00	3,713,947.48	771,604.25	288	7+175.00	3,713,754.07	772,547.73	328	8+175.00	3,713,914.67	773,490.85				
249	6+200.00	3,713,933.89	771,625.22	289	7+200.00	3,713,760.86	772,571.71	329	8+200.00	3,713,903.88	773,513.26				
250	6+225.00	3,713,920.28	771,646.20	290	7+225.00	3,713,769.61	772,595.13	330	8+225.00	3,713,896.49	773,537.14				
251	6+250.00	3,713,906.67	771,667.17	291	7+250.00	3,713,778.36	772,618.55	331	8+250.00	3,713,888.57	773,560.85				
252	6+275.00	3,713,893.15	771,688.20	292	7+275.00	3,713,785.39	772,642.47	332	8+275.00	3,713,879.27	773,584.05				
253	6+300.00	3,713,882.70	771,710.86	293	7+300.00	3,713,785.56	772,667.42	333	8+300.00	3,713,869.81	773,607.20				
254	6+325.00	3,713,874.58	771,734.50	294	7+325.00	3,713,789.20	772,692.05	334	8+325.00	3,713,860.35	773,630.34				
255	6+350.00	3,713,867.82	771,758.56	295	7+350.00	3,713,799.36	772,714.86	335	8+350.00	3,713,851.00	773,653.52				
256	6+375.00	3,713,861.81	771,782.83	296	7+375.00	3,713,810.39	772,737.30	336	8+375.00	3,713,843.33	773,677.31				
257	6+400.00	3,713,859.48	771,807.67	297	7+400.00	3,713,821.41	772,759.73	337	8+400.00	3,713,836.62	773,701.39				
258	6+425.00	3,713,862.10	771,832.51	298	7+425.00	3,713,829.46	772,783.35	338	8+425.00	3,713,829.43	773,725.32				
259	6+450.00	3,713,865.46	771,857.29	299	7+450.00	3,713,840.39	772,805.61	339	8+450.00	3,713,821.17	773,748.90				
260	6+475.00	3,713,868.81	771,882.06	300	7+475.00	3,713,851.57	772,827.89	340	8+475.00	3,713,817.74	773,773.64				
261	6+500.00	3,713,872.17	771,906.83	301	7+500.00	3,713,861.00	772,851.05	341	8+500.00	3,713,815.09	773,798.50				
262	6+525.00	3,713,875.75	771,931.58	302	7+525.00	3,713,870.44	772,874.20	342	8+525.00	3,713,812.87	773,823.40				
263	6+550.00	3,713,880.54	771,956.11	303	7+550.00	3,713,879.87	772,897.35	343	8+550.00	3,713,810.83	773,848.32				
264	6+575.00	3,713,886.21	771,980.46	304	7+575.00	3,713,890.01	772,920.20	344	8+575.00	3,713,808.91	773,873.24				
265	6+600.00	3,713,890.16	772,005.10	305	7+600.00	3,713,901.76	772,942.26	345	8+600.00	3,713,807.39	773,898.20				
266	6+625.00	3,713,889.23	772,030.06	306	7+625.00	3,713,913.56	772,964.30	346	8+625.00	3,713,805.94	773,923.15				
267	6+650.00	3,713,886.87	772,054.95	307	7+650.00	3,713,921.99	772,987.80	347	8+650.00	3,713,804.47	773,948.11				
268	6+675.00	3,713,882.55	772,079.56	308	7+675.00	3,713,929.55	773,011.63	348	8+675.00	3,713,801.82	773,972.96				
269	6+700.00	3,713,877.30	772,104.00	309	7+700.00	3,713,938.63	773,034.90	349	8+700.00	3,713,798.43	773,997.73				
270	6+725.00	3,713,872.05	772,128.45	310	7+725.00	3,713,949.54	773,057.39	350	8+725.00	3,713,795.05	774,022.50				
271	6+750.00	3,713,868.12	772,153.12	311	7+750.00	3,713,960.47	773,079.88	351	8+750.00	3,713,792.04	774,047.32				
272	6+775.00	3,713,866.65	772,178.07	312	7+775.00	3,713,969.98	773,102.94	352	8+775.00	3,713,791.72	774,072.30				
273	6+800.00	3,713,865.48	772,203.05	313	7+800.00	3,713,972.53	773,127.71	353	8+800.00	3,713,793.51	774,097.23				
274	6+825.00	3,713,862.14	772,227.78	314	7+825.00	3,713,969.15	773,152.47	354	8+825.00	3,713,795.37	774,122.16				
275	6+850.00	3,713,859.95	772,252.64	315	7+850.00	3,713,965.38	773,177.19	355	8+850.00	3,713,797.26	774,147.09				
276	6+875.00	3,713,849.02	772,274.13	316	7+875.00	3,713,961.61	773,201.90	356	8+875.00	3,713,801.14	774,171.77				
277	6+900.00	3,713,830.76	772,291.20	317	7+900.00	3,713,957.61	773,226.58	357	8+900.00	3,713,808.24	774,195.72				
278	6+925.00	3,713,815.63	772,311.01	318	7+925.00	3,713,953.24	773,251.19	358	8+925.00	3,713,818.43	774,218.53				
279	6+950.00	3,713,803.68	772,332.97	319	7+950.00	3,713,948.84	773,275.80	359	8+950.00	3,713,831.03	774,240.12				
280	6+975.00	3,713,791.60	772,354.86	320	7+975.00	3,713,945.04	773,300.51	360	8+975.00	3,713,842.59	774,262.28				

Younis
Deputy Director Construction
Provincial Road, Improvement Project
C&W Department, Peshawar



CLIENT:		DESIGN CONSULTANT:		REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings.	G. DESIGNED	AMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	NTS	CENTRE LINE COORDINATES		
		a			DRAWN	IMRAN TARIQ			DATE:			
		b			CHECKED	SHAHZAD DURANI						
		c			APPROVED	AQEEL YOUNIS			SEP, 2024.			
									ACCESS ROAD		DWG NO:CEC/KP-RRDP/HW//N-KOHAT-2/CLD-03	

HORIZONTAL CURVE DATA

Paul S

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



Curve Table: Alignments

Curve #	PI Station	PI Easting	PI Northing	PC Station	PC Easting	PC Northing	PT Station	PT Easting	PT Northing	Radius	Length	Tangent Length	Delta Angle	Chord Direction
C1	0+044.38	768833.4727	3709569.4272	0+029.63	768818.9903	3709566.6390	0+059.00	768846.9399	3709575.4396	127.85	29.37	14.748	13.1609	N72° 31' 20.08"E
C2	0+109.29	768892.8609	3709595.9408	0+096.35	768881.0436	3709590.6651	0+119.07	768892.2804	3709608.8692	19.00	22.72	12.941	68.5123	N31° 41' 08.20"E
C3	0+159.14	768890.4835	3709648.8956	0+140.58	768891.3155	3709630.3614	0+174.61	768905.5181	3709659.7661	34.38	34.03	18.553	56.7024	N25° 46' 50.35"E
C4	0+231.36	768951.5091	3709693.0190	0+222.34	768944.1929	3709687.7292	0+238.34	768949.6297	3709701.8494	13.86	16.00	9.028	66.1466	N21° 03' 30.77"E
C5	0+275.57	768941.8791	3709738.2672	0+261.43	768944.8239	3709724.4305	0+289.56	768942.5529	3709752.3977	109.33	28.14	14.147	14.7450	N4° 38' 32.25"W
C6	0+326.98	768944.3352	3709789.7721	0+313.64	768943.6998	3709776.4484	0+337.93	768956.0702	3709796.1137	23.63	24.29	13.339	58.8831	N32° 10' 18.27"E
C7	0+435.30	769041.7354	3709842.4070	0+418.79	769027.2085	3709834.5567	0+451.56	769053.2756	3709854.2171	108.70	32.77	16.512	17.2753	N52° 58' 32.27"E
C8	0+480.82	769073.7194	3709875.1389	0+467.35	769064.3076	3709865.5070	0+494.19	769080.9602	3709886.4935	130.18	26.84	13.467	11.8125	N38° 25' 54.13"E
C9	0+573.08	769123.3762	3709953.0081	0+544.17	769107.8345	3709928.6364	0+601.92	769141.6229	3709975.4265	500.00	57.75	28.905	6.6173	N35° 50' 02.68"E
C10	0+653.59	769174.2414	3710015.5025	0+640.76	769166.1427	3710005.5522	0+666.42	769181.9377	3710025.7673	644.39	25.66	12.830	2.2812	N38° 00' 07.64"E
C11	0+733.75	769222.3276	3710079.6369	0+719.33	769213.6792	3710068.1022	0+748.16	769230.7560	3710091.3332	1522.62	28.83	14.417	1.0850	N36° 19' 08.58"E
C12	0+852.69	769291.8652	3710176.1363	0+841.29	769285.2010	3710166.8882	0+864.08	769299.0717	3710184.9683	380.00	22.79	11.399	3.4364	N37° 29' 41.20"E
C13	0+934.48	769343.5804	3710239.5161	0+923.56	769336.6725	3710231.0501	0+945.23	769352.7397	3710245.4740	70.00	21.68	10.927	17.7439	N48° 05' 05.79"E
C14	0+988.35	769388.8854	3710268.9859	0+978.92	769380.9785	3710263.8427	0+997.74	769395.7726	3710275.4309	107.20	18.82	9.432	10.0565	N51° 55' 43.07"E
C15	1+023.54	769414.6141	3710293.0621	1+013.66	769407.3950	3710286.3067	1+030.78	769410.4720	3710302.0395	13.69	17.13	9.887	71.6686	N11° 03' 57.89"E
C16	1+055.72	769400.0222	3710324.6880	1+043.05	769405.3313	3710313.1813	1+068.19	769398.5212	3710337.2712	80.17	25.14	12.672	17.9657	N15° 47' 07.30"W
C17	1+093.42	769395.5331	3710362.3204	1+081.72	769396.9190	3710350.7026	1+105.11	769394.6820	3710373.9896	509.51	23.40	11.700	2.6310	N5° 29' 13.34"W
C18	1+150.79	769391.3595	3710419.5430	1+128.42	769392.9866	3710397.2337	1+168.81	769410.1322	3710431.7060	37.80	40.40	22.369	61.2319	N26° 26' 39.86"E
C19	1+202.13	769438.0928	3710449.8220	1+190.94	769428.7044	3710443.7391	1+213.07	769444.7223	3710458.8327	61.20	22.13	11.187	20.7168	N46° 42' 07.01"E
C20	1+230.76	769455.2043	3710473.0795	1+222.94	769450.5678	3710466.7776	1+238.58	769459.6336	3710479.5288	481.25	15.65	7.824	1.8628	N35° 24' 43.68"E
C21	1+286.98	769487.0302	3710519.4199	1+272.51	769478.8419	3710507.4971	1+301.25	769498.2246	3710528.5788	101.44	28.73	14.464	16.2301	N42° 35' 44.86"E
C22	1+407.90	769580.7716	3710596.1167	1+398.42	769573.4372	3710590.1158	1+417.34	769588.9570	3710600.8919	120.00	18.91	9.476	9.0306	N55° 13' 34.12"E
C23	1+462.50	769627.9661	3710623.6491	1+457.44	769623.5960	3710621.0997	1+467.52	769632.7584	3710625.2714	50.00	10.08	5.059	11.5560	N65° 31' 10.07"E
C24	1+478.85	769643.4880	3710628.9038	1+470.59	769635.6659	3710626.2557	1+486.85	769649.4853	3710634.5809	37.67	16.26	8.258	24.7271	N58° 56' 02.13"E
C25	1+512.33	769667.9831	3710652.0916	1+501.29	769659.9685	3710644.5047	1+523.12	769678.1728	3710656.3301	60.00	21.83	11.036	20.8443	N56° 59' 33.08"E
C26	1+626.72	769773.8260	3710696.1180	1+613.52	769761.6442	3710691.0508	1+638.85	769779.9869	3710707.7849	36.67	25.33	13.194	39.5778	N47° 37' 32.74"E
C27	1+667.76	769793.4846	3710733.3457	1+657.77	769788.8192	3710724.5108	1+677.03	769802.5726	3710737.4963	29.33	19.26	9.991	37.6162	N46° 38' 41.81"E
C28	1+758.07	769876.2966	3710771.1672	1+745.64	769864.9845	3710766.0008	1+769.81	769882.9224	3710781.6913	41.64	24.17	12.436	33.2589	N48° 49' 24.96"E
C29	1+799.43	769898.7064	3710806.7614	1+788.40	769892.8256	3710797.4209	1+810.45	769905.5403	3710815.4290	208.52	22.05	11.038	6.0599	N35° 13' 26.80"E
C30	1+824.52	769914.2488	3710826.4740	1+815.10	769908.4190	3710819.0800	1+833.78	769917.5629	3710835.2873	60.66	18.68	9.416	17.6459	N29° 25' 52.10"E
C31	1+868.50	769929.7819	3710867.7812	1+868.33	769929.7245	3710867.6285	1+868.66	769929.8368	3710867.9348	20.00	0.33	0.163	0.9347	N20° 08' 27.09"E
C32	1+886.58	769935.8708	3710884.8116	1+873.35	769931.4140	3710872.3462	1+899.19	769946.0621	3710893.2604	48.28	25.84	13.238	30.6669	N35° 00' 25.00"E
C33	1+966.34	769997.7608	3710936.1200	1+956.35	769990.0721	3710929.7459	1+975.97	770001.7839	3710945.2611	42.27	19.61	9.987	26.5855	N37° 02' 51.50"E
C34	2+012.26	770016.4030	3710978.4780	2+004.62	770013.3244	3710971.4828	2+019.88	770018.6154	3710985.7935	126.25	15.27	7.643	6.9286	N20° 17' 26.09"E
C35	2+042.53	770025.1704	3711007.4687	2+034.27	770022.7806	3710999.5664	2+050.59	770030.2735	3711013.9585	43.79	16.32	8.256	21.3528	N27° 30' 09.66"E
C36	2+070.95	770042.8546	3711029.9582	2+062.75	770037.7906	3711023.5182	2+078.88	770050.1755	3711033.6354	36.72	16.12	8.193	25.1512	N50° 45' 16.87"E
C37	2+096.98	770066.3523	3711041.7608	2+088.68	770058.9391	3711038.0373	2+103.73	770066.8404	3711050.0423	14.38	15.05	8.296	59.9572	N33° 21' 06.07"E
C38	2+169.19	770070.6920	3711115.3896	2+158.96	770070.0900	3711105.1765	2+177.94	770062.8883	3711122.0057	20.48	18.98	10.231	53.0814	N23° 10' 03.38"W
C39	2+235.37	770019.0817	3711159.1454	2+220.83	770030.1751	3711149.7403	2+247.90	770019.6430	3711173.6782	29.87	27.07	14.544	51.9201	N23° 44' 53.68"W
C40	2+275.12	770020.6936	3711200.8797	2+263.36	770020.2398	3711189.1297	2+286.57	770016.6186	3711211.9097	59.15	23.21	11.759	22.4883	N9° 01' 56.37"W


 Deputy Director Construction-in-
 Provincial Road Improvement Project
 C&W Department, Peshawar


CLIENT:		DESIGN CONSULTANT: (MIN - JV - CEC)		REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58635-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP,2024	Tender Drawings.	G.DESIGNED	AAMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	N.T.S	HORIZONTAL CURVE DATA		
		a			DRAWN	IMRAN TARIQ						
		b			CHECKED	SHAHZAD DURRANI						
		c			APPROVED	AQEEL YOUNIS			ACCESS ROAD		SEP,2024	DWG NO:CEC/KP-RRDP/HW/IN-KOHAT-2 HCD/A

Curve Table: Alignments

Curve #	PI Station	PI Easting	PI Northing	PC Station	PC Easting	PC Northing	PT Station	PT Easting	PT Northing	Radius	Length	Tangent Length	Delta Angle	Chord Direction
C41	2+324.99	770003.3055	3711247.9453	2+313.62	770007.2443	3711237.2838	2+335.54	770006.6437	3711258.8100	33.62	21.92	11.366	37.3564	N1° 35' 53.75"W
C42	2+364.82	770015.2408	3711286.7900	2+352.58	770011.6461	3711275.0908	2+376.90	770015.4739	3711299.0267	87.15	24.32	12.239	15.9884	N9° 05' 08.65"E
C43	2+399.10	770015.8968	3711321.2229	2+386.45	770015.6559	3711308.5786	2+411.65	770013.5390	3711333.6477	122.00	25.20	12.647	11.8367	N4° 49' 36.56"W
C44	2+456.76	770005.1284	3711377.9680	2+450.05	770006.3791	3711371.3770	2+463.44	770002.7973	3711384.2587	80.00	13.39	6.709	9.5871	N15° 32' 19.31"W
C45	2+486.53	769994.7750	3711405.9086	2+475.50	769998.6086	3711395.5629	2+496.89	769997.4606	3711416.6099	35.62	21.40	11.033	34.4206	N3° 07' 18.96"W
C46	2+509.72	770000.5835	3711429.0531	2+500.29	769998.2869	3711419.9022	2+517.41	770009.6502	3711431.6618	16.39	17.12	9.435	59.8598	N44° 01' 05.78"E
C47	2+551.98	770042.8774	3711441.2221	2+542.43	770033.6931	3711438.5795	2+561.11	770049.5251	3711448.0882	35.82	18.68	9.557	29.8740	N59° 00' 40.27"E
C48	2+582.74	770064.5738	3711463.6312	2+571.20	770056.5457	3711455.3395	2+594.03	770069.1494	3711474.2267	63.14	22.83	11.541	20.7172	N33° 42' 56.18"E
C49	2+628.93	770082.9858	3711506.2667	2+616.80	770078.1780	3711495.1336	2+640.18	770093.5931	3711512.1442	35.57	23.37	12.127	37.6521	N42° 10' 59.11"E
C50	2+677.44	770126.1888	3711530.2055	2+669.16	770118.9420	3711526.1901	2+683.64	770124.9567	3711538.3982	11.93	14.48	8.285	69.5612	N26° 13' 42.80"E
C51	2+699.29	770122.6291	3711553.8766	2+690.49	770123.9378	3711545.1740	2+707.96	770118.7750	3711561.7882	57.44	17.47	8.800	17.4208	N17° 15' 44.75"W
C52	2+730.48	770108.9108	3711582.0372	2+718.41	770114.1957	3711571.1885	2+742.05	770109.4524	3711594.0925	47.44	23.63	12.067	28.5451	N11° 42' 01.01"W
C53	2+757.13	770110.1291	3711609.1563	2+744.96	770109.5833	3711597.0055	2+769.29	770110.3632	3711621.3172	948.27	24.32	12.163	1.4697	N1° 50' 14.60"E
C54	2+825.03	770111.4356	3711677.0439	2+813.52	770111.2143	3711665.5427	2+835.99	770117.4334	3711686.8600	42.45	22.47	11.503	30.3233	N16° 15' 50.94"E
C55	2+887.86	770144.4789	3711731.1228	2+877.43	770139.0395	3711722.2207	2+897.54	770143.3688	3711741.4958	30.70	20.11	10.432	37.5342	N12° 39' 31.19"E
C56	2+921.94	770140.7728	3711765.7528	2+914.17	770141.5990	3711758.0331	2+928.99	770145.3715	3711772.0080	20.00	14.81	7.764	42.4311	N15° 06' 25.57"E
C57	2+958.96	770163.1261	3711796.1579	2+953.81	770160.0745	3711792.0071	2+964.06	770167.0713	3711799.4711	43.03	10.25	5.152	13.6532	N43° 08' 57.41"E
C58	3+003.02	770196.9030	3711824.5243	2+990.24	770187.1149	3711816.3041	3+014.64	770198.6614	3711837.1847	33.24	24.41	12.782	42.0685	N28° 56' 29.99"E
C59	3+054.17	770204.0998	3711876.3394	3+043.67	770202.6556	3711865.9415	3+060.78	770214.5924	3711876.0130	11.68	17.10	10.498	83.8740	N49° 50' 39.88"E
C60	3+095.60	770249.3926	3711874.9307	3+084.94	770238.7461	3711875.2618	3+106.24	770259.9955	3711873.9123	329.31	21.30	10.652	3.7052	S86° 21' 57.63"E
C61	3+167.18	770320.6557	3711868.0857	3+153.10	770306.6443	3711869.4315	3+181.20	770334.7059	3711868.9338	180.03	28.09	14.076	8.9411	S88° 59' 02.27"E
C62	3+219.79	770373.2312	3711871.2594	3+193.46	770346.9496	3711869.6729	3+245.30	770396.4343	3711883.7035	120.00	51.84	26.329	24.7506	N74° 10' 12.75"E
C63	3+282.62	770429.3196	3711901.3402	3+271.16	770419.2259	3711895.9268	3+294.05	770439.9653	3711905.5658	200.00	22.88	11.454	6.5553	N65° 04' 21.32"E
C64	3+309.12	770453.9762	3711911.1272	3+298.79	770444.3718	3711907.3149	3+319.41	770462.8026	3711916.5006	122.00	20.62	10.333	9.6827	N63° 30' 32.08"E
C65	3+373.68	770509.1600	3711944.7222	3+358.36	770496.0763	3711936.7571	3+388.89	770523.5930	3711949.8521	148.66	30.53	15.318	11.7659	N64° 33' 01.82"E
C66	3+512.65	770640.2047	3711991.2990	3+494.73	770623.3236	3711985.2990	3+530.50	770656.0096	3711999.7356	240.33	35.77	17.916	8.5267	N66° 10' 12.32"E
C67	3+604.37	770721.1778	3712034.5224	3+588.48	770707.1587	3712027.0390	3+620.26	770735.0224	3712042.3241	1391.24	31.78	15.891	1.3089	N61° 15' 08.28"E
C68	3+665.84	770774.7362	3712064.7036	3+649.86	770760.8125	3712056.8573	3+681.82	770788.8787	3712072.1485	1117.43	31.96	15.982	1.6389	N61° 25' 02.26"E
C69	3+745.00	770844.7796	3712101.5760	3+727.93	770829.6824	3712093.6285	3+762.06	770860.0808	3712109.1234	1296.52	34.12	17.061	1.5079	N62° 59' 26.36"E
C70	3+884.03	770969.4733	3712163.0827	3+872.05	770958.7294	3712157.7831	3+895.54	770976.4987	3712172.7863	48.34	23.49	11.980	27.8399	N49° 49' 28.70"E
C71	3+937.33	771001.0065	3712206.6366	3+925.64	770994.1506	3712197.1672	3+948.98	771009.2162	3712214.9597	153.64	23.34	11.691	8.7026	N40° 15' 21.63"E
C72	4+005.56	771048.9510	3712255.2428	3+990.61	771038.4505	3712244.5974	4+020.50	771060.1427	3712265.1590	444.78	29.89	14.953	3.8509	N46° 31' 58.02"E
C73	4+119.82	771134.4820	3712331.0254	4+104.43	771122.9640	3712320.8202	4+135.15	771144.2526	3712342.9143	194.58	30.71	15.389	9.0436	N43° 56' 11.17"E
C74	4+173.38	771168.5295	3712372.4540	4+157.68	771158.5603	3712360.3236	4+188.96	771175.6759	3712386.4347	145.24	31.28	15.701	12.3402	N33° 14' 40.33"E
C75	4+231.75	771195.1497	3712424.5317	4+221.58	771190.5234	3712415.4811	4+241.88	771198.5127	3712434.1237	150.00	20.30	10.164	7.7532	N23° 11' 52.18"E
C76	4+283.43	771212.2609	3712473.3358	4+259.79	771204.4375	3712451.0220	4+303.51	771198.7646	3712492.7514	46.28	43.72	23.646	54.1255	N7° 44' 29.55"W
C77	4+320.76	771188.9195	3712506.9143	4+308.07	771196.1629	3712496.4942	4+332.57	771189.3683	3712519.5968	38.11	24.50	12.690	36.8311	N16° 23' 19.58"W
C78	4+356.21	771190.2047	3712543.2291	4+345.46	771189.8244	3712532.4831	4+366.88	771188.2917	3712553.8103	100.00	21.42	10.753	12.2746	N4° 06' 37.89"W
C79	4+431.83	771176.7382	3712617.7157	4+417.82	771179.2301	3712603.9326	4+445.77	771176.5379	3712631.7208	169.85	27.95	14.007	9.4282	N5° 32' 01.27"W
C80	4+478.28	771176.0729	3712664.2256	4+461.65	771176.3107	3712647.6032	4+494.42	771182.5632	3712679.5305	78.89	32.77	16.624	23.8000	N11° 04' 49.64"E

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C&W Department, Peshawar

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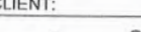
CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP,2024	Tender Drawings.	G.DESIGNED	AAMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	N.T.S	HORIZONTAL CURVE DATA			
		a			DRAWN	IMRAN TARIQ							
		b			CHECKED	SHAHZAD DURRANI							
		c			APPROVED	AQEEL YOUNIS				ACCESS ROAD	SEP,2024	DWG NO:CEC/KP-RRDP/HW/N-KOHAT-2 HCD/ B	

Curve Table: - Alignments

Curve #	PI Station	PI Easting	PI Northing	PC Station	PC Easting	PC Northing	PT Station	PT Easting	PT Northing	Radius	Length	Tangent Length	Delta Angle	Chord Direction
C81	4+559.14	771207.8298	3712739.1111	4+541.57	771200.9701	3712722.9354	4+576.71	771215.1137	3712755.1003	1332.01	35.14	17.570	1.5115	N23° 44' 10.35"E
C82	4+673.33	771255.1708	3712843.0302	4+657.93	771248.7879	3712829.0191	4+688.68	771259.7100	3712857.7424	239.87	30.75	15.397	7.3452	N20° 49' 09.67"E
C83	4+759.61	771280.6209	3712925.5173	4+743.59	771275.8978	3712910.2093	4+774.32	771274.3828	3712940.2730	43.94	30.72	16.020	40.0634	N2° 53' 05.67"W
C84	4+828.62	771253.2365	3712990.2928	4+820.95	771256.2229	3712983.2287	4+836.29	771250.5779	3712997.4868	333.55	15.34	7.669	2.6344	N21° 35' 57.74"W
C85	4+898.15	771229.1330	3713055.5155	4+886.86	771233.0479	3713044.9219	4+909.18	771221.5959	3713063.9265	59.26	22.32	11.294	21.5814	N31° 04' 22.25"W
C86	4+934.81	771204.4945	3713083.0108	4+922.15	771212.9416	3713073.5842	4+946.91	771201.7162	3713095.3597	48.62	24.77	12.658	29.1844	N27° 16' 16.88"W
C87	5+042.11	771180.8205	3713188.2388	5+030.20	771183.4366	3713176.6107	5+053.98	771180.1186	3713200.1367	146.49	23.78	11.919	9.3030	N8° 01' 39.69"W
C88	5+067.99	771179.2934	3713214.1239	5+057.03	771179.9388	3713203.1848	5+078.79	771175.5239	3713224.4132	74.46	21.76	10.958	16.7443	N11° 44' 54.13"W
C89	5+115.94	771162.7465	3713259.2905	5+083.91	771173.7625	3713229.2211	5+145.46	771173.1342	3713289.5826	90.31	61.55	32.024	39.0484	N0° 35' 46.86"W
C90	5+205.09	771192.4761	3713345.9861	5+190.67	771187.7973	3713332.3421	5+219.44	771199.4966	3713358.5862	161.65	28.77	14.424	10.1980	N24° 01' 36.53"E
C91	5+264.27	771221.3195	3713397.7526	5+250.84	771214.7820	3713386.0196	5+277.23	771221.9969	3713411.1669	57.64	26.39	13.431	26.2349	N16° 00' 30.09"E
C92	5+359.13	771226.1272	3713492.9574	5+335.42	771224.9313	3713469.2750	5+382.81	771225.1236	3713516.6487	510.73	47.39	23.713	5.3166	N0° 13' 57.50"E
C93	5+432.68	771223.0127	3713566.4806	5+410.54	771223.9501	3713544.3526	5+454.80	771219.9771	3713588.4195	465.15	44.26	22.148	5.4521	N5° 09' 06.03"W
C94	5+497.02	771214.1906	3713630.2405	5+478.18	771216.7719	3713611.5848	5+515.47	771218.1652	3713648.6498	106.48	37.28	18.833	20.0610	N2° 09' 09.95"E
C95	5+537.37	771222.7871	3713670.0576	5+526.92	771220.5832	3713659.8497	5+547.78	771223.6305	3713680.4666	158.25	20.86	10.443	7.5512	N8° 24' 27.53"E
C96	5+569.09	771225.3510	3713701.7024	5+556.13	771224.3044	3713688.7848	5+581.86	771230.0584	3713713.7771	88.48	25.74	12.960	16.6665	N12° 57' 55.10"E
C97	5+607.88	771239.5102	3713738.0213	5+590.97	771233.3675	3713722.2650	5+624.78	771246.6857	3713753.3350	508.74	33.81	16.911	3.8078	N23° 12' 08.83"E
C98	5+730.60	771291.5860	3713849.1593	5+715.18	771285.0424	3713835.1941	5+745.97	771300.0817	3713862.0305	212.02	30.79	15.422	8.3206	N29° 15' 59.90"E
C99	5+803.85	771331.9620	3713910.3301	5+787.22	771322.8038	3713896.4552	5+820.46	771340.2312	3713924.7524	529.24	33.24	16.625	3.5984	N31° 37' 39.74"E
C100	5+904.69	771382.1270	3713997.8222	5+889.79	771374.7162	3713984.8972	5+919.47	771392.1008	3714008.8901	139.47	29.69	14.899	12.1950	N35° 55' 33.61"E
C101	5+953.91	771415.1543	3714034.4725	5+946.35	771410.0906	3714028.8534	5+961.28	771421.9789	3714037.7346	38.15	14.93	7.564	22.4292	N53° 14' 17.27"E
C102	5+989.17	771447.1364	3714049.7596	5+976.49	771435.7023	3714044.2942	5+998.61	771456.1934	3714040.8952	18.12	22.12	12.673	69.9315	S80° 34' 53.47"E
C103	6+049.01	771492.2090	3714005.6455	6+031.89	771479.9792	3714017.6152	6+065.78	771507.7707	3713998.5270	98.03	33.88	17.113	19.8031	S55° 31' 02.36"E
C104	6+097.85	771536.9375	3713985.1850	6+085.61	771525.8047	3713990.2776	6+110.08	771547.6735	3713979.3017	338.58	24.47	12.242	4.1415	S63° 20' 53.16"E
C105	6+165.49	771596.2605	3713952.6761	6+153.59	771585.8266	3713958.3939	6+177.37	771606.2416	3713946.2004	320.45	23.78	11.898	4.2527	S59° 09' 03.57"E
C106	6+284.97	771696.5030	3713887.6392	6+270.02	771683.9606	3713895.7766	6+299.77	771710.6403	3713882.7741	121.90	29.75	14.951	13.9853	S64° 01' 02.29"E
C107	6+332.93	771741.9976	3713871.9830	6+322.19	771731.8386	3713875.4790	6+343.66	771752.4173	3713869.3645	251.93	21.47	10.744	4.8839	S73° 27' 06.78"E
C108	6+391.94	771799.2384	3713857.5985	6+370.56	771778.5055	3713862.8086	6+412.80	771820.4226	3713860.4670	110.92	42.24	21.377	21.8176	S86° 48' 09.36"E
C109	6+532.63	771939.1712	3713876.5465	6+510.30	771917.0440	3713873.5503	6+554.93	771960.9132	3713881.6333	468.54	44.62	22.329	5.4569	N79° 33' 36.52"E
C110	6+597.90	772002.7602	3713891.4241	6+579.73	771985.0643	3713887.2838	6+615.79	772020.8754	3713889.9669	116.27	36.06	18.174	17.7672	N85° 42' 54.98"E
C111	6+654.47	772059.4386	3713886.8649	6+635.84	772040.8607	3713888.3593	6+673.06	772077.6615	3713882.9536	283.78	37.22	18.638	7.5153	S81° 38' 36.49"E
C112	6+743.74	772146.7658	3713868.1210	6+726.01	772129.4367	3713871.8405	6+761.38	772164.4700	3713867.2892	215.02	35.37	17.724	9.4244	S82° 35' 52.74"E
C113	6+812.47	772215.5034	3713864.8916	6+803.11	772206.1500	3713865.3311	6+821.79	772224.6365	3713862.8263	106.46	18.68	9.364	10.0527	S82° 17' 01.79"E
C114	6+831.92	772234.5172	3713860.5919	6+823.10	772225.9192	3713862.5362	6+840.68	772243.3268	3713860.2798	94.01	17.58	8.815	10.7138	S82° 36' 51.92"E
C115	6+861.72	772264.3542	3713859.5350	6+851.35	772253.9951	3713859.9019	6+871.01	772271.4144	3713851.9456	25.00	19.65	10.366	45.0400	S65° 27' 04.79"E
C116	6+911.95	772299.2995	3713821.9706	6+896.81	772288.9927	3713833.0498	6+926.81	772312.5955	3713814.7461	92.65	30.00	15.132	18.5511	S52° 12' 24.65"E
C117	6+970.64	772351.1043	3713793.8222	6+955.58	772337.8722	3713801.0119	6+985.70	772364.1476	3713786.2957	1174.58	30.12	15.059	1.4691	S60° 44' 52.19"E
C118	7+019.80	772393.6861	3713769.2507	7+003.88	772379.8928	3713777.2101	7+034.76	772409.5609	3713770.5150	51.22	30.88	15.925	34.5401	S77° 17' 00.06"E
C119	7+073.99	772448.6671	3713773.6294	7+051.13	772425.8875	3713771.8153	7+096.45	772470.8732	3713768.2364	142.64	45.32	22.852	18.2040	S85° 27' 05.03"E
C120	7+171.64	772543.9385	3713750.4917	7+150.07	772522.9811	3713755.5814	7+191.93	772564.1422	3713758.0370	70.26	41.85	21.567	34.1294	N86° 35' 09.40"E

Paul S
Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



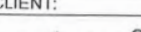
CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP,2024	Tender Drawings.	G.DESIGNED	AAMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	N.T.S	HORIZONTAL CURVE DATA			
		a			DRAWN	IMRAN TARIQ							
		b			CHECKED	SHAHZAD DURRANI							
		c			APPROVED	AQEEL YOUNIS			ACCESS ROAD		SEP,2024	DWG NO:CEC/HW/KP-RRDP/N-KOHAT-2 HCD/ C	

Curve Table: Alignments

Curve #	PI Station	PI Easting	PI Northing	PC Station	PC Easting	PC Northing	PT Station	PT Easting	PT Northing	Radius	Length	Tangent Length	Delta Angle	Chord Direction
C81	4+559.14	771207.8298	3712739.1111	4+541.57	771200.9701	3712722.9354	4+576.71	771215.1137	3712755.1003	1332.01	35.14	17.570	1.5115	N23° 44' 10.35"E
C82	4+673.33	771255.1708	3712843.0302	4+657.93	771248.7879	3712829.0191	4+688.68	771259.7100	3712857.7424	239.87	30.75	15.397	7.3452	N20° 49' 09.67"E
C83	4+759.61	771280.6209	3712925.5173	4+743.59	771275.8978	3712910.2093	4+774.32	771274.3828	3712940.2730	43.94	30.72	16.020	40.0634	N2° 53' 05.67"W
C84	4+828.62	771253.2365	3712990.2928	4+820.95	771256.2229	3712983.2287	4+836.29	771250.5779	3712997.4868	333.55	15.34	7.669	2.6344	N21° 35' 57.74"W
C85	4+898.15	771229.1330	3713055.5155	4+886.86	771233.0479	3713044.9219	4+909.18	771221.5959	3713063.9265	59.26	22.32	11.294	21.5814	N31° 04' 22.25"W
C86	4+934.81	771204.4945	3713083.0108	4+922.15	771212.9416	3713073.5842	4+946.91	771201.7162	3713095.3597	48.62	24.77	12.658	29.1844	N27° 16' 16.88"W
C87	5+042.11	771180.8205	3713188.2388	5+030.20	771183.4366	3713176.6107	5+053.98	771180.1186	3713200.1367	146.49	23.78	11.919	9.3030	N8° 01' 39.69"W
C88	5+067.99	771179.2934	3713214.1239	5+057.03	771179.9388	3713203.1848	5+078.79	771175.5239	3713224.4132	74.46	21.76	10.958	16.7443	N11° 44' 54.13"W
C89	5+115.94	771162.7465	3713259.2905	5+083.91	771173.7625	3713229.2211	5+145.46	771173.1342	3713289.5826	90.31	61.55	32.024	39.0484	N0° 35' 46.86"W
C90	5+205.09	771192.4761	3713345.9861	5+190.67	771187.7973	3713332.3421	5+219.44	771199.4966	3713358.5862	161.65	28.77	14.424	10.1980	N24° 01' 36.53"E
C91	5+264.27	771221.3195	3713397.7526	5+250.84	771214.7820	3713386.0196	5+277.23	771221.9969	3713411.1669	57.64	26.39	13.431	26.2349	N16° 00' 30.09"E
C92	5+359.13	771226.1272	3713492.9574	5+335.42	771224.9313	3713469.2750	5+382.81	771225.1236	3713516.6487	510.73	47.39	23.713	5.3166	N0° 13' 57.50"E
C93	5+432.68	771223.0127	3713566.4806	5+410.54	771223.9501	3713544.3526	5+454.80	771219.9771	3713588.4195	465.15	44.26	22.148	5.4521	N5° 09' 06.03"W
C94	5+497.02	771214.1906	3713630.2405	5+478.18	771216.7719	3713611.5848	5+515.47	771218.1652	3713648.6498	106.48	37.28	18.833	20.0610	N2° 09' 09.95"E
C95	5+537.37	771222.7871	3713670.0576	5+526.92	771220.5832	3713659.8497	5+547.78	771223.6305	3713680.4666	158.25	20.86	10.443	7.5512	N8° 24' 27.53"E
C96	5+569.09	771225.3510	3713701.7024	5+556.13	771224.3044	3713688.7848	5+581.86	771230.0584	3713713.7771	88.48	25.74	12.960	16.6665	N12° 57' 55.10"E
C97	5+607.88	771239.5102	3713738.0213	5+590.97	771233.3675	3713722.2650	5+624.78	771246.6857	3713753.3350	508.74	33.81	16.911	3.8078	N23° 12' 08.83"E
C98	5+730.60	771291.5860	3713849.1593	5+715.18	771285.0424	3713835.1941	5+745.97	771300.0817	3713862.0305	212.02	30.79	15.422	8.3206	N29° 15' 59.90"E
C99	5+803.85	771331.9620	3713910.3301	5+787.22	771322.8038	3713896.4552	5+820.46	771340.2312	3713924.7524	529.24	33.24	16.625	3.5984	N31° 37' 39.74"E
C100	5+904.69	771382.1270	3713997.8222	5+889.79	771374.7162	3713984.8972	5+919.47	771392.1008	3714008.8901	139.47	29.69	14.899	12.1950	N35° 55' 33.61"E
C101	5+953.91	771415.1543	3714034.4725	5+946.35	771410.0906	3714028.8534	5+961.28	771421.9789	3714037.7346	38.15	14.93	7.564	22.4292	N53° 14' 17.27"E
C102	5+989.17	771447.1364	3714049.7596	5+976.49	771435.7023	3714044.2942	5+998.61	771456.1934	3714040.8952	18.12	22.12	12.673	69.9315	S80° 34' 53.47"E
C103	6+049.01	771492.2090	3714005.6455	6+031.89	771479.9792	3714017.6152	6+065.78	771507.7707	3713998.5270	98.03	33.88	17.113	19.8031	S55° 31' 02.36"E
C104	6+097.85	771536.9375	3713985.1850	6+085.61	771525.8047	3713990.2776	6+110.08	771547.6735	3713979.3017	338.58	24.47	12.242	4.1415	S63° 20' 53.16"E
C105	6+165.49	771596.2605	3713952.6761	6+153.59	771585.8266	3713958.3939	6+177.37	771606.2416	3713946.2004	320.45	23.78	11.898	4.2527	S59° 09' 03.57"E
C106	6+284.97	771696.5030	3713887.6392	6+270.02	771683.9606	3713895.7766	6+299.77	771710.6403	3713882.7741	121.90	29.75	14.951	13.9853	S64° 01' 02.29"E
C107	6+332.93	771741.9976	3713871.9830	6+322.19	771731.8386	3713875.4790	6+343.66	771752.4173	3713869.3645	251.93	21.47	10.744	4.8839	S73° 27' 06.78"E
C108	6+391.94	771799.2384	3713857.5985	6+370.56	771778.5055	3713862.8086	6+412.80	771820.4226	3713860.4670	110.92	42.24	21.377	21.8176	S86° 48' 09.36"E
C109	6+532.63	771939.1712	3713876.5465	6+510.30	771917.0440	3713873.5503	6+554.93	771960.9132	3713881.6333	468.54	44.62	22.329	5.4569	N79° 33' 36.52"E
C110	6+597.90	772002.7602	3713891.4241	6+579.73	771985.0643	3713887.2838	6+615.79	772020.8754	3713889.9669	116.27	36.06	18.174	17.7672	N85° 42' 54.98"E
C111	6+654.47	772059.4386	3713886.8649	6+635.84	772040.8607	3713888.3593	6+673.06	772077.6615	3713882.9536	283.78	37.22	18.638	7.5153	S81° 38' 36.49"E
C112	6+743.74	772146.7658	3713868.1210	6+726.01	772129.4367	3713871.8405	6+761.38	772164.4700	3713867.2892	215.02	35.37	17.724	9.4244	S82° 35' 52.74"E
C113	6+812.47	772215.5034	3713864.8916	6+803.11	772206.1500	3713865.3311	6+821.79	772224.6365	3713862.8263	106.46	18.68	9.364	10.0527	S82° 17' 01.79"E
C114	6+831.92	772234.5172	3713860.5919	6+823.10	772225.9192	3713862.5362	6+840.68	772243.3268	3713860.2798	94.01	17.58	8.815	10.7138	S82° 36' 51.92"E
C115	6+861.72	772264.3542	3713859.5350	6+851.35	772253.9951	3713859.9019	6+871.01	772271.4144	3713851.9456	25.00	19.65	10.366	45.0400	S65° 27' 04.79"E
C116	6+911.95	772299.2995	3713821.9706	6+896.81	772288.9927	3713833.0498	6+926.81	772312.5955	3713814.7461	92.65	30.00	15.132	18.5511	S52° 12' 24.65"E
C117	6+970.64	772351.1043	3713793.8222	6+955.58	772337.8722	3713801.0119	6+985.70	772364.1476	3713786.2957	1174.58	30.12	15.059	1.4691	S60° 44' 52.19"E
C118	7+019.80	772393.6861	3713769.2507	7+003.88	772379.8928	3713777.2101	7+034.76	772409.5609	3713770.5150	51.22	30.88	15.925	34.5401	S77° 17' 00.06"E
C119	7+073.99	772448.6671	3713773.6294	7+051.13	772425.8875	3713771.8153	7+096.45	772470.8732	3713768.2364	142.64	45.32	22.852	18.2040	S85° 27' 05.03"E
C120	7+171.64	772543.9385	3713750.4917	7+150.07	772522.9811	3713755.5814	7+191.93	772564.1422	3713758.0370	70.26	41.85	21.567	34.1294	N86° 35' 09.40"E

Lawal S
 Deputy Director Construction
 Provincial Road Development Project
 G&W Department, Peshawar



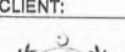
CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT  CREATIVE ENGINEERING CONSULTANTS (CEC)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.	0	SEP, 2024	Tender Drawings.	G.DESIGNED	AAMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	N.T.S	HORIZONTAL CURVE DATA		
						DRAWN	IMRAN TARIQ						
						CHECKED	SHAHZAD DURRANI						
						APPROVED	AQEEL YOUNIS						
									ACCESS ROAD	SEP, 2024	DWG NO: CEC/HW/KP-RRDP/N-KOHAT-2 HCD/ C		

Curve Table: Alignments

Curve #	PI Station	PI Easting	PI Northing	PC Station	PC Easting	PC Northing	PT Station	PT Easting	PT Northing	Radius	Length	Tangent Length	Delta Angle	Chord Direction
C121	7+274.18	772641.2016	3713786.8157	7+258.62	772626.6186	3713781.3695	7+289.32	772656.7486	3713786.0305	75.27	30.70	15.567	23.3701	N81° 12' 22.63"E
C122	7+317.45	772684.8469	3713784.6114	7+296.71	772664.1349	3713785.6575	7+337.30	772703.4588	3713793.7593	80.00	40.58	20.738	29.0658	N78° 21' 30.22"E
C123	7+409.21	772768.0013	3713825.4825	7+398.96	772758.7995	3713820.9597	7+419.40	772777.9268	3713828.0547	100.54	20.44	10.253	11.6456	N69° 38' 53.84"E
C124	7+436.45	772794.4384	3713832.3338	7+426.65	772784.9496	3713829.8747	7+446.03	772802.3803	3713838.0792	51.99	19.38	9.802	21.3540	N64° 47' 38.83"E
C125	7+458.14	772812.1912	3713845.1766	7+448.38	772804.2856	3713839.4575	7+467.80	772821.2276	3713848.8575	81.11	19.42	9.757	13.7199	N60° 58' 37.48"E
C126	7+568.67	772914.6441	3713886.9097	7+555.35	772902.3039	3713881.8831	7+581.97	772926.3791	3713893.2211	249.67	26.62	13.325	6.1097	N64° 46' 55.78"E
C127	7+629.75	772968.4622	3713915.8547	7+622.28	772961.8799	3713912.3145	7+637.18	772975.5864	3713918.1143	80.00	14.90	7.474	10.6746	N67° 03' 52.65"E
C128	7+688.89	773024.8764	3713933.7482	7+675.82	773012.4103	3713929.7942	7+701.93	773036.6400	3713939.4626	180.00	26.11	13.078	8.3112	N68° 14' 46.86"E
C129	7+784.41	773110.8302	3713975.5023	7+759.31	773088.2583	3713964.5375	7+807.97	773135.6375	3713971.7194	80.62	48.66	25.094	34.5796	N81° 22' 49.93"E
C130	7+891.72	773218.4338	3713959.0937	7+874.15	773201.0612	3713961.7428	7+909.29	773235.7330	3713956.0010	1373.94	35.14	17.573	1.4656	S80° 35' 48.75"E
C131	7+981.13	773306.4499	3713943.3587	7+959.43	773285.0845	3713947.1782	8+002.67	773328.1373	3713944.2112	200.00	43.24	21.704	12.3871	S86° 03' 27.40"E
C132	8+088.78	773414.1872	3713947.5938	8+074.49	773399.9009	3713947.0322	8+103.00	773428.3276	3713945.4809	151.96	28.51	14.297	10.7496	S86° 52' 34.94"E
C133	8+138.51	773463.4543	3713940.2322	8+123.00	773448.1108	3713942.5249	8+153.02	773474.5819	3713929.4222	48.22	30.02	15.514	35.6722	S63° 39' 55.75"E
C134	8+181.58	773495.0714	3713909.5175	8+164.72	773482.9732	3713921.2704	8+197.83	773511.1834	3713904.5275	70.36	33.11	16.867	26.9626	S59° 18' 38.45"E
C135	8+245.70	773556.9134	3713890.3647	8+230.37	773542.2711	3713894.8995	8+261.01	773571.1021	3713884.5645	349.24	30.64	15.328	5.0264	S70° 16' 43.69"E
C136	8+357.69	773660.6001	3713847.9784	8+341.80	773645.8910	3713853.9913	8+373.55	773675.9086	3713843.7168	272.35	31.75	15.891	6.6785	S71° 06' 17.51"E
C137	8+420.79	773721.4192	3713831.0478	8+410.78	773711.7708	3713833.7337	8+430.79	773730.7450	3713827.3961	196.76	20.01	10.015	5.8279	S71° 31' 48.53"E
C138	8+449.90	773748.5413	3713820.4276	8+437.88	773737.3480	3713824.8106	8+461.78	773760.4936	3713819.1456	89.72	23.90	12.021	15.2617	S76° 14' 49.26"E
C139	8+506.18	773804.6439	3713814.4100	8+493.27	773791.8072	3713815.7869	8+519.09	773817.5111	3713813.3556	1029.21	25.82	12.910	1.4373	S84° 35' 47.46"E
C140	8+572.98	773871.2230	3713808.9540	8+556.48	773854.7760	3713810.3018	8+589.48	773887.6973	3713807.9965	1392.06	33.00	16.502	1.3584	S85° 59' 39.72"E
C141	8+659.28	773957.3792	3713803.9463	8+647.31	773945.4305	3713804.6408	8+671.24	773969.2379	3713802.3263	307.87	23.93	11.969	4.4526	S84° 26' 49.99"E
C142	8+758.98	774056.1735	3713790.4499	8+737.71	774035.0965	3713793.3293	8+780.10	774077.3874	3713792.0330	201.60	42.39	21.273	12.0470	S88° 14' 39.88"E
C143	8+892.36	774189.3414	3713800.3879	8+847.06	774144.1573	3713797.0159	8+936.00	774228.1061	3713823.8459	189.37	88.95	45.310	26.9118	N72° 16' 34.15"E
C144	8+958.15	774247.0522	3713835.3110	8+943.41	774234.4419	3713827.6800	8+972.86	774260.3498	3713841.6690	300.00	29.46	14.739	5.6255	N61° 37' 58.79"E
C145	8+989.15	774275.0393	3713848.6926	8+976.60	774263.7202	3713843.2805	9+001.68	774286.0236	3713854.7554	430.03	25.09	12.546	3.3423	N62° 46' 28.52"E
C146	9+068.43	774344.4602	3713887.0097	9+057.59	774334.9681	3713881.7704	9+079.26	774354.4157	3713891.3038	223.11	21.67	10.842	5.5641	N63° 53' 07.75"E

Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Peshawar

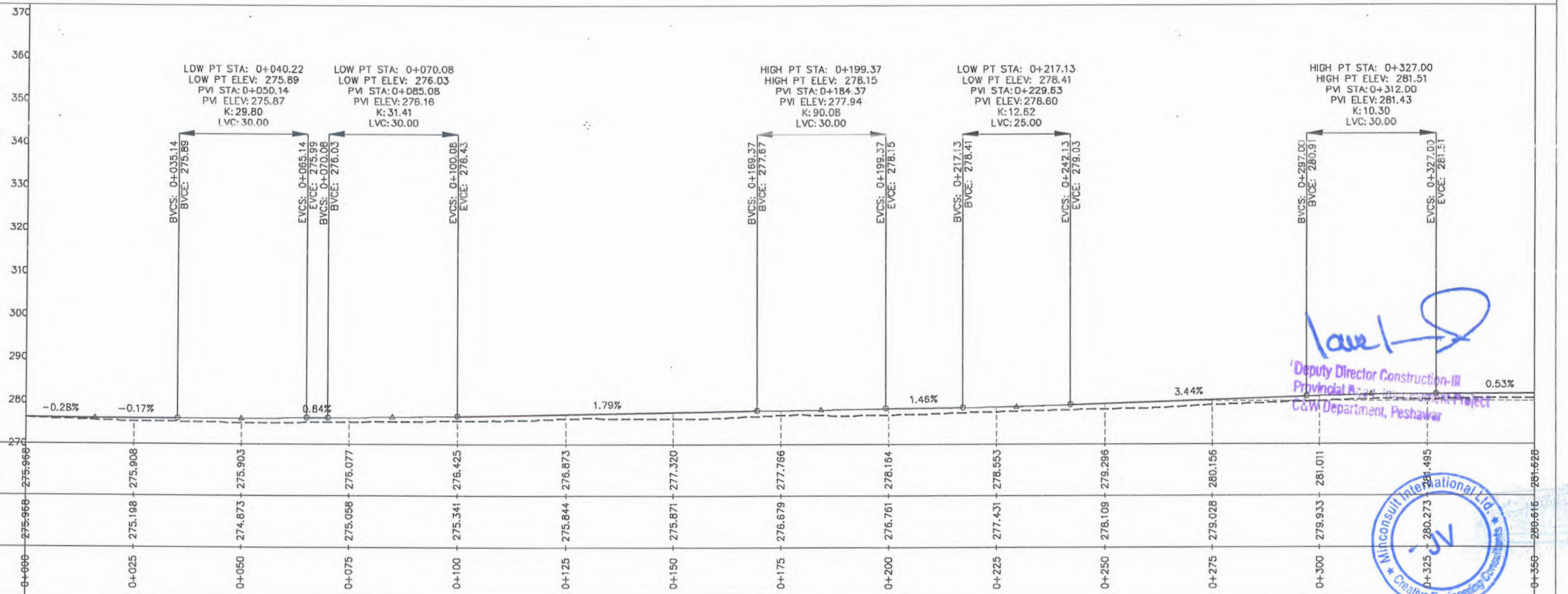
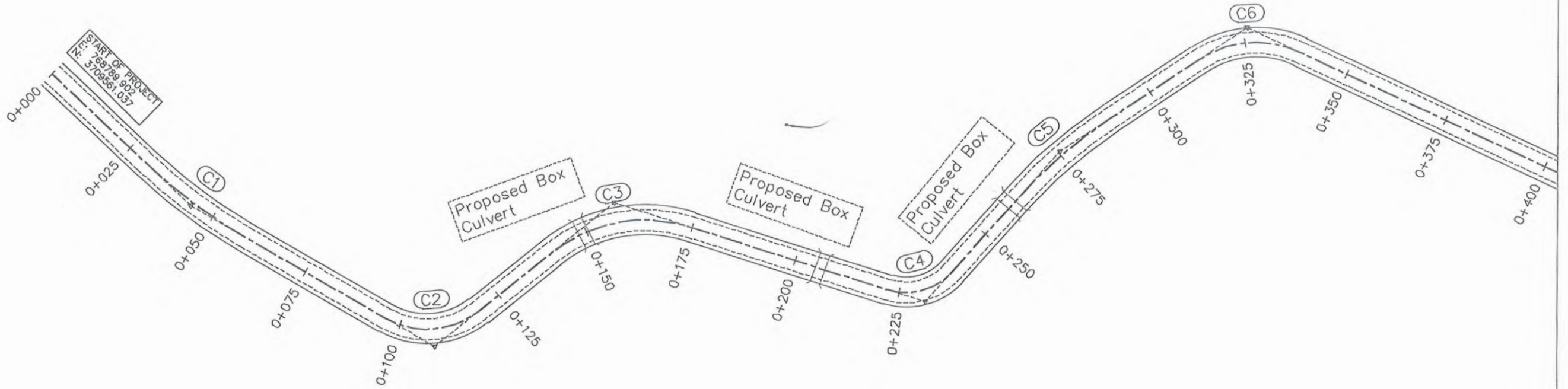


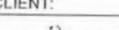
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 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP,2024	Tender Drawings.	G.DESIGNED	AAMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	ACCESS ROAD	N.T.S	HORIZONTAL CURVE DATA	
		a			DRAWN	IMRAN TARIQ				DATE:		
		b			CHECKED	SHAHZAD DURRANI				SEP,2024		DWG NO:CEC/KP-RRDP/HW/N-KOHAT-2 HCD/ D
		c			APPROVED	AQEEL YOUNIS						

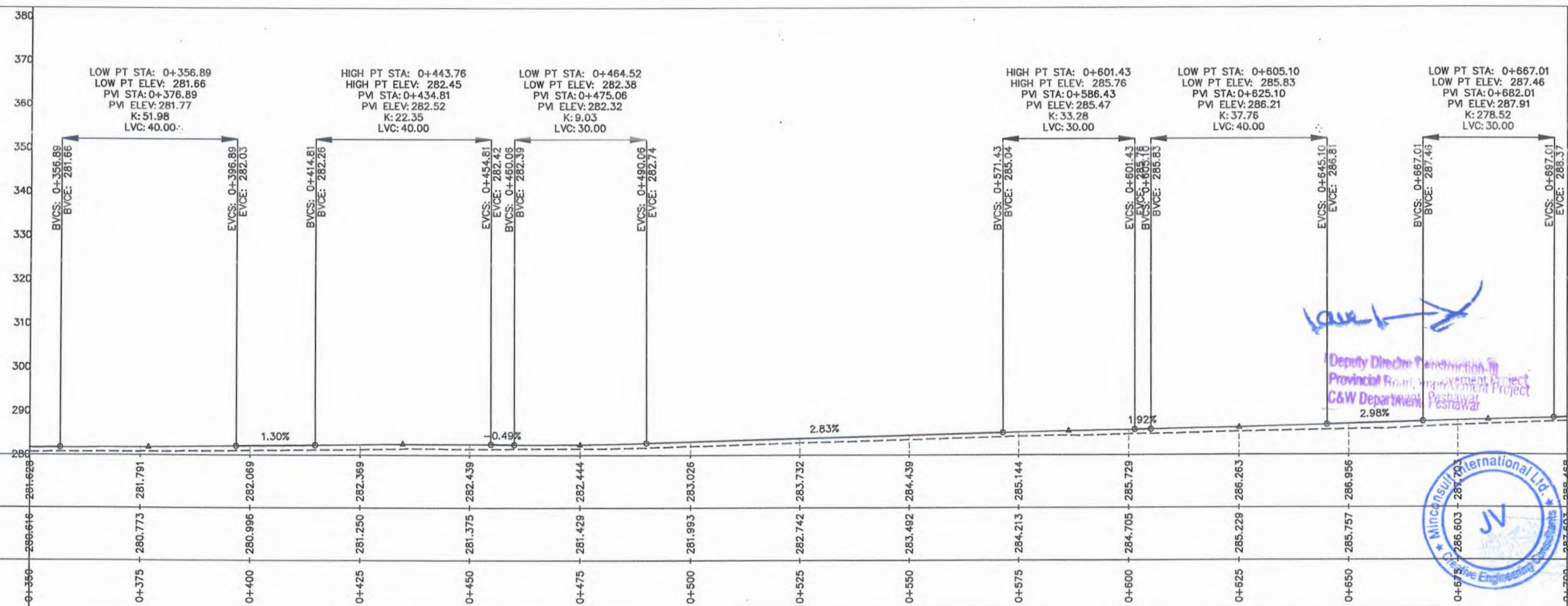
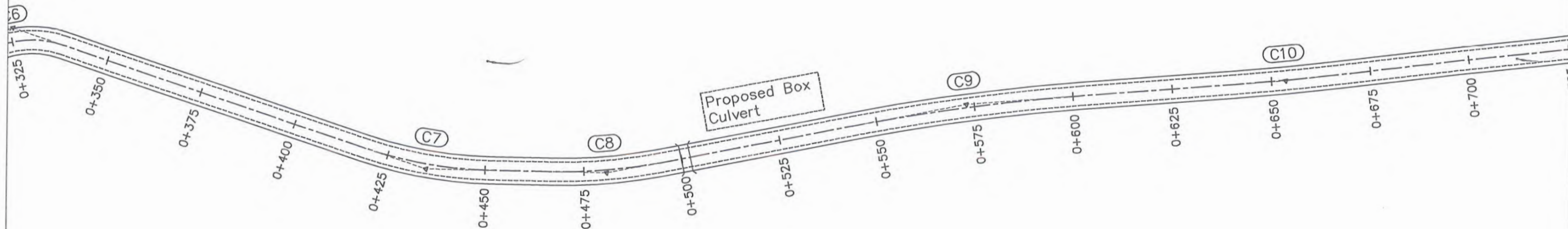
PLAN & PROFILE DRAWINGS

Lawe S
Deputy Director Construction
Provincial Road Development Project
C&W Department, Peshawar





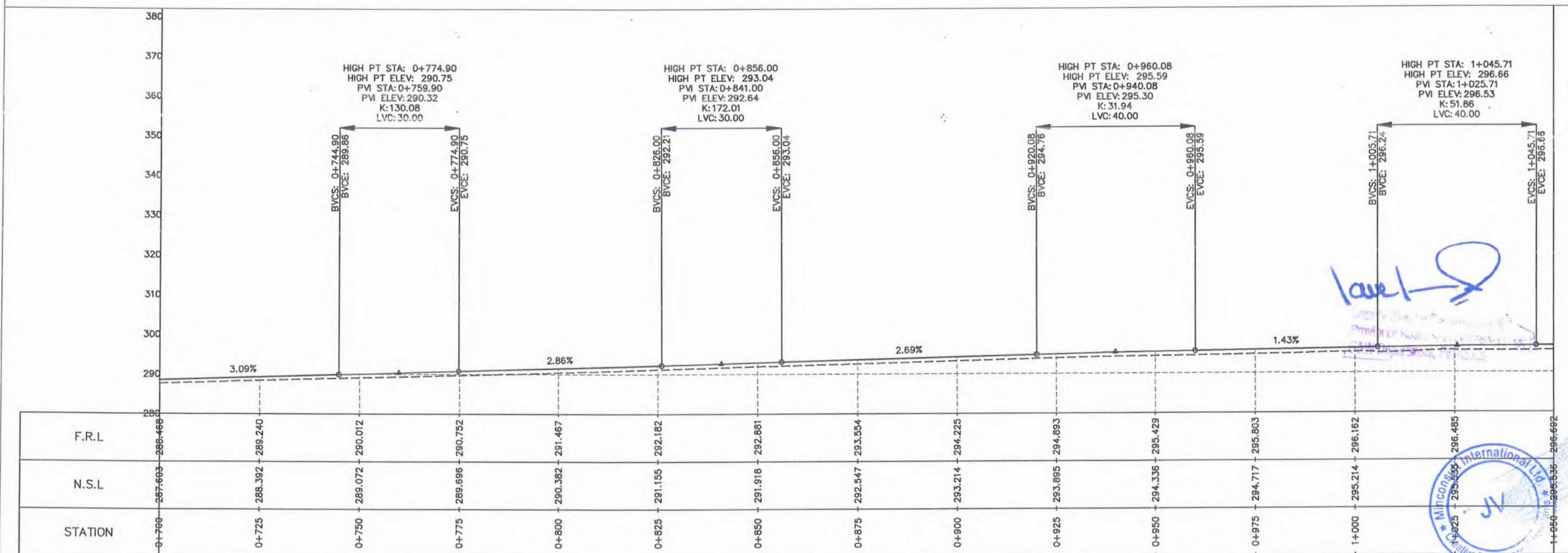
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		b			CHECKED	SHAHZAD DURRANI						
		c			APPROVED	AQEEL YOUNIS						

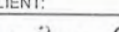


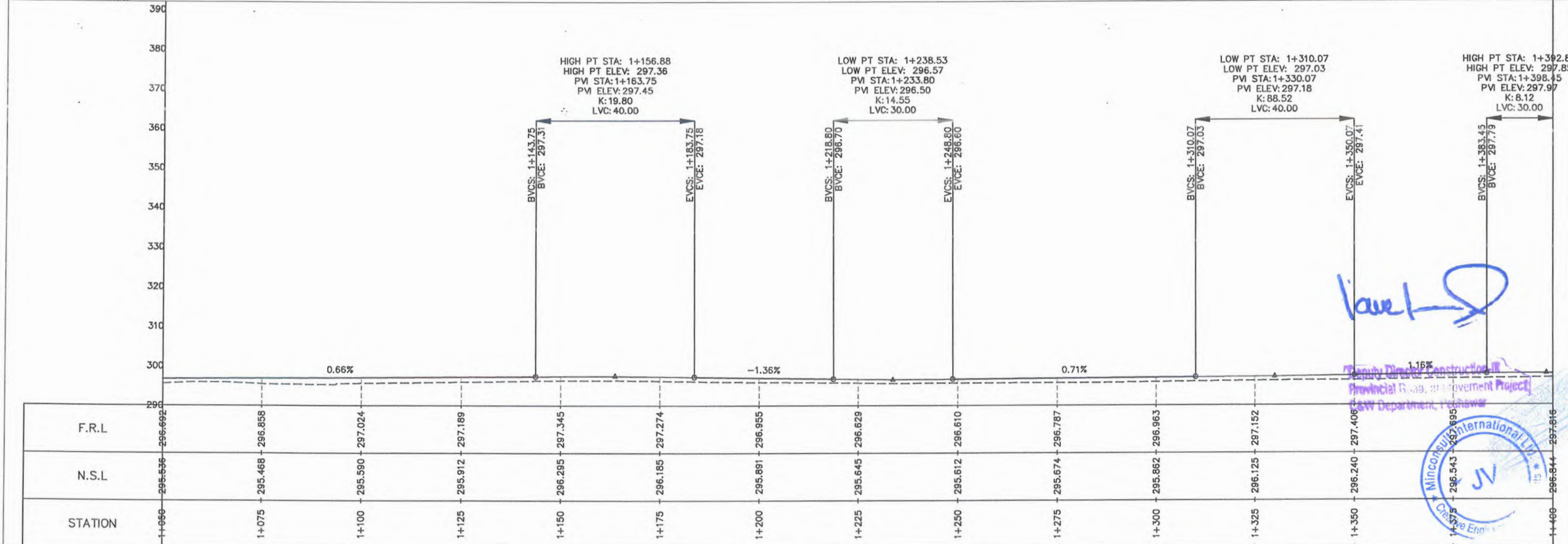
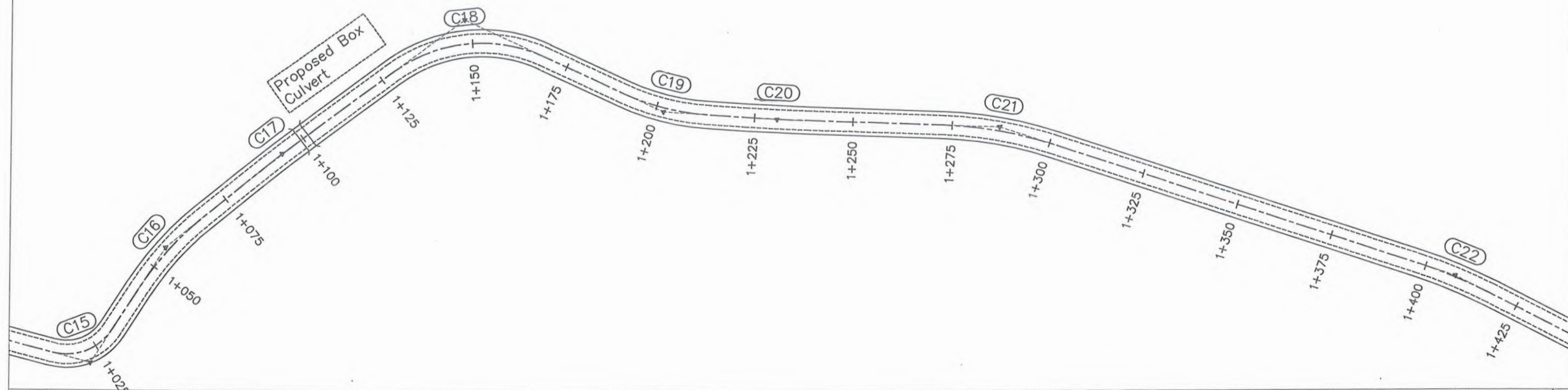
Deputy Director
Provincial Road, Peshawar
C&W Department
Peshawar



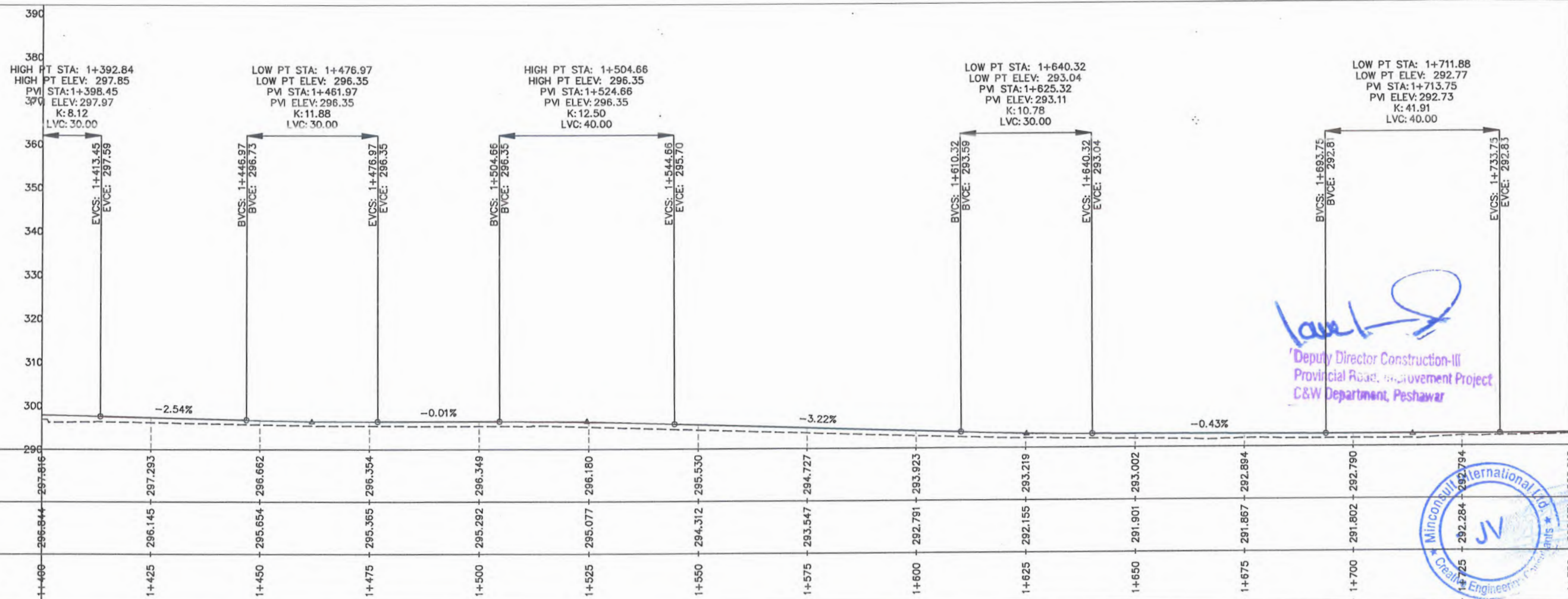
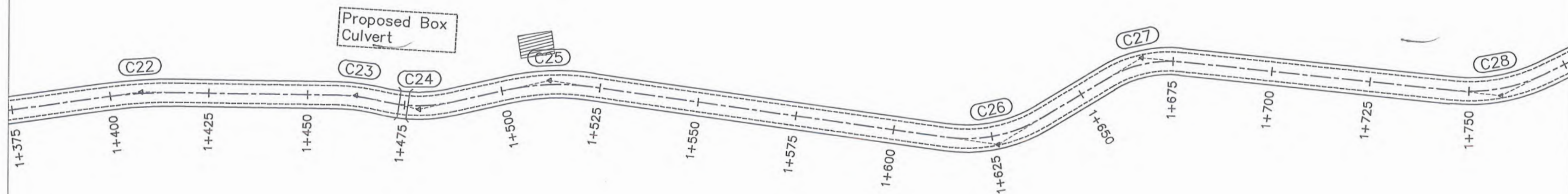
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		0	SEP, 2024.	Tender Drawings.	G.DESIGNED	AMIR KHAN				
		a			DRAWN	IMRAN TARIQ				
		b			CHECKED	SHAHZAD DURRANI				
		c			APPROVED	AQEEL YOUNIS				



CLIENT:		DESIGN CONSULTANT:		REV	DATE	DESCRIPTION		NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings.		G.DESIGNED	AMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	H:1:1000 V:1:1000	PLAN & PROFILE 0+700.00 - 1+050.00		
		a			DRAWN	IMRAN TARIQ							
		b			CHECKED	SHAHZAD DURRANI			ACCESS ROAD	DATE:			
		c			APPROVED	AQEEL YOUNIS	SEP, 2024.			DWG NO:CEC/KP-RRDP/HWIN-KOHAT-2/PP 3			

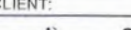


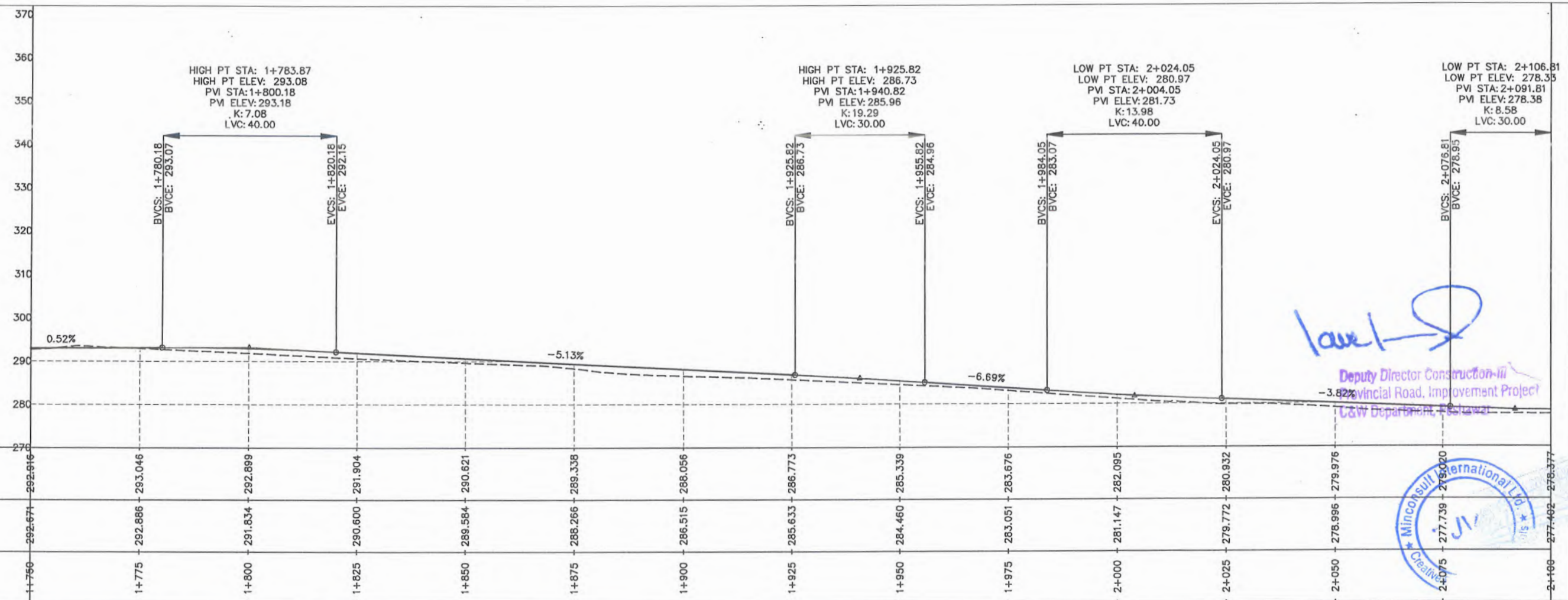
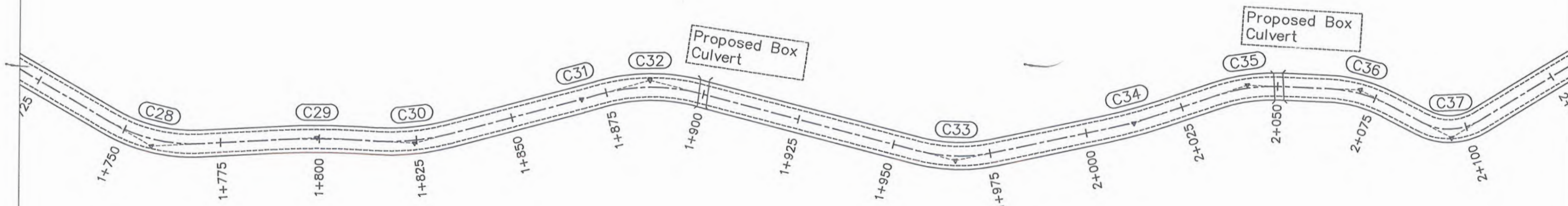
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	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)		0	SEP, 2024.	Tender Drawings.	G.DESIGNED	AMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	H:1:1000 V:1:1000	PLAN & PROFILE 1+050.00 - 1+400.00
		a			DRAWN	IMRAN TARIQ					
		b			CHECKED	SHAHZAD DURRANI					
		c			APPROVED	AQEEL YOUNIS					
								ACCESS ROAD	DATE: SEP, 2024.	DWG NO:CEC/KP-RRDP/HWN-KOHAT-2/PP 4	



Signature
 Deputy Director Construction-III
 Provincial Road Improvement Project
 C&W Department, Peshawar



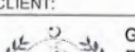
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		b			CHECKED	SHAHZAD DURRANI								
		c			APPROVED	AQEEL YOUNIS								
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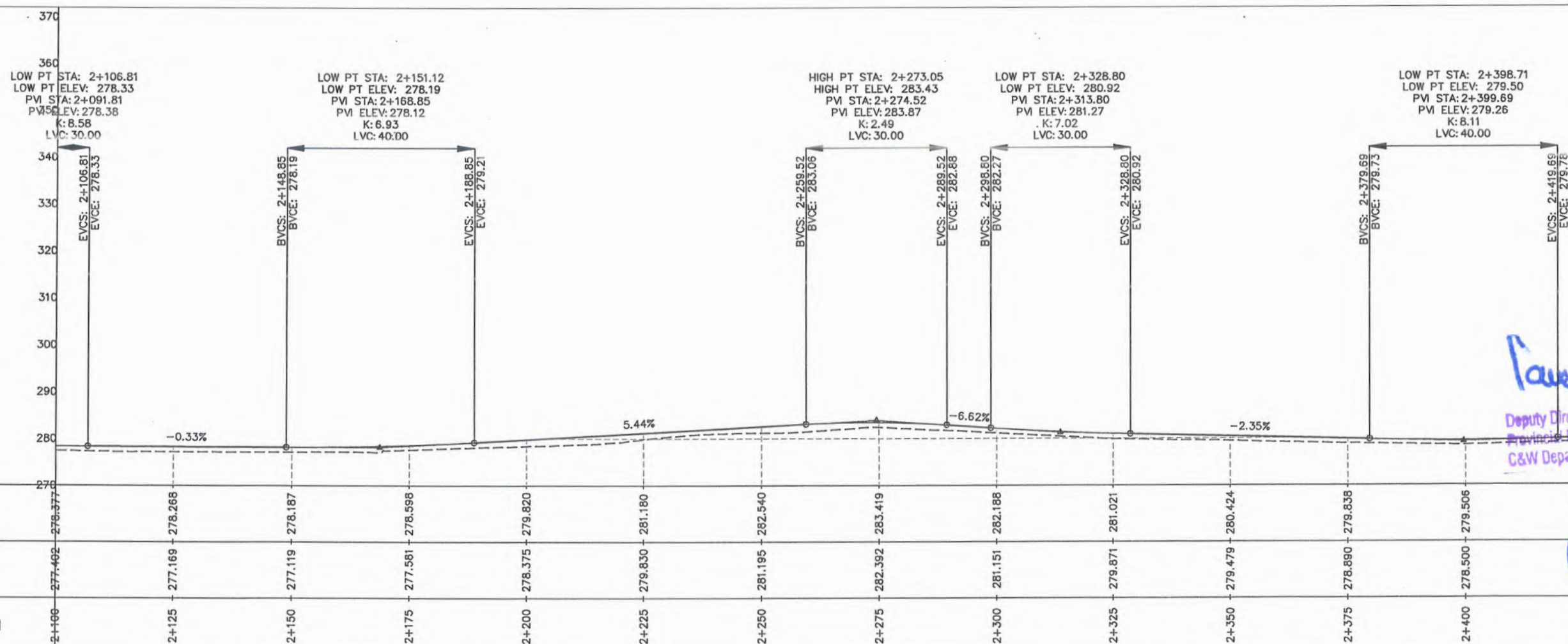
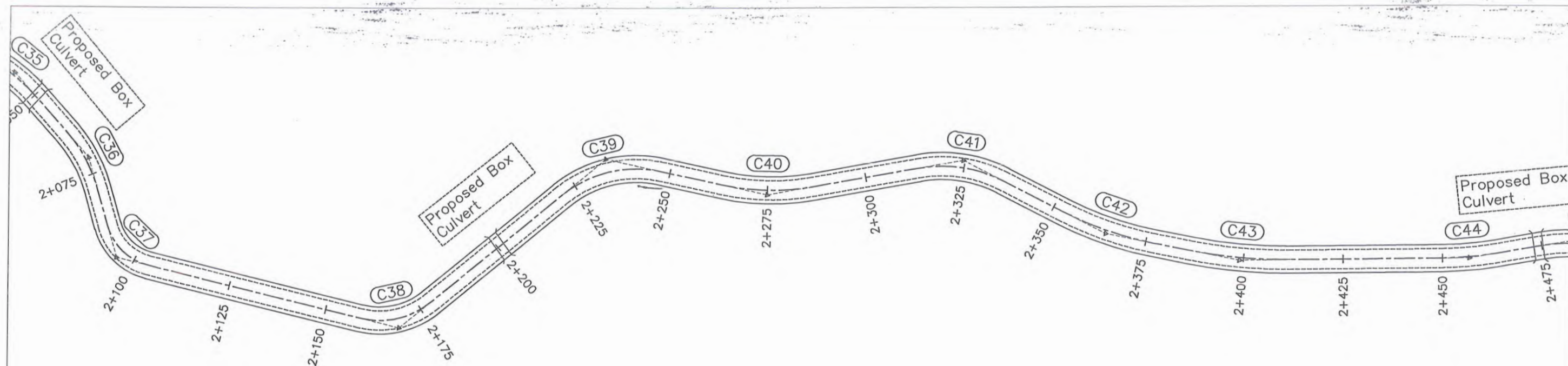


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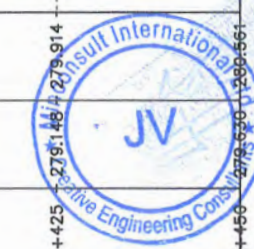
Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Islamabad

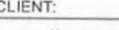


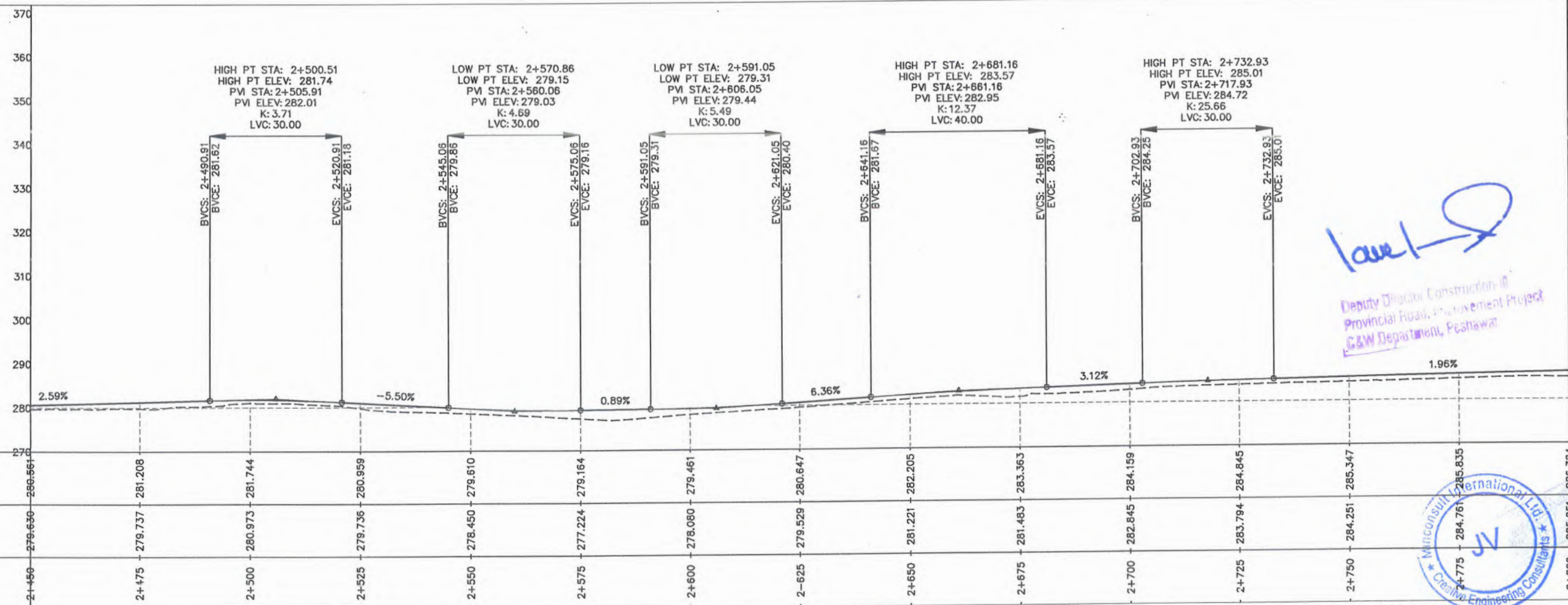
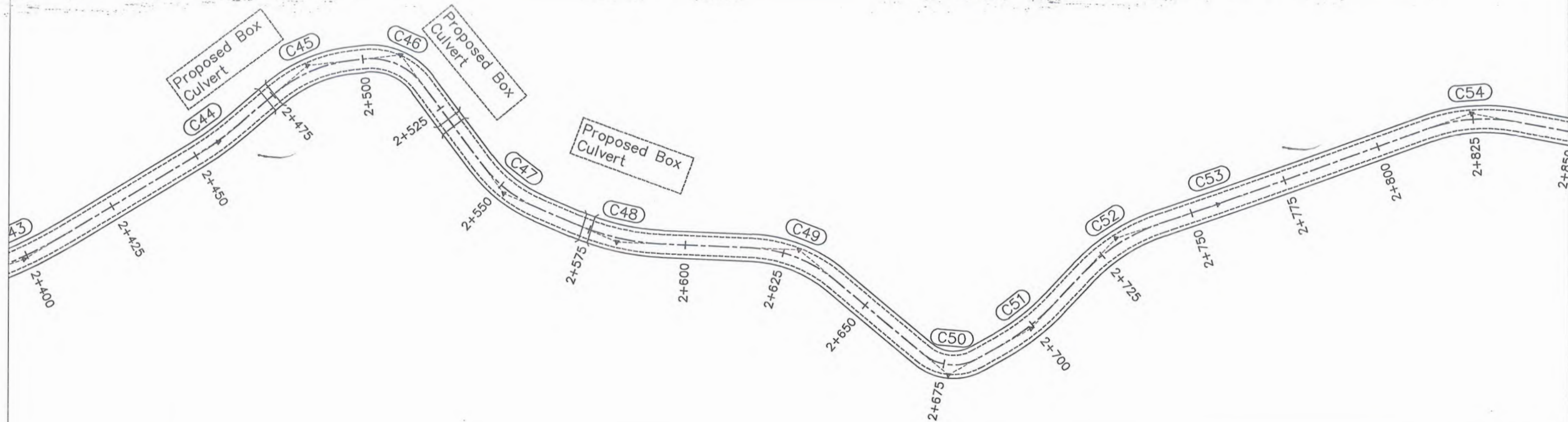
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DWG NO:CEC/KP-RRDP/HWIN-KOHAT-2/PP 6												



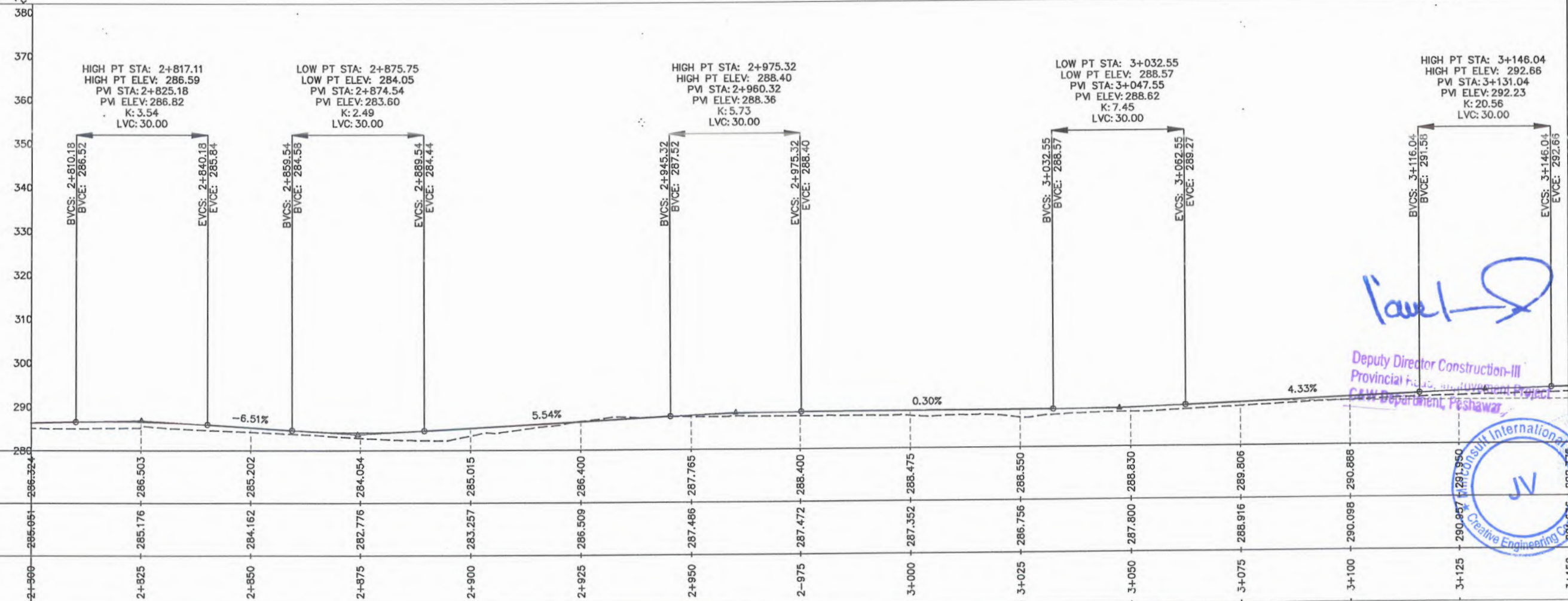
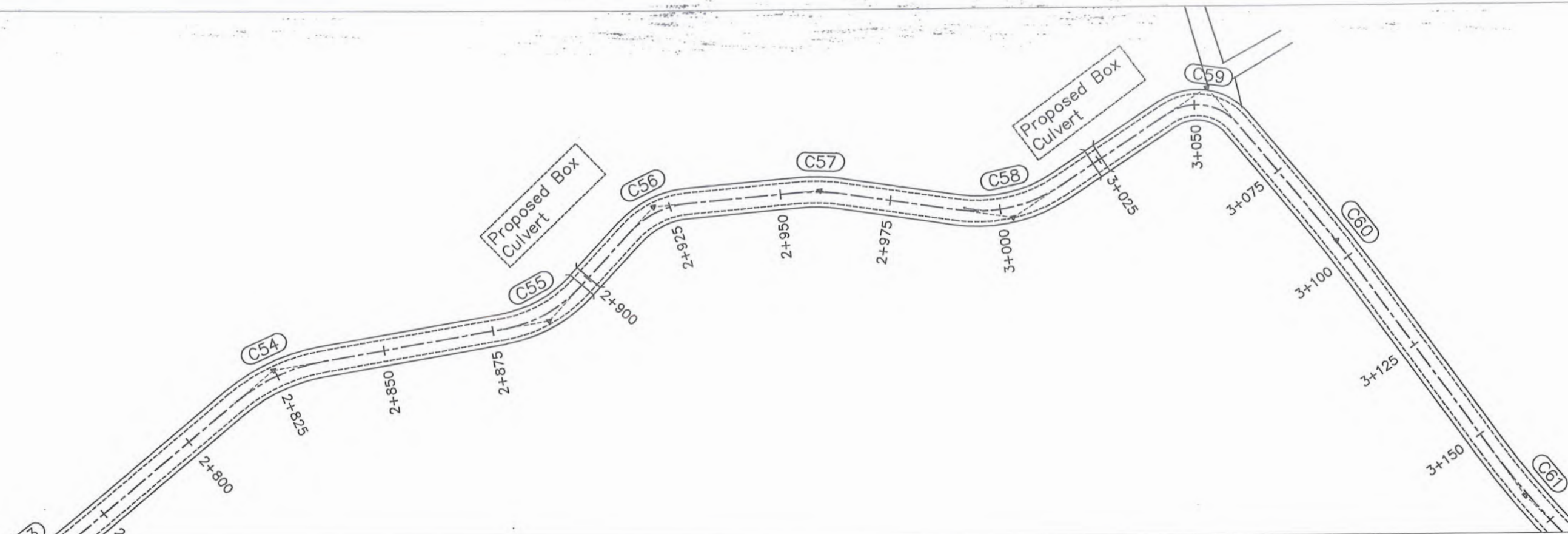
Paul
Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



CLIENT:		DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:		SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings.	G.DESIGNED	AMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	H:1:1000 V:1:1000	PLAN & PROFILE 2+100.00 - 2+450.00			
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DWG NO:CEC/KP-RRDP/HWN-KOHAT-2/PP													



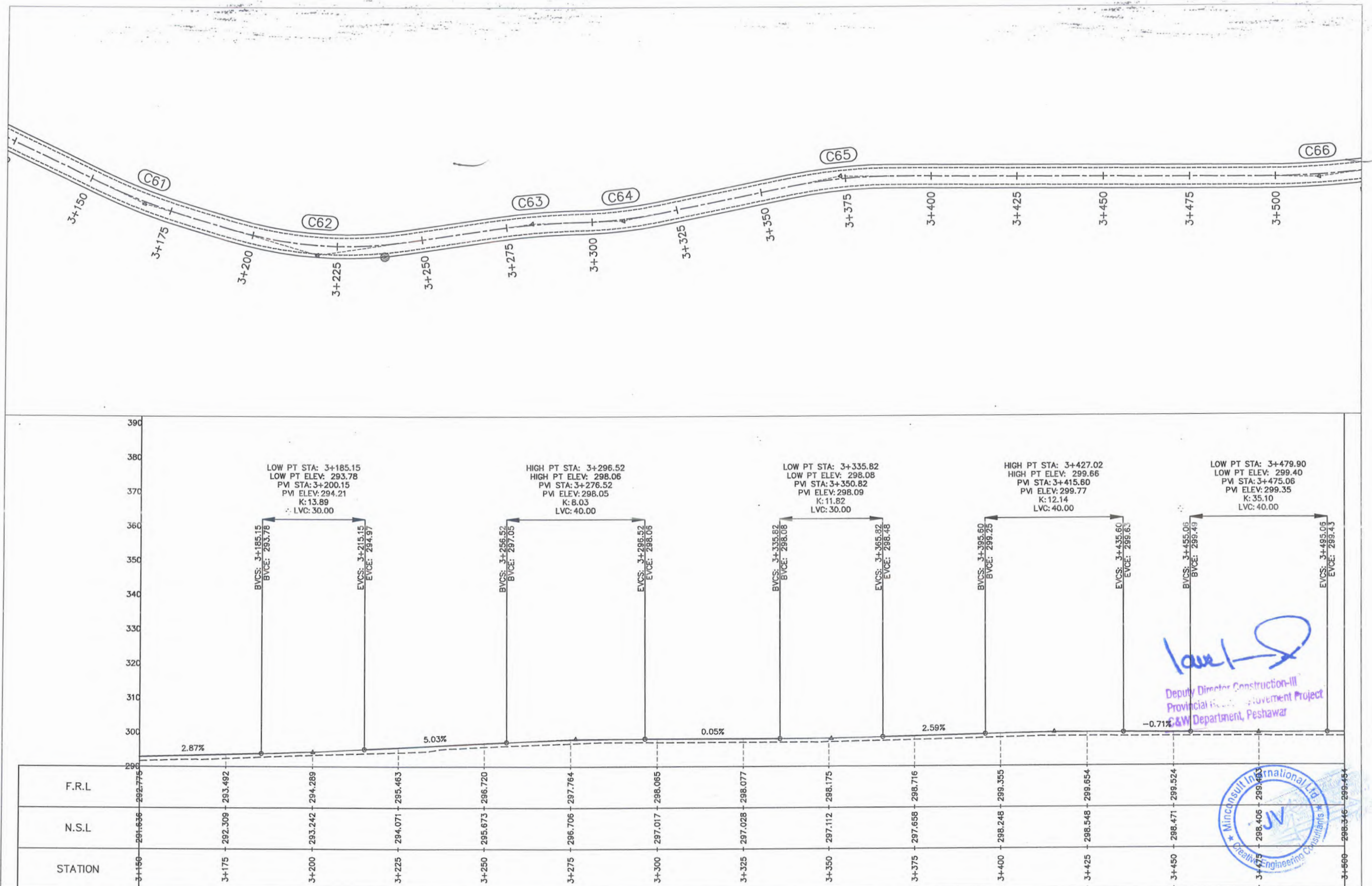
GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	DESIGN CONSULTANT: (MIN - JV - CEC) MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT: KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	ROAD NAME: N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK ACCESS ROAD	SCALE: H:1:1000 V:1:1000 DATE: SEP, 2024	SHEET CONTENT: PLAN & PROFILE 2+450.00 - 2+800.00 DWG NO: CEC/KP-RRDP/HWN-KOHAT-2/PP 8
		0	SEP, 2024	Tender Drawings.	G.DESIGNED	AMIR KHAN				
		a			DRAWN	IMRAN TARIQ				
		b			CHECKED	SHAHZAD DURRANI				
		c			APPROVED	AQEEL YOUNIS				



Deputy Director Construction-III
Provincial Road Development Project
C&W Department, Peshawar

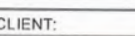


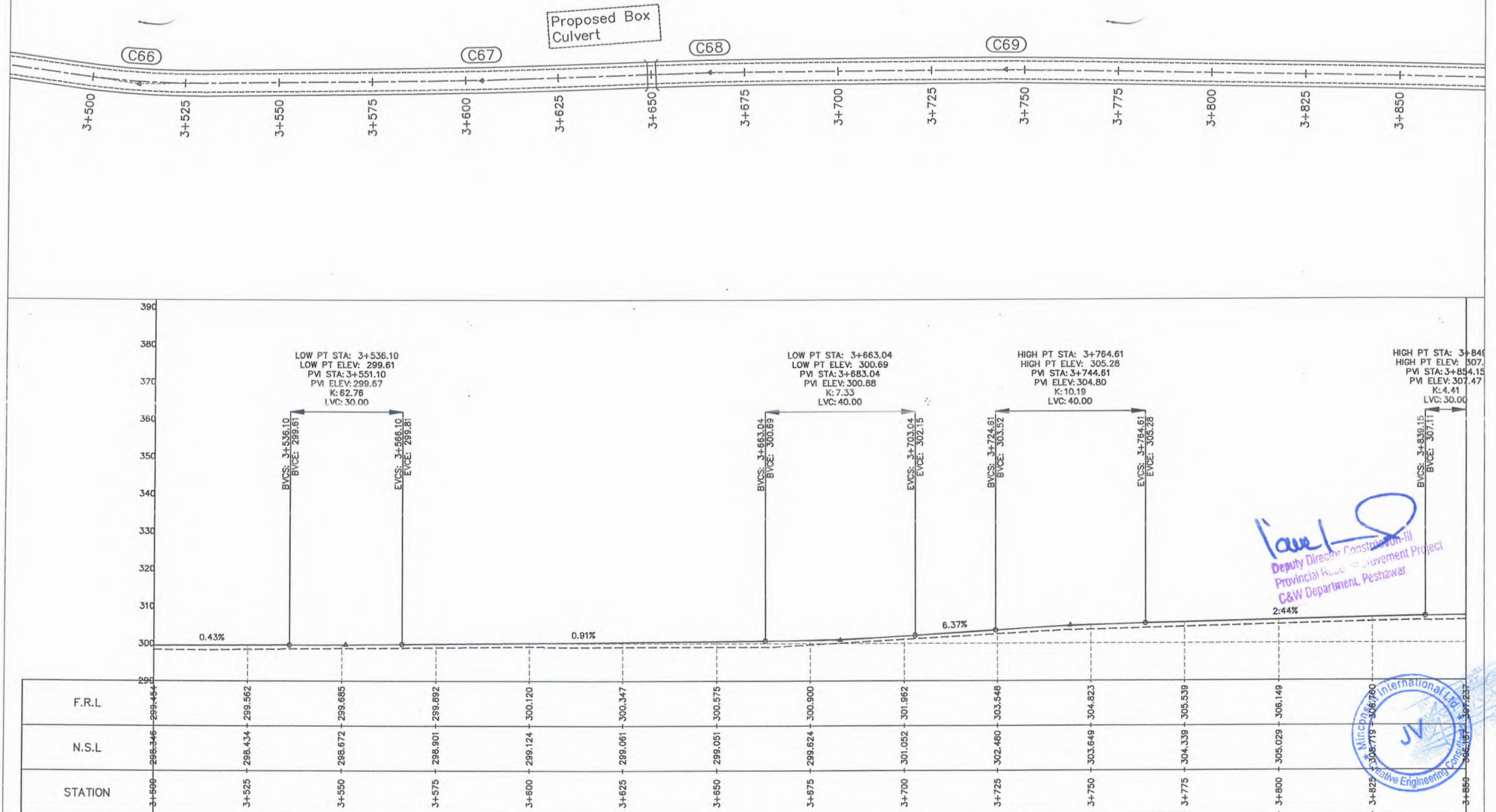
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		b			CHECKED	SHAHZAD DURRANI			DATE:	
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Imran
Deputy Director Construction-III
Provincial Road Development Project
C&W Department, Peshawar

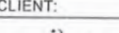


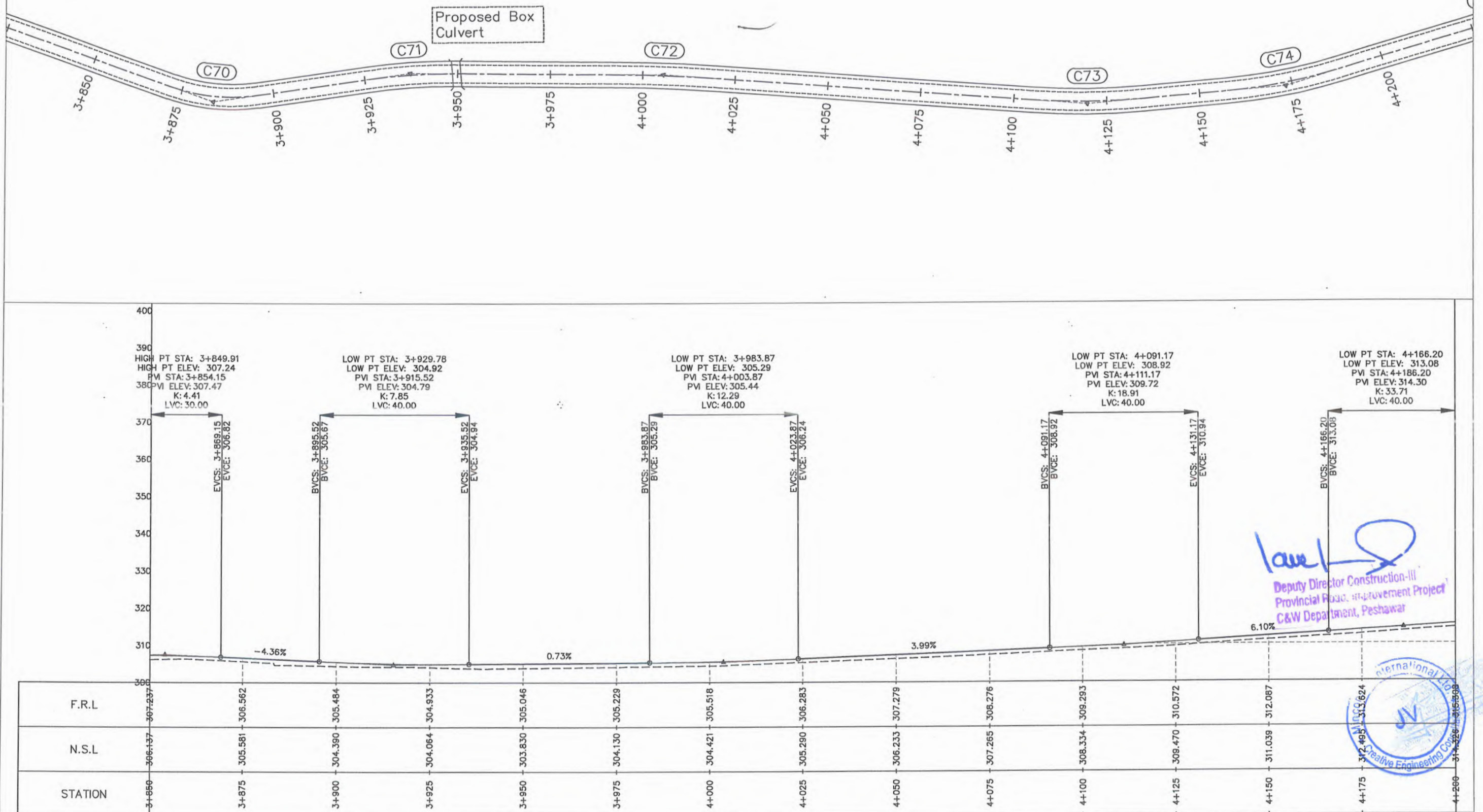
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		b			CHECKED	SHAHZAD DURRANI						
		c			APPROVED	AQEEL YOUNIS						
										DATE:		
										SEP, 2024.	DWG NO:CEC/KP-RRDP/HWN-KOHAT-2/PP 10	



Lawal
Deputy Director Construction-III
Provincial Road Development Project
C&W Department, Peshawar

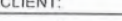


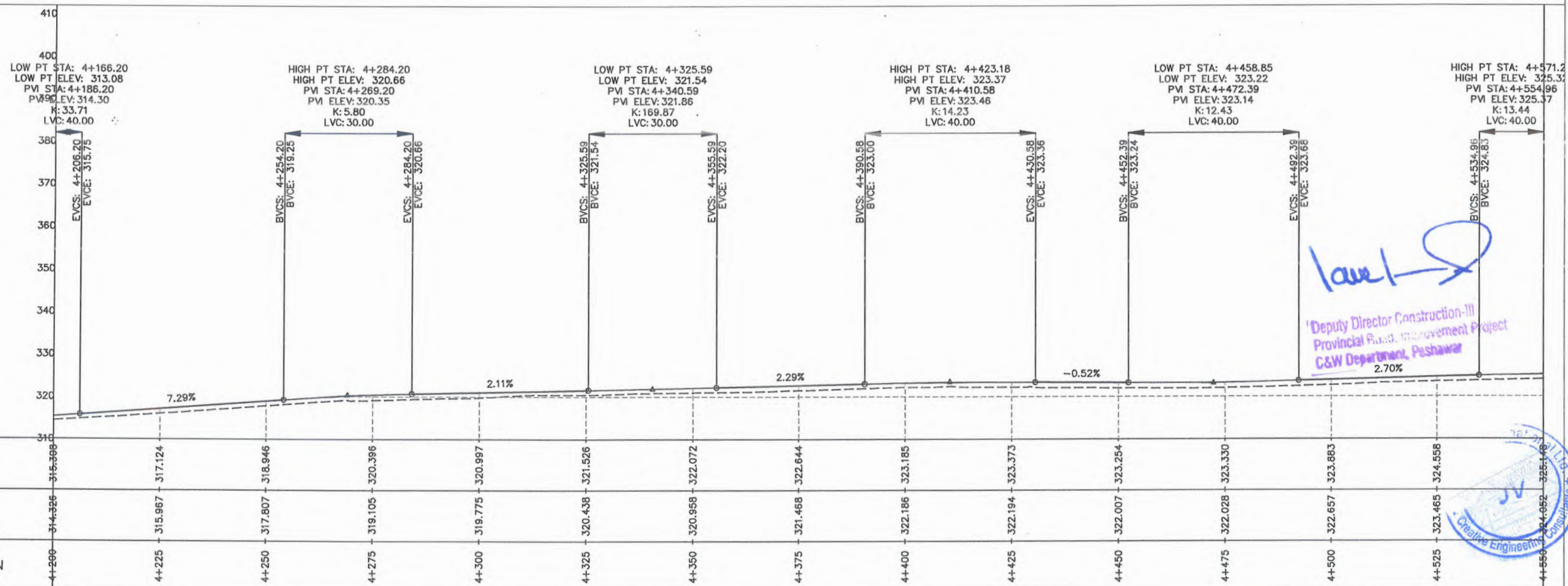
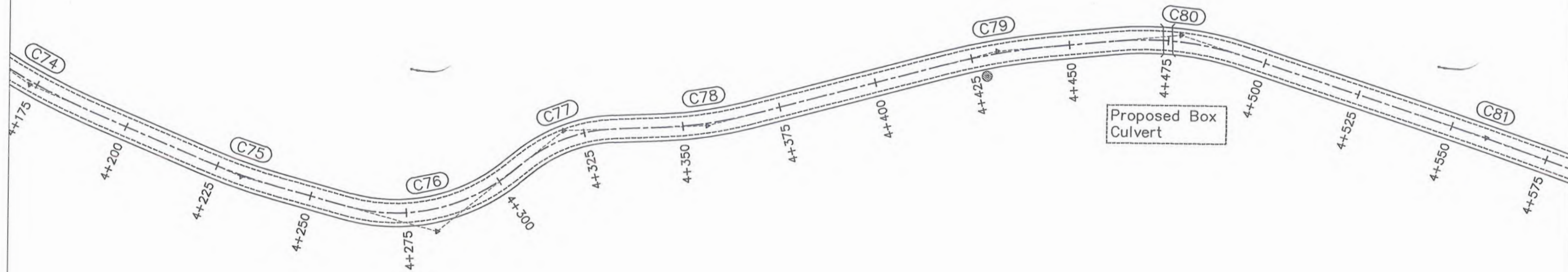
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		b			CHECKED	SHAHZAD DURRANI								
		c			APPROVED	AQEEL YOUNIS								
									ACCESS ROAD	DATE:				
									SEP, 2024.		DWG NO:CEC/KP-RRDP/HWIN-KOHAT-2/PP 11			



Signature
 Deputy Director Construction-III
 Provincial Road Improvement Project
 C&W Department, Peshawar



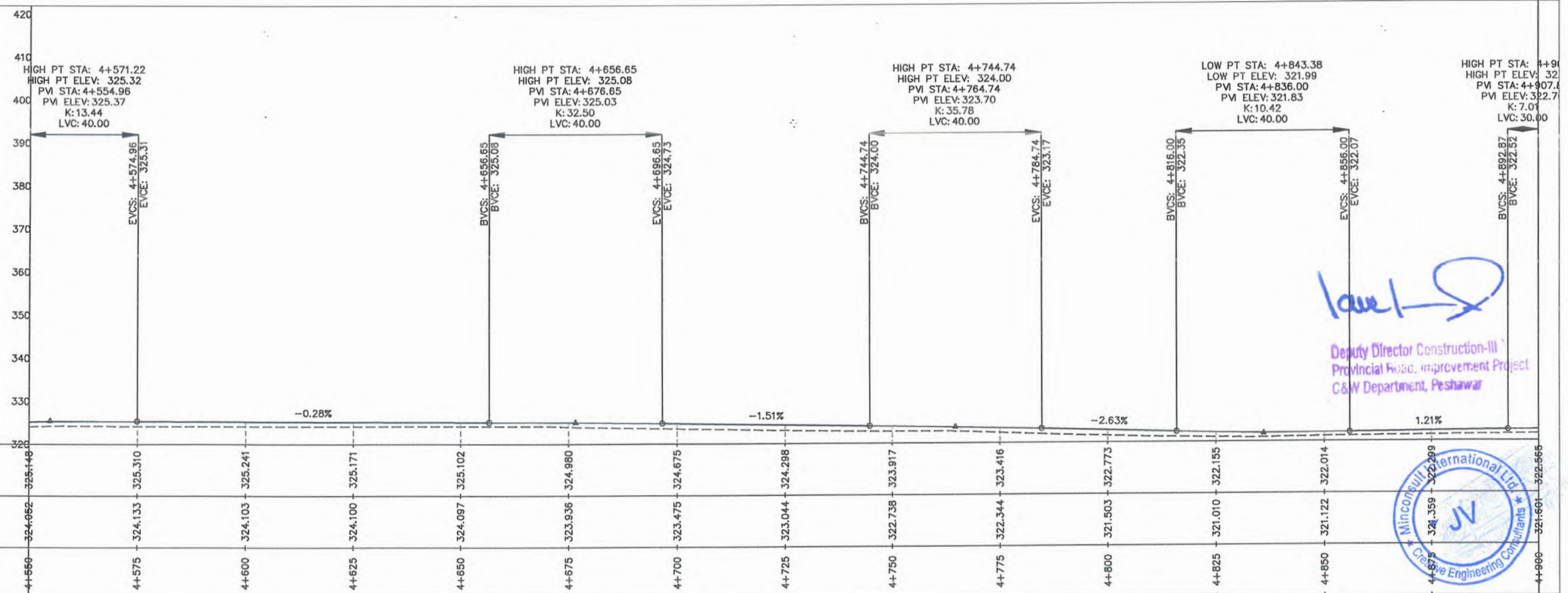
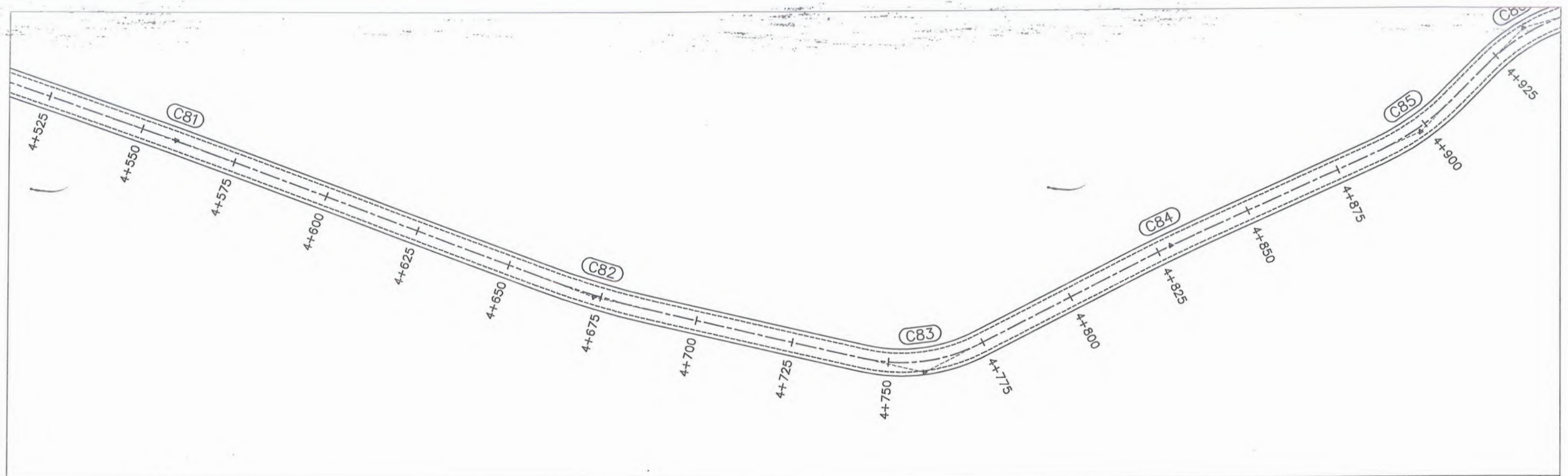
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		c			APPROVED	AQEEL YOUNIS						
DWG NO:CEC/KP-RRDP/HWN-KOHAT-2/PP 12												



Lawal S

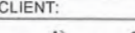
Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

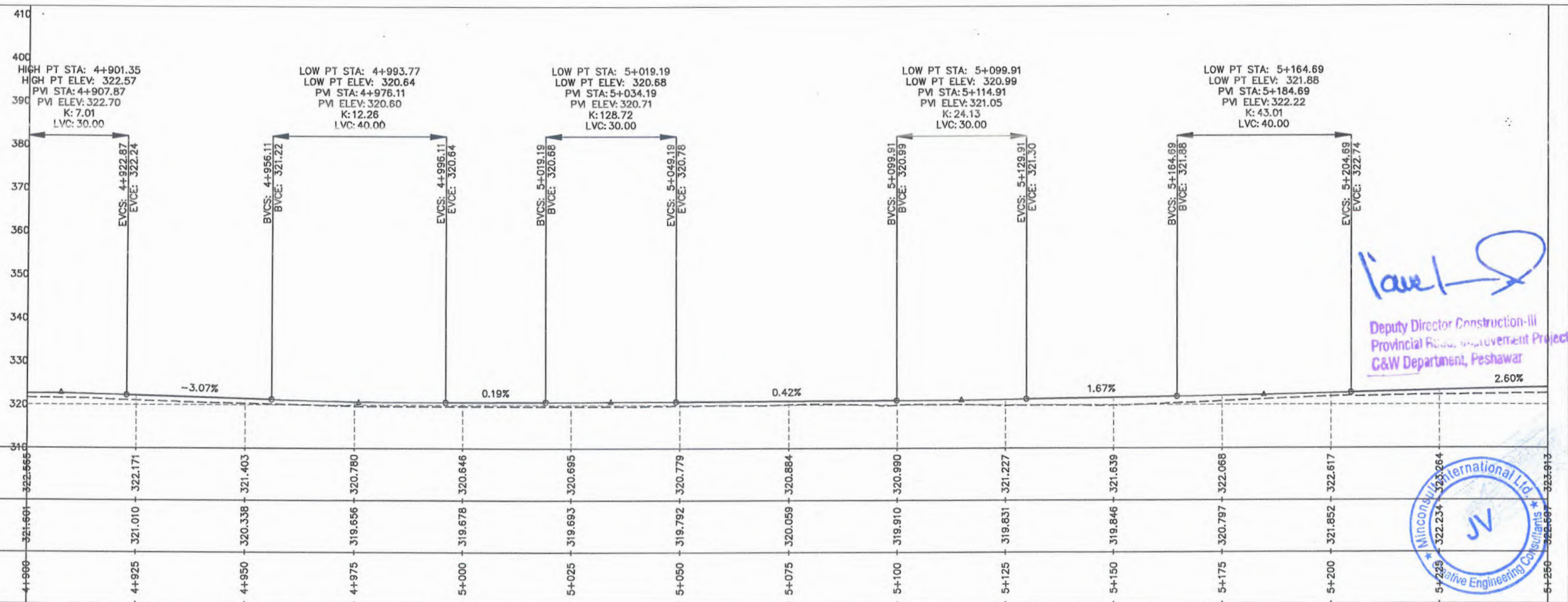
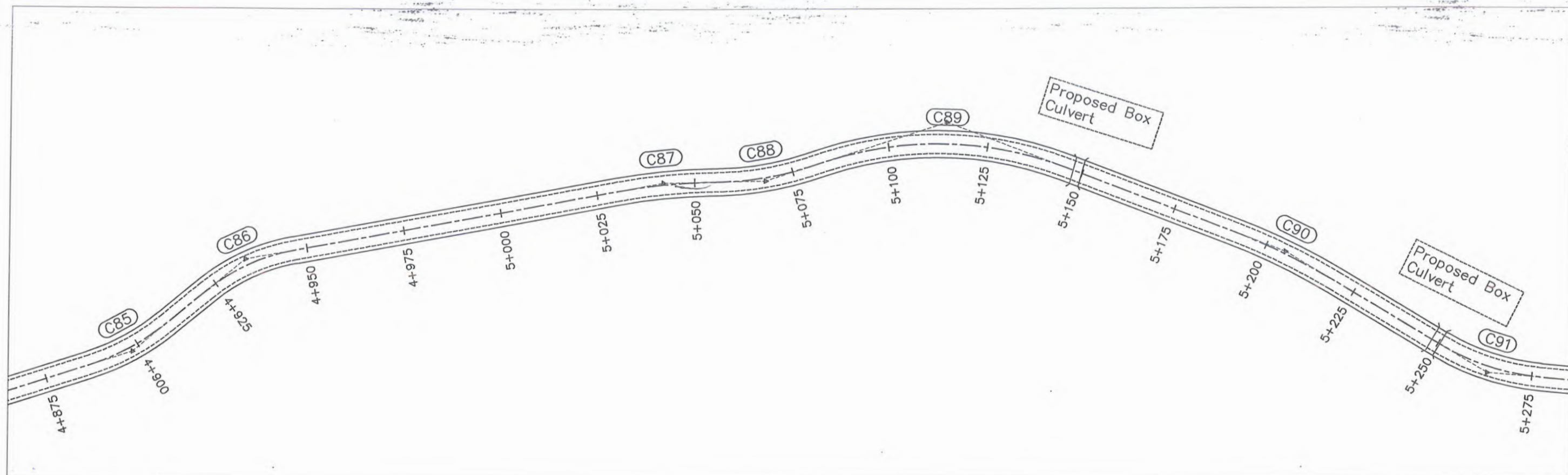
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	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings.		G.DESIGNED	AMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK ACCESS ROAD	H:1:1000 V:1:1000	DATE: SEP, 2024.	PLAN & PROFILE 4+200.00 - 4+550.00 DWG NO:CEC/KP-RRDP/HWN-KOHAT-2/PP 13			
			a			DRAWN	IMRAN TARIQ									
			b			CHECKED	SHAHZAD DURRANI									
			c			APPROVED	AQEEL YOUNIS									



Signature
 Deputy Director Construction-III
 Provincial Road Improvement Project
 C&W Department, Peshawar



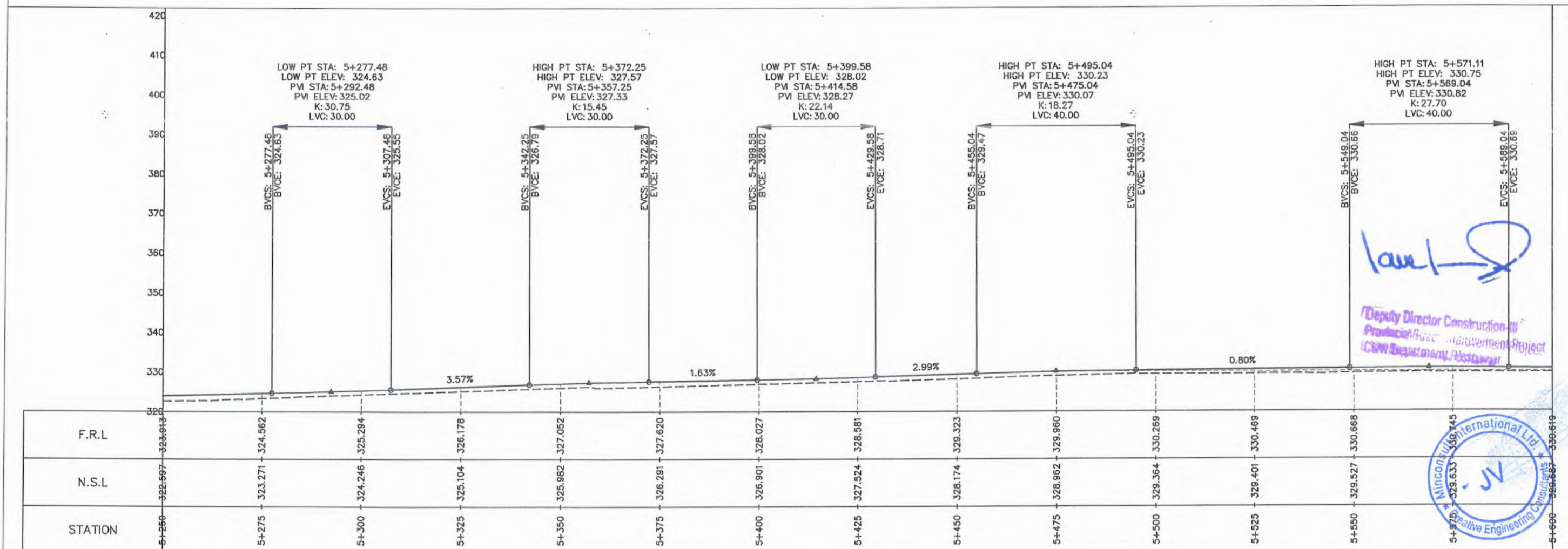
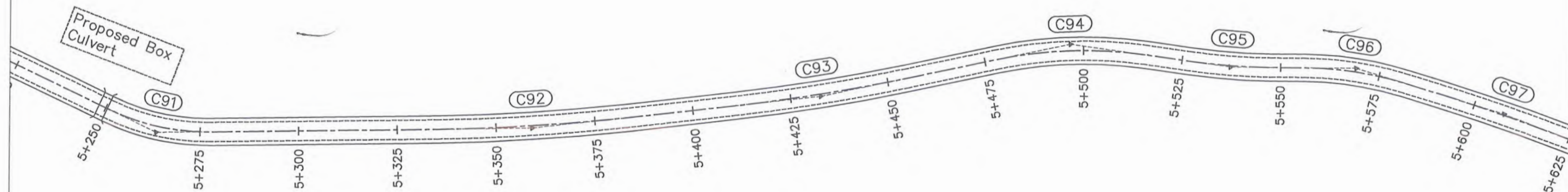
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 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings.	G.DESIGNED	AMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	H:1:1000 V:1:1000	PLAN & PROFILE 4+550.00 - 4+900.00			
		a			DRAWN	IMRAN TARIQ							
		b			CHECKED	SHAHZAD DURRANI		ACCESS ROAD	DATE: SEP, 2024.				
		c			APPROVED	AQEEL YOUNIS							
DWG NO:CEC/KP-RRDP/HWN-KOHAT-2/PP 14													

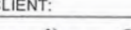


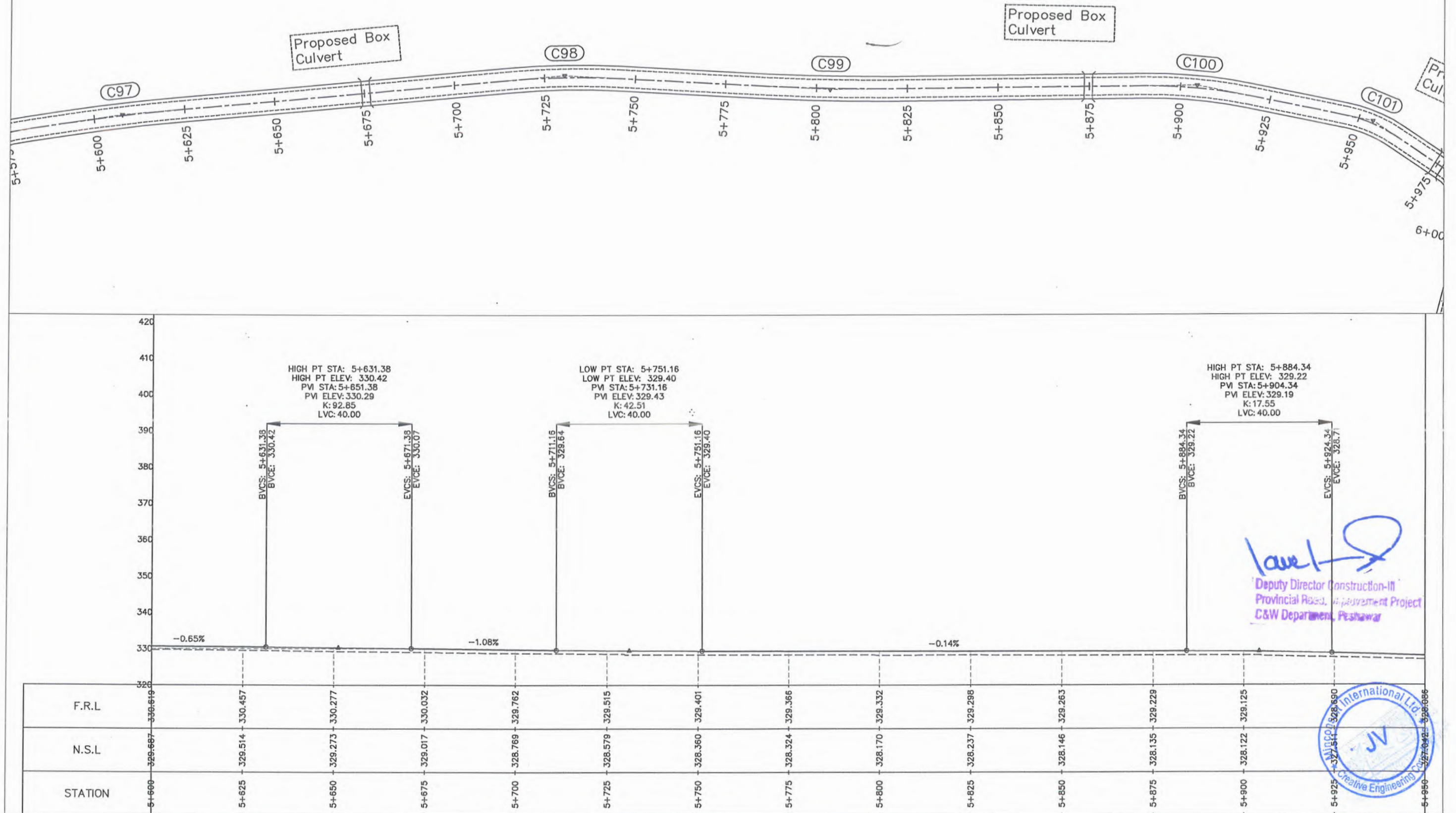
Deputy Director Construction-III
 Provincial Road Development Project
 C&W Department, Peshawar



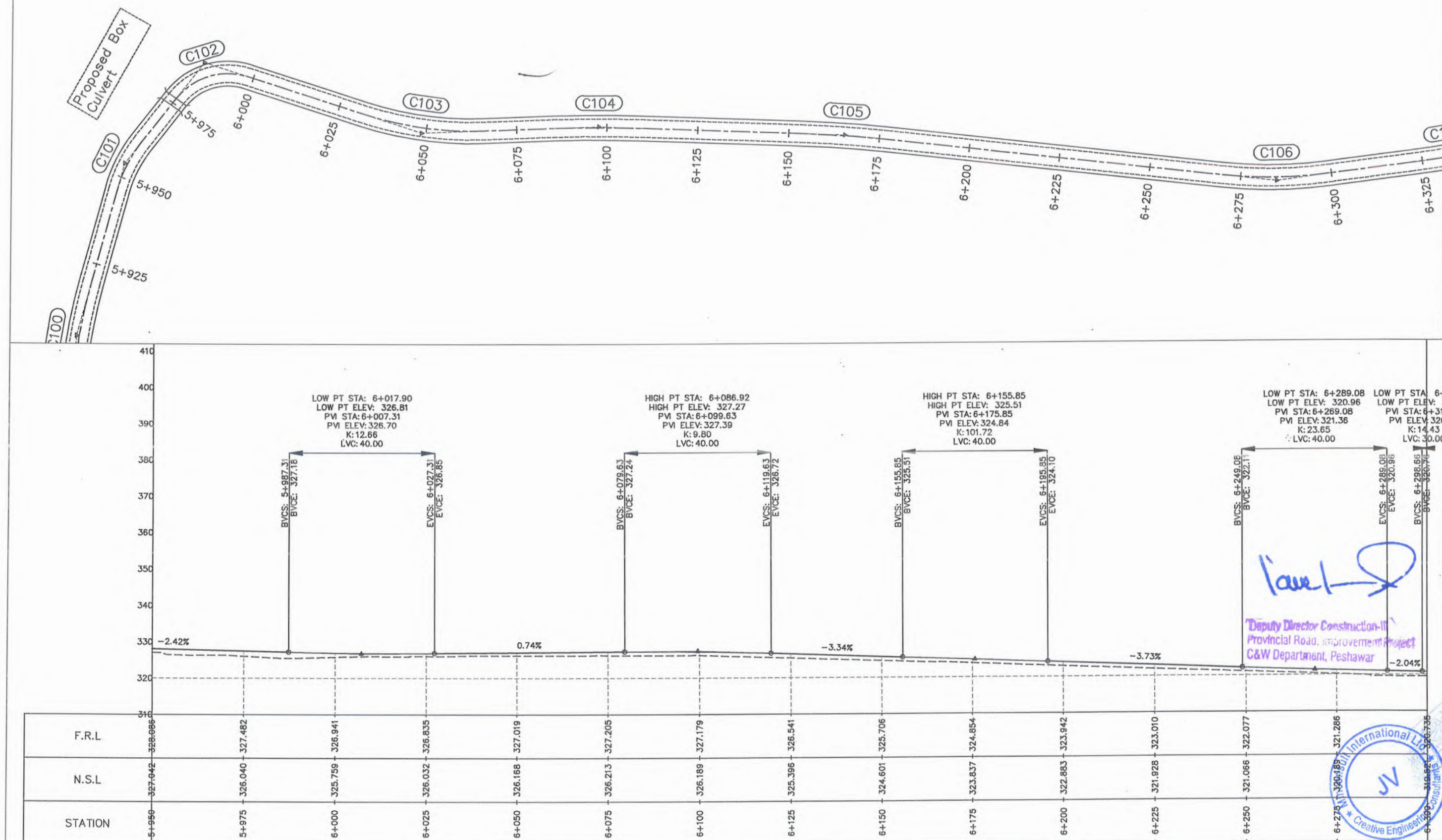
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
		0	SEP, 2024	Tender Drawings.	G.DESIGNED AMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	H:1:1000 V:1:1000	PLAN & PROFILE 4+900.00 - 5+250.00 DWG NO:CEC/KP-RRDP/HWIN-KOHAT-2/PP 15
		a			DRAWN IMRAN TARIQ		ACCESS ROAD	DATE:	
		b			CHECKED SHAHZAD DURRANI			SEP, 2024	
		c			APPROVED AQEEL YOUNIS				



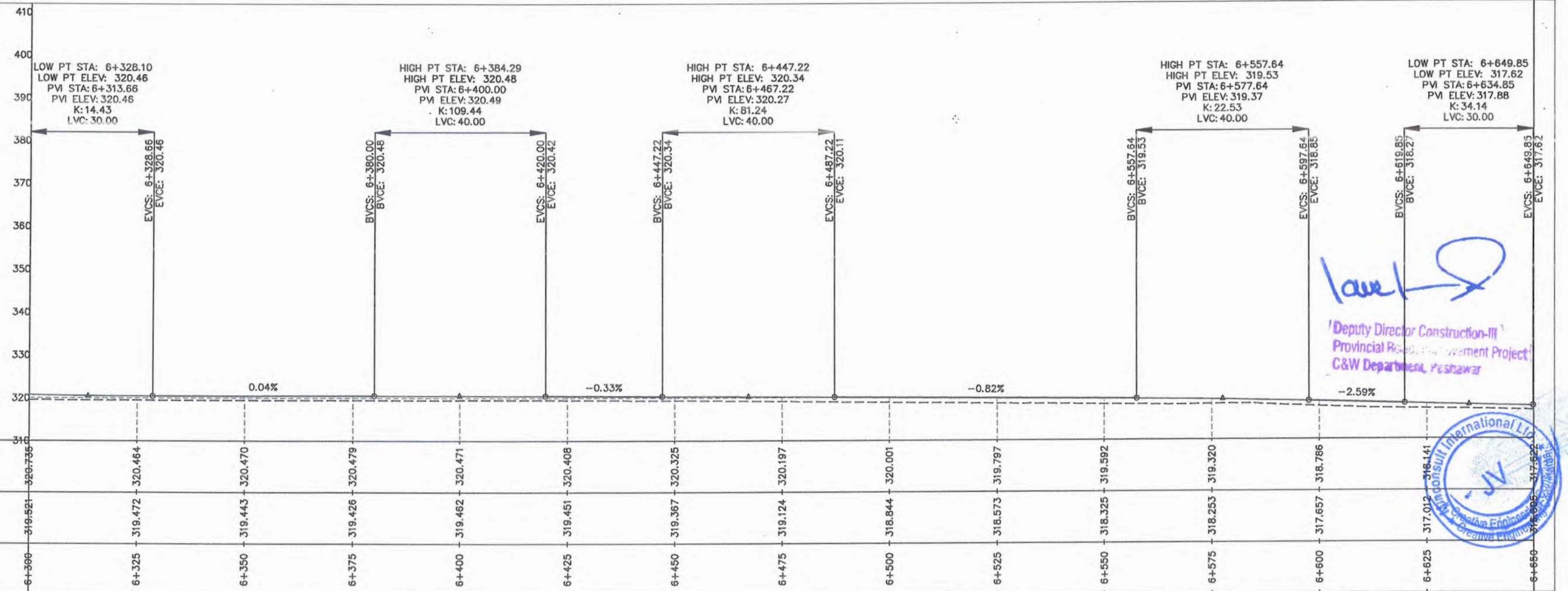
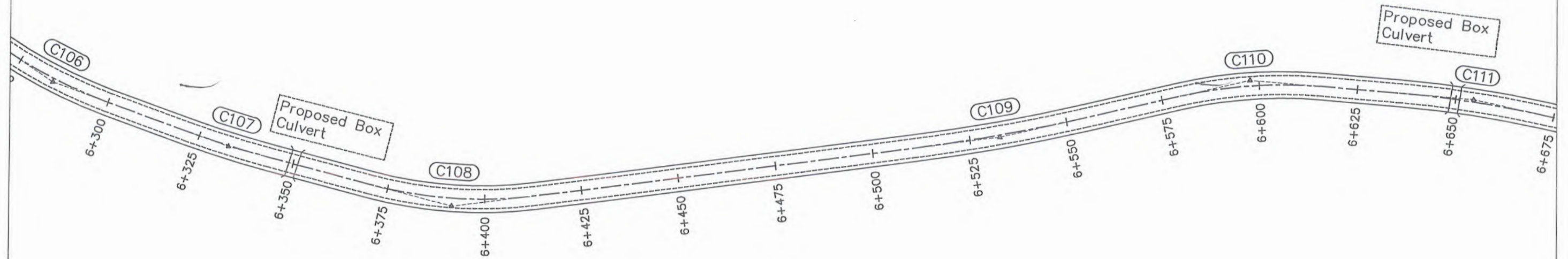
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 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings.		G.DESIGNED	AMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	H:1:1000 V:1:1000	PLAN & PROFILE 5+250.00 - 5+600.00		
		a			DRAWN	IMRAN TARIQ	CHECKED					SHAHZAD DURRANI	
		b								APPROVED			AQEEL YOUNIS
		c											



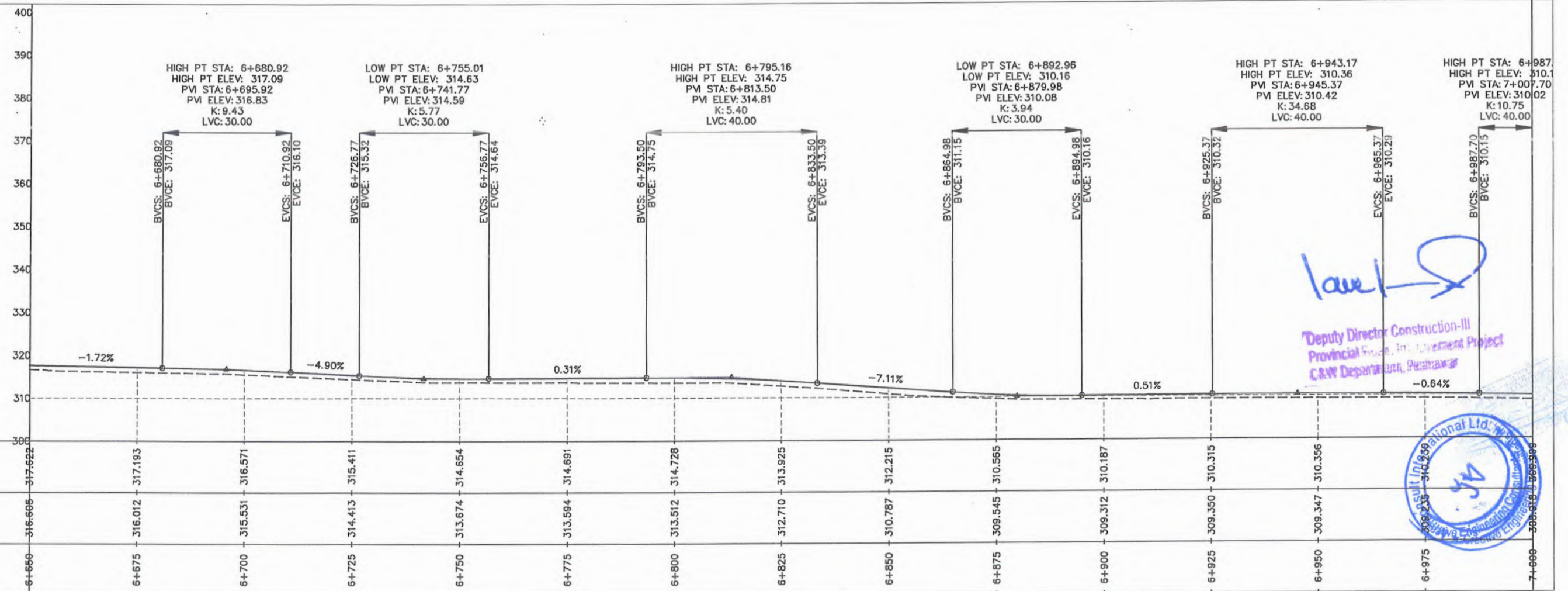
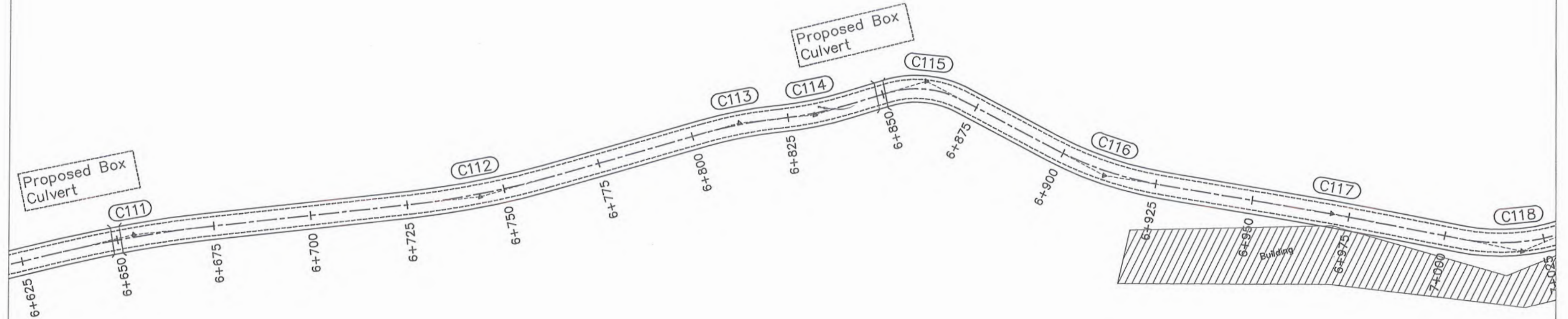
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 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings.		G.DESIGNED	AMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	H:1:1000 V:1:1000	DATE: SEP, 2024.	PLAN & PROFILE 5+600.00 - 5+950.00	
		a			DRAWN	IMRAN TARIQ							
		b			CHECKED	SHAHZAD DURRANI							
		c			APPROVED	AQEEL YOUNIS							
						KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)		ACCESS ROAD				DWG NO:CEC/KP-RRDP/H/WN-KOHAT-2/PP 17	



CLIENT:		DESIGN CONSULTANT: (MIN - JV - CEC)		REV	DATE	DESCRIPTION		NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings.		G.DESIGNED	AMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	H:1:1000 V:1:1000	PLAN & PROFILE 5+950.00 - 6+300.00		
		a			DRAWN	IMRAN TARIQ							
		b			CHECKED	SHAHZAD DURRANI	ACCESS ROAD		DATE: SEP, 2024.				
		c			APPROVED	AQEEL YOUNIS							
DWG NO:CEC/KP-RRDP/HWN-KOHAT-2/PP 18													



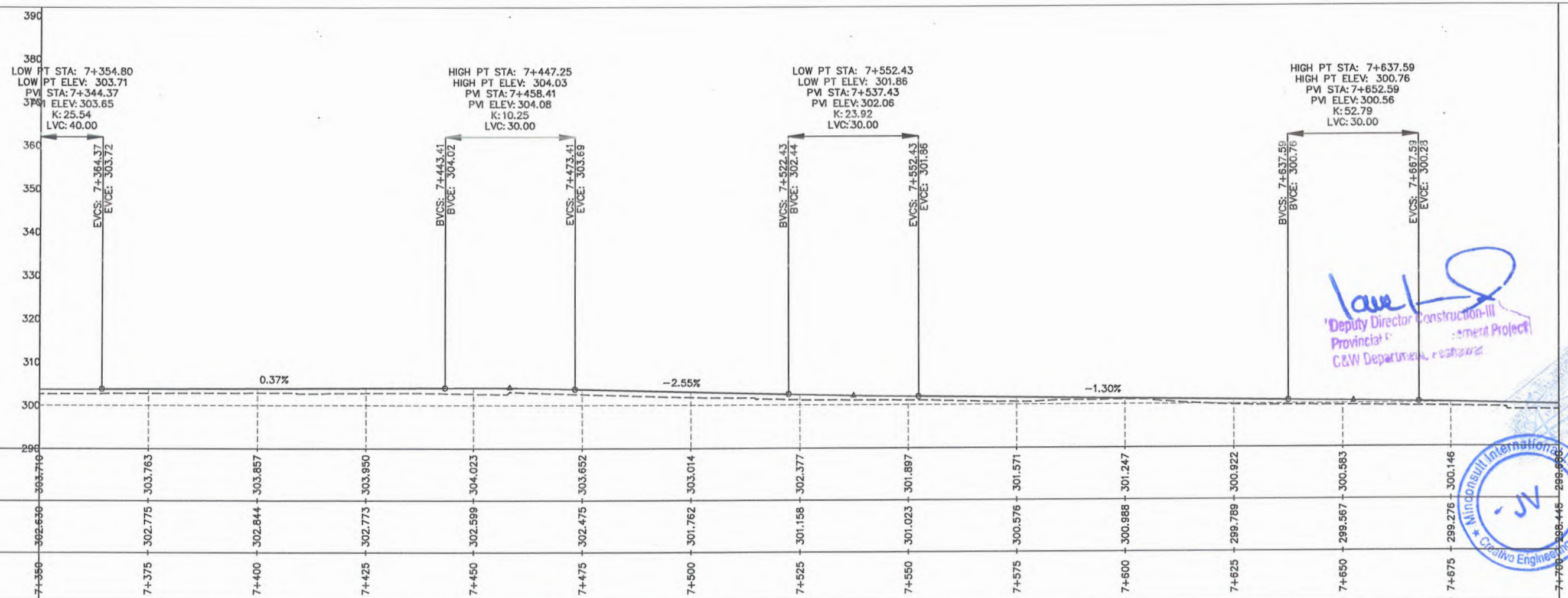
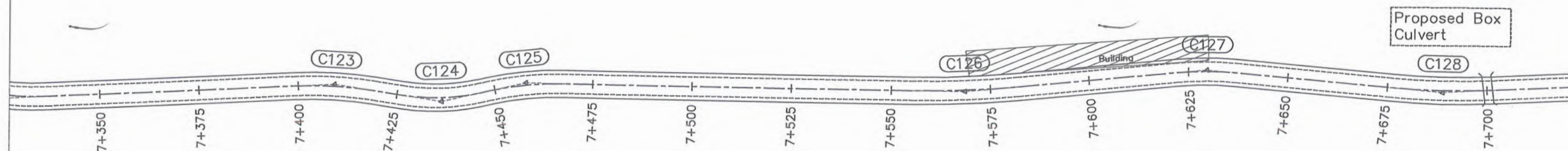
CLIENT:  GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	DESIGN CONSULTANT: (MIN - JV - CEC)  MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	REV 0 a b c	DATE SEP, 2024 	DESCRIPTION Tender Drawings. 	NAMES: G.DESIGNED AMIR KHAN DRAWN IMRAN TARIQ CHECKED SHAHZAD DURRANI APPROVED AQEEL YOUNIS	PROJECT: KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	ROAD NAME: N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK ACCESS ROAD	SCALE: H:1:1000 V:1:1000 DATE: SEP, 2024 SHEET CONTENT: PLAN & PROFILE 6+300.00 - 6+650.00 DWG NO:CEC/KP-RRDP/HWN-KOHAT-2/PP 19
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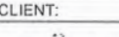


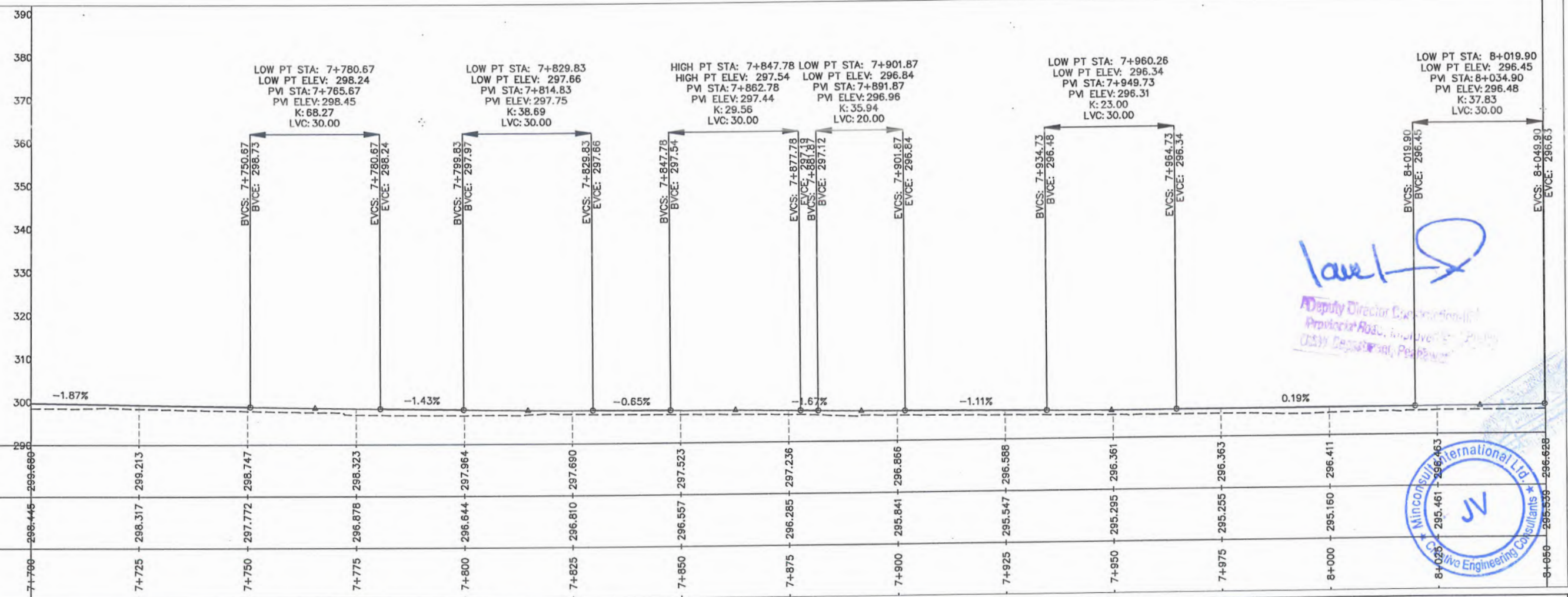
Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Peshawar

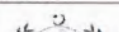


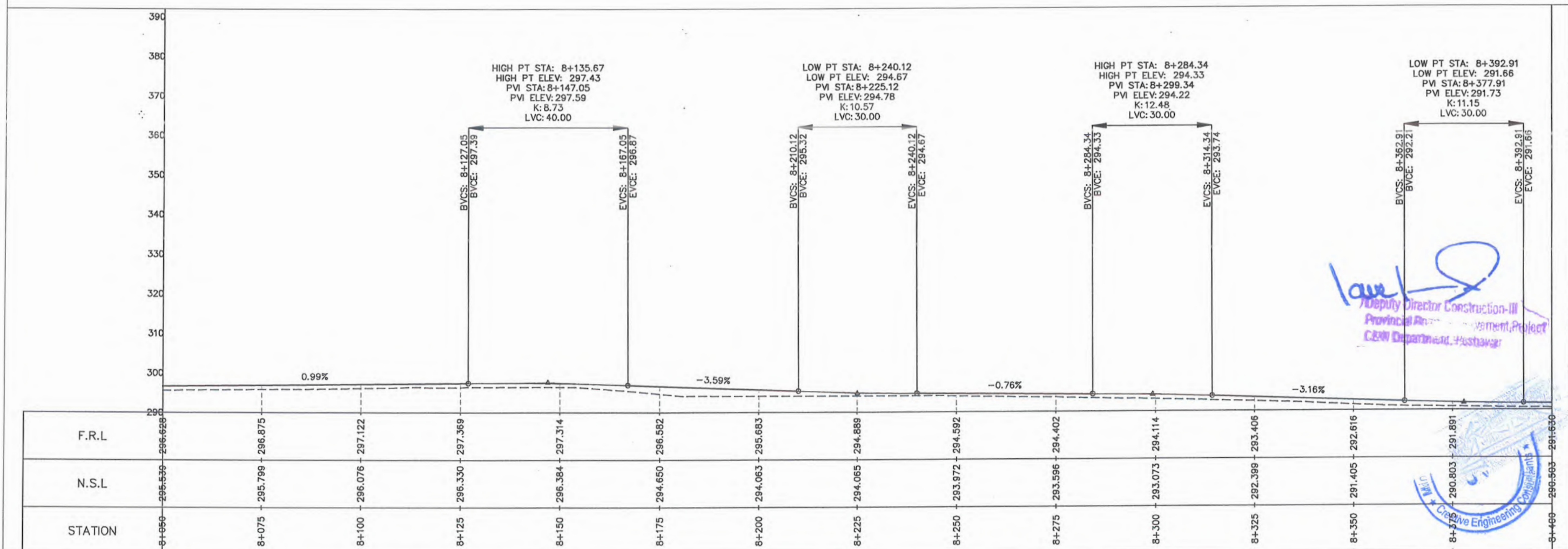
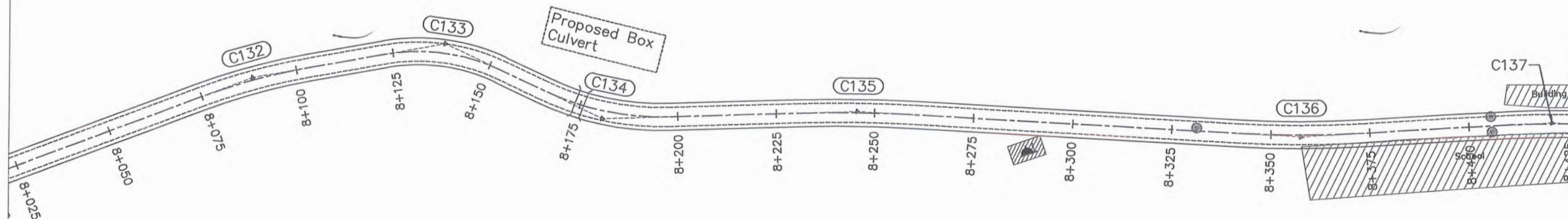
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		0	SEP, 2024.	Tender Drawings.	G.DESIGNED	AMIR KHAN			H:1:1000 V:1:1000	
		a			DRAWN	IMRAN TARIQ			DATE:	
		b			CHECKED	SHAHZAD DURRANI			SEP, 2024.	
		c			APPROVED	AQEEL YOUNIS				

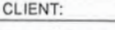


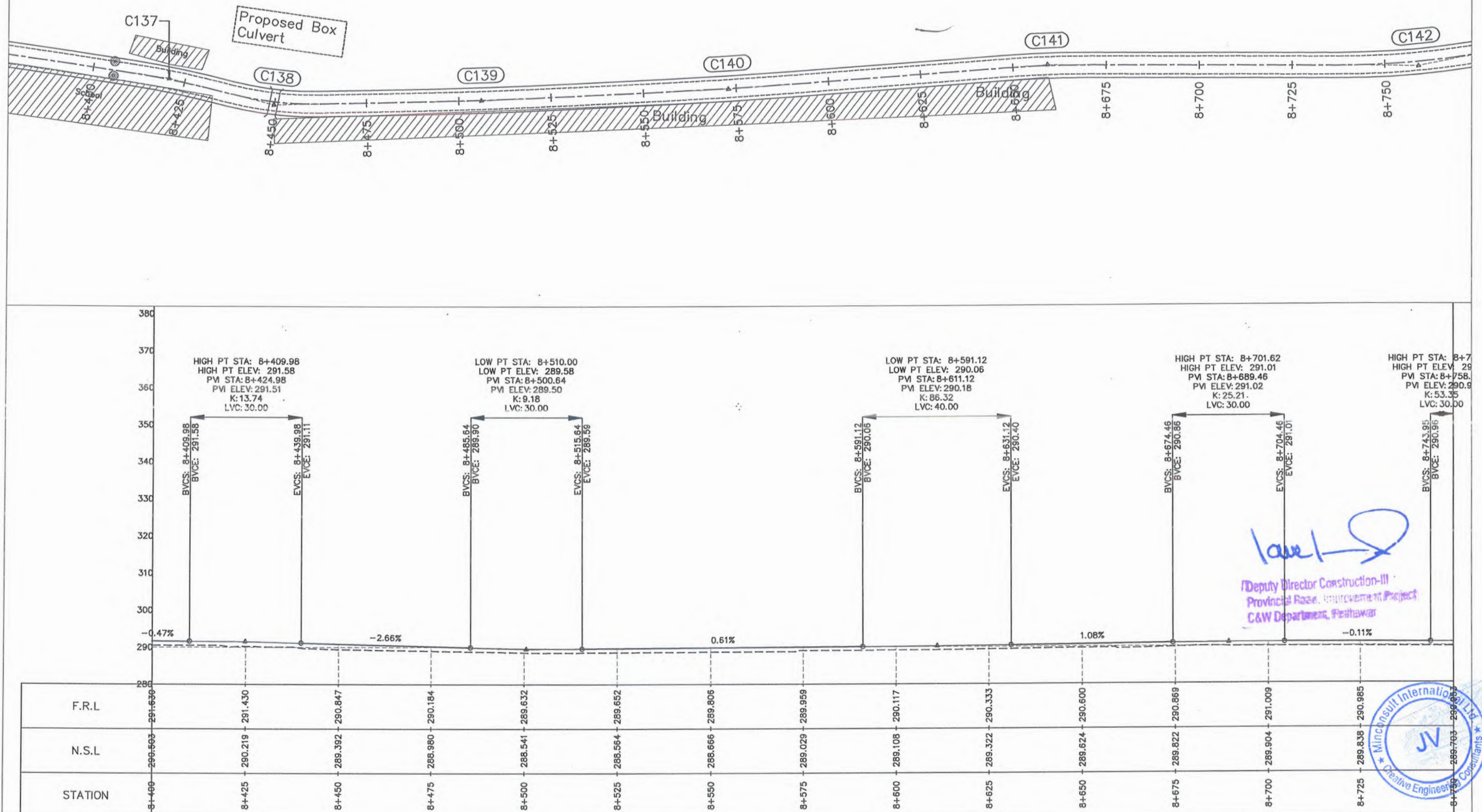
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 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings.	G.DESIGNED	AMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK ACCESS ROAD	H:1:1000 V:1:1000	DATE: SEP, 2024.			
		a			DRAWN	IMRAN TARIQ							
		b			CHECKED	SHAHZAD DURRANI							
		c			APPROVED	AQEEL YOUNIS							
DWG NO:CEC/KP-RRDP/HWIN-KOHAT-2/PP													



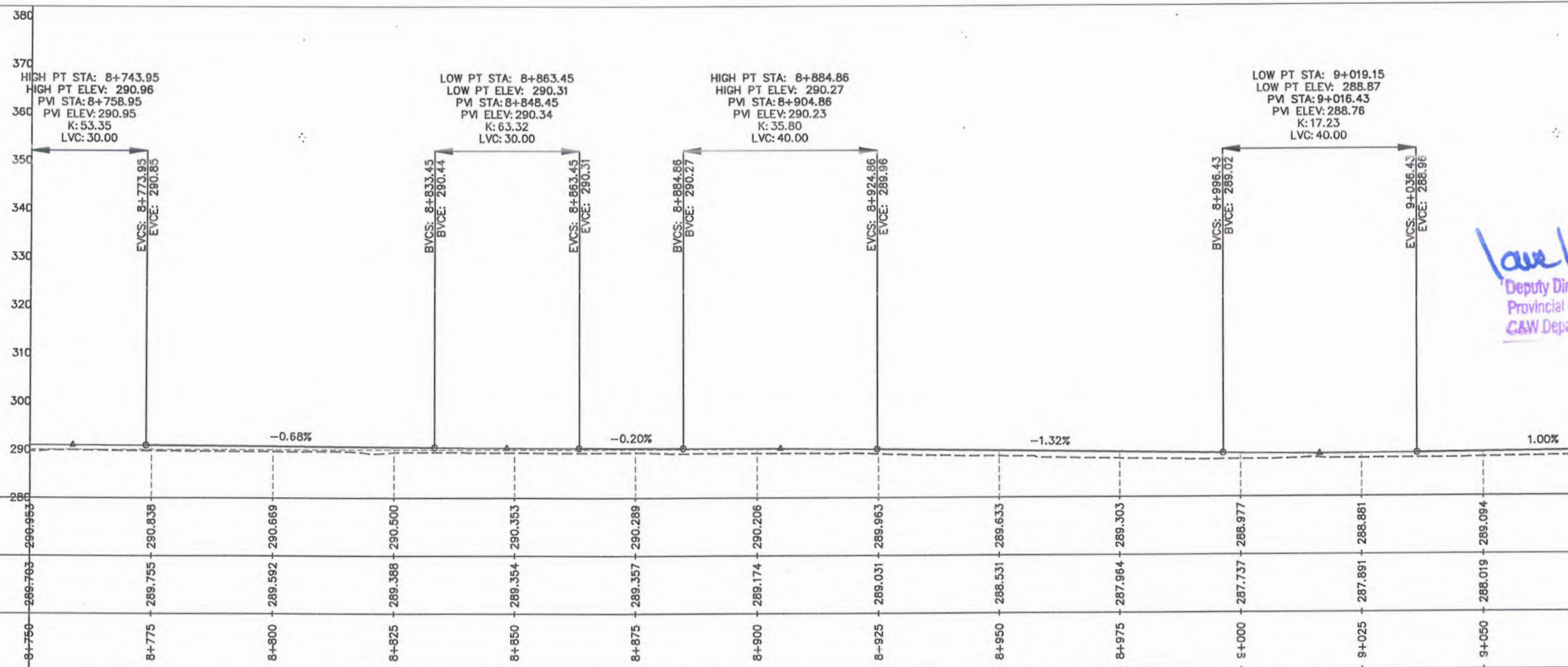
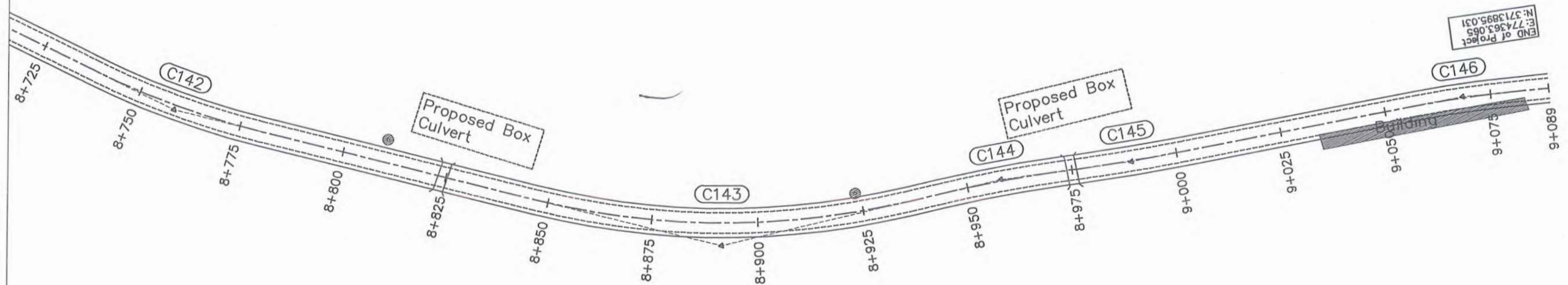
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				a			DRAWN	IMRAN TARIQ				
				b			CHECKED	SHAHZAD DURRANI		ACCESS ROAD	DATE:	
				c			APPROVED	AQEEL YOUNIS			SEP, 2024.	
												DWG NO:CEC/KP-RRDP/HWN-KOHAT-2/PP 23



CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:		SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings.	G.DESIGNED	AMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	ACCESS ROAD	H:1:1000 V:1:1000	PLAN & PROFILE 8+050.00 - 8+400.00			
		a			DRAWN	IMRAN TARIQ								
		b			CHECKED	SHAHZAD DURRANI								
		c			APPROVED	AQEEL YOUNIS								
												DATE:		
												SEP, 2024.	DWG NO:CEC/KP-RRDP/HWN-KOHAT-2/PP 24	



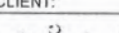
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		b			CHECKED	SHAHZAD DURRANI	ACCESS ROAD		DATE: SEP, 2024.				
		c			APPROVED	AQEEL YOUNIS							
DWG NO:CEC/KP-RRDP/HWIN-KOHAT-2/PP 25													



END of Project
N: 3713895.031
E: 774363.065

Lawal S
Deputy Director Construction-III
Provincial Road Development Project
C&W Department, Peshawar



CLIENT:	DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:	
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings.	G.DESIGNED	AMIR KHAN	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KOHAT-2 KHUSHAL GARH ROAD TO KAMAR DHOK	H:1:1000 V:1:1000	PLAN & PROFILE 8+750.00 - 9+088.69	
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		b			CHECKED	SHAHZAD DURRANI	APPROVED	AQEEL YOUNIS	ACCESS ROAD	DATE:	SEP, 2024.
		c									

DWG NO:CEC/KP-RRDP/HW/N-KOHAT-2/PP 26

PROJECT:

**KHYBER PAKHTUNKHWA
RURAL ROAD DEVELOPMENT PROJECT
(KP-RRDP)**

TENDER DRAWINGS

**KOHAT-3
FROM MUKARAB KHAN KORONA TO KOT ROAD**

SEPTEMBER, 2024

Lawal S

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



**GOVERNMENT OF KHYBER
PAKHTUNKHWA**

**COMMUNICATION & WORKS
DEPARTMENT
PROJECT IMPLEMENTATION UNIT(PIU)**



MINCONSULT SDN BHD
(Company No : 58835-P)



CREATIVE ENGINEERING CONSULTANTS
CREATIVE HOUSE, PHASE 3 CHOWK MAIN JAMRUD ROAD,
PESHAWAR.

SR.NO	TITLE	DWG NO.	SR.NO	TITLE	DWG NO.
1	TITLE PAGE		29	TYPICAL PLUM-RETAINING WALL	CEC/HW/KP-RRDP/KOHAT-3/STR-14
2	LIST OF DRAWINGS	CEC/HW/KP-RRDP/KOHAT-3/LD-01	30	TYPICAL SIDE DRAIN	CEC/HW/KP-RRDP/KOHAT-3/STR-016
3	PROJECT LOCATION MAP		31	CAUSEWAY	CEC/HW/KP-RRDP/KOHAT-3/STR-07
4	GENERAL & TYPICAL DRAWINGS				
5	SYMBOLS & ABBREVIATIONS	CEC/HW/KP-RRDP/KOHAT-3/SA-03(a&b)			
6	GENERAL NOTES FOR ROAD CONSTRUCTION	CEC/HW/KP-RRDP/KOHAT-3/GN-04			
7	TYPICAL MINOR ROAD JUNCTION	CEC/HW/KP-RRDP/KOHAT-3/MJD-05(a-b)			
8	TYPICAL SUPER ELEVATION DETAILS	CEC/HW/KP-RRDP/KOHAT-3/SE-06			
9	TRAFFIC SIGNS DETAILS	CEC/HW/KP-RRDP/KOHAT-3/TSD-07(a-g)			
10	PAVEMENT MARKING DETAILS	CEC/HW/KP-RRDP/KOHAT-3/PM-08			
11	KILOMETER POST DETAILS	CEC/HW/KP-RRDP/KOHAT-3/KM-09			
12	GUARD RAIL DETAILS	CEC/HW/KP-RRDP/KOHAT-3/GR-10			
13	TYPICAL CROSS SECTIONS				
14					
15	TYPICAL CROSS SECTIONS	CEC/HW/KP-RRDP/KOHAT-3/TCS-01			
16	CENTER LINE DATA				
17	CENTER LINE DATA	CEC/HW/KP-RRDP/KOHAT-3/CL-01-02			
18	HORIZONTAL CURVE DATA				
19	HORIZONTAL CURVE DATA	CEC/HW/KP-RRDP/KOHAT-3/HCD-01-2			
22	LIST OF BENCH MARKS	CEC/HW/KP-RRDP/KOHAT-3/BM-01			
23	LIST OF CULVERTS , CAUSEWAYS	CEC/HW/KP-RRDP/KOHAT-3/CVT-01			
24	PLAN & PROFILE DRAWINGS				
25	PLAN & PROFILE DRAWINGS	CEC/HW/KP-RRDP/KOHAT-3/P&P-01-16			
26	STRUCTURAL DRAWINGS				
27	TYPICAL BOX CULVERT	CEC/HW/KP-RRDP/KOHAT-3/STR-01a-b			
28					

Lawal S
Deputy Director Construction-III
Provincial Government Project
C&W Department, Peshawar



CLIENT:		DESIGN CONSULTANT:		REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	SHAHZAD DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (RRDP)	KOHAT-3 FROM MUKARAB KORON TO KOT ROAD	N.T.S	LIST OF DRAWINGS		
		a			DRAWN	MANSOOR						
		b			CHECKED	SHAHZAD DURRANI		ACCESS ROAD	SEP, 2024.			
		c			APPROVED	AOEEL YOUNIS						
										DATE:		DWG NO: CEC/KP-RRDP/HWKOHAT-3/ LD - 01

DESIGN CENTERLINE

PROPOSED RIGHT OF WAY

TOE OF PROPOSED EMBANKMENT

EXISTING ROAD EDGE

GARDEN / TREES

BUSHES

MOSQUE

BUILT-UP AREA (BUILDING/HOUSE)

HUT / MUD HOUSE (KACHA)

GRAVES / GRAVE YARD

LIMIT OF AGRICULTURAL FIELDS

H.T / L.T POWER TRANSMISSION LINE

500 KV TRANSMISSION LINE

TELEPHONE / TELEGRAPH LINE

EXISTING KATCHA TRACK

DYKE

NORTH

TRAVERSE POINT

BENCH MARK

TUBE WELL / WELL

EXISTING EMBANKMENT SLOPE

POINT OF INTERSECTION

CAUSEWAY (IN PLAN)

PARAPET WALL

RETAINING WALL

DEPRESSION / DITCH / POND

RIVER / NULLAH

STONE MASONRY SIDE WALL

EXISTING/PROPOSED BOX
CULVERT (IN PLAN)

PIPE CULVERT (IN PLAN)

EXISTING/PROPOSED BRIDGE
(IN PLAN)

BRICK WALL / BOUNDARY WALL

BOX CULVERT (IN PROFILE)

PIPE CULVERT (IN PROFILE)

EXISTING GROUND LEVEL (N.S.L)
AT DESIGN CENTRELINE

FORMATION ROAD LEVEL (F.R.L)

SUB GRADE LINE (S.G.L)
AT DESIGN CENTRELINE

BRIDGE (IN PROFILE)

EXISTING CULVERT SIZE

EXISTING CULVERT EXTENSION
TO LEFT (L) RIGHT (R)

WATER COURSE (EXISTING)
(LINED)

WATER COURSE (UNLINED)

RELOCATED WATER COURSE

GRID CORNER

GROUTED RIPRAP

LOOSE RIPRAP

RAILWAY LINE

ROAD SIGN (IN PLAN)

CAUSEWAY (IN PROFILE)

P. WALL

R. WALL

S. WALL

EXIS.

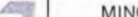
EXT. ()

ROAD SIGN NUMBER

No.

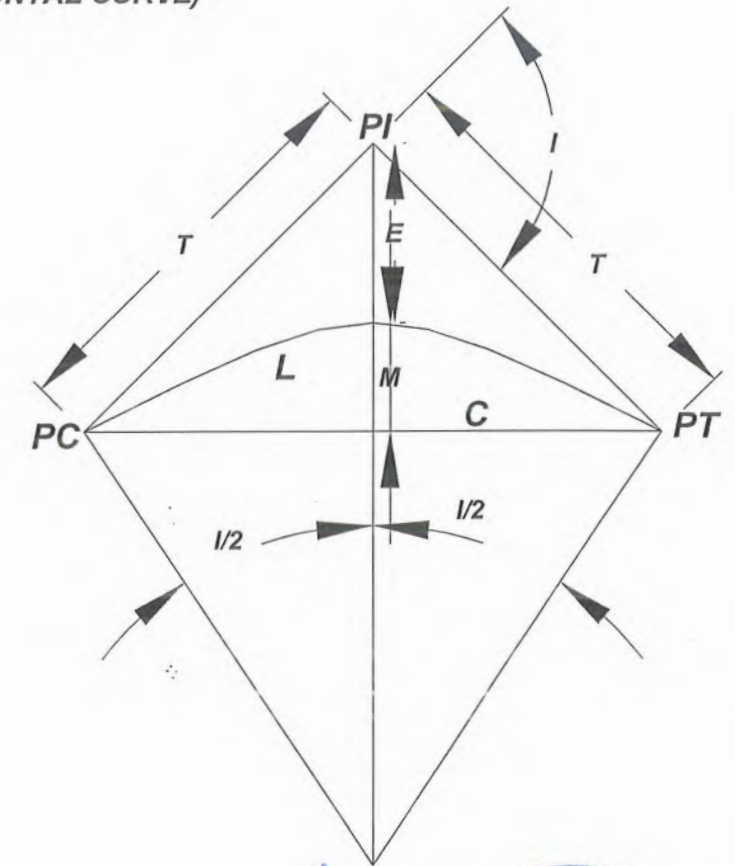
Deputy Director Construction-III
Provincial Road Development Project
C&W Department, Peshawar



CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION		NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MINCONSULT SDN BHD (COMPANY NO. 58635-P) J.V. 	CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP. 2024.	TENDER DRAWINGS		G.DESIGNED	SHAHZAD DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (RRDP)	KOHAT-3 FROM MUKARAB KORON TO KOT ROAD	N.T.S	SYMBOLS & ABBREVIATOIN
					a			DRAWN	MANSOOR					
					b			CHECKED	SHAHZAD DURRANI					
					c			APPROVED	AQEEL YOUNIS			ACCESS ROAD	SEP. 2024.	

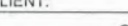
A	AREA
B	BREADTH
BC	REINFORCED CONCRETE BOX CULVERT
B.M	BENCH MARK
BOP	BEGINNING OF PROJECT
C	CHORD LENGTH
C.B.R	CALIFORNIA BEARING RATIO
C/C	CENTER TO CENTER
CHD	CHECKED
C/L	CENTER LINE
CM	CENTIMETER
CONC	CONCRETE
CONST/JT	CONSTRUCTION JOINT
CUL	CULVERT
Cu.m	CUBIC METER
CURVE LEN	VERTICAL CURVE LENGTH
D	DEPTH
Da	DEGREE OF CURVE (BY ARC)
Dc	DEGREE OF CURVE (BY CHORD)
DEG	DEGREE
DIA	DIAMETER
DIM	DIMENSION
D/S	DOWNSTREAM
D.S.T	DOUBLE SURFACE TREATMENT
DRG	DRAWING
E	EASTING , EAST
E	EXTERNAL DISTANCE (SHIFT)
ELEV./EL	ELEVATION
EOP	END OF PROJECT
EXIS	EXISTING
EXT/JT	EXPANSION JOINT
F.R.L	FORMATION ROAD LEVEL
G.I	GALVANIZED IRON
H	HORIZONTAL
H.T/L.T	HIGH TENSION/LOW TENSION
HF	HEIGHT OF FILL
HWY	HIGHWAY
I	DEFLECTION ANGLE (HORIZONTAL CURVE)
Ic	CIRCULAR DEFLECTION ANGLE
I.L	INVERT LEVEL
K	K-FACTOR (VERTICAL CURVE)
Kg	KILOGRAM
KM/km	KILOMETER
L	LENGTH OF HORIZONTAL CURVE
LIN.M	LINEAR METER
LHS	LEFT HAND SIDE
LT	LEFT
M/m	METER
M	MIDDLE ORDINATE
MAX	MAXIMUM
M.H	MAN HOLE
MIN	MINIMUM
MM	MILLIMETER

MSE	CROSS SLOPE AT MAXIMUM SUPERELEVATION
N	NORTHING, NORTH
No	NUMBER
N.T.S	NOT TO SCALE
NSL	NATURAL SURFACE LEVEL
PROP:	PROPOSED
PC	POINT OF HORIZONTAL CURVATURE (START OF HORIZONTAL CURVE)
PC	REINFORCED CONCRETE PIPE CULVERT
PGL	PROFILE GRADE LINE
PI	POINT OF HORIZONTAL INTERSECTION
PR	POINT OF ROTATION
PT	POINT OF HORIZONTAL TANGENCY (END OF HORIZONTAL CURVE)
P.C.C	PLAN CEMENT CONCRERE
R	RADIUS OF HORIZONTAL CURVE
R.C.C	REINFORCED CONCRETE
REINF	REINFORCEMENT
REV	REVISION
RHS	RIGHT HAND SIDE
R.O.W	RIGHT OF WAY
R.R	RIP RAP
RT	RIGHT
RW	RETAINING WALL
RWC ()	RELOCATION WATER COURSE (TYPE)
S.G.L	SUB GRADE LEVEL
S	SLOPE GRADIENT (PERCENT)
SE	SUPERELEVATION
S.B.P	SHOULDER BREAK POINT
SC	SLAB CULVERT
SHLD	SHOULDER
Sq.m	SQUARE METER
STA./STA	STATION
STRUCT	STRUCTURE
S'WALL	SIDE WALL
T	TANGENT LENTH OF HORIZONTAL CURVE
T.D	TOE DITCH
T.S.T	TRIPPLE SURFASE TREATMENT
TAN	TANGENT
TH	THICKNESS
TR	TRANSITION
TR	(TANGENT RUN OUT) = DISTANCE FROM BS TO THE PC
TYP	TYPICAL
U/S	UPSTREAM
V	VERTICAL
VAR	VARIABLE
VER	VERIFIED
VPC	VERTICAL POINT OF CURVATURE (START OF VERTICAL CURVE)
VPI	VERTICAL POINT INTERSECTION OF PROFILE GRADE.
VPT	VERTICAL POINT OF TANGENCY (END OF VERTICAL CURVE)
W	WEST,WIDTH OF ROADWAY
W.B.M	WATER BOUND MACADAM
WC	WATER COURSE
Ø	SKREW ANGLE



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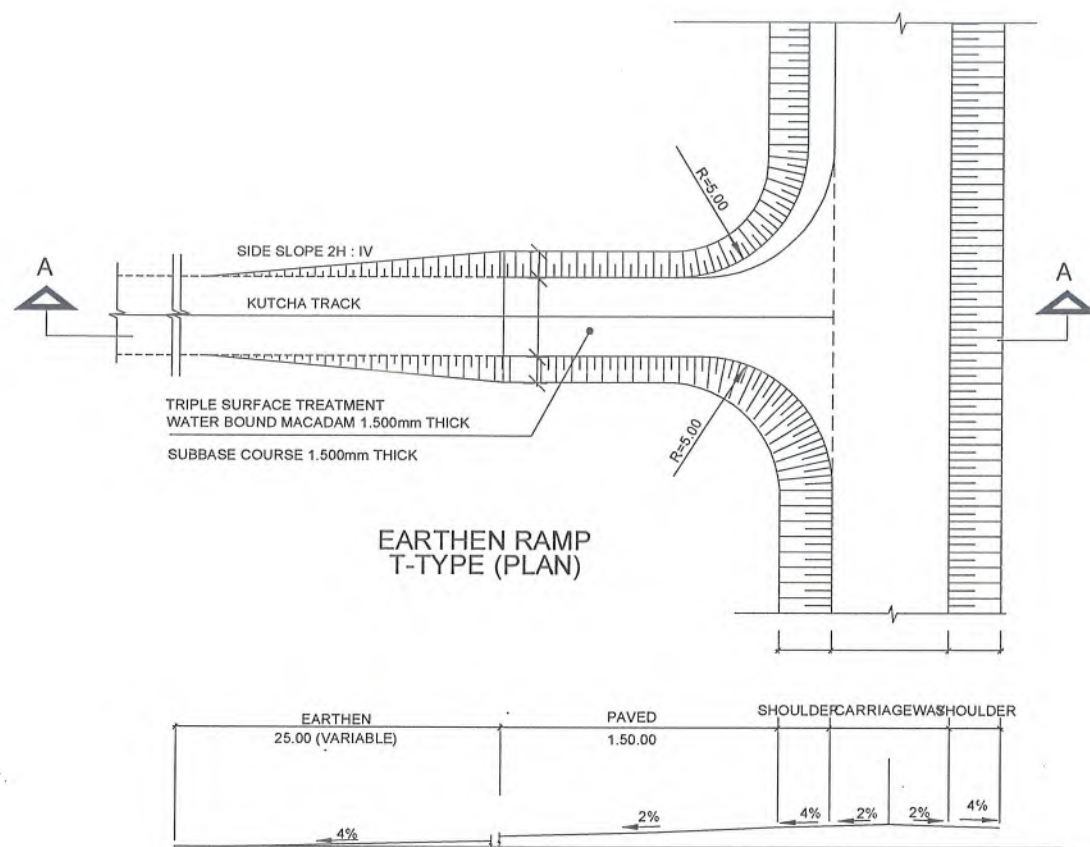
CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION		NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. 	CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS		G.DESIGNED	SHAHZAD DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (RRDP)	KOHAT-3 FROM MUKARAB KORON TO KOT ROAD	N.T.S	SYMBOLS & ABBREVIATOIN
					a			DRAWN	MANSOOR					
					b			CHECKED	SHAHZAD DURRANI					
					c			APPROVED	AQEEL YOUNIS					
											ACCESS ROAD	SEP, 2024.	DWG NO: CEC/KP-RRDP/HWK/KOHAT-3/ SA - 03b	

GENERAL NOTES FOR ROAD CONSTRUCTION

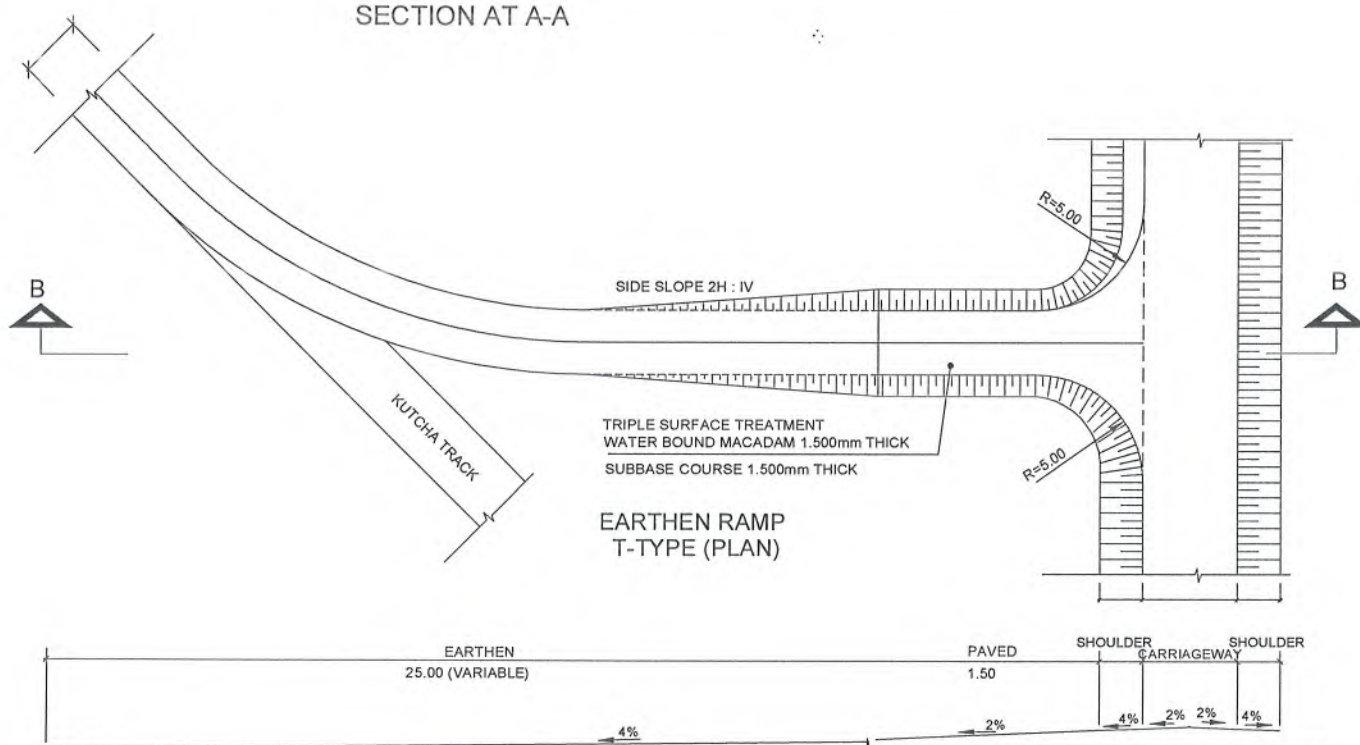
1. GRID COORDINATES & ELEVATIONS FOR THE PROJECT ARE BASED ON UNIVERSAL TRANSVERSE MERCATOR (UTM WGS84).
2. EACH DRAWING SHALL BE READ IN CONJUNCTION WITH OTHER DRAWINGS.
3. NOTES GIVEN ON DRAWINGS ADJACENT TO A SECTION OR DETAIL PERTAIN TO THAT PARTICULAR DETAIL ONLY.
4. THE CONTRACTOR SHALL ENDEAVOR MAXIMUM TO MAINTAIN UNINTERRUPTED FLOW OF TRAFFIC AT ITS ADJOINING CROSS ROADS AND SUBMIT A COMPREHENSIVE DIVERSION PLAN TO ENGINEER FOR APPROVAL.
5. ANY DAMAGE CAUSED TO THE UTILITIES DURING EXCAVATION/EXECUTION OF WORK SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXTRA COST TO THE EMPLOYER IN CONSULTATION WITH THE CONCERNED UTILITY PROVIDER.
6. CONTRACTOR SHALL PREPARE AND SUBMIT, FOR ENGINEER'S REPRESENTATIVE APPROVAL, CROSS-SECTION @25m INTERVAL DULY DESIGN TEMPLATES, SHOP DRAWINGS FOR STRUCTURES, PAVEMENT MARKINGS (LOCATION, TYPE AND SIZE), ROAD SIGNS ETC. ON THE PLAN SHEETS FOR THE APPROVAL OF ENGINEER/ENGINEER'S REPRESENTATIVE BEFORE EXECUTION OF RELATED WORKS WITHOUT ANY EXTRA COST TO THE EMPLOYER.
7. SERVICE DUCTS SHALL BE PROVIDED AT JUNCTION LOCATIONS OR AT AN INTERVAL AS DIRECTED BY THE ENGINEER.
8. STRUCTURES SHOWN ON PLAN ARE SYMBOLIC. THE LENGTHS, SIZES, SLOPE, INVERT LEVELS, SKEW ANGLE AND OTHERS DETAILS OF THE PROPOSED STRUCTURES AS SHOWN ON DRAWINGS ARE TENTATIVE. THE CONTRACTOR SHALL PREPARE SHOP DRAWINGS OF EACH STRUCTURE LOCATIONS WITH THE REQUIRED SKEW ANGLE AND OTHER DETAILS AS PER SITE REQUIREMENTS AND SHALL SUBMIT THEM TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION EXECUTION.\
9. THE CONTRACTOR SHALL BE RESPONSIBLE TO CATER FOR ALL TEMPORARY TRAFFIC DIVERSION DURING CONSTRUCTION TO THE SATISFACTION OF THE ENGINEER INCLUDING DETOUR ROAD AND ITS MAINTENANCE, SPRINKLING OF WATER, GRADING AND COMPACTION WHEN AND WHERE REQUIRED WITHOUT ANY EXTRA COST TO EMPLOYER.
10. ROADWAY EXCAVATION MATERIAL SHALL BE UTILIZED IN THE MOST EFFECTIVE MANNER IN THE EMBANKMENT EVEN WITH BLENDING/ MIXING THE SUPERIOR MATERIALS (WHERE REQUIRED WITHOUT AT ANY EXTRA COST).ROADWAY SUITABLE EXCAVATION SHALL NOT BE DISPOSED OFF OUTSIDE RIGHT OF WAY WITHOUT WRITTEN APPROVAL OF THE ENGINEER BY EMPLOYER.

CLIENT:  GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	DESIGN CONSULTANT:  MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT: KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (RRDP)	ROAD NAME: KOHAT-3 FROM MUKARAB KORON TO KOT ROAD ACCESS ROAD	SCALE:	SHEET CONTENT: GENERAL NOTES FOR ROAD CONSTRUCTION DWG NO: CEC/KP-RRDP/HWKOHAT-3/ GN-04
		0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	SHAHZAD DURRANI			N.T.S	
		a			DRAWN	MANSOOR			DATE:	
		b			CHECKED	SHAHZAD DURRANI			SEP, 2024.	
		c			APPROVED	AQEEL YOUNIS				

MINOR JUNCTION DETAIL



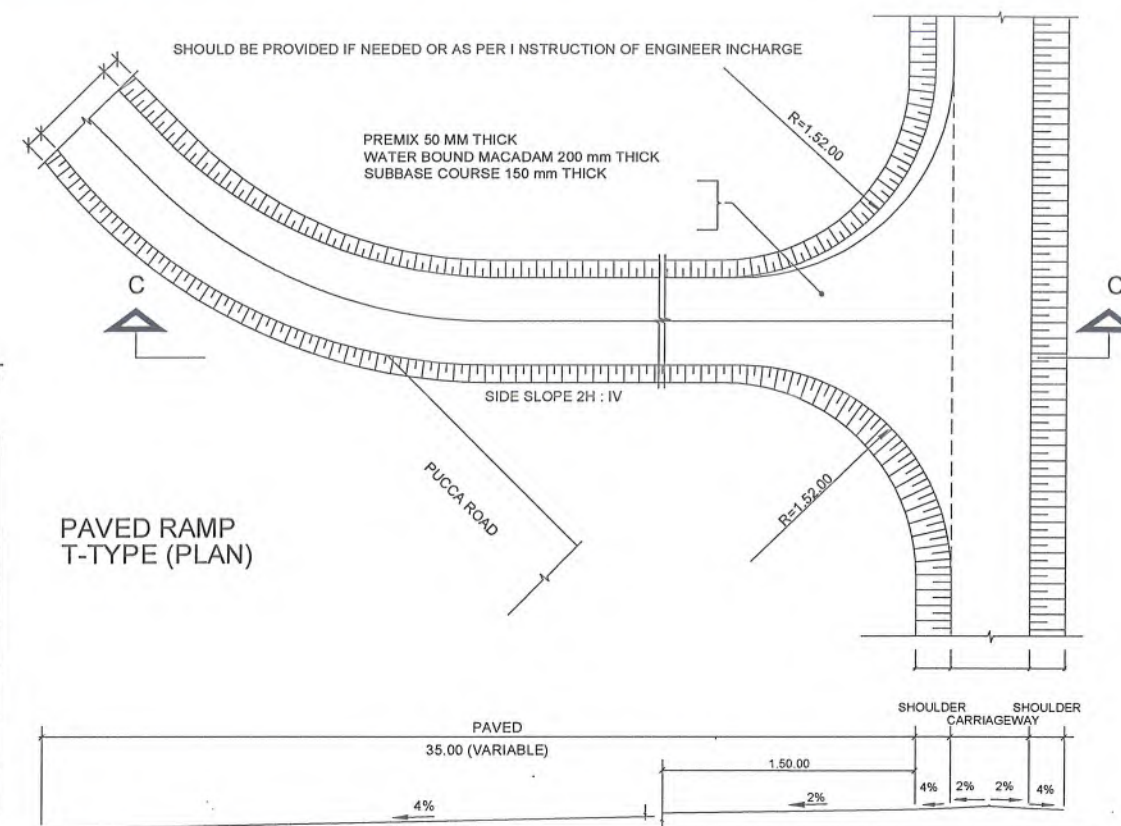
SECTION AT A-A



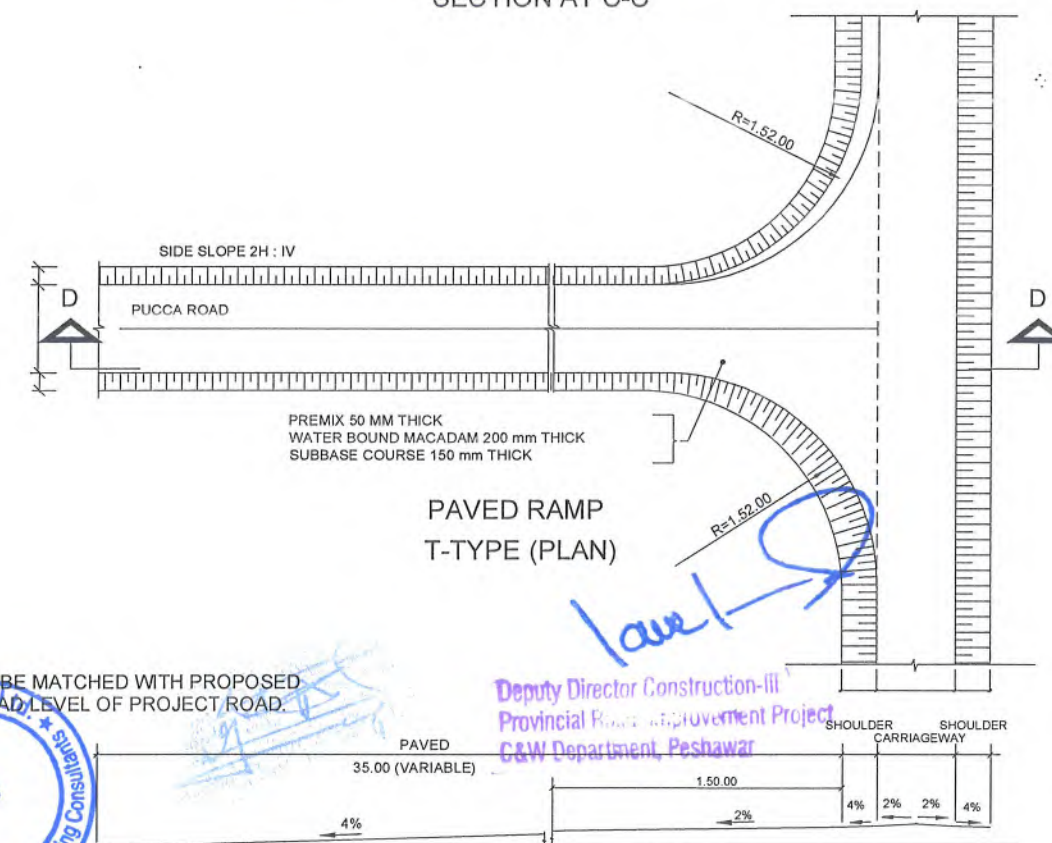
SECTION AT B-B

RECOMMENDED CURVE RADII FOR DIFFERENT ANGLES OF TURN

ANGLE OF TURN (DEGREES)	SIMPLE CURVE RADIUS (R) (METRES)
30	30
45	23
60	1.58
75	1.56
90	1.52 TO 1.55
>90	VARIABLE



SECTION AT C-C



SECTION AT D-D

NOTE:
1.5- RAMP ARE TO BE MATCHED WITH PROPOSED FINISHED ROAD LEVEL OF PROJECT ROAD.



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Provincial Road Improvement Project
C&W Department, Peshawar

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GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP. 2024.	TENDER DRAWINGS	G.DESIGNED SHAHZAD DURRANI DRAWN MANSOOR CHECKED SHAHZAD DURRANI APPROVED AQEEL YOUNIS	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (RRDP)	KOHAT-3 FROM MUKARAB KORON TO KOT ROAD ACCESS ROAD	N.T.S DATE: SEP. 2024.	MINOR JUNCTION DETAILS DWG NO: CEC/KP-RRDP/HW/KOHAT-3/ MJD - 05a

MINOR JUNCTION DETAIL

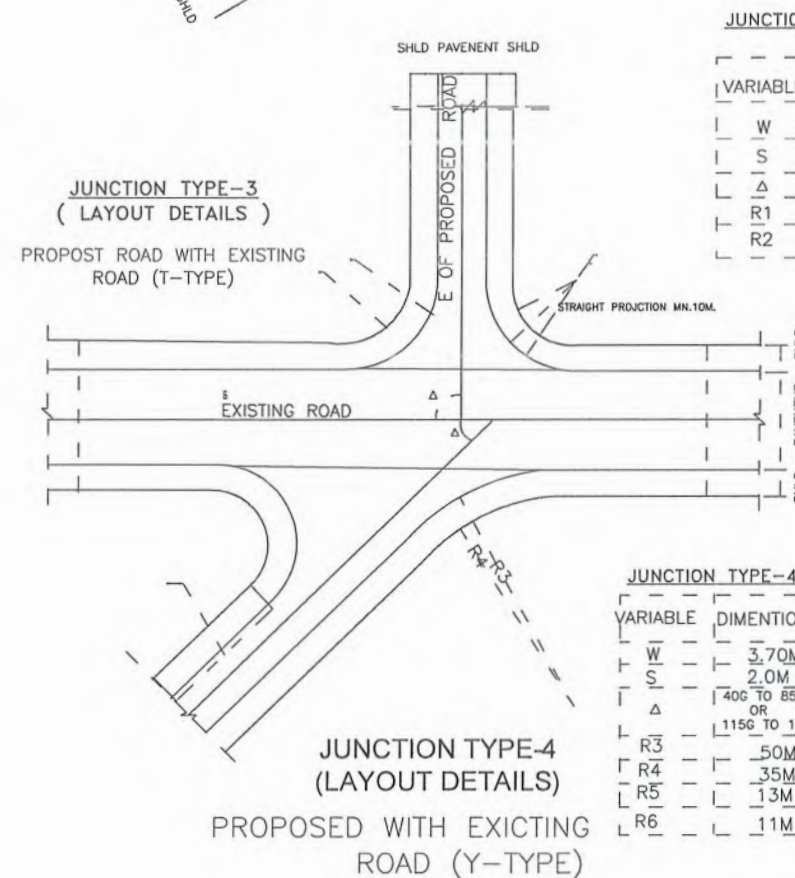
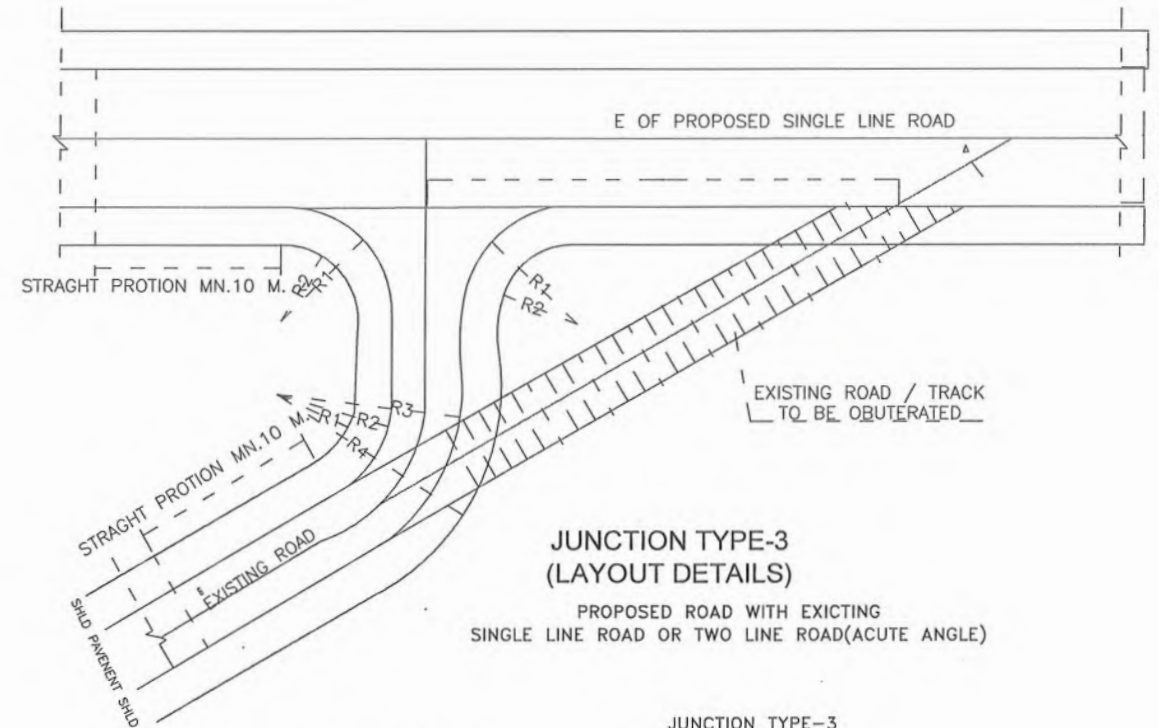
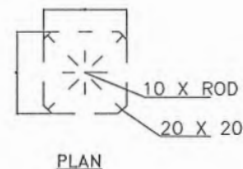
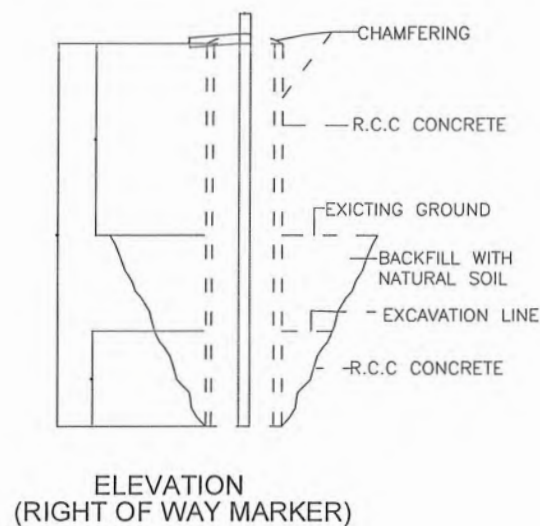
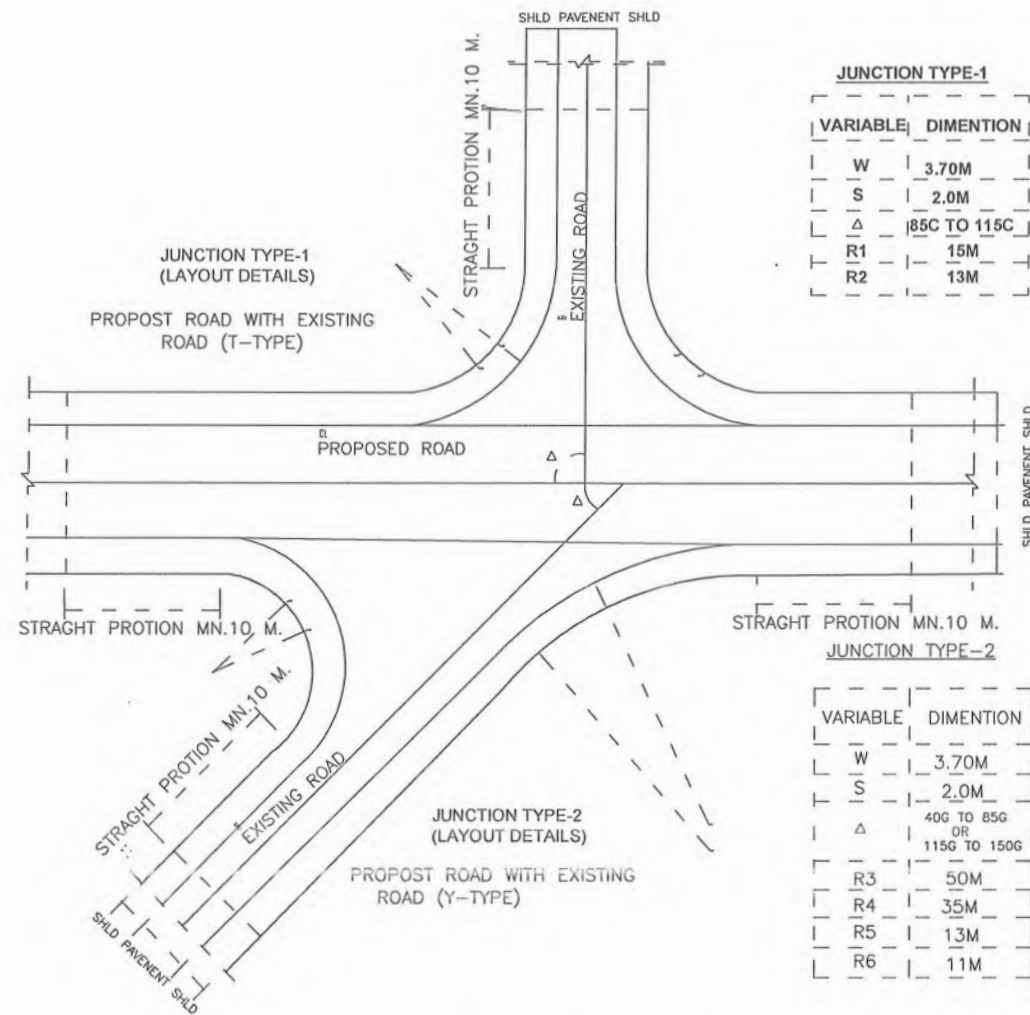


TABLE NO.5 APPLICABLE WHEN
1 <50G OR >150G
(JUNCTION WITH 2 LINE
ROAD)(2) 40G OR 160G)
JUNCTION WITH SINGLE ROAD)

VARIABLE	DIMENTION FOR JUSTIFICATION SINGLE LINE ROAD
W	3.70M
S	3.70M
R1	2.0M
R2	15M
R3	13M
R4	25M
R5	27M

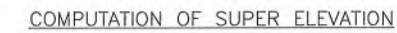
NOTES :

- EXISTING ROAD TO BE DISMANTLED WHERE IT MEETS PROPOSED ROAD AT THE JUNCTION LOCATION ONLY AND WILL BE RECONSTRUCTED ACCORDING TO JUNCTION DETAIL AND LIMITS.
- ON JUNCTION MIN. 10 METER STRAIGHT PORTION SHOULD BE PROVIDED.
- RAD# SHOWN ARE TYPICAL AND MAY BE ADJUSTED AS PER SITE CONDITIONS AS APPROVED BY THE ENGINEER.
- ALL DIMENSIONS ARE IN MILLI-METER UNLESS OTHERWISE SPECIFIED.

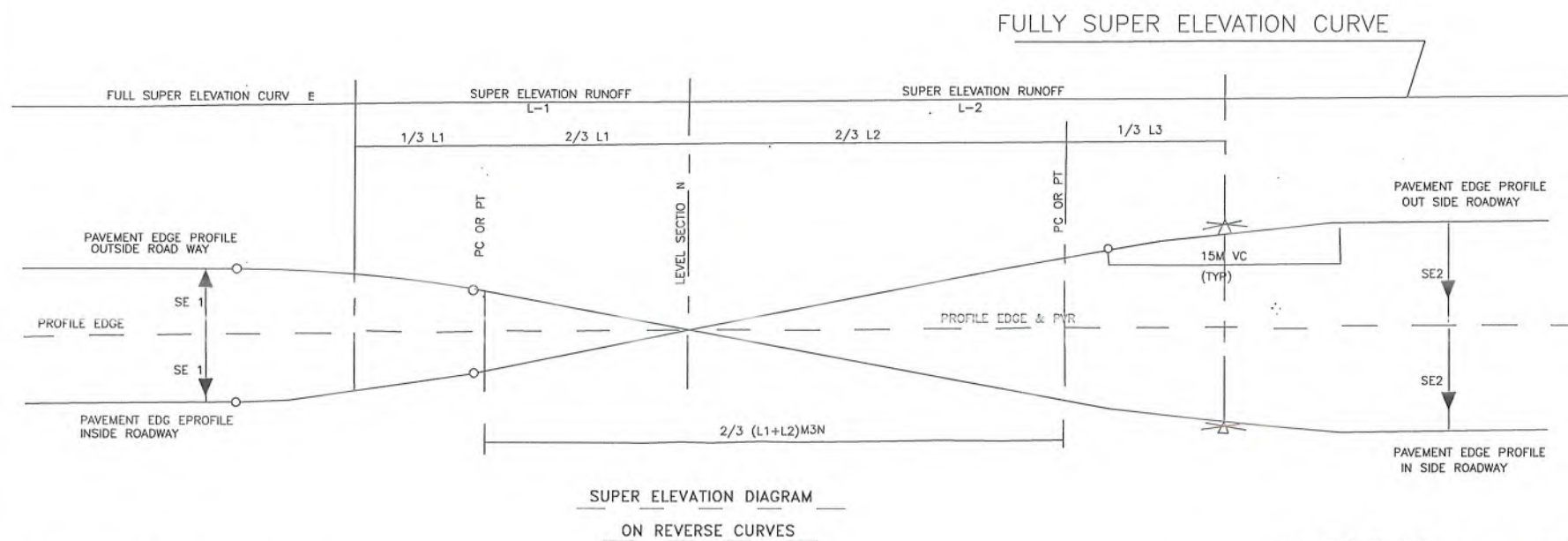


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GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP. 2024.	TENDER DRAWINGS	G.DESIGNED SHAHZAD DURRANI DRAWN MANSOOR CHECKED SHAHZAD DURRANI APPROVED AQEEL YOUNIS	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (RRDP)	KOHAT-3 FROM MUKARAB KORON TO KOT ROAD ACCESS ROAD	N.T.S DATE: SEP. 2024.	MINOR JUNCTION DETAILS DWG NO: CEC/KP-RRDP/HW/KOHAT-3/ MJD - 05b

ROADWAY WIDENING

RADIUS (M)	SE (m/m)	L(M)	W(M)
80.00	0.060	32.00	1.00
90.00	0.060	32.00	0.80
100.00	0.060	32.00	0.60
120.00	0.060	32.00	0.60
150.00	0.058	30.00	—
200.00	0.050	25.00	—
300.00	0.043	22.00	—
500.00	—	—	—
600.00	—	—	—
700.00	—	—	—

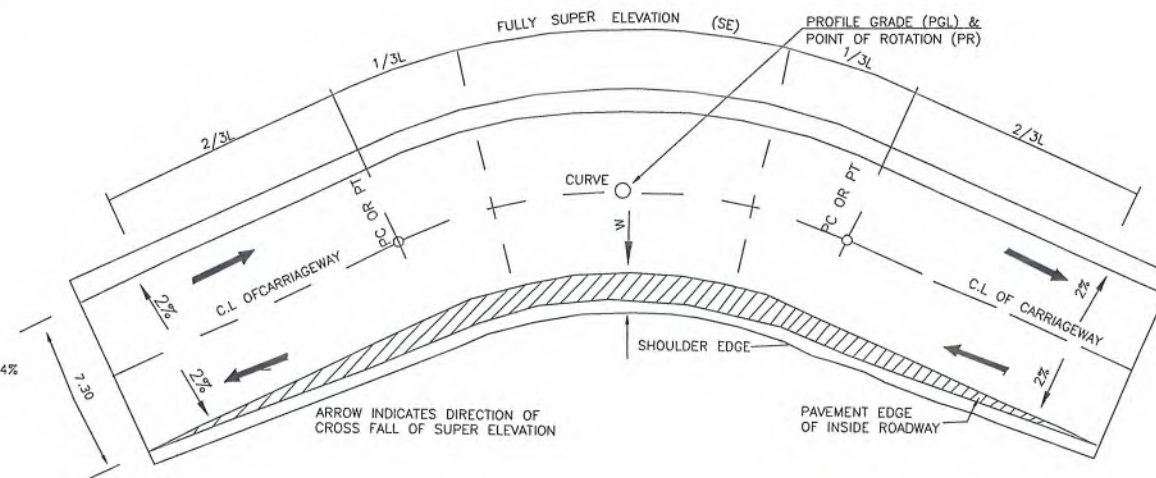


SHOULDER	7.30 CARRAGEWAY		SHOULDER
2.00	3.65	3.65	2.00
-4%	-2%	-2%	-4%
-4%	0%	-2%	-4%
-3%	+2%	+2%	-4%
-2%	+2%	+2%	-4%
-1%	+3%	-3%	-4%
+0%	+4%	+4%	-4%
+1%	+5%	-5%	-3%
+2%	+6%	-6%	-4%

UNDIVIDED HIGHWAY

CROWNING AND ROUNDING
OF OUTER SHOULDER WHERE > 4%

- 1 ROLL OVER ALGEBRAIC DIFFERENCE SE AND NORMAL SHOULDER SLOPE i.e 4%
AT PAVEMENT EDGE NOT TO BE EXCEED 6%
- 2 WHERE THE DIFFERENCE EXCEED 6% THE ABOVE CROWNING OF
SHOULDERS SHOULD BE USED WITH $g = (6 - SE)\%$



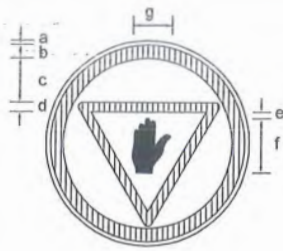
ROAD WIEDNING AND
SUPER ELEVATED UNDIVIDED HIGHWAY

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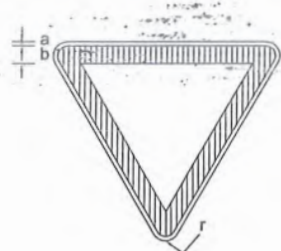


CLIENT:	DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	a	SEP. 2024.	TENDER DRAWINGS	G.DESIGNED	SHAHZAD DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (RRDP)	KOHAT-3 FROM MUKARAB KORON TO KOT ROAD	N.T.S	SUPER ELEVATION DETAILS	
		b			DRAWN	MANSOOR					
		c			CHECKED	SHAHZAD DURRANI					
		d			APPROVED	AQEEL YOUNIS					
DWG NO: CEC/KP-RRDP/HWKOHAT-3/ SE - 06											



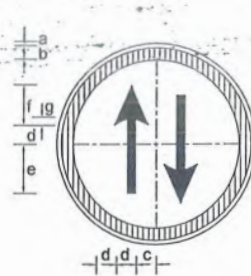
STOP SIGN
R-1
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	16.0	18.70
d	5.5	6.4
e	3.5	4.1
f	30.0	35.0
g	18.5	21.60



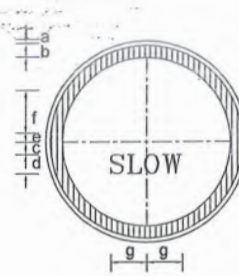
GIVE WAY SIGN
R-2
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	6.5	7.6
r	3.5	4.1



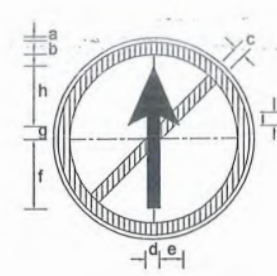
PRIORITY ROAD
SIGN R-3
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	10.5	12.20
d	7.0	8.2
e	26.0	30.3
f	19.0	22.2
g	2.0	2.3



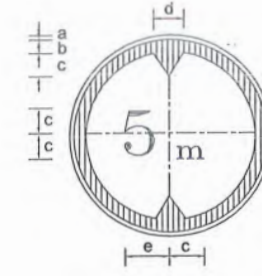
SLOW SIGN
R-4
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	14.5	16.9
e	2.0	2.3
f	24.5	28.6
g	27.6	31.5



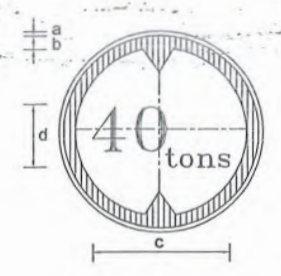
NO ENTRY SIGN
R-6
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	8.0	9.3
e	9.0	10.5
f	30.5	35.6
g	7.0	8.2
h	23.5	27.4
i	4.5	5.2



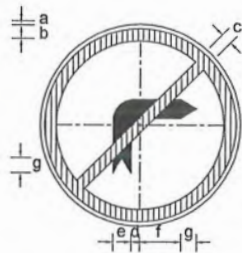
HEIGHT LIMIT SIGN
R-16
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	16.5	19.2
d	26.0	30.3
e	20.0	23.3



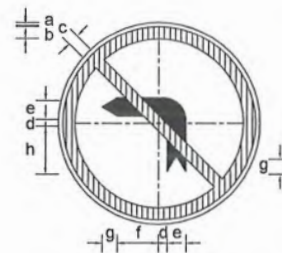
GROSS WEIGHT LIMIT SIGN
R-18
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	49.0	57.2
d	40.0	46.7



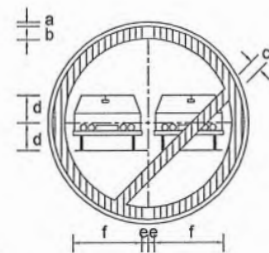
NO RIGHT TURN SIGN
R-20
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	6.0	7.0
e	10.0	11.6
f	25.0	29.2
g	5.0	5.8
h	30.0	35.0



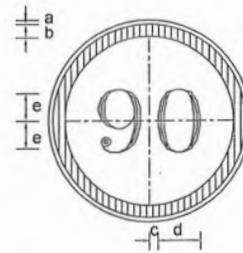
NO LEFT TURN SIGN
R-21
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	6.0	7.0
e	10.0	11.6
f	25.0	29.2
g	5.0	5.8
h	30.0	35.0



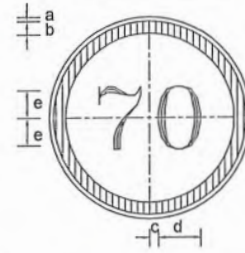
OVERTAKING PROHIBITED SIGN
R-23
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	12.0	14.0
e	3.0	3.5
f	29.5	34.4



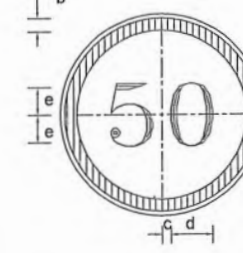
SPEED LIMIT SIGN
R-25-1
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	23.0	26.8
e	20.0	23.3



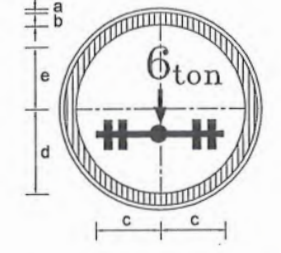
SPEED LIMIT SIGN
R-25-2
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	23.0	26.8
e	20.0	23.3



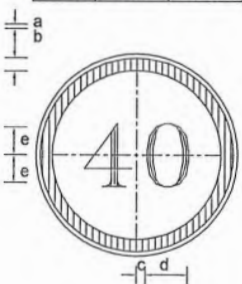
SPEED LIMIT SIGN
R-25-3
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	23.0	26.8
e	20.0	23.3



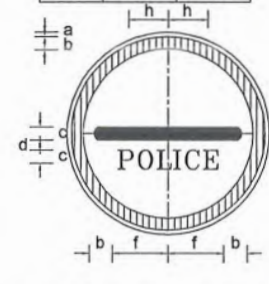
AXLE WEIGHT LIMIT SIGN
R-19
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	28.0	32.7
d	23.0	26.8
e	32.0	37.3



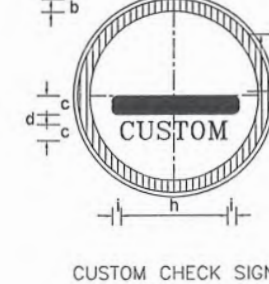
SPEED LIMIT SIGN
R-25-4
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	23.0	26.8
e	20.0	23.3



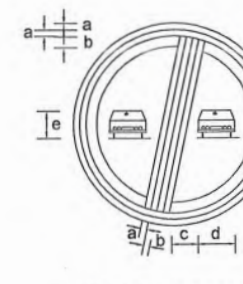
POLICE CHECK POST SIGN
R-27
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	7.5	8.8
d	3.0	3.5
e	10.0	11.7
f	27.5	32.1
g	29.0	33.8
h	28.0	32.7



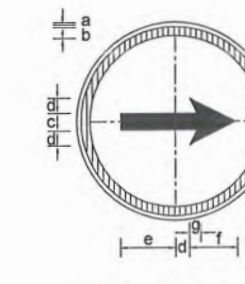
CUSTOM CHECK SIGN
R-28
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	8.0	9.3
d	4.0	4.7
e	11.0	12.8
f	31.0	36.2
g	41.0	47.8
h	52.0	60.7
i	7.5	8.7



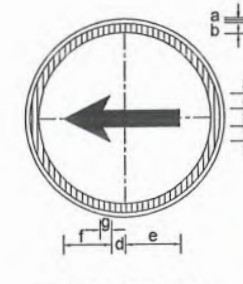
END OF OVERTAKING
RESTRICTION SIGN
R-31
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	1.7	7.6
c	10.0	11.7
d	25.0	29.2
e	21.0	24.5



TURN RIGHT SIGN
R-34
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	4.0	4.7
c	8.0	9.3
d	9.0	10.5
e	32.0	37.3
f	23.0	26.8
g	4.5	5.2



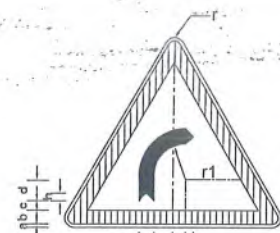
TURN LEFT SIGN
R-35
DIMENSIONS (cm)

PARTS	90cm	105cm
a	1.0	1.2
b	4.0	4.7
c	8.0	9.3
d	9.0	10.5
e	32.0	37.3
f	23.0	26.8
g	4.5	5.2

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

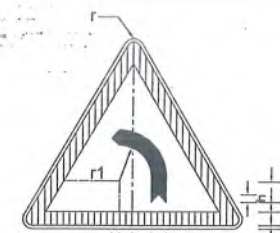
- NOTES:
- 1 - For Sign Locations Refer To Plan Sheets.
 - 2 - Final Location To Be Decide By The Engineer As Per Site.
 - 3 - Some Of The Sign Faces As Shown Are Reversible And The Actual Face Detail Shall Be Identified Prior To Placing Any
 - 4 - All Signs To Have High Intensity Reflective Sheetings In Accordance With The Relevant Clause In The Specification.
 - 5 - Sign Legends Shall Be Approved By Engineer And Client.

CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED SHAHZAD DURRANI DRAWN MANSOOR CHECKED SHAHZAD DURRANI APPROVED AQEEL YOUNIS	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (RRDP)	KOHAT-3 FROM MUKARAB KORON TO KOT ROAD ACCESS ROAD	N.T.S DATE: SEP, 2024.	TRAFFIC SIGNS DETAILS DWG NO: CEC/KP-RRDP/HAWKOHAT-3/ TSD - 07a



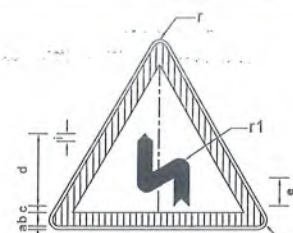
CURVE TOWARDS RIGHT
W-1

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	11.5	13.4
e	8.5	9.9
f	7.0	8.2
g	6.0	7.0
h	3.5	4.1
r1	12.5	14.6



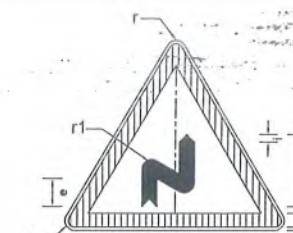
CURVE TOWARDS LEFT
W-2

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	11.5	13.4
e	8.5	9.9
f	7.0	8.2
g	6.0	7.0
h	3.5	4.1
r1	12.5	14.6



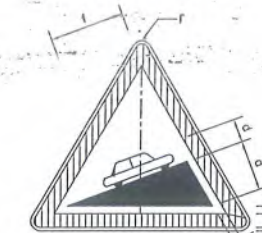
LEFT REVERSE CURVE
W-3

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	33.0	38.5
e	14.0	16.3
f	8.0	9.3
g	7.0	8.2
h	2.0	2.3
i	3.5	4.1
r1	4.5	5.2



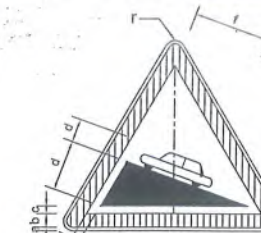
RIGHT REVERSE CURVE
W-4

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	33.0	38.5
e	14.0	16.3
f	8.0	9.3
g	7.0	8.2
h	2.0	2.3
i	3.5	4.1
R1	4.5	5.2



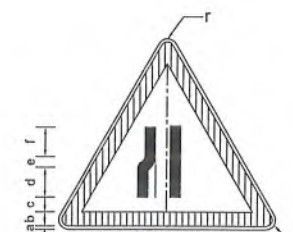
UP-GRADE
W-5

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.5	4.1
d	23.5	27.4
e	11.5	13.4
f	33.0	38.5



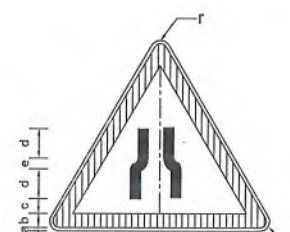
DOWN-GRADE
W-6

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.5	4.1
d	23.5	27.4
e	11.5	13.4
f	33.0	38.5



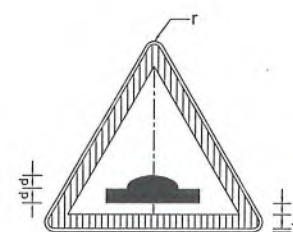
LANE ENDS
W-8

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	14.0	16.3
e	7.2	8.4
f	11.3	13.2
g	3.5	4.1
h	33.0	5.8



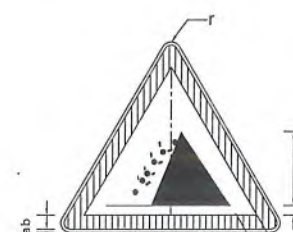
CARRIAGE WAY
NARROWS
W-8

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.5	4.1
d	10.0	11.7
e	14.0	16.3
f	2.5	2.9
g	5.0	5.8



HUMP SIGN
W-12

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	7.0	8.2
e	32.0	37.3



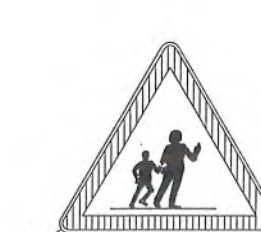
FALLING ROCK
W-16

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.5	4.1
d	38.0	44.3
e	12.0	14.3



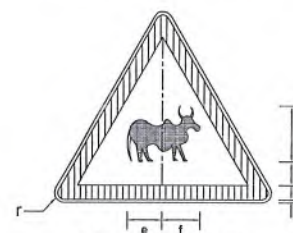
PEDESTRIAN CROSSING
W-17

PARTS	SIGN SIZE	
	90cm	105cm
r	2.9	3.5
a	0.8	1.0
b	5.4	6.5
c	2.1	2.5
d	35.8	43.0
e	19.2	23.0



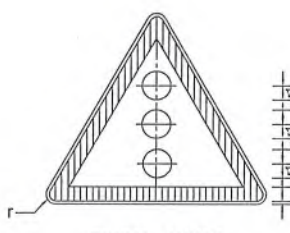
CHILDREN CROSSING
W-18

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.5	5.3
d	28.5	33.3
e	37.5	43.8



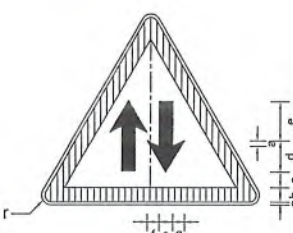
CATTLE CROSSING
W-20

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	2.0	2.3
d	22.0	25.7
e	18.5	21.6
f	17.5	20.4



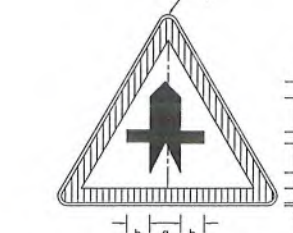
SINGAL AHEAD
W-23

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	2.5	2.9
R1	6.5	7.6



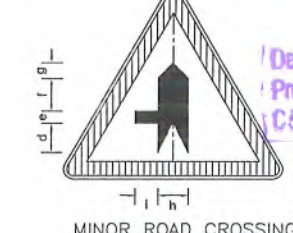
TWO WAY
W-26

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	9.0	10.5
e	19.0	22.2
f	5.0	5.8
g	3.5	4.1



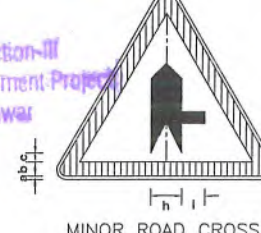
MINOR ROAD CROSSING
AT RIGHT ANGLE
W-27

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	15.0	17.5
e	6.0	7.0
f	11.0	12.8
g	13.5	15.7
h	8.5	9.9



MINOR ROAD CROSSING
ONE SIDE ONLY
W-29

PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	13.5	15.8
e	5.5	6.4
f	15.0	17.5
g	7.0	8.2
h	14.0	16.3
i	10.5	12.3



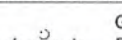
MINOR ROAD CROSSING
ONE SIDE ONLY
W-29A

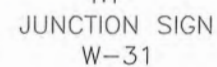
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	13.5	15.8
e	5.5	6.4
f	15.0	17.5
g	7.0	8.2
h	14.0	16.3
i	10.5	12.3

lane 1-2

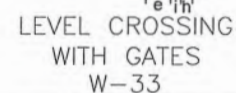
Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Peshawar



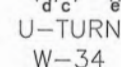
CLIENT:		DESIGN CONSULTANT: (MIN - JV - CEC)		REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 56835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	SHAHZAD DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (RRDP)	KOHAT-3 FROM MUKARAB KORON TO KOT ROAD	N.T.S	TRAFFIC SIGNS DETAILS		
		a			DRAWN	MANSOOR						
		b			CHECKED	SHAHZAD DURRANI						
		c			APPROVED	AQEEL YOUNIS						
								ACCESS ROAD	SEP, 2024.	DWG NO: CEC/KP-RRDP/HWKOHAT-3TSD - 07b		



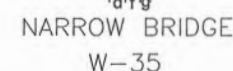
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	17.0	19.8
e	13.0	15.2
f	7.0	8.2



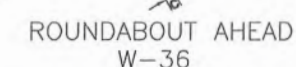
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	1.5	1.8
d	2.5	2.9
e	3.0	3.5
f	7.5	8.8
g	3.5	4.1
h	2.0	2.3
i	4.0	4.7



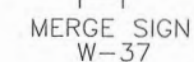
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	7.0	8.2
e	5.0	5.8
f	2.5	2.9
g	23.0	26.8
h	7.5	8.8
i	12.0	14.0



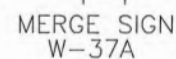
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	6.0	7.0
d	2.5	2.9
e	15.0	17.5
f	4.0	4.7
g	3.0	3.5



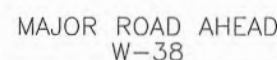
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	9.0	10.5
R1	12.0	14.0
R2	16.0	18.7



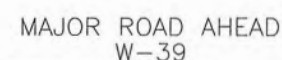
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.5	4.1
d	33.0	38.5
e	7.0	8.2
f	14.0	16.3
g	15.0	17.5
h	3.0	3.5
i	5.5	6.4



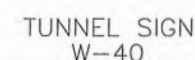
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.5	4.1
d	33.0	38.5
e	7.0	8.2
f	14.0	16.3
g	15.0	17.5
h	3.0	3.5
i	5.5	6.4



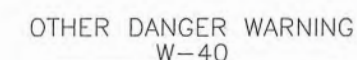
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	13.0	15.2
e	7.0	8.2
f	10.0	11.7
g	2.5	2.9
h	5.0	5.8



PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	15.5	18.1
e	7.0	8.2
f	5.0	5.8
g	11.0	12.8
h	2.5	2.9



PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	2.5	2.9
d	17.0	19.8
e	9.0	10.5
f	2.0	2.3
g	4.0	4.7



PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	2.5	2.9
d	10.0	11.7
e	2.0	2.3
f	1.7	2.0
g	25.0	29.2
h	5.0	5.8

Love - S

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



CLIENT:		DESIGN CONSULTANT: (MIN - JV - CEC)		REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	SHAHZAD DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (RRDP)	KOHAT-3 FROM MUKARAB KORON TO KOT ROAD	N.T.S	TRAFFIC SIGNS DETAILS	
			a			DRAWN	MANSOOR					
			b			CHECKED	SHAHZAD DURRANI					
			c			APPROVED	AQEEL YOUNIS					ACCESS ROAD

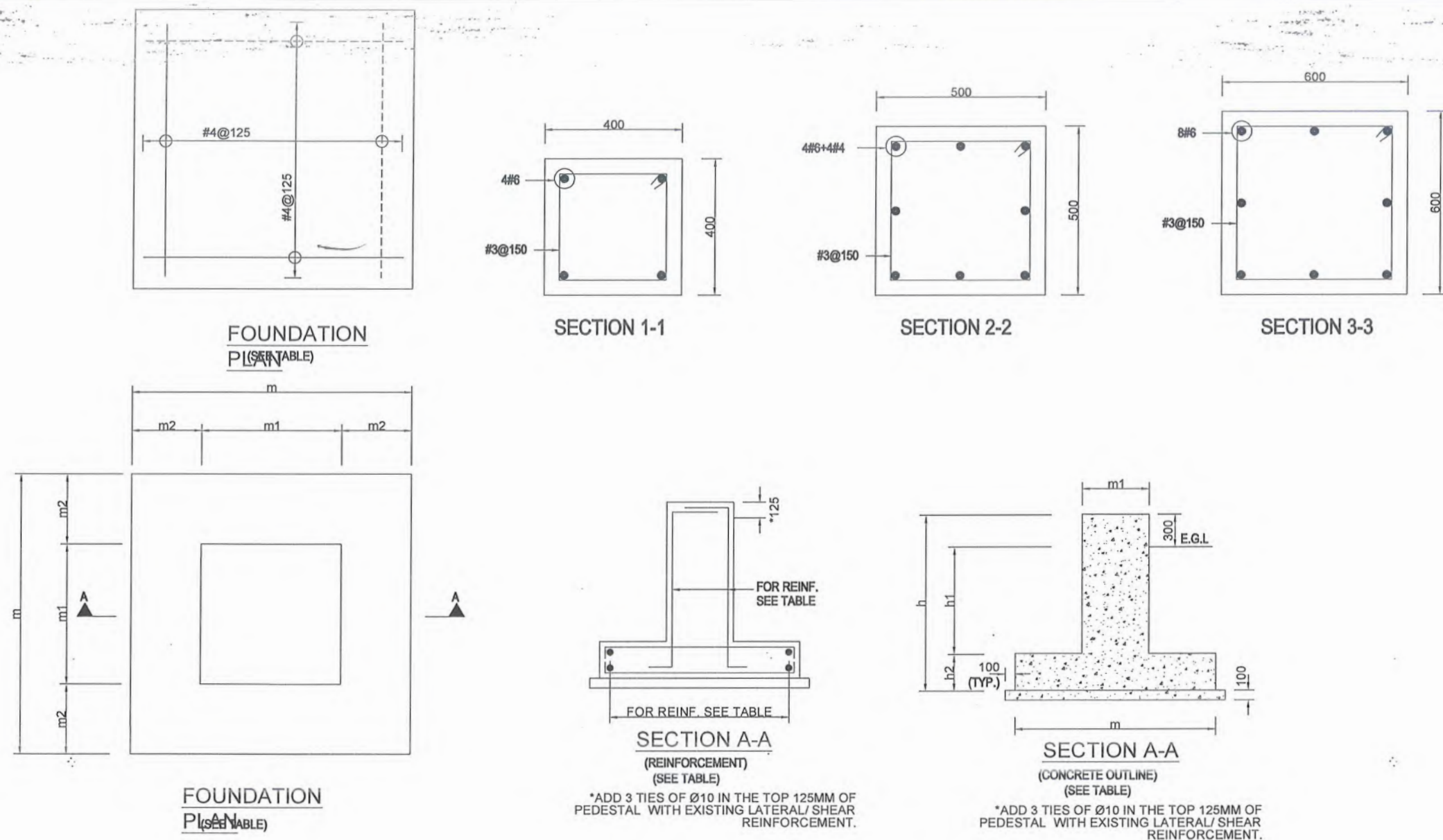


TABLE - 1

AREA OF SIGN BOARD A (M) ²	STRUCTURAL CONCRETE SIZING (mm)						STRUCTURAL STEEL SIZING (mm)							REINFORCEMENT	
	PEDESTAL m ₁ x m ₁	FOUNDATION PAD m x m	m ₂	h ₁	h ₂	h	PIPE		BASE PLATE		ANCHOR BOLTS (J-TYPE)			PEDESTAL	PAD
							DIA (Ø)	THICKNESS (t)	PLAN SIZE (AxB)	THICKNESS (T)	DIA.	EMBEDMENT (L)	Number		
3 < A < 5	400x400	1000x1000	400	1250	350	1600	125	6	300x300	22	16	400	4	SEE SEC. 1-1	SEE FOUNDATION PLAN
5 < A < 10	500x500	1350x1350	525	1175	425	1600	150	10	400x400	25	20	450	4	SEE SEC. 2-2	
10 < A < 15	500x500	1500x1500	525	1125	475	1600	175	10	400x400	28	22	500	4	SEE SEC. 2-2	
15 < A < 20	600x600	1750x1750	625	1050	550	1600	200	10	500x500	32	25	600	4	SEE SEC. 3-3	

TABLE - 2

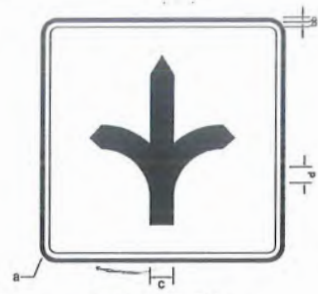
INFORMATION	
FOUNDATION TYPE-1	FOR SINGLE SIGNS AND SINGLE SIGNS WITH ADDITIONAL PLATE
FOUNDATION TYPE-2	FOR DOUBLE SIGNS, FOR SINGLE POST SIGNS WITH AREA <1.5m ² & FOR DOUBLE POST SIGNS WITH AREA <3m ²
FOUNDATION TYPE-3	FOR DOUBLE SIGNS WITH 3 < AREA <20m ²

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		a			DRAWN	MANSOOR		DATE:	
		b			CHECKED	SHAHZAD DURRANI		SEP, 2024.	
		c			APPROVED	AQEEL YOUNIS			

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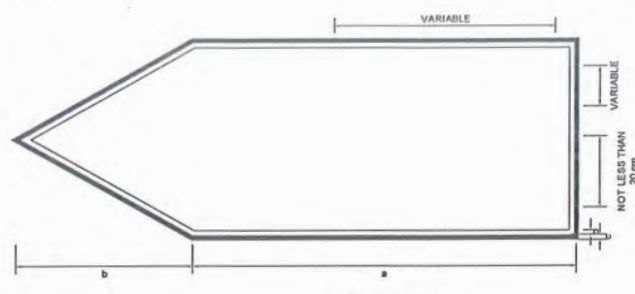
Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Peshawar





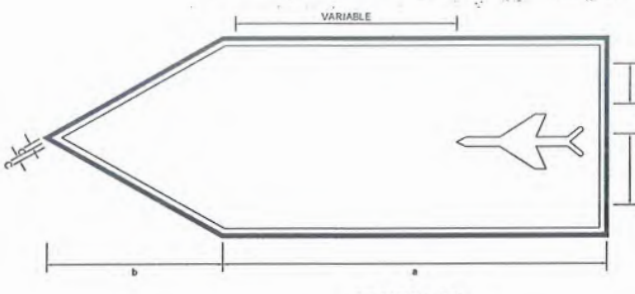
DESTINATION SIGN
I-1

PARTS	SIGN SIZE
	120 x 120 240 x 240
a	4.5 6.0
b	1.8 2.4
c	12.0 16.0
d	22.5 30.0



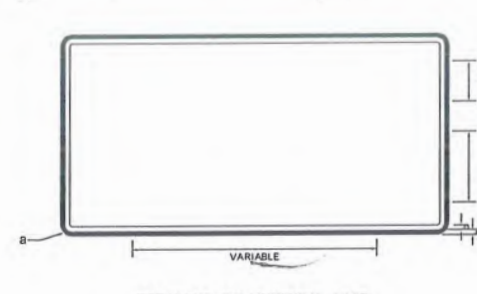
DIRECTION SIGN
I-3

PARTS	SIGN SIZE
	225 x 90 300 x 120
a	180.0 240.0
b	45.0 60.0
c	1.8 2.4



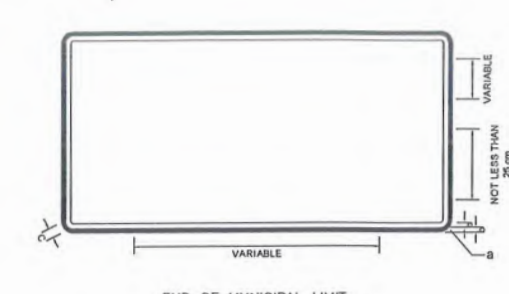
DIRECTION SIGN
I-4

PARTS	SIGN SIZE
	225 x 90 300 x 120
a	180.0 240.0
b	45.0 60.0
c	1.8 2.4



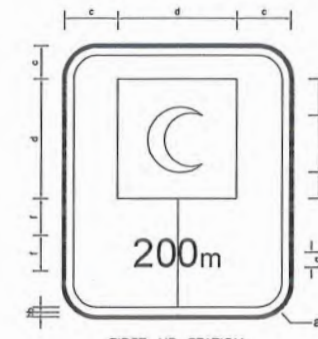
BEGINNING OF MUNICIPAL LIMIT
I-5

PARTS	SIGN SIZE
	225 x 135 300 x 180
a	4.5 6.0
b	1.8 2.4



END OF MUNICIPAL LIMIT
I-6

PARTS	SIGN SIZE
	225 x 135 300 x 180
a	4.5 6.0
b	1.8 2.4
c	20.3 27.0



FIRST AID STATION
I-9

PARTS	SIGN SIZE
	120 x 180
a	6.0
b	2.4
c	20.0
d	80.0
e	40.0
f	26.0
g	14.0



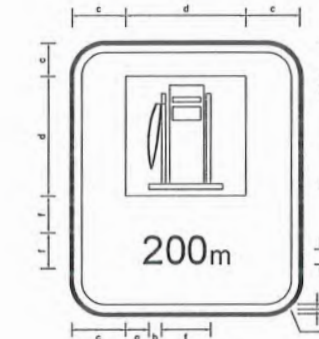
AUTO REPAIR SHOP
I-10

PARTS	SIGN SIZE
	120 x 180
a	6.0
b	2.4
c	20.0
d	80.0
e	30.0
f	15.0
g	35.0
h	5.0
i	11.0
j	7.0
k	44.0
l	26.0
m	14.0



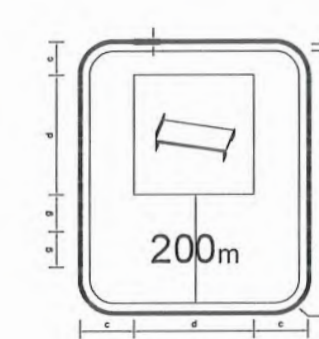
PHONE SERVICE
I-11

PARTS	SIGN SIZE
	120 x 180
a	6.0
b	2.4
c	20.0
d	80.0
e	26.0
f	14.0



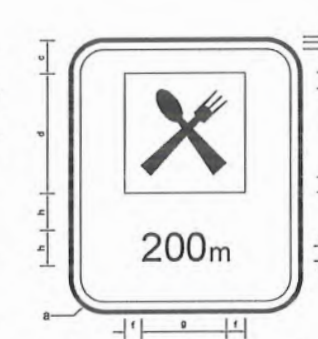
PETROL PUMP
I-12

PARTS	SIGN SIZE
	120 x 180
a	6.0
b	2.4
c	20.0
d	80.0
e	4.0
f	60.0
g	8.0
h	12.0
i	17.0
j	26.0
k	14.0



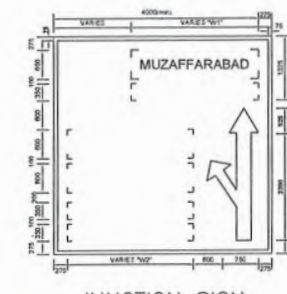
HOTEL / MOTEL
I-13

PARTS	SIGN SIZE
	90 x 135 120 x 180
a	4.5 6.0
b	1.8 2.4
c	15.0 20.0
d	60.0 80.0
e	18.8 25.0
f	24.0 32.0
g	19.5 26.0
h	10.5 14.0

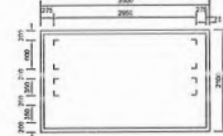


RESTAURANT
I-14

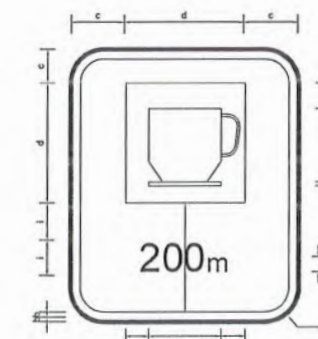
PARTS	SIGN SIZE
	90 x 135 120 x 180
a	4.5 6.0
b	1.8 2.4
c	15.0 20.0
d	60.0 80.0
e	51.0 68.0
f	12.0 16.0
g	36.0 48.0
h	19.5 26.0
i	10.5 14.0



JUNCTION SIGN
(250m SHORT OF JUNCTION)

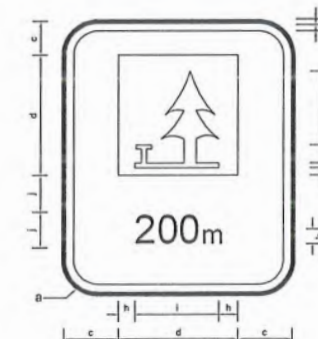


DESTINATION SIGN
(200m OF LIMITS OF TOWN)



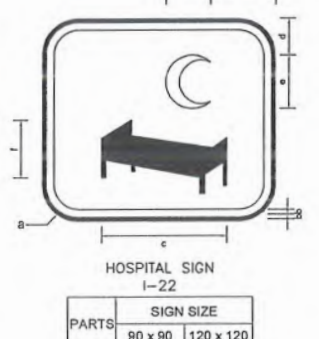
CAFETERIA
I-15

PARTS	SIGN SIZE
	120 x 180
a	6.0
b	2.4
c	20.0
d	80.0
e	16.0
f	34.0
g	8.0
h	64.0
i	26.0
j	14.0



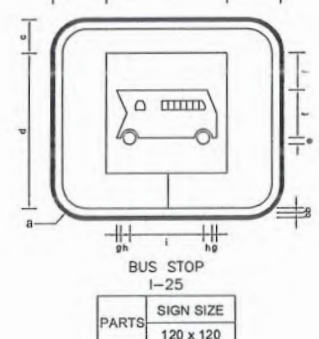
PICNIC SITE
I-16

PARTS	SIGN SIZE
	90 x 135 120 x 180
a	4.5 6.0
b	1.8 2.4
c	15.0 20.0
d	60.0 80.0
e	3.0 4.0
f	42.0 56.0
g	11.3 15.0
h	6.0 8.0
i	48.0 64.0
j	19.5 26.0
k	10.5 14.0



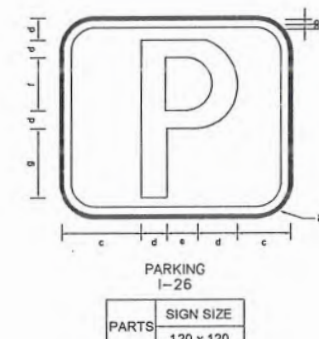
HOSPITAL SIGN
I-22

PARTS	SIGN SIZE
	90 x 90 120 x 120
a	4.5 6.0
b	1.8 2.4
c	67.5 90.0
d	18.0 24.0
e	22.5 30.0
f	30.0 40.0



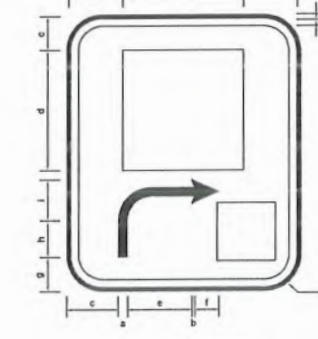
BUS STOP
I-25

PARTS	SIGN SIZE
	120 x 120
a	6.0
b	2.4
c	20.0
d	80.0
e	8.0
f	26.0
g	4.0
h	12.0
i	48.0



PARKING
I-26

PARTS	SIGN SIZE
	120 x 120
a	6.0
b	2.4
c	30.0
d	13.0
e	34.0
f	29.0
g	40.0



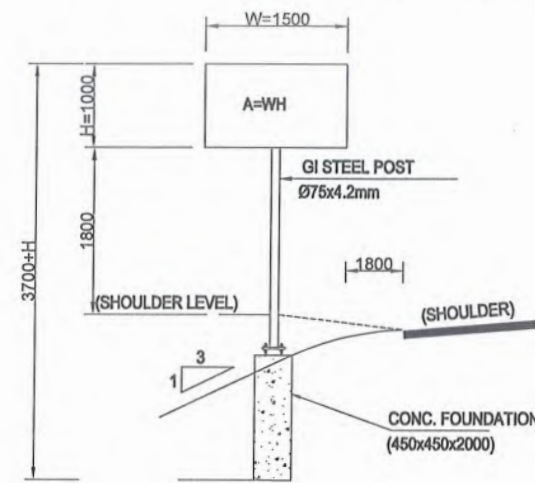
GENERAL INFORMATION
I-27

PARTS	SIGN SIZE
	90 x 135 120 x 180
a	4.5 6.0
b	1.8 2.4
c	15.0 20.0
d	60.0 80.0
e	12.0 16.0
f	20.3 27.0
g	10.5 14.0
h	28.5 38.0
i	18.0 24.0

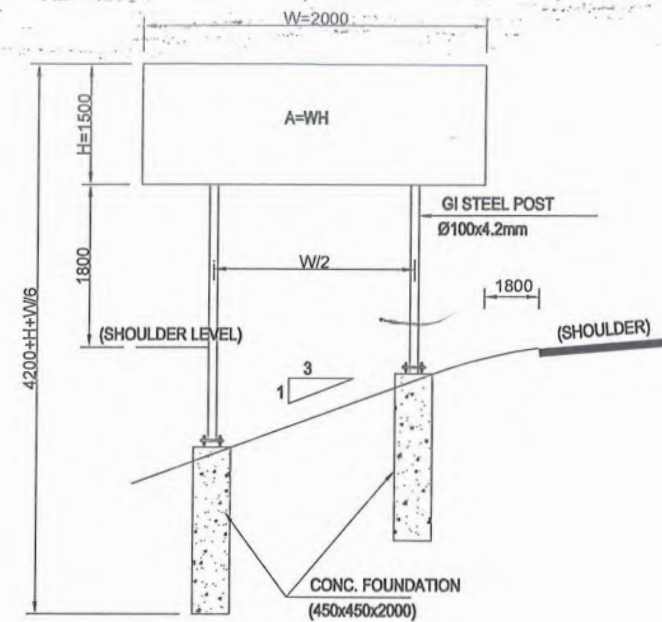
Deputy Director Construction
Provincial Road, Improvement Project
C&W Department, Peshawar



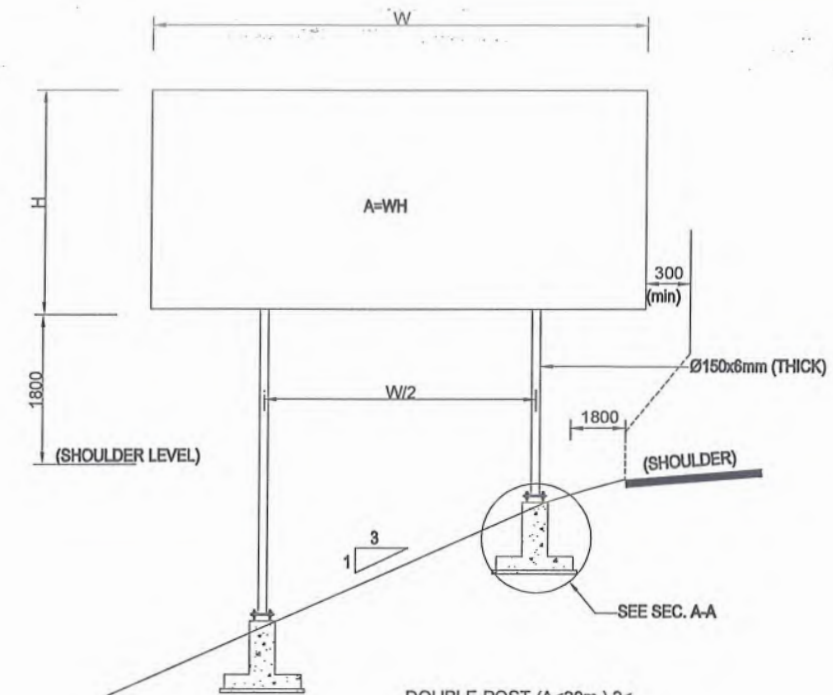
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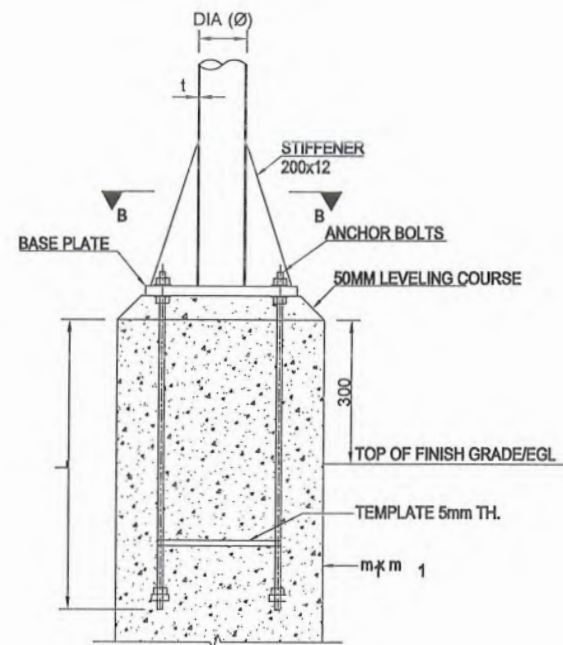
2 SINGLE POST
(A<1.5m.) 2<
FOUNDATION TYPE-1



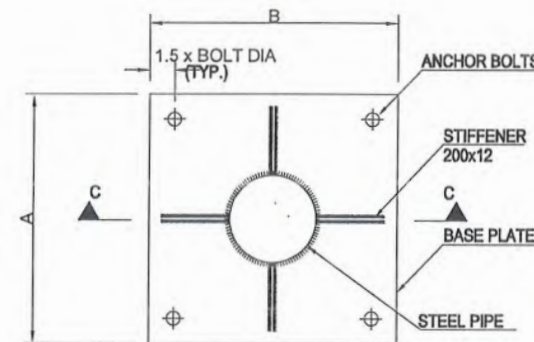
DOUBLE POST (A<3m.)
2<FOUNDATION TYPE-2



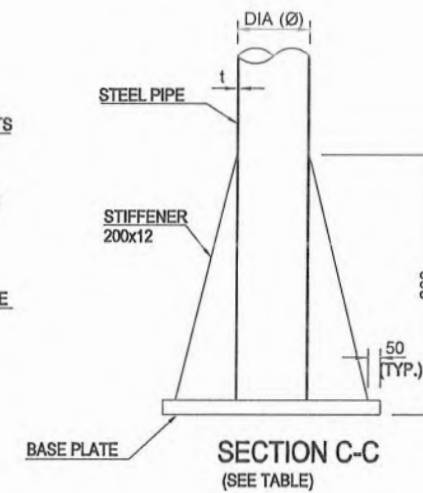
DOUBLE POST (A<20m.) 2<
FOUNDATION TYPE-3



BASE PLATE &
ANCHORAGE ELEVATION



SECTION B-B
(SEE TABLE)



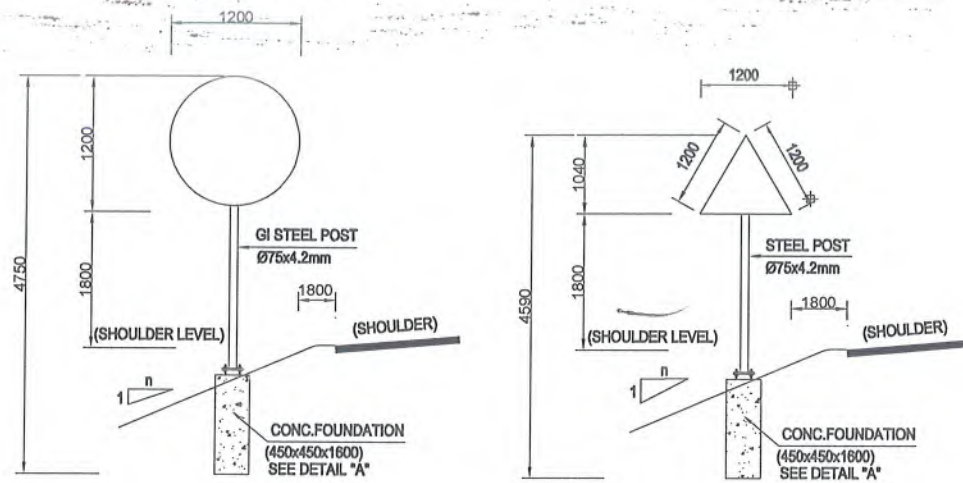
SECTION C-C
(SEE TABLE)

NOTES:-

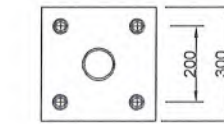
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.
- FABRICATION GALVANIZING AND ERECTION TO BE IN ACCORDANCE WITH AISC SPECIFICATIONS.
- AFTER FABRICATION AND BEFORE GALVANIZING THE TRIAL ASSEMBLY OF COMPLETE STRUCTURE SHALL BE DONE.
- ALL COMPONENTS TO BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123. GALVANIZATION THICKNESS SHALL NOT BE LESS THAN 90 MICRONS.
- BASE PLATES SHALL BE SET LEVEL TO CORRECT ELEVATION WITH THE HELP OF LEVELING NUTS.
- STEEL STRUCTURE SHALL BE ASTM A36, OR EQUIVALENT.
- BOLTS (GALVANIZED) SHALL BE ISO 898-1, GRADE 8.8, OR EQUIVALENT.
- NUTS (GALVANIZED) SHALL BE ISO 896-2, GRADE 8, OR EQUIVALENT.
- PLAIN WASHERS (GALVANIZED) SHALL BE ISO 7089, GRADE A CLASS 200, OR EQUIVALENT. ALL BOLTS SHALL BE FIXED WITH ONE PLAIN WASHER.
- ANCHOR RODS SHALL BE G60 DEFORMED BARS IN ACCORDANCE WITH ASTM A615.
- WELDING ELECTRODES SHALL BE E 60 XX.
- SIGN PANELS SHALL BE MADE OF ALUMINUM ALLOY PLATES OF MIN. 3mm TH.
- SIGN PANELS SHOULD BE RIVETED TO STEEL MEMBER OF SUPPORTING FRAME.
- ALL STRUCTURAL CONCRETE SHALL HAVE MINIMUM CYLINDER STRENGTH EQUAL TO 3000psi AT 28 DAYS.
- ALL REINFORCEMENT SHALL BE GRADE 60 DEFORMED IN ACCORDANCE WITH ASTM A-615 SPECIFICATION.

Deputy Director Construction-M
Provincial Road Improvement Project
C&W Department, Peshawar

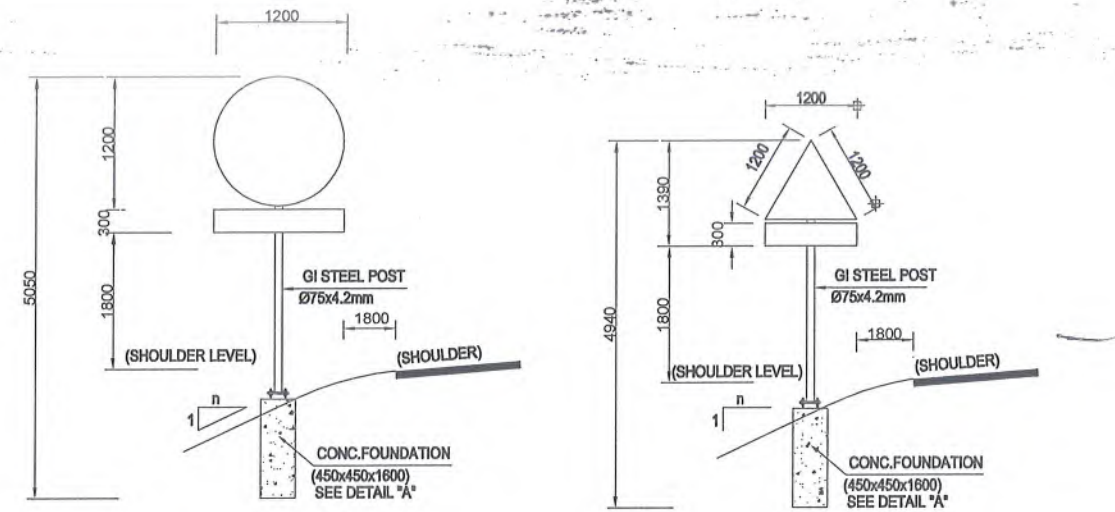
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GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED SHAHZAD DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (RRDP)	KOHAT-3 FROM MUKARAB KORON TO KOT ROAD	N.T.S	TRAFFIC SIGNS FOUNDATION DETAILS
		a			DRAWN MANSOOR		ACCESS ROAD	DATE:	
		b			CHECKED SHAHZAD DURRANI			SEP, 2024.	
		c			APPROVED AQEEL YOUNIS				DWG NO: CEC/KP-RRDP/HW/KOHAT-3TSD - 07e



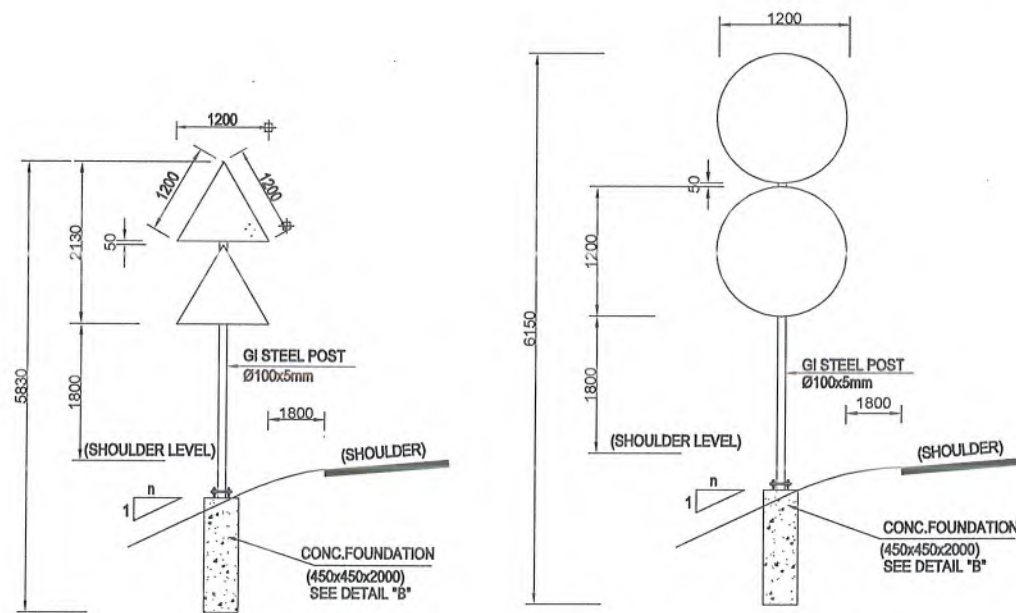
SINGLE SIGNS
FOUNDATION TYPE-1



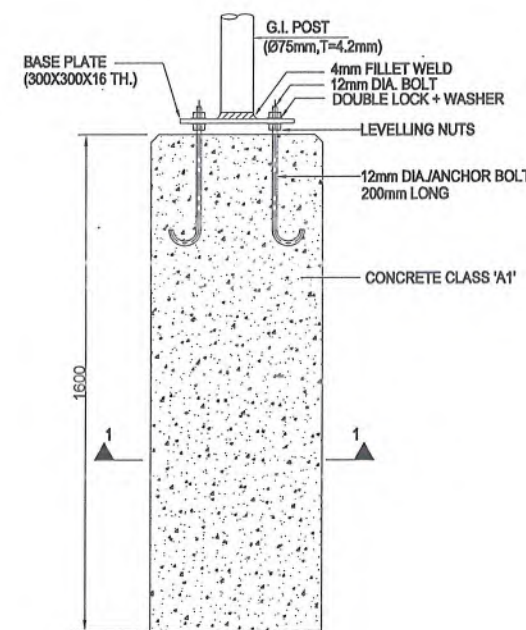
TYPICAL PLAN



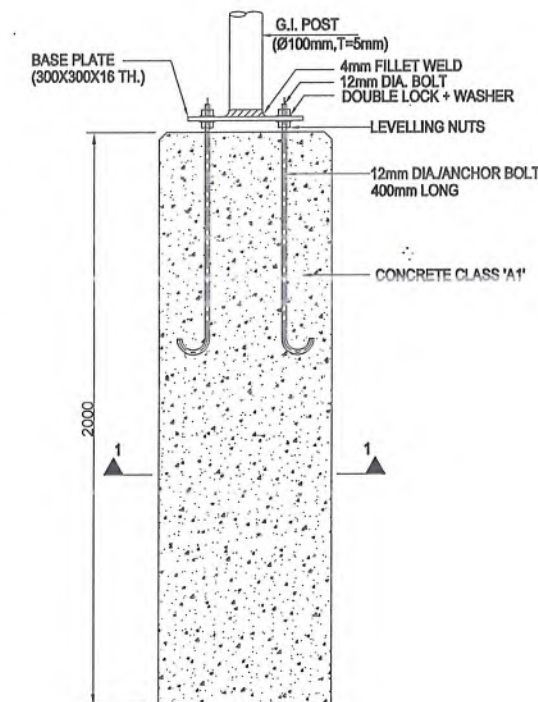
SINGLE SIGNS WITH ADDITIONAL PLATE
FOUNDATION TYPE-1



DOUBLE SIGNS
FOUNDATION TYPE-2



DETAIL 'A'
CONCRETE FOUNDATION
(TYPE-1)



DETAIL 'B'
CONCRETE FOUNDATION
(TYPE-2)

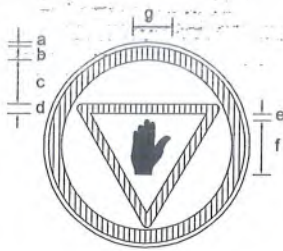
NOTE:-

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.
- ALL STRUCTURAL CONCRETE SHALL HAVE MINIMUM CYLINDER STRENGTH EQUAL TO 3000psi AT 28 DAYS.
- SIGN PANELS SHALL BE MADE OF ALUMINUM ALLOY PLATES OF MIN. 3mm TH.
- SIGN PANELS SHOULD BE RIVETED TO STEEL MEMBER OF SUPPORTING FRAME.



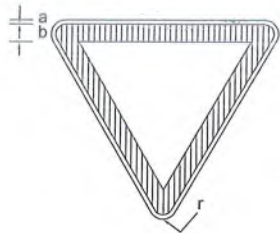
Lawal
Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
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					a			DRAWN	MANSOOR				
					b			CHECKED	SHAHZAD DURRANI				
					c			APPROVED	AQEEL YOUNIS				
											ACCESS ROAD	SEP, 2024.	DWG NO: CEC/KP-RRDP/HWKOHAT-37SD - 071



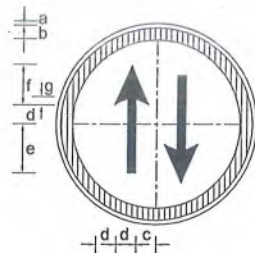
STOP SIGN
R-1
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	16.0	18.70
d	5.5	6.4
e	3.5	4.1
f	30.0	35.0
g	18.5	21.60



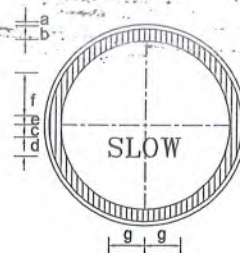
GIVE WAY SIGN
R-2
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
r	3.5	4.1



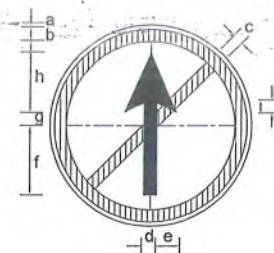
PRIORITY ROAD
SIGN R-3
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	10.5	12.20
d	7.0	8.2
e	26.0	30.3
f	19.0	22.2
g	2.0	2.3



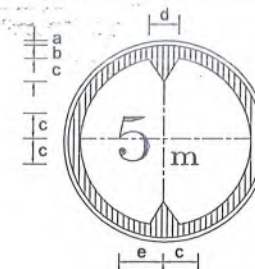
SLOW SIGN
R-4
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	14.5	16.9
e	2.0	2.3
f	24.5	28.6
g	27.6	31.5



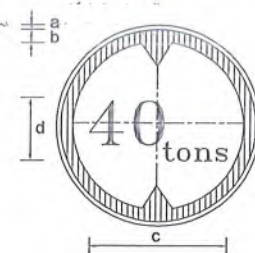
NO ENTRY SIGN
R-6
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	8.0	9.3
e	9.0	10.5
f	30.5	35.6
g	7.0	8.2
h	23.5	27.4
i	4.5	5.2



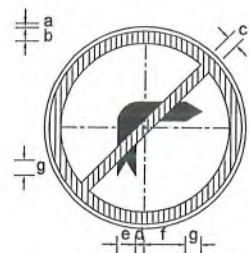
HEIGHT LIMIT SIGN
R-16
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	16.5	19.2
d	26.0	30.3
e	20.0	23.3



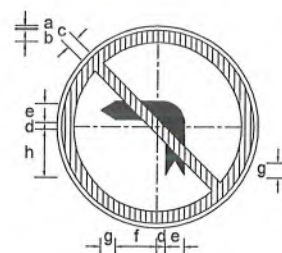
GROSS WEIGHT LIMIT SIGN
R-18
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	49.0	57.2
d	40.0	46.7



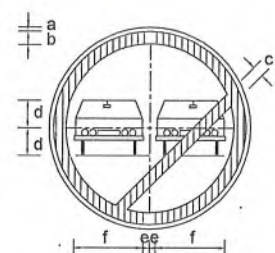
NO RIGHT TURN SIGN
R-20
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	6.0	7.0
e	10.0	11.6
f	25.0	29.2
g	5.0	5.8
h	30.0	35.0



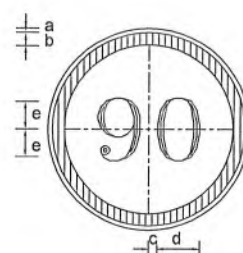
NO LEFT TURN SIGN
R-21
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	6.0	7.0
e	10.0	11.6
f	25.0	29.2
g	5.0	5.8
h	30.0	35.0



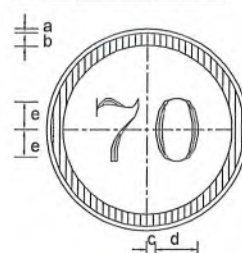
OVERTAKING PROHIBITED SIGN
R-23
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	12.0	14.0
e	3.0	3.5
f	29.5	34.4



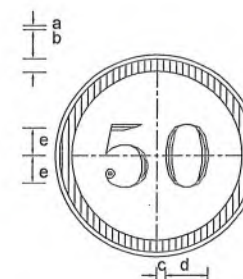
SPEED LIMIT SIGN
R-25-1
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	23.0	26.8
e	20.0	23.3



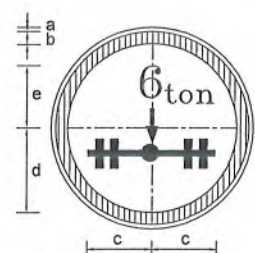
SPEED LIMIT SIGN
R-25-2
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	23.0	26.8
e	20.0	23.3



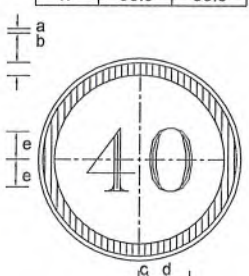
SPEED LIMIT SIGN
R-25-3
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	23.0	26.8
e	20.0	23.3



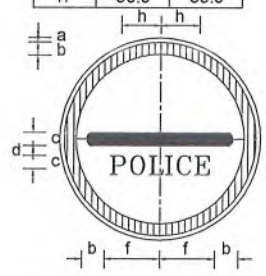
AXLE WEIGHT LIMIT SIGN
R-19
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	28.0	32.7
d	23.0	26.8
e	32.0	37.3



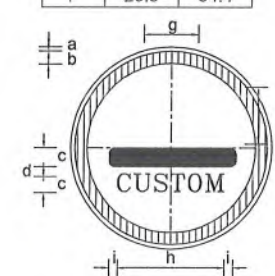
SPEED LIMIT SIGN
R-25-4
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	23.0	26.8
e	20.0	23.3



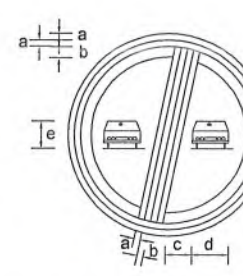
POLICE CHECK POST SIGN
R-27
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	7.5	8.8
d	3.0	3.5
e	10.0	11.7
f	27.5	32.1
g	29.0	33.8
h	28.0	32.7



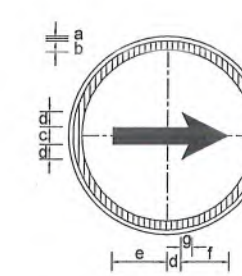
CUSTOM CHECK SIGN
R-28
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	8.0	9.3
d	4.0	4.7
e	11.0	12.8
f	31.0	36.2
g	41.0	47.8
h	52.0	60.7
i	7.5	8.7



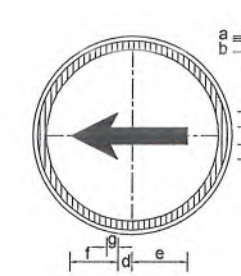
END OF OVERTAKING
RESTRICTION SIGN
R-31
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	1.7	7.6
c	10.0	11.7
d	25.0	29.2
e	21.0	24.5



TURN RIGHT SIGN
R-34
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	4.0	4.7
c	8.0	9.3
d	9.0	10.5
e	32.0	37.3
f	23.0	26.8
g	4.5	5.2



TURN LEFT SIGN
R-35
DIMENSIONS (cm)

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	4.0	4.7
c	8.0	9.3
d	9.0	10.5
e	32.0	37.3
f	23.0	26.8
g	4.5	5.2

- NOTES :
- 1 - For Sign Locations Refer To Plan Sheets.
 - 2 - Final Location To Be Decide By The Engineer As Per Site.
 - 3 - Some Of The Sign Faces As Shown Are Reversible And The Actual Face Detail Shall Be Identified Prior To Placing Any
 - 4 - All Signs To Have High Intensity Reflective Sheetings In Accordance With The Relevant Clause In The Specification.
 - 5 - Sign Legends Shall Be Approved By Engineer And Client.

CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:	
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	SHAHZAD DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (RRDP)	KOHAT-3 FROM MUKARAB KORON TO KOT ROAD ACCESS ROAD	N.T.S DATE: SEP, 2024.	TRAFFIC SIGNS DETAILS DWG NO: CEC/KP-RRDP/HWKOHAT-3/ TSD - 07a
		a			DRAWN	MANSOOR				
		b			CHECKED	SHAHZAD DURRANI				
		c			APPROVED	AQEEL YOUNIS				

PAVEMENT MARKING LINES

FOR DIMENSIONS L & W1 TO W5, SEE TABLE-1



L1 - BROKEN GUIDE LINE-WHITE

AT CENTERLINE OF DIVIDED 2-LANE



L2 -BROKEN WARNING LINE -WHITE

LANE MARKING FOR MIX TRAFFIC



L3 - CONTINUOUS LINE - WHITE

AT NO PASSING ZONES



L4 - CONTINUOUS EDGE LINE -YELLOW

AT EDGE OF PAVEMENT AT ALL LOCATIONS



L5 - DASHED LINE - WHITE

AT SEPARATION OF THROUGH LANES FROM ACCELERATION LANE



L6 - DOTTED LINE - WHITE

FOR DEFINING VEHICLE PATHS WITHIN INTERSECTIONS



L7 - STOP LINE - WHITE

AT INTERSECTIONS ACROSS PAVEMENT



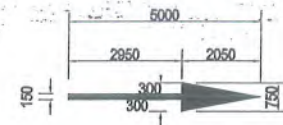
L8 - TRANSVERSE YIELD LINE - WHITE

AT INTERSECTIONS ACROSS PAVEMENT IN THE SAME POSITION AS L7 LINE TO INDICATE GIVE WAY

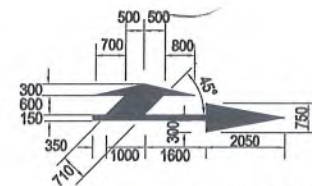
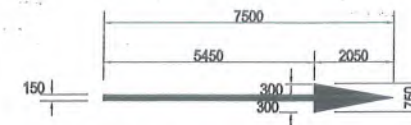


L9 - DOTTED LINE - YELLOW

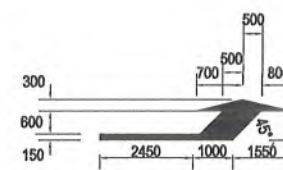
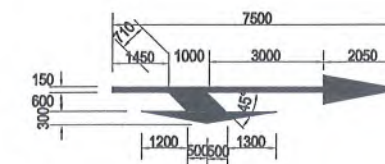
FOR EDGE LINE WHERE PARKING BAYS ARE PROVIDED OUTSIDE THE LANE



ARROWS TYPE-I (STRAIGHT)



ARROWS TYPE-II (COMBINED)



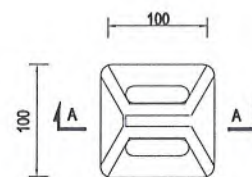
(FOR ≤60 Km/hr)

ARROWS TYPE-III (DEFLECTION)

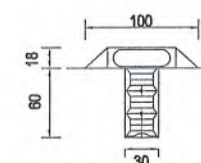
LANE SELECTION ARROWS - WHITE

TABLE - 1

ROADWAY SPEED	L (mm)	W1	W2	W3	W4	W5
≤50 Km/hr	2000	100	100	100	300	100
60-80 Km/hr*	3000	120	120	150	300	100
>80 Km/hr	4000	150	150	150	300	120
SERVICE ROAD	2000	100	120	100	300	100



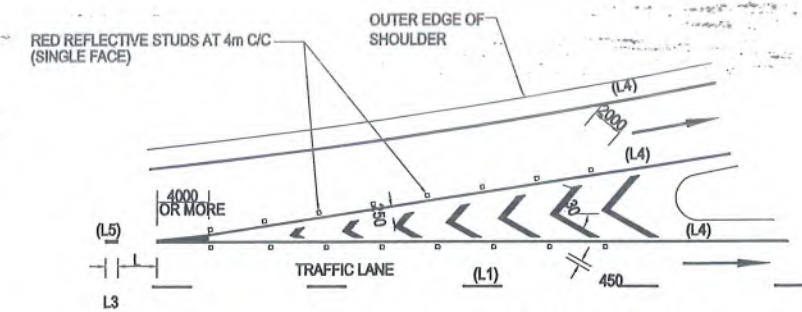
PLAN



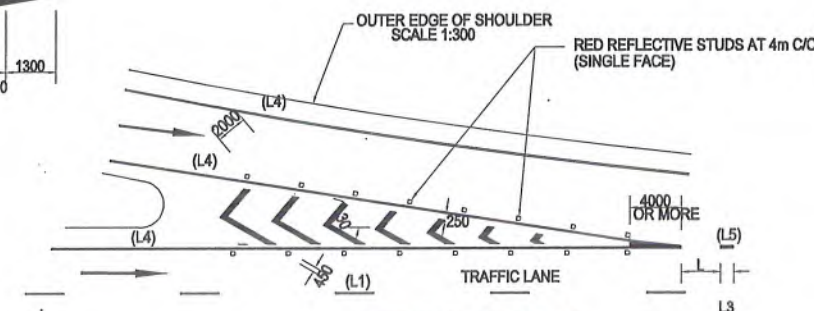
SECTION A-A

REFLECTORISED PAVEMENT STUD

(RAISED PROFILE TYPE)

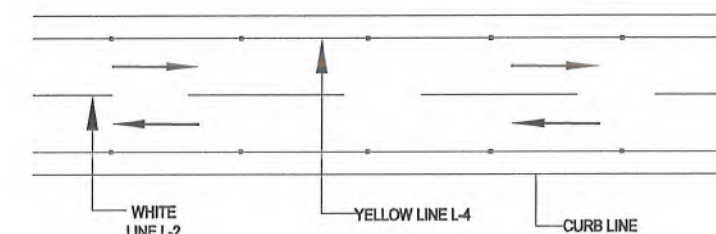


ENTRANCE NOSE DETAIL



EXIT NOSE DETAIL

SCALE 1:300



PROJECT ROAD

Law 19

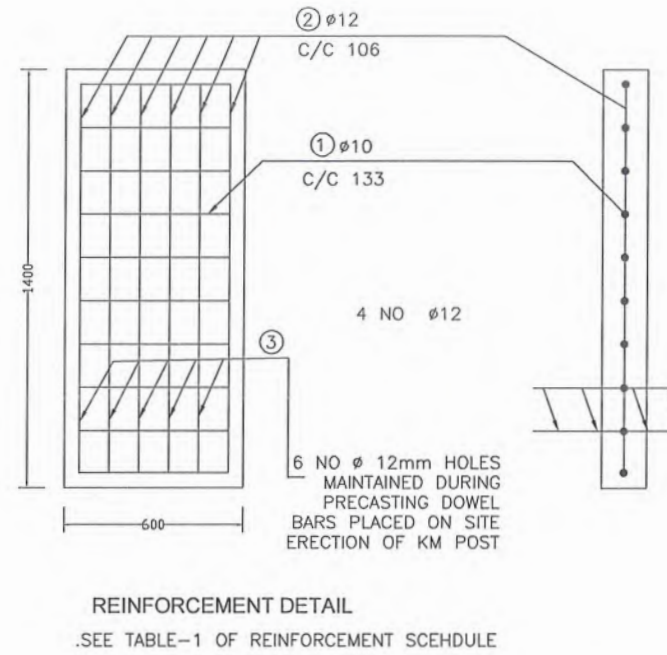
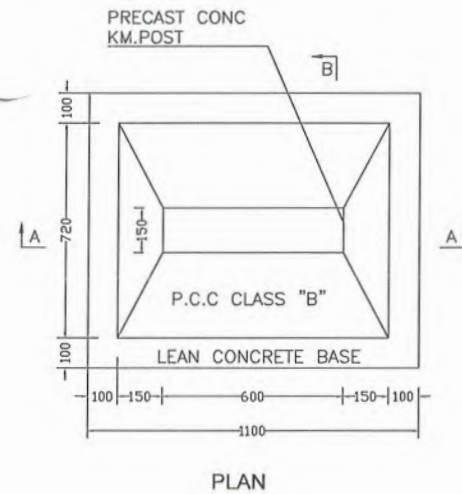
Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Peshawar



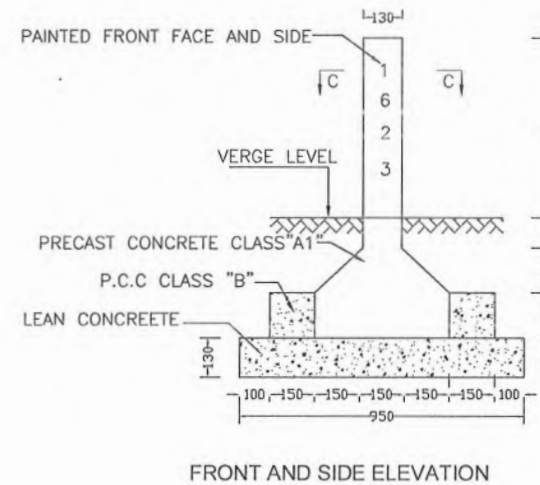
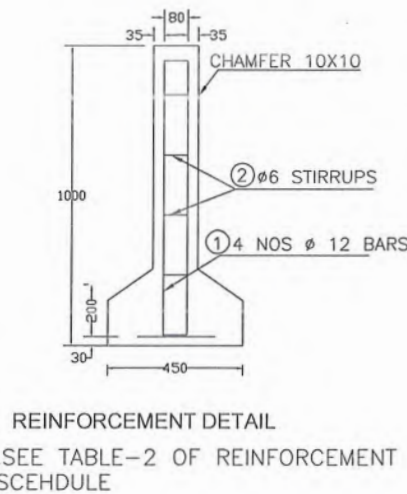
CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED SHAHZAD DURRANI DRAWN MANSOOR CHECKED SHAHZAD DURRANI APPROVED AQEEL YOUNIS	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (RRDP)	KOHAT-3 FROM MUKARAB KORON TO KOT ROAD ACCESS ROAD	N.T.S DATE: SEP, 2024.	TYPICAL PAVEMENT MARKING DETAILS DWG NO: CEC/KP-RRDP/HWKOHAT-3/ PM-08

BAR NO	DESCRIPTION	DIA. (mm)	NO
①	530mm	10	11
②	1330mm	10	6
③	620mm	12	6
④	620mm	12	4

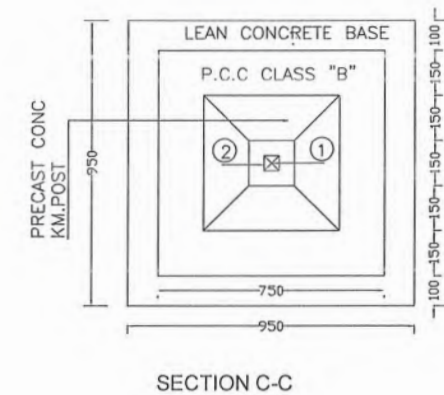
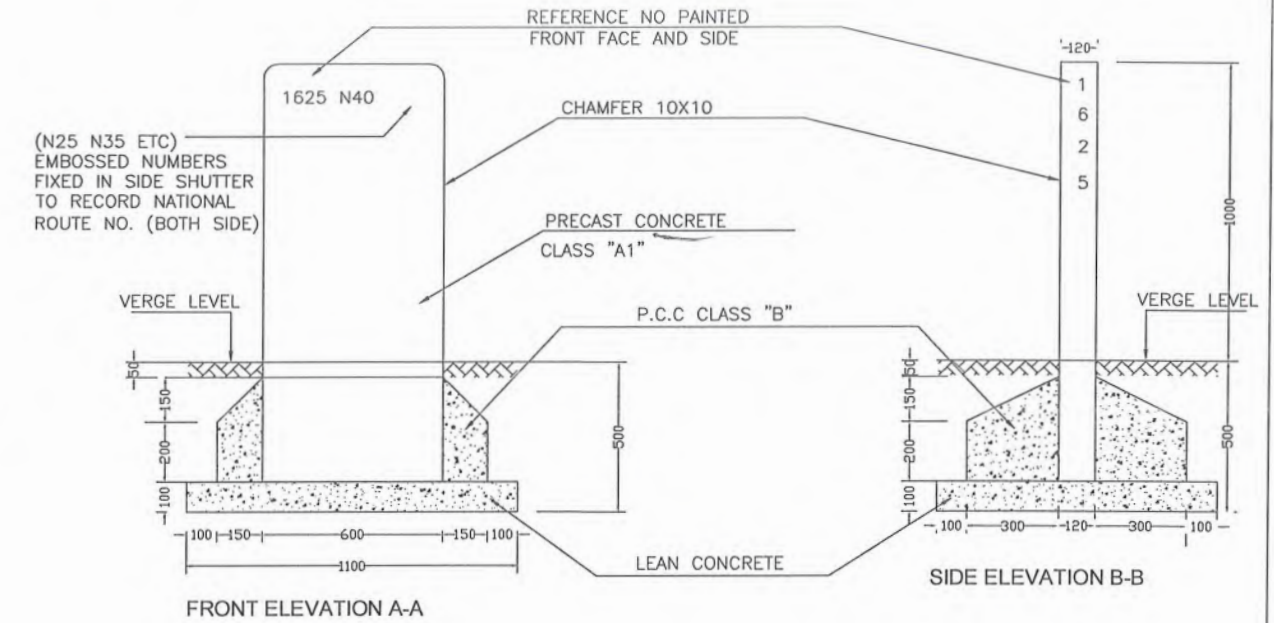
TABLE-1
REINFORCEMENT SCHEDULE



FIVE KILOMETER POST



ONE KILOMETER POST



BAR NO	DESCRIPTION	DIA. (mm)	NO
①	230	12	4
②	40/80	6	9

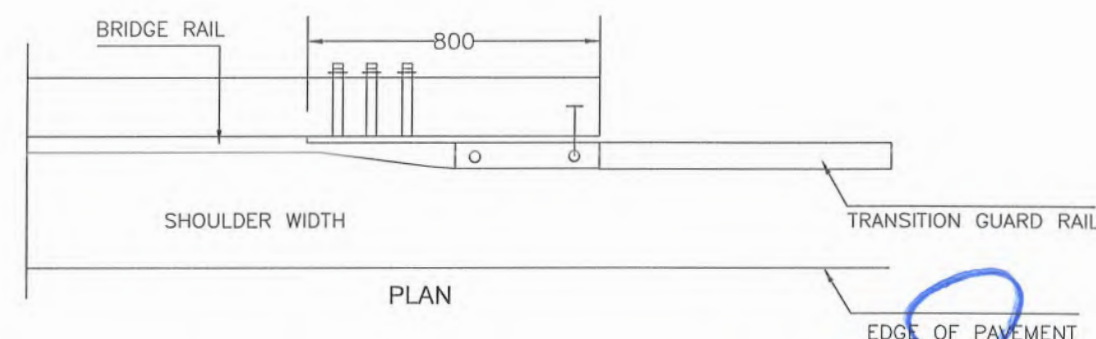
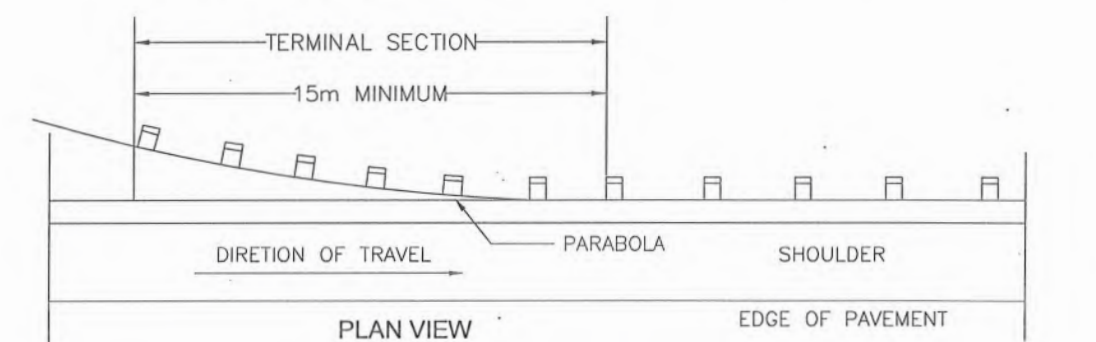
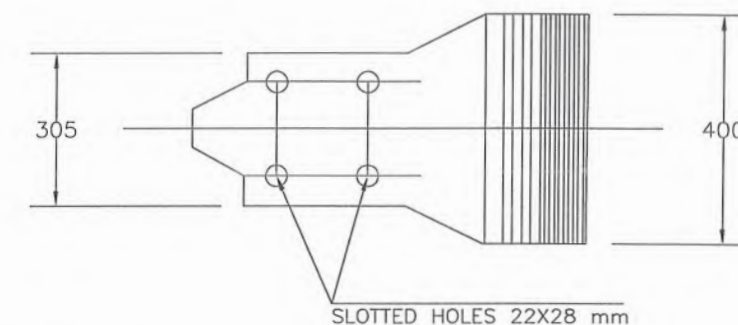
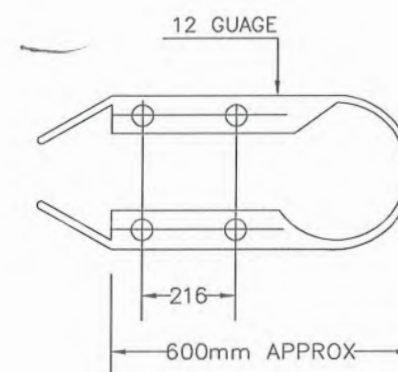
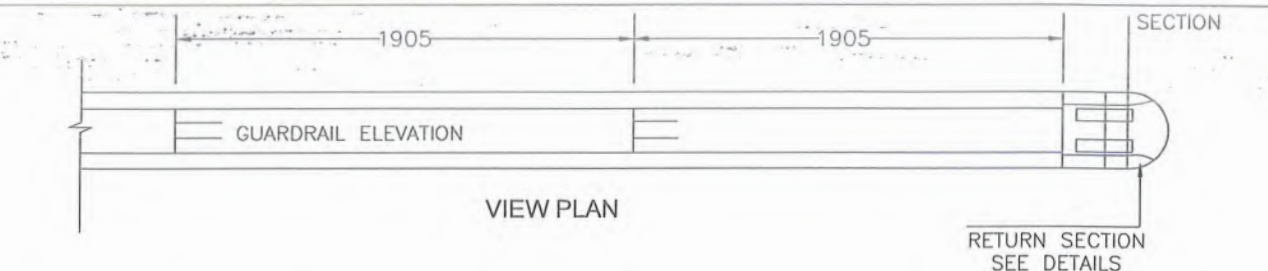
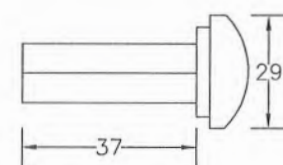
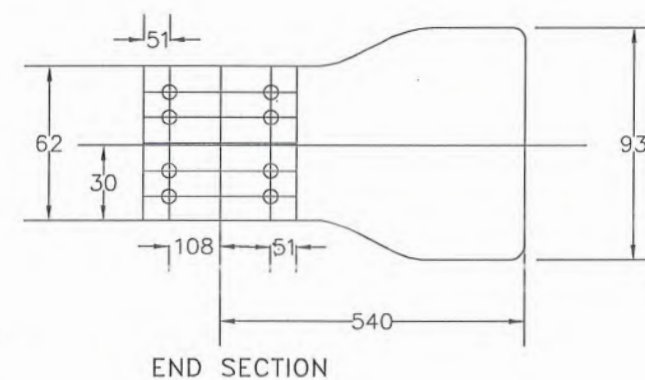
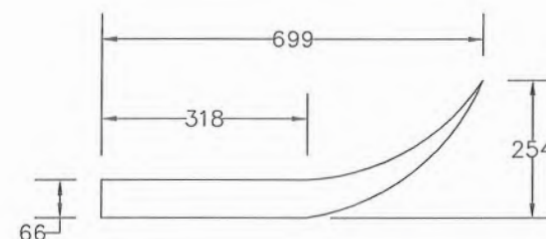
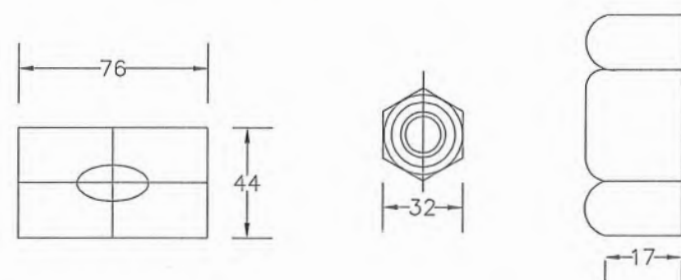
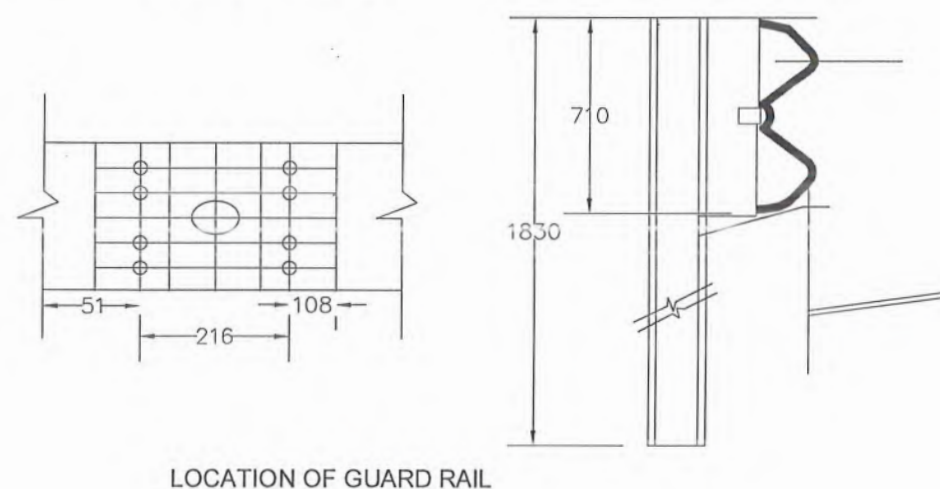
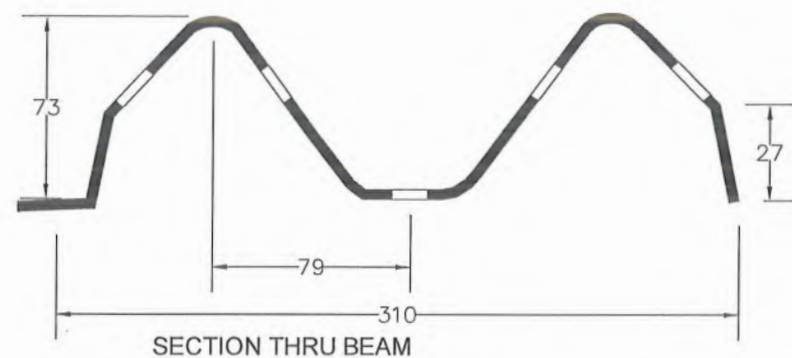
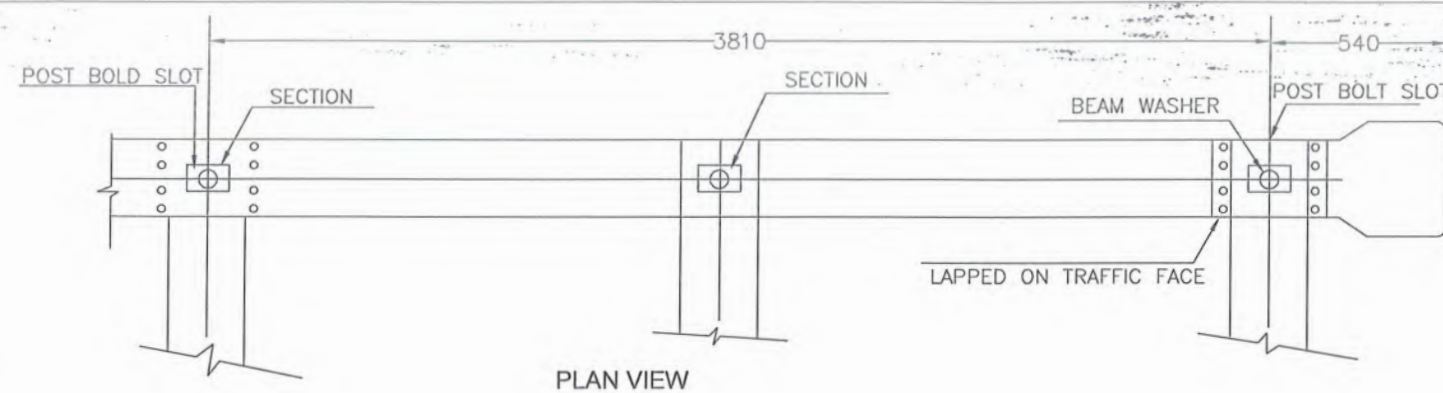
TABLE-2
REINFORCEMENT SCHEDULE

NOTES:-

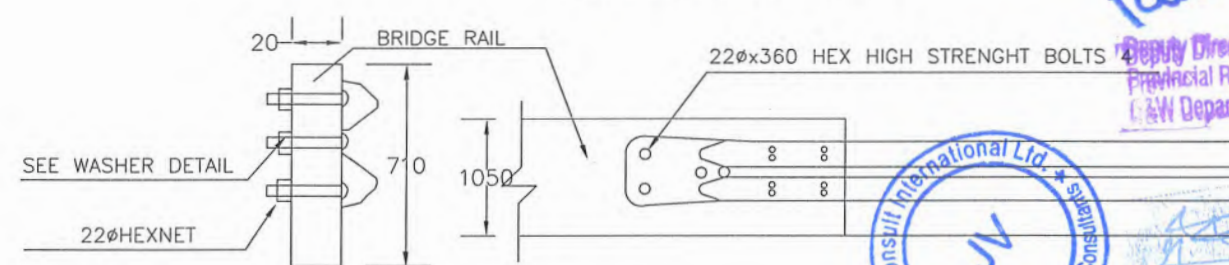
1. PRECAST CONCRETE SHALL BE CLASS "A1" AS PER G.S.I 401
2. CONCRETE COVER 35mm
3. P.C.C CLASS "B" AS PER G.S.I 401
4. LEAN CONCRETE SHALL BE AS PER G.S.I 401
5. REINFORCEMENT DEFORMED GRADE 40 AS PER AASHTO M-31
6. BACKGROUND COLOUR WILL BE WHITE WHILE LETTERING COLOUR WILL BE BLACK.
7. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.



CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP. 2024.	TENDER DRAWINGS	G.DESIGNED SHAHZAD DURRANI DRAWN MANSOOR CHECKED SHAHZAD DURRANI APPROVED AQEEL YOUNIS	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (RRDP)	KOHAT-3 FROM MUKARAB KORON TO KOT ROAD ACCESS ROAD	N.T.S DATE: SEP. 2024.	KM POST DETAILS DWG NO: CEC/KP-RRDP/HW/KOHAT-3/ KMP 09



STEEL GUARD RAIL DETAILS



SEC. C-C

ELEVATION

CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
GOVERNMENT OF KHYBER PAKHTUNKHWA	(MIN - JV - CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	SHAHZAD DURRANI	KOHAT-3	N.T.S	GUARD RAIL DETAILS
COMMUNICATION & WORKS DEPARTMENT	MINCONSULT SDN BHD (COMPANY NO. 58835-P)	a			DRAWN	MANSOOR	FROM MUKARAB KORON TO KOT ROAD	DATE:	
PROJECT IMPLEMENTATION UNIT (PIU)	J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	b			CHECKED	SHAHZAD DURRANI	ACCESS ROAD	SEP, 2024.	DWG NO: CEC/KP-RRDP/RWKOHAT-3/ GR-10
		c			APPROVED	AQEEL YOUNIS			

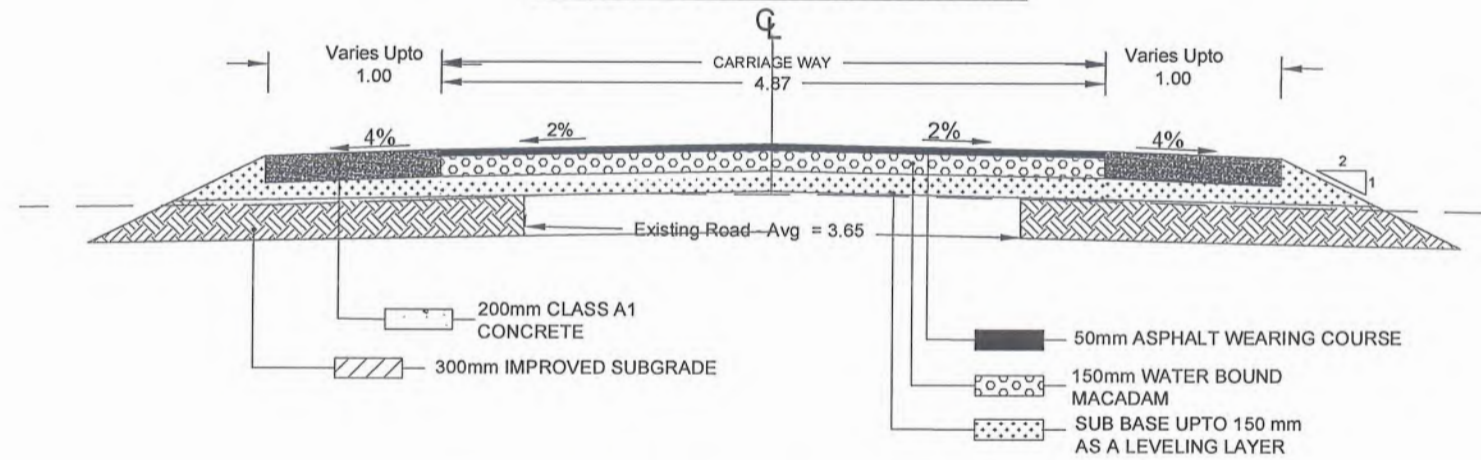
TYPICAL SECTIONS

Lawal S

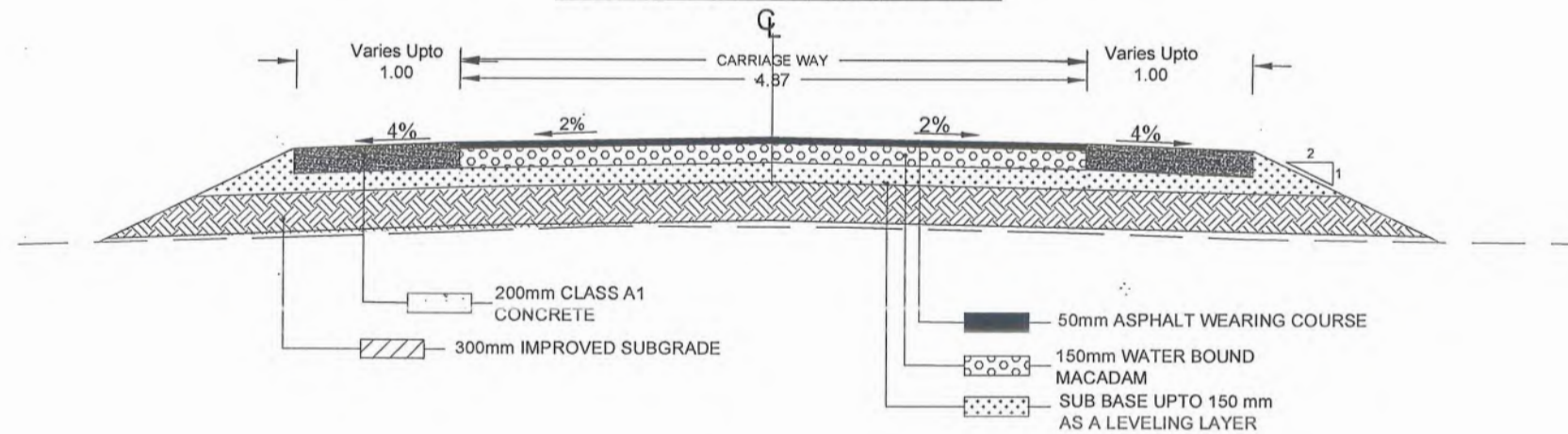
Deputy Director Construction
Provincial Road Improvement Project
Peshawar Department, Peshawar



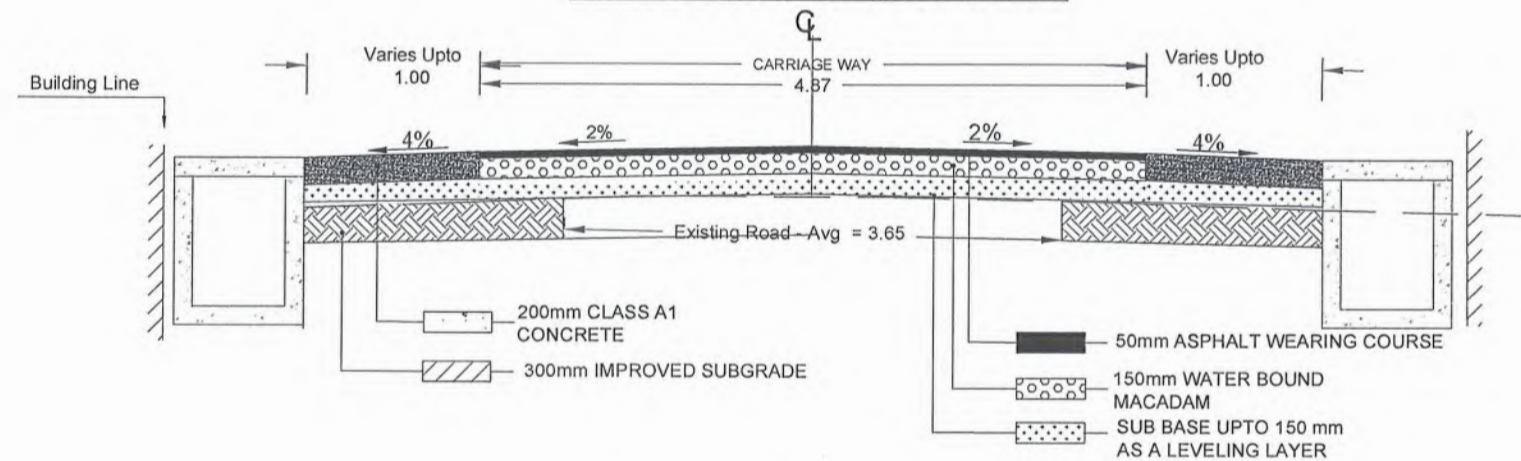
TYPICAL SECTION FOR OPEN AREA



TYPICAL SECTION FOR FILL AREA

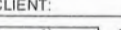


TYPICAL SECTION FOR OPEN AREA



Lawal S
Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Peshawar



CLIENT:		DESIGN CONSULTANT: (MIN - JV - CEC)		REV	DATE	DESCRIPTION	NAMES		ROAD NAME	PROJECT:	SCALE:	SHEET CONTENT:
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MIN CONSULT	0	SEP -2024	TENDER DRAWINGS	DESIGNED:	SHAHZAD DURRANI	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	KOHAT-3 FROM MUKARAB KHAN KORONA TO KOT ROAD	NTS	TYPICAL CROSS SECTION
				a			DRAWN:	MANSOOR				
			CREATIVE ENGINEERING CONSULTANTS (CEC)	b			CHECKED:	SHAHZAD DURRANI		FLOOD AFFECTED ROAD	DATE:	
				c			APPROVED:	AQEEL YOUNIS			SEP-2024	DWG NO: CEC/KP-RRDP/HWKOHAT-3/TS

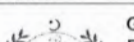
CENTER LINE DATA

Lawal S

Deputy Director Construction-III
Provincial Road Improvement Project
Road Department, Peshawar



CENTERLINE COORDINATES				CENTERLINE COORDINATES				CENTERLINE COORDINATES			
SNO	Station	Northing	Easting	SNO	Station	Northing	Easting	SNO	Station	Northing	Easting
1	0+000.00	3,709,490.63	739,268.21	41	1+000.00	3,710,322.61	738,718.89	81	2+000.00	3,711,038.51	738,234.02
2	0+025.00	3,709,506.45	739,249.41	42	1+025.00	3,710,343.55	738,705.23	82	2+025.00	3,711,061.03	738,223.14
3	0+050.00	3,709,526.63	739,234.65	43	1+050.00	3,710,364.00	738,690.95	83	2+050.00	3,711,083.52	738,212.24
4	0+075.00	3,709,546.81	739,219.89	44	1+075.00	3,710,364.54	738,667.62	84	2+075.00	3,711,106.09	738,201.49
5	0+100.00	3,709,566.99	739,205.13	45	1+100.00	3,710,353.94	738,644.98	85	2+100.00	3,711,128.76	738,190.94
6	0+125.00	3,709,587.16	739,190.37	46	1+125.00	3,710,343.33	738,622.34	86	2+125.00	3,711,151.42	738,180.38
7	0+150.00	3,709,607.34	739,175.62	47	1+150.00	3,710,336.29	738,598.89	87	2+150.00	3,711,170.16	738,165.44
8	0+175.00	3,709,627.52	739,160.86	48	1+175.00	3,710,352.80	738,581.24	88	2+175.00	3,711,171.13	738,140.49
9	0+200.00	3,709,647.70	739,146.10	49	1+200.00	3,710,349.57	738,557.37	89	2+200.00	3,711,171.70	738,115.49
10	0+225.00	3,709,667.88	739,131.34	50	1+225.00	3,710,342.16	738,533.49	90	2+225.00	3,711,180.20	738,093.55
11	0+250.00	3,709,688.06	739,116.59	51	1+250.00	3,710,343.07	738,509.74	91	2+250.00	3,711,190.93	738,075.18
12	0+275.00	3,709,708.24	739,101.83	52	1+275.00	3,710,363.70	738,495.87	92	2+275.00	3,711,183.29	738,051.37
13	0+300.00	3,709,728.35	739,086.98	53	1+300.00	3,710,385.21	738,483.13	93	2+300.00	3,711,175.65	738,027.57
14	0+325.00	3,709,747.44	739,070.83	54	1+325.00	3,710,406.80	738,470.54	94	2+325.00	3,711,168.00	738,003.77
15	0+350.00	3,709,766.78	739,055.02	55	1+350.00	3,710,429.31	738,459.68	95	2+350.00	3,711,152.67	737,985.94
16	0+375.00	3,709,788.36	739,042.41	56	1+375.00	3,710,452.75	738,451.02	96	2+375.00	3,711,128.66	737,991.58
17	0+400.00	3,709,810.07	739,030.01	57	1+400.00	3,710,476.63	738,443.62	97	2+400.00	3,711,105.25	738,000.34
18	0+425.00	3,709,831.77	739,017.60	58	1+425.00	3,710,500.51	738,436.22	98	2+425.00	3,711,081.99	738,009.51
19	0+450.00	3,709,853.76	739,005.70	59	1+450.00	3,710,524.39	738,428.82	99	2+450.00	3,711,058.74	738,018.68
20	0+475.00	3,709,875.98	738,994.26	60	1+475.00	3,710,548.19	738,421.17	100	2+475.00	3,711,035.48	738,027.85
21	0+500.00	3,709,898.21	738,982.82	61	1+500.00	3,710,571.85	738,413.09	101	2+500.00	3,711,012.22	738,037.03
22	0+525.00	3,709,920.15	738,970.84	62	1+525.00	3,710,595.51	738,405.01	102	2+525.00	3,710,988.95	738,046.15
23	0+550.00	3,709,941.89	738,958.48	63	1+550.00	3,710,619.15	738,396.89	103	2+550.00	3,710,965.39	738,054.52
24	0+575.00	3,709,963.62	738,946.12	64	1+575.00	3,710,642.58	738,388.15	104	2+575.00	3,710,941.57	738,061.57
25	0+600.00	3,709,985.35	738,933.76	65	1+600.00	3,710,665.97	738,379.35	105	2+600.00	3,710,926.80	738,043.35
26	0+625.00	3,710,007.08	738,921.41	66	1+625.00	3,710,689.37	738,370.55	106	2+625.00	3,710,917.47	738,020.16
27	0+650.00	3,710,028.81	738,909.05	67	1+650.00	3,710,712.77	738,361.74	107	2+650.00	3,710,908.14	737,996.96
28	0+675.00	3,710,050.06	738,895.89	68	1+675.00	3,710,736.17	738,352.94	108	2+675.00	3,710,892.97	737,978.96
29	0+700.00	3,710,070.67	738,881.74	69	1+700.00	3,710,759.57	738,344.14	109	2+700.00	3,710,869.23	737,985.90
30	0+725.00	3,710,091.49	738,867.90	70	1+725.00	3,710,782.97	738,335.33	110	2+725.00	3,710,845.86	737,994.79
31	0+750.00	3,710,112.52	738,854.38	71	1+750.00	3,710,806.40	738,326.63	111	2+750.00	3,710,822.49	738,003.67
32	0+775.00	3,710,133.54	738,840.86	72	1+775.00	3,710,829.90	738,318.08	112	2+775.00	3,710,799.12	738,012.56
33	0+800.00	3,710,154.57	738,827.34	73	1+800.00	3,710,853.39	738,309.54	113	2+800.00	3,710,775.75	738,021.45
34	0+825.00	3,710,175.60	738,813.82	74	1+825.00	3,710,876.89	738,300.99	114	2+825.00	3,710,752.34	738,030.20
35	0+850.00	3,710,196.63	738,800.30	75	1+850.00	3,710,900.38	738,292.45	115	2+850.00	3,710,728.91	738,038.92
36	0+875.00	3,710,217.66	738,786.78	76	1+875.00	3,710,923.63	738,283.27	116	2+875.00	3,710,705.48	738,047.64
37	0+900.00	3,710,238.69	738,773.26	77	1+900.00	3,710,946.61	738,273.44	117	2+900.00	3,710,682.05	738,056.35
38	0+925.00	3,710,259.72	738,759.74	78	1+925.00	3,710,969.60	738,263.61	118	2+925.00	3,710,658.75	738,065.42
39	0+950.00	3,710,280.73	738,746.20	79	1+950.00	3,710,992.59	738,253.78	119	2+950.00	3,710,635.64	738,074.95
40	0+975.00	3,710,301.68	738,732.55	80	1+975.00	3,711,015.57	738,243.95	120	2+975.00	3,710,612.52	738,084.47

CLIENT:		DESIGN CONSULTANT: (MIN - JV - CEC)		REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings.	G.DESIGNED	SHAHZAD DURRANI	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	KOHAT-3 FROM MUBARAK KHAN KORONA TO KOT ROAD	NTS	CENTRE LINE COORDINATES		
		a			DRAWN	MANSOOR			DATE:			
		b			CHECKED	SHAHZAD DURRANI			SEP, 2024.			
		c			APPROVED	AQEEL YOUNIS					ACCESS ROAD	DWG NO:CEC/KP-RRDP/HW KOHAT-3/CLD-01


Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Peshawar

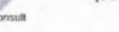


CENTERLINE COORDINATES			
SNO	Station	Northing	Easting
	3+000.00	3,710,589.41	738,094.00
122	3+025.00	3,710,566.00	738,098.81
123	3+050.00	3,710,555.31	738,076.53
124	3+075.00	3,710,538.38	738,065.69
125	3+100.00	3,710,515.58	738,075.82
126	3+125.00	3,710,492.00	738,084.11
127	3+150.00	3,710,468.82	738,093.45
128	3+175.00	3,710,445.63	738,102.79
129	3+200.00	3,710,422.44	738,112.14
130	3+225.00	3,710,399.48	738,122.02
131	3+250.00	3,710,376.58	738,132.05
132	3+275.00	3,710,353.67	738,142.07
133	3+300.00	3,710,330.52	738,151.49
134	3+325.00	3,710,307.32	738,160.82
135	3+350.00	3,710,284.13	738,170.16
136	3+375.00	3,710,260.94	738,179.49
137	3+400.00	3,710,237.50	738,188.15
138	3+425.00	3,710,213.79	738,196.10
139	3+450.00	3,710,190.09	738,204.05
140	3+475.00	3,710,166.39	738,212.00
141	3+500.00	3,710,142.71	738,220.02
142	3+525.00	3,710,119.73	738,229.87
143	3+550.00	3,710,096.88	738,239.99
144	3+575.00	3,710,074.02	738,250.11
145	3+600.00	3,710,050.89	738,259.58
146	3+625.00	3,710,027.28	738,267.79
147	3+650.00	3,710,004.02	738,276.93
148	3+675.00	3,709,980.92	738,286.51
149	3+700.00	3,709,958.47	738,297.22
150	3+725.00	3,709,952.78	738,320.55
151	3+750.00	3,709,953.71	738,345.53
152	3+775.00	3,709,942.19	738,366.13
153	3+800.00	3,709,917.95	738,371.99
154	3+825.00	3,709,893.58	738,377.59
155	3+850.00	3,709,869.35	738,383.72
156	3+875.00	3,709,845.11	738,389.85
157	3+900.00	3,709,820.87	738,395.98
158	3+925.00	3,709,796.53	738,401.68
159	3+950.00	3,709,772.10	738,406.98
160	3+975.00	3,709,748.06	738,413.78

Handwritten signature

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



CLIENT:		DESIGN CONSULTANT: (MIN - JV - CEC)		REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE	SHEET CONTENT:
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. 	0	SEP, 2024.	Tender Drawings.	G.DESIGNED	SHAHZAD DURRANI	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	KOHAT-3 FROM MUBARAK KHAN KORONA TO KOT ROAD	NTS	CENTRE LINE COORDINATES
				a			DRAWN	MANSOOR				
				b			CHECKED	SHAHZAD DURRANI			DATE:	
				c			APPROVED	AQEEL YOUNIS			ACCESS ROAD	

HORIZONTAL CURVE DATA

Lawal S

Deputy Director Construction-III
Provincial Road Improvement Project
Department, Peshawar



Curve Table: Alignments

Curve #	PI Station	PI Easting	PI Northing	PC Station	PC Easting	PC Northing	PT Station	PT Easting	PT Northing	Radius	Length	Tangent Length	Delta Angle	Chord Direction
C1	0+011.71	739257.4998	3709495.3805	0+002.47	739265.9513	3709491.6342	0+020.53	739252.0426	3709502.8424	34.60	18.07	9.245	29.9147	N51° 08' 12.42"W
C2	0+300.73	739086.6367	3709729.0111	0+293.74	739090.7658	3709723.3652	0+307.72	739082.0826	3709734.3202	180.29	13.98	6.995	4.4437	N38° 24' 04.60"W
C3	0+348.12	739055.7816	3709764.9810	0+339.80	739061.1949	3709758.6704	0+356.38	739051.6554	3709772.1990	87.40	16.58	8.314	10.8683	N35° 11' 20.27"W
C4	0+436.76	739011.7621	3709841.9842	0+424.12	739018.0380	3709831.0058	0+449.41	739005.9742	3709853.2275	575.83	25.29	12.646	2.5161	N28° 29' 48.31"W
C5	0+510.51	738978.0067	3709907.5562	0+499.71	738982.9480	3709897.9574	0+521.30	738972.6695	3709916.9407	517.77	21.59	10.796	2.3890	N28° 25' 59.46"W
C6	0+663.96	738902.1445	3710040.9477	0+652.69	738907.7166	3710031.1500	0+675.22	738895.7660	3710050.2406	266.85	22.53	11.271	4.8374	N32° 02' 46.94"W
C7	0+712.89	738874.4473	3710081.3000	0+707.08	738877.7375	3710076.5065	0+718.70	738871.3032	3710086.1905	385.55	11.63	5.814	1.7279	N33° 36' 04.07"W
C8	0+947.03	738747.8301	3710278.2453	0+939.86	738751.7047	3710272.2185	0+954.19	738743.9155	3710284.2462	2157.32	14.33	7.165	0.3806	N32° 55' 38.94"W
C9	1+060.30	738685.9402	3710373.1198	1+044.66	738694.4865	3710360.0188	1+070.42	738671.7752	3710366.4846	18.00	25.76	15.642	81.9816	N74° 06' 30.82"W
C10	1+154.84	738595.3222	3710330.6724	1+138.45	738610.1613	3710337.6233	1+165.04	738587.0089	3710344.7934	18.00	26.59	16.386	84.6129	N72° 47' 34.41"W
C11	1+178.75	738580.0558	3710356.6037	1+170.65	738584.1654	3710349.6233	1+184.35	738572.3191	3710354.2043	10.23	13.70	8.100	76.7440	N68° 51' 30.37"W
C12	1+246.98	738512.5003	3710335.6524	1+232.04	738526.7646	3710340.0763	1+257.33	738504.8849	3710348.4995	18.92	25.29	14.935	76.5721	N68° 56' 39.78"W
C13	1+345.92	738459.7106	3710424.7078	1+315.26	738475.3450	3710398.3328	1+376.30	738450.6344	3710453.9943	260.23	61.04	30.661	13.4396	N23° 56' 18.78"W
C14	1+465.69	738424.1723	3710539.3805	1+456.73	738426.8257	3710530.8188	1+474.66	738421.2764	3710547.8632	629.89	17.93	8.963	1.6305	N18° 02' 02.53"W
C15	1+550.81	738396.6716	3710619.9360	1+543.80	738398.9366	3710613.3013	1+557.82	738394.2028	3710626.4976	453.98	14.02	7.011	1.7695	N19° 44' 02.51"W
C16	1+740.36	738329.9227	3710797.3422	1+732.02	738332.8585	3710789.5394	1+748.70	738327.0732	3710805.1768	1512.13	16.67	8.337	0.6318	N20° 18' 10.36"W
C17	1+862.73	738288.0947	3710912.3449	1+856.61	738290.1889	3710906.5872	1+868.86	738285.6857	3710917.9781	221.62	12.25	6.127	3.1671	N21° 34' 14.00"W
C18	1+998.38	738234.7553	3711037.0708	1+992.81	738236.9477	3711031.9443	2+003.96	738232.3232	3711042.0880	235.91	11.15	5.576	2.7078	N24° 30' 28.95"W
C19	2+063.59	738206.3101	3711095.7505	2+061.12	738207.3858	3711093.5315	2+066.06	738205.2689	3711097.9858	319.04	4.93	2.466	0.8857	N25° 25' 08.81"W
C20	2+145.97	738171.5244	3711170.4294	2+136.38	738175.5730	3711161.7377	2+153.54	738161.9385	3711170.6467	15.43	17.16	9.588	63.7251	N56° 50' 19.65"W
C21	2+219.00	738096.4965	3711172.1303	2+208.12	738107.3752	3711171.8837	2+227.30	738092.5744	3711182.2803	16.26	19.18	10.881	67.5738	N54° 54' 51.92"W
C22	2+240.88	738087.6801	3711194.9459	2+230.77	738091.3228	3711185.5193	2+246.97	738078.0580	3711191.8565	10.71	16.20	10.106	86.6730	N64° 27' 50.45"W
C23	2+349.48	737980.4583	3711160.5197	2+330.94	737998.1113	3711166.1876	2+359.80	737986.5680	3711143.0147	18.08	28.85	18.541	91.4400	S26° 28' 46.09"W
C24	2+386.06	737995.2244	3711118.2137	2+382.08	737993.9110	3711121.9766	2+390.05	737996.6866	3711114.5060	200.00	7.97	3.986	2.2833	S20° 22' 55.85"E
C25	2+525.16	738046.2589	3710988.8128	2+519.70	738044.2526	3710993.8998	2+530.63	738048.0767	3710983.6555	297.34	10.94	5.468	2.1072	S20° 28' 12.75"E
C26	2+581.66	738065.0399	3710935.5304	2+569.21	738060.9028	3710947.2675	2+589.07	738053.4945	3710930.8853	13.00	19.85	12.445	87.5001	S24° 20' 00.37"W
C27	2+674.18	737974.5367	3710899.1181	2+659.46	737988.1886	3710904.6107	2+682.73	737979.7668	3710885.3635	15.00	23.27	14.715	88.9026	S23° 37' 55.95"W
C28	2+806.02	738023.5862	3710770.1237	2+801.02	738021.8082	3710774.7997	2+811.03	738025.3305	3710765.4351	1392.67	10.01	5.003	0.4116	S20° 36' 47.73"E
C29	2+914.16	738061.2911	3710668.7785	2+908.14	738059.1922	3710674.4200	2+920.17	738063.5846	3710663.2133	346.61	12.04	6.019	1.9898	S21° 24' 08.50"E
C30	3+025.29	738103.6347	3710566.0313	3+015.14	738099.7698	3710575.4095	3+030.99	738094.2025	3710562.3003	10.00	15.85	10.143	90.8156	S23° 00' 37.85"W
C31	3+067.58	738060.1763	3710548.8410	3+058.66	738068.4718	3710552.1223	3+072.10	738064.3385	3710540.9506	8.00	13.44	8.921	96.2306	S20° 18' 10.87"W
C32	3+089.48	738072.4498	3710525.5742	3+083.59	738069.6978	3710530.7911	3+095.36	738074.3337	3710519.9849	73.42	11.77	5.898	9.1855	S23° 13' 10.32"E
C33	3+119.35	738081.9975	3710497.2476	3+113.56	738080.1483	3710502.7340	3+125.14	738084.1610	3710491.8774	200.00	11.58	5.790	3.3163	S20° 17' 05.85"E
C34	3+205.22	738114.0880	3710417.5932	3+202.24	738112.9717	3710420.3642	3+208.21	738115.2866	3710414.8568	200.00	5.97	2.987	1.7115	S22° 47' 55.95"E
C35	3+277.70	738143.1655	3710351.2101	3+271.14	738140.5356	3710357.2141	3+284.25	738145.6123	3710345.1293	432.69	13.11	6.555	1.7358	S22° 47' 12.31"E
C36	3+387.91	738184.3080	3710248.9622	3+381.59	738181.9475	3710254.8286	3+394.23	738186.3189	3710242.9671	214.54	12.64	6.323	3.3765	S20° 13' 50.15"E
C37	3+502.49	738220.7458	3710140.3280	3+495.50	738218.5251	3710146.9486	3+509.46	738223.5736	3710133.9430	149.57	13.96	6.983	5.3462	S21° 12' 55.49"E
C38	3+591.39	738256.7512	3710059.0330	3+585.58	738254.4000	3710064.3416	3+597.19	738258.6572	3710053.5489	140.78	11.61	5.806	4.7234	S21° 31' 36.52"E
C39	3+632.94	738270.3956	3710019.7747	3+623.26	738267.2169	3710028.9205	3+642.62	738274.1049	3710010.8308	330.11	19.36	9.683	3.3601	S20° 50' 42.68"E
C40	3+706.36	738298.5208	3709951.9590	3+692.89	738293.3607	3709964.4010	3+716.43	738311.9811	3709952.4591	19.38	23.54	13.470	69.6027	S57° 19' 35.78"E

Deputy Director Construction-III
Province
C&W Department, Islamabad



CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024	Tender Drawings.	G.DESIGNED	SHAHZAD DURRANI	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP) KOHAT-3 FROM MUBARAB KHAN KORONA TO KOT ROAD ACCESS ROAD	N.T.S	HORIZONTAL CURVE DATA DWG NO: CEC/KP-RRDP/HW/KOHAT-3 HCD/ A
		a			DRAWN	MANSOOR		DATE:	
		b			CHECKED	SHAHZAD DURRANI			
		c			APPROVED	AQEEL YOUNIS		SEP, 2024	

LIST OF BENCH MARKS

Lawal S

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

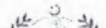


S.N	EASTING	NORTHING	ELEVATION	DISCRIBTION
1	738077.34	3711216.2	385.16	BM1
2	738007.51	3711092.77	384.49	BM2
3	738174.25	3711169.69	384.62	BM3
4	738247.49	3711007.73	383.99	BM4
5	738300.73	3710880.66	383.38	BM5
6	738400.76	3710602.48	382.04	BM6
7	738458.62	3710437.06	381.3	BM7
8	738504.21	3710348.03	381.08	BM8
9	738579.6	3710354.81	380.77	BM9
10	738600.91	3710333.35	380.53	BM10
11	738711.56	3710331.81	379.94	BM11
12	738841.84	3710130.23	378.82	BM12
13	738963.21	3709936.3	378.17	BM13
14	739048.5	3709775.15	377.57	BM14
15	739104.66	3709706.88	377.11	BM15
16	739170.67	3709615.58	376.54	BM16
17	739263.48	3709487.38	376.4	BM17
18	738077.322	3711216.169	385.165	BM18
19	738058.27	3710950.03	384.105	BM19
20	738007.189	3710811.216	383.484	BM20
21	738061.33	3710547.81	382.348	BM21
22	738178.344	3710265.085	381.278	BM22
23	738225.477	3710128.451	380.573	BM23
24	738256.54	3710057.236	380.322	BM24
25	738299.052	3709952.883	379.733	BM25
26	738363.499	3709952.056	379.749	BM26
27	738410.701	3709754.21	378.371	BM27
28	738611.237	3709522.31	376.868	BM28
29	738707.778	3709262.932	375.642	BM29
30	738848.468	3709168.027	374.843	BM30
31	739023.542	3709159.366	374.531	BM31
32	739085.134	3709050.299	374.046	BM32
33	739057.61	3708946.435	373.342	BM33
34	739038.347	3708812.852	372.895	BM34
35	738979.26	3708793.767	372.666	BM35

law 1-2

Deputy Director Construction-III
Provincial Road Improvement Project
G&W Department, Peshawar



CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION		NAMES:		PROJECT:		ROAD NAME:		SCALE:	SHEET CONTENT:	
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)			MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)		0	SEP. 2024.	TENDER DRAWINGS		G.DESIGNED	SHAHZAD DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (RRDP)	KOHAT-3 FROM MUKARAB KORON TO KOT ROAD	N.T.S	LIST OF BENCH MARKS		
						a			DRAWN	MANSOOR							
						b			CHECKED	SHAHZAD DURRANI							
						c			APPROVED	AQEEL YOUNIS				ACCESS ROAD		SEP, 2024.	DWG NO: CEC/KP-RRDP/HW/KOHAT-3/ BM- 01

PLAN & PROFILE DRAWINGS

Lawal

Deputy Director Construction-in
Provincial Road, Improvement Project
C&W Department, Peshawar



START POINT OF PROJECT

E=739268.206

N=3709490.635

Slab Culvert
Replaced with
Box Culvert
Size: 2x1

Proposed
Box Culvert

Proposed
Box Culvert

(C2)

(C3)

HIGH PT STA: 0+243.99
HIGH PT ELEV: 377.42
PVI STA: 0+168.99
PVI ELEV: 377.05
K: 3584.06
LVC: 150.00

Existing Slab culvert Replace
with Box culvert
ELEV: 375.152

Proposed Box culvert

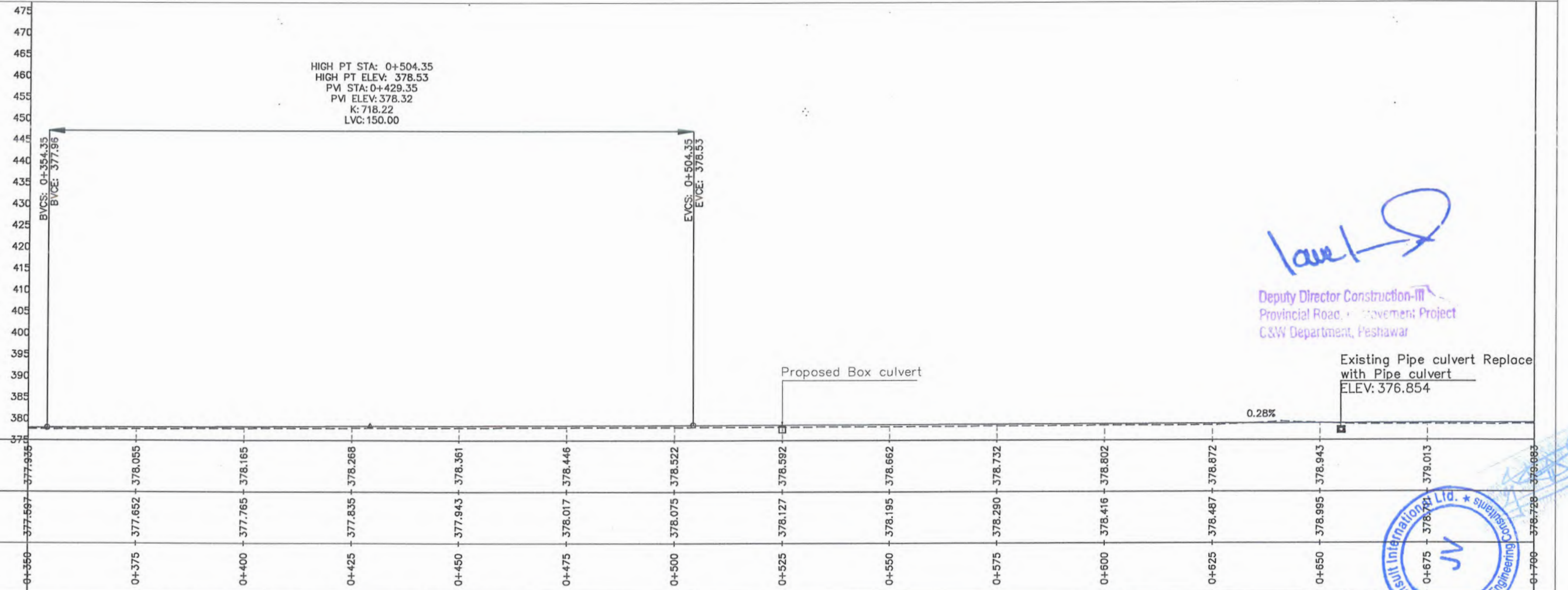
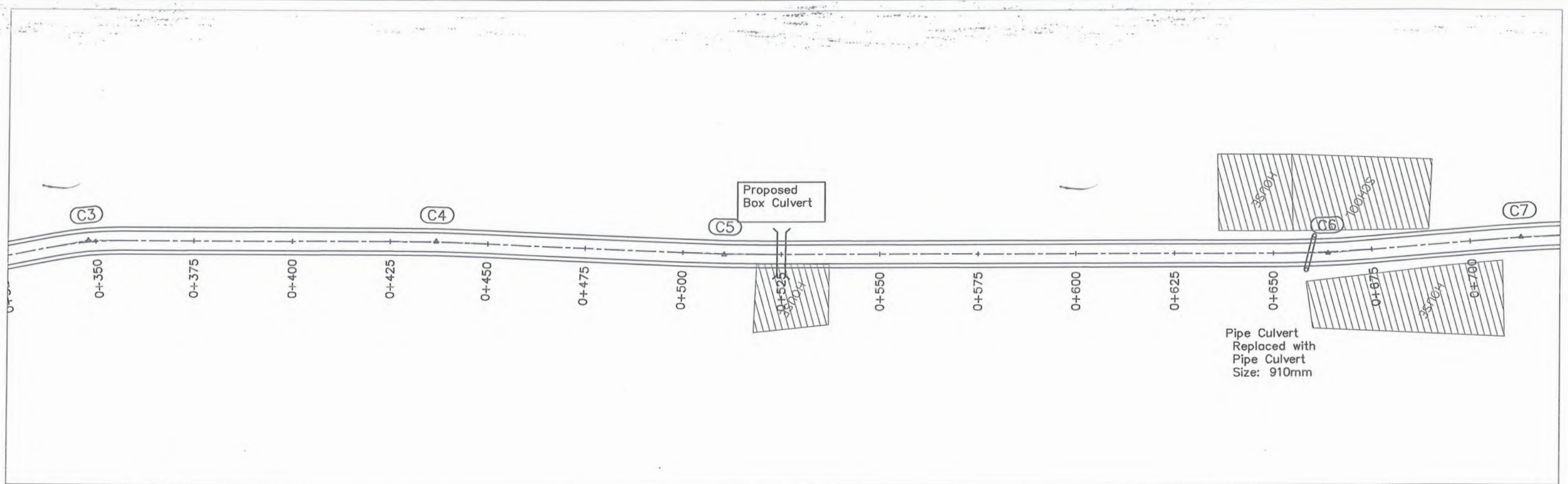
Proposed Box culvert

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



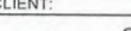
F.R.L	376.152	376.285	376.417	376.550	376.683	376.814	376.944	377.072	377.198	377.323	377.446	377.568	377.691	377.813	377.935
N.S.L	376.152	376.029	376.121	376.242	376.309	376.434	376.512	376.625	376.684	376.778	376.909	377.063	377.173	377.456	377.597
STATION	0+000	0+025	0+050	0+075	0+100	0+125	0+150	0+175	0+200	0+225	0+250	0+275	0+300	0+325	0+350

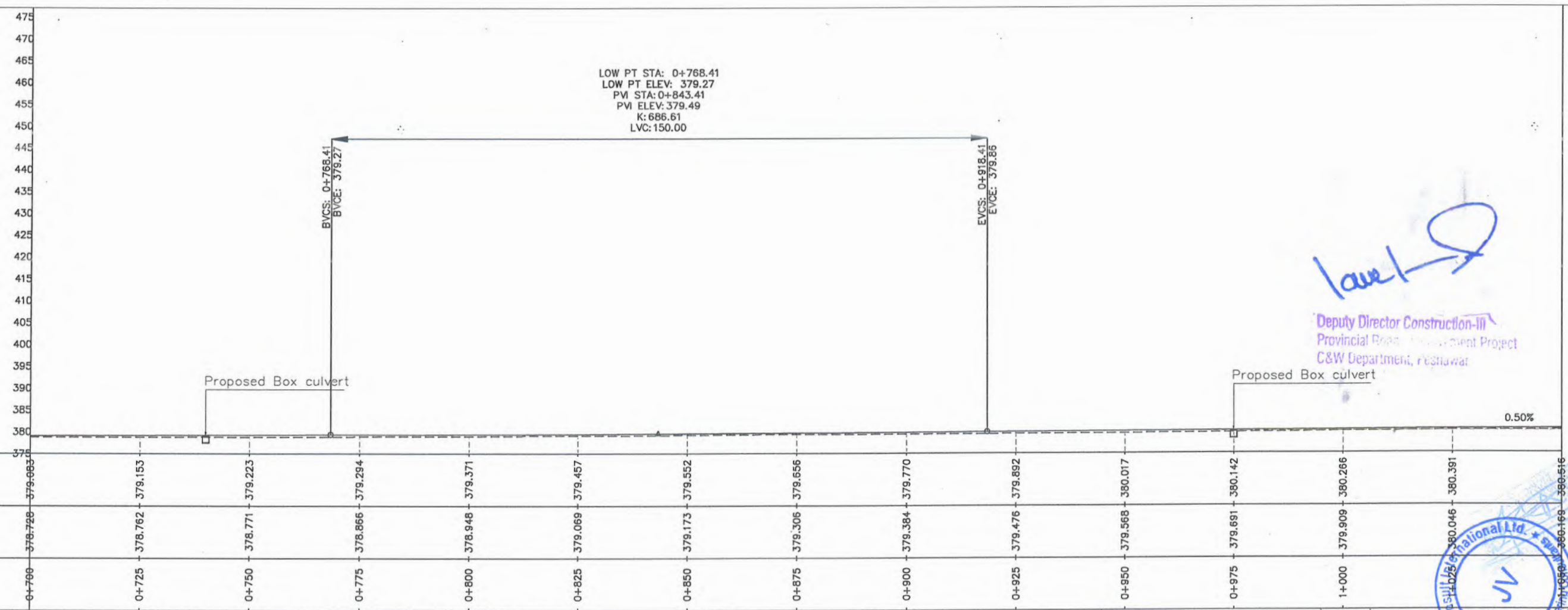
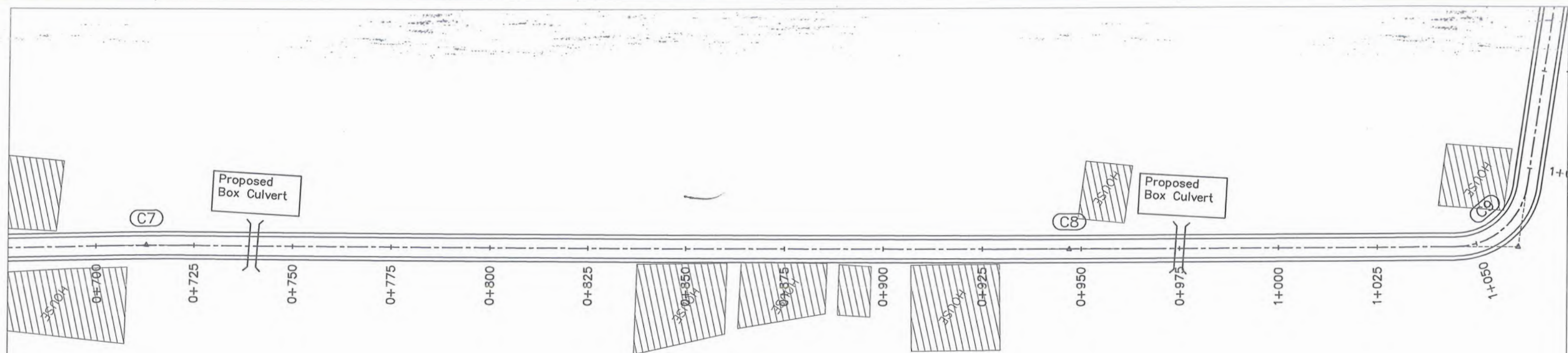
CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024	TENDER DRAWINGS	G.DESIGNED S.DURRANI DRAWN MANSOOR CHECKED S.DURRANI APPROVED AQEEL YOUNIS	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	KOHAT-3 FROM MUKARAB KORONA TO KOT ROAD ACCESS ROAD	H=1:1000 V=1:1000 DATE: SEP, 2024	PLAN & PROFILE 0+000.00 - 0+350.00 CEC/KP-RRDP/HW/KOHAT-3/PPI 1



Lawal S
 Deputy Director Construction-III
 Provincial Road Development Project
 C&W Department, Peshawar

Existing Pipe culvert Replace
 with Pipe culvert
 ELEV: 376.854

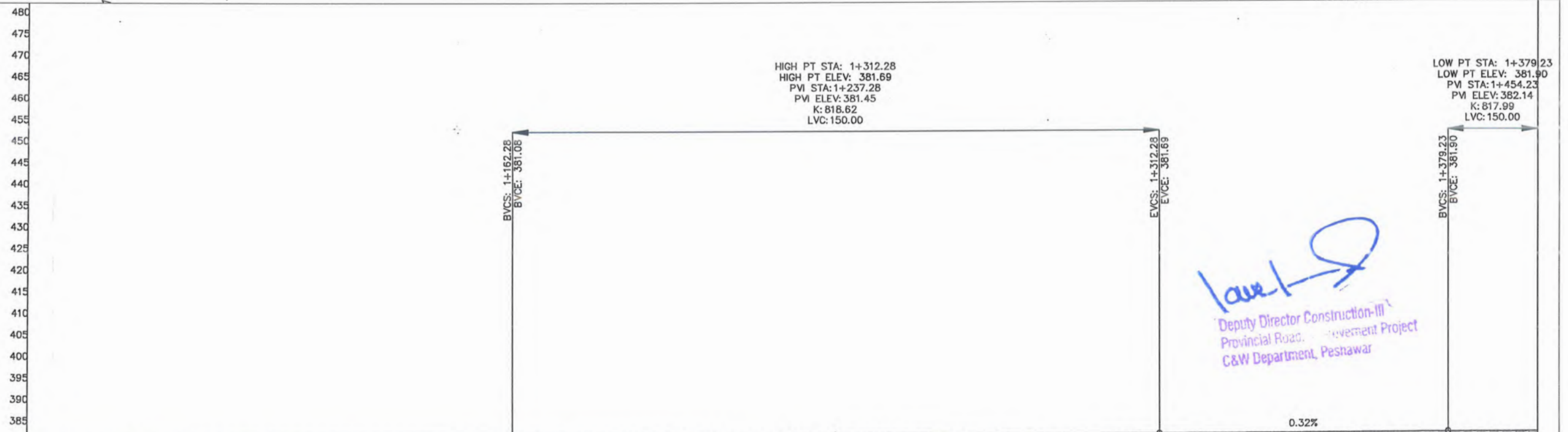
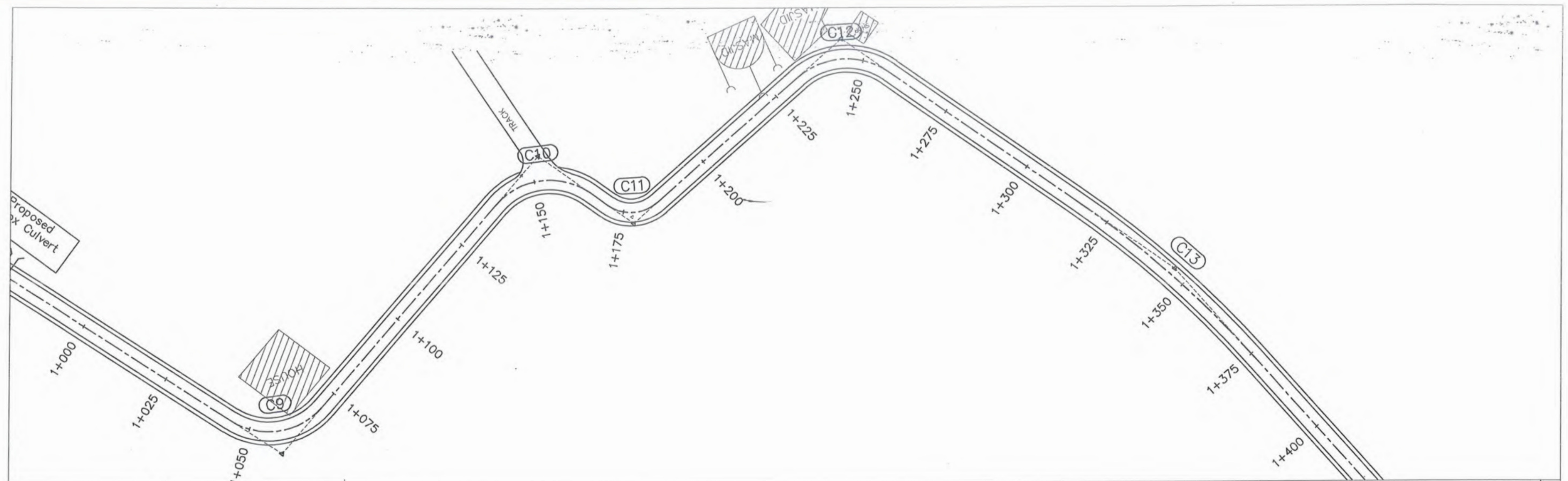
CLIENT:		DESIGN CONSULTANT: (MIN - JV - CEC)		REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	KOHAT-3 FROM MUKARAB KORONA TO KOT ROAD	H=1:1000 V=1:1000	PLAN & PROFILE 0+350.00 - 0+700.00
				a			DRAWN	MANSOOR			DATE:	
				b			CHECKED	S.DURRANI				
				c			APPROVED	AQEEL YOUNIS				
										ACCESS ROAD	SEP, 2024.	CEC/KP-RRDP/HW/KOHAT-3/PP/ 2



Lawal S
 Deputy Director Construction-III
 Provincial Road Development Project
 C&W Department, Peshawar

F.R.L	379.665	379.153	379.223	379.294	379.371	379.457	379.552	379.656	379.770	379.892	380.017	380.142	380.266	380.391	380.516
N.S.L	378.729	378.762	378.771	378.866	378.948	379.069	379.173	379.308	379.384	379.476	379.568	379.691	379.909	380.046	380.169
STATION	0+700	0+725	0+750	0+775	0+800	0+825	0+850	0+875	0+900	0+925	0+950	0+975	1+000	1+025	1+050

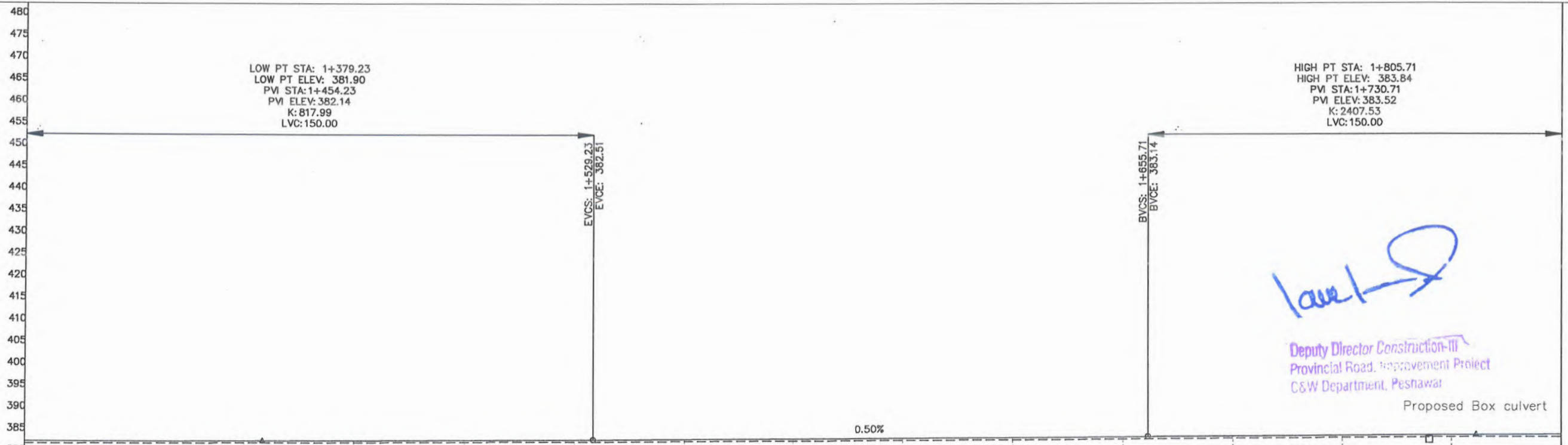
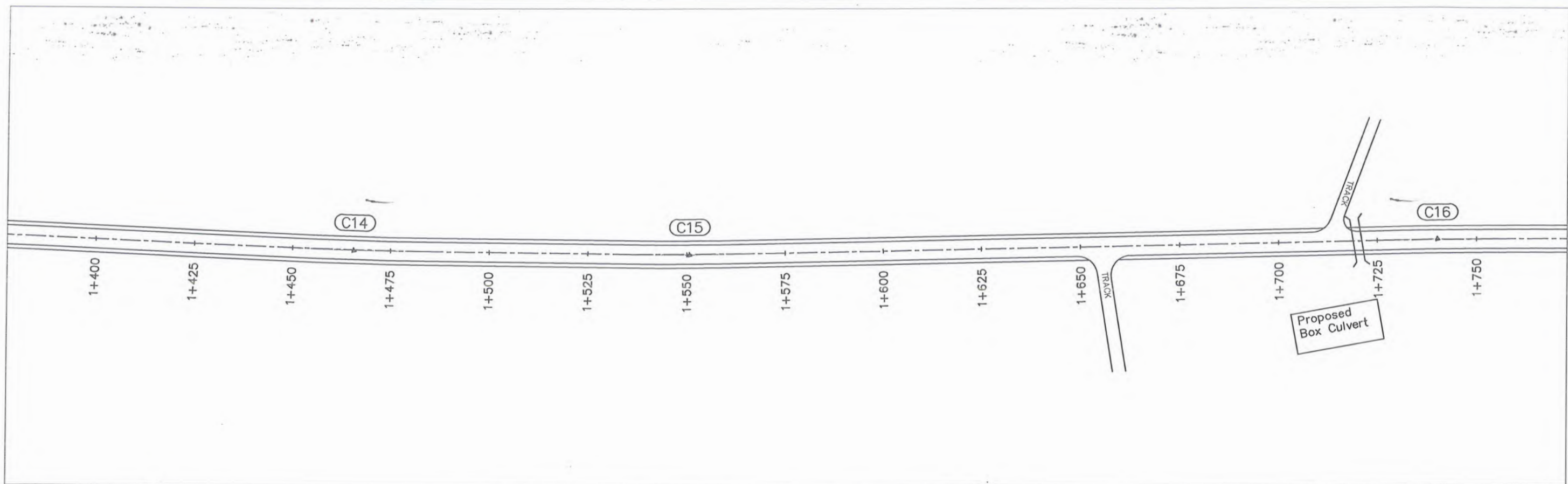
CLIENT: GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	DESIGN CONSULTANT: (MIN - JV - CEC) MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT: KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	ROAD NAME: KOHAT-3 FROM MUKARAB KORONA TO KOT ROAD ACCESS ROAD	SCALE: H=1:1000 V=1:1000 DATE: SEP, 2024	SHEET CONTENT: PLAN & PROFILE 0+700.00 - 1+050.00 CEC/KP-RRDP/HW/KOHAT-3/PP/ 3
		0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	S.DURRANI				
		a			DRAWN	MANSOOR				
		b			CHECKED	S.DURRANI				
		c			APPROVED	AQEEL YOUNIS				



Lawal
Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

F.R.L	380.516	380.541	380.765	380.890	381.015	381.139	381.255	381.365	381.467	381.561	381.648	381.727	381.806	381.885	381.967
N.S.L	380.169	380.323	380.358	380.428	380.427	380.704	380.803	380.897	381.008	381.111	381.147	381.244	381.284	381.388	381.477
STATION	1+050	1+075	1+100	1+125	1+150	1+175	1+200	1+225	1+250	1+275	1+300	1+325	1+350	1+375	1+400

CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	KOHAT-3 FROM MUKARAB KORONA TO KOT ROAD ACCESS ROAD	H=1:1000 V=1:1000 DATE: SEP, 2024.	PLAN & PROFILE 1+050.00 - 1+400.00 CEC/KP-RRDP/HW/KOHAT-3/PP/ 4
		a			DRAWN MANSOOR				
		b			CHECKED S.DURRANI				
		c			APPROVED AQEEL YOUNIS				

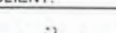


F.R.L	381.967	382.056	382.153	382.257	382.369	382.489	382.614	382.738	382.863	382.988	383.113	383.237	383.358	383.477	383.593
N.S.L	381.477	381.564	381.682	381.808	381.949	381.971	382.113	382.260	382.379	382.456	382.569	382.740	382.858	382.980	383.067
STATION	1+400	1+425	1+450	1+475	1+500	1+525	1+550	1+575	1+600	1+625	1+650	1+675	1+700	1+725	1+750

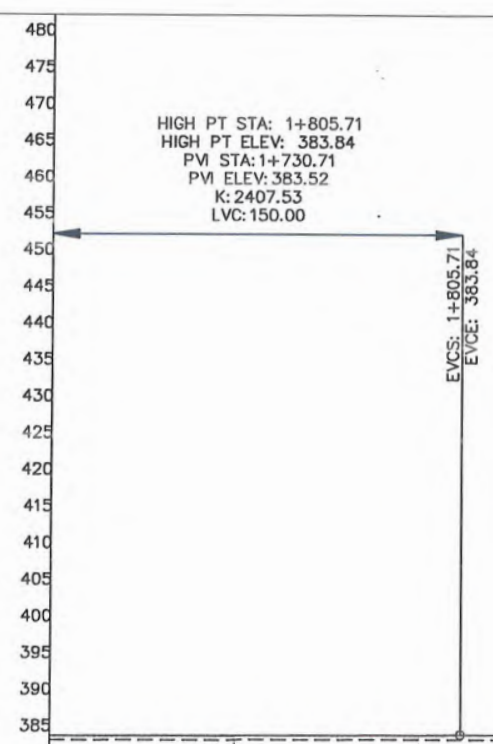
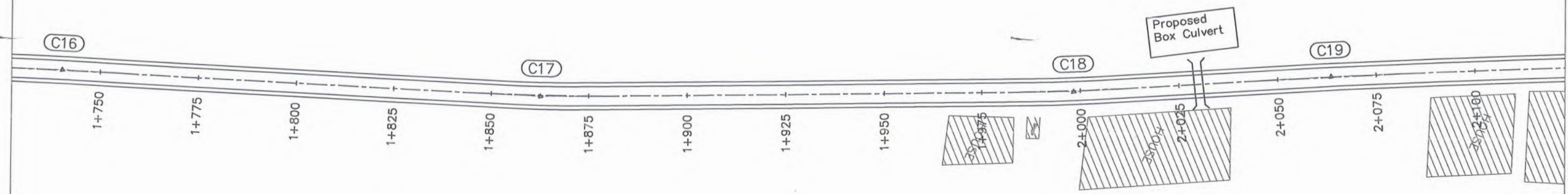
Lawal S

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

Proposed Box culvert

CLIENT:	DESIGN CONSULTANT: (MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	KOHAT-3 FROM MUKARAB KORONA TO KOT ROAD	H=1:1000 V=1:1000	PLAN & PROFILE 1+400.00 - 1+750.00
		a			DRAWN	MANSOOR				
		b			CHECKED	S.DURRANI				
		c			APPROVED	AQEEL YOUNIS				ACCESS ROAD





Lawal S
 Deputy Director Construction-III
 Provincial Government Project
 C&W Department, Peshawar

F.R.L	383.563	383.707	383.818	383.927	384.037	384.146	384.255	384.364	384.473	384.583	384.692	384.801	384.910	385.019	385.129
N.S.L	383.667	383.145	383.221	383.352	383.421	383.494	383.629	383.799	383.902	384.003	384.047	384.181	384.297	384.354	384.454
STATION	1+750	1+775	1+800	1+825	1+850	1+875	1+900	1+925	1+950	1+975	2+000	2+025	2+050	2+075	2+100

CLIENT: GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	DESIGN CONSULTANT: (MIN - JV - CEC) MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT: KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	ROAD NAME: KOHAT-3 FROM MUKARAB KORONA TO KOT ROAD ACCESS ROAD	SCALE: H=1:1000 V=1:1000 DATE: SEP, 2024	SHEET CONTENT: PLAN & PROFILE 1+750.00 - 2+100.00 CEC/KP-RRDP/HW/KOHAT-3/PP/ 6
		0	SEP, 2024	TENDER DRAWINGS	G.DESIGNED	S.DURRANI				
		a			DRAWN	MANSOOR				
		b			CHECKED	S.DURRANI				
		c			APPROVED	AQEEL YOUNIS				



HIGH PT STA: 2+267.30
 HIGH PT ELEV: 385.60
 PVI STA: 2+249.11
 PM ELEV: 385.78
 K: 269.13
 LVC: 198.74

480
475
470
465
460
455
450
445
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385
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5
0

BVCS: 2+149.74
 BVCE: 385.35

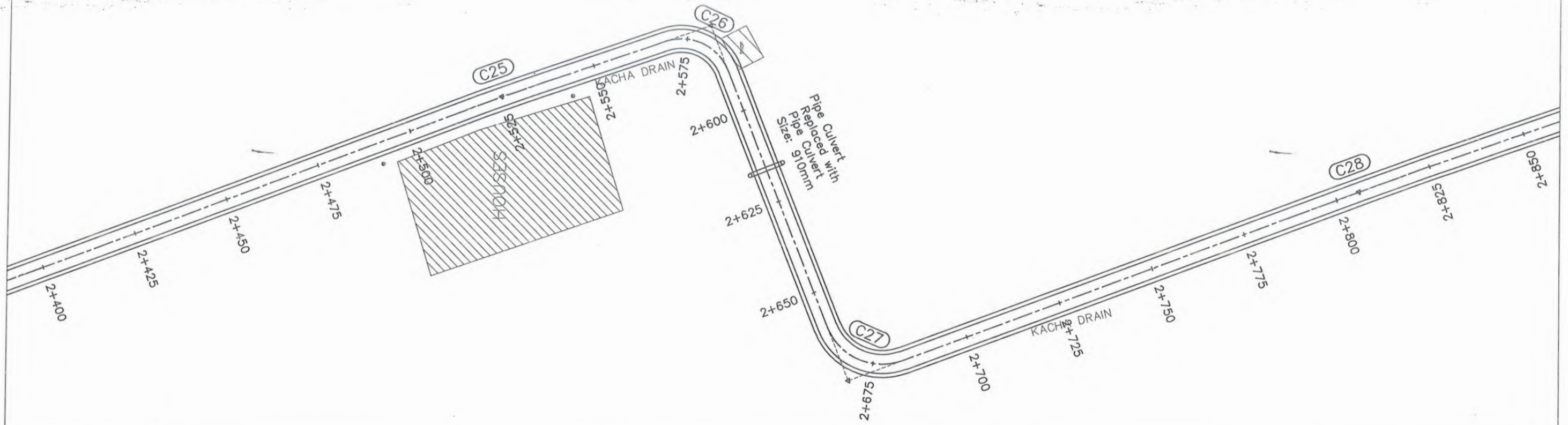
EVCS: 2+348.48
 EVCE: 385.48

Proposed Box culvert

Deputy Director Construction-III
 Provincial Road Improvement Project
 C&W Department, Peshawar

F.R.L	384.454	384.539	384.653	384.734	384.865	384.951	384.666	384.673	384.726	384.680	384.638	384.589	384.538	384.431	384.317
N.S.L	384.454	384.539	384.653	384.734	384.865	384.951	384.666	384.673	384.726	384.680	384.638	384.589	384.538	384.431	384.317
STATION	2+100	2+125	2+150	2+175	2+200	2+225	2+250	2+275	2+300	2+325	2+350	2+375	2+400	2+425	2+450

CLIENT:		DESIGN CONSULTANT: (MIN - JV - CEC)		REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	d	SEP, 2024.	TENDER DRAWINGS	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	KOHAT-3 FROM MUKARAB KORONA TO KOT ROAD	H=1:1000 V=1:1000	PLAN & PROFILE 2+100.00 - 2+450.00
				a			DRAWN	MANSOOR				
				b			CHECKED	S.DURRANI				
				c			APPROVED	AOEEL YOUNIS				



480
475
470
465
460
455
450
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430
425
420
415
410
405
400
395
390
385
380

Existing Pipe culvert Replace
with Pipe culvert
ELEV: 382.751

-0.30%

F.R.L	385.174	385.099	385.023	384.948	384.872	384.797	384.722	384.646	384.571	384.495	384.420	384.345	384.269	384.194	384.118
N.S.L	384.317	384.248	384.153	384.067	384.098	383.986	383.897	383.885	383.897	383.750	383.743	383.688	383.575	383.473	383.364
STATION	2+450	2+475	2+500	2+525	2+550	2+575	2+600	2+625	2+650	2+675	2+700	2+725	2+750	2+775	2+800

Lawal
Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT: KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	ROAD NAME: KOHAT-3 FROM MUKARAB KORONA TO KOT ROAD ACCESS ROAD	SCALE: H=1:1000 V=1:1000 DATE: SEP, 2024.	SHEET CONTENT: PLAN & PROFILE 2+450.00 - 2+800.00 CEC/KP-RRDP/IHW/KOHAT-3/PP/	8
		0	SEP, 2024.	TENDER DRAWNGS	G.DESIGNED	S.DURRANI					
		a			DRAWN	MANSOOR					
		b			CHECKED	S.DURRANI					
		c			APPROVED	AQEEL YOUNIS					

Pipe Culvert
Replaced with
Pipe Culvert
Size: 910mm

C34

C35

C36

C37

3+150

3+175

3+200

3+225

3+250

3+275

3+300

3+325

3+350

3+375

3+400

3+425

3+450

3+475

3+500

KACHA DRAIN

HIGH PT STA: 3+121.97
HIGH PT ELEV: 383.20
PVI STA: 3+196.97
PVI ELEV: 383.00
K: 583.18
LVC: 150.00

Existing Pipe culvert Replace
with Pipe culvert
ELEV: 381.084

EVCS: 3+271.97
EVC: 382.51

LOW PT STA: 3+637.1
LOW PT ELEV: 380.8
PVI STA: 3+562.05
PVI ELEV: 381.08
K: 749.20
LVC: 150.00

BVCS: 3+487.05
BVC: 381.43

-0.53%

F.R.L

N.S.L

STATION

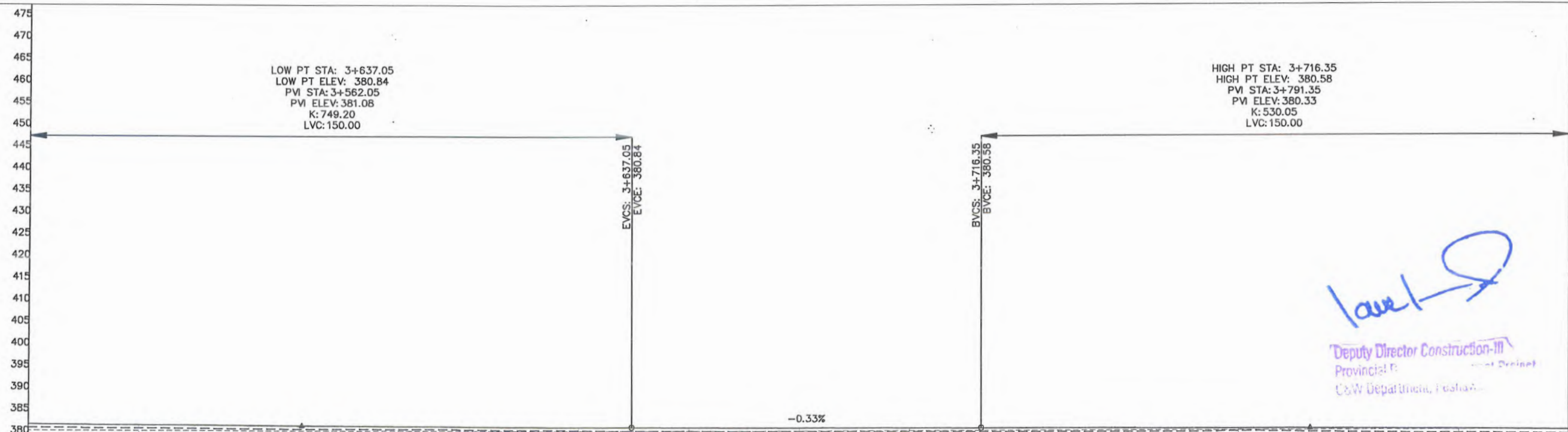
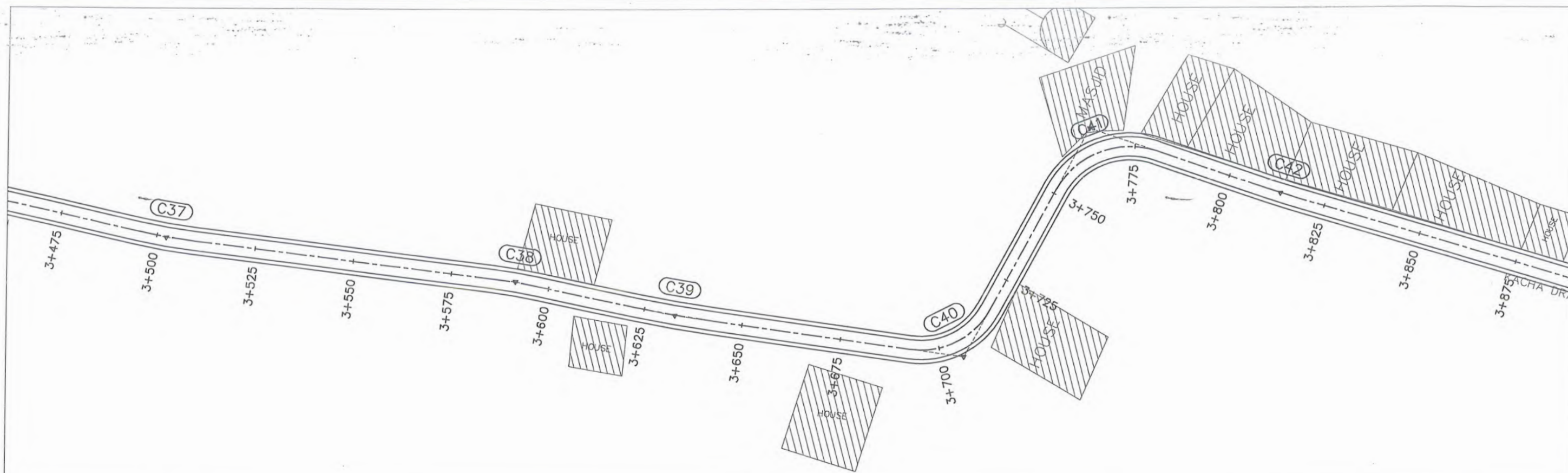
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CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION		NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:	
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. 	CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	TENDER DRAWINGS		G. DESIGNED	S. DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	KOHAT-3 FROM MUKARAB KORONA TO KOT ROAD	H=1:1000 V=1:1000 DATE:	PLAN & PROFILE 3+150.00 - 3+500.00	
					a			DRAWN	MANSOOR						
					b			CHECKED	S. DURRANI						
					c			APPROVED	AQEEL YOUNIS						
											ACCESS ROAD	SEP, 2024.	CEC/KP-RRDP/HW/KOHAT-3/PP/	10	



Lawal
 Deputy Director Construction-III
 Provincial Road
 CoW Department, Peshawar

F.R.L	381.408	381.285	381.170	381.064	380.966	380.876	380.794	380.712	380.631	380.548	380.457	380.353	380.238	380.117	379.973
N.S.L	380.617	380.544	380.416	380.349	380.255	380.110	379.963	379.846	379.758	379.687	379.604	379.734	379.435	379.199	379.017
STATION	3+500	3+525	3+550	3+575	3+600	3+625	3+650	3+675	3+700	3+725	3+750	3+775	3+800	3+825	3+850

 CLIENT: GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 DESIGN CONSULTANT: (MIN - JV - CEC) MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT: KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	ROAD NAME: KOHAT-3 FROM MUKARAB KORONA TO KOT ROAD ACCESS ROAD	SCALE: H=1:1000 V=1:1000 DATE: SEP, 2024	SHEET CONTENT: PLAN & PROFILE 3+500.00 - 3+850.00 CEC/KP-RRDP/HW/KOHAT-3/PP/ 11
		0	SEP, 2024	TENDER DRAWINGS	G.DESIGNED	S.DURRANI				
		a			DRAWN	MANSOOR				
		b			CHECKED	S.DURRANI				
		c			APPROVED	AQEEL YOUNIS				

CENTER LINE DATA LINK ROAD


Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



CENTER LINE DATA			
S.NO	Station	Northing	Easting
1	0+000.00	3,710,042.64	738,259.47
2	0+025.00	3,710,037.28	738,235.05
3	0+050.00	3,710,031.93	738,210.63
4	0+075.00	3,710,026.82	738,186.16
5	0+100.00	3,710,022.47	738,161.54
6	0+125.00	3,710,018.13	738,136.92
7	0+150.00	3,710,012.19	738,113.10
8	0+175.00	3,709,989.58	738,108.09
9	0+200.00	3,709,985.27	738,083.47
10	0+225.00	3,709,980.89	738,058.86
11	0+250.00	3,709,977.62	738,034.07
12	0+275.00	3,709,975.21	738,009.19
13	0+300.00	3,709,973.30	737,984.27
14	0+325.00	3,709,986.44	737,965.50
15	0+350.00	3,710,007.84	737,952.58
16	0+375.00	3,710,029.28	737,939.73
17	0+400.00	3,710,052.08	737,929.49
18	0+425.00	3,710,075.06	737,919.64
19	0+450.00	3,710,098.04	737,909.79
20	0+475.00	3,710,121.01	737,899.94
21	0+500.00	3,710,143.70	737,889.45
22	0+525.00	3,710,166.35	737,878.87
23	0+550.00	3,710,188.69	737,867.65
24	0+575.00	3,710,210.62	737,855.64
25	0+600.00	3,710,232.55	737,843.64
26	0+625.00	3,710,254.95	737,832.59
27	0+650.00	3,710,278.28	737,823.61
28	0+675.00	3,710,301.63	737,814.67
29	0+700.00	3,710,324.98	737,805.73
30	0+725.00	3,710,348.32	737,796.78
31	0+750.00	3,710,371.67	737,787.84
32	0+775.00	3,710,394.95	737,778.74
33	0+800.00	3,710,417.39	737,767.73
34	0+825.00	3,710,439.81	737,756.67
35	0+850.00	3,710,462.28	737,745.71
36	0+875.00	3,710,484.80	737,734.85
37	0+900.00	3,710,507.32	737,723.99
38	0+925.00	3,710,529.94	737,713.35
39	0+950.00	3,710,553.22	737,704.23
40	0+975.00	3,710,576.51	737,695.16

CENTER LINE DATA			
S.NO	Station	Northing	Easting
41	1+000.00	3,710,599.81	737,686.09
42	1+025.00	3,710,623.11	737,677.02
43	1+050.00	3,710,646.30	737,667.70
44	1+075.00	3,710,668.60	737,656.40
45	1+100.00	3,710,690.79	737,644.90
46	1+125.00	3,710,712.88	737,633.18
47	1+150.00	3,710,735.18	737,621.92
48	1+175.00	3,710,758.63	737,613.25
49	1+200.00	3,710,782.10	737,604.64
50	1+225.00	3,710,805.58	737,596.04
51	1+250.00	3,710,828.73	737,586.65
52	1+275.00	3,710,851.14	737,575.58
53	1+294.76	3,710,861.82	737,561.96

Lawal S

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



CLIENT:	DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	Sep,2024	Tender Drawings.	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	KOHAT-3 FROM MUKARAB KHAN KORONA TO KOT ROAD	NTS	CENTER LINE DATA LINK ROAD	
		a			DRAWN	MANSOOR			DATE:		
		b			CHECKED	S.DURRANI			Sep, 2024.	ACCESS ROAD	CEC/RRDP/HW/KOHAT-3/CLD-01
		c			APPROVED	AQEEL YOUNIS					

HORIZONTAL CURVE DATA LINK ROAD

Lawal S

Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Peshawar

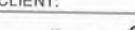


Curve Table: Alignments

Curve #	PI Station	PI Easting	PI Northing	PC Station	PC Easting	PC Northing	PT Station	PT Easting	PT Northing	Radius	Length	Tangent Length	Delta Angle	Chord
C1	0+068.92	738192.1508	3710027.8793	0+064.54	738196.4267	3710028.8166	0+073.29	738187.8401	3710027.1181	213.44	8.75	4.377	2.3499	S78° 48'
C2	0+149.84	738112.4610	3710013.8079	0+145.86	738116.3831	3710014.5005	0+152.47	738112.4820	3710009.8252	4.72	6.62	3.983	80.2881	S39° 50'
C3	0+171.93	738112.5845	3709990.3685	0+167.54	738112.5614	3709994.7608	0+174.83	738108.2578	3709989.6123	5.20	7.29	4.392	80.3876	S39° 53'
C4	0+199.49	738083.9729	3709985.3677	0+192.18	738091.1724	3709986.6260	0+206.79	738076.7786	3709984.0798	3563.08	14.62	7.309	0.2351	S79° 58'
C5	0+233.43	738050.5568	3709979.3856	0+222.04	738061.7728	3709981.3935	0+244.82	738039.2274	3709978.1714	323.72	22.78	11.394	4.0317	S81° 51'
C6	0+266.66	738017.5060	3709975.8432	0+260.14	738023.9974	3709976.5390	0+273.19	738010.9964	3709975.3444	431.04	13.06	6.529	1.7355	S84° 45'
C7	0+310.38	737973.9159	3709972.5029	0+302.38	737981.8901	3709973.1140	0+316.72	737969.7812	3709979.3488	12.99	14.34	7.998	63.2521	N62° 45'
C8	0+377.44	737938.3905	3710031.3243	0+370.74	737941.8526	3710025.5918	0+384.11	737935.7519	3710037.4794	96.67	13.37	6.697	7.9255	N27° 10'
C9	0+478.00	737898.7592	3710123.7709	0+475.14	737899.8864	3710121.1416	0+480.86	737897.5485	3710126.3627	178.79	5.72	2.861	1.8334	N24° 07'
C10	0+538.85	737873.0084	3710178.8985	0+530.13	737876.6972	3710171.0016	0+547.56	737868.8229	3710186.5438	272.70	17.43	8.716	3.6614	N26° 52'
C11	0+617.40	737835.2821	3710247.8092	0+605.87	737840.8198	3710237.6941	0+628.90	737831.1573	3710258.5781	170.45	23.03	11.532	7.7410	N24° 49'
C12	0+773.81	737779.3245	3710393.9022	0+769.18	737780.9821	3710389.5744	0+778.44	737777.2736	3710398.0582	100.00	9.26	4.634	5.3069	N23° 36'
C13	0+837.43	737751.1664	3710450.9632	0+831.48	737753.7989	3710445.6286	0+843.38	737748.5825	3710456.3214	1308.92	11.90	5.949	0.5208	N26° 00'
C14	0+922.59	737714.1779	3710527.6677	0+915.71	737717.1686	3710521.4658	0+929.47	737711.6798	3710534.0839	176.38	13.76	6.885	4.4710	N23° 30'
C15	1+048.04	737668.6620	3710644.5712	1+041.85	737670.9052	3710638.8097	1+054.21	737665.8525	3710650.0788	123.04	12.36	6.183	5.7535	N24° 09'
C16	1+089.82	737649.6706	3710681.8009	1+088.06	737650.4678	3710680.2379	1+091.57	737648.8479	3710683.3507	215.25	3.51	1.755	0.9340	N27° 29'
C17	1+146.71	737622.9967	3710732.0500	1+139.80	737626.2368	3710725.9461	1+153.60	737620.6178	3710738.5383	101.04	13.80	6.911	7.8253	N24° 02'
C18	1+242.13	737590.1413	3710821.6594	1+236.81	737591.9718	3710816.6670	1+247.44	737587.7872	3710826.4273	99.11	10.62	5.317	6.1421	N23° 12'
C19	1+287.16	737570.2029	3710862.0414	1+284.26	737571.4869	3710859.4410	1+289.41	737567.3039	3710861.9633	4.53	5.16	2.900	65.2667	N58° 54'

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 Provincial Road Improvement Project
 C&W Department, Peshawar



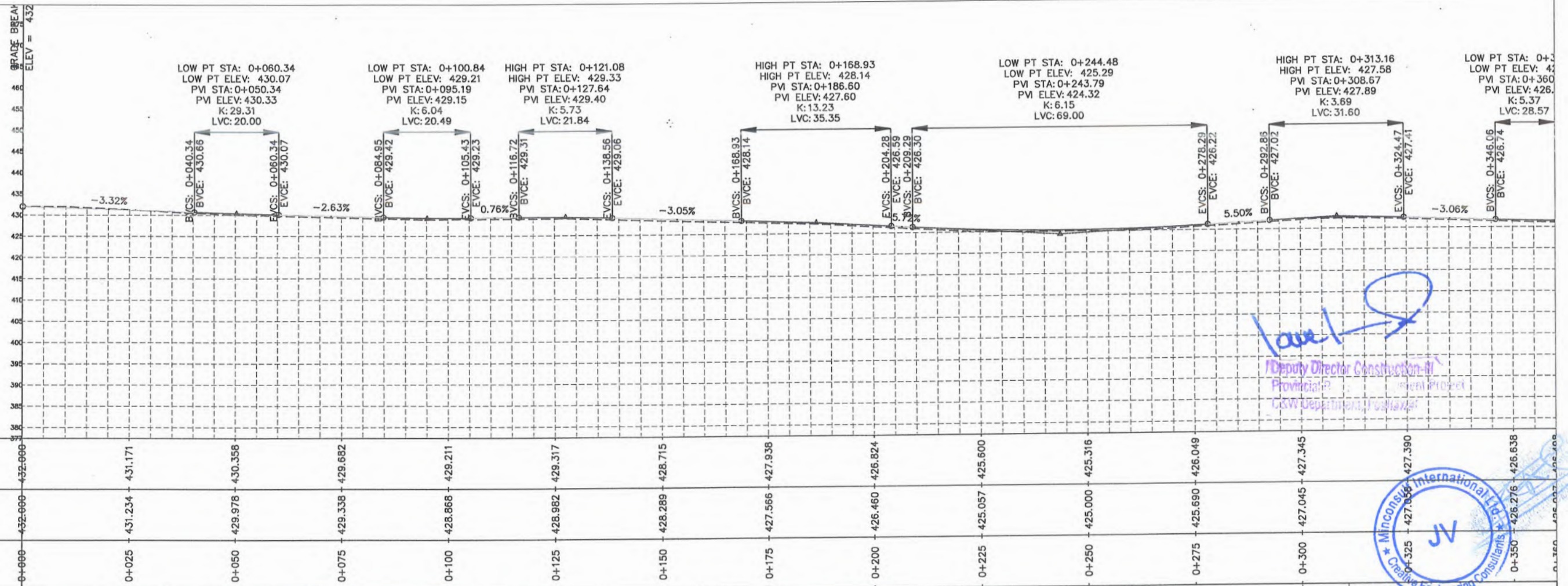
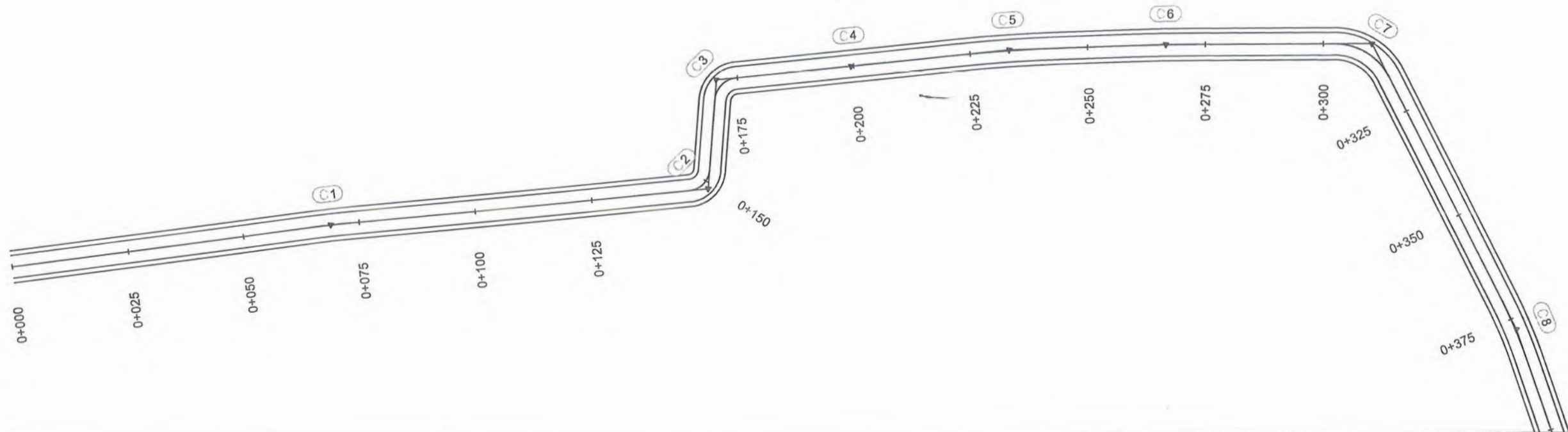
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 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	Sep,2024	Tender Drawings.	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	KOHAT-3 FROM MUKARAB KHAN KORONA TO KOT ROAD	NTS	HORIZONTAL CURVE DATA LINK ROAD	
		a			DRAWN	MANSOOR			DATE:		
		b			CHECKED	S.DURRANI					
		c			APPROVED	AQEEL YOUNIS					
								ACCESS ROAD	Sep. 2024.	CEC/RRDP/HWKOHAT-3/HCD-01	

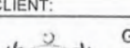
PLAN & PROFILE DRAWINGS LINK ROAD

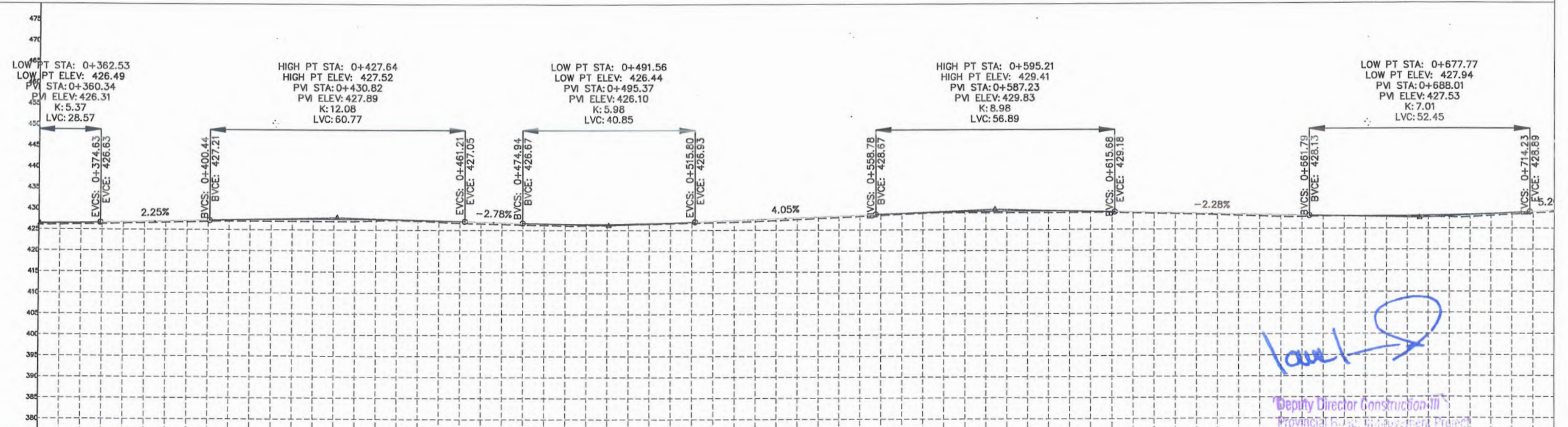
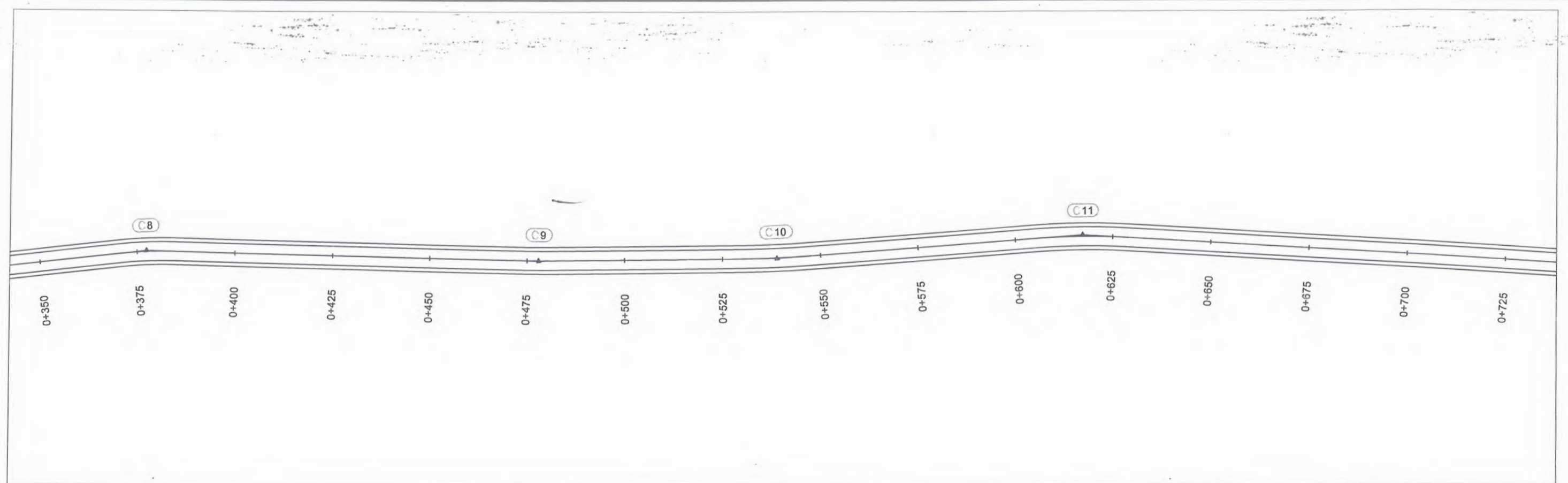
Lawal S

Deputy Director Construction-III
Provincial Government Project
C&W Department, Peshawar





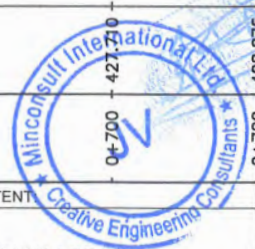
CLIENT:	DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT		
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	Sep,2024	Tender Drawings.	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	KOHAT-3 FROM MUKARAB KHAN KORONA TO KOT ROAD	H=1:1000 V=1:1000	PLAN & PROFILE 0+000.00 - 0+360.00 LINK ROAD		
		a			DRAWN	MANSOOR			DATE:			
		b			CHECKED	S.DURRANI	APPROVED	AQEEL YOUNIS	ACCESS ROAD	Sep, 2024.	CEC/RRDP/HW/KOHAT-3/PP/	1
		c										

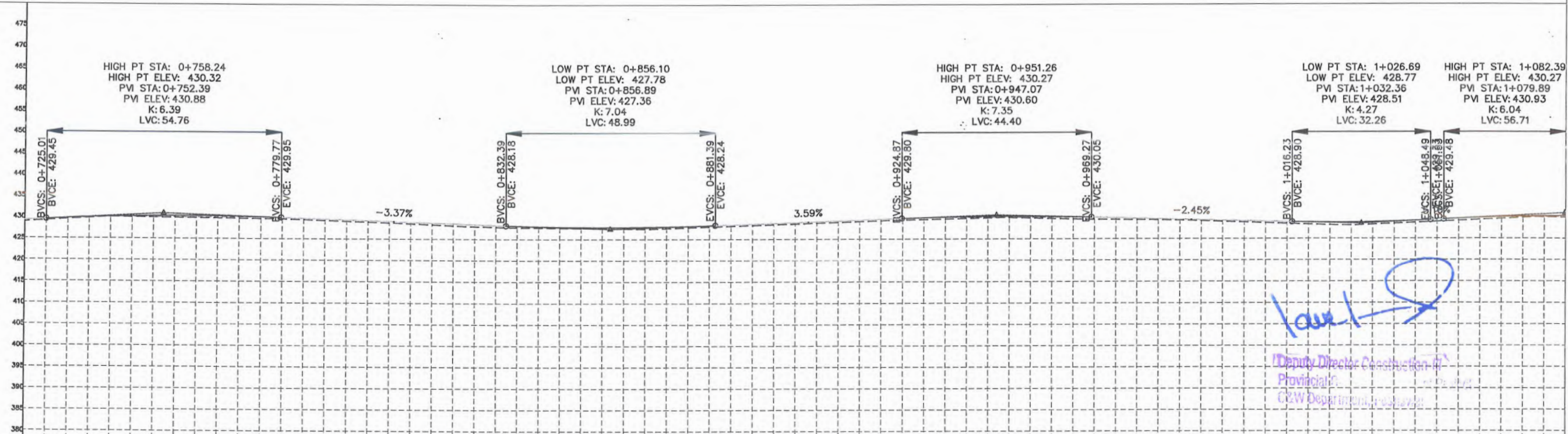


F.R.L	426.498	426.637	427.200	427.513	427.309	426.667	426.497	427.302	428.316	429.183	429.398	428.965	428.395	427.950	428.297	428.107
N.S.L	426.927	426.310	426.906	427.000	427.104	426.290	426.304	426.896	427.962	429.000	429.000	428.785	428.026	427.946	427.710	428.826
STATION	0+350	0+375	0+400	0+425	0+450	0+475	0+500	0+525	0+550	0+575	0+600	0+625	0+650	0+675	0+700	0+725

GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT
		0	Sep, 2024	Tender Drawings.	G.DESIGNED S. DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	KOHAT-3 FROM MUKARAB KHAN KORONA TO KOT ROAD	H=1:1000 V=1:1000	PLAN & PROFILE 0+360.00 - 0+720.00 LINK ROAD
		a			DRAWN MANSOOR			DATE:	
		b			CHECKED S. DURRANI			Sep, 2024.	
		c			APPROVED AQEEL YOUNIS			CEC/RRDP/HWIKOHAT-3/PP1	

Deputy Director Construction III
Provincial Road Development Project
C&W Department Peshawar

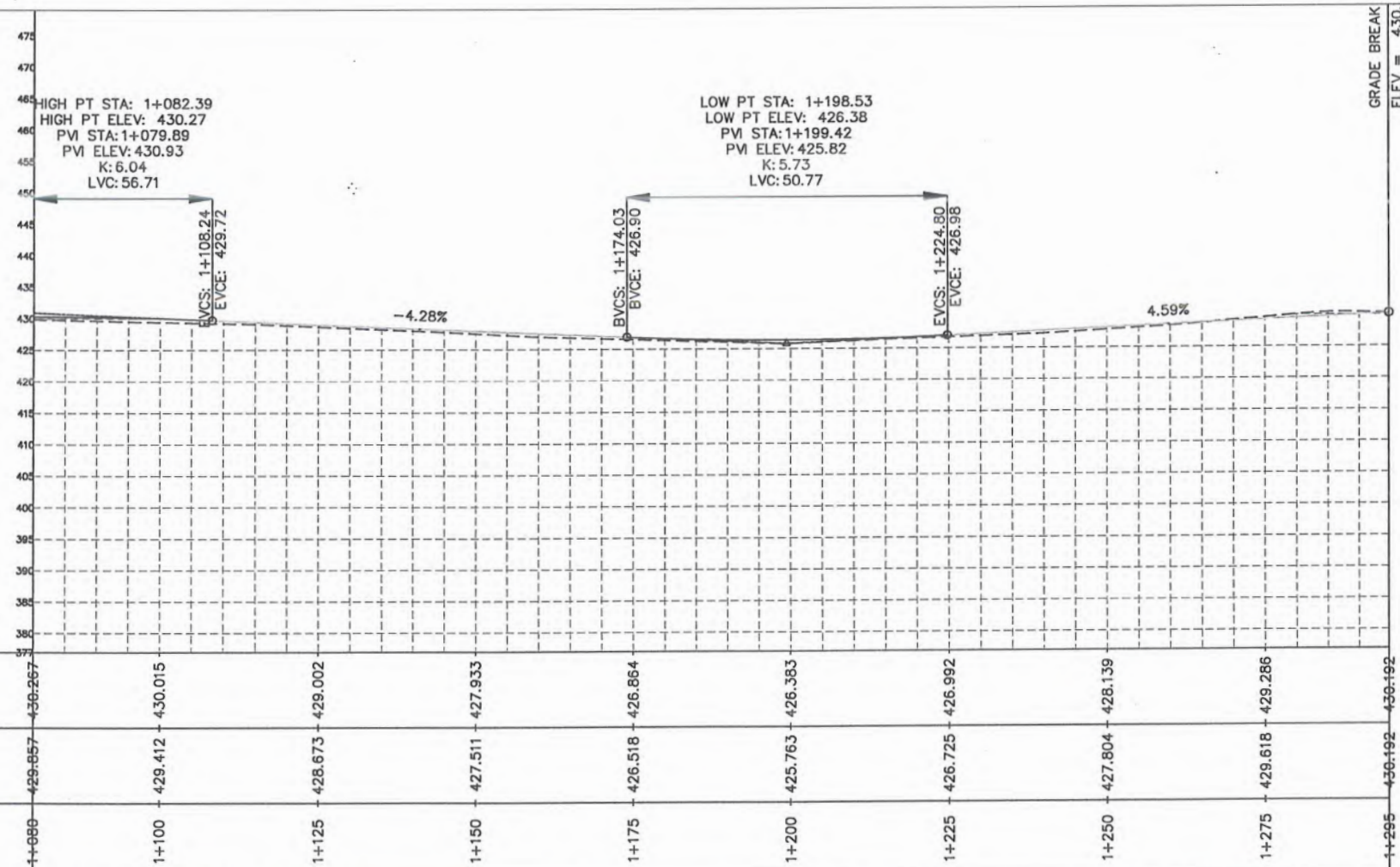
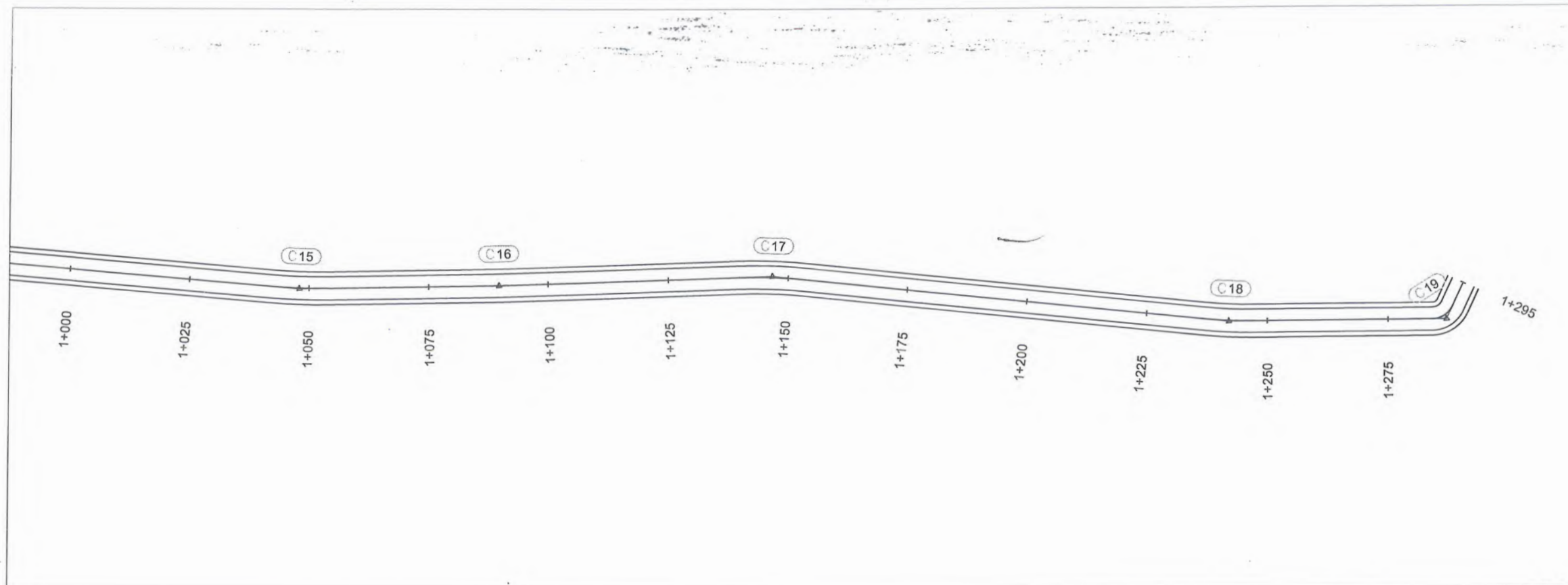




Low
Deputy Director Construction
Provincial
C&W Department

F.R.L	429.163	429.453	430.264	430.097	429.273	428.431	427.809	428.036	428.905	429.803	430.271	429.911	429.298	428.776	429.406	430.226
N.S.L	428.875	429.166	429.916	429.677	428.925	427.948	427.547	427.700	428.573	429.410	429.981	429.491	429.015	428.169	428.910	429.971
STATION	0+720	0+725	0+750	0+775	0+800	0+825	0+850	0+875	0+900	0+925	0+950	0+975	1+000	1+025	1+050	1+075

GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
		0	Sep, 2024	Tender Drawings.	G.DESIGNED	S.DURRANI				
		a			DRAWN	MANSOOR				
		b			CHECKED	S.DURRANI				
		c			APPROVED	AQEEL YOUNIS	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	KOHAT-3 FROM MUKARAB KHAN KORONA TO KOT ROAD ACCESS ROAD	H=1:1000 V=1:1000 DATE: Sep, 2024.	0+720.00 - 1+080.00 LINK ROAD CEC/RRDP/HW/KOHAT-3/PP/ 3



Lawal S
 Deputy Director Construction-III
 Provincial Road Development Project
 C&W Department, Peshawar



CLIENT:		DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	Sep,2024	Tender Drawings.	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	KOHAT-3 FROM MUKARAB KHAN KORONA TO KOT ROAD	H=1:1000 V=1:1000	PLAN & PROFILE 1+080.00 - 1+294.76 LINK ROAD		
		a			DRAWN	MANSOOR						
		b			CHECKED	S.DURRANI						
		c			APPROVED	AQEEL YOUNIS				ACCESS ROAD	Sep. 2024.	CEC/RRDP/HW/KOHAT-3/PP/

KHYBER PAKHTUNKHWA
RURAL ROADS DEVELOPMENT PROJECT
(KP-RRDP)

KHARMATOO ROAD BRIDGE
DISTRICT KOHAT (KOHAT-BR-110)



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Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



GOVERNMENT OF KHYBER PAKHTUNKHWA
COMMUNICATION & WORKS DEPARTMENT
PROJECT IMPLEMENTATION UNIT (PIU)



MIN CONSULT
J.V.



CREATIVE ENGINEERING CONSULTANTS (CEC)
PHASE 3 CHOWK JAMRUD ROAD PESHAWAR

S. NO.	DWG. NO.	TITLE
01	CEC/RRDP/KOHAT/BR1/LD-01	LIST OF DRAWINGS
02	CEC/RRDP/KOHAT/BR1/GN-01	GENERAL NOTES
BRIDGE DRAWINGS		
03	CEC/RRDP/KOHAT/STR/BR1/01	GENERAL ARRANGEMENT
04	CEC/RRDP/KOHAT/STR/BR1/02	ABUTMENT CONCRETE OUTLINE
05	CEC/RRDP/KOHAT/STR/BR1/03	REINFORCEMENT DETAIL OF TRANSOM, WING WALL & BACK WALL
06	CEC/RRDP/KOHAT/STR/BR1/04	PIER CONC. OUTLINES, PIER REINFORCEMENT & DECK SLAB REINF.
07	CEC/RRDP/KOHAT/STR/BR1/05	ABUTMENT & PIER PILES DETAILS

Lawal
Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MIN CONSULT J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	REV	DATE	DESCRIPTION	DESIGNED	ENG. FAIZAN	PROJECT: KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP) KHARMATOO ROAD BRIDGE DISTRICT KOHAT (BR-110)	SCALE: AS SHOWN	SHEET CONTENT:	
		0			DRAWN:	NABI AMIN				
		a			CHECKED	ENGR. ISLAM				
		b			APPROVED	GULFAM SHEHZAD				
		c							DATE: OCT 2022	DWG NO. CEC/RRDP/KOHAT/STR/BR1/LD-01

GENERAL NOTES

1. DESIGN SPECIFICATIONS:

- 1.1 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 2020 .
1.2 PAKISTAN CODE OF PRACTICE FOR HIGHWAY BRIDGES- 1967 (WHERE APPLICABLE)

2. LIVE LOADS:

- 2.1 SINGLE LANE OF CLASS 'AA' (MILITARY 70 TON TANK) LOADING OR THREE/FOUR LANES OF CLASS 'A' LOADING WHICH EVER GOVERNS, OF PAKISTAN CODE OF PRACTICE FOR HIGHWAY BRIDGES- 1967.

3. GENERAL:

- 3.1 THE SPECIFICATION GIVEN IN THE DRAWINGS SHALL OVER RUN THE GENERAL NOTES
3.2 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED. ELEVATIONS ARE IN METRES.
3.3 ALL ELEVATIONS SHOWN ON DRAWINGS ARE FINISHED SURFACE LEVELS UNLESS OTHERWISE NOTED.
3.4 ALL EXPOSED CONCRETE CORNERS, EDGES AND ANGLES SHALL BE CHAMFERED OR FILLETED 20 x 20mm UNLESS OTHERWISE SPECIFIED.
3.5 GIRDER TOP SHALL BE ROUGHENED TO A FULL AMPLITUDE OF 6 mm.
3.6 THE FINISHES OF EXPOSED CONCRETE FACES SHALL BE AS PER DRAWINGS OR AS SPECIFIED IN THE GENERAL SPECIFICATIONS.

4. MATERIALS:

- 4.1 ALL THE MATERIALS AND WORKMANSHIP SHALL BE ACCORDING TO THE AASHTO SPECIFICATIONS AND ASTM STANDARDS EXCEPT WHERE MODIFIED BELOW, OR IN "PARTICULAR SPECIFICATIONS AND SPECIAL PROVISIONS" OF TENDER DOCUMENTS.

4.2 CONCRETE

UNLESS OTHERWISE NOTED, CONCRETE SHALL BE CLASSIFIED AS FOLLOWS:

CONCRETE	CLASS	28 DAYS (15 X 30 CM) CYLINDER STRENGTH KG/Sq.Cm	
REINFORCED	A3	280 (4000 psi)	WING WALLS
REINFORCED	A3	280 (4000 psi)	RETAINING WALLS IN ABUTMENTS, DECK SLAB AND DIAPHRAGM.
REINFORCED	A3	280 (4000 psi)	IN PILES/PIER/PILECAP/TRANSOM
PRESTRESSED	D2	425 (6000 psi)	IN GIRDERS.
PLUM	B	170 (2500 psi)	
LEAN	-	100 (1500 psi)	

UNLESS OTHERWISE NOTED, ALL STRUCTURAL CONCRETE SHALL BE CLASS A1 CONCRETE.

4.3 STEEL REINFORCEMENT

REINFORCING STEEL SHALL BE GRADE 60 STEEL CONFORMING TO AASHTO M-31 (ASTM A-615) WITH MINIMUM YIELD STRENGTH OF 4220 Kg/Sq.Cm (60,000 Psi).

4.4 STRUCTURAL STEEL

ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A-36 HAVING MINIMUM YIELD STRENGTH OF 248 N/mm² (36,000 psi). BOLTS AND NUTS SHALL CONFORM TO ASTM A-307 OR EQUIVALENT. ALL WELDS SHALL CONFORM TO A.W.S (AMERICAN WELDING STANDARDS).

4.5 PRESTRESSING CABLES.

PRESTRESSING STEEL SHALL BE NORMAL RELAXATION STRAND CONFORMING TO AASHTO M203 (ASTM A-416), GRADE 270 HAVING MINIMUM ULTIMATE TENSILE STRENGTH OF 1862 N/mm² (270 Ksi).

4.6 BEARING PADS.

BEARING PADS WITH DURO. HARDNESS 60±5, SHALL CONFORM TO SECTION 14, "ELASTOMERIC BEARINGS" OF AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 2020.

4.7 DUCTS FOR PRESTRESSING

- ID SHALL BE > or = 75 mm
- FULLY GALVANIZED SHEATH TH > or = 0.5mm SHALL BE USED

4.8 STEEL TUBES.

ALL STEEL TUBES SHALL CONFORM TO ASTM A-501 HAVING MINIMUM YIELD STRENGTH OF 248 N/mm² (36,000 psi).

5. CONCRETE COVER:

THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED TO REINFORCING STEEL UNLESS OTHERWISE NOTED IN CASE OF BEAMS, PRESTRESSED GIRDERS & PILES etc. THE COVER WILL BE MEASURED FROM THE OUTER EDGE OF STIRRUPS, TIES OR SPIRAL.

- DECK SLABS,
TOP OF SLABS 40 mm
BOTTOM OF SLAB 25 mm

- PRESTRESSED GIRDER
TOP 25 mm
BOTTOM 40 mm
STIRRUPS AND TIES 40 mm

- BARRIER
TOP, BOTTOM & SIDES 30 mm

- PILES 100 mm

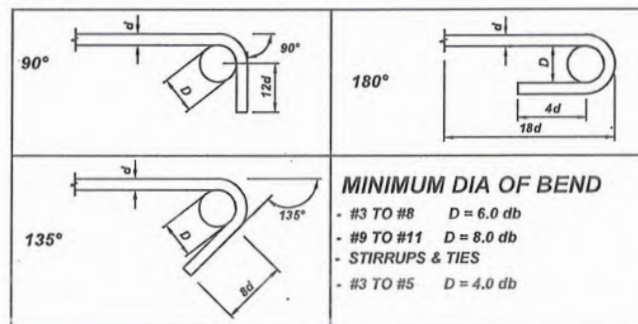
- PIER MAIN BARS 75 mm

- PIER PILE CAP 100 mm

- PIER AND COLUMN TIES,
BEAM STIRRUP 40 mm

- APPROACH SLAB,
BOTTOM 50 mm
TOP 30 mm

6. STANDARD HOOKS



7. LAPPED SPLICES:

- 7.1 ALL LAPPED SPLICES SHALL BE CONFORMING TO AASHTO LRFD 2020. UNLESS OTHERWISE NOTED.
7.2 FOR SMALLER HEIGHTS OF WALLS UPTO, 3 METRES, LAPPING OF REBARS IS NOT ALLOWED, UNLESS OTHERWISE NOTED.
7.3 NOT MORE THAN 50% OF THE BARS SHALL BE SPLICED AT ONE LOCATION, UNLESS OTHERWISE SHOWN ON DRAWINGS.
7.4 FOR DEVELOPMENT LENGTH REFER AASHTO LRFD 2020.

8. CONSTRUCTION & ERECTION:

- 8.1 CONCRETE IN DECK SLAB SHALL BE PLACED IN FULL WIDTH. NO CONSTRUCTION JOINT SHALL BE PERMITTED. DIAPHRAGMS AND DECK SLAB SHALL BE CAST MONOLITHICALLY.
8.2 CONCRETE FOR THE BARRIERS SHALL BE PLACED NO SOONER THAN 20 DAYS AFTER PLACING OF CONCRETE IN THE DECK SLAB.
8.3 GIRDERS SHALL BE INSTALLED IN THEIR CORRECT POSITION ON BEARINGS BY LIFTING OR LAUNCHING AND SHALL BE TEMPORARILY BRACED UNTIL CASTING OF DIAPHRAGMS.
8.4 IF LIFTING METHOD IS USED, GIRDERS SHALL BE LIFTED FROM BOTH ENDS USING LIFTING HOLES / SLEEVES BY MEANS APPROVED BY THE ENGINEER.
8.5 IF LAUNCHING IS USED THE MAXIMUM CANTILEVER OVERHANG SHALL NOT EXCEED 3 m.
8.6 ALL EXPOSED SURFACES SHALL HAVE FAIR FACED FINISH UNLESS OTHERWISE SPECIFIED.
8.7 BEHIND THE ABUTMENT AND WING WALLS A SELECTED GRANULAR FILL SHALL BE PROVIDED, AS SHOWN IN THE DRAWINGS.

9. POST-TENSIONING:

- 9.1 A MULTI-STRAND POST TENSIONING SYSTEM SHALL BE USED.
9.2 ALL CABLES SHALL BE STRESSED, SIMULTANEOUSLY FROM BOTH ENDS, IN THE ORDER SPECIFIED ON THE DRAWINGS. MAXIMUM PERMISSIBLE STRESS BEFORE LOCKING SHALL BE 0.75 OF GUARANTEED ULTIMATE TENSILE STRENGTH (GUTS).
9.3 CABLE EXTENSION INCLUDES A PULL-IN MARGIN OF 5 mm AT EACH STRESSING END. CONE PULL-IN AT BOTH ENDS, DURING TENSIONING AND AFTER ANCHORAGE SHALL BE RECORDED AND COMMUNICATED TO THE ENGINEER FOR ANY DEVIATION.
9.4 THE JACKING FORCE, CABLE ELONGATION AND LOCKING SLIPPAGE SHALL BE IN ACCORDANCE WITH THE DRAWINGS. ANY DEVIATION OR VARIATION MUST BE REPORTED TO THE ENGINEER BEFORE CONTINUING STRESSING WORK.
9.5 THE CABLE AXIS MUST COINCIDE WITH THE ANCHORAGE AXIS BEHIND THE ANCHORAGE FOR A LENGTH OF AT LEAST 400mm OR TRUMPET LENGTH, WHICHEVER IS GREATER.
9.6 SUITABLE STEEL CHAIRS/FRAMES TO HOLD THE PRESTRESSING CABLE DUCTS AND REINFORCEMENT IN TRUE POSITION AT ADEQUATE INTERVALS (RANGING FROM 0.8 TO 1.2 METER) SHALL BE PROVIDED.
9.7 PROVISIONS SHALL BE MADE IN THE END ANCHORAGES FOR GROUTING THE CABLE DUCTS IMMEDIATELY AFTER TENSIONING. AFTER SECURING THE END ANCHORAGES, ALL CABLES SHALL BE PRESSURE GROUTED IN THEIR DUCTS IN ACCORDANCE WITH THE SPECIFICATIONS.
9.8 INTERMEDIATE GROUT VENTS SHALL BE PROVIDED NEAR THE LOWEST PARTS OF THE CABLE PROFILE AT ABOUT MID-LENGTH OF THE CABLES. CABLES SHALL BE GROUTED AFTER STRESSING WITH FLOW-CABLE/ FLOWCABLE-50 OR EQUIVALENT AS APPROVED BY THE ENGINEER. ANCHORAGE POCKETS SHALL BE FILLED WITH 210 KG/SQ. CM (3000 Psi) CONCRETE USING 10 MM. DOWN AGGREGATE, AFTER GROUTING AND TRIMMING CABLES.
9.9 UNLESS OTHERWISE NOTED THE CYLINDER STRENGTH OF CONCRETE IN PRESTRESSED CONCRETE POST TENSIONED GIRDER AT TRANSFER SHALL BE NOT LESS THAN 425 Kg/Sq.CM (6000 psi).
9.10 COMPLETE PRESTRESSING TENDONS OR CABLES SHALL CONSIST OF HIGH TENSILE WIRES OR CABLES AS SPECIFIED IN DRAWINGS, ALONGWITH CORE HELIX, METAL SHEATHS, COUPLINGS AT ADEQUATE INTERVALS, PRESTRESSING ANCHORAGES, BINDING TAPE, METAL SPACERS AND OTHER ACCESSORIES.

10. FOUNDATIONS:

- 10.1 ALL THE EXCAVATION FOR OPEN FOUNDATIONS SHALL BE SUBJECTED TO INSPECTION BY THE ENGINEER PRIOR TO POURING OF CONCRETE.
10.2 WHERE SHOWN ON THE DRAWINGS, SELECT FILL SHOULD BE PROVIDED UNDER THE FOUNDATIONS, AS PER SPECIFICATIONS. THE DEPTH OF SELECT FILL MATERIAL SHOWN ON THE DRAWINGS, IS THE REQUIRED MINIMUM; THE EXACT DEPTH WILL BE DETERMINED BY THE GEOTECHNICAL ENGINEER AT SITE.
10.3 SELECTED GRANULAR BACKFILL SHOULD BE PLACED IN LAYERS OF THICKNESS APPROPRIATE TO THE COMPACTION EQUIPMENT ENSURING A MINIMUM INSITU COMPACTION OF 95% MODIFIED PROCTOR.
10.5 PILES
(i) PILE LOAD TEST
PILE FOR LOAD TEST SHOULD BE CAST AS SHOWN ON THE DRAWING AND AT LOCATION DIRECTED BY THE ENGINEER. FOR PILE LOAD TEST PILE SHOULD BE TESTED TO 2.0 TIMES THE DESIGN LOAD SHOWN ON THE DRAWINGS. PILE LOAD TEST SHALL BE CARRIED OUT AS PER ASTM DESIGNATION D1143-87 AND TEST RESULTS SHALL BE SUBMITTED TO ENGINEER FOR APPROVAL. CONSTRUCTION OF WORKING PILES SHALL COMMENCE AFTER COMPLETION AND INTERPRETATION OF TEST RESULTS.
(ii) PLANNING FOR LOAD TESTS, SUPERVISION, INTERPRETATION OF RESULTS AND LOAD CARRYING CAPACITY SHALL BE CARRIED OUT BY THE ENGINEER.
(iii) PROVIDE ONE HALF (1-1/2) EXTRA TURNS OF THE SPIRAL AT THE TOP & BOTTOM OF EACH PILE AND AT EACH SEGMENT OF REINFORCEMENT CAGE OR SPLICE OF MAIN LONGITUDINAL REINFORCEMENT.
(iv) LEAN / BEDDING CONCRETE SHOULD NOT BE PROVIDED OVER THE TOP BUTT OF PILES.

11. METAL WORK:

- 11.1 MATERIALS TO BE IN ACCORDANCE WITH THE SPECIFICATIONS.
11.2 ALL WELDED CONSTRUCTION UNLESS OTHERWISE NOTED.
11.3 ALL STEEL TO BE PAINTED OR GALVANIZED AS DIRECTED BY THE ENGINEER.
11.4 ALL SHEAR EDGES TO BE GROUND SMOOTH.
11.5 ALL WELDS SHALL BE 5mm CONTINUOUS FILLET WELD, E70XX ELECTRODE UNLESS OTHERWISE NOTED ON DRAWING.

13. EMBEDDED ITEMS:

ALL EMBEDDED ITEMS SHALL BE SECURED IN POSITION ACCORDING TO THE DRAWINGS BEFORE PROCEEDING WITH THE CONCRETING.

14. PROTECTION WORKS:

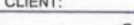
- 14.1 THE LIMITS OF PROTECTION WORKS SHALL BE AS SHOWN IN THE DRAWINGS AND AS DIRECTED BY THE ENGINEER.
14.2 WEEP HOLES PVC PIPE 100mm DIA SHALL BE STAGGERED AT AN INTERVAL OF 1500mm VERTICAL AND HORIZONTAL AND AS ADDITIONALLY DIRECTED BY THE ENGINEER.
14.3 THE SLOPE OF WEEP HOLES SHALL BE 1 IN 8 FROM BACK OF THE WALL TO THE OUTER FACE OR AS DIRECTED BY THE ENGINEER.
14.4 PLUM CONCRETE IN 2:1 (2 PARTS CONCRETE CLASS 'B' & 1 PART ROCK FILL MATERIAL) HAVING STONE SIZE RANGING BETWEEN 200-300) BE UTILIZED.
14.5 SAFE BEARING CAPACITY OF 1.5 Tsf SHOULD BE ACHIEVED PRIOR TO CONSTRUCTION AT SITE IF LESS IT SHOULD BE COMMUNICATED TO THE ENGINEER
14.6 AFTER 10m LENGTH CONSTRUCTION JOINT SHOULD BE PROVIDE.
14.7 COMPACTION OF FILL MATERIAL (AS PER SPECIFICATION BY JETTING OR PONDING WITH WATER IS NOT PERMITTED. EACH LAYER OF FILL, MAXIMUM 200mm IN THICKNESS, SHALL BE MOISTENED AS REQUIRED. (OPTIMUM MOISTURE CONTENT FROM STANDARD PROCTOR TEST) AND THOROUGHLY TEMPERED OR OTHERWISE COMPACTION TO MINIMUM OF 95% COMPACTION (STANDARD PROCTOR TEST).

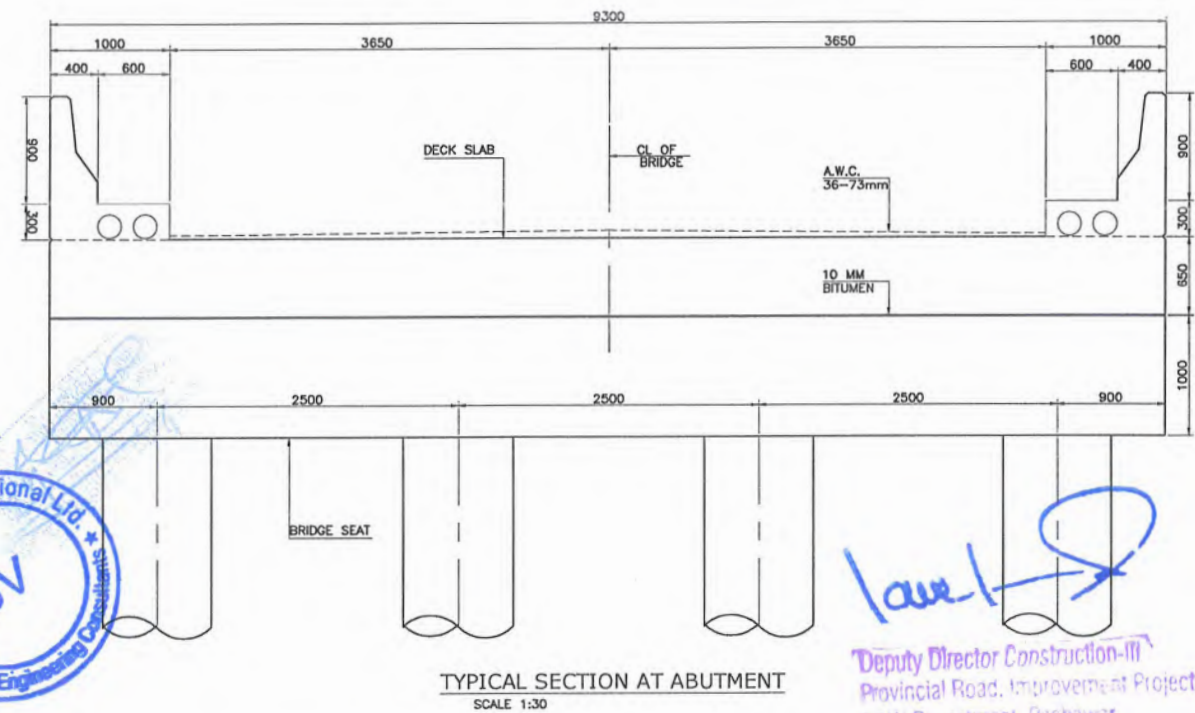
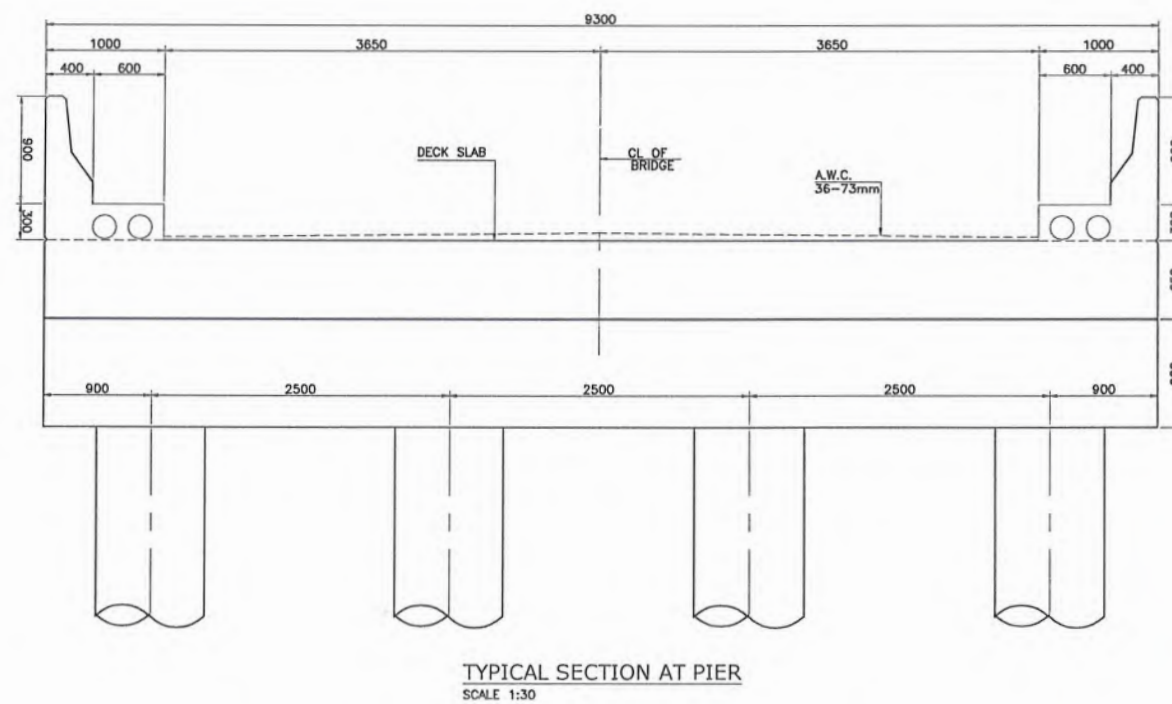
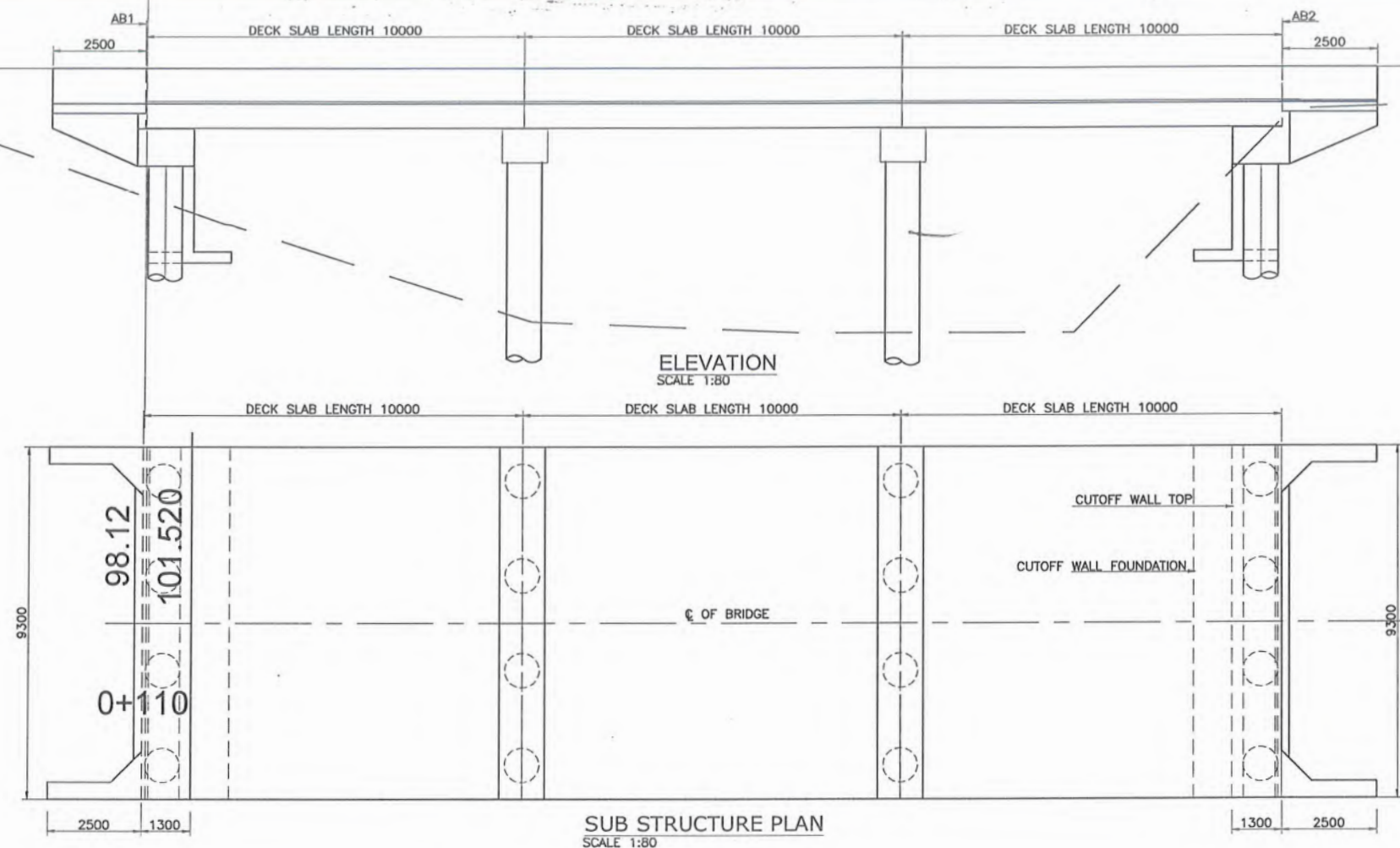
15. LIST OF SYMBOLS AND ABBREVIATIONS:

AO	=	THEORETICAL ELONGATION OF PRESTRESSING TENDON
B	=	BOTTOM
BOS	=	BOTTOM OF SLAB
B.H	=	BORE HOLE
C. JT.	=	CONSTRUCTION JOINT
C	=	CENTRELINE
C/C	=	CENTER TO CENTER
DIA.	=	DIAMETER
DI	=	DRAIN INVERT
EXP. JT.	=	EXPANSION JOINT
E.F	=	EACH FACE
EL	=	ELEVATION
F.F	=	FAR FACE
GI	=	GALVANIZED IRON
GUTS	=	GUARANTEED ULTIMATE STRENGTH (OF PRESTRESSING CABLES)
ID	=	INTERNAL DIAMETER
I.F	=	INNER FACE
m	=	METRE
mm	=	MILLIMETRE
N.F	=	NEAR FACE
N.SL	=	NATURAL SURFACE LEVEL
PGL	=	PROFILE GRADE LEVEL
RD.	=	REDUCED DISTANCE.
SYM.	=	SYMMETRICAL
T	=	TOP
TH.	=	THICK
TYP.	=	TYPICAL
TOW	=	TOP OF WALL

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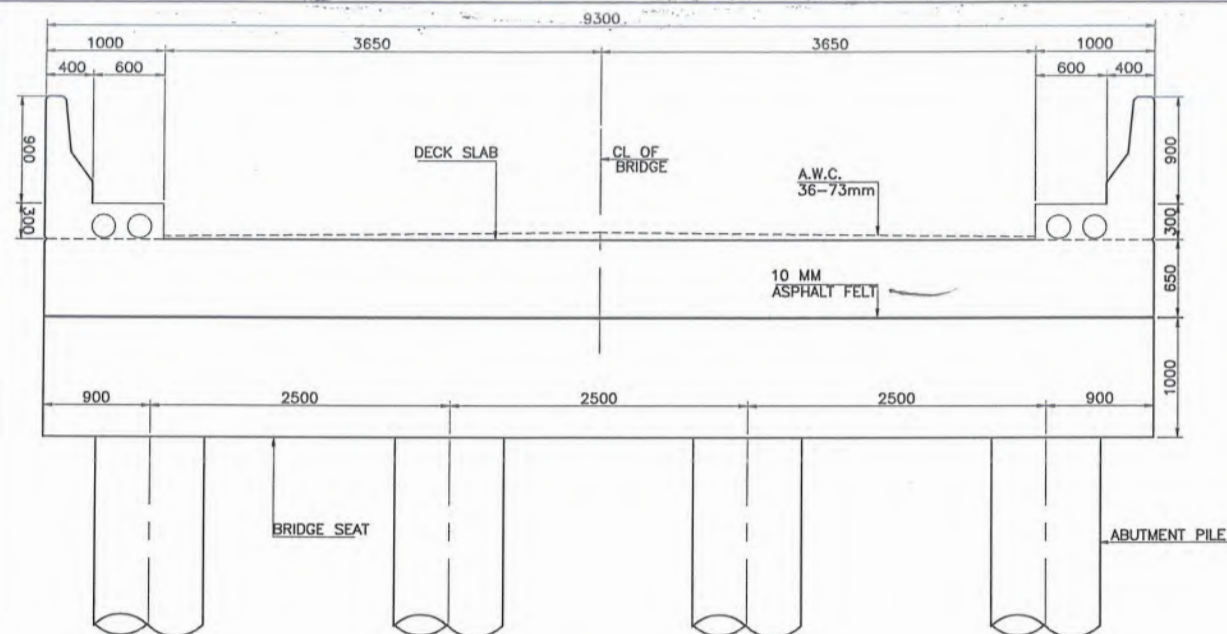


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 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MIN CONSULT J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0				DESIGNED	ENG.FAIZAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	AS SHOWN	GENERAL NOTES		
		a				DRAWN:	NABI AMIN					
		b				CHECKED	ENGR. ISLAM	KHARMATOO ROAD BRIDGE DISTRICT KOHAT (BR-110)				
		c				APPROVED	GULFAM SHEHZAD					
											DATE: OCT 2022	DWG NO.CEC/RRDP/KOHAT/STR/BR1/GN-01

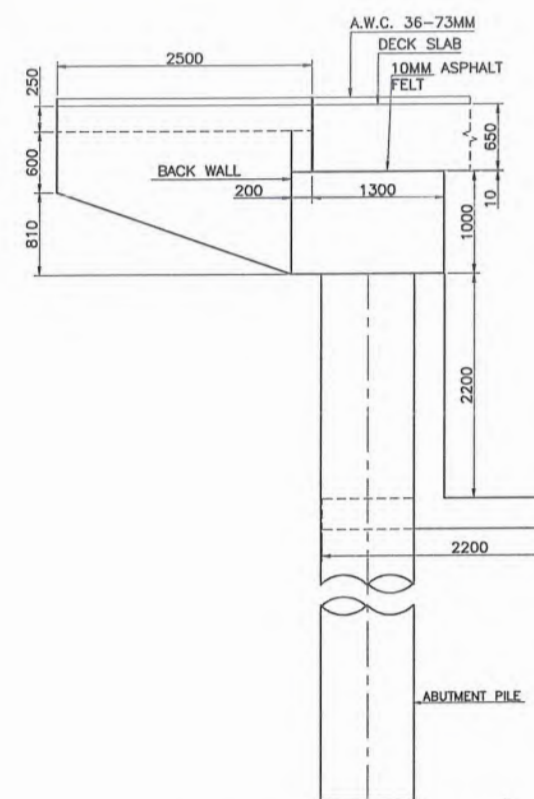


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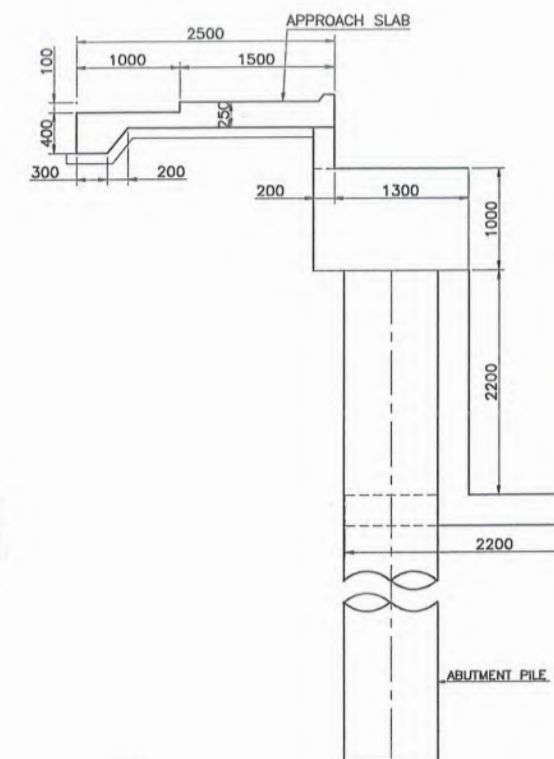
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	a					DRAWN	NABI AMIN							
	COMMUNICATION & WORKS DEPARTMENT				J.V.	b			CHECKED				ENGR. ISLAM	KHARMATOO ROAD BRIDGE DISTRICT KOHAT (BR-110)
	PROJECT IMPLEMENTATION UNIT (PIU)					c			APPROVED				GULFAM SHEHZAD	
												DATE: OCT 2022	DWG NO. CEC/RRDP/KOHAT/STR/BR/101	



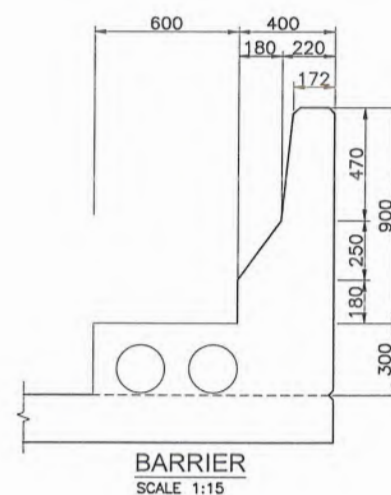
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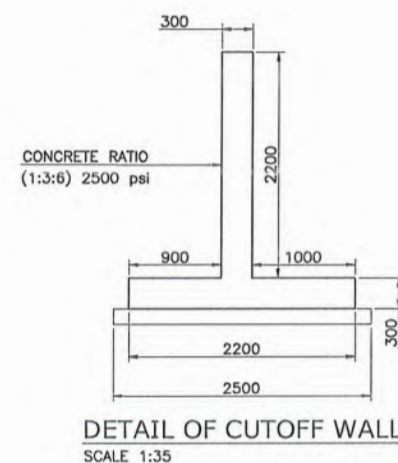
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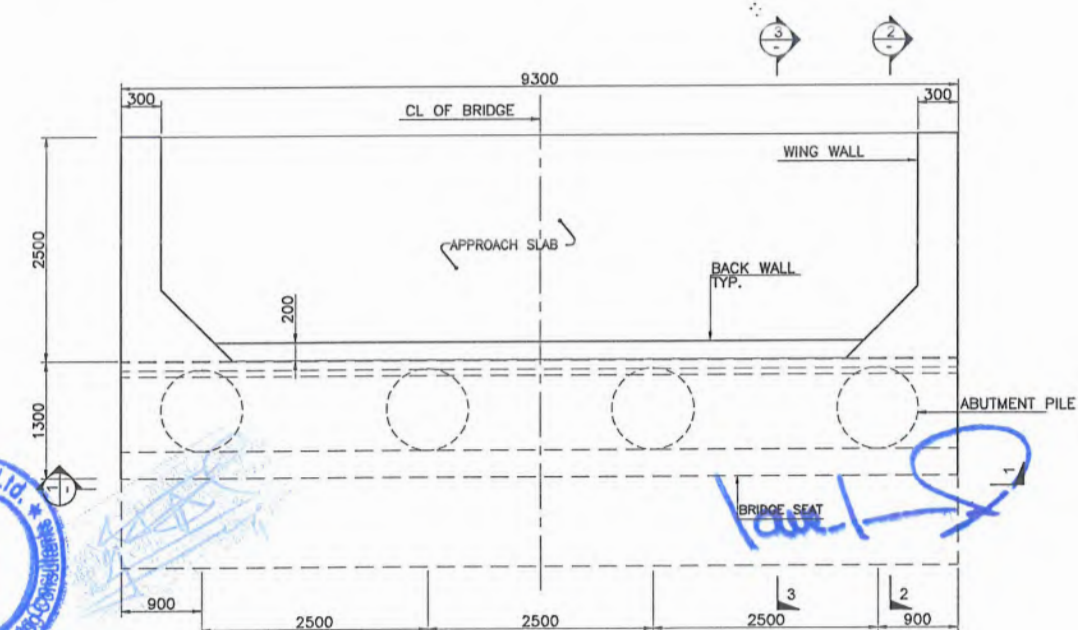
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BARRIER
SCALE 1:15



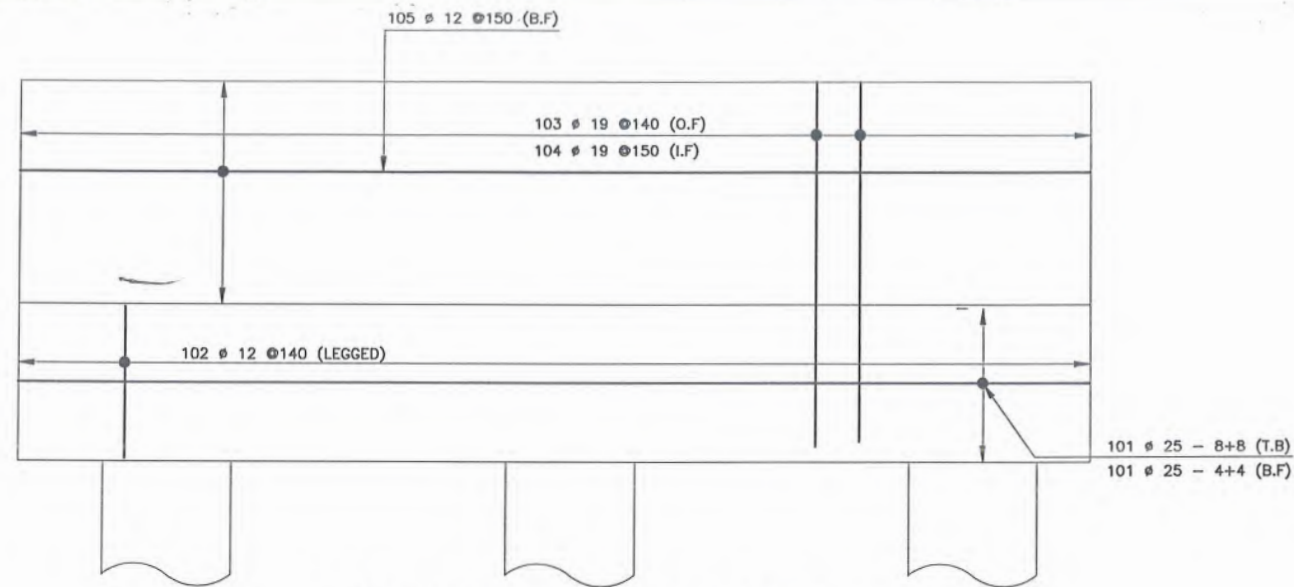
DETAIL OF CUTOFF WALL
SCALE 1:35



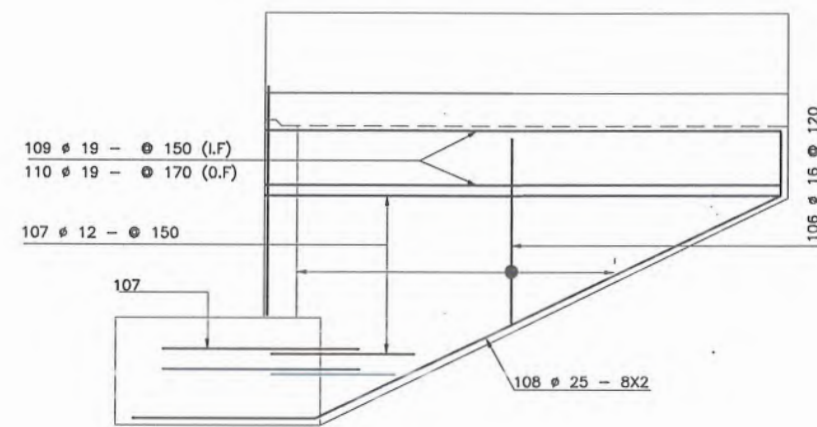
ABUTMENT PLAN
SCALE 1:40

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C&W Department, Peshawar

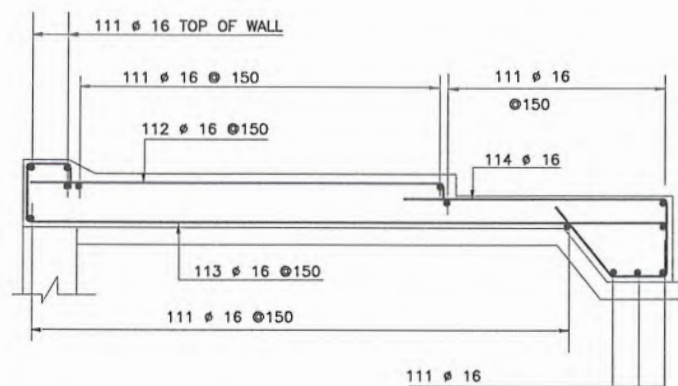
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	a					DRAWN:	NABI AMIN							
	COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)				CREATIVE ENGINEERING CONSULTANTS (CEC)	b			CHECKED				ENGR. ISLAM	KHARMATOO ROAD BRIDGE DISTRICT KOHAT (BR-110)
						c			APPROVED				GULFAM SHEHZAD	
												DATE: OCT 2022	DWG NO.CEC/RRDP/KOHAT/STR/BR102	



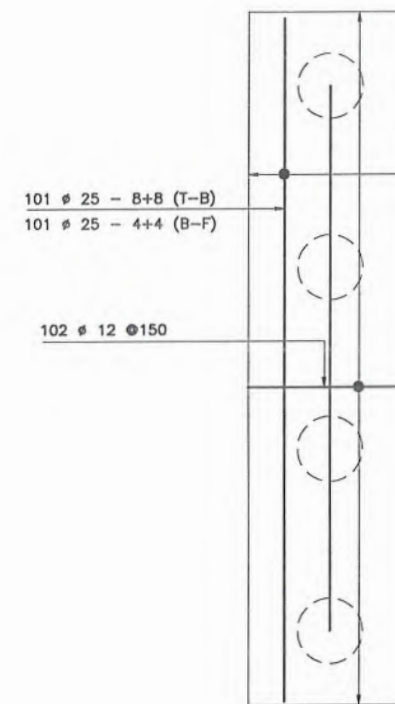
ELEVATION VIEW REINFORCEMENT DETAIL



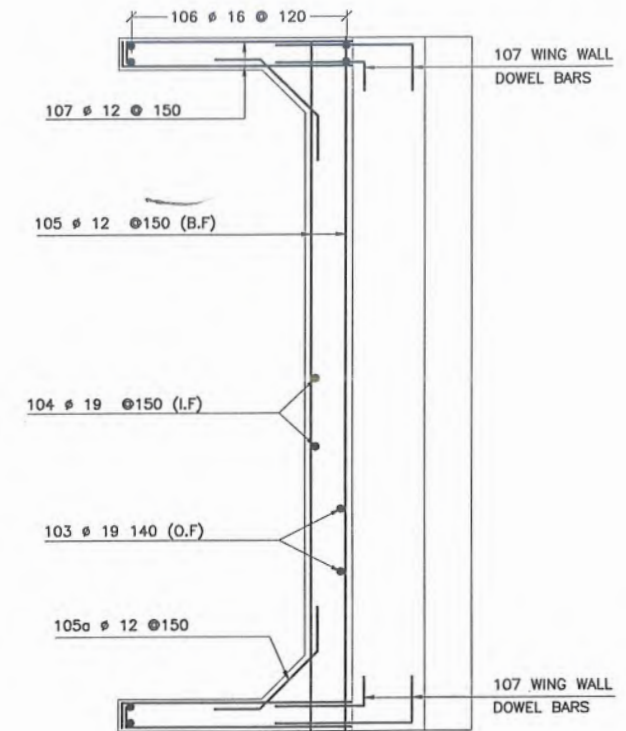
WING WALL ELEVATION VIEW REINFORCEMENT DETAIL



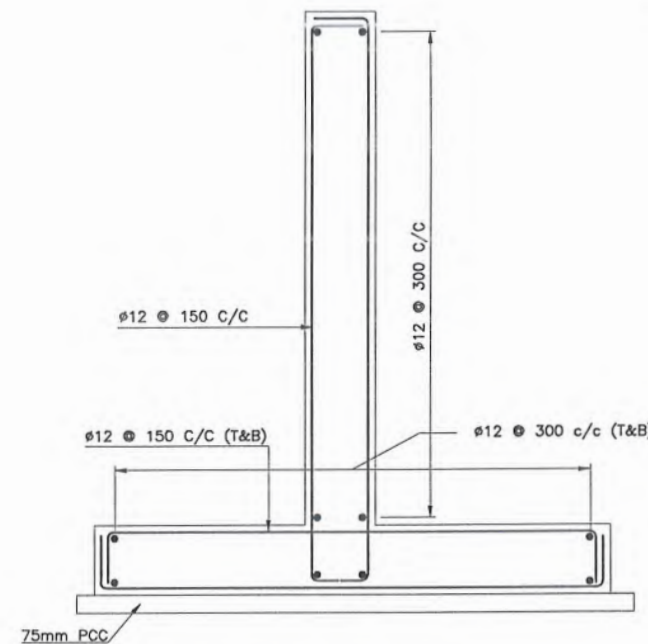
APPROACH SLAB



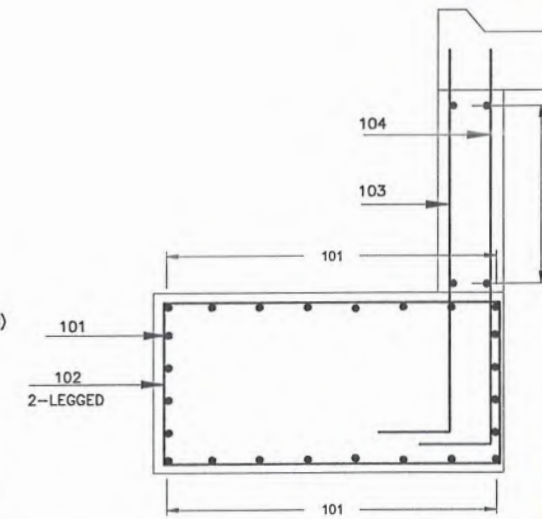
PLAN TRANSOM REINFORCEMENT DETAIL



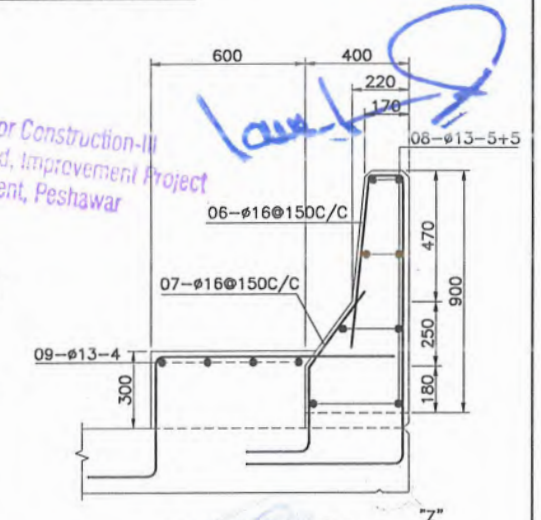
PLAN VIEW OF BACK WALL WING WALL REINFORCEMENT DETAIL



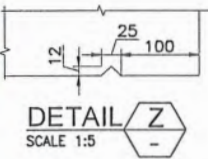
CUTOFF WALL REINFORCEMENT DETAIL



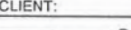
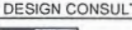
TRANSOM & BACK WALL REINFORCEMENT DETAIL

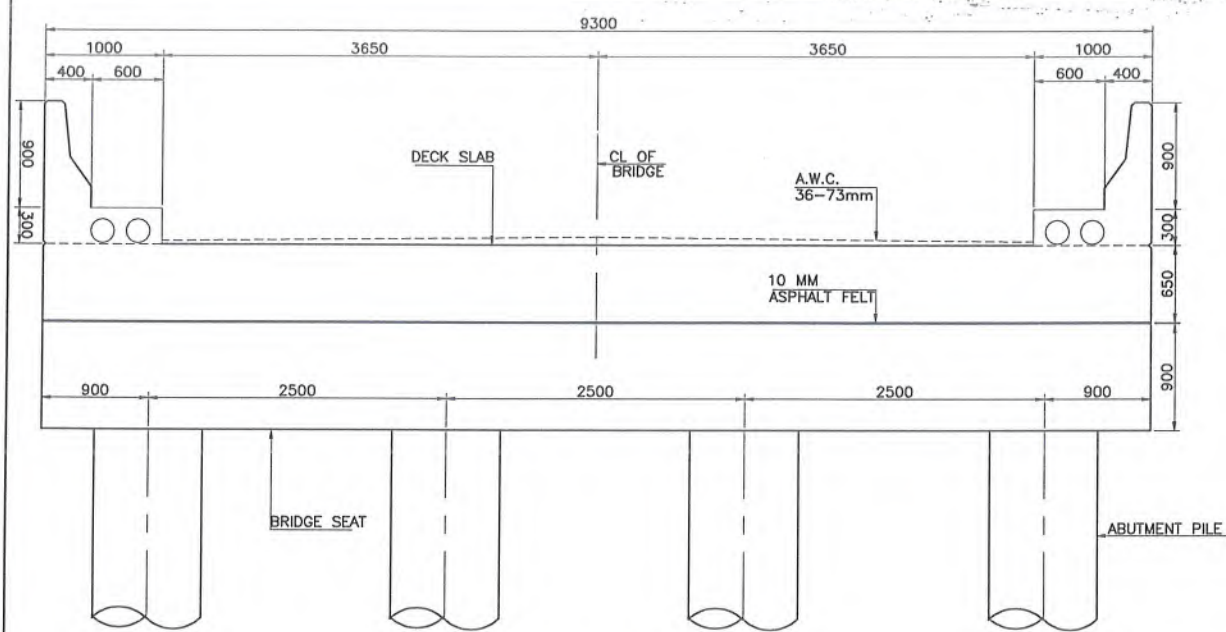


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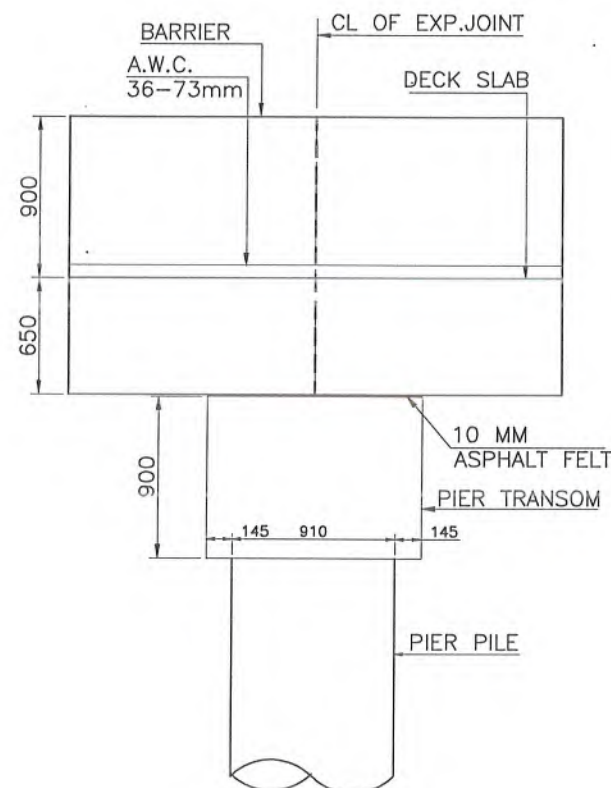


DETAIL Z SCALE 1:5

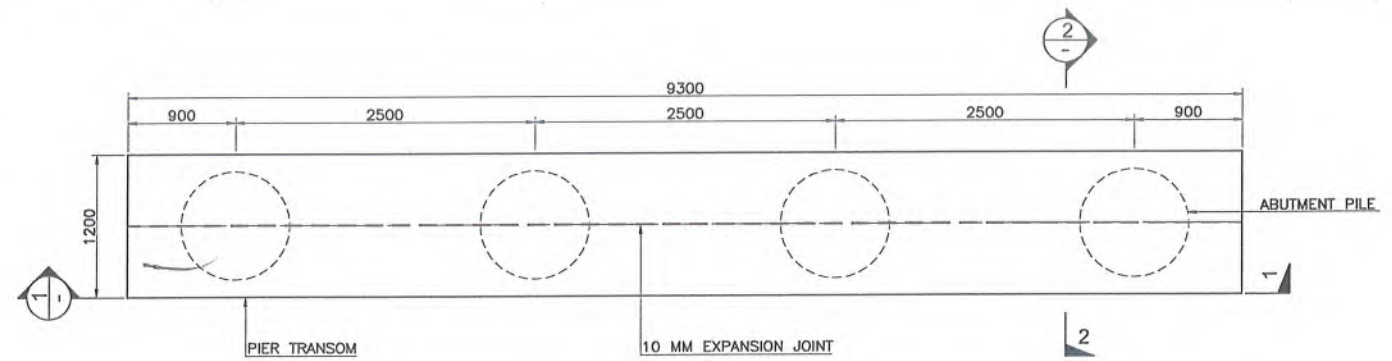
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	GOVERNMENT OF KHYBER PAKHTUNKHWA		MIN CONSULT	0			DESIGNED	ENG.FAIZAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	AS SHOWN	REINFORCEMENT DETAIL OF TRANSOM, BARRIER, BACK WALL, WING WALL & APPROACH SLAB		
	J.V.		a			DRAWN:	NABI AMIN						
	COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)			CREATIVE ENGINEERING CONSULTANTS (CEC)	b			CHECKED	ENGR. ISLAM	KHARMATOO ROAD BRIDGE DISTRICT KOHAT (BR-110)			
					c			APPROVED	GULFAM SHEHZAD				
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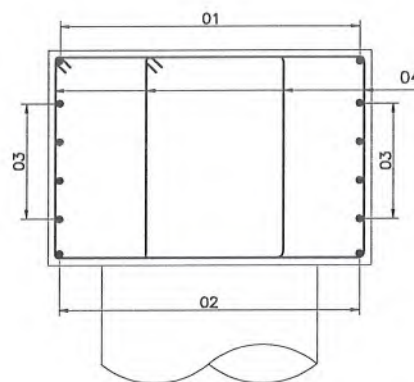
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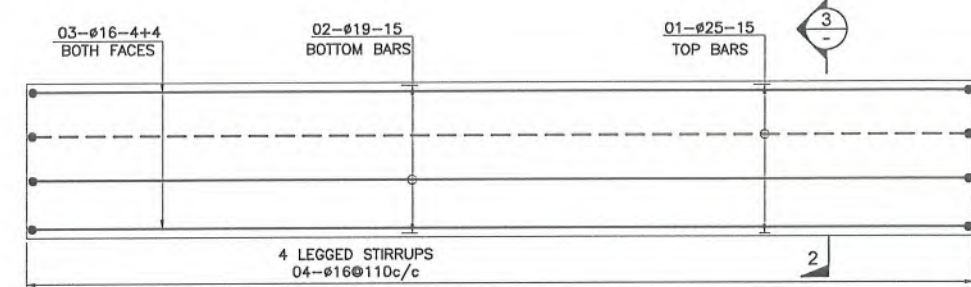
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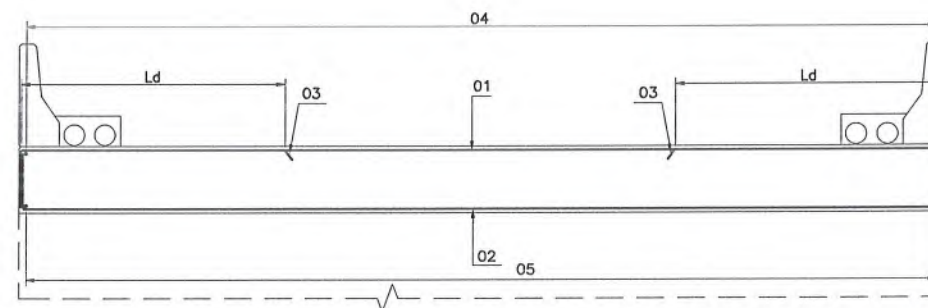
PIER TRANSOM PLAN
SCALE 1:35



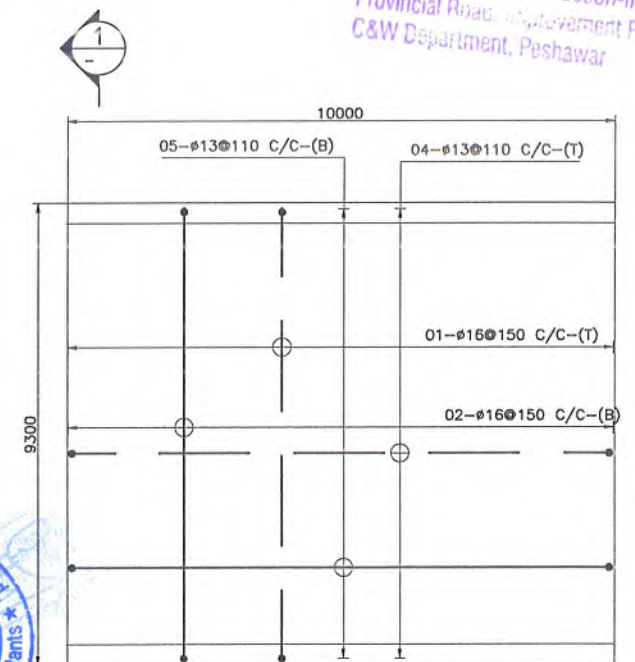
SECTION 2
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REINFORCEMENT DETAIL OF TRANSOM (IN PLAN)
SCALE 1:30



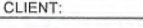
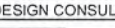
SECTION 1
SCALE 1:35

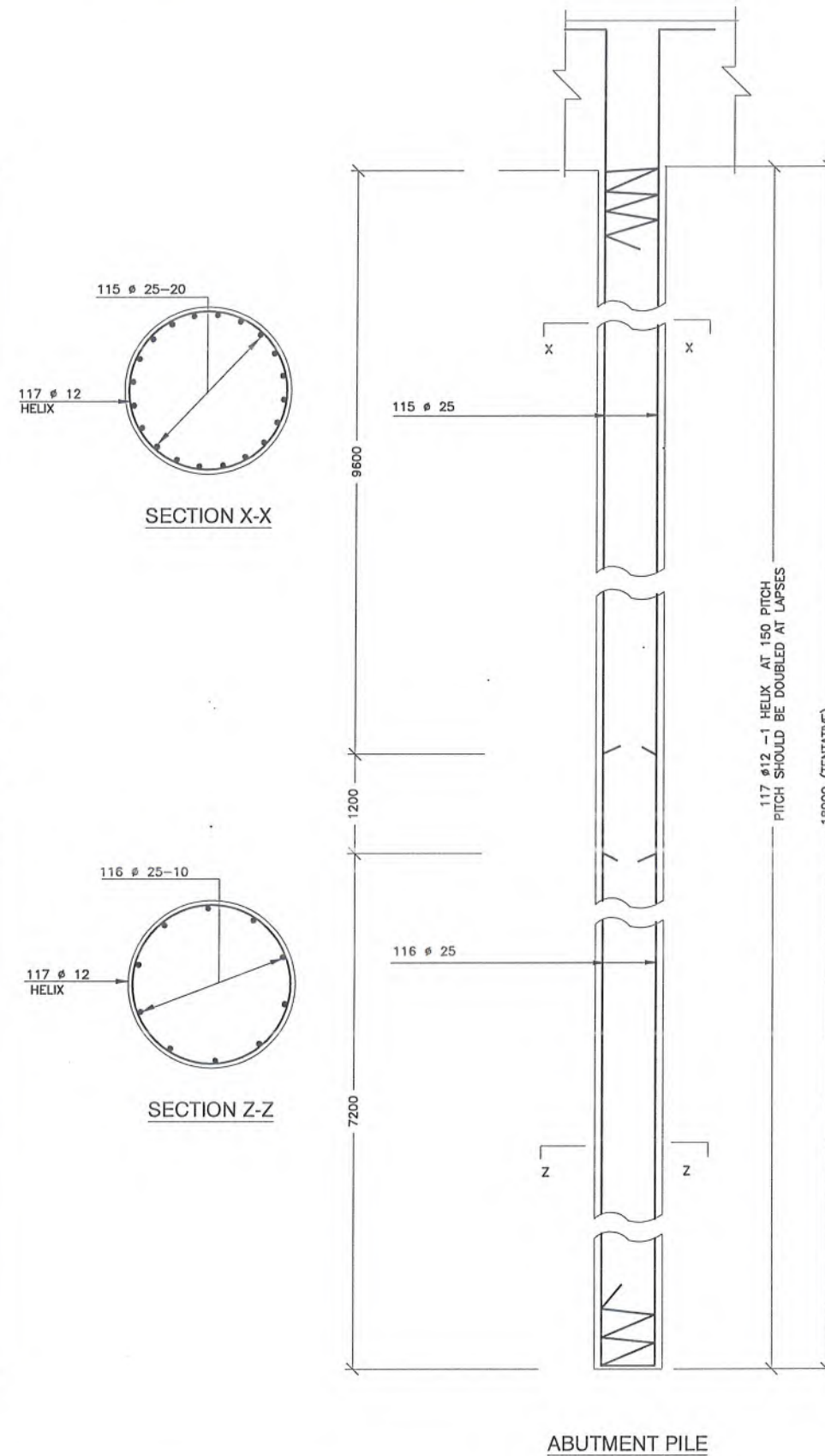
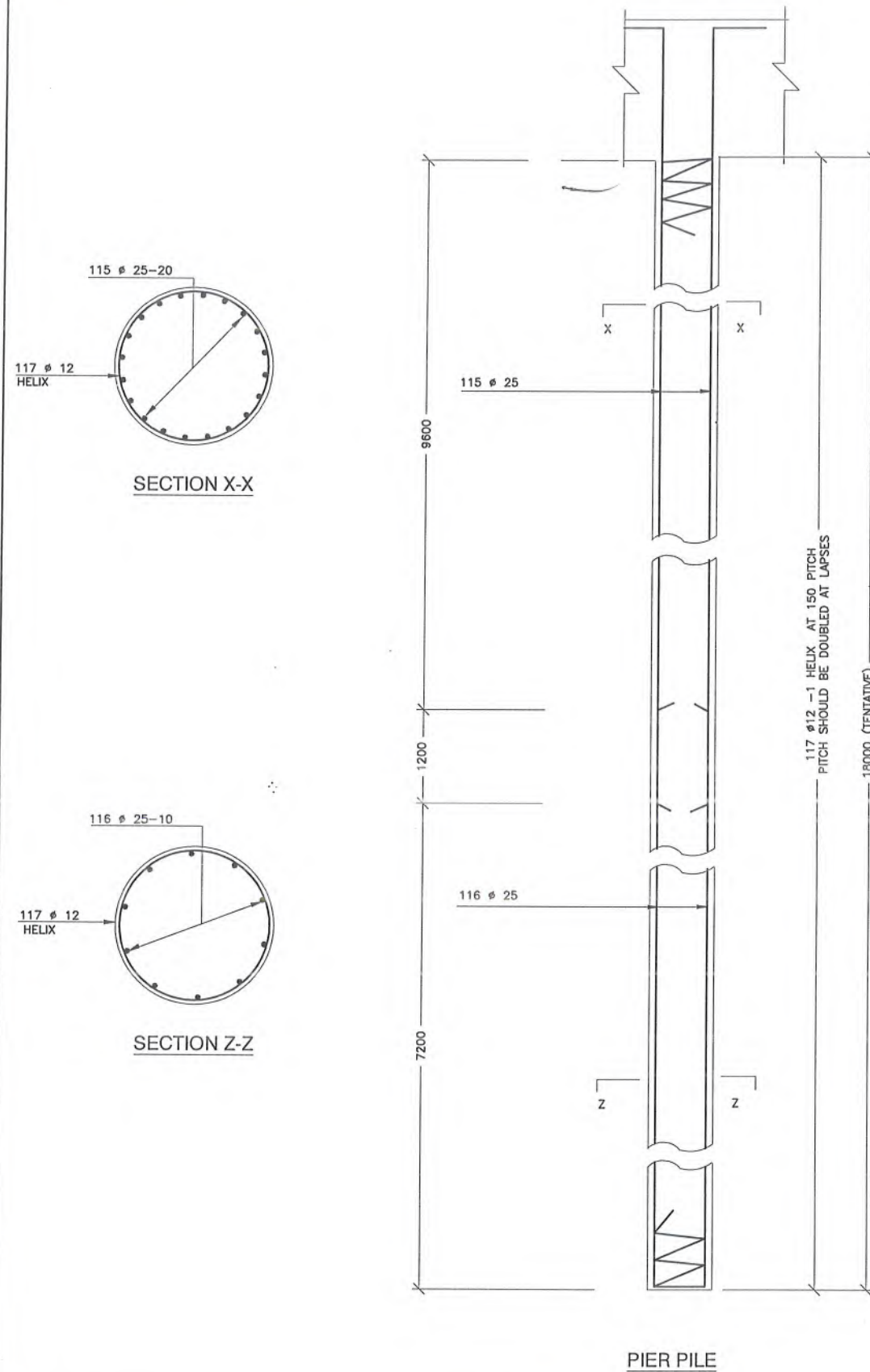


REINFORCEMENT DETAIL DECK SLAB PLAN
SCALE 1:70

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



CLIENT:		DESIGN CONSULTANT:		REV	DATE	DESCRIPTION			PROJECT:	SCALE:	SHEET CONTENT:		
	GOVERNMENT OF KHYBER PAKHTUNKHWA		MIN CONSULT	0			DESIGNED	ENG.FAIZAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	AS SHOWN	PIER CONCRETE OUTLINES PIER REINFORCEMENT DETAILS & DECK SLAB REINFORCEMENT DETAILS		
	COMMUNICATION & WORKS DEPARTMENT		J.V.	a			DRAWN:	NABI AMIN					
	PROJECT IMPLEMENTATION UNIT (PIU)			CREATIVE ENGINEERING CONSULTANTS (CEC)	b			CHECKED	ENGR. ISLAM		KHARMATOO ROAD BRIDGE DISTRICT KOHAT (BR-110)		
					c			APPROVED	GULFAM SHEHZAD				
											DATE: OCT 2022	DWG NO.CEC/RRDP/KOHAT/STR/BR/1/	04

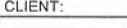
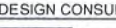


Deputy Director Construction-III
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C&W Department, Peshawar



NOTE:-

- 1-THE PILE LENGTH, DIA (VARIES FORM 910 TO 1200 MM) AND NO OF PILES ARE TENTATIVE , AND WILL BE DECIDED UPON ARRIVAL OF DETAIL GEOTECHNICAL REPORT.
- 2-PROVIDE ONE HALF(1-1/2) EXTRA TURNS OF THE SPIRAL AT THE TOP & BOTTOM OF EACH PILE AND AT EACH SEGMENT OF REINFORCEMENT CAGE OR SPLICE OF MAIN LONGITUDINAL REINFORCEMENT.
- 3-LEAN/BED CONCRETE SHOULD NOT CAST OVER THE TOP BUTT OF PILES.

CLIENT:		DESIGN CONSULTANT:		REV	DATE	DESCRIPTION				PROJECT:		SCALE:	SHEET CONTENT:	
	GOVERNMENT OF KHYBER PAKHTUNKHWA		MIN CONSULT J.V.	0				DESIGNED	ENG.FAIZAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)		AS SHOWN	ABUTMENT & PIER PILES REINFORCEMENT DETAIL	
	COMMUNICATION & WORKS DEPARTMENT						DRAWN:	NABI AMIN						
	PROJECT IMPLEMENTATION UNIT (PIU)						CHECKED	ENGR. ISLAM	KHARMATOO ROAD BRIDGE DISTRICT KOHAT (BR-110)					
							APPROVED	GULFAM SHEHZAD						
													DATE: OCT 2022	DWG NO.CEC/RRDP/KOHAT/STR/BR/1/05

DATE: OCT 2022 DWG NO.CEC/RRDP/KOHAT/STR/BR.105

PROJECT:

**KHYBER PAKHTUNKHWA
RURAL ROAD DEVELOPMENT PROJECT
(KP-RRDP)**

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

Law / S

TENDER DRAWINGS

**PACKAGE - 3
LOT - 2**

SEP, 2024



**GOVERNMENT OF KHYBER
PAKHTUNKHWA**

**COMMUNICATION & WORKS
DEPARTMENT**

PROJECT IMPLEMENTATION UNIT (PIU)



MINCONSULT SDN BHD
(Company No : 58835-P)



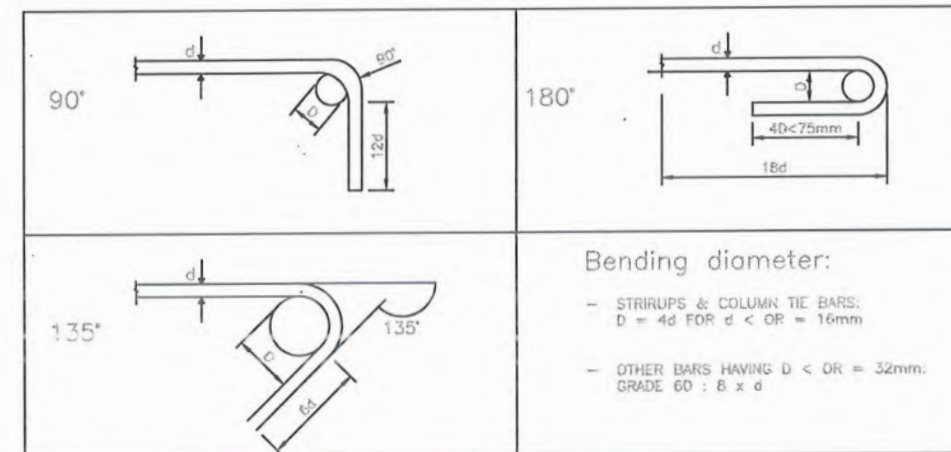
CREATIVE ENGINEERING CONSULTANTS
CREATIVE HOUSE, PHASE 3 CHOWK MAIN JAMRUD ROAD,
PESHAWAR.

GENERAL NOTES – CULVERTS

1. THE DESIGN IS IN ACCORDANCE WITH AASHTO "LFRD 2020" AND PAKISTAN CODE OF PRACTICE FOR HIGHWAY BRIDGES, 1967.
2. THE DESIGN IS BASED ON THE ASSUMPTION OF A HOMOGENEOUS FOUNDATION MATERIAL AT AND AROUND THE LOCATION OF THE CULVERT. IN CASE NON-HOMOGENEOUS MATERIAL IS ENCOUNTERED, CASE SHOULD BE REFERRED TO THE DESIGN ENGINEER FOR OPENION/REDESIGN.
3. ALL REINFORCING STEEL SHALL BE DEFORMED BARS GRADE 60, CONFORMING TO ASTM A – 615 STANDARDS HAVING 4200 Kg/Sq.Cm (60,000 PSI) MIN YIELD STRENGTH.
4. DESIGN OF SPECIFIED CONCRETE MIX SHALL BE SUBMITTED BY THE CONTRACTOR AND SHALL BE APPROVED FROM THE ENGINEER WELL BEFORE CONCRETING OF RELEVANT STRUCTURE ALONG WITH RESULT OF TEST SPECIMEN TESTED AS PER ASTM C – 39. TEST SPECIMEN SHALL BE MADE AND CURED IN ACCORDANCE WITH ASTM C – 31.
5. ORDINARY PORTLAND CEMENT, CONFORMING TO BS – 12/ PS – 232 SHALL BE USED IN ALL R.C.C WORKS.
6. CEMENT FROM DIFFERENT SOURCES SHALL NOT BE MIXED FOR THE SAME STRUCTURE, UNLESS APPROVED.
7. WELL GRADED CRUSHED STONE FROM APPROVED QUARRIES/SOURCES SHALL BE USED, AS COARSE AGGREGATE. MAXIMUM NOMINAL SIZE OF THE COARSE AGGREGATE SHALL BE 20MM FOR ALL R.C.C WORKS. IT SHALL BE CONFORM TO THE SPECIFICATIONS.
8. POTABLE WATER SHALL BE USED FOR CONCRETE & SHALL BE FREE OF ORGANIC & OTHER IMPURITIES.
9. UNLESS OTHERWISE NOTED ON THE DRAWINGS, ALL DIMENSIONS ARE IN MILLIMETERS IN BOX CULVERT DRAWINGS.
10. CONCRETE COVER PROVIDED FOR REINFORCEMENT SHALL BE AS SHOWN ON THE DRAWINGS.
11. ALL LAYOUT, CONFIGURATION, DIMENSIONS & LEVELS SHALL BE VERIFIED BEFORE PROCEEDING WITH WORK.
12. ALL REINFORCING BARS SHALL BE HELD FIRMLY IN PLACE BEFORE AND DURING THE POURING OF CONCRETE BY MEANS OF ADEQUATE NUMBER OF WIRES, CHAIRS AND SUPPORTS TO PREVENT DISLOCATION DURING THE COURSE OF CONSTRUCTION.
13. DURING CONSTRUCTION, SAFETY AND STABILITY OF STRUCTURE AND ALL THE TEMPORARY WORKS SHALL BE GIVEN PRIME IMPORTANCE. UTMOST CARE AND PRECAUTION SHALL BE EXERCISED BY THE CONTRACTOR DURING THE WORK AGAINST ANY MISHAP OR ACCIDENT.
14. CONCRETE TEST CYLINDERS / CUBES SHALL BE CURED WITH THE SAME METHOD AND CONDITIONS AS THOSE FOR THE CONCRETE WORK THEY REPRESENT.
15. THE CLASS OF CONCRETE BASED ON 28 DAYS' CYLINDER STRENGTH SHALL BE AS FOLLOWS:
 - BLINDING/LEAN CONCRETE 100 Kg/Sq.Cm.
 - CULVERTS 280 Kg/Sq.Cm. (4000 PSI)
16. THE CONTRACTION JOINTS SHALL BE PROVIDED AROUND THE OVER ALL BARREL, AT INTERVAL 9M TO 12M ALONG THE LENGTH OF CULVERTS.
17. EXPANSION JOINTS SHALL BE PROVIDED AT THE CULVERT ENDS WHERE IT MEET THE WING WALLS AND APRON SLABS AND AT EACH 30M ALONG THE LENGTH OF CULVERT.
18. BACKFILLING AND COMPACTION SHALL BE CARRIED OUT USING APPROVED GRANULAR FILL/A3 MATERIAL IN LAYERS, NOT EXCEEDING 150MM, AND THE DIFFERENCE IN THE LEVELS OF BACKFILL ON EITHER SIDE OF CULVERT SHALL AT NO TIME EXCEED 50CM.
19. DETAILED BAR BENDING SCHEDULE SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED FOR ENGINEER'S APPROVAL. DEVELOPMENT / SPLICE / LAP LENGTH AND STANDARD HOOKS SHAL BE AS GIVEN BELOW.
20. TWO COATS OF HOT BITUMEN SHALL BE APPLIED TO ALL STRUCTURAL CONCRETE COMING IN CONTACT WITH EARTH WITHOUT ANY EXTRA COST.
21. CONCRETE SURFACE ON EXPANSION JOINT AT THE JUNCTION OF BASE SLAB OF BARREL AND APRON SLAB SHALL BE MADE FLUSH IRRESPECTIVE OF THICKNESS OF THE BASE SLAB OF BARREL AND APRON SLAB. SIMILARLY, CONCRETE SURFACE OF EXPANSION JOINT IN BARREL AND WING WALL SHALL BE FLUSH ON WATER SIDE.

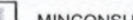
22. AT LEAST A MINIMUM OF 300 MM DIFFERENCE SHOULD BE PROVIDED BETWEEN CULVERT TOP SLAB AND FRL.
23. DRAINAGE ENGINEER SHOULD PROVIDE MINIMUM SELF CLEANSING SLOPE FOR CULVERT. CONTRACTOR SHOULD MAKE SURE THAT THE CULVERTS ARE SELF CLEANSING WITH THE APPROVAL OF THE ENGINEER.
24. PRIOR TO THE CONSTRUCTION, CONTRACTOR SHOULD SUBMIT MIX DESIGN TO THE ENGINEER FOR APPROVAL THE DESIRE STRENGTH ACHIEVEMENT ON SITE IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR IRRESPECT OF THE CONDITION ON SITE.
25. SHOP DRAWING AND BBS CONFIRMING WITH DRAWING SHOULD BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER PRIOR TO THE CONSTRUCTION.
26. DETAILED BAR BENDING SCHEDULE SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED FOR ENGINEER'S APPROVAL.

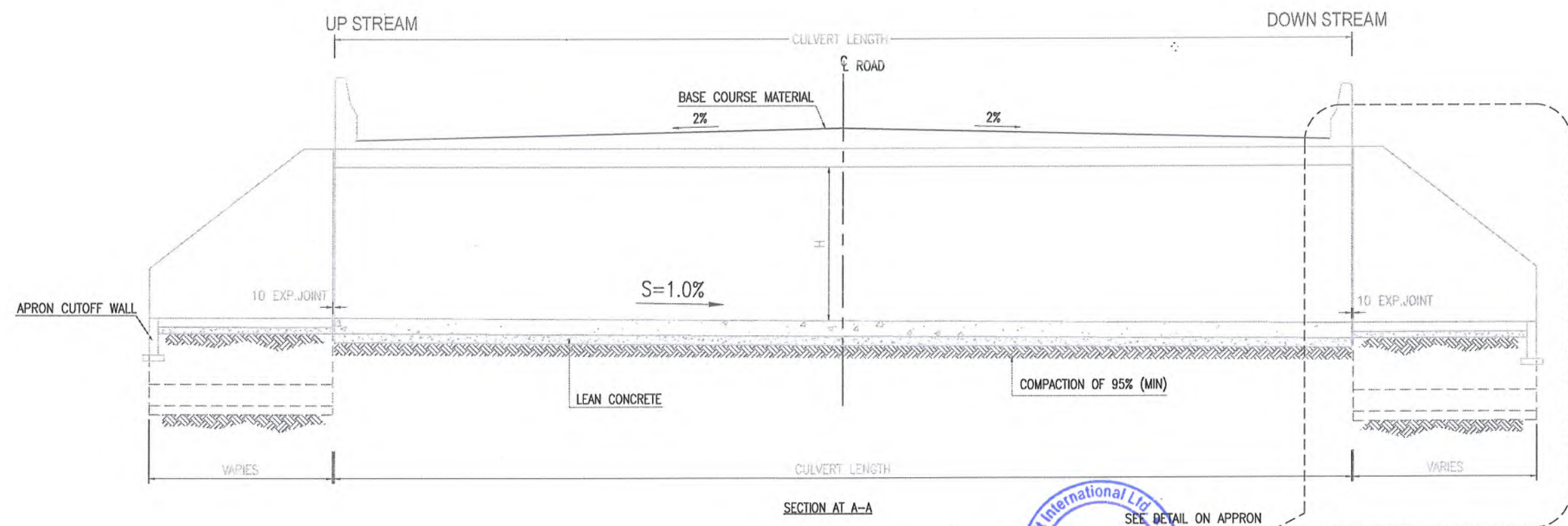
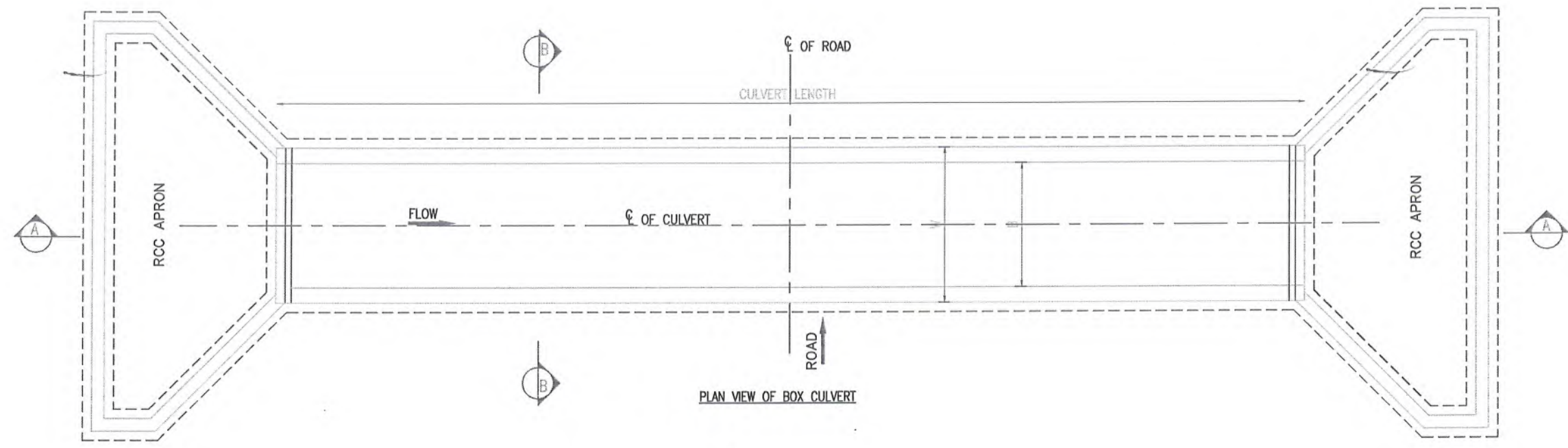
Ø10	=	#3
Ø12 / Ø13	=	#4
Ø16	=	#5
Ø19 / Ø20	=	#6
Ø22	=	#7
Ø25	=	#8



BAR DIA (mm)	DEVELOPMENT LENGTH (mm)		SPLICE/LAP LENGTH (mm)	
	fc' = 210–280 kg/sq.cm fy' = 4200 kg/sq.cm		fc' = 210–280 kg/sq.cm fy' = 4200 kg/sq.cm	
	Straight Bar	Bar with Hook	Straight Bar	Bar with Hook
10.00	500.00	250.00	500.00	250.00
12.00	600.00	300.00	600.00	300.00
16.00	800.00	400.00	800.00	400.00
18.00	900.00	450.00	900.00	450.00
20.00	1000.00	500.00	1000.00	500.00
22.00	1100.00	550.00	1100.00	550.00
25.00	1250.00	625.00	1250.00	625.00

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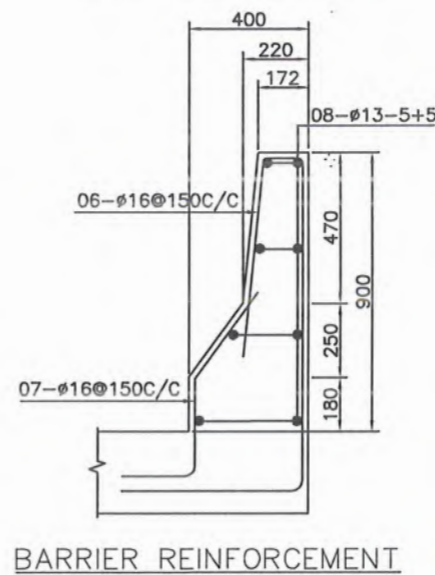
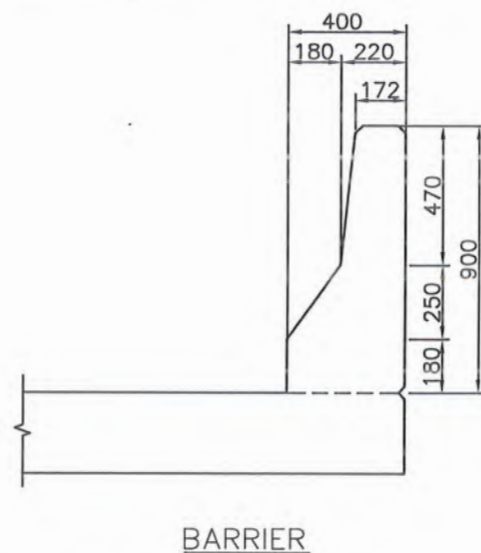
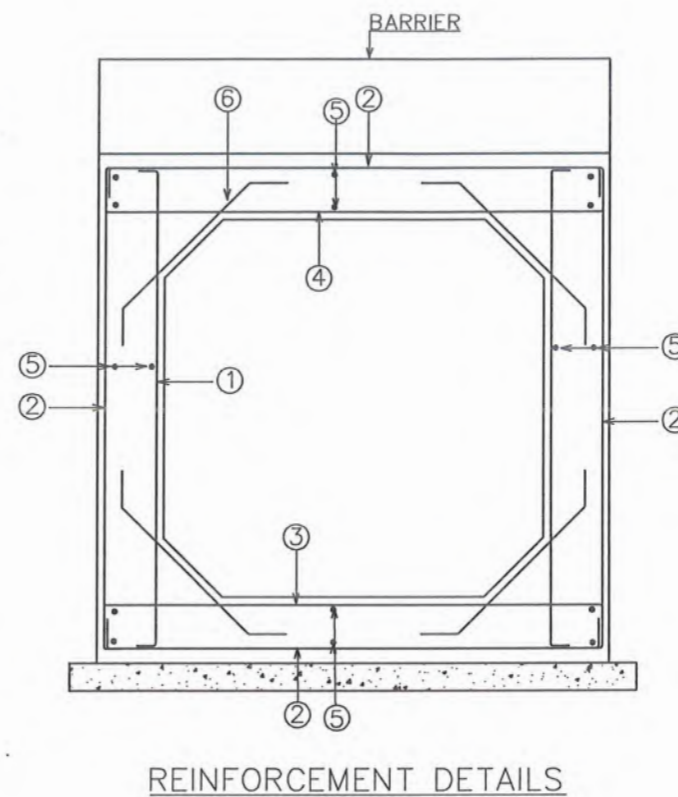
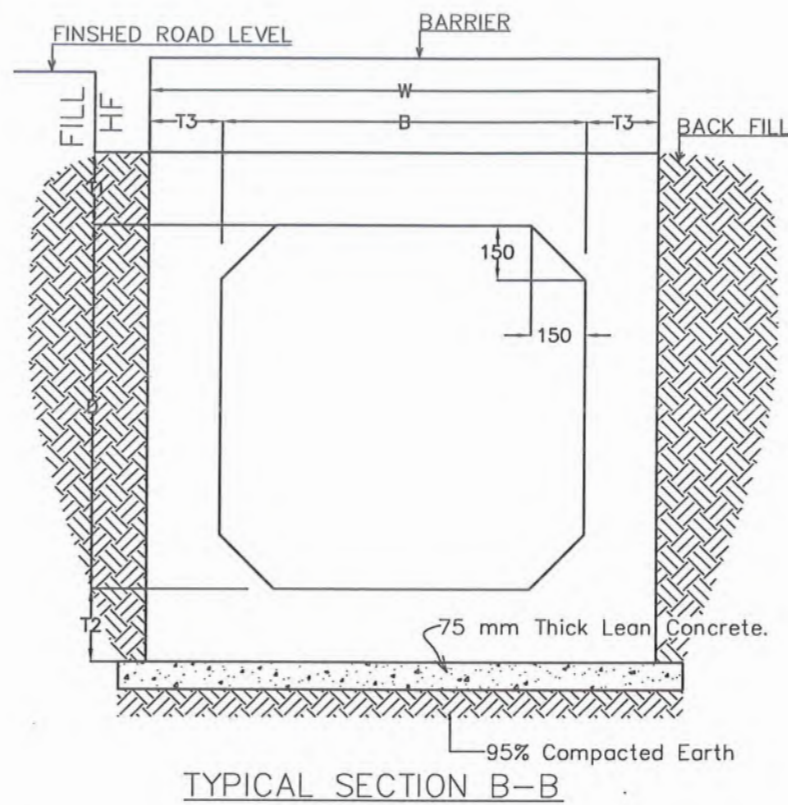
CLIENT:	DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:	PROJECT:		SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024	TENDER DRAWINGS	DESIGNED	M.FAIZAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	PACKAGE-3	N.T.S	GENERAL NOTES FOR CULVERTS DWG NO:CEC/KPRRDP/STR/STR-01
		a			DRAWN	MUSHTAQ		LOT-2	DATE:	
		b			CHECKED	M.ISLAM			SEP, 2024.	
		c			APPROVED	GULFAM SHAHZAD				



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Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Peshawar



CLIENT:		DESIGN CONSULTANT: (MIN - JV - CEC)		REV	DATE	DESCRIPTION	NAMES:		PROJECT:		SCALE:	SHEET CONTENT:
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MINCONSULT SDN BHD (COMPANY NO. 58635-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024	TENDER DRAWINGS	DESIGNED	M.FAIZAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	PACKAGE-3	N.T.S	SINGLE CELL BOX CULVERT PLAN & SECTION VIEW
				a			DRAWN	MUSHTAQ			DATE:	
				b			CHECKED	M.ISLAM		SEP, 2024		
				c			APPROVED	GULFAM SHAHZAD		LOT-2	DWG NO:CEC/KPRRDP/STR/STR-2A	

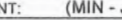


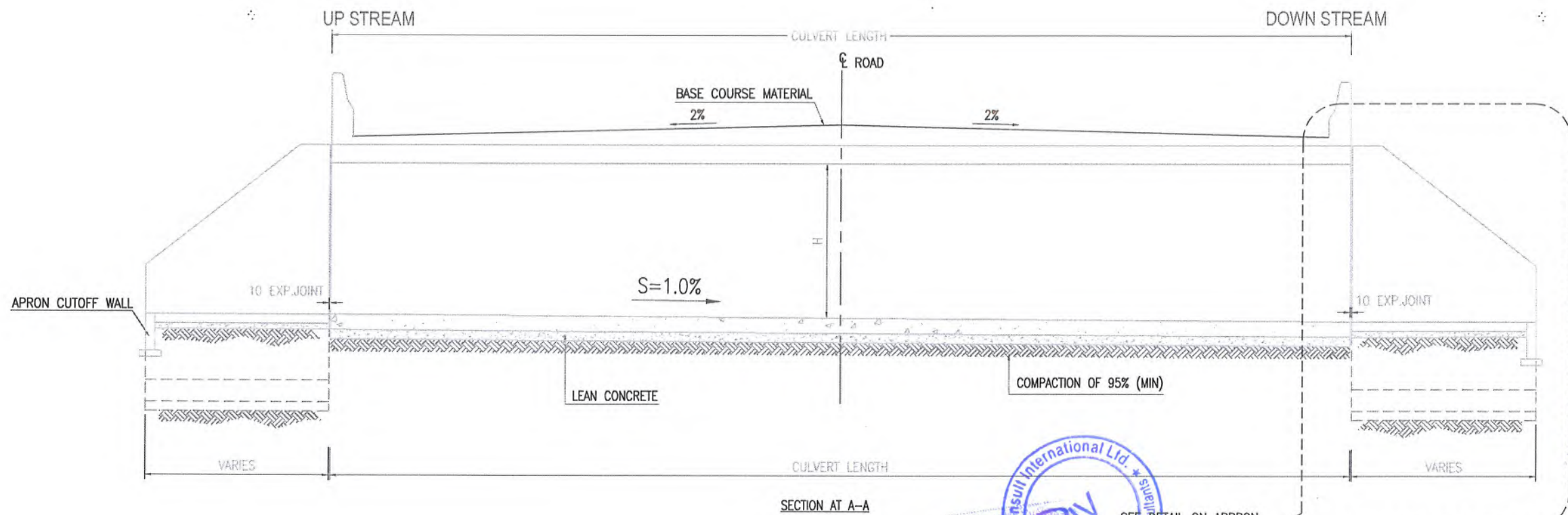
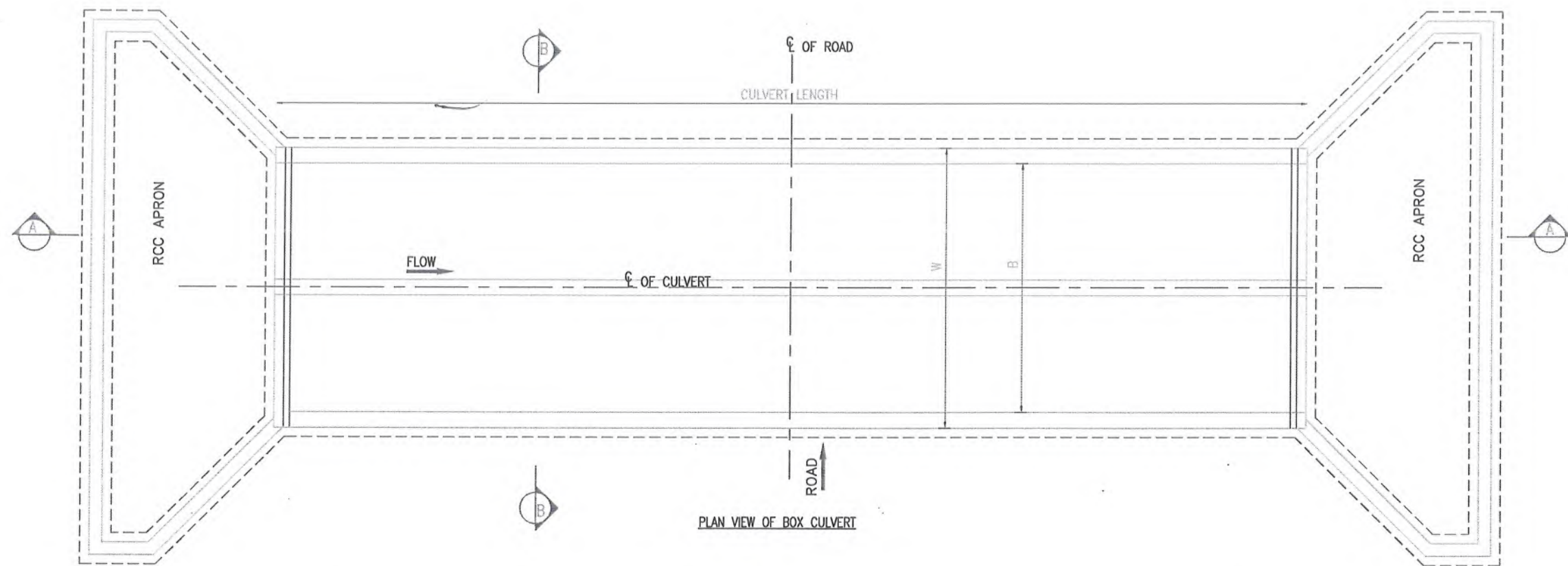
- NOTES: -
- 1- ALL DIMENSIONS ARE IN MILLIMETER UNLESS NOTED.
 - 2- ALL CONCRETE SHALL BE REINFORCED CONCRETE CLASS A3.
 - 3- REINFORCEMENT FOR REINFORCED CONCRETE SHALL BE DEFORMED BAR OF (GRADE 60) CONFORMING TO AASHTO M-31 (ASTM A615) WITH MINIMUM YIELD STRENGTH OF 4200 kg/sq.cm (60,000 psi).
 - 4- ALL FACES OF CONCRETE IN CONTACT WITH SOIL SHALL BE DAMP PROOFED WITH 2 LAYERS OF BITUMINOUS COATING MATERIAL.
 - 5- THE DEPTH OF SELECT FILL SHALL BE DECIDED BY THE ENGINEER AT SITE, 300mm SHALL BE (min.).
 - 6- WING WALLS SHALL BE AT LEAST 45° FOR SKEW 0, HOWEVER IF SKEW IT SHALL BE FINALIZED AS PER SITE REQUIREMENT.
 - 7- CONCRETE COVER: OUTER SIDE = 50mm, INNER SIDE = 40mm, BOTTOM = 40mm & TOP = 40mm

SINGLE CELL BOX CULVERT DIMENSION AND REINFORCEMENT												
SIZE		FILL	T1	T2	T3	W	BAR 1	BAR 2	BAR 3	BAR 4	BAR 5	BAR 6
B	D	HF					DIA-C/C	DIA-C/C	DIA-C/C	DIA-C/C	DIA-C/C	DIA-C/C
1000	1000	300-600	250	250	250	1500	16-150	16-150	16-150	16-150	10-150	10-150
		601-1000	200	200	200	1400	12-150	16-150	16-150	16-150	10-150	10-150
		1001-2000	200	200	200	1400	12-150	12-150	12-150	16-150	10-150	10-150
1000	1500	300-600	250	250	250	1500	20-150	20-150	16-150	20-150	10-150	10-150
		601-1000	200	200	200	1400	16-150	16-150	16-150	20-150	10-150	10-150
		1001-2000	200	200	200	1400	16-150	16-150	12-150	16-150	10-150	10-150
1500	1000	300-600	275	275	225	1950	20-200	20-200	16-150	20-200	10-150	10-150
		601-1000	225	225	225	1950	16-150	16-150	16-150	20-200	10-150	10-150
		1001-2000	225	225	225	1950	16-150	16-150	12-150	16-150	10-150	10-150
2000	1000	300-600	300	315	250	2500	20-150	20-150	16-150	20-150	10-150	10-150
		601-1000	250	250	250	2500	16-150	20-150	16-150	20-150	10-150	10-150
		1001-2000	250	250	250	2500	16-150	16-150	16-150	16-150	10-150	10-150
2500	1000	300-600	325	325	300	3100	20-150	20-150	16-150	20-150	10-150	10-150
		601-1000	275	275	275	3050	16-150	20-150	16-150	20-150	10-150	10-150
		1001-2000	275	275	275	3050	16-150	16-150	16-150	16-150	10-150	10-150
1500	1500	300-600	275	275	225	1950	20-150	20-150	16-150	20-150	10-150	10-150
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2500	1500	300-600	325	325	300	3050	20-150	20-150	20-150	20-150	10-150	10-150
		601-1000	275	275	275	3050	16-150	20-150	16-150	20-150	10-150	10-150
		1001-2000	275	275	275	3050	16-150	16-150	16-150	16-150	10-150	10-150
3000	1500	300-600	400	415	325	3650	20-150	20-150	16-150	20-150	10-150	10-150
		601-1000	300	300	300	3600	16-150	20-150	16-150	16-150	10-150	10-150
		1001-2000	300	300	300	3600	20-200	20-200	20-200	20-200	10-150	10-150
2000	2000	300-600	300	315	250	2500	20-150	20-150	16-150	20-150	10-150	10-150
		601-1000	250	250	250	2500	16-150	20-150	16-150	20-200	10-150	10-150
		1001-2000	250	250	250	2500	16-150	16-150	16-150	16-150	10-150	10-150
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3000	3000	300-600	400	425	350	3700	20-150	20-150	20-150	20-150	12-150	12-150
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3000	3500	300-600	400	425	375	3750	20-150	20-150	20-150	20-150	12-150	12-150
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4000	2000	300-600	500	500	350	4700	20-125	20-125	20-150	20-100	12-150	12-150
		601-1000	350	350	350	4700	20-150	20-150	20-150	20-100	12-150	12-150
		1001-2000	350	350	350	4700	20-170	20-170	20-170	20-100	12-150	12-150

Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Peshawar



CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION		NAMES:		PROJECT:	SCALE:	SHEET CONTENT:	
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.		CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024	TENDER DRAWINGS	DESIGNED	M.FAIZAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	PACKAGE-43	N.T.S	SINGLE CELL BOX CULVERT SECTION & REINFORCEMENT DETAIL
						a			DRAWN	MUSHTAQ			DATE:	
						b			CHECKED	M.ISLAM		SEP, 2024.		
						c			APPROVED	GULFAM SHAHZAD			DWG NO:CEC/KPRRDP/STR/STR-02B	

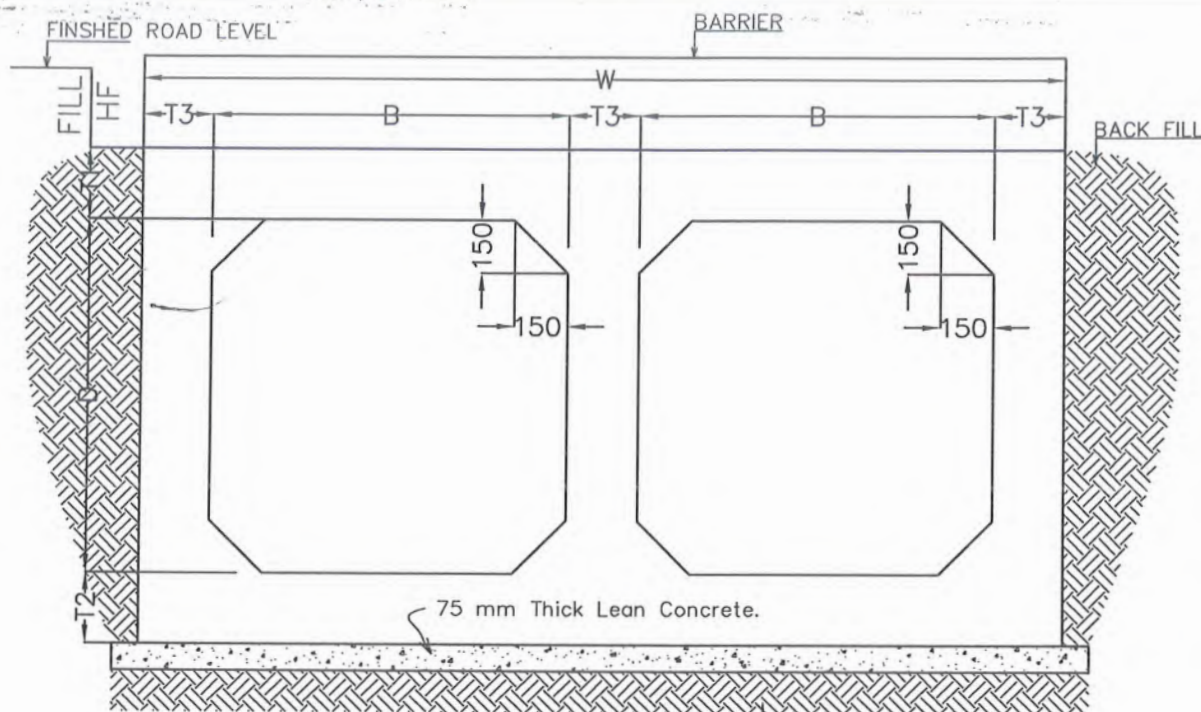


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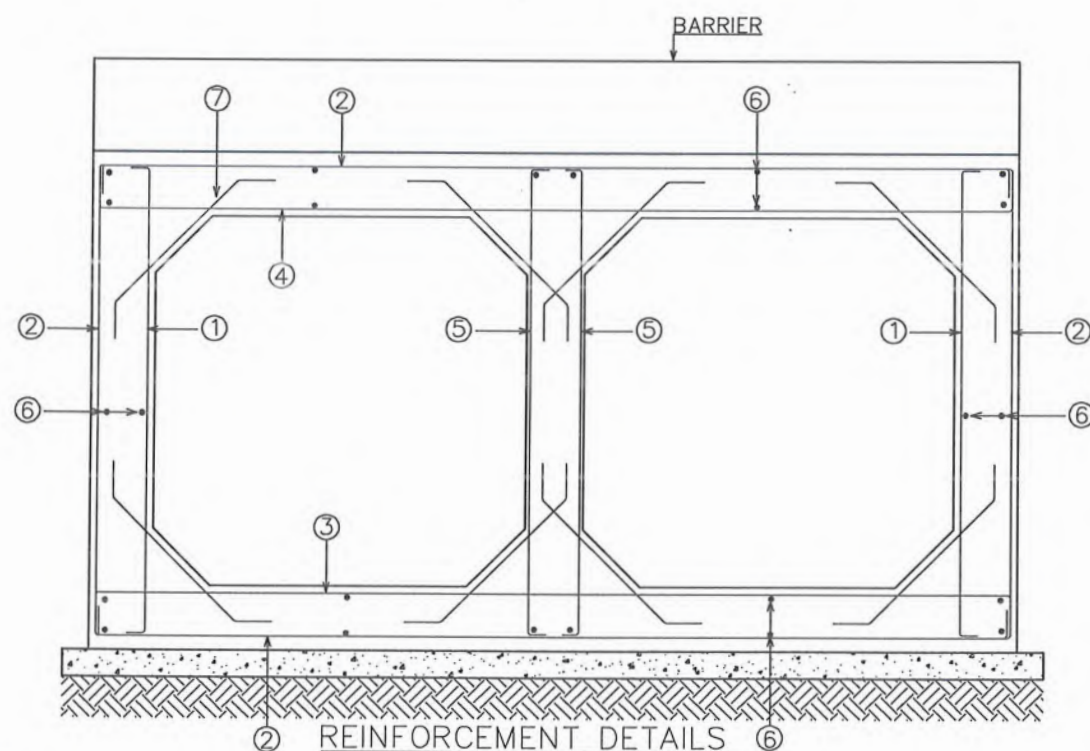
Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



CLIENT:	DESIGN CONSULTANT: (MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:		SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58635-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024	TENDER DRAWINGS	DESIGNED	M.FAIZAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	PACKAGE-3	N.T.S	2 CELL BOX CULVERT PLAN & SECTION VIEW
		a			DRAWN	MUSHTAQ		DATE:		
		b			CHECKED	M.ISLAM		SEP, 2024.	LOT-2	DWG NO.CEC/KPRRDP/STR/STR-2C
		c			APPROVED	GULFAM SHAHZAD				



TYPICAL SECTION



REINFORCEMENT DETAILS

NOTES:-

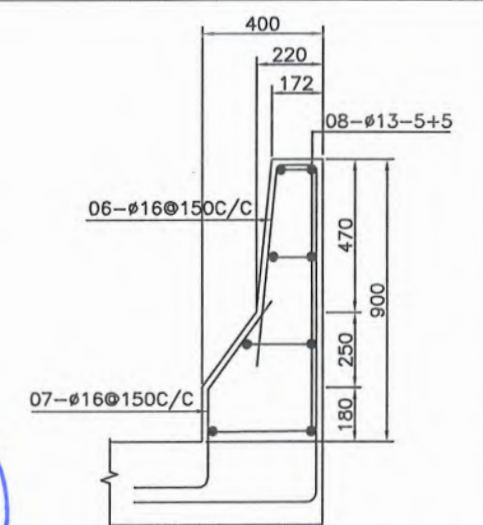
- 1- ALL DIMENSIONS ARE IN MILLIMETER UNLESS NOTED.
- 2- ALL CONCRETE SHALL BE REINFORCED CONCRETE CLASS A3.
- 3- REINFORCEMENT FOR REINFORCED CONCRETE SHALL BE DEFORMED BAR OF (GRADE 60) CONFORMING TO AASHTO M-31 (ASTM A615) WITH MINIMUM YIELD STRENGTH OF 4200 kg/sq.cm (60,000 psi).
- 4- ALL FACES OF CONCRETE IN CONTACT WITH SOIL SHALL BE DAMP PROOFED WITH 2 LAYERS OF BITUMINOUS COATING MATERIAL.
- 5- THE DEPTH OF SELECT FILL SHALL BE DECIDED BY THE ENGINEER AT SITE, 300mm SHALL BE (min.).
- 6- WING WALLS SHALL BE AT LEAST 45° FOR SKEW 0, HOWEVER IF SKEW IT SHALL BE FINALIZED AS PER SITE REQUIREMENT.
- 7- CONCRETE COVER: OUTER SIDE = 50mm, INNER SIDE = 40mm, BOTTOM = 40mm & TOP = 40mm

TWO CELL BOX CULVERT DIMENSION AND REINFORCEMENT

SIZE		FILL					BAR 1	BAR 2	BAR 3	BAR 4	BAR 5	BAR 6	BAR 7
B	D	HF	T1	T2	T3	W	DIA-C/C	DIA-C/C	DIA-C/C	DIA-C/C	DIA-C/C	DIA-C/C	DIA-C/C
2000	1000	300-600	300	315	250	4750	16-150	20-150	16-150	20-150	16-150	12-200	12-200
		601-1000	250	250	250	4750	16-150	16-150	16-150	20-150	16-150	12-200	12-200
		1001-2000	250	250	250	4750	16-150	16-150	16-150	20-175	16-150	12-200	12-200
2500	1000	300-600	325	325	300	5900	20-150	20-150	20-175	20-125	16-150	12-200	12-200
		601-1000	275	275	275	5825	20-150	20-150	20-175	20-125	16-150	12-200	12-200
		1001-2000	275	275	275	5825	16-150	20-150	20-175	20-125	16-150	12-200	12-200
2000	1500	300-600	300	315	250	4750	16-150	20-150	20-150	20-150	16-150	12-200	12-200
		601-1000	250	250	250	4750	16-150	16-150	20-150	20-150	16-150	12-200	12-200
		1001-2000	250	250	250	4750	16-150	16-150	20-150	20-150	16-150	12-200	12-200
3000	1500	300-600	400	415	325	6975	16-125	20-125	20-150	20-100	20-200	12-200	12-200
		601-1000	300	300	300	6900	16-150	20-150	20-150	20-100	20-200	12-200	12-200
		1001-2000	300	300	300	6900	16-150	20-150	20-150	20-150	20-200	12-200	12-200
2000	2000	300-600	300	315	250	4750	16-150	20-150	20-150	20-150	16-170	12-200	12-200
		601-1000	250	250	250	4750	16-150	20-150	20-150	20-150	16-150	12-200	12-200
		1001-2000	250	250	250	4750	16-150	20-150	16-150	20-150	16-150	12-200	12-200
3000	2000	300-600	400	425	325	6975	16-125	20-125	20-125	20-125	20-175	12-200	12-200
		601-1000	300	300	300	6900	16-150	20-150	20-150	20-150	20-175	12-200	12-200
		1001-2000	300	300	300	6900	20-170	20-170	20-170	20-170	20-175	12-200	12-200
4000	2000	300-600	500	500	350	9050	20-125	20-125	20-125	20-100	20-150	12-200	12-200
		601-1000	350	350	350	9050	20-150	20-150	20-150	20-100	20-150	12-200	12-200
		1001-2000	250	250	250	8750	20-170	20-170	20-170	20-100	20-150	12-200	12-200

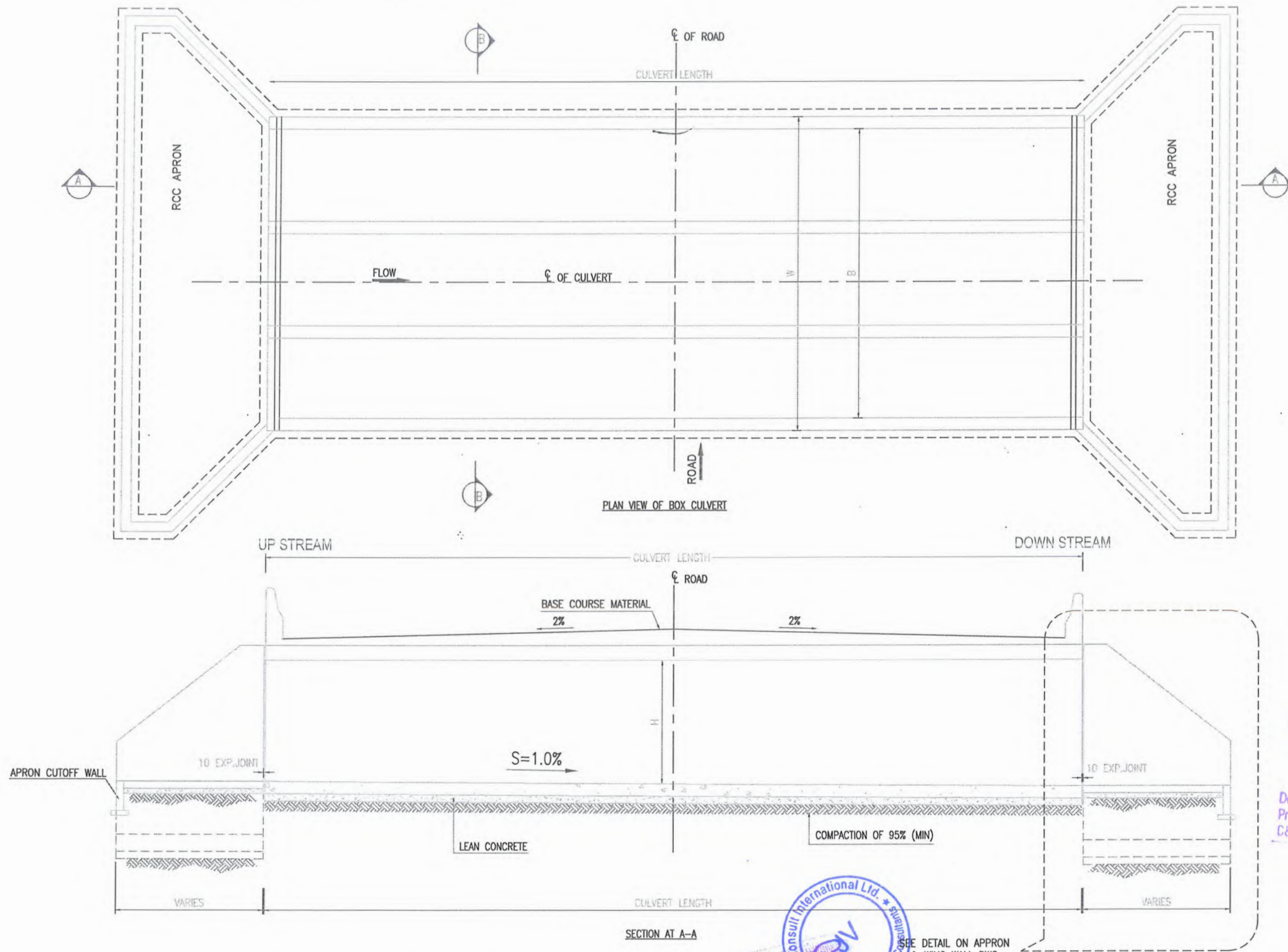
Deputy Director Construction-III
Provincial Road Development Project
C&W Department, Peshawar

BARRIER

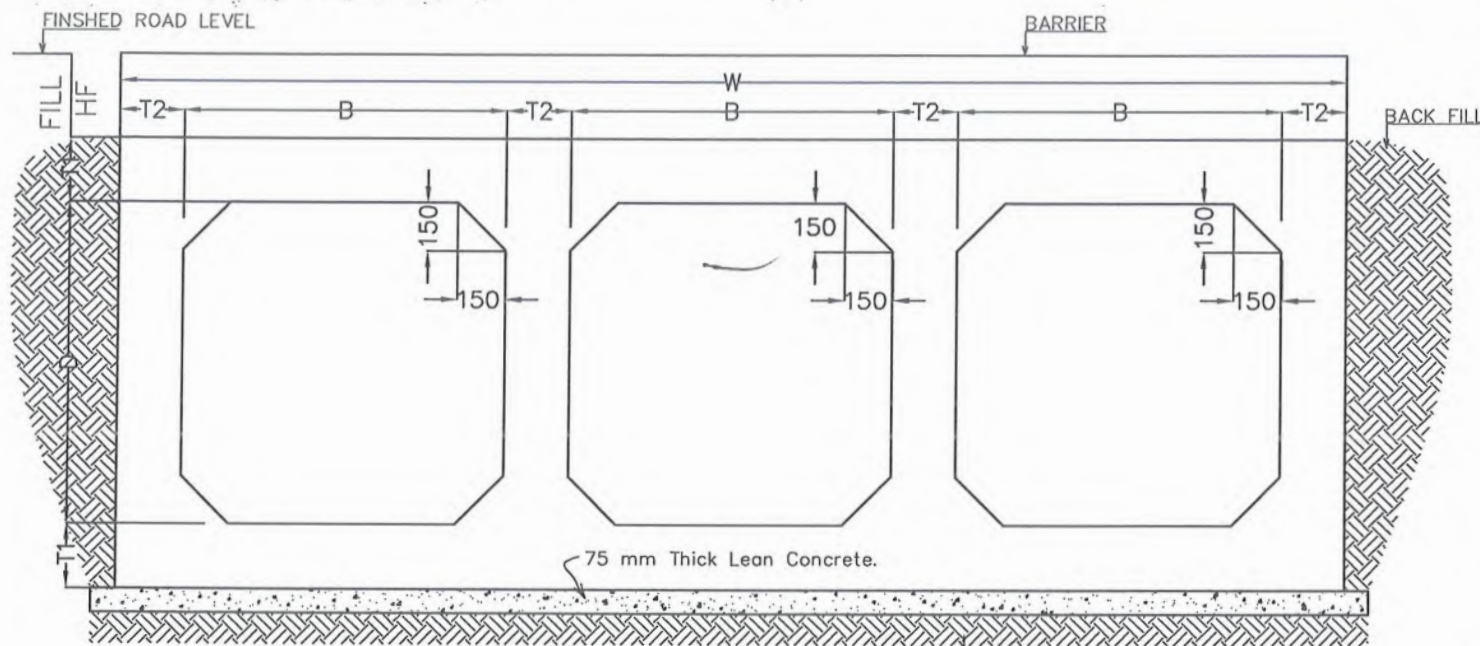


BARRIER REINFORCEMENT

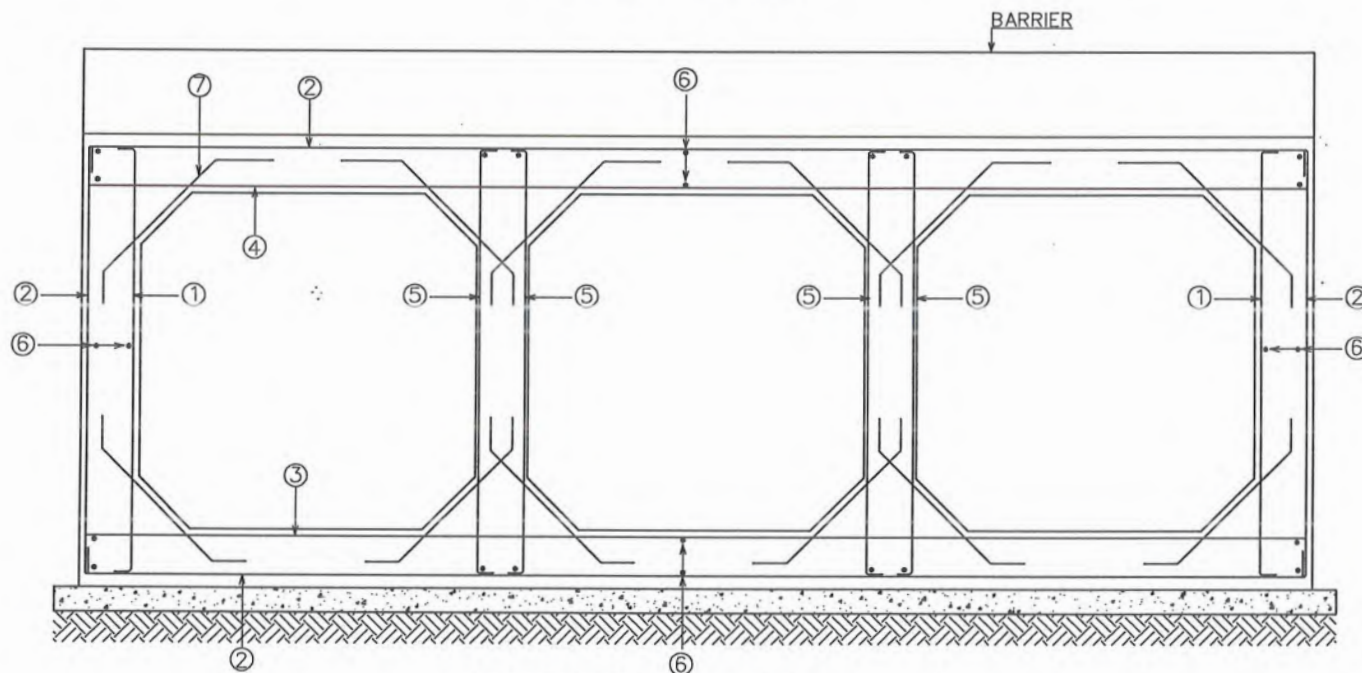
CLIENT: GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		DESIGN CONSULTANT: (MIN - JV - CEC) MINCONSULT SDN BHD (COMPANY NO. 58635-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)		REV	DATE	DESCRIPTION	NAMES:	PROJECT:	PACKAGE-4 LOT-2	SCALE:	SHEET CONTENT: 2 CELL BOX CULVERT SECTION & REINFORCEMENT DETAIL DWG NO: CEC/KPRRDP/STR/ STR-02D
				0	SEP, 2024	TENDER DRAWINGS	DESIGNED: M. FAIZAN DRAWN: MUSHTAQ CHECKED: M. ISLAM APPROVED: GULFAM SHAHZAD	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)		N.T.S	



CLIENT: GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	DESIGN CONSULTANT: (MIN - JV - CEC) MINCONSULT SDN BHD (COMPANY NO. 58635-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	REV SEP, 2024 a b c	DATE SEP, 2024 TENDER DRAWINGS	NAMES DESIGNED M.FAIZAN DRAWN MUSHTAQ CHECKED M.ISLAM APPROVED GULFAM SHAHZAD	PROJECT: KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	PACKAGE-3 LOT-2	SCALE: N.T.S DATE: SEP, 2024	SHEET CONTENT: THREE/MULTI CELL BOX CULVERT PLAN & SECTION VIEW DWG NO: CEC/KPRRDP/STR/STR-02E
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TYPICAL SECTION



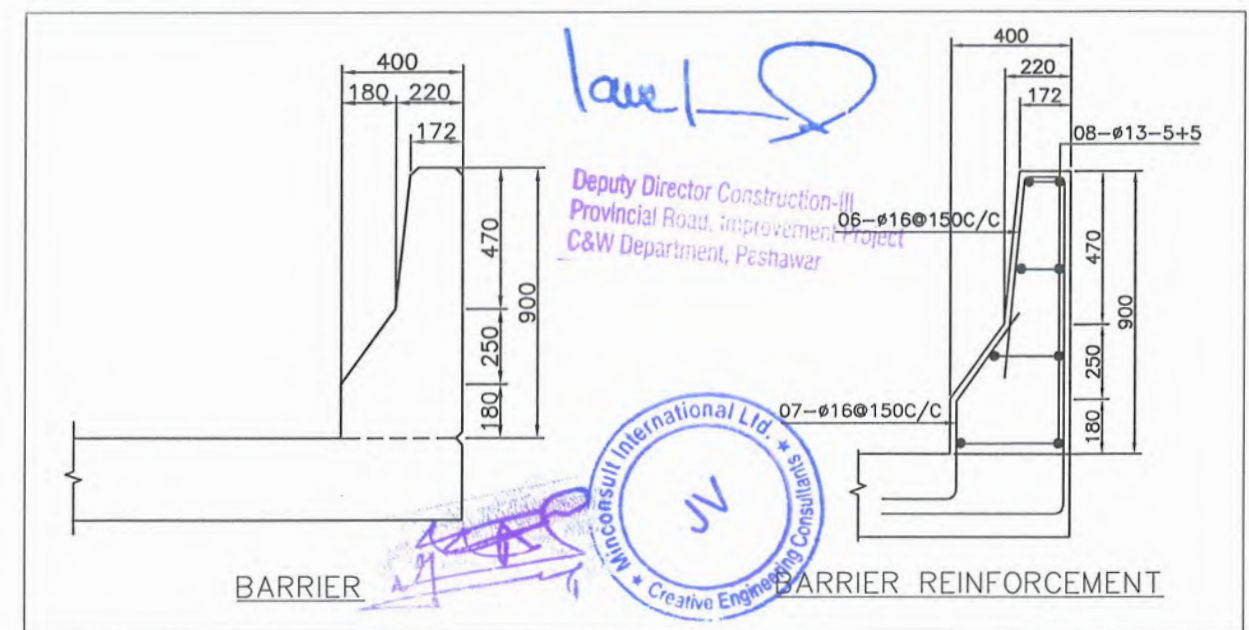
REINFORCEMENT DETAILS

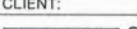
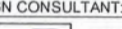
NOTES:-

- 1- ALL DIMENSIONS ARE IN MILLIMETER UNLESS NOTED.
- 2- ALL CONCRETE SHALL BE REINFORCED CONCRETE CLASS A3.
- 3- REINFORCEMENT FOR REINFORCED CONCRETE SHALL BE DEFORMED BAR OF (GRADE 60) CONFORMING TO AASHTO M-31 (ASTM A615) WITH MINIMUM YIELD STRENGTH OF 4200 kg/sq.cm (60,000 psi).
- 4- ALL FACES OF CONCRETE IN CONTACT WITH SOIL SHALL BE DAMP PROOFED WITH 2 LAYERS OF BITUMINOUS COATING MATERIAL.
- 5- THE DEPTH OF SELECT FILL SHALL BE DECIDED BY THE ENGINEER AT SITE, 300mm SHALL BE (min.).
- 6- WING WALLS SHALL BE AT LEAST 45° FOR SKEW 0, HOWEVER IF SKEW IT SHALL BE FINALIZED AS PER SITE REQUIREMENT.
- 7- CONCRETE COVER: OUTER SIDE = 50mm, INNER SIDE = 40mm, BOTTOM = 40mm & TOP = 40mm

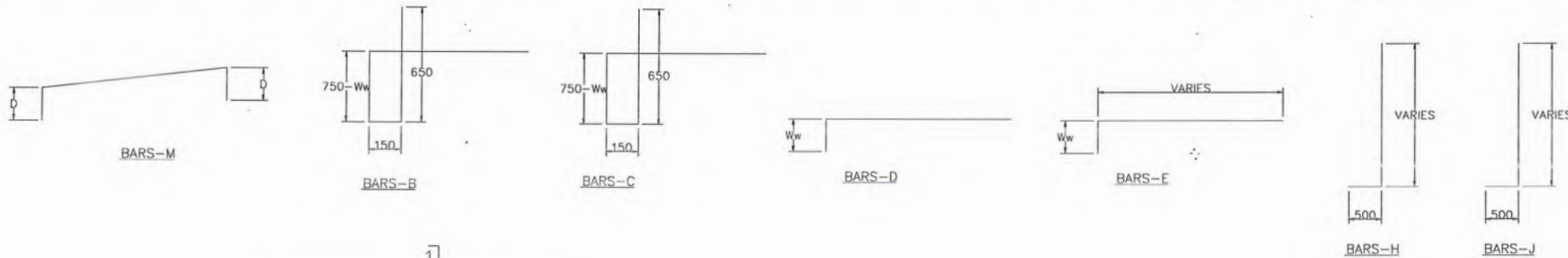
THREE / MULTI CELL BOX CULVERT DIMENSION AND REINFORCEMENT

SIZE	B	D	FILL HF	T1	T2	T3	W	BAR 1	BAR 2	BAR 3	BAR 4	BAR 5	BAR 6	BAR 7
								DIA-C/C	DIA-C/C	DIA-C/C	DIA-C/C	DIA-C/C	DIA-C/C	DIA-C/C
2000	1000	300-600	300	315	250	7000	16-150	20-150	16-150	20-150	16-150	12-200	12-200	12-200
			601-1000	250	250	7000	16-150	16-150	16-150	20-150	16-150	12-200	12-200	12-200
			1001-2000	250	250	7000	16-150	16-150	16-150	20-175	16-150	12-200	12-200	12-200
2500	1000	300-600	325	325	300	8700	20-150	20-150	20-175	20-125	16-150	12-200	12-200	12-200
			601-1000	275	275	8600	20-150	20-150	20-175	20-125	16-150	12-200	12-200	12-200
			1001-2000	275	275	8600	16-150	20-150	20-175	20-125	16-150	12-200	12-200	12-200
2000	1500	300-600	300	315	250	7000	16-150	20-150	20-150	20-150	16-150	12-200	12-200	12-200
			601-1000	250	250	7000	16-150	16-150	20-150	20-150	16-150	12-200	12-200	12-200
			1001-2000	250	250	7000	16-150	16-150	20-150	20-150	16-150	12-200	12-200	12-200
3000	1500	300-600	400	415	325	10300	16-125	20-125	20-150	20-100	20-200	12-200	12-200	12-200
			601-1000	300	300	10200	16-150	20-150	20-150	20-100	20-200	12-200	12-200	12-200
			1001-2000	300	300	10200	16-150	20-150	20-150	20-150	20-200	12-200	12-200	12-200
2000	2000	300-600	300	315	250	7000	16-150	20-150	20-150	20-150	16-170	12-200	12-200	12-200
			601-1000	250	250	7000	16-150	20-150	16-150	20-150	16-150	12-200	12-200	12-200
			1001-2000	250	250	7000	16-150	20-150	16-150	20-150	16-150	12-200	12-200	12-200
3000	2000	300-600	400	425	325	10300	16-125	20-125	20-125	20-125	20-175	12-200	12-200	12-200
			601-1000	300	300	10200	16-150	20-150	20-150	20-175	12-200	12-200	12-200	12-200
			1001-2000	300	300	10200	20-170	20-170	20-170	20-170	20-175	12-200	12-200	12-200
4000	2000	300-600	500	500	350	13400	20-125	20-125	20-125	20-100	20-150	12-200	12-200	12-200
			601-1000	350	350	13400	20-150	20-150	20-150	20-100	20-150	12-200	12-200	12-200
			1001-2000	250	250	13000	20-170	20-170	20-170	20-100	20-150	12-200	12-200	12-200
3000	3000	300-600	400	415	375	10500	16-125	20-125	20-125	20-125	20-125	12-125	12-125	12-125
			601-1000	300	300	10200	16-150	20-150	20-150	20-150	20-125	12-150	12-150	12-150
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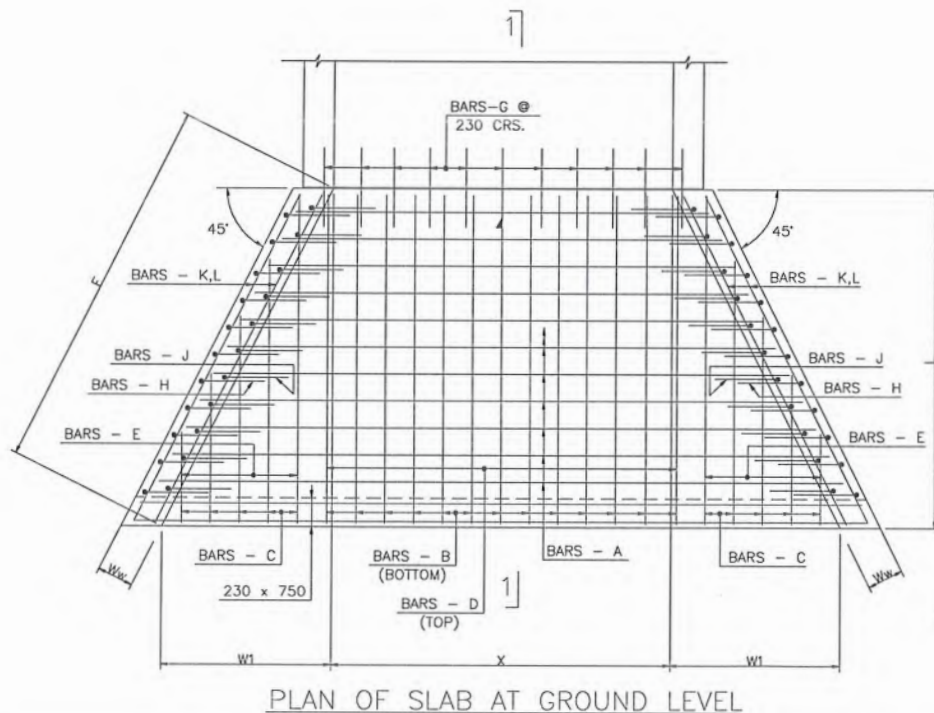
CLIENT:		DESIGN CONSULTANT: (MIN - JV - CEC)		REV	DATE	DESCRIPTION	NAMES:		PROJECT:		SCALE:	SHEET CONTENT:		
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. 	CREATIVE ENGINEERING CONSULTANTS (CEC)	a	SEP, 2024	TENDER DRAWINGS	DESIGNED	M.FAIZAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	PACKAGE-43 LOT-2	N.T.S	THREE/MULTI CELL BOX CULVERT SECTION & REINFORCEMENT DETAIL	
					b			DRAWN	MUSHTAQ			DATE:		
					c			CHECKED	M.ISLAM			SEP, 2024.		DWG NO:CEC/KPRRDP/STR/STR-02F
					d			APPROVED	GULFAM SHAHZAD					

APRÓN & WINGWALLS DIMENSIONS & REINFORCEMENTS

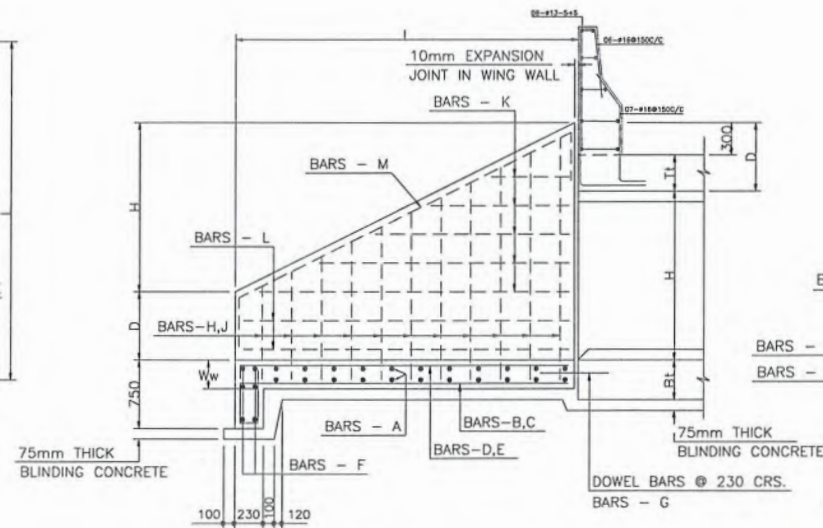
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NOTES

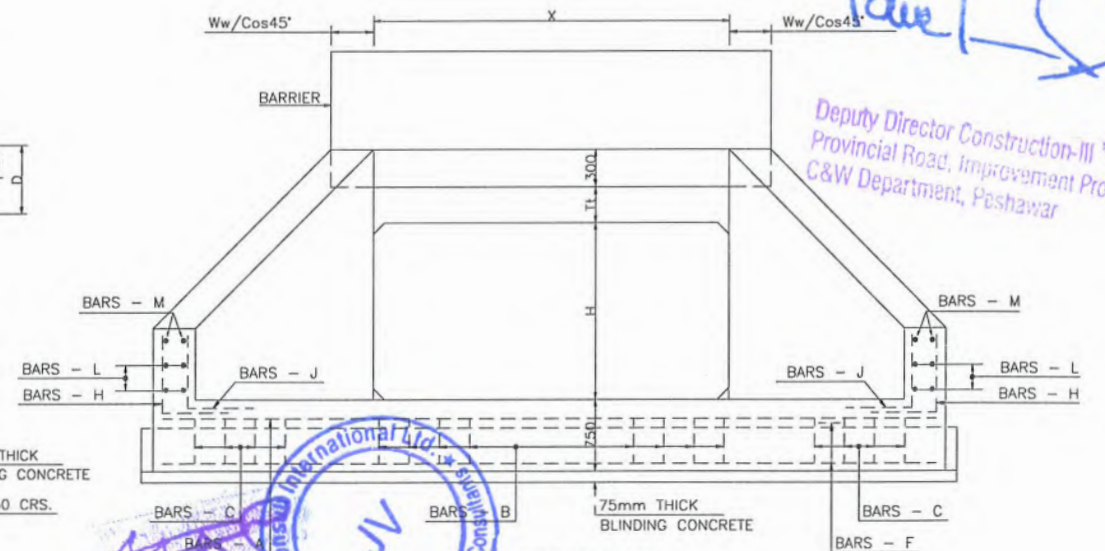
- * ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
- * ALL STRUCTURAL CONCRETE SHALL BE CLASS-A3 HAVING COMPRESSIVE STRENGTH OF 280 Kg/cm²
- * ALL STRUCTURAL REINFORCEMENT SHALL BE OF GRADE-60 STEEL, CONFORMING TO ASTM A-615.
- * MINIMUM COVER TO THE REINFORCEMENT TO BE 40mm.



PLAN OF SLAB AT GROUND LEVEL



TYP. SEC. 1 - 1



END ELEVATION

INTERNAL WALL (IF ANY) OMITTED FOR CLARITY.

CLIENT:	DESIGN CONSULTANT: (MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	SCALE:	SHEET CONTENT:				
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.,  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024	TENDER DRAWINGS	DESIGNED	M.FAIZAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	PACKAGE-3	N.T.S	REINFORCEMENT DETAIL OF BOX CULVERT APRON & WING WALL		
		a			DRAWN	MUSHTAQ						
		b			CHECKED	M.ISLAM						
		c			APPROVED	GULFAM SHAHZAD						
								LOT-2	DATE:			
									SEP, 2024.		DWG NO:CEC/KPRRDP/STR/STR-26	

PIPE CULVERT NOTES

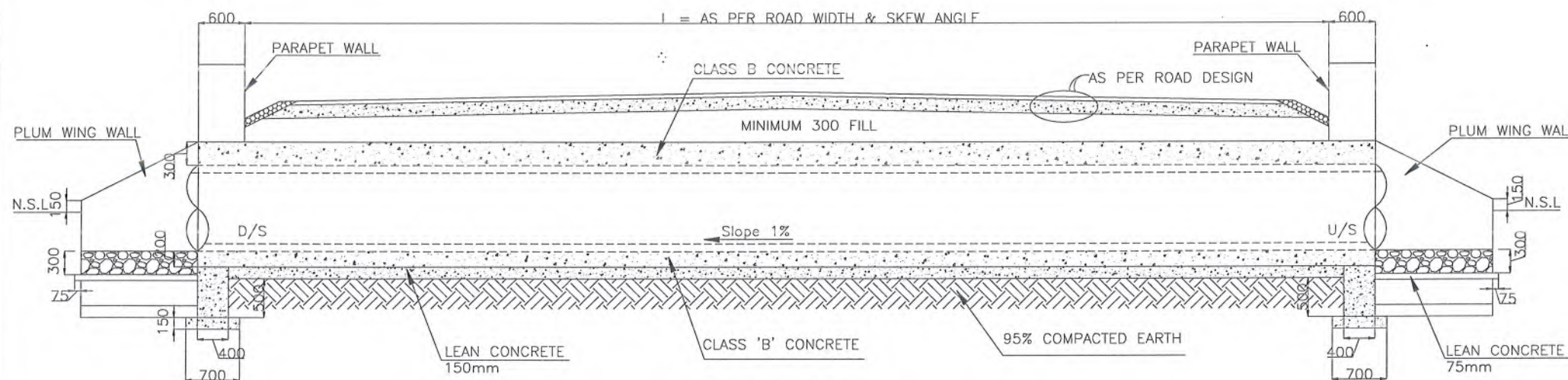
- MORTAR :

- PORTLAND CEMENT CONCRETE :

- REINFORCEMENT :

-
- The diagram illustrates the plan view of a pipe culvert. Key features include:
 - Dimensions:** A length dimension 'L' is shown at the top, with a note 'L = AS PER ROAD WIDTH & SKEW ANGLE'. A width dimension '400' is indicated on both the left and right sides.
 - Structural Components:** Labels include 'PLAM WING WALL' (likely a typo for 'Plain Wing Wall'), 'WING WALL', 'PARAPET WALL', and 'RIPRAP' (shown as a textured area on the left and right).
 - Centerline:** A dashed line runs through the center, labeled 'C.C. OF PIPE CULVERT' on the right.
 - Section Markers:** Section lines 'A-A' and 'B-B' are marked with arrows indicating the direction of the sections.
 - Orientation:** Arrows labeled 'N' (North) are present at the bottom left and bottom right corners.
 - Caption:** The diagram is captioned 'PLAN OF PIPE CULVERT' at the bottom center.

PLAN OF PIPE CULVERT



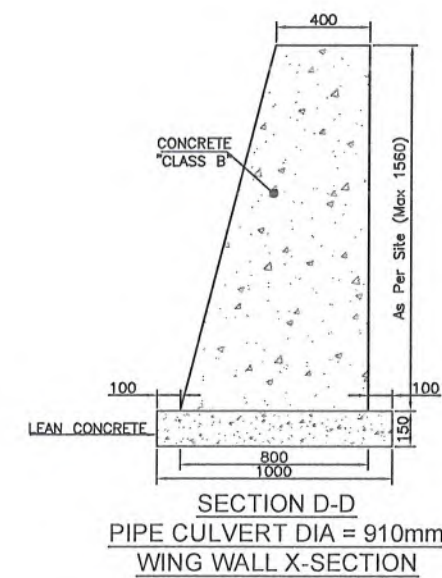
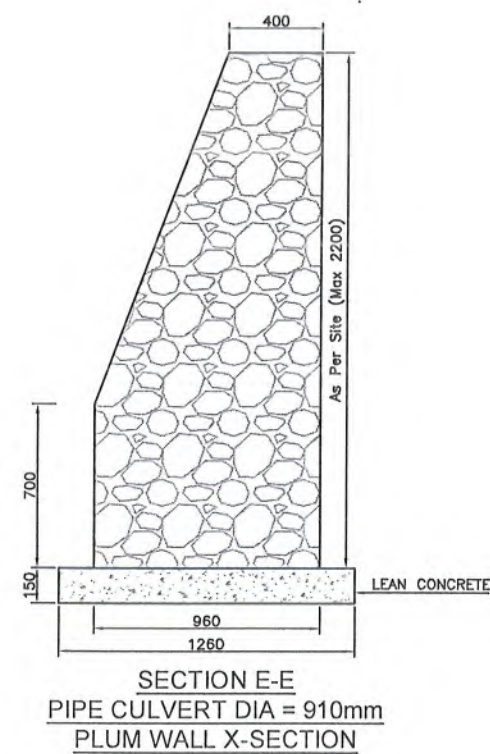
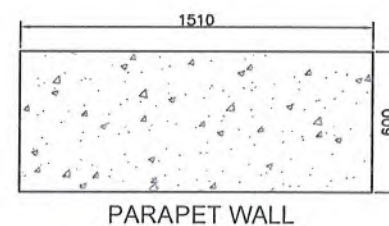
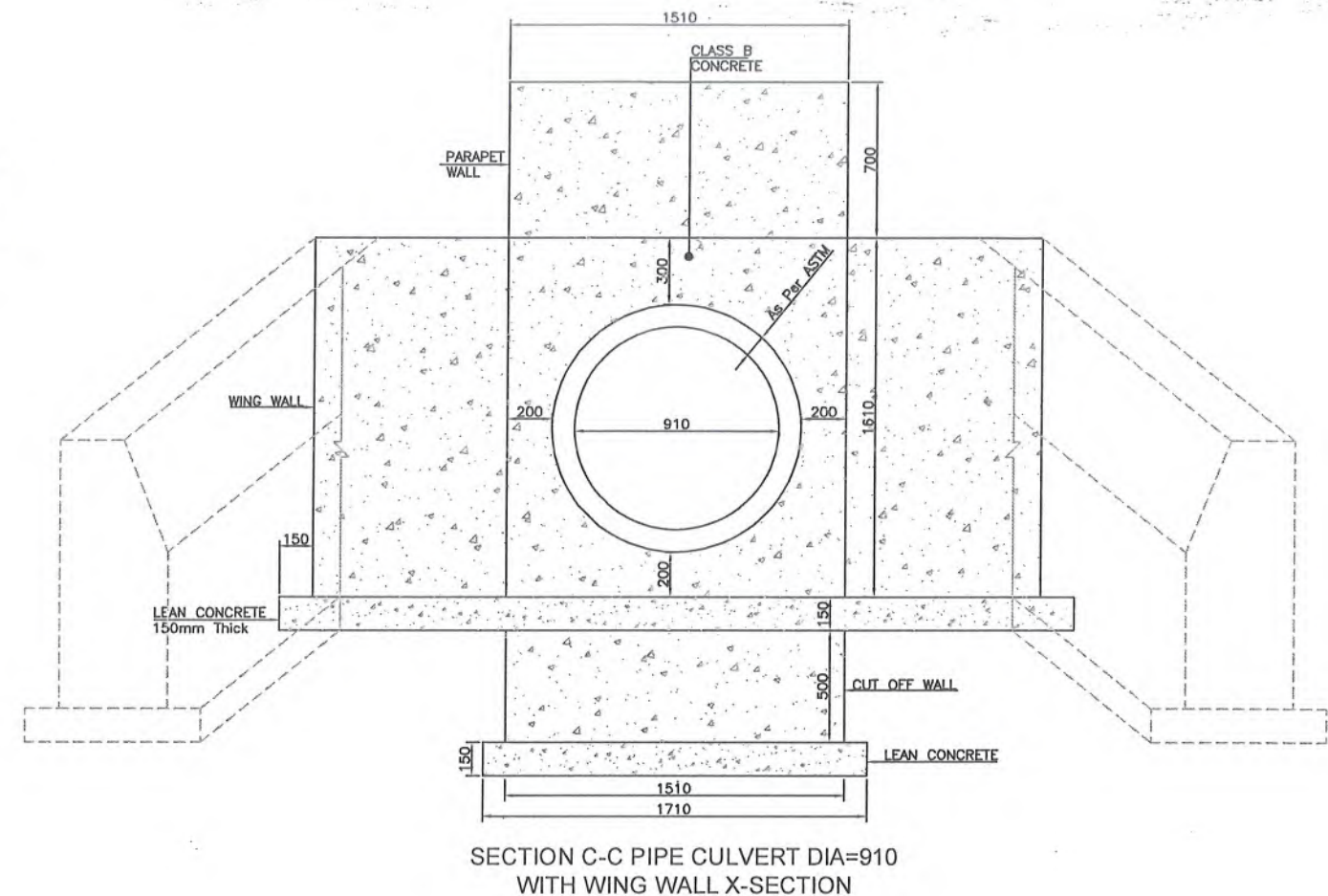
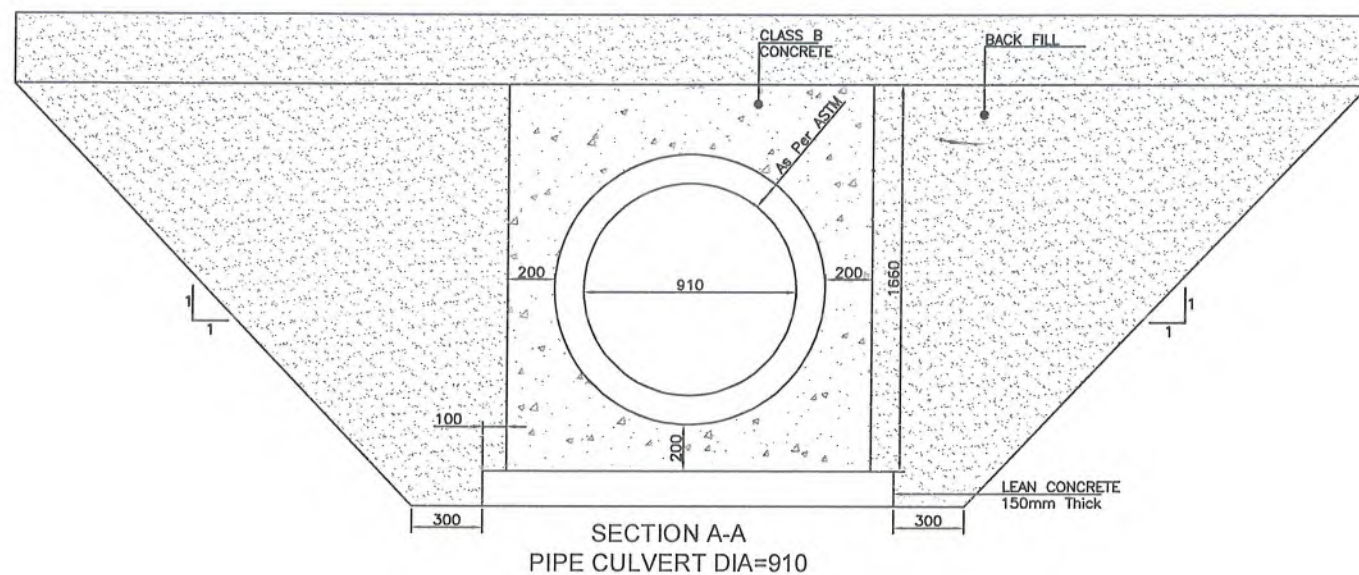
SECTION BB

Lawal S

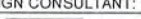
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C&W Department, Peshawar

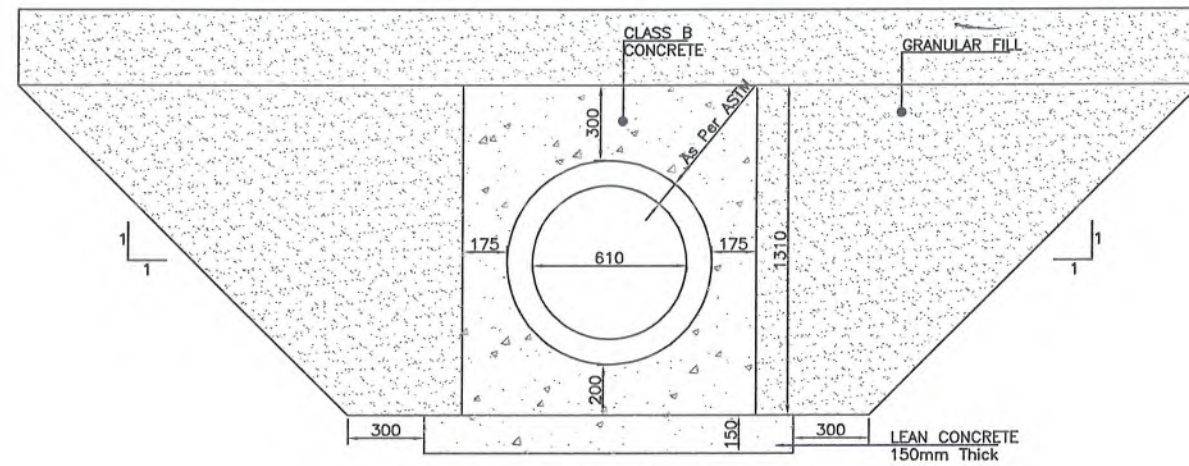


CLIENT:		DESIGN CONSULTANT: (MIN - JV - CEC)		REV	DATE	DESCRIPTION	NAMES:		PROJECT:		SCALE:	SHEET CONTENT:	
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. 	CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024	TENDER DRAWINGS	DESIGNED	M.FAIZAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	PACKAGE-3	TYPICAL PIPE CULVERT PLAN & SECTIONS	
					a			DRAWN	MUSHTAQ				N.T.S
					b			CHECKED	M.ISLAM				DATE:
					c			APPROVED	GULFAM SHAHZAD		LOT-2		SEP, 2024.

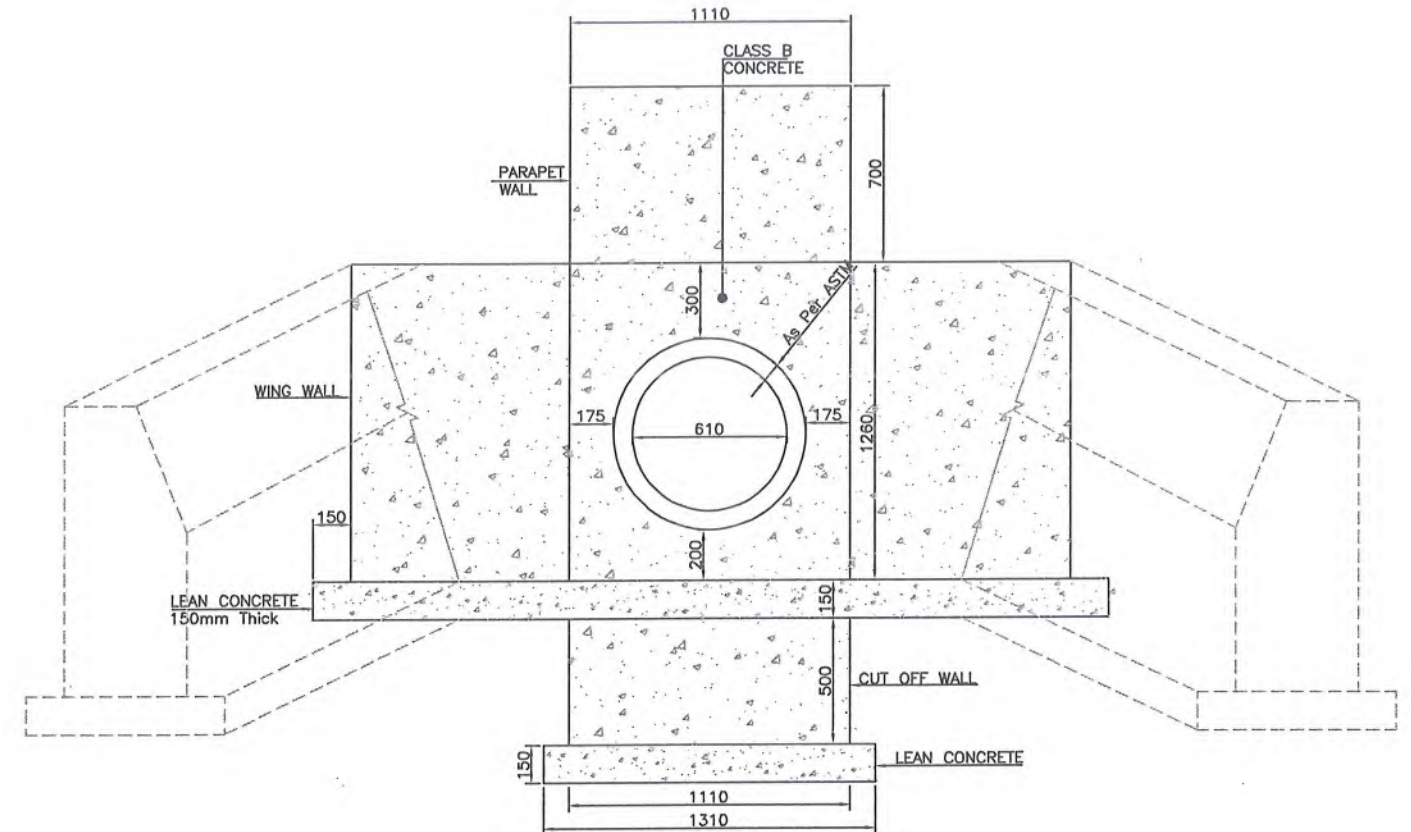


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Provincial Road Improvement Project
C&W Department, Peshawar

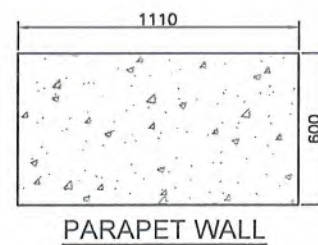
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		b			DRAWN	MUSHTAQ				DATE:		
		c			CHECKED	M.ISLAM				SEP, 2024.		
		d			APPROVED	GULFAM SHAHZAD				DWG NO:CEC/KPRRDP/STR/STR-3b		



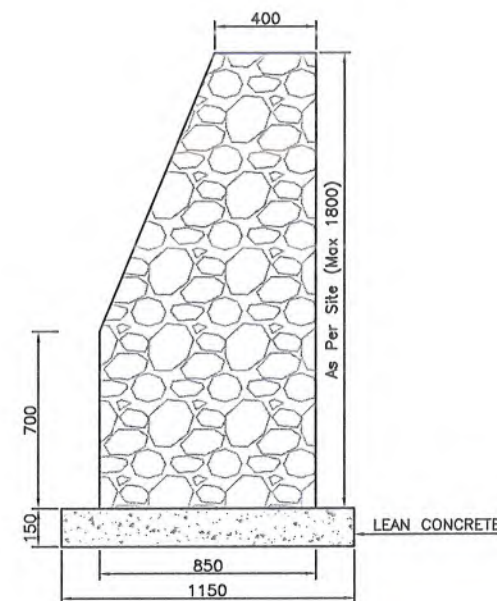
SECTION A-A
PIPE CULVERT DIA=610



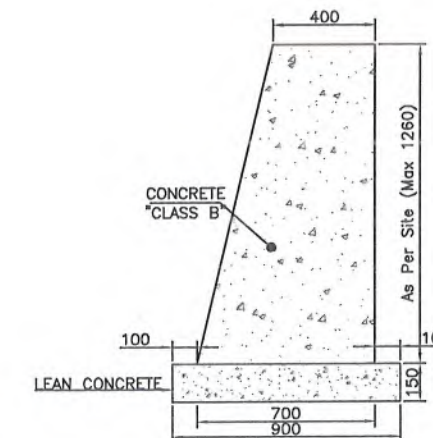
SECTION C-C PIPE CULVERT DIA=610
WITH WING WALL X-SECTION



PARAPET WALL



SECTION E-E
PIPE CULVERT DIA = 610mm
PLUM WALL X-SECTION

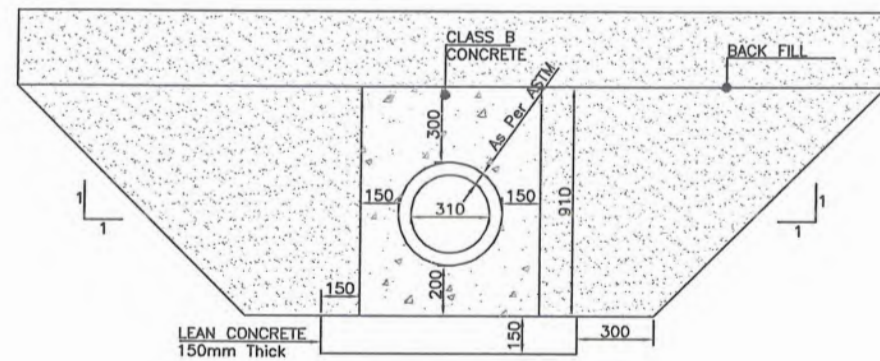


SECTION D-D
PIPE CULVERT DIA = 610mm
WING WALL X-SECTION

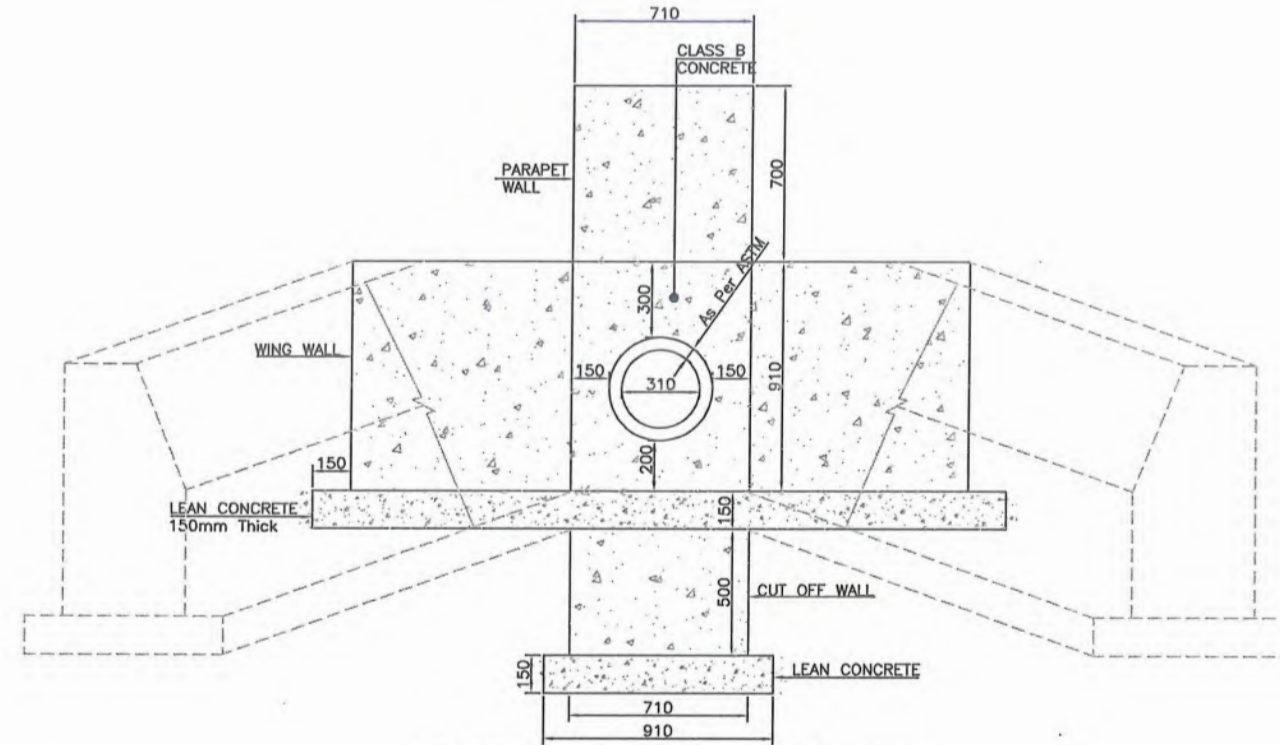
Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Peshawar



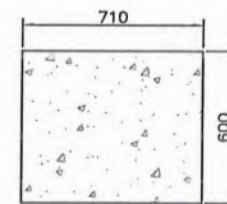
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 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58935-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024	TENDER DRAWINGS	DESIGNED: M.FAIZAN DRAWN: MUSHTAQ CHECKED: M.ISLAM APPROVED: GULFAM SHAHZAD	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	PACKAGE-3 LOT-2	N.T.S. DATE: SEP, 2024 DWG NO:CEC/KPRRDP/STR/ STR-3c



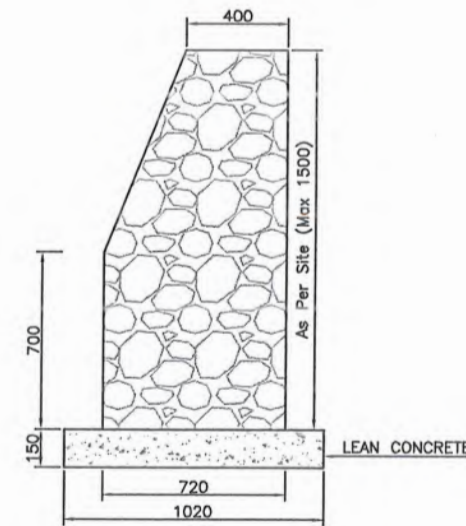
SECTION A-A
PIPE CULVERT DIA=310



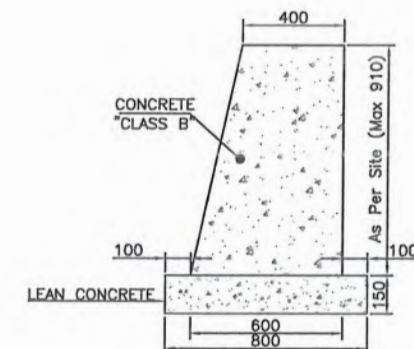
SECTION C-C PIPE CULVERT DIA=310
WITH WING WALL X-SECTION



PARAPET WALL



SECTION E-E
PIPE CULVERT DIA = 310mm
PLUM WALL X-SECTION

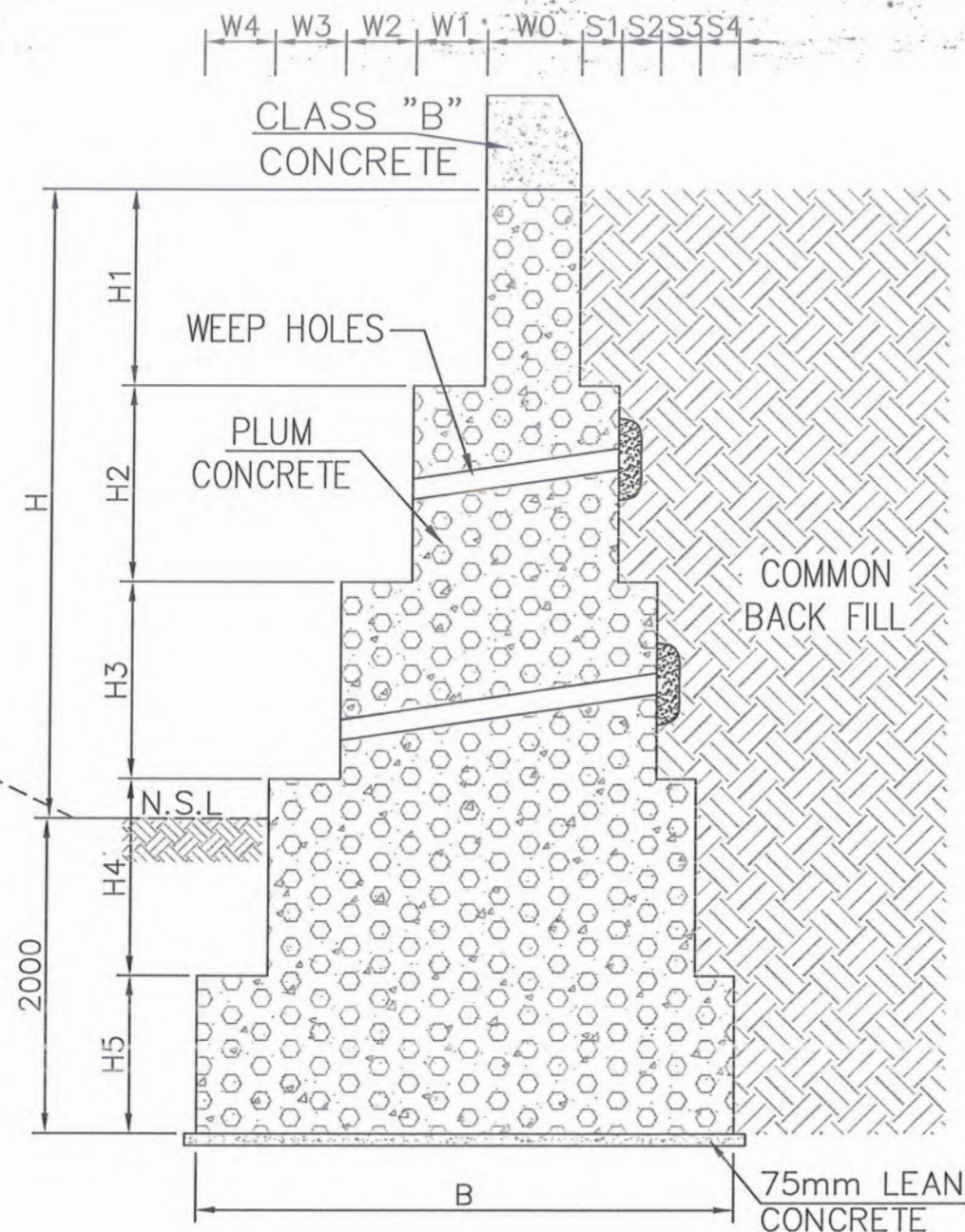


SECTION D-D
PIPE CULVERT DIA = 310mm
WING WALL X-SECTION

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024	TENDER DRAWINGS	DESIGNED M. FAIZAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	PACKAGE-3	Ø310 mm TYPICAL PIPE CULVERT SECTION DETAILS
		a			DRAWN MUSHTAQ		LOT-2	
		b			CHECKED M. ISLAM			
		c			APPROVED GULFAM SHAHZAD			DWG NO:CEC/KPRRDP/STR/STR-3d

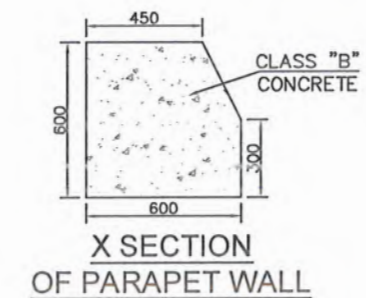


PLUM RETAINING WALL

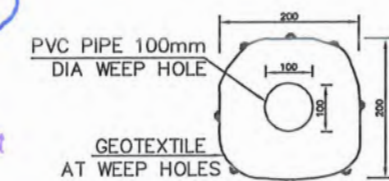
RETAINING WALL DIMENSIONS												1 Ts _f =107.2 kPa
H	H1	H2	H3	H4	H5	W0	B	W1 S1	W2 S2	W3 S3	W4 S4	BEARING PRESSURE (Kpa)
1000	1500	1500				600	1300	450 250				143
2000	1250	1250	1500			600	2000	450 250	450 250			145
3000	1250	1250	1250	1250		600	2700	450 250	450 250	450 250		150
4000	1250	1250	1250	1250	1000	600	3400	450 250	450 250	450 250	450 250	158

NOTES

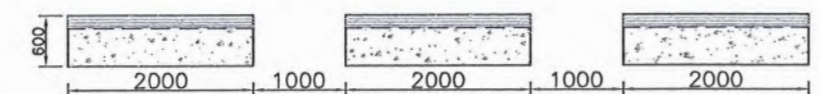
1. WEEP HOLES PVC PIPE 100mm DIA SHALL BE STAGGERED AT AN INTERVAL OF 1500mm VERTICAL AND HORIZONTAL AND AS ADDITIONALLY DIRECTED BY THE ENGINEER.
2. THE SLOPE OF WEEP HOLES SHALL BE 1 IN 8 FROM BACK OF THE WALL TO THE OUTER FACE OR AS DIRECTED BY THE ENGINEER.
3. PLUM CONCRETE IN 3:2 (3 PARTS CONCRETE CLASS 'B' & 2 PART ROCK FILL MATERIAL) HAVING STONE SIZE RANGING BETWEEN 200~300) BE UTILIZED.
4. PCC PARAPET SHALL BE PROVIDED AT TOP OF RETAINING WALL AND AT OTHER HAZARDOUS LOCATIONS, GUARD RAIL SHALL BE PROVIDED OVER 4m HIGH FILL OR AS DIRECTED BY THE ENGINEER.
5. SAFE BEARING CAPACITY MENTIONED IN THE TABLE SHOULD BE ACHIEVED PRIOR TO CONSTRUCTION AT SITE. IF LESS IT SHOULD BE COMMUNICATED TO THE ENGINEER
6. AFTER 10m LENGTH CONSTRUCTION JOINT SHOULD BE PROVIDE.
7. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
8. MINIMUM 28 DAYS CYLINDER COMPRESSIVE STRENGTH OF CONCRETE IN FOOTING SHOULD BE 210 Kg/cm² (3000 Psi)
9. NSL SHOULD BE AT LEAST 2m ABOVE THE BOTTOM OF FOOTING ON THE OUTER SIDE OF PLUM RETAINING WALL.
10. ALL SUB-STRUCTURE FOOTING SHALL BE SUBJECTED TO APPROVAL BY THE ENGINEER.
ALL ELEVATION SHOWN ARE ESTIMATED AND SUBJECTED TO CHANGE TO SUIT FILL CONDITION.
11. COMPACTION OF FILL MATERIAL (AS PER SPECIFICATION BY JETTING OR PONDING WITH WATER IS NOT PERMITTED. EACH LAYER OF FILL, MAXIMUM 200mm IN THICKNESS, SHALL BE MOISTENED AS REQUIRED. (OPTIMUM MOISTER CONTENT FROM STANDARD PROCTOR TEST) AND THOROUGHLY TEMPERED OR OTHERWISE COMPACTED TO MINIMUM OF 95% COMPACTION (STANDARD PROCTOR TEST).



**X SECTION
OF PARAPET WALL**



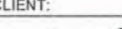
**WEEP HOLE DETAIL
(TYPICAL)**

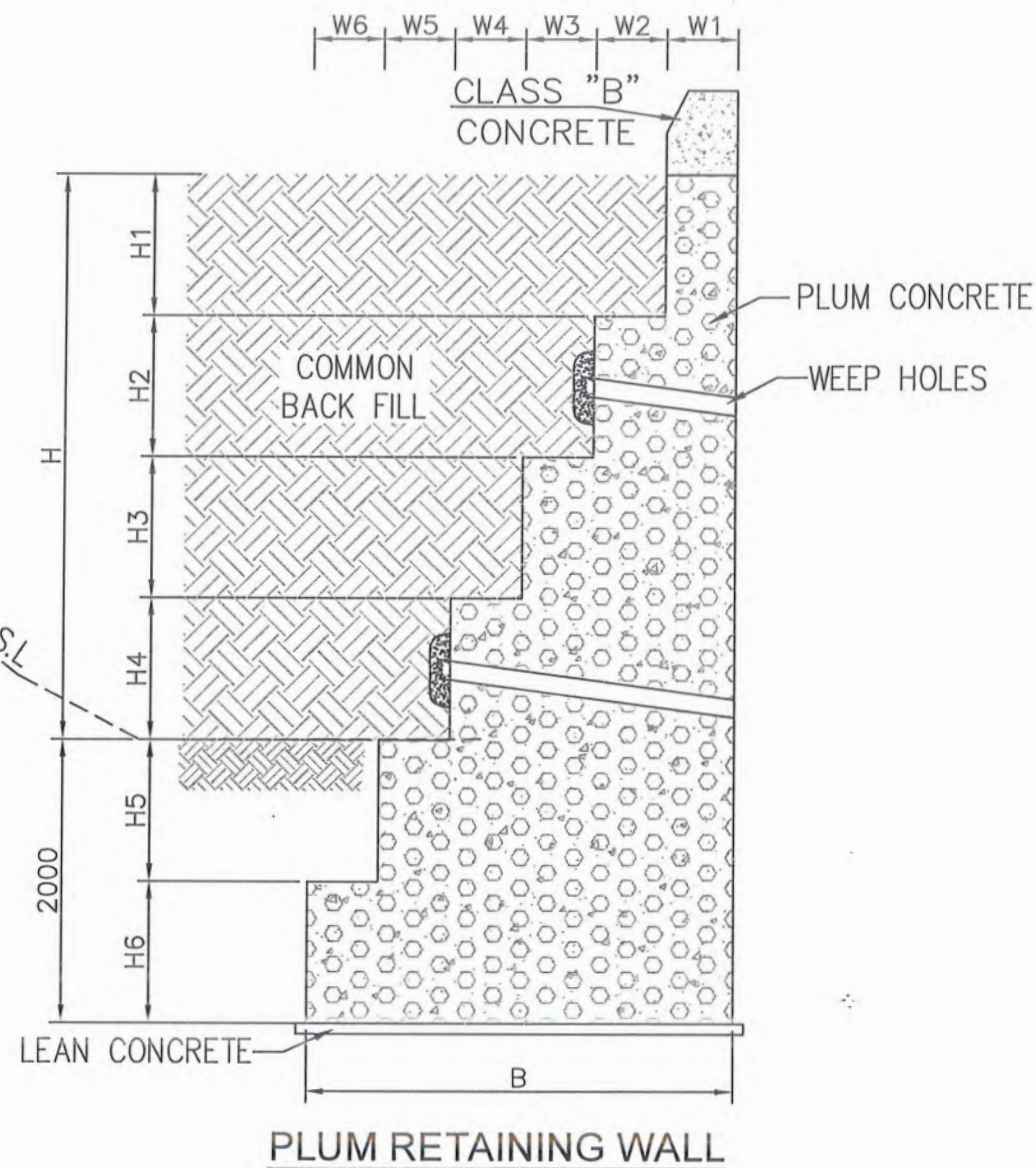


TYPICAL PLAN OF PARAPET WALL

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

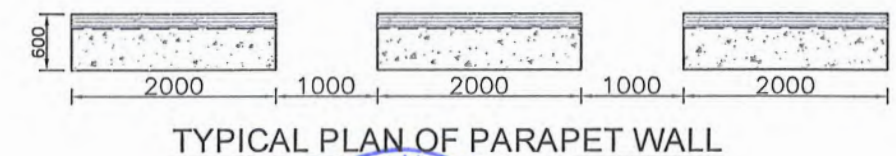
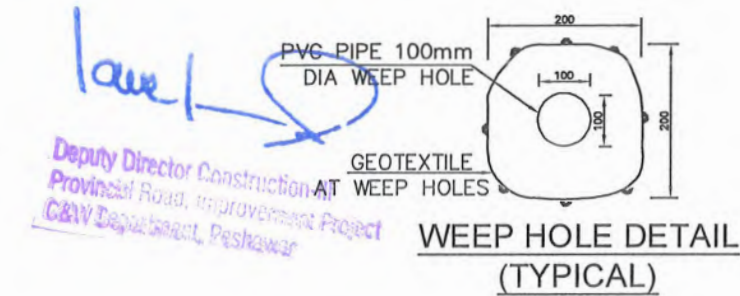
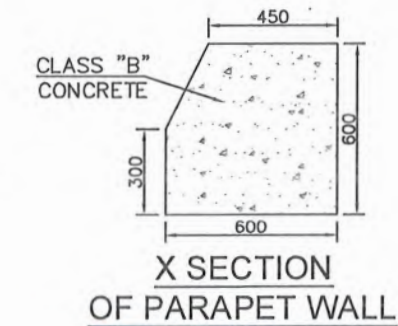


CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION		NAMES:		PROJECT:		SCALE:		SHEET CONTENT:	
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024	TENDER DRAWINGS		DESIGNED	M.FAIZAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	PACKAGE-3	LOT-2	N.T.S	DETAIL OF PLUM CONCRETE RETAINING WALL			
			a			DRAWN	MUSHTAQ	DATE:								
			b			CHECKED	M.ISLAM	SEP, 2024.								
			c			APPROVED	GULFAM SHAHZAD					DWG NO:CEC/KPRRDP/STR/SRT-05b				

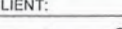
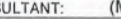
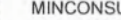


NOTES

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RETAINING WALL DIMENSIONS													1 Tsf=107.2 kPa	
H	H1	H2	H3	H4	H5	H6	W1	W2	W3	W4	W5	W6	B	BEARING PRESSURE (Kpa)
2000	1000	1500	1500				750	750	750				2250	188.3
3000	1000	1500	1500				750	750	750	750			3000	223
4000	1500	1500	1500	1500			750	1000	1000	1000			3750	257
5000	1000	1500	1500	1500	1500		750	1200	1200	1200	1200		5550	260
6000	1000	1000	1500	1500	1500	1500	750	1070	1070	1070	1070	1070	6100	299

CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION		NAMES:		PROJECT:		SCALE:	SHEET CONTENT:	
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024	TENDER DRAWINGS		DESIGNED	M.FAIZAN	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	 PACKAGE-3 LOT-2		N.T.S	DETAIL OF PLUM CONCRETE RETAINING WALL			
		a			DRAWN	MUSHTAQ	DATE:								
		b			CHECKED	M.ISLAM	SEP, 2024.				DWG NO:CEC/KPRRDP/STR/SRT-05c				
		c			APPROVED	GULFAM SHAHZAD									

PROJECT:

**KHYBER PAKHTUNKHWA
RURAL ROAD DEVELOPMENT PROJECT
(KP-RRDP)**

Handwritten signature

Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Peshawar

TENDER DRAWINGS

**N-KRK-R2
TAKHA NASRATI BRIDGE TO KHADDA
BANDA VIA BHOGARA CULVERT ROSE
BAIG KHAIL KALAH**

SEP, 2024.



**GOVERNMENT OF KHYBER
PAKHTUNKHWA**

**COMMUNICATION & WORKS
DEPARTMENT
PROJECT IMPLEMENTATION UNIT (PIU)**



MINCONSULT SDN BHD
(Company No : 58835-P)



CREATIVE ENGINEERING CONSULTANTS
CREATIVE HOUSE, PHASE 3 CHOWK MAIN JAMRUD ROAD,
PESHAWAR.

SR.NO	TITLE	DWG NO.	SR.NO	TITLE	DWG NO.
1	TITLE PAGE		30		
2	LIST OF DRAWINGS	CEC/RRDP/HW/RRD-KRK-R3/LD-01			
3	PROJECT LOCATION MAP				
4	GENERAL & TYPICAL DRAWINGS				
5	SYMBOLS & ABBREVIATIONS	CEC/RRDP/HW/RRD-KRK-R3/SA-03(a&b)			
6	GENERAL NOTES FOR ROAD CONSTRUCTION	CEC/RRDP/HW/RRD-KRK-R3/GN-04			
7	TYPICAL MINOR ROAD JUNCTION	CEC/RRDP/HW/RRD-KRK-R3/MJD-05 (a-b)			
8	TYPICAL SUPER ELEVATION DETAILS	CEC/RRDP/HW/RRD-KRK-R3/SE-06			
9	TRAFFIC SIGNS DETAILS	CEC/RRDP/HW/RRD-KRK-R3/TSD-07 (a-g)			
10	PAVEMENT MARKING DETAILS	CEC/RRDP/HW/RRD-KRK-R3/PM-08			
11	KILOMETER POST DETAILS	CEC/RRDP/HW/RRD-KRK-R3/KM-09			
12	GUARD RAIL DETAILS	CEC/RRDP/HW/RRD-KRK-R3/GR-10			
13	TYPICAL CROSS SECTIONS				
14	TYPICAL CROSS SECTIONS	CEC/RRDP/HW/RRD-KRK-R3/TCS-01			
15	CENTER LINE DATA				
16	CENTER LINE DATA	CEC/RRDP/HW/RRD-KRK-R3/CL-01-02			
17	HORIZONTAL CURVE DATA				
18	HORIZONTAL CURVE DATA	CEC/RRDP/HW/RRD-KRK-R3/HCD-01			
19	LIST OF CULVERTS	CEC/RRDP/HW/RRD-KRK-R3/CVT-01			
20	BENCH MARK DATA	CEC/RRDP/HW/RRD-KRK-R3/BM-01			
21					
22	PLAN & PROFILE DRAWINGS				
23	PLAN & PROFILE DRAWINGS	CEC/RRDP/HW/RRD-KRK-R3/P&P-01-17			
24	STRUCTURAL DRAWINGS				
25	TYPICAL BOX CULVERT	CEC/RRDP/STR/RRD-KRK-R3/STR-01-04			
26	TYPICAL PLUM-RETAINING WALL	CEC/RRDP/STR/RRD-KRK-R3/STR-09			
27	TYPICAL SIDE DRAIN	CEC/RRDP/STR/RRD-KRK-R3/STR-11			
28	TYPICAL PIPE CULVERT	CEC/RRDP/STR/RRD-KRK-R3/STR-10a-c			
29					

Law

Deputy Director Construction-III
Provincial Road Development Project
C&W Department, Peshawar



CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings	G.DESIGNED TANZEEL	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHA NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH FLOOD AFFECTED ROAD	N.T.S	LIST OF DRAWINGS DWG NO: CEC/KP-RRDP/HW/N_KRK_R2/ LD - 01
		a			DRAWN MUSTAFA			DATE:	
		b			CHECKED SHAHZAD DURRANI			SEP, 2024.	
		c			APPROVED AQEEL YOUNIS				

DESIGN CENTERLINE

PROPOSED RIGHT OF WAY

TOE OF PROPOSED EMBANKMENT

EXISTING ROAD EDGE

GARDEN / TREES

BUSHES

MOSQUE

BUILT-UP AREA (BUILDING/HOUSE)

HUT / MUD HOUSE (KACHA)

GRAVES / GRAVE YARD

LIMIT OF AGRICULTURAL FIELDS

H.T / L.T POWER TRANSMISSION LINE

500 KV TRANSMISSION LINE

TELEPHONE / TELEGRAPH LINE

EXISTING KATCHA TRACK

DYKE

NORTH

TRAVERSE POINT

BENCH MARK

TUBE WELL / WELL

EXISTING EMBANKMENT SLOPE

POINT OF INTERSECTION

CAUSEWAY (IN PLAN)

PARAPET WALL

RETAINING WALL

DEPRESSION / DITCH / POND

RIVER / NULLAH

STONE MASONRY SIDE WALL

EXISTING/PROPOSED BOX
CULVERT (IN PLAN)

PIPE CULVERT (IN PLAN)

EXISTING/PROPOSED BRIDGE
(IN PLAN)

BRICK WALL / BOUNDARY WALL

BOX CULVERT (IN PROFILE)

PIPE CULVERT (IN PROFILE)

EXISTING GROUND LEVEL (N.S.L)
AT DESIGN CENTRELINE

FORMATION ROAD LEVEL (F.R.L)

SUB GRADE LINE (S.G.L)
AT DESIGN CENTRELINE

BRIDGE (IN PROFILE)

EXISTING CULVERT SIZE

EXISTING CULVERT EXTENSION
TO LEFT (L) RIGHT (R)WATER COURSE (EXISTING)
(LINED)

WATER COURSE (UNLINED)

RELOCATED WATER COURSE

GRID CORNER

GROUTED RIPRAP

LOOSE RIPRAP

RAILWAY LINE

ROAD SIGN (IN PLAN)

CAUSEWAY (IN PROFILE)

P. WALL

R. WALL

S. WALL

EXIS.

EXT. ()

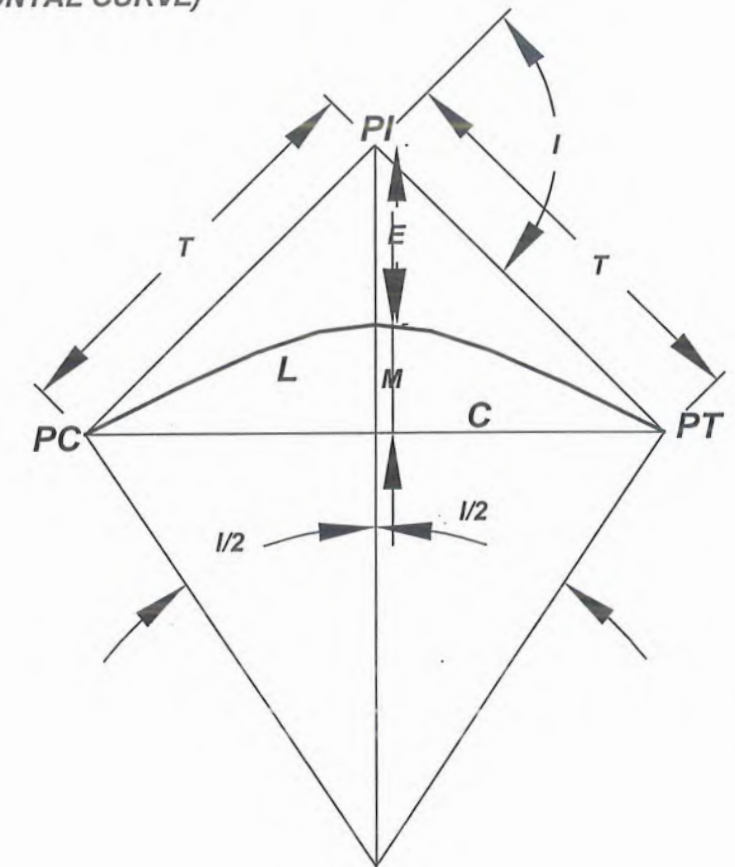
ROAD SIGN NUMBER
No.

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

CLIENT:		DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:	
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP. 2024.	Tender Drawings	G.DESIGNED	TANZEEL	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	TAKHA NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAL KALAH	N.T.S	SYMBOLS & ABBREVIATOIN	
				a			DRAWN	MUSTAFA			DATE:		
				b			CHECKED	SHAHZAD DURRANI		FLOOD AFFECTED ROAD	SEP. 2024.		DWG NO: CEC/KP-RRDP/HW/N_KRK_R2/ SA - 03a
				c			APPROVED	AQEEL YOUNIS					

A	AREA
B	BREADTH
BC	REINFORCED CONCRETE BOX CULVERT
B.M	BENCH MARK
BOP	BEGINNING OF PROJECT
C	CHORD LENGTH
C.B.R	CALIFORNIA BEARING RATIO
C/C	CENTER TO CENTER
CHD	CHECKED
C/L	CENTER LINE
CM	CENTIMETER
CONC	CONCRETE
CONST/JT	CONSTRUCTION JOINT
CUL	CULVERT
Cu.m	CUBIC METER
CURVE LEN	VERTICAL CURVE LENGTH
D	DEPTH
Da	DEGREE OF CURVE (BY ARC)
Dc	DEGREE OF CURVE (BY CHORD)
DEG	DEGREE
DIA	DIAMETER
DIM	DIMENSION
D/S	DOWNSTREAM
D.S.T	DOUBLE SURFACE TREATMENT
DRG	DRAWING
E	EASTING , EAST
E	EXTERNAL DISTANCE (SHIFT)
ELEV./EL	ELEVATION
EOP	END OF PROJECT
EXIS	EXISTING
EXT/JT	EXPANSION JOINT
F.R.L	FORMATION ROAD LEVEL
G.I	GALVANIZED IRON
H	HORIZONTAL
H.T/L.T	HIGH TENSION/LOW TENSION
HF	HEIGHT OF FILL
HWY	HIGHWAY
I	DEFLECTION ANGLE (HORIZONTAL CURVE)
Ic	CIRCULAR DEFLECTION ANGLE
I.L	INVERT LEVEL
K	K-FACTOR (VERTICAL CURVE)
Kg	KILOGRAM
KM/km	KILOMETER
L	LENGTH OF HORIZONTAL CURVE
LIN.M	LINEAR METER
LHS	LEFT HAND SIDE
LT	LEFT
M/m	METER
M	MIDDLE ORDINATE
MAX	MAXIMUM
M.H	MAN HOLE
MIN	MINIMUM
MM	MILLIMETER

MSE	CROSS SLOPE AT MAXIMUM SUPERELEVATION
N	NORTHING, NORTH
No	NUMBER
N.T.S	NOT TO SCALE
NSL	NATURAL SURFACE LEVEL
PROP:	PROPOSED
PC	POINT OF HORIZONTAL CURVATURE (START OF HORIZONTAL CURVE)
PC	REINFORCED CONCRETE PIPE CULVERT
PGL	PROFILE GRADE LINE
PI	POINT OF HORIZONTAL INTERSECTION
PR	POINT OF ROTATION
PT	POINT OF HORIZONTAL TANGENCY (END OF HORIZONTAL CURVE)
P.C.C	PLAN CEMENT CONCRERE
R	RADIUS OF HORIZONTAL CURVE
R.C.C	REINFORCED CONCRETE
REINF	REINFORCEMENT
REV	REVISION
RHS	RIGHT HAND SIDE
R.O.W	RIGHT OF WAY
R.R	RIP RAP
RT	RIGHT
R/W	RETAINING WALL
RWC ()	RELOCATION WATER COURSE (TYPE)
S.G.L	SUB GRADE LEVEL
S	SLOPE GRADIENT (PERCENT)
SE	SUPERELEVATION
S.B.P	SHOULDER BREAK POINT
SC	SLAB CULVERT
SHLD	SHOULDER
Sq.m	SQUARE METER
STA./STA	STATION
STRUCT	STRUCTURE
S'WALL	SIDE WALL
T	TANGENT LENTH OF HORIZONTAL CURVE
T.D	TOE DITCH
T.S.T	TRIPPLE SURFASE TREATMENT
TAN	TANGENT
TH	THICKNESS
TR	TRANSITION
TR	(TANGENT RUN OUT) = DISTANCE FROM BS TO THE PC
TYP	TYPICAL
U/S	UPSTREAM
V	VERTICAL
VAR	VARIABLE
VER	VERIFIED
VPC	VERTICAL POINT OF CURVATURE (START OF VERTICAL CURVE)
VPI	VERTICAL POINT INTERSECTION OF PROFILE GRADE.
VPT	VERTICAL POINT OF TANGENCY (END OF VERTICAL CURVE)
W	WEST,WIDTH OF ROADWAY
W.B.M	WATER BOUND MACADAM
WC	WATER COURSE
Ø	SKEW ANGLE

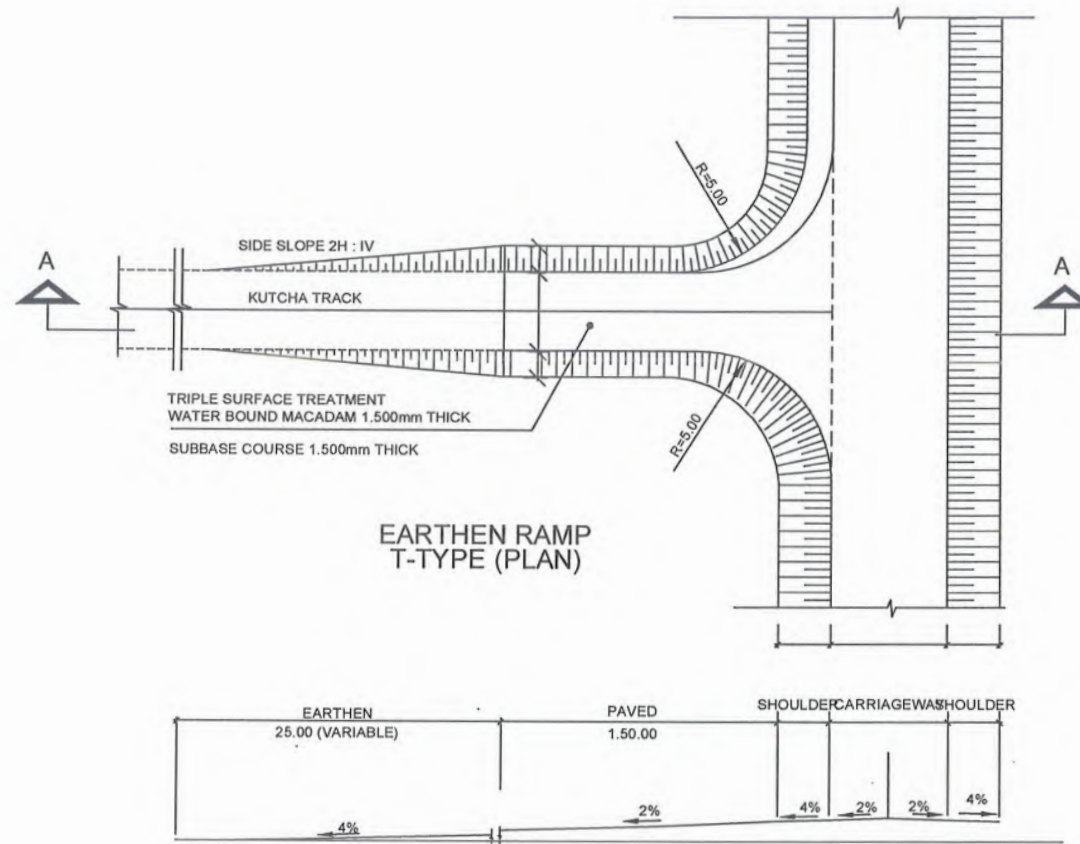


Lawal
Deputy Director Construction-III
Provincial Road Development Project
C&W Department, Peshawar



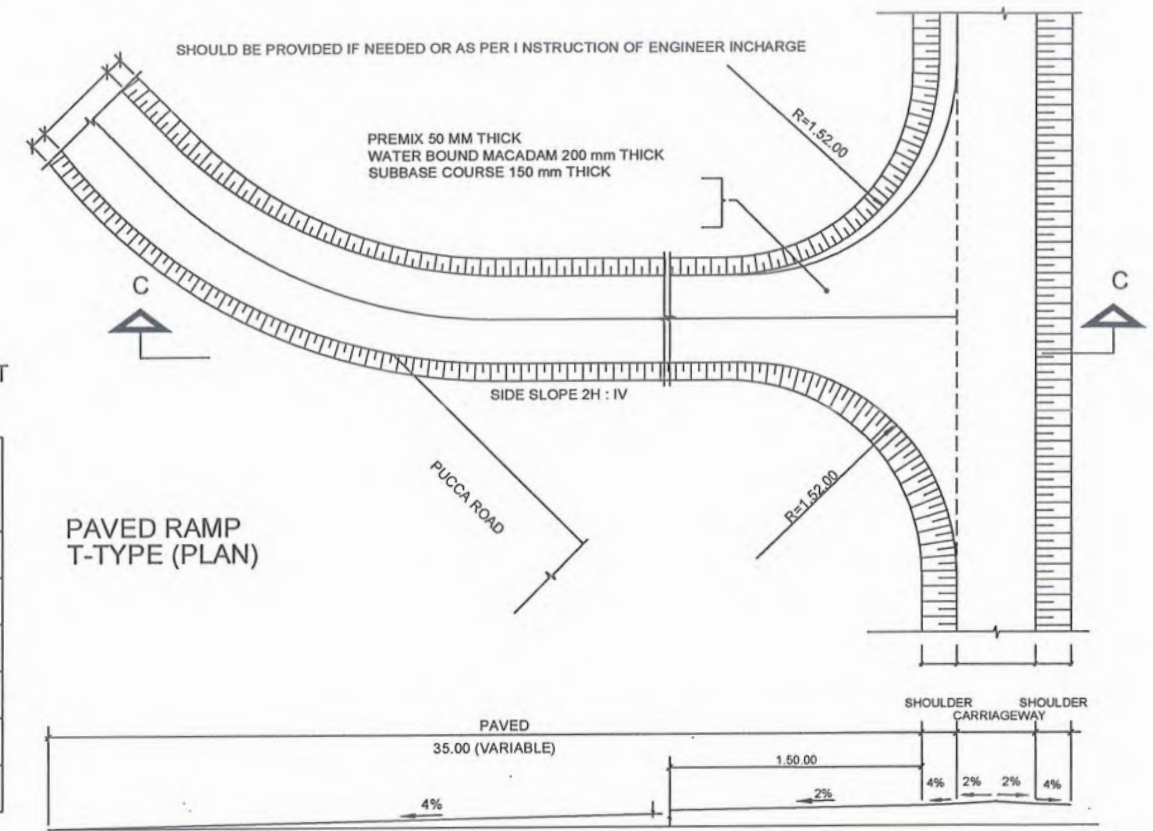
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		a			DRAWN MUSTAFA				
		b			CHECKED SHAHZAD DURRANI				
		c			APPROVED AQEEL YOUNIS				
							FLOOD AFFECTED ROAD	SEP, 2024.	DWG NO: CEC/KP-RRDP/HWN_KRK_R2/ SA - 03b

MINOR JUNCTION DETAIL

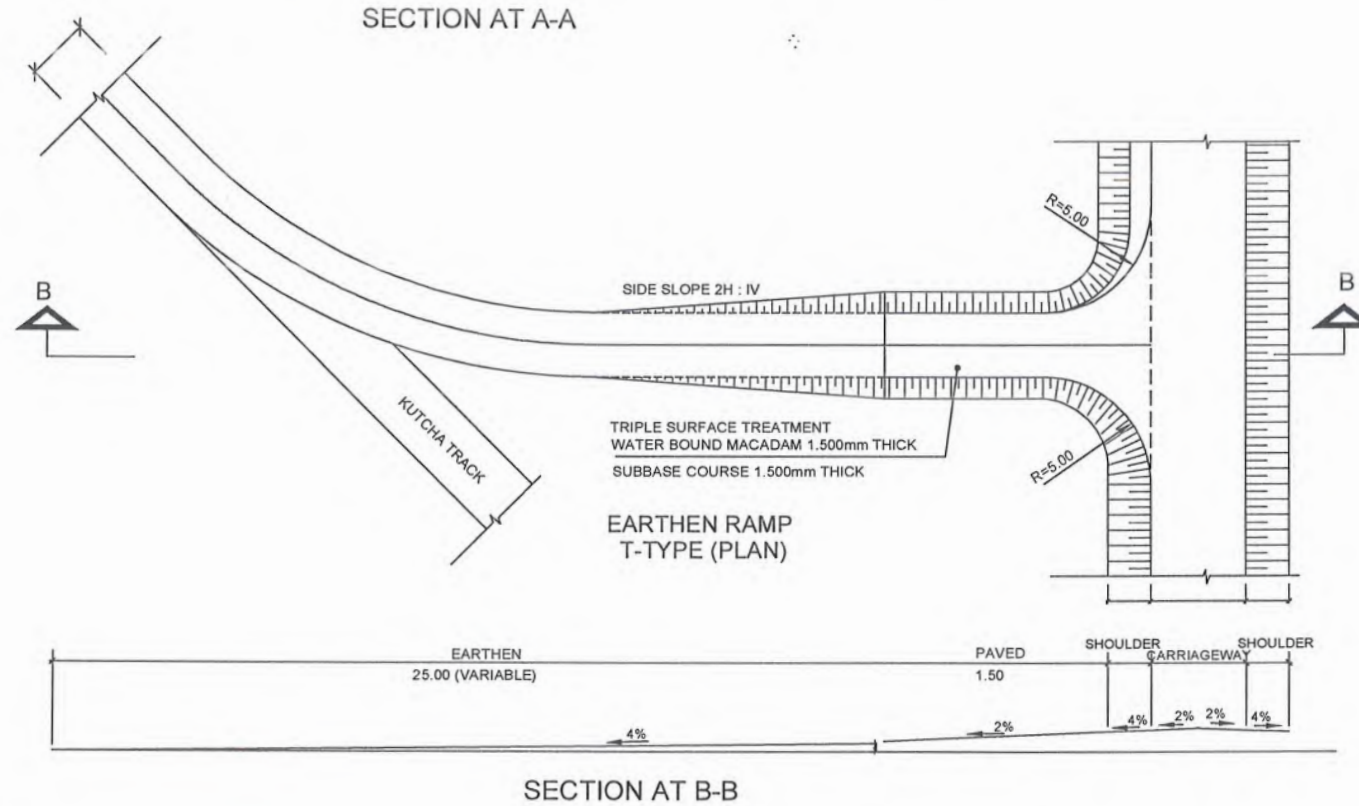


RECOMMENDED CURVE RADII FOR DIFFERENT ANGLES OF TURN

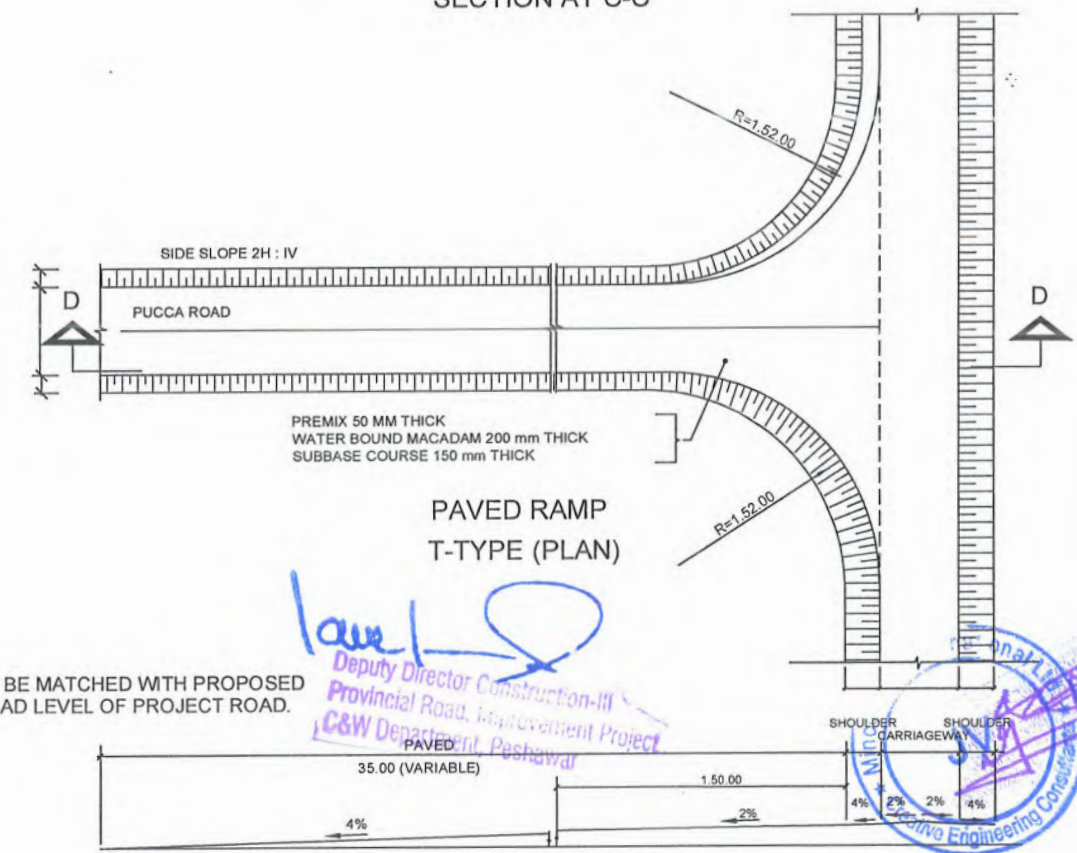
ANGLE OF TURN (DEGREES)	SIMPLE CURVE RADIUS (R) (METRES)
30	30
45	23
60	1.58
75	1.56
90	1.52 TO 1.55
>90	VARIABLE



SECTION AT C-C



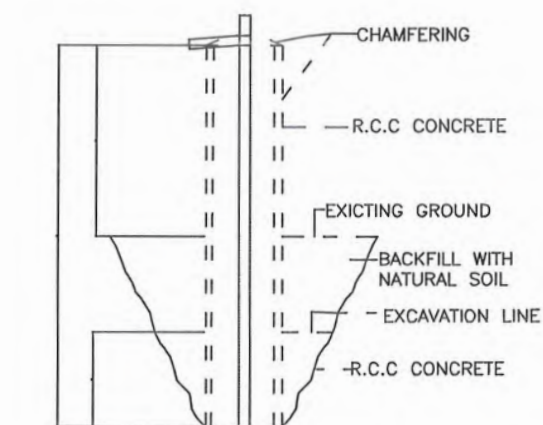
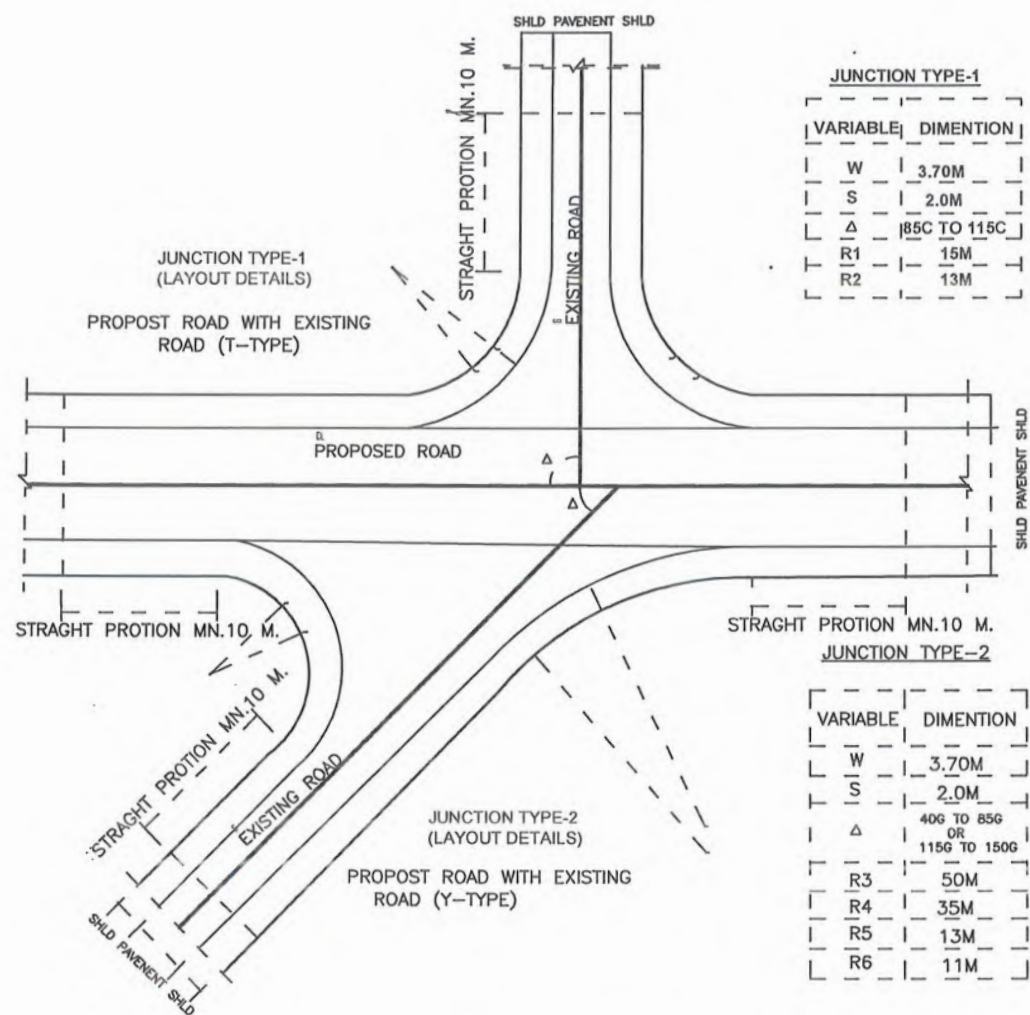
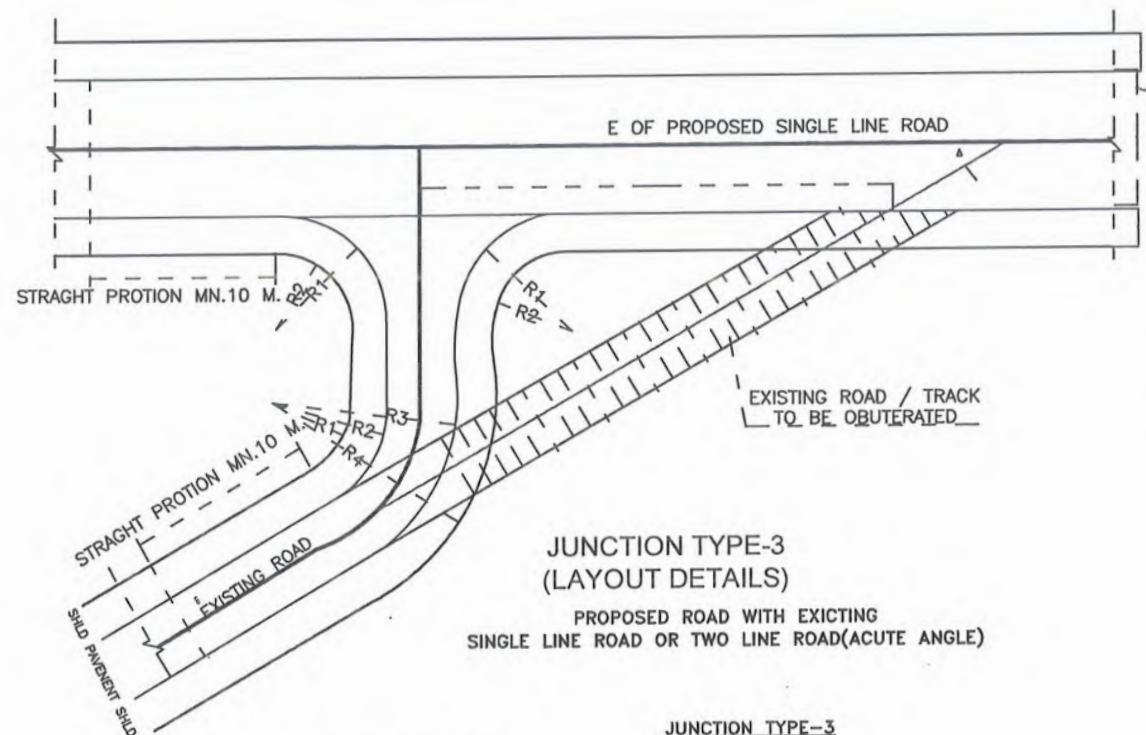
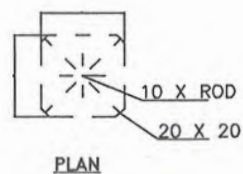
NOTE:
1.5- RAMPs ARE TO BE MATCHED WITH PROPOSED FINISHED ROAD LEVEL OF PROJECT ROAD.



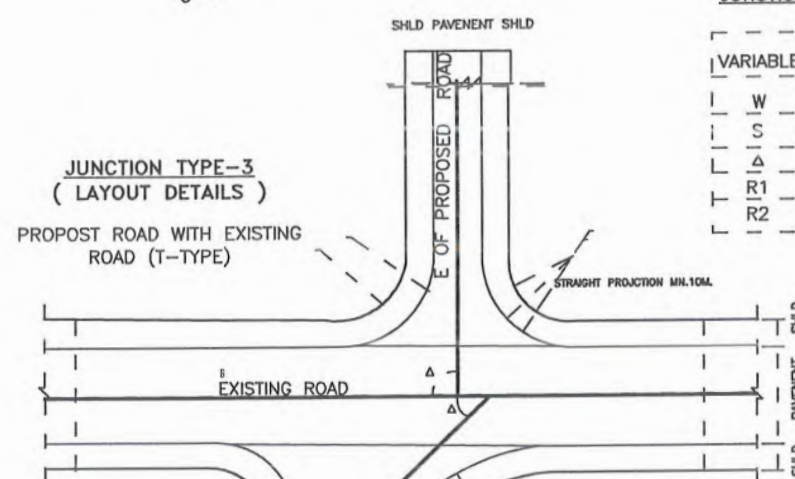
SECTION AT D-D

CLIENT:	DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings	G.DESIGNED	TANZEEL	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHA NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH	N.T.S	MINOR JUNCTION DETAILS	
		a			DRAWN	MUSTAFA					
		b			CHECKED	SHAHZAD DURRANI					
				c			APPROVED	AQEEL YOUNIS		FLOOD AFFECTED ROAD	SEP, 2024.

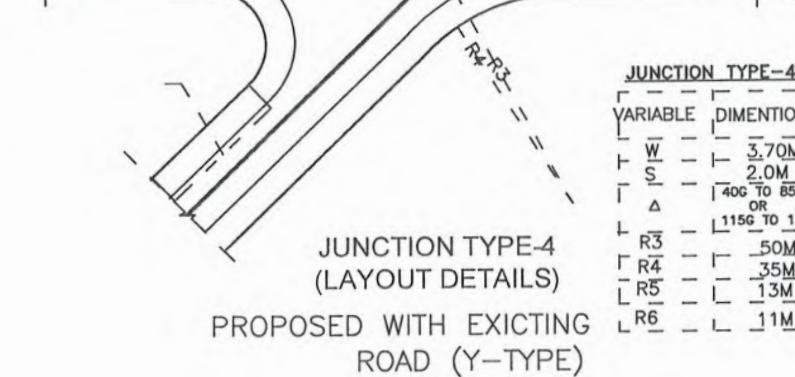
MINOR JUNCTION DETAIL

ELEVATION
(RIGHT OF WAY MARKER)

JUNCTION TYPE-3 (LAYOUT DETAILS)



JUNCTION TYPE-3
(LAYOUT DETAILS)



✓ JUNCTION TYPE-4
(LAYOUT DETAILS)
PROPOSED WITH EXISTING
ROAD (Y-TYPE)

JUNCTION TYPE-1	
VARIABLE	DIMENTION
W	3.70M
S	2.0M
Δ	185C TO 115C
R1	15M
R2	13M

VARIABLE	DIMENTION
W	3.70M
S	2.0M
Δ	40G TO 85G OR 115G TO 150G
R3	50M
R4	35M
R5	13M
R6	11M

JUNCTION TYPE-3	
VARIABLE	DIMENTION
W	3.70M
S	2.0M
Δ	85C TO 115C
R1	15M
R2	13M

JUNCTION TYPE-4	
VARIABLE	DIMENTION
W	3.70M
S	2.0M
Δ	40C TO 85C OR 115G TO 150G
R3	50M
R4	35M
R5	13M
R6	11M

TABLE NO.5 APPLICABLE WHEN
1 <50G OR >150G
(JUNCTION WITH 2 LINE
ROAD)(2) 40G OR 160G)
JUNCTION WITH SINGLE ROAD)

VARIABLE	DIMENSION FOR JUSTIFICATION SINGLE LINE
3.70M	3.70M
W	3.70M
S	2.0M
R1	15M
R2	13M
R3	25M
R4	27M

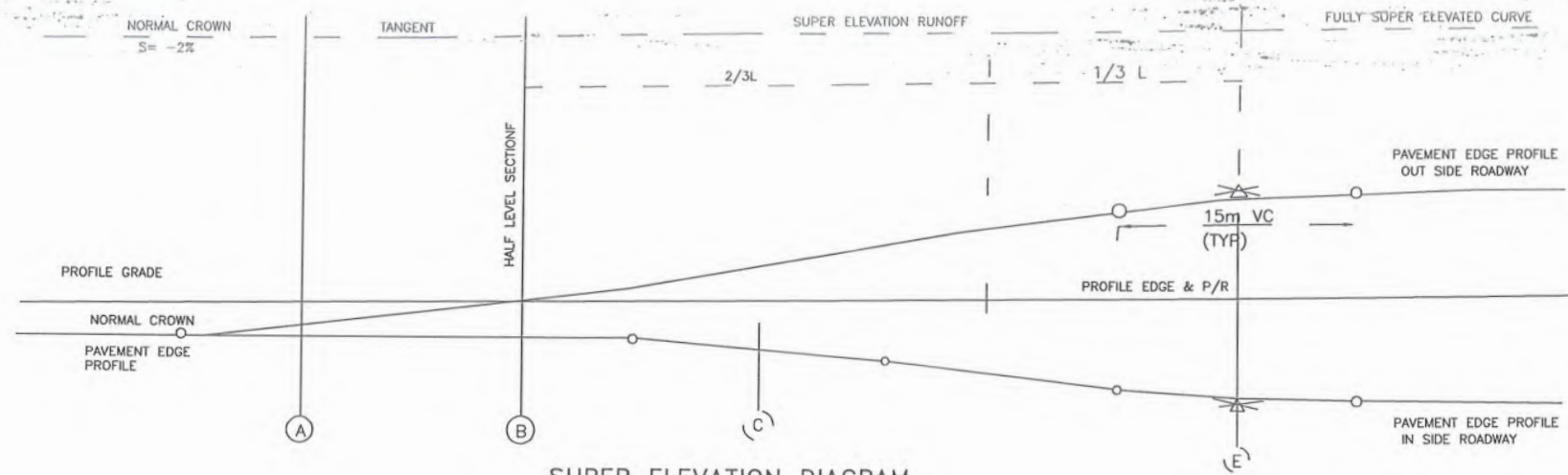
Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

NOTES :

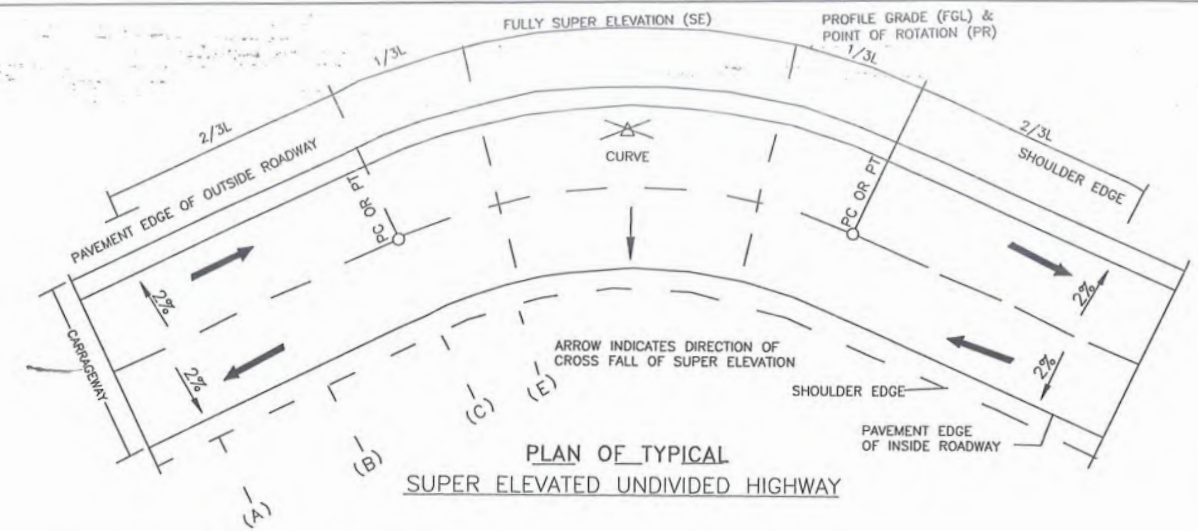
1. EXISTING ROAD TO BE DISMANTLED WHERE IT MEETS PROPOSED ROAD AT THE JUNCTION LOCATION ONLY AND WILL BE RECONSTRUCTED ACCORDING TO JUNCTION DETAIL AND LIMITS.
2. ON JUNCTION MIN. 10 METER STRAIGHT PORTION SHOULD BE PROVIDED.
3. RAD# SHOWN ARE TYPICAL AND MAY BE ADJUSTED AS PER SITE CONDITIONS AS APPROVED BY THE ENGINEER.
4. ALL DIMENSIONS ARE IN MILLI-METER UNLESS OTHERWISE SPECIFIED.



CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings	G.DESIGNED	TANZEEL	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	TAKHA NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH	N.T.S	MINOR JUNCTION DETAILS			
		a			DRAWN	MUSTAFA							
		b			CHECKED	SHAHZAD DURRANI							
		c			APPROVED	AQEEL YOUNIS							
										FLOOD AFFECTED ROAD	SEP, 2024.	DWG NO: CEC/KP-RRDP/HWN_KRK_R2/ MJD - 058	



SUPER ELEVATION DIAGRAM ON SIMPLE RIGHT AND CURVES



COMPUTATION OF SUPER ELEVATION

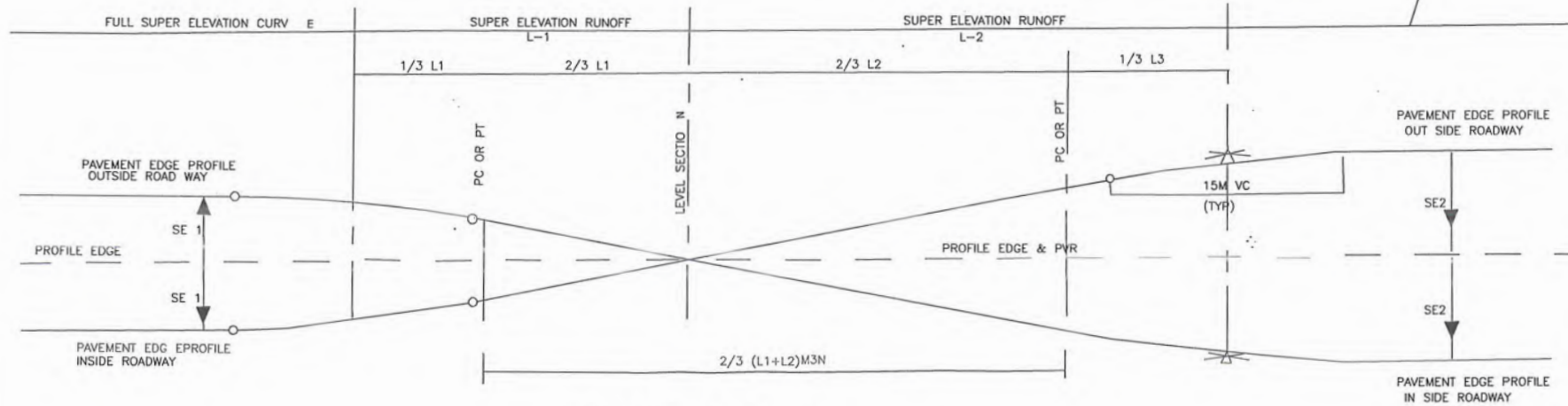
RADIUS	40 KPH		60 KPH	
	SE (m/m)	L (m/m)	SE (m/m)	L (m/m)
950				
900				
850	NC			
800	NC			
750	RC			
700	RC			
650	RC			
600	RC			
550	0.020	10	NC	
500	0.021	10	NC	
460	0.022	11	RC	
400	0.023	12	RC	
350	0.027	15	RC	
300	0.030	15	0.020	10
250	0.033	17	0.023	12
200	0.036	19	0.027	13
100	0.047	25	0.037	18
90	0.050	26	0.039	19
80	0.052	27	0.040	19
70	0.054	28	0.042	20
60	0.056	29	0.044	21
50	0.057	30	0.048	23
40	0.060	31	0.052	25
30			0.057	28
21			0.060	29

ROADWAY WIDENING

RADIUS (M)	SE (m/m)	L(M)	W(M)
15.00	0.06	32.00	1.20
20.00	0.060	32.00	1.20
25.00	0.060	32.00	1.20
10.00	0.060	32.00	1.20
35.00	0.060	32.00	1.20
40.00	0.060	32.00	1.20
45.00	0.060	32.00	1.20
15.00	0.060	32.00	1.20
55.00	0.060	32.00	1.20
60.00	0.060	32.00	1.20
70.00	0.060	32.00	1.20

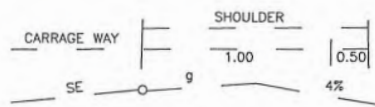
RADIUS (M)	SE (m/m)	L(M)	W(M)
80.00	0.060	32.00	1.00
90.00	0.060	32.00	0.80
100.00	0.060	32.00	0.80
120.00	0.060	32.00	0.60
150.00	0.060	32.00	0.60
200.00	0.058	30.00	—
300.00	0.050	25.00	—
400.00	0.043	22.00	—
500.00	—	—	—
600.00	—	—	—
700.00	—	—	—

FULLY SUPER ELEVATION CURVE



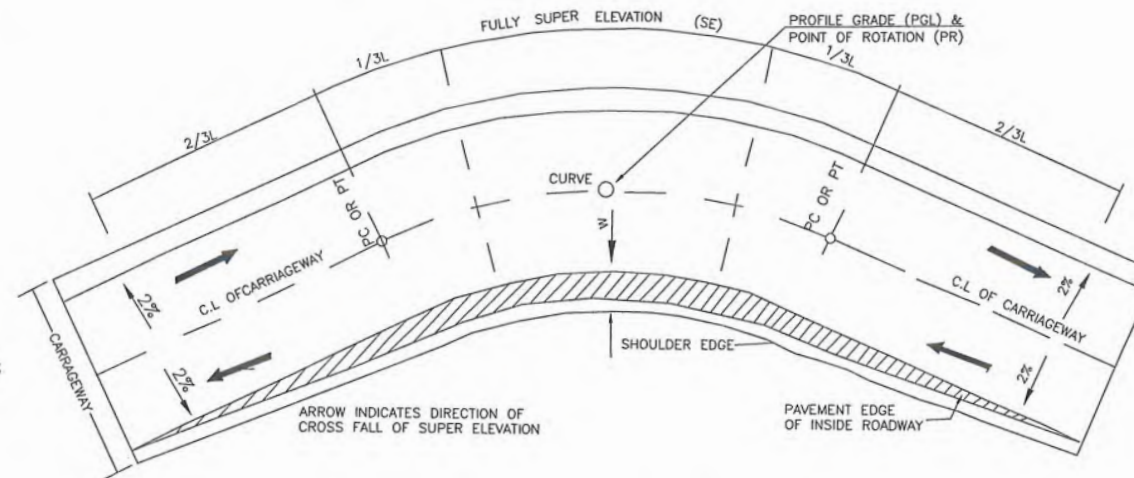
SUPER ELEVATION DIAGRAM ON REVERSE CURVES

SHOULDER	CARRIAGEWAY	SHOULDER
-4%	-2%	-4%
-4%	0%	-4%
-3%	+2%	-4%
-2%	+2%	-4%
-1%	+3%	-4%
+0%	+4%	-4%
+1%	+5%	-3%
+2%	+6%	-4%



CROWNING AND ROUNDING OF OUTER SHOULDER WHERE > 4%

1. ROLL OVER ALGEBRAIC DIFFERENCE SE AND NORMAL SHOULDER SLOPE i.e. 4% AT PAVEMENT EDGE NOT TO BE EXCEED 6%.
2. WHERE THE DIFFERENCE EXCEED 6% THE ABOVE CROWNING OF SHOULDERS SHOULD BE USED WITH $g = (6 - SE)\%$



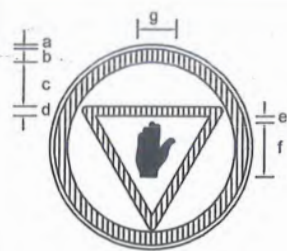
ROAD WIDENING AND SUPER ELEVATED UNDIVIDED HIGHWAY

laul

Deputy Director Construction-III
Provincial Road Development Project
C&W Department, Peshawar

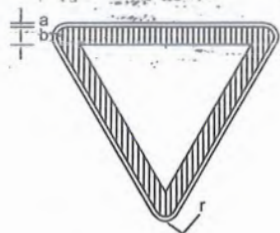


CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings	G.DESIGNED TANZEEL	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHA NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH	N.T.S	SUPER ELEVATION DETAILS
		a			DRAWN MUSTAFA			DATE:	
		b			CHECKED SHAHZAD DURRANI				
		c			APPROVED AQEEL YOUNIS		FLOOD AFFECTED ROAD	SEP, 2024.	
									DWG NO: CEC/KP-RRDP/HWN_KRK_R2/ SE - 06



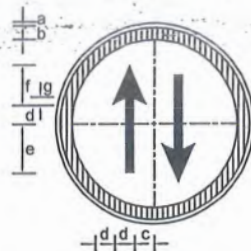
STOP SIGN
R-1

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	16.0	18.70
d	5.5	6.4
e	3.5	4.1
f	30.0	35.0
g	18.5	21.60



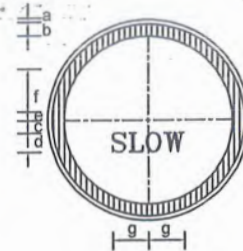
GIVE WAY SIGN
R-2

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
r	3.5	4.1



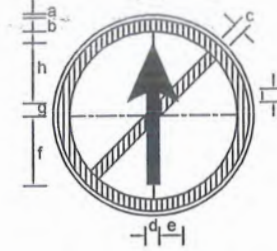
PRIORITY ROAD
SIGN R-3

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	10.5	12.20
d	7.0	8.2
e	26.0	30.3
f	19.0	22.2
g	2.0	2.3



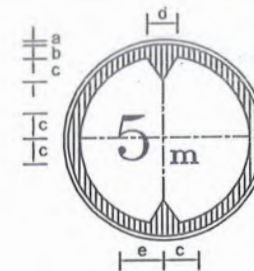
SLOW SIGN
R-4

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	14.5	16.9
e	2.0	2.3
f	24.5	28.6
g	27.6	31.5



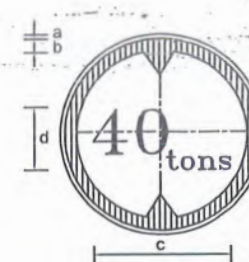
NO ENTRY SIGN
R-6

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	8.0	9.3
e	9.0	10.5
f	30.5	35.6
g	7.0	8.2
h	23.5	27.4
i	4.5	5.2



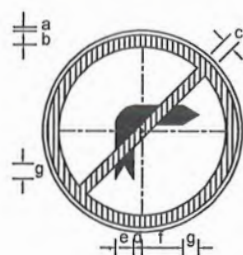
HEIGHT LIMIT SIGN
R-16

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	16.5	19.2
d	26.0	30.3
e	20.0	23.3



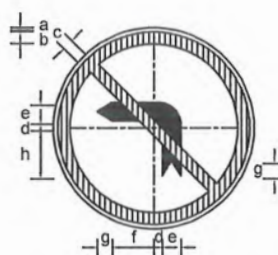
GROSS WEIGHT LIMIT SIGN
R-18

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	49.0	57.2
d	40.0	46.7



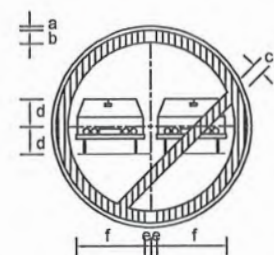
NO RIGHT TURN SIGN
R-20

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	6.0	7.0
e	10.0	11.6
f	25.0	29.2
g	5.0	5.8
h	30.0	35.0



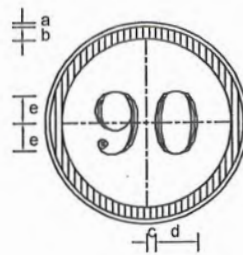
NO LEFT TURN SIGN
R-21

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	6.0	7.0
e	10.0	11.6
f	25.0	29.2
g	5.0	5.8
h	30.0	35.0



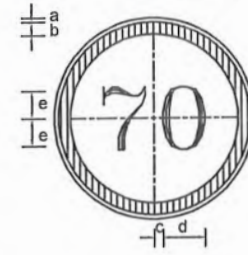
OVERTAKING PROHIBITED SIGN
R-23

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	12.0	14.0
e	3.0	3.5
f	29.5	34.4



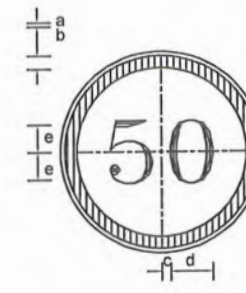
SPEED LIMIT SIGN
R-25-1

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	23.0	26.8
e	20.0	23.3



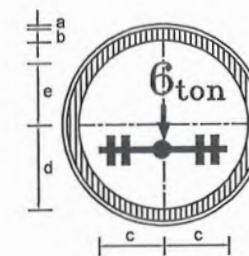
SPEED LIMIT SIGN
R-25-2

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	23.0	26.8
e	20.0	23.3



SPEED LIMIT SIGN
R-25-3

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	23.0	26.8
e	20.0	23.3



AXLE WEIGHT LIMIT SIGN
R-19

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	28.0	32.7
d	23.0	26.8
e	32.0	37.3



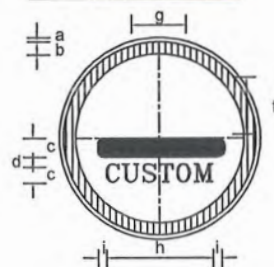
SPEED LIMIT SIGN
R-25-4

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	23.0	26.8
e	20.0	23.3



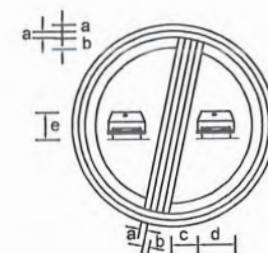
POLICE CHECK POST SIGN
R-27

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	7.5	8.8
d	3.0	3.5
e	10.0	11.7
f	27.5	32.1
g	29.0	33.8
h	28.0	32.7



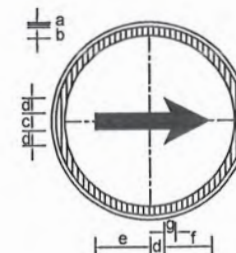
CUSTOM CHECK SIGN
R-28

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	6.5	7.6
c	8.0	9.3
d	4.0	4.7
e	11.0	12.8
f	31.0	36.2
g	41.0	47.8
h	52.0	60.7
i	7.5	8.7



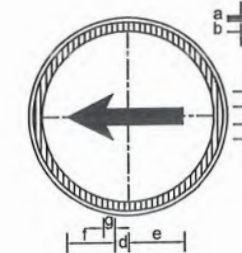
END OF OVERTAKING
RESTRICTION SIGN
R-31

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	1.7	7.6
c	10.0	11.7
d	25.0	29.2
e	21.0	24.5



TURN RIGHT SIGN
R-34

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	4.0	4.7
c	8.0	9.3
d	9.0	10.5
e	32.0	37.3
f	23.0	26.8
g	4.5	5.2

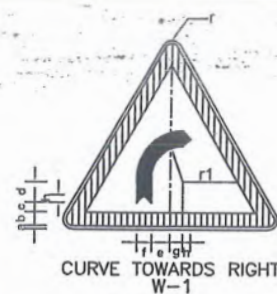


TURN LEFT SIGN
R-35

PARTS	SIGN SIZE	
	90cm	105cm
a	1.0	1.2
b	4.0	4.7
c	8.0	9.3
d	9.0	10.5
e	32.0	37.3
f	23.0	26.8
g	4.5	5.2

- NOTES :
- 1 - For Sign Locations Refer To Plan Sheets.
 - 2 - Final Location To Be Decide By The Engineer As Per Site.
 - 3 - Some Of The Sign Faces As Shown Are Reversible And The Actual Face Detail Shall Be Identified Prior To Placing Any
 - 4 - All Signs To Have High Intensity Reflective Sheetings In Accordance With The Relevant Clause In The Specification.
 - 5 - Sign Legends Shall Be Approved By Engineer And Client.

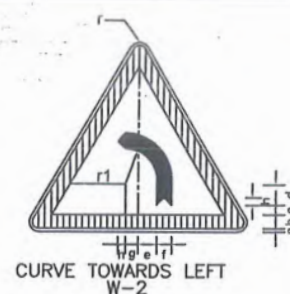
CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings	G.DESIGNED TANZEEL DRAWN MUSTAFA CHECKED SHAHZAD DURRANI APPROVED AQEEL YOUNIS	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHA NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAL KALAH FLOOD AFFECTED ROAD	N.T.S DATE: SEP, 2024.	TRAFFIC SIGNS DETAILS DWG NO: CEC/KP-RRDP/AMN_KRK_R2/ TSD - 07a



CURVE TOWARDS RIGHT
W-1

DIMENSIONS (cm)

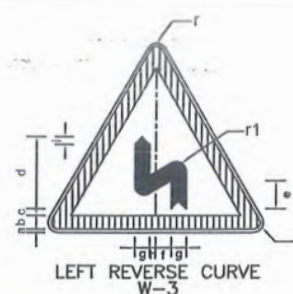
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	11.5	13.4
e	8.5	9.9
f	7.0	8.2
g	6.0	7.0
h	3.5	4.1
r1	12.5	14.6



CURVE TOWARDS LEFT
W-2

DIMENSIONS (cm)

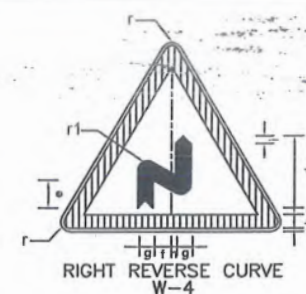
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	11.5	13.4
e	8.5	9.9
f	7.0	8.2
g	6.0	7.0
h	3.5	4.1
r1	12.5	14.6



LEFT REVERSE CURVE
W-3

DIMENSIONS (cm)

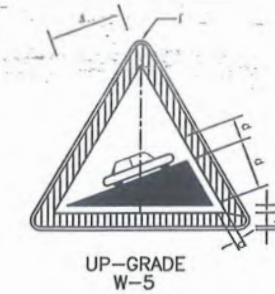
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	33.0	38.5
e	14.0	16.3
f	8.0	9.3
g	7.0	8.2
h	2.0	2.3
i	3.5	4.1
r1	4.5	5.2



RIGHT REVERSE CURVE
W-4

DIMENSIONS (cm)

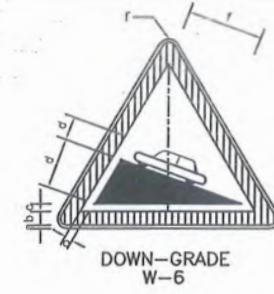
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	33.0	38.5
e	14.0	16.3
f	8.0	9.3
g	7.0	8.2
h	2.0	2.3
i	3.5	4.1
R1	4.5	5.2



UP-GRADE
W-5

DIMENSIONS (cm)

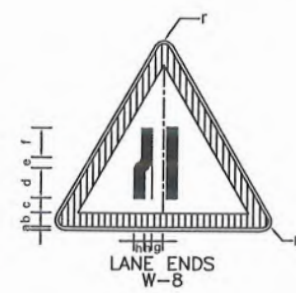
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.5	4.1
d	23.5	27.4
e	11.5	13.4
f	33.0	38.5



DOWN-GRADE
W-6

DIMENSIONS (cm)

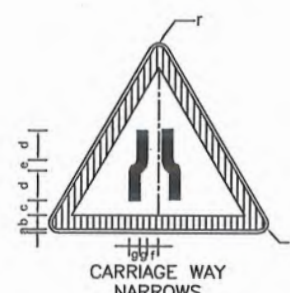
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.5	4.1
d	23.5	27.4
e	11.5	13.4
f	33.0	38.5



LANE ENDS
W-8

DIMENSIONS (cm)

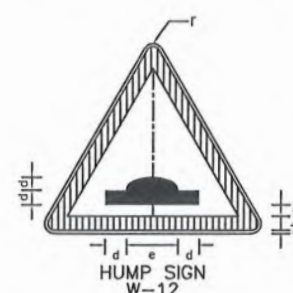
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	14.0	16.3
e	7.2	8.4
f	11.3	13.2
g	3.5	4.1
h	33.0	5.8



CARRIAGE WAY
NARROWS
W-8

DIMENSIONS (cm)

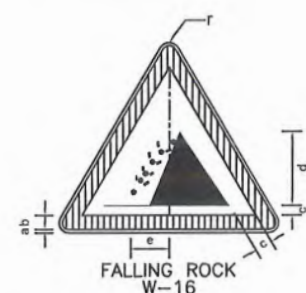
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.5	4.1
d	10.0	11.7
e	14.0	16.3
f	2.5	2.9
g	5.0	5.8



HUMP SIGN
W-12

DIMENSIONS (cm)

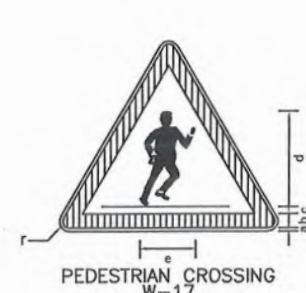
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	7.0	8.2
e	32.0	37.3



FALLING ROCK
W-16

DIMENSIONS (cm)

PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.5	4.1
d	38.0	44.3
e	12.0	14.3



PEDESTRIAN CROSSING
W-17

DIMENSIONS (cm)

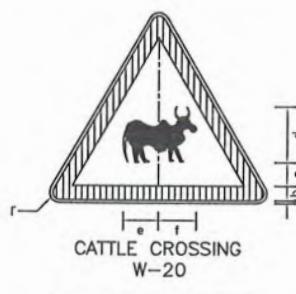
PARTS	90cm	105cm
r	2.9	3.5
a	0.8	1.0
b	5.4	6.5
c	2.1	2.5
d	35.8	43.0
e	19.2	23.0



CHILDREN CROSSING
W-18

DIMENSIONS (cm)

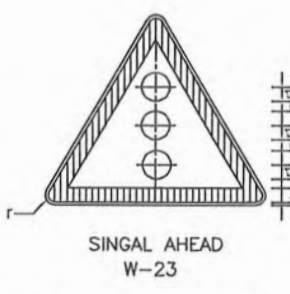
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.5	5.3
d	28.5	33.3
e	37.5	43.8



CATTLE CROSSING
W-20

DIMENSIONS (cm)

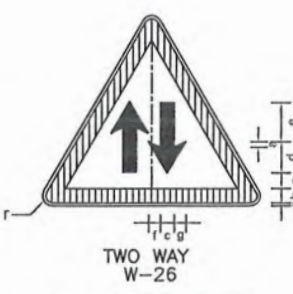
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	2.0	2.3
d	22.0	25.7
e	18.5	21.6
f	17.5	20.4



SINGAL AHEAD
W-23

DIMENSIONS (cm)

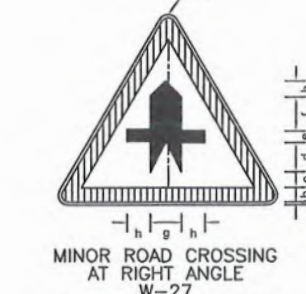
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	2.5	2.9
R1	6.5	7.6



TWO WAY
W-26

DIMENSIONS (cm)

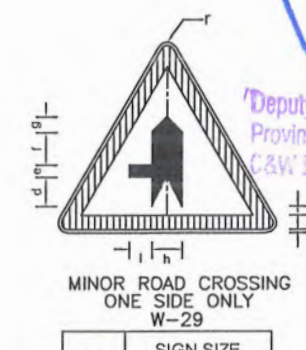
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	9.0	10.5
e	19.0	22.2
f	5.0	5.8
g	3.5	4.1



MINOR ROAD CROSSING
AT RIGHT ANGLE
W-27

DIMENSIONS (cm)

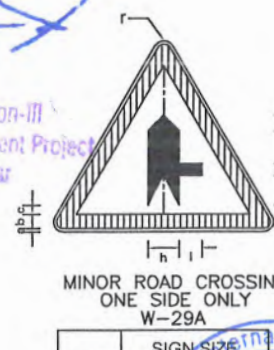
PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	15.0	17.5
e	6.0	7.0
f	11.0	12.8
g	13.5	15.7
h	8.5	9.9



MINOR ROAD CROSSING
ONE SIDE ONLY
W-29

DIMENSIONS (cm)

PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	13.5	15.8
e	5.5	6.4
f	15.0	17.5
g	7.0	8.2
h	14.0	16.3
i	10.5	12.3

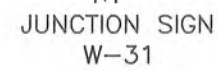


MINOR ROAD CROSSING
ONE SIDE ONLY
W-29A

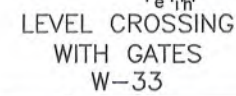
DIMENSIONS (cm)

PARTS	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	13.5	15.8
e	5.5	6.4
f	15.0	17.5
g	7.0	8.2
h	14.0	16.3
i	10.5	12.3

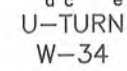
CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings	G.DESIGNED TANZEEL DRAWN MUSTAFA CHECKED SHAHZAD DURRANI APPROVED AQEEL YOUNIS	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHA NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH FLOOD AFFECTED ROAD	N.T.S DATE: SEP, 2024.	TRAFFIC SIGNS DETAILS DWG NO: CEC/KP-RRDP/HWN_KRK_R2/ TSD - 07b



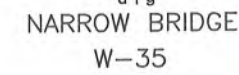
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	17.0	19.8
e	13.0	15.2
f	7.0	8.2



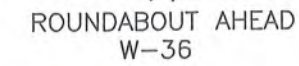
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	1.5	1.8
d	2.5	2.9
e	3.0	3.5
f	7.5	8.8
g	3.5	4.1
h	2.0	2.3
i	4.0	4.7



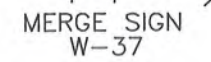
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	5.5	6.4
d	7.0	8.2
e	5.0	5.8
f	2.5	2.9
g	23.0	26.8
h	7.5	8.8
i	12.0	14.0



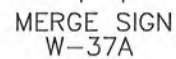
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	6.0	7.0
d	2.5	2.9
e	15.0	17.5
f	4.0	4.7
g	3.0	3.5



PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	9.0	10.5
R1	12.0	14.0
R2	16.0	18.7



PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.5	4.1
d	33.0	38.5
e	7.0	8.2
f	14.0	16.3
g	15.0	17.5
h	3.0	3.5
i	5.5	6.4



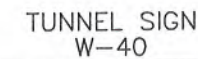
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.5	4.1
d	33.0	38.5
e	7.0	8.2
f	14.0	16.3
g	15.0	17.5
h	3.0	3.5
i	5.5	6.4



PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	13.0	15.2
e	7.0	8.2
f	10.0	11.7
g	2.5	2.9
h	5.0	5.8



PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	15.5	18.1
e	7.0	8.2
f	5.0	5.8
g	11.0	12.8
h	2.5	2.9



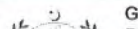
PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	2.5	2.9
d	17.0	19.8
e	9.0	10.5
f	2.0	2.3
g	4.0	4.7

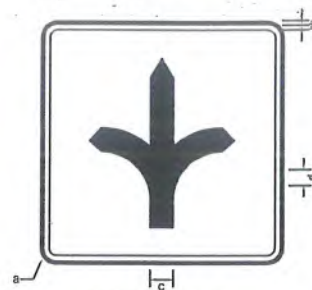


PARTS	SIGN SIZE	
	90cm	105cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	2.5	2.9
d	10.0	11.7
e	2.0	2.3
f	1.7	2.0
g	25.0	29.2
h	5.0	5.8

Lawal S
Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

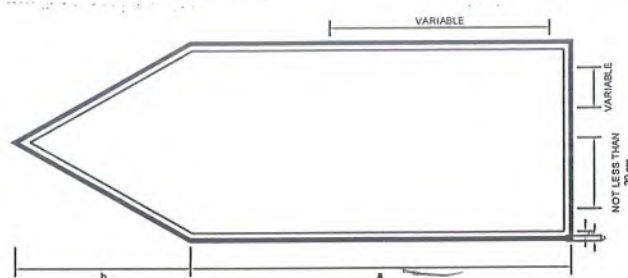


CLIENT:	DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	a	SEP, 2024.	Tender Drawings	G.DESIGNED	TANZEEL	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHA NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAL KALAH	N.T.S	TRAFFIC SIGNS DETAILS	
		b			DRAWN	MUSTAFA					
		c			CHECKED	SHAHZAD DURRANI					DATE:
		d			APPROVED	AQEEL YOUNIS				FLOOD AFFECTED ROAD	SEP, 2024.



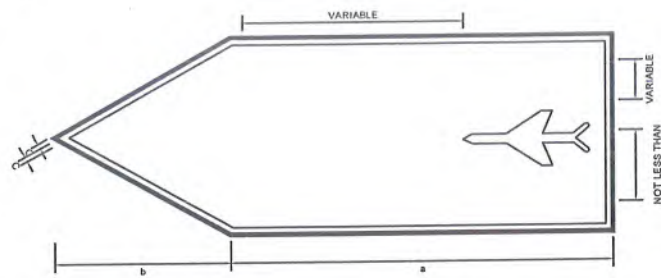
DESTINATION SIGN
I-1

PARTS	SIGN SIZE
	120 x 120 240 x 240
a	4.5 6.0
b	1.8 2.4
c	12.0 16.0
d	22.5 30.0



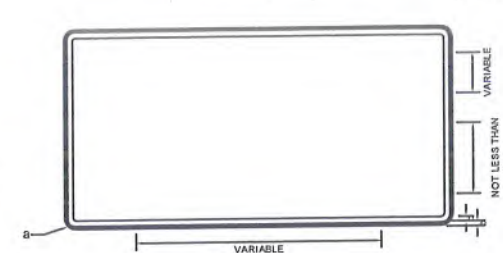
DIRECTION SIGN
I-3

PARTS	SIGN SIZE
	225 x 90 300 x 120
a	180.0 240.0
b	45.0 60.0
c	1.8 2.4



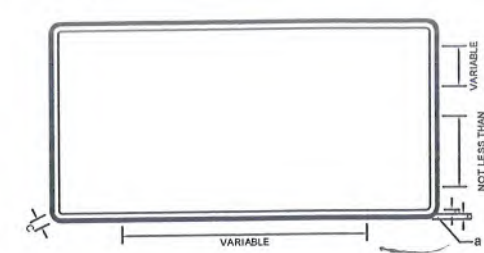
DIRECTION SIGN
I-4

PARTS	SIGN SIZE
	225 x 90 300 x 120
a	180.0 240.0
b	45.0 60.0
c	1.8 2.4



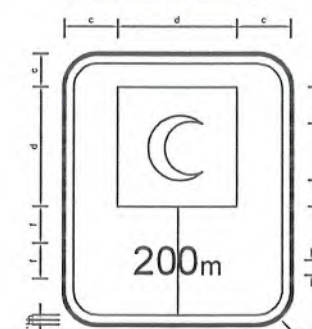
BEGINNING OF MUNICIPAL LIMIT
I-5

PARTS	SIGN SIZE
	225 x 135 300 x 180
a	4.5 6.0
b	1.8 2.4



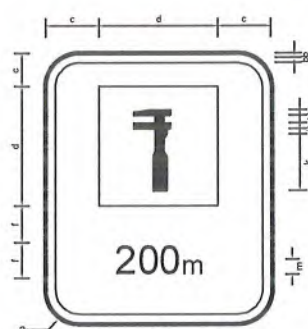
END OF MUNICIPAL LIMIT
I-6

PARTS	SIGN SIZE
	225 x 135 300 x 180
a	4.5 6.0
b	1.8 2.4
b	20.3 27.0



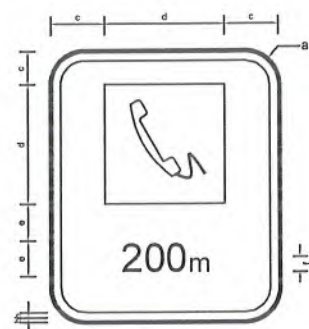
FIRST AID STATION
I-9

PARTS	SIGN SIZE
	120 x 180
a	6.0
b	2.4
c	20.0
d	80.0
e	40.0
f	26.0
g	14.0



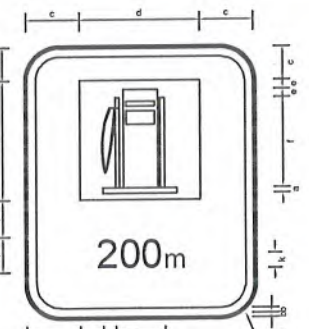
AUTO REPAIR SHOP
I-10

PARTS	SIGN SIZE
	120 x 180
a	6.0
b	2.4
c	20.0
d	80.0
e	30.0
f	15.0
g	35.0
h	5.0
i	11.0
j	7.0
k	44.0
l	26.0
m	14.0



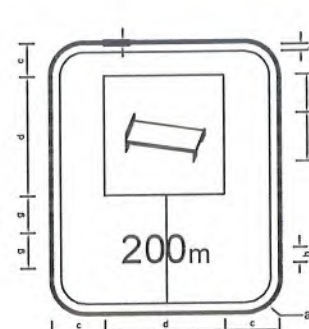
PHONE SERVICE
I-11

PARTS	SIGN SIZE
	120 x 180
a	6.0
b	2.4
c	20.0
d	80.0
e	26.0
f	14.0



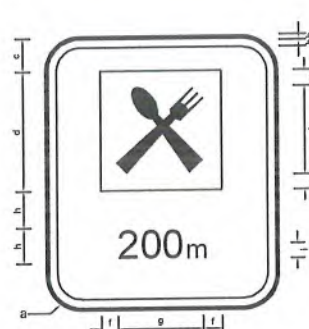
PETROL PUMP
I-12

PARTS	SIGN SIZE
	120 x 180
a	6.0
b	2.4
c	20.0
d	80.0
e	4.0
f	60.0
g	8.0
h	12.0
i	17.0
j	26.0
k	14.0



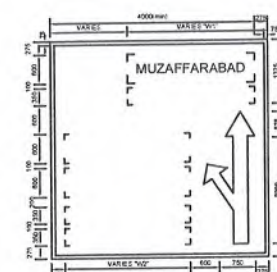
HOTEL / MOTEL
I-13

PARTS	SIGN SIZE
	90 x 135 120 x 180
a	4.5 6.0
b	1.8 2.4
c	15.0 20.0
d	60.0 80.0
e	18.8 25.0
f	24.0 32.0
g	19.5 26.0
h	10.5 14.0

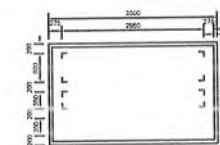


RESTAURANT
I-14

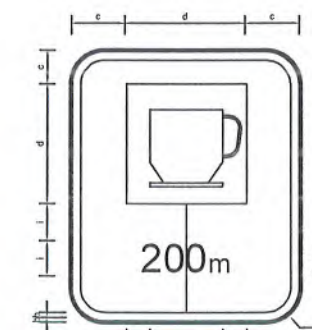
PARTS	SIGN SIZE
	90 x 135 120 x 180
a	4.5 6.0
b	1.8 2.4
c	15.0 20.0
d	60.0 80.0
e	51.0 68.0
f	12.0 16.0
g	36.0 48.0
h	19.5 26.0
i	10.5 14.0



JUNCTION SIGN
(250m SHORT OF JUNCTION)



DESTINATION SIGN
(250m OF LIMITS OF TOWN)



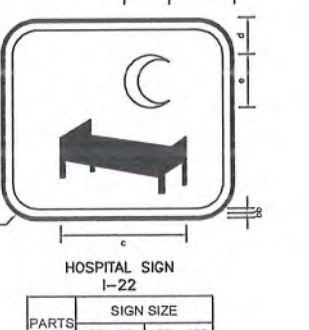
CAFETERIA
I-15

PARTS	SIGN SIZE
	120 x 180
a	6.0
b	2.4
c	20.0
d	80.0
e	16.0
f	34.0
g	8.0
h	64.0
i	26.0
j	14.0



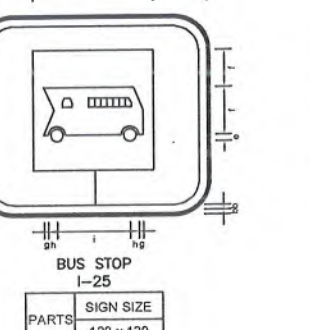
PICNIC SITE
I-16

PARTS	SIGN SIZE
	90 x 135 120 x 180
a	4.5 6.0
b	1.8 2.4
c	15.0 20.0
d	60.0 80.0
e	3.0 4.0
f	42.0 56.0
g	11.3 15.0
h	6.0 8.0
i	48.0 64.0
j	19.5 26.0
k	10.5 14.0



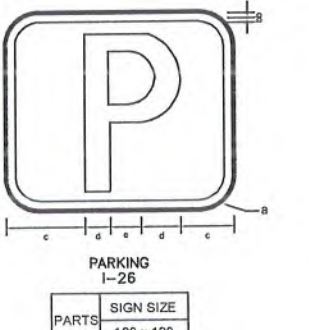
HOSPITAL SIGN
I-22

PARTS	SIGN SIZE
	90 x 90 120 x 120
a	4.5 6.0
b	1.8 2.4
c	67.5 90.0
d	18.0 24.0
e	22.5 30.0
f	30.0 40.0



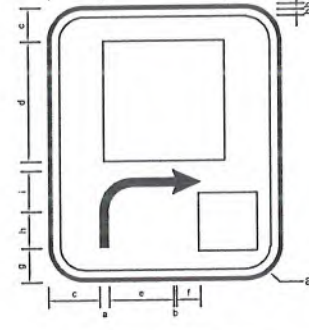
BUS STOP
I-25

PARTS	SIGN SIZE
	120 x 120
a	6.0
b	2.4
c	20.0
d	80.0
e	8.0
f	26.0
g	4.0
h	12.0
i	48.0



PARKING
I-26

PARTS	SIGN SIZE
	120 x 120
a	6.0
b	2.4
c	30.0
d	13.0
e	34.0
f	29.0
g	40.0



GENERAL INFORMATION
I-27

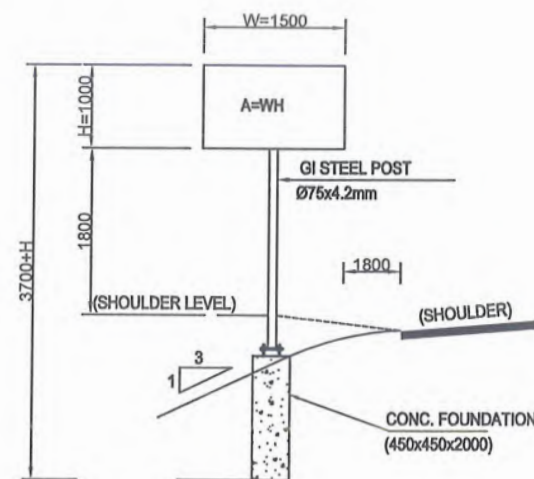
PARTS	SIGN SIZE
	90 x 135 120 x 180
a	4.5 6.0
b	1.8 2.4
c	15.0 20.0
d	60.0 80.0
e	12.0 16.0
f	20.3 27.0
g	10.5 14.0
h	28.5 38.0
i	18.0 24.0

law

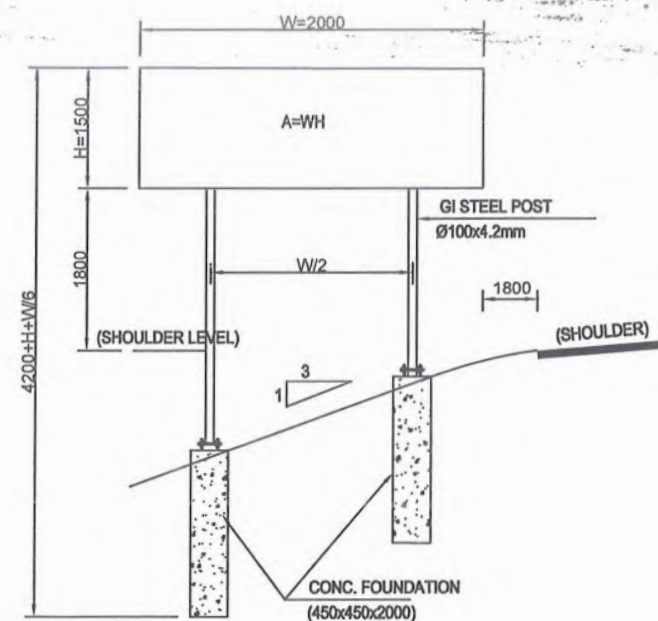
Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Peshawar



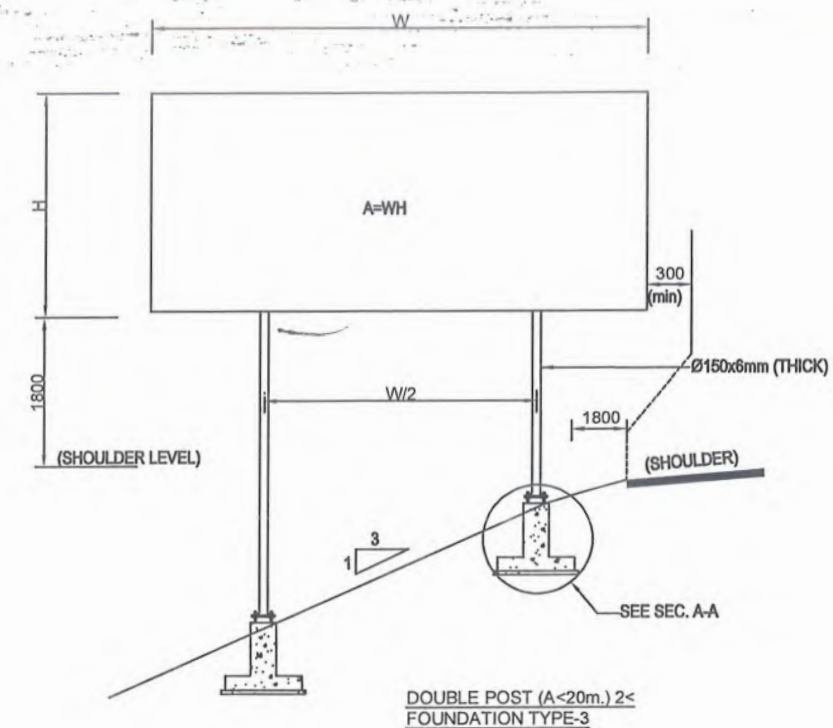
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 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings	G.DESIGNED TANZEEL DRAWN MUSTAFA CHECKED SHAHZAD DURRANI APPROVED AQEEL YOUNIS	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHA NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHALI KALAH FLOOD AFFECTED ROAD	N.T.S DATE: SEP, 2024.	TRAFFIC SIGNS DETAILS DWG NO: CEC/KP-RRDP/HWN_KRK_R2/ TSD - 07d



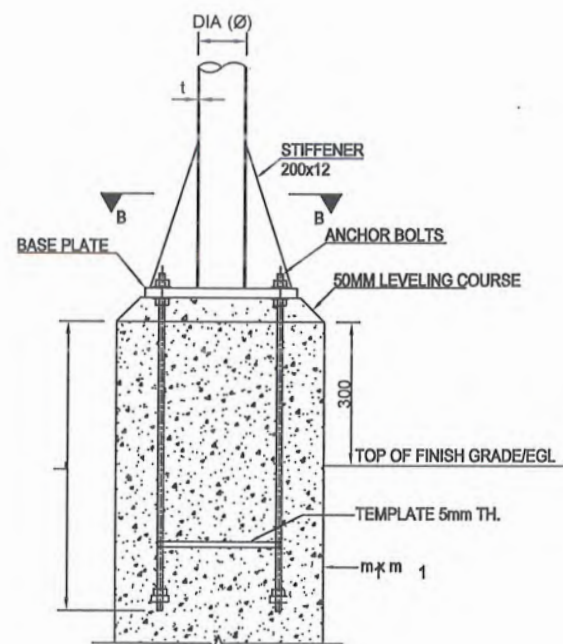
2 SINGLE POST
(A<1.5m.) 2<
FOUNDATION TYPE-1



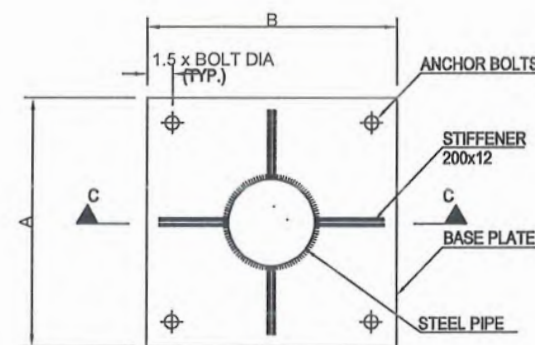
DOUBLE POST (A<3m.)
2<FOUNDATION TYPE-2



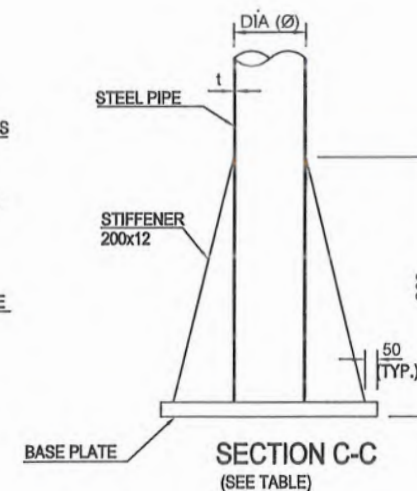
DOUBLE POST (A<20m.) 2<
FOUNDATION TYPE-3



BASE PLATE &
ANCHORAGE ELEVATION



SECTION B-B
(SEE TABLE)

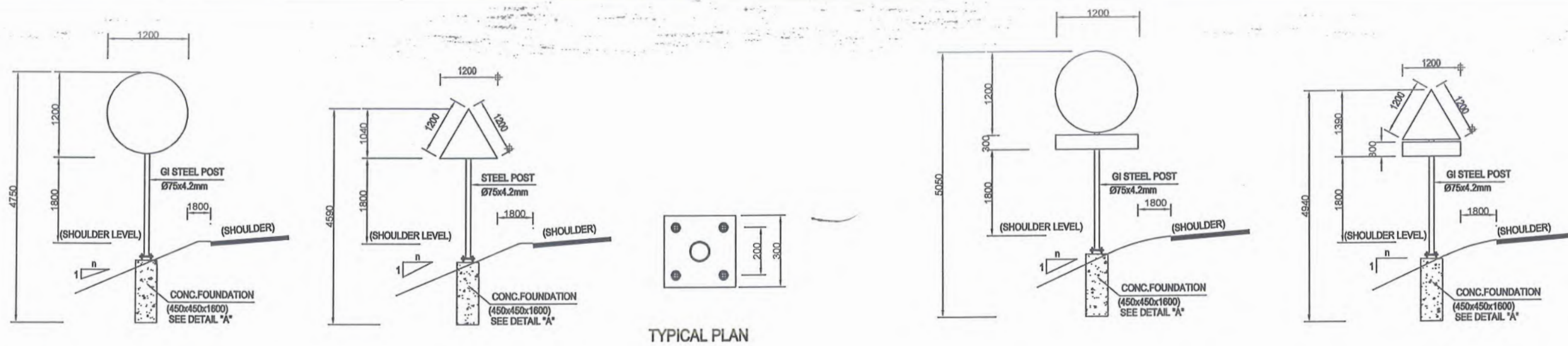


SECTION C-C
(SEE TABLE)

NOTES:-

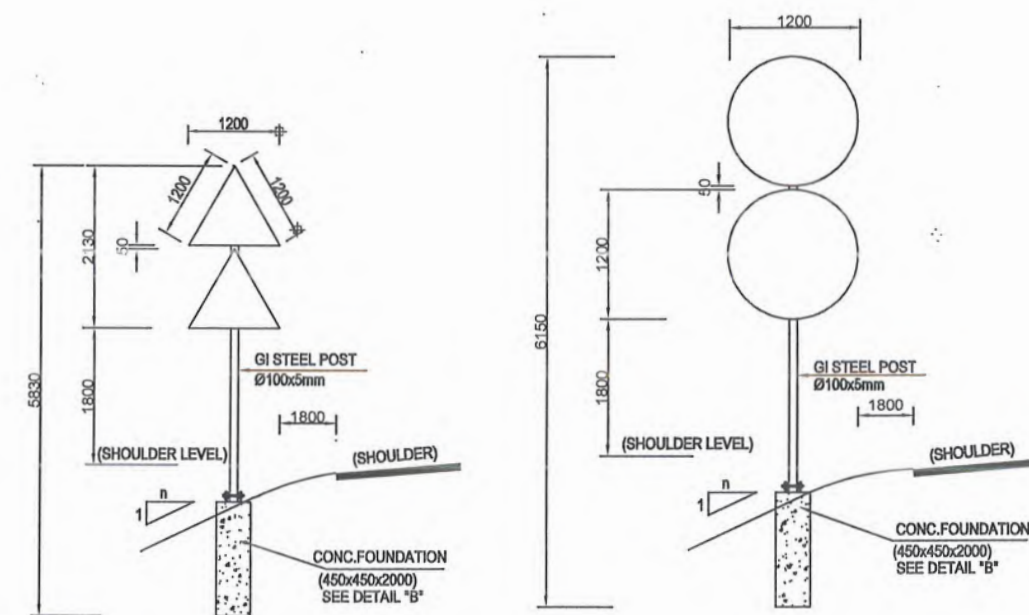
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.
- FABRICATION GALVANIZING AND ERECTION TO BE IN ACCORDANCE WITH AISC SPECIFICATIONS.
- AFTER FABRICATION AND BEFORE GALVANIZING THE TRAIL ASSEMBLY OF COMPLETE STRUCTURE SHALL BE DONE.
- ALL COMPONENTS TO BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123. GALVANIZATION THICKNESS SHALL NOT BE LESS THAN 90 MICRONS.
- BASE PLATES SHALL BE SET LEVEL TO CORRECT ELEVATION WITH THE HELP OF LEVELING NUTS.
- STEEL STRUCTURE SHALL BE ASTM A36, OR EQUIVALENT.
- BOLTS (GALVANIZED) SHALL BE ISO 898-1, GRADE 8.8, OR EQUIVALENT.
- NUTS (GALVANIZED) SHALL BE ISO 896-2, GRADE 8, OR EQUIVALENT.
- PLAIN WASHERS (GALVANIZED) SHALL BE ISO 7089, GRADE A CLASS 200, OR EQUIVALENT. ALL BOLTS SHALL BE FIXED WITH ONE PLAIN WASHER.
- ANCHOR RODS SHALL BE G60 DEFORMED BARS IN ACCORDANCE WITH ASTM A615.
- WELDING ELECTRODES SHALL BE E 60 XX.
- SIGN PANELS SHALL BE MADE OF ALUMINUM ALLOY PLATES OF MIN 3mm TH.
- SIGN PANELS SHOULD BE RIVETED TO STEEL MEMBER OF SUPPORTING FRAME.
- ALL STRUCTURAL CONCRETE SHALL HAVE MINIMUM CYLINDER STRENGTH EQUAL TO 3000psi AT 28 DAYS.
- ALL REINFORCEMENT SHALL BE GRADE 60 DEFORMED IN ACCORDANCE WITH ASTM A-615 SPECIFICATION.

CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings	G.DESIGNED TANZEEL	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHA NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH FLOOD AFFECTED ROAD	N.T.S DATE: SEP, 2024.	TRAFFIC SIGNS FOUNDATION DETAILS DWG NO: CEC/KP-RRDP/HWN_KRK_R2/ TSD - 07e
		a			DRAWN MUSTAFA				
		b			CHECKED SHAHZAD DURRANI				
		c			APPROVED AQEEL YOUNIS				

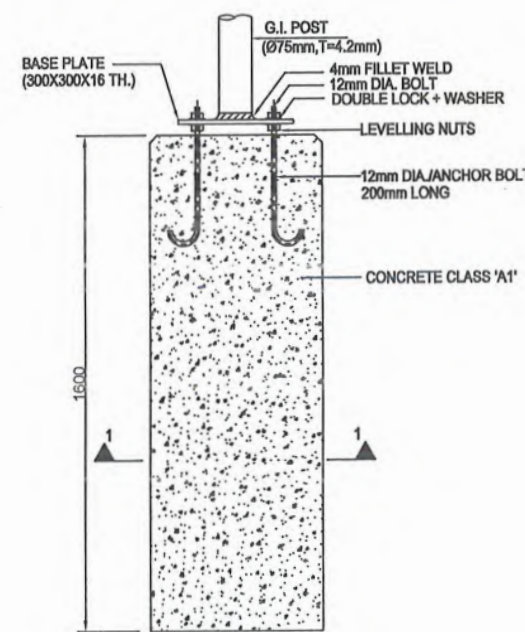


SINGLE SIGNS
FOUNDATION TYPE-1

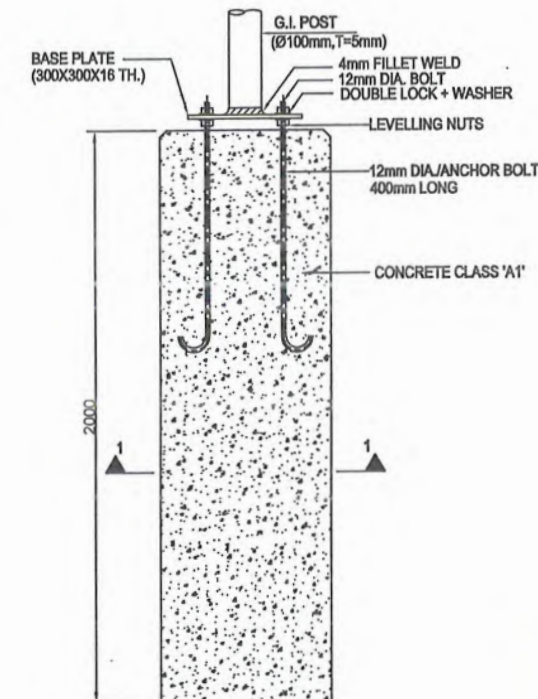
SINGLE SIGNS WITH ADDITIONAL PLATE
FOUNDATION TYPE-1



DOUBLE SIGNS
FOUNDATION TYPE-2



DETAIL 'A'
CONCRETE FOUNDATION
(TYPE-1)



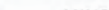
DETAIL 'B'
CONCRETE FOUNDATION
(TYPE-2)

laul

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Provincial Road Improvement Project
C&W Department, Peshawar

NOTE:-

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.
- ALL STRUCTURAL CONCRETE SHALL HAVE MINIMUM CYLINDER STRENGTH EQUAL TO 8000 psi AT 28 DAYS.
- SIGN PANELS SHALL BE MADE OF ALUMINUM ALLOY PLATES OF MIN. 3mm TH.
- SIGN PANELS SHOULD BE RIVETED TO STEEL MEMBER OF SUPPORTING FRAME.

CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	a	0	SEP. 2024.	Tender Drawings	G.DESIGNED	TANZEEL	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHA NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH	N.T.S	TRAFFIC SIGNS FOUNDATION DETAILS
				a			DRAWN	MUSTAFA	DATE:				
				b			CHECKED	SHAHZAD DURRANI	SEP. 2024.				
				c			APPROVED	AQEEL YOUNIS			FLOOD AFFECTED ROAD	DWG NO: CEC/KP-RRDP/HWN_KRK_R2/	

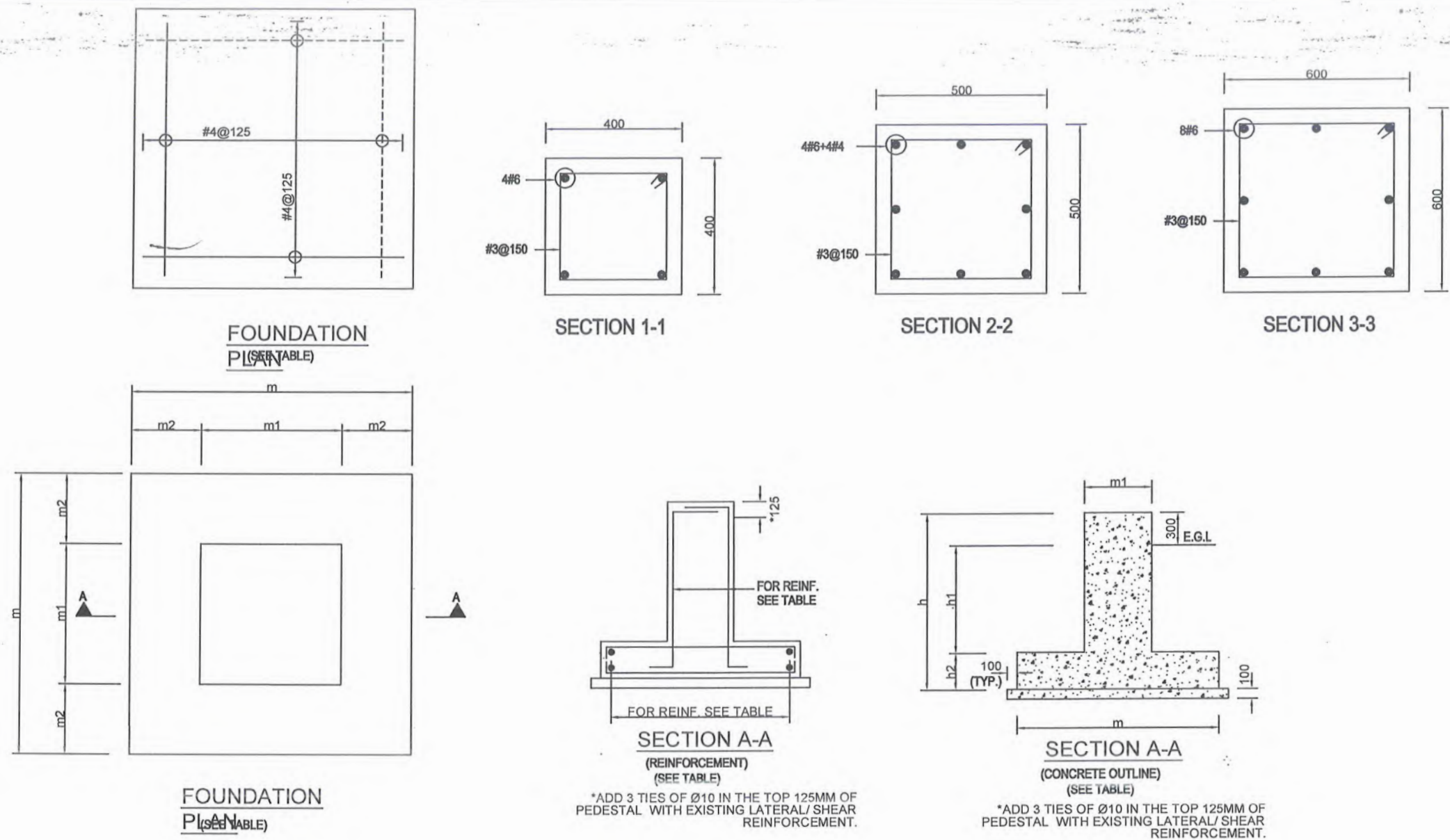


TABLE - 1

AREA OF SIGN BOARD A (M) ²	STRUCTURAL CONCRETE SIZING (mm)						STRUCTURAL STEEL SIZING (mm)							REINFORCEMENT	
	PEDESTAL m ₁ x m ₁	FOUNDATION PAD m x m	m ₂	h ₁	h ₂	h	PIPE		BASE PLATE		ANCHOR BOLTS (J-TYPE)			PEDESTAL	PAD
							DIA (Ø)	THICKNESS (t)	PLAN SIZE (AxB)	THICKNESS (T)	DIA.	EMBEDMENT (L)	Number		
3<A<5	400x400	1000x1000	400	1250	350	1600	125	6	300x300	22	16	400	4	SEE SEC. 1-1	SEE FOUNDATION PLAN
5<A<10	500x500	1350x1350	525	1175	425	1600	150	10	400x400	25	20	450	4	SEE SEC. 2-2	
10 < A < 15	500x500	1500x1500	525	1125	475	1600	175	10	400x400	28	22	500	4	SEE SEC. 2-2	
15<A<20	600x600	1750x1750	625	1050	550	1600	200	10	500x500	32	25	600	4	SEE SEC. 3-3	

TABLE - 2

INFORMATION	
FOUNDATION TYPE-1	FOR SINGLE SIGNS AND SINGLE SIGNS WITH ADDITIONAL PLATE
FOUNDATION TYPE-2	FOR DOUBLE SIGNS, FOR SINGLE POST SIGNS WITH AREA <1.5m ² & FOR DOUBLE POST SIGNS WITH AREA <3m ²
FOUNDATION TYPE-3	FOR DOUBLE SIGNS WITH 3< AREA <20m ²

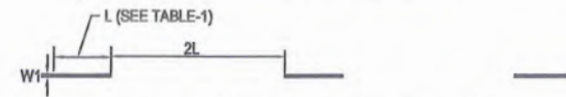
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GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings	G.DESIGNED TANZEEL	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHA NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH FLOOD AFFECTED ROAD	N.T.S	TRAFFIC SIGNS FOUNDATION DETAILS DWG NO: CEC/KP-RRDP/HWN_KRK_R2/ TSD - 07g
		a			DRAWN MUSTAFA			DATE:	
		b			CHECKED SHAHZAD DURRANI			SEP, 2024.	
		c			APPROVED AQEEL YOUNIS				

Deputy Director Construction-III
Provincial Flood Management Project
C&W Department, Peshawar



PAVEMENT MARKING LINES

FOR DIMENSIONS L & W1 TO W5, SEE TABLE-1



L1 - BROKEN GUIDE LINE-WHITE

AT CENTERLINE OF DIVIDED 2-LANE



L2 - BROKEN WARNING LINE -WHITE

LANE MARKING FOR MIX TRAFFIC



L3 - CONTINUOUS LINE - WHITE

AT NO PASSING ZONES



L4 - CONTINUOUS EDGE LINE -YELLOW

AT EDGE OF PAVEMENT AT ALL LOCATIONS



L5 - DASHED LINE - WHITE

AT SEPARATION OF THROUGH LANES FROM ACCELERATION LANE



L6 - DOTTED LINE - WHITE

FOR DEFINING VEHICLE PATHS WITHIN INTERSECTIONS



L7 - STOP LINE - WHITE

AT INTERSECTIONS ACROSS PAVEMENT



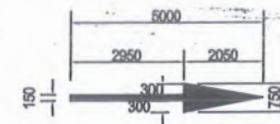
L8 - TRANSVERSE YIELD LINE - WHITE

AT INTERSECTIONS ACROSS PAVEMENT IN THE SAME POSITION AS L7 LINE TO INDICATE GIVE WAY

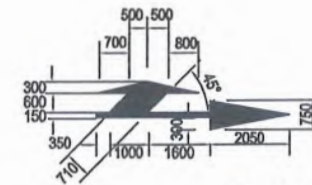
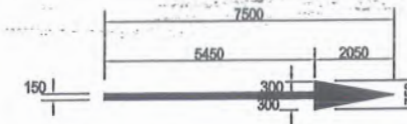


L9 - DOTTED LINE - YELLOW

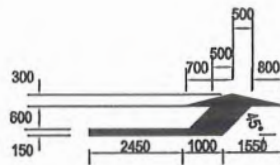
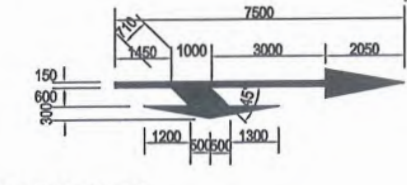
FOR EDGE LINE WHERE PARKING BAYS ARE PROVIDED OUTSIDE THE LANE



ARROWS TYPE-I (STRAIGHT)



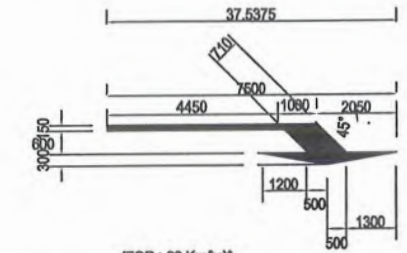
ARROWS TYPE-II (COMBINED)



(FOR ≤ 50 Km/hr)

ARROWS TYPE-III (DEFLECTION)

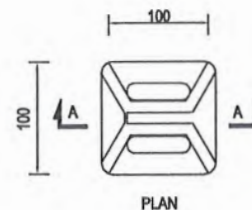
LANE SELECTION ARROWS - WHITE



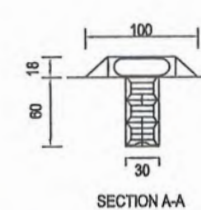
(FOR > 50 Km/hr)*

TABLE - 1

ROADWAY SPEED	L (mm)	W1	W2	W3	W4	W5
≤ 50 Km/hr	2000	100	100	100	300	100
60-80 Km/hr*	3000	120	120	150	300	100
> 80 Km/hr	4000	150	150	150	300	120
SERVICE ROAD	2000	100	120	100	300	100



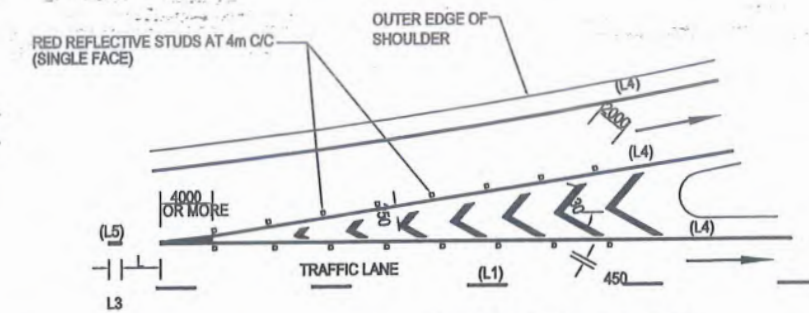
PLAN



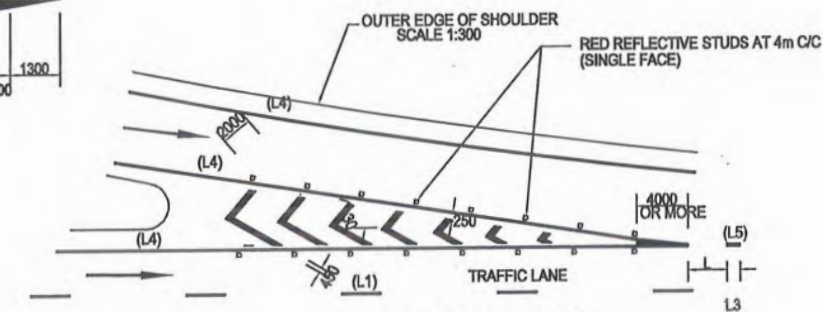
SECTION A-A

REFLECTORISED PAVEMENT STUD

(RAISED PROFILE TYPE)

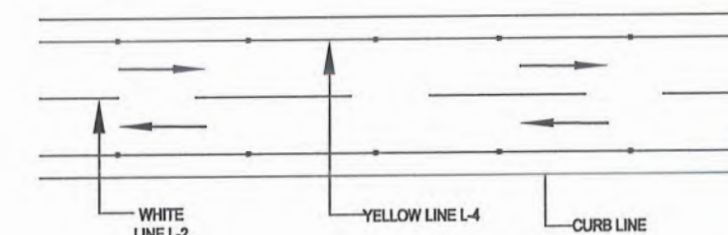


ENTRANCE NOSE DETAIL



EXIT NOSE DETAIL

SCALE 1:300



PROJECT ROAD

lane 1-2

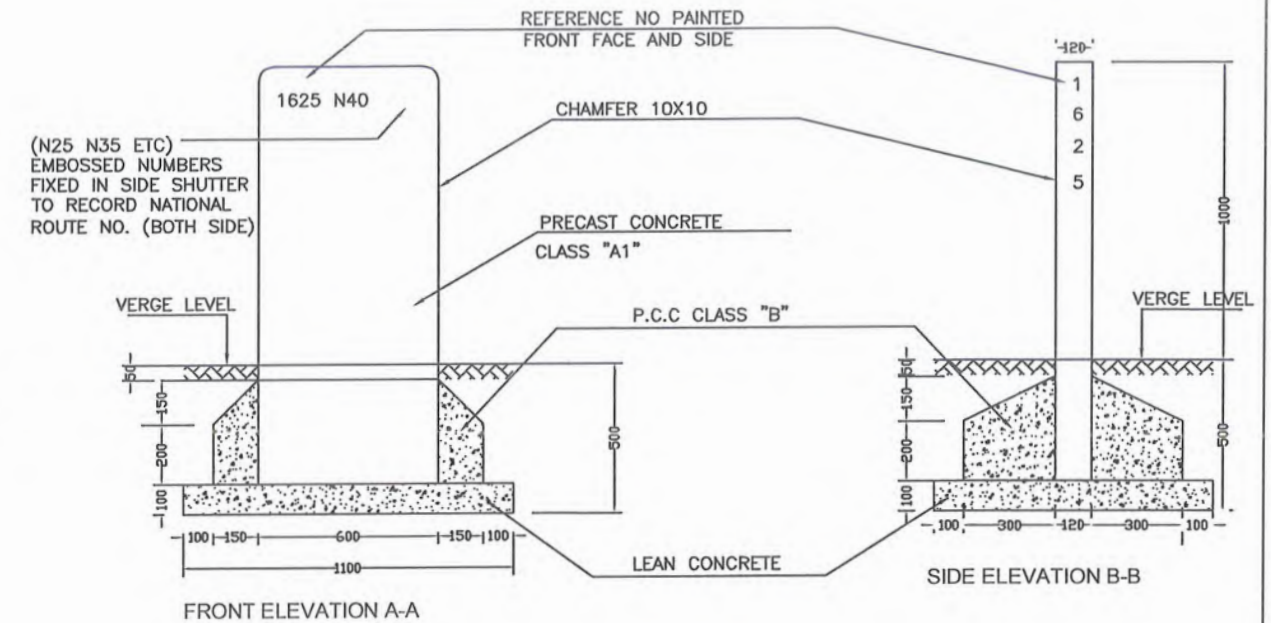
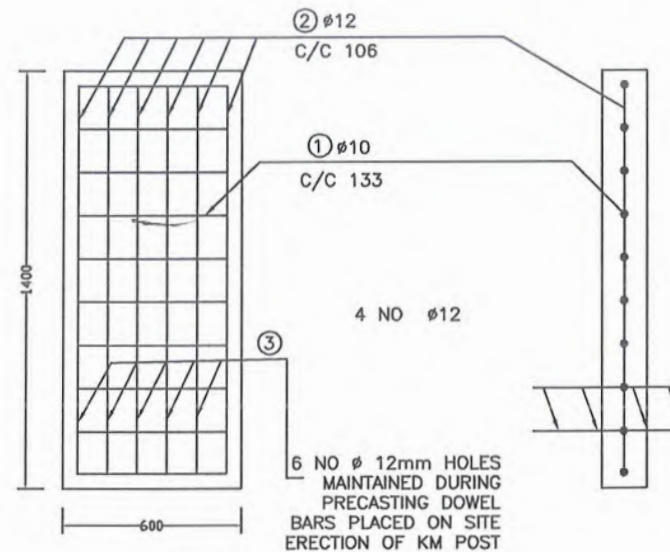
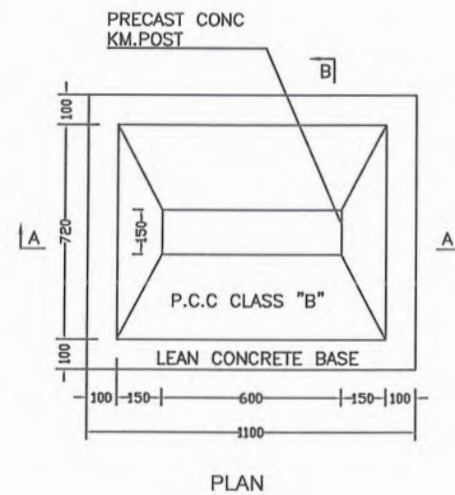
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Provincial Road Development Project
C&W Department, Peshawar



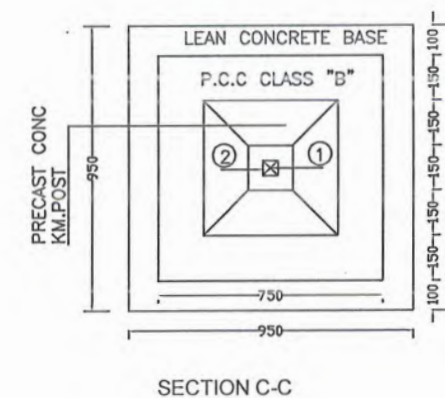
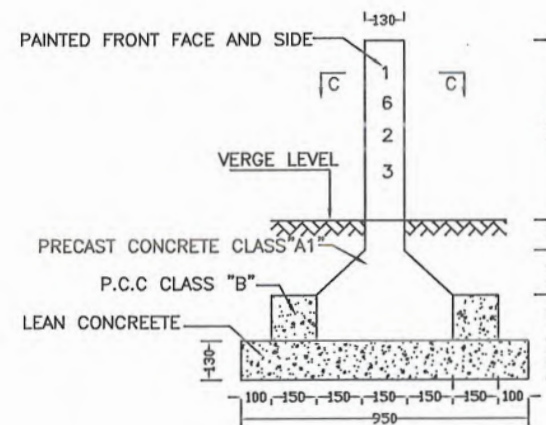
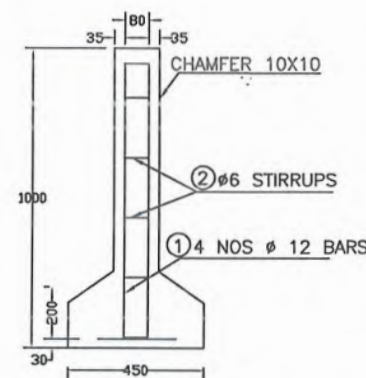
CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings	G. DESIGNED TANZEEL DRAWN MUSTAFA CHECKED SHAHZAD DURRANI APPROVED AQEEL YOUNIS	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHA NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH FLOOD AFFECTED ROAD	N.T.S DATE: SEP, 2024.	TYPICAL PAVEMENT MARKING DETAILS DWG NO: CEC/KP-RRDP/1WN_KRK_R2/ PM-08

BAR NO	DESCRIPTION	DIA. (mm)	NO
①	530mm	10	11
②	1330mm	10	6
③	620mm	12	6
④	620mm	12	4

TABLE-1
REINFORCEMENT SCHEDULE



FIVE KILOMETER POST



BAR NO	DESCRIPTION	DIA. (mm)	NO
①	230	12	4
②	40/80	6	9

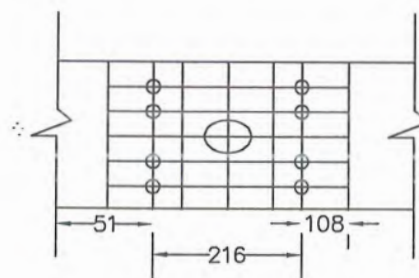
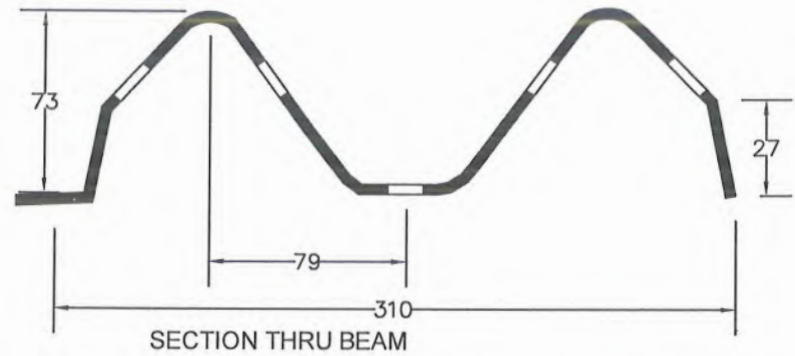
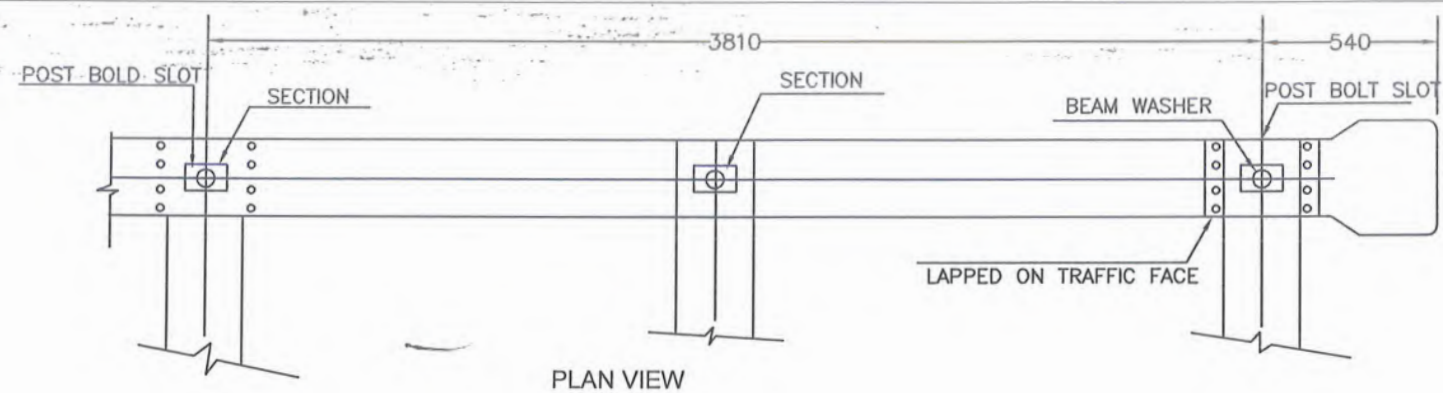
TABLE-2
REINFORCEMENT SCHEDULE

NOTES:-

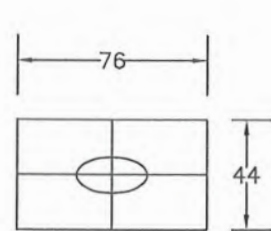
1. PRECAST CONCRETE SHALL BE CLASS "A1" AS PER G.S.I 401
2. CONCRETE COVER 35mm
3. P.C.C CLASS "B" AS PER G.S.I 401
4. LEAN CONCRETE SHALL BE AS PER G.S.I 401
5. REINFORCEMENT DEFORMED GRADE 40 AS PER AASHTO M-31
6. BACKGROUND COLOUR WILL BE WHITE WHILE LETTERING COLOUR WILL BE BLACK.
7. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

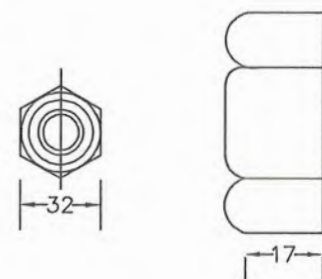
CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58635-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings	G.DESIGNED TANZEEL DRAWN MUSTAFA CHECKED SHAHZAD DURRANI APPROVED AQEEL YOUNIS	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHA NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH FLOOD AFFECTED ROAD	N.T.S DATE: SEP, 2024.	KM POST DETAILS DWG NO: CEC/KP-RRDP/HWIN_KRK_R2/ KMP 09



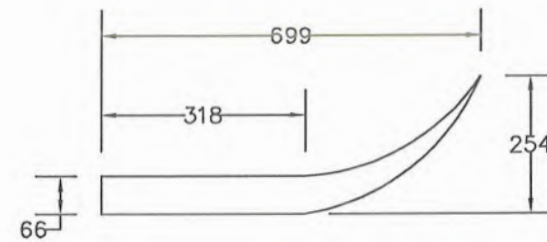
LOCATION OF GUARD RAIL



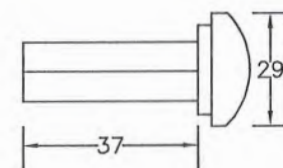
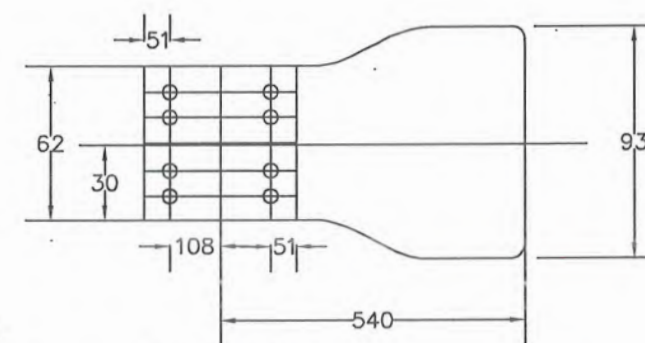
BEAM WASHER



(15.875mm) POST OR SLICE BOLT AND NET

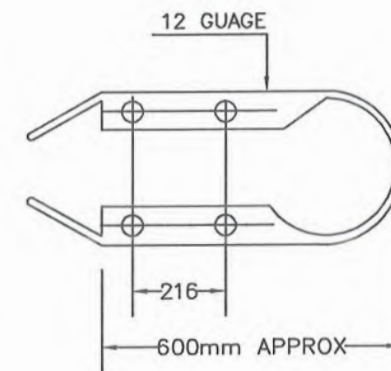
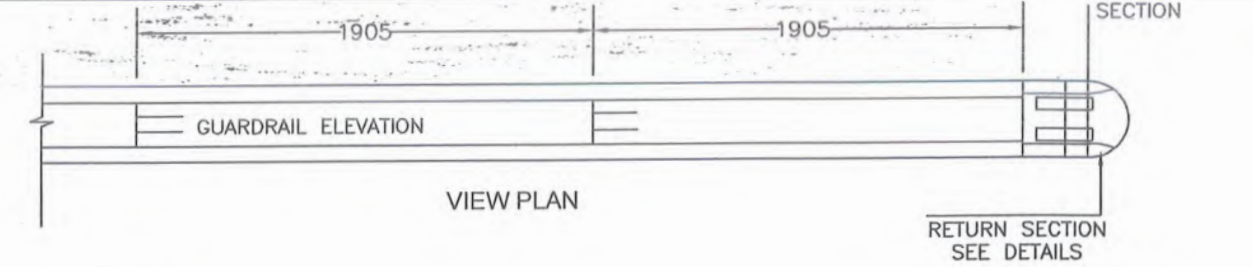


END SECTION

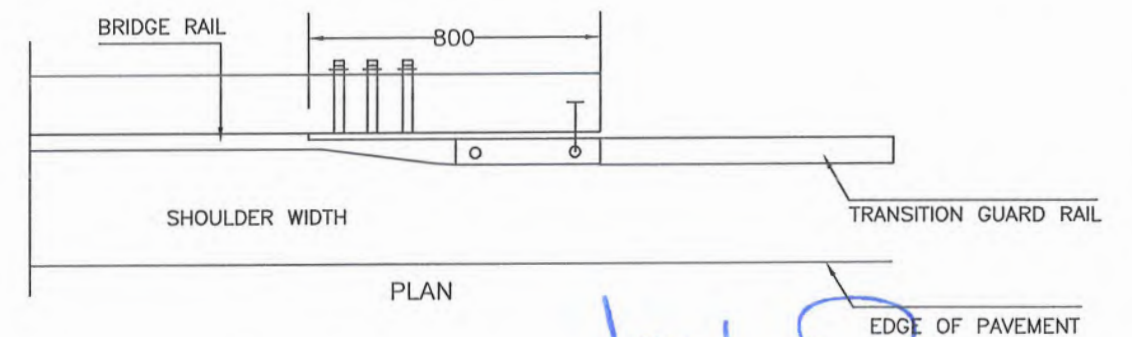
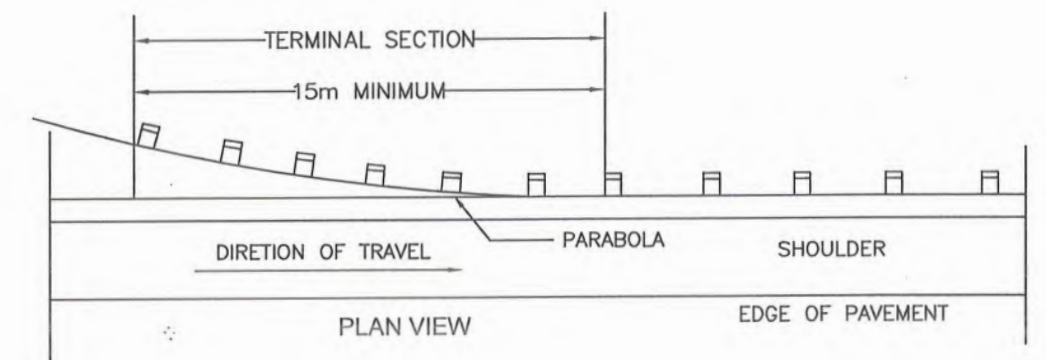
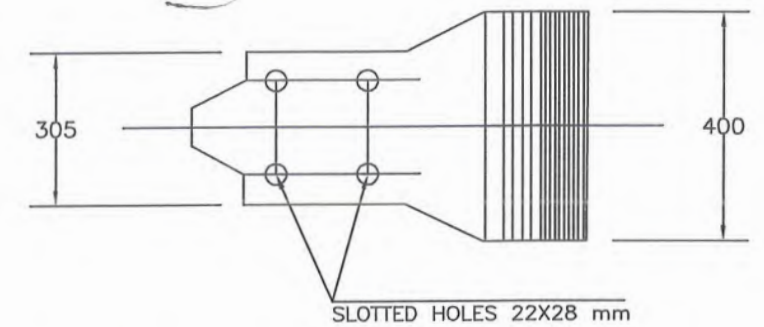


SEC. C-C

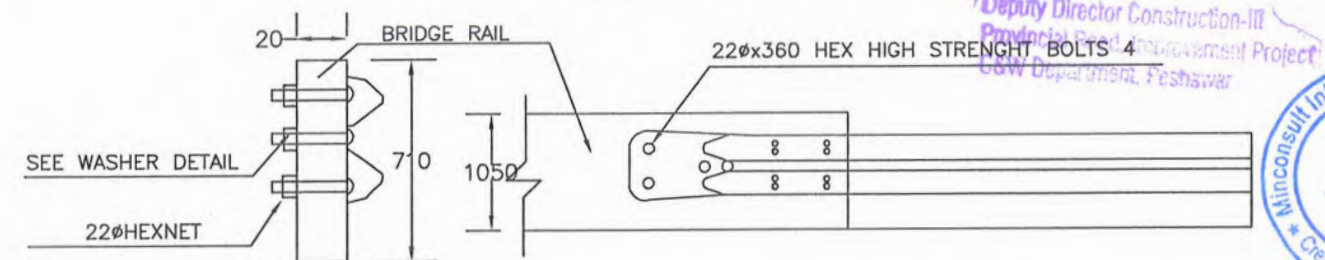
ELEVATION



RETURN SECTION TERMINAL



STEEL GUARD RAIL DETAILS



CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024.	Tender Drawings	G.DESIGNED	TANZEEL	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	TAKHA NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH	N.T.S	GUARD RAIL DETAILS			
		a			DRAWN	MUSTAFA							
		b			CHECKED	SHAHZAD DURRANI							
		c			APPROVED	AQEEL YOUNIS							
									FLOOD AFFECTED ROAD	SEP, 2024.	DWG NO: CEC/KP-RRDP/HWN_KRK_R2/ GR-10		

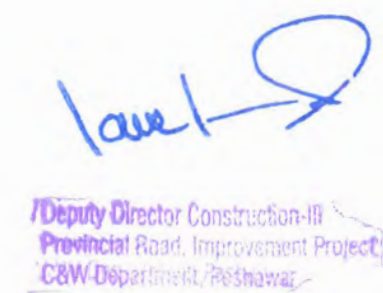
TYPICAL SECTIONS

Lawal S

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

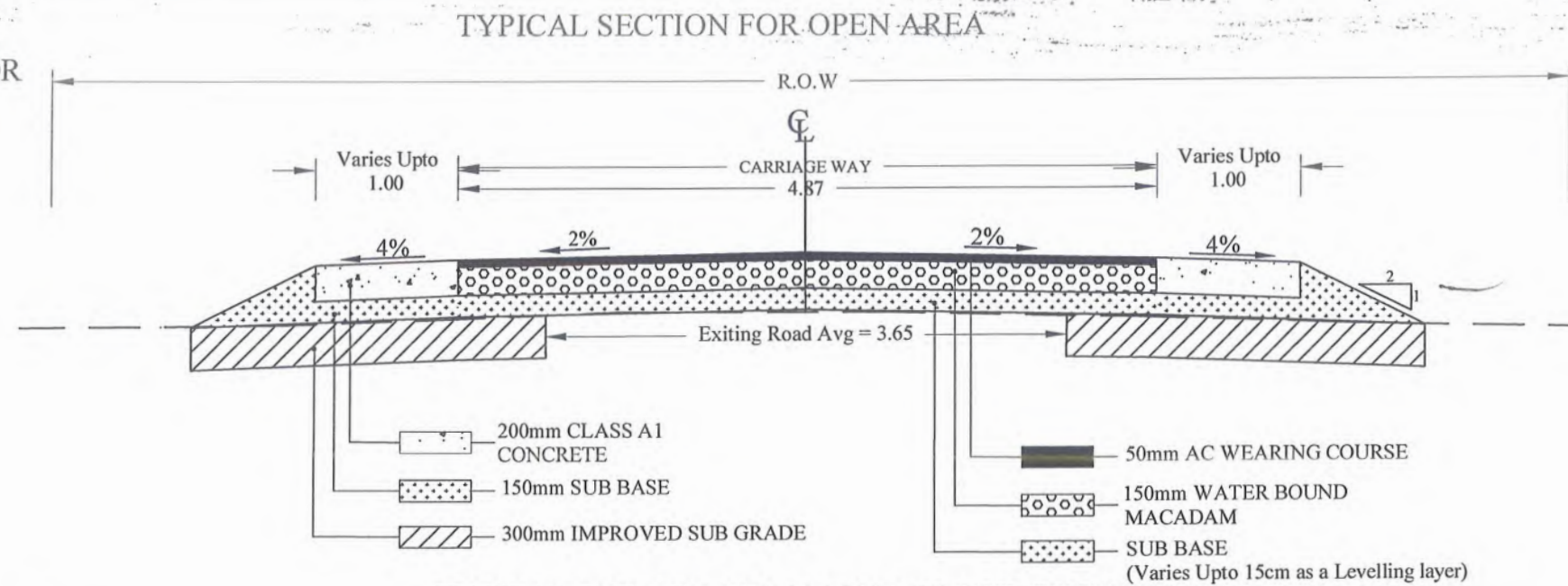


TYPICAL SECTION FOR KM 00+000 TO 1+200

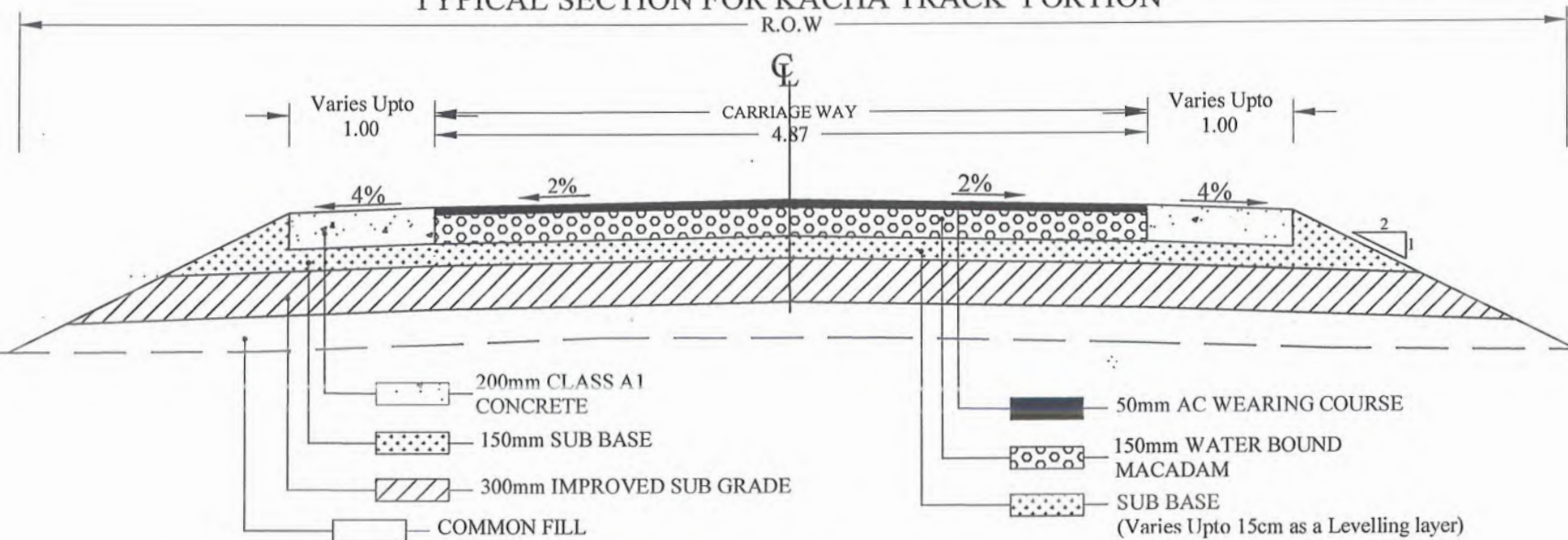


CLIENT:		DESIGN CONSULTANT:		REV	DATE	DESCRIPTION		NAMES		PROJECT:	ROAD NAME	SCALE:	SHEET CONTENT:
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MIN CONSULT	0			DESIGNED	REHMAT	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 Takhate Nasrati Bridge to Khadda Banda via Bhogara Culvert Rose Baig Khail Kalah	N.T.S	TYPICAL CROSS SECTIONS	
			J.V.	a			DRAWN:	MUSTAFA					
			CREATIVE ENGINEERING CONSULTANTS (CEC)	b			CHECKED	SHAHZAD DURRANI					
				c			APPROVED	AQEEL YOUNIS MUGHAL					
										ACCESS ROAD	DATE: SEP, 2024	DWG NO.CEC/RRDP/HW/N-KRK-R2/TS-01	

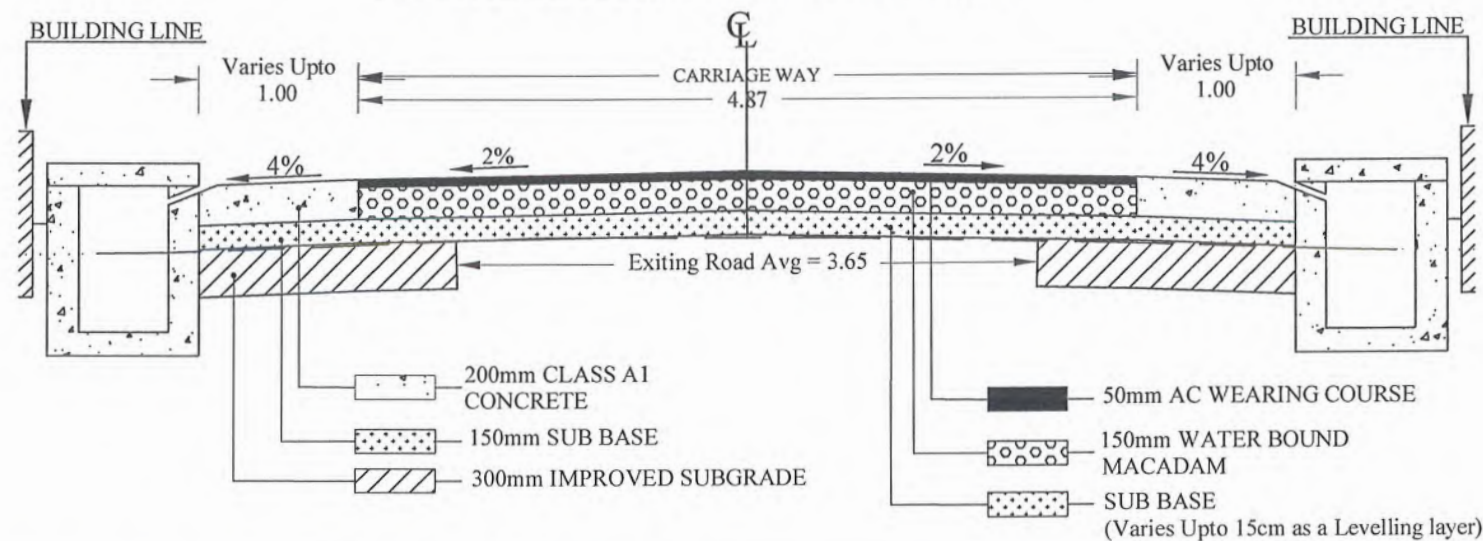
TYPICAL SECTION FOR
KM 1+200 TO END



TYPICAL SECTION FOR KACHA TRACK PORTION



TYPICAL SECTION FOR BUILTUP AREA



Lawal

Deputy Director Construction-III
Provincial Road Development Project
C&W Department, Peshawar



CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES	PROJECT:	ROAD NAME	SCALE:	SHEET CONTENT:
GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	(MIN - JV - CEC) MIN CONSULT J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0			DESIGNED REHMAT	KHYBER PAKHTUNKHWA RURAL ROADS DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 Takhate Nasrati Bridge to Khadda Banda via Bhogara Culvert Rose Baig Khail Kalah	N.T.S	TYPICAL CROSS SECTIONS
		a			DRAWN: MUSTAFA			DATE: SEP. 2024	
		b			CHECKED SHAHZAD DURRANI		ACCESS ROAD		
		c			APPROVED AQEEL YOUNIS MUGHAL				DWG NO.CEC/RRDP/HW/N-KRK-R2/TS-02

CENTER LINE DATA

Lawal S

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar



CENTER LINE DATA			
S,NO	Station	Northing	Easting
1	0+000.00	3,654,401.29	694,545.60
2	0+025.00	3,654,413.46	694,524.84
3	0+050.00	3,654,429.02	694,506.23
4	0+075.00	3,654,423.52	694,481.90
5	0+100.00	3,654,416.26	694,457.99
6	0+125.00	3,654,408.48	694,434.23
7	0+150.00	3,654,400.02	694,410.72
8	0+175.00	3,654,390.09	694,387.77
9	0+200.00	3,654,380.15	694,364.83
10	0+225.00	3,654,370.21	694,341.89
11	0+250.00	3,654,360.44	694,318.88
12	0+275.00	3,654,350.72	694,295.85
13	0+300.00	3,654,340.98	694,272.83
14	0+325.00	3,654,331.11	694,249.86
15	0+350.00	3,654,321.17	694,226.92
16	0+375.00	3,654,311.23	694,203.98
17	0+400.00	3,654,301.29	694,181.04
18	0+425.00	3,654,291.35	694,158.10
19	0+450.00	3,654,281.71	694,135.04
20	0+475.00	3,654,272.64	694,111.74
21	0+500.00	3,654,263.62	694,088.42
22	0+525.00	3,654,254.60	694,065.11
23	0+550.00	3,654,245.57	694,041.79
24	0+575.00	3,654,236.83	694,018.37
25	0+600.00	3,654,228.23	693,994.90
26	0+625.00	3,654,220.44	693,971.16
27	0+650.00	3,654,214.04	693,946.99
28	0+675.00	3,654,207.65	693,922.82
29	0+700.00	3,654,199.37	693,899.28
30	0+725.00	3,654,188.90	693,876.59
31	0+750.00	3,654,178.42	693,853.89
32	0+775.00	3,654,168.67	693,830.87
33	0+800.00	3,654,160.18	693,807.36
34	0+825.00	3,654,152.93	693,783.44
35	0+850.00	3,654,146.05	693,759.40
36	0+875.00	3,654,140.60	693,735.01
37	0+900.00	3,654,135.61	693,710.51
38	0+925.00	3,654,131.61	693,685.84
39	0+950.00	3,654,129.80	693,660.92
40	0+975.00	3,654,130.19	693,635.93
41	1+000.00	3,654,131.59	693,610.97
42	1+025.00	3,654,132.99	693,586.01
43	1+050.00	3,654,134.39	693,561.04
44	1+075.00	3,654,141.00	693,537.28
45	1+100.00	3,654,152.89	693,515.29
46	1+125.00	3,654,164.78	693,493.29
47	1+150.00	3,654,176.67	693,471.30
48	1+175.00	3,654,184.75	693,448.03
49	1+200.00	3,654,186.69	693,423.11
50	1+225.00	3,654,188.29	693,398.16

CENTER LINE DATA			
S,NO	Station	Northing	Easting
51	1+250.00	3,654,189.74	693,373.20
52	1+275.00	3,654,191.27	693,348.25
53	1+300.00	3,654,193.94	693,323.39
54	1+325.00	3,654,196.65	693,298.54
55	1+350.00	3,654,199.24	693,273.68
56	1+375.00	3,654,200.31	693,248.71
57	1+400.00	3,654,199.42	693,223.73
58	1+425.00	3,654,196.59	693,198.90
59	1+450.00	3,654,191.83	693,174.36
60	1+475.00	3,654,185.69	693,150.13
61	1+500.00	3,654,179.48	693,125.91
62	1+525.00	3,654,173.28	693,101.69
63	1+550.00	3,654,166.47	693,077.64
64	1+575.00	3,654,159.13	693,053.74
65	1+600.00	3,654,151.87	693,029.82
66	1+625.00	3,654,144.66	693,005.88
67	1+650.00	3,654,137.45	692,981.94
68	1+675.00	3,654,130.43	692,957.95
69	1+700.00	3,654,124.14	692,933.76
70	1+725.00	3,654,117.84	692,909.56
71	1+750.00	3,654,111.55	692,885.37
72	1+775.00	3,654,105.25	692,861.17
73	1+800.00	3,654,098.96	692,836.98
74	1+825.00	3,654,094.29	692,812.44
75	1+850.00	3,654,091.96	692,787.55
76	1+875.00	3,654,089.65	692,762.66
77	1+900.00	3,654,087.37	692,737.76
78	1+925.00	3,654,085.68	692,712.82
79	1+950.00	3,654,084.04	692,687.88
80	1+975.00	3,654,082.99	692,662.91
81	2+000.00	3,654,084.48	692,637.95
82	2+025.00	3,654,086.03	692,613.00
83	2+050.00	3,654,086.57	692,588.01
84	2+075.00	3,654,087.01	692,563.01
85	2+100.00	3,654,085.75	692,538.07
86	2+125.00	3,654,081.56	692,513.43
87	2+150.00	3,654,077.26	692,488.80
88	2+175.00	3,654,072.96	692,464.17
89	2+200.00	3,654,068.69	692,439.54
90	2+225.00	3,654,067.36	692,414.62
91	2+250.00	3,654,069.85	692,389.75
92	2+275.00	3,654,072.65	692,364.90
93	2+300.00	3,654,075.45	692,340.06
94	2+325.00	3,654,078.25	692,315.22
95	2+350.00	3,654,078.68	692,290.26
96	2+375.00	3,654,076.31	692,265.37
97	2+400.00	3,654,073.92	692,240.49
98	2+425.00	3,654,071.64	692,215.59
99	2+450.00	3,654,069.59	692,190.68
100	2+475.00	3,654,066.70	692,165.86

CENTER LINE DATA			
S,NO	Station	Northing	Easting
101	2+500.00	3,654,060.84	692,141.57
102	2+525.00	3,654,052.75	692,117.91
103	2+550.00	3,654,044.55	692,094.30
104	2+575.00	3,654,041.39	692,069.80
105	2+600.00	3,654,042.50	692,044.83
106	2+625.00	3,654,043.61	692,019.85
107	2+650.00	3,654,044.19	691,994.86
108	2+675.00	3,654,044.54	691,969.87
109	2+700.00	3,654,046.88	691,944.98
110	2+725.00	3,654,049.38	691,920.10
111	2+750.00	3,654,051.89	691,895.23
112	2+775.00	3,654,057.32	691,870.88
113	2+800.00	3,654,062.52	691,846.44
114	2+825.00	3,654,064.54	691,821.54
115	2+850.00	3,654,063.35	691,796.59
116	2+875.00	3,654,058.98	691,771.99
117	2+900.00	3,654,051.51	691,748.15
118	2+925.00	3,654,042.92	691,724.67
119	2+950.00	3,654,035.28	691,700.87
120	2+975.00	3,654,027.66	691,677.06
121	3+000.00	3,654,020.43	691,653.13
122	3+025.00	3,654,014.27	691,628.90
123	3+050.00	3,654,009.15	691,604.43
124	3+075.00	3,654,004.27	691,579.91
125	3+100.00	3,653,999.39	691,555.39
126	3+125.00	3,653,994.51	691,530.87
127	3+150.00	3,653,989.81	691,506.32
128	3+175.00	3,653,985.49	691,481.70
129	3+200.00	3,653,981.71	691,456.99
130	3+225.00	3,653,978.47	691,432.20
131	3+250.00	3,653,975.23	691,407.41
132	3+275.00	3,653,973.32	691,382.50
133	3+300.00	3,653,972.81	691,357.50
134	3+325.00	3,653,972.31	691,332.51
135	3+350.00	3,653,971.80	691,307.51
136	3+375.00	3,653,970.12	691,282.60
137	3+400.00	3,653,964.73	691,258.19
138	3+425.00	3,653,959.10	691,233.83
139	3+450.00	3,653,955.98	691,209.12
140	3+475.00	3,653,956.45	691,184.13
141	3+500.00	3,653,956.92	691,159.13
142	3+525.00	3,653,957.40	691,134.13
143	3+550.00	3,653,957.93	691,109.14
144	3+575.00	3,653,959.54	691,084.19
145	3+600.00	3,653,961.25	691,059.25
146	3+625.00	3,653,962.97	691,034.31
147	3+650.00	3,653,964.68	691,009.37
148	3+675.00	3,653,966.39	690,984.43
149	3+700.00	3,653,968.05	690,959.48
150	3+725.00	3,653,966.95	690,934.53

CENTER LINE DATA			
S,NO	Station	Northing	Easting
151	3+750.00	3,653,964.56	690,909.65
152	3+775.00	3,653,962.17	690,884.76
153	3+800.00	3,653,959.49	690,859.91
154	3+825.00	3,653,954.81	690,835.35
155	3+850.00	3,653,949.91	690,810.84
156	3+875.00	3,653,945.01	690,786.33
157	3+900.00	3,653,940.11	690,761.81
158	3+925.00	3,653,935.60	690,737.23
159	3+950.00	3,653,933.15	690,712.35
160	3+975.00	3,653,930.70	690,687.47
161	4+000.00	3,653,928.25	690,662.59
162	4+025.00	3,653,925.87	690,637.71
163	4+050.00	3,653,927.64	690,612.82
164	4+075.00	3,653,930.14	690,587.96
165	4+100.00	3,653,930.86	690,562.97
166	4+125.00	3,653,929.77	690,538.00
167	4+150.00	3,653,926.90	690,513.17
168	4+175.00	3,653,922.26	690,488.61
169	4+200.00	3,653,915.86	690,464.45
170	4+225.00	3,653,907.83	690,440.78
171	4+250.00	3,653,899.43	690,417.23
172	4+275.00	3,653,891.02	690,393.69
173	4+300.00	3,653,882.61	690,370.15
174	4+325.00	3,653,873.52	690,346.86
175	4+350.00	3,653,864.37	690,323.59
176	4+375.00	3,653,855.08	690,300.38
177	4+400.00	3,653,845.51	690,277.29
178	4+425.00	3,653,835.93	690,254.20
179	4+450.00	3,653,826.34	690,231.11
180	4+475.00	3,653,816.08	690,208.31
181	4+500.00	3,653,805.66	690,185.59
182	4+525.00	3,653,795.07	690,162.94
183	4+550.00	3,653,784.41	690,140.33
184	4+575.00	3,653,773.74	690,117.72
185	4+600.00	3,653,763.75	690,094.83
186	4+625.00	3,653,760.85	690,070.08
187	4+650.00	3,653,759.82	690,045.10
188	4+675.00	3,653,774.30	690,030.33
189	4+700.00	3,653,798.90	690,025.87
190	4+725.00	3,653,822.47	690,030.70
191	4+750.00	3,653,844.72	690,042.03
192	4+775.00	3,653,868.33	690,050.25
193	4+800.00	3,653,891.94	690,058.47
194	4+825.00	3,653,915.74	690,066.11
195	4+850.00	3,653,939.58	690,073.64
196	4+875.00	3,653,963.42	690,081.17
197	4+900.00	3,653,987.26	690,088.69
198	4+925.00	3,654,011.13	690,096.12
199	4+950.00	3,654,035.17	690,102.99
200	4+975.00	3,654,059.21	690,109.86

 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	DESIGN CONSULTANT: (MIN - JV - CEC)  MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT: Deputy Director Construction Provincial Road Improvement Project KHYBER PAKHTUNKHWA, Peshawar RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	ROAD NAME: N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH ACCESS ROAD	SCALE:</
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CENTER LINE DATA			
S,NO	Station	Northing	Easting
201	5+000.00	3,654,083.39	690,116.19
202	5+025.00	3,654,107.88	690,121.19
203	5+050.00	3,654,132.83	690,122.35
204	5+075.00	3,654,145.32	690,108.99
205	5+100.00	3,654,132.42	690,087.58
206	5+125.00	3,654,119.51	690,066.17
207	5+150.00	3,654,106.61	690,044.76
208	5+175.00	3,654,093.74	690,023.33
209	5+200.00	3,654,082.46	690,001.04
210	5+225.00	3,654,072.28	689,978.20
211	5+250.00	3,654,062.70	689,955.12
212	5+275.00	3,654,053.44	689,931.89
213	5+300.00	3,654,042.65	689,909.45
214	5+325.00	3,654,023.33	689,893.99
215	5+350.00	3,654,001.56	689,881.81
216	5+375.00	3,653,990.66	689,859.98
217	5+400.00	3,653,986.53	689,835.33
218	5+425.00	3,653,982.47	689,810.66
219	5+450.00	3,653,979.96	689,785.79
220	5+475.00	3,653,978.91	689,760.82
221	5+500.00	3,653,977.92	689,735.84
222	5+525.00	3,653,980.13	689,710.96
223	5+550.00	3,653,983.48	689,686.19
224	5+575.00	3,653,991.02	689,662.40
225	5+600.00	3,654,000.07	689,639.10
226	5+625.00	3,654,009.93	689,616.17
227	5+650.00	3,654,021.02	689,593.86
228	5+675.00	3,654,029.68	689,570.41
229	5+700.00	3,654,034.89	689,546.05
230	5+725.00	3,654,032.91	689,521.22
231	5+750.00	3,654,027.64	689,496.78
232	5+775.00	3,654,024.30	689,472.05
233	5+800.00	3,654,025.42	689,447.08
234	5+825.00	3,654,026.89	689,422.13
235	5+850.00	3,654,022.58	689,398.71
236	5+875.00	3,653,998.98	689,390.77
237	5+900.00	3,653,975.00	689,383.70
238	5+925.00	3,653,951.03	689,376.63
239	5+950.00	3,653,927.02	689,369.64
240	5+975.00	3,653,903.01	689,362.67
241	6+000.00	3,653,879.38	689,354.83
242	6+025.00	3,653,876.04	689,331.75
243	6+050.00	3,653,880.89	689,307.22
244	6+075.00	3,653,885.74	689,282.70
245	6+100.00	3,653,890.03	689,258.07
246	6+125.00	3,653,893.85	689,233.37
247	6+150.00	3,653,897.67	689,208.66
248	6+175.00	3,653,901.50	689,183.95
249	6+200.00	3,653,905.32	689,159.25
250	6+225.00	3,653,909.28	689,134.56

CENTER LINE DATA			
S,NO	Station	Northing	Easting
251	6+250.00	3,653,913.39	689,109.91
252	6+275.00	3,653,917.50	689,085.25
253	6+300.00	3,653,921.62	689,060.59
254	6+325.00	3,653,925.73	689,035.93
255	6+350.00	3,653,918.02	689,014.81
256	6+375.00	3,653,893.69	689,009.10
257	6+400.00	3,653,869.33	689,003.50
258	6+425.00	3,653,856.57	688,984.54
259	6+450.00	3,653,865.98	688,961.43
260	6+475.00	3,653,876.01	688,938.54
261	6+500.00	3,653,886.05	688,915.64
262	6+525.00	3,653,896.09	688,892.74
263	6+550.00	3,653,906.57	688,870.05
264	6+575.00	3,653,920.37	688,849.25
265	6+600.00	3,653,937.23	688,830.80
266	6+625.00	3,653,954.47	688,812.70
267	6+650.00	3,653,971.71	688,794.60
268	6+675.00	3,653,986.69	688,774.71
269	6+700.00	3,653,994.22	688,751.00
270	6+725.00	3,653,993.30	688,726.14
271	6+750.00	3,653,984.06	688,703.04
272	6+775.00	3,653,967.63	688,684.34
273	6+800.00	3,653,948.96	688,667.72
274	6+825.00	3,653,930.29	688,651.09
275	6+850.00	3,653,911.62	688,634.47
276	6+875.00	3,653,893.65	688,617.11
277	6+900.00	3,653,879.04	688,596.87
278	6+925.00	3,653,868.46	688,574.26
279	6+950.00	3,653,862.29	688,550.07
280	6+975.00	3,653,860.75	688,525.16
281	7+000.00	3,653,863.89	688,500.39
282	7+025.00	3,653,871.48	688,476.61
283	7+050.00	3,653,880.41	688,453.26
284	7+075.00	3,653,889.34	688,429.90
285	7+100.00	3,653,898.27	688,406.55
286	7+125.00	3,653,907.21	688,383.20
287	7+150.00	3,653,916.14	688,359.85
288	7+175.00	3,653,925.07	688,336.50
289	7+200.00	3,653,934.00	688,313.15
290	7+225.00	3,653,942.93	688,289.80
291	7+250.00	3,653,951.86	688,266.45
292	7+275.00	3,653,960.79	688,243.10
293	7+300.00	3,653,969.72	688,219.75
294	7+325.00	3,653,978.65	688,196.40
295	7+350.00	3,653,987.58	688,173.05
296	7+375.00	3,653,996.51	688,149.70
297	7+400.00	3,654,005.44	688,126.35
298	7+425.00	3,654,012.07	688,102.28
299	7+450.00	3,654,013.99	688,077.40
300	7+475.00	3,654,011.12	688,052.60

CENTER LINE DATA			
S,NO	Station	Northing	Easting
301	7+500.00	3,654,003.57	688,028.81
302	7+525.00	3,653,992.50	688,006.40
303	7+550.00	3,653,981.17	687,984.11
304	7+575.00	3,653,969.84	687,961.83
305	7+600.00	3,653,958.51	687,939.54
306	7+625.00	3,653,947.18	687,917.26
307	7+650.00	3,653,936.35	687,894.73
308	7+675.00	3,653,927.47	687,871.37
309	7+700.00	3,653,920.67	687,847.32
310	7+725.00	3,653,916.02	687,822.77
311	7+750.00	3,653,913.54	687,797.90
312	7+775.00	3,653,912.71	687,772.91
313	7+800.00	3,653,911.97	687,747.92
314	7+825.00	3,653,911.23	687,722.93
315	7+850.00	3,653,909.87	687,697.98
316	7+875.00	3,653,905.63	687,673.36
317	7+900.00	3,653,898.38	687,649.45
318	7+925.00	3,653,890.08	687,625.86
319	7+930.82	3,653,888.15	687,620.38


 Deputy Director Construction-III
 Provincial Road Improvement Project
 C&W Department, Peshawar



CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP,2024	Tender Drawings.	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH	NTS	CENTER LINE DATA			
		a			DRAWN	IFTIKHAR ABBAS							
		b			CHECKED	S.DURRANI			DATE:				
		c			APPROVED	AQEEL YOUNIS			SEP, 2024.		CEC/RRDP/HW/N-KRK-R2/CLD-01		

HORIZONTAL CURVE DATA

Lawal S

Deputy Director Construction-III
Provincial Road Improvement Project
C&W Department, Peshawar

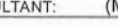


Curve Table: Alignments

Curve #	PI Station	PI Easting	PI Northing	PC Station	PC Easting	PC Northing	PT Station	PT Easting	PT Northing	Radius	Length	Tangent Length	Delta Angle	Chord Direction
C1	0+013.19	694532.7509	3654404.2520	0+008.42	694537.4016	3654403.1819	0+017.64	694529.6407	3654407.8714	14.53	9.22	4.772	36.3695	N58° 51' 26.97"W
C2	0+047.75	694510.0159	3654430.7093	0+039.36	694515.4861	3654424.3436	0+054.38	694501.8843	3654428.6301	13.52	15.02	8.393	63.6703	N72° 30' 28.34"W
C3	0+083.30	694473.8623	3654421.4650	0+076.67	694480.2885	3654423.1081	0+089.93	694467.5591	3654419.3997	200.00	13.26	6.633	3.7990	S73° 45' 26.98"W
C4	0+142.30	694417.7904	3654403.0924	0+133.08	694426.5556	3654405.9644	0+151.51	694409.3267	3654399.4258	200.00	18.43	9.224	5.2811	S69° 13' 02.86"W
C5	0+230.29	694337.0442	3654368.1117	0+228.34	694338.8290	3654368.8850	0+232.23	694335.2523	3654367.3551	418.65	3.89	1.945	0.5324	S66° 50' 35.26"W
C6	0+306.58	694266.7615	3654338.4366	0+290.59	694281.4932	3654344.6567	0+322.57	694252.0889	3654332.0784	3403.81	31.98	15.991	0.5383	S66° 50' 24.57"W
C7	0+442.90	694141.6732	3654284.2309	0+428.03	694155.3200	3654290.1446	0+457.77	694127.8028	3654278.8625	750.44	29.74	14.873	2.2708	S67° 42' 23.00"W
C8	0+558.29	694034.0580	3654242.5800	0+555.23	694036.9151	3654243.6858	0+561.36	694031.1814	3654241.5260	339.26	6.13	3.064	1.0347	S69° 21' 33.00"W
C9	0+615.83	693980.0338	3654222.7849	0+606.57	693988.7324	3654225.9721	0+625.08	693971.0779	3654220.4154	200.00	18.51	9.264	5.3041	S72° 31' 42.97"W
C10	0+688.60	693909.6702	3654204.1686	0+680.28	693917.7172	3654206.2976	0+696.88	693902.1127	3654200.6798	95.52	16.61	8.324	9.9602	S70° 12' 02.03"W
C11	0+783.26	693823.6942	3654164.4793	0+747.75	693855.9306	3654179.3607	0+818.62	693789.5654	3654154.6884	462.90	70.87	35.506	8.7722	S69° 36' 23.69"W
C12	0+855.78	693753.8473	3654144.4414	0+847.95	693761.3782	3654146.6019	0+863.61	693746.1705	3654142.8767	200.00	15.66	7.835	4.4867	S76° 14' 09.67"W
C13	0+937.70	693673.5729	3654128.0793	0+901.12	693709.4129	3654135.3845	0+973.87	693637.0534	3654130.1262	283.01	72.75	36.577	14.7287	S85° 50' 37.23"W
C14	1+062.90	693548.1637	3654135.1083	1+054.30	693556.7545	3654134.6268	1+071.23	693540.5950	3654139.2008	38.51	16.93	8.604	25.1922	N74° 11' 45.29"W
C15	1+165.42	693457.7370	3654184.0022	1+160.17	693462.3603	3654181.5024	1+170.52	693452.4969	3654184.4085	24.76	10.36	5.256	23.9663	N73° 34' 58.74"W
C16	1+207.83	693415.2974	3654187.2930	1+204.53	693418.5917	3654187.0375	1+211.14	693411.9988	3654187.4845	340.58	6.61	3.304	1.1117	N86° 07' 19.11"W
C17	1+274.21	693349.0345	3654191.1394	1+269.14	693354.0903	3654190.8459	1+279.27	693344.0000	3654191.6884	200.00	10.13	5.064	2.9010	N85° 13' 38.26"W
C18	1+399.51	693224.4703	3654204.7225	1+341.42	693282.2205	3654198.4252	1+456.35	693168.1936	3654190.3118	319.88	114.93	58.092	20.5863	S85° 55' 48.26"W
C19	1+536.55	693090.5036	3654170.4177	1+530.06	693096.7903	3654172.0275	1+543.03	693084.3003	3654168.5121	274.02	12.98	6.489	2.7133	S74° 16' 48.98"W
C20	1+583.62	693045.5017	3654156.5936	1+578.23	693050.6585	3654158.1777	1+589.02	693040.3364	3654155.0377	1977.47	10.79	5.395	0.3126	S73° 04' 47.75"W
C21	1+669.68	692963.0995	3654131.7718	1+663.17	692969.3373	3654133.6508	1+676.19	692956.7946	3654130.1315	342.33	13.03	6.515	2.1805	S74° 19' 35.29"W
C22	1+814.90	692822.5529	3654095.2059	1+802.41	692834.6431	3654098.3514	1+827.34	692810.1137	3654094.0517	153.89	24.93	12.493	9.2820	S80° 03' 27.80"W
C23	1+900.91	692736.8632	3654087.2548	1+894.39	692743.3494	3654087.8567	1+907.42	692730.3631	3654086.8282	482.72	13.03	6.514	1.5463	S85° 28' 18.76"W
C24	1+971.02	692666.9030	3654082.6632	1+962.58	692675.3272	3654083.2161	1+979.44	692658.4772	3654083.1921	131.50	16.86	8.442	7.3465	S89° 55' 05.72"W
C25	2+026.69	692611.3123	3654086.1524	2+022.21	692615.7886	3654085.8715	2+031.18	692606.8280	3654086.2324	200.00	8.97	4.485	2.5693	N87° 41' 35.38"W
C26	2+091.68	692546.3314	3654087.3118	2+077.31	692560.6982	3654087.0555	2+105.97	692532.1766	3654084.8386	150.14	28.65	14.369	10.9336	S85° 33' 19.44"W
C27	2+215.57	692424.2089	3654065.9731	2+197.06	692442.4402	3654069.1587	2+233.83	692405.8178	3654068.0445	128.93	36.76	18.507	16.3376	S88° 15' 26.67"W
C28	2+338.74	692301.5604	3654079.7871	2+325.24	692314.9768	3654078.2760	2+352.15	692288.1210	3654078.4963	129.41	26.91	13.501	11.9125	N89° 31' 48.28"W
C29	2+416.86	692223.7076	3654072.3094	2+414.59	692225.9677	3654072.5265	2+419.13	692221.4449	3654072.1229	335.89	4.54	2.270	0.7746	S84° 54' 03.37"W
C30	2+481.98	692158.8015	3654066.9597	2+456.63	692184.0665	3654069.0421	2+507.06	692134.8550	3654058.6396	200.00	50.43	25.351	14.4478	S78° 03' 51.46"W
C31	2+561.46	692083.4727	3654040.7870	2+555.46	692089.1374	3654042.7552	2+567.31	692077.4817	3654041.0528	31.29	11.85	5.997	21.7001	S81° 41' 25.58"W
C32	2+637.61	692007.2544	3654044.1687	2+629.06	692015.7959	3654043.7898	2+646.16	691998.7044	3654044.1800	397.37	17.10	8.550	2.4652	N88° 41' 31.52"W
C33	2+673.51	691971.3537	3654044.2159	2+663.58	691981.2791	3654044.2029	2+683.42	691961.4783	3654045.2116	200.00	19.83	9.925	5.6822	N87° 05' 00.90"W
C34	2+757.89	691887.3760	3654052.6832	2+751.57	691893.6657	3654052.0490	2+764.18	691881.2904	3654054.3945	72.63	12.61	6.322	9.9490	N79° 16' 04.71"W
C35	2+838.16	691810.0721	3654074.4218	2+774.92	691870.9582	3654057.3000	2+897.22	691750.7555	3654052.4714	194.58	122.30	63.248	36.0138	S87° 41' 58.70"W
C36	2+923.41	691726.1968	3654043.3833	2+918.92	691730.4010	3654044.9391	2+927.89	691721.9270	3654042.0175	200.00	8.96	4.483	2.5681	S70° 58' 36.37"W
C37	3+010.27	691643.4630	3654016.9172	2+978.85	691673.3881	3654026.4901	3+041.62	691612.6482	3654010.7851	554.64	62.77	31.419	6.4844	S75° 30' 10.79"W
C38	3+142.15	691514.0551	3653991.1651	3+134.53	691521.5277	3653992.6522	3+149.77	691506.5505	3653989.8486	669.25	15.24	7.619	1.3045	S79° 23' 50.86"W
C39	3+187.46	691469.4255	3653983.3357	3+181.46	691475.3320	3653984.3719	3+193.45	691463.4793	3653982.5590	273.90	11.99	5.997	2.5084	S81° 18' 14.14"W
C40	3+262.89	691394.6281	3653973.5656	3+251.92	691405.5081	3653974.9867	3+273.84	691383.6580	3653973.3432	200.00	21.92	10.972	6.2804	S85° 41' 54.00"W

Deputy Director Construction-III
Provincial Road Development Project
C&W Department, Peshawar



CLIENT:	DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP,2024	Tender Drawings.	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH	NTS	CURVE DATA	
		a			DRAWN	IFTIKHAR ABBAS					
		b			CHECKED	S.DURRANI			ACCESS ROAD		SEP, 2024.
		c			APPROVED	AQEEL YOUNIS					
											CEC/RRDP/HWN-KRK-R2/HCD-01

Curve Table: Alignments

Curve #	PI Station	PI Easting	PI Northing	PC Station	PC Easting	PC Northing	PT Station	PT Easting	PT Northing	Radius	Length	Tangent Length	Delta Angle	Chord Direction
C41	3+370.52	691286.9931	3653971.3834	3+358.50	691299.0155	3653971.6271	3+382.46	691275.2771	3653968.6757	115.85	23.96	12.025	11.8519	S82° 54' 45.31"W
C42	3+439.73	691219.4815	3653955.7805	3+430.71	691228.2704	3653957.8118	3+448.66	691210.4625	3653955.9512	72.95	17.95	9.021	14.0974	S84° 02' 07.16"W
C43	3+550.79	691108.3522	3653957.8833	3+544.13	691115.0032	3653957.7574	3+557.44	691101.7155	3653958.3389	268.02	13.30	6.652	2.8435	N87° 29' 39.21"W
C44	3+707.54	690951.9688	3653968.6200	3+696.30	690963.1823	3653967.8501	3+718.73	690940.7803	3653967.5459	136.56	22.43	11.240	9.4107	S89° 13' 19.87"W
C45	3+799.41	690860.4694	3653959.8367	3+789.23	690870.5975	3653960.8089	3+809.56	690850.4923	3653957.8417	200.00	20.33	10.175	5.8246	S81° 36' 16.32"W
C46	3+920.99	690741.2230	3653935.9921	3+918.79	690743.3879	3653936.4250	3+923.20	690739.0258	3653935.7758	44.46	4.41	2.208	5.6861	S81° 32' 07.11"W
C47	4+031.66	690631.0878	3653925.1513	4+021.72	690640.9775	3653926.1248	4+041.51	690621.2410	3653926.4910	84.79	19.78	9.938	13.3695	N88° 56' 12.68"W
C48	4+135.20	690528.4055	3653939.1219	4+050.39	690612.4392	3653927.6886	4+216.76	690448.5363	3653910.6035	347.93	166.37	84.808	27.3978	S84° 02' 56.49"W
C49	4+301.88	690368.3730	3653881.9800	4+298.71	690371.3624	3653883.0473	4+305.05	690365.4191	3653880.8183	200.00	6.35	3.174	1.8185	S69° 26' 27.21"W
C50	4+367.61	690307.1994	3653857.9221	4+355.33	690318.6272	3653862.4163	4+379.89	690295.8576	3653853.2153	1315.56	24.56	12.280	1.0696	S67° 59' 48.63"W
C51	4+454.55	690226.9045	3653824.6005	4+447.55	690233.3674	3653827.2825	4+461.54	690220.5437	3653821.6844	383.38	13.99	6.997	2.0913	S66° 24' 59.09"W
C52	4+508.14	690178.1880	3653802.2662	4+504.86	690181.1672	3653803.6321	4+511.42	690175.2239	3653800.8680	599.97	6.55	3.277	0.6260	S65° 03' 28.08"W
C53	4+603.06	690092.3377	3653761.7671	4+590.48	690103.7170	3653767.1352	4+615.31	690079.7663	3653761.2501	62.12	24.83	12.582	22.9002	S76° 11' 41.78"W
C54	4+662.07	690033.0429	3653759.3287	4+655.63	690039.4816	3653759.5934	4+666.23	690031.8929	3653765.6694	7.40	10.61	6.444	82.0756	N51° 19' 01.69"W
C55	4+711.41	690023.8304	3653810.1257	4+704.61	690025.0437	3653803.4354	4+717.67	690027.1383	3653816.0663	19.00	13.06	6.799	39.3899	N9° 24' 56.24"E
C56	4+744.70	690040.2846	3653839.6753	4+737.96	690037.0080	3653833.7910	4+751.40	690042.4978	3653846.0362	77.56	13.44	6.735	9.9255	N24° 08' 52.23"E
C57	4+803.90	690059.7505	3653895.6205	4+801.00	690058.8001	3653892.8891	4+806.79	690060.6215	3653898.3783	200.00	5.78	2.892	1.6569	N18° 21' 23.93"E
C58	4+921.23	690095.0894	3654007.5094	4+916.13	690093.5509	3654002.6383	4+926.34	690096.4929	3654012.4211	370.12	10.22	5.108	1.5815	N16° 44' 14.82"E
C59	4+992.23	690114.5941	3654075.7698	4+985.04	690112.6210	3654068.8645	4+999.40	690116.0669	3654082.7989	200.00	14.36	7.182	4.1131	N13° 53' 24.68"E
C60	5+028.52	690122.0375	3654111.2950	5+020.32	690120.3562	3654103.2707	5+036.66	690122.1547	3654119.4928	85.03	16.35	8.199	11.0145	N6° 19' 35.05"E
C61	5+070.72	690122.6416	3654153.5491	5+056.48	690122.4380	3654139.3032	5+073.31	690110.4398	3654146.1935	7.91	16.84	14.247	121.9019	N60° 07' 54.50"W
C62	5+139.62	690053.6504	3654111.9592	5+137.94	690055.0931	3654112.8289	5+141.31	690052.2065	3654111.0915	2493.41	3.37	1.685	0.0774	S58° 57' 21.45"W
C63	5+185.10	690014.6689	3654088.5319	5+175.45	690022.9435	3654093.5048	5+194.73	690005.8508	3654084.6026	158.12	19.28	9.654	6.9878	S62° 29' 18.81"W
C64	5+233.85	689970.1175	3654068.6799	5+229.86	689973.7623	3654070.3041	5+237.84	689966.4108	3654067.2025	200.00	7.98	3.990	2.2860	S67° 07' 31.58"W
C65	5+305.41	689903.6489	3654042.1864	5+287.00	689920.7481	3654049.0019	5+322.22	689895.2542	3654025.8047	49.06	35.22	18.407	41.1361	S47° 42' 01.40"W
C66	5+358.15	689878.8659	3653993.8236	5+342.48	689886.0143	3654007.7734	5+371.53	689863.4067	3653991.2338	31.19	29.05	15.675	53.3573	S53° 48' 39.59"W
C67	5+436.69	689799.1446	3653980.4680	5+418.78	689816.8073	3653983.4270	5+454.55	689781.2504	3653979.7401	285.41	35.77	17.909	7.1810	S84° 04' 48.57"W
C68	5+505.50	689730.3380	3653977.6692	5+497.66	689738.1710	3653977.9878	5+513.31	689722.5608	3653978.6559	93.75	15.64	7.840	9.5598	N87° 32' 57.90"W
C69	5+555.71	689680.4946	3653983.9928	5+543.66	689692.4535	3653982.4756	5+567.64	689669.2576	3653988.3571	98.21	23.99	12.055	13.9951	N75° 46' 19.10"W
C70	5+620.04	689620.4171	3654007.3262	5+616.59	689623.6321	3654006.0775	5+623.47	689617.4774	3654009.1302	38.23	6.88	3.449	10.3105	N63° 37' 09.08"W
C71	5+638.67	689604.5248	3654017.0788	5+633.41	689609.0080	3654014.3276	5+643.89	689599.5906	3654018.9016	53.36	10.49	5.260	11.2603	N64° 05' 38.79"W
C72	5+700.21	689546.7669	3654038.4162	5+675.18	689570.2452	3654029.7427	5+723.89	689522.2993	3654033.1440	86.05	48.71	25.029	32.4357	N85° 56' 31.67"W
C73	5+769.16	689478.0436	3654023.6080	5+754.65	689492.2332	3654026.6655	5+783.50	689463.5533	3654024.4582	106.53	28.85	14.515	15.5180	S85° 35' 56.54"W
C74	5+847.78	689399.3847	3654028.2234	5+837.25	689409.8916	3654027.6069	5+855.04	689396.4088	3654018.1279	13.25	17.79	10.525	76.9336	S54° 53' 28.59"W
C75	5+929.65	689375.3134	3653946.5650	5+928.02	689375.7732	3653948.1246	5+931.28	689374.8600	3653945.0036	802.94	3.25	1.626	0.2320	S16° 18' 30.47"W
C76	6+007.59	689353.5790	3653871.7177	5+994.88	689357.1234	3653883.9236	6+015.46	689341.1103	3653874.1839	13.87	20.58	12.710	84.9959	S58° 41' 25.49"W
C77	6+086.43	689271.4830	3653887.9558	6+078.33	689279.4322	3653886.3835	6+094.53	689263.4751	3653889.1946	387.71	16.20	8.103	2.3947	N80° 00' 32.21"W
C78	6+212.95	689146.4544	3653907.2972	6+206.28	689153.0451	3653906.2777	6+219.62	689139.8761	3653908.3941	1135.26	13.34	6.669	0.6732	N80° 52' 10.91"W
C79	6+344.01	689017.1720	3653928.8549	6+331.13	689029.8778	3653926.7362	6+351.80	689014.2891	3653916.3003	13.68	20.67	12.881	86.5343	S56° 11' 59.09"W
C80	6+420.31	688998.9554	3653849.5245	6+399.56	689003.5996	3653869.7492	6+429.78	688979.9505	3653857.8565	17.18	30.22	20.751	100.7408	S63° 18' 10.89"W

Deputy Director Construction-III
Provincial Road Development Project
C&W Department, Peshawar



CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024	Tender Drawings.	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP) N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH ACCESS ROAD	NTS	CURVE DATA
		a			DRAWN	IFTIKHAR ABBAS		DATE:	
		b			CHECKED	S.DURRANI		SEP, 2024	
		c			APPROVED	AQEEL YOUNIS			

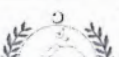
CEC/RRDP/HWN-KRK-R2/HCD-01

Curve Table: Alignments

Curve #	PI Station	PI Easting	PI Northing	PC Station	PC Easting	PC Northing	PT Station	PT Easting	PT Northing	Radius	Length	Tangent Length	Delta Angle	Chord Direction
C81	6+562.95	688857.9882	3653911.3268	6+538.30	688880.5618	3653901.4302	6+587.10	688840.1416	3653928.3271	140.25	48.80	24.648	19.9352	N56° 21' 32.16"W
C82	6+729.68	688736.9046	3654026.6682	6+654.51	688791.3283	3653974.8255	6+771.12	688686.9229	3653970.5306	72.68	116.60	75.164	91.9287	S87° 38' 39.65"W
C83	6+950.39	688567.7142	3653836.6396	6+858.52	688628.8032	3653905.2525	7+019.32	688481.9081	3653869.4558	133.05	160.80	91.867	69.2492	S76° 18' 16.53"W
C84	7+457.74	688072.4158	3654026.0647	7+399.98	688126.3628	3654005.4329	7+508.70	688020.9305	3653999.8883	130.09	108.71	57.758	47.8791	S86° 59' 22.64"W
C85	7+695.77	687854.1726	3653915.1044	7+632.15	687910.8880	3653943.9399	7+757.33	687790.5753	3653913.2277	283.95	125.18	63.625	25.2597	S75° 40' 47.75"W
C86	7+865.35	687682.5981	3653910.0415	7+834.23	687713.7083	3653910.9595	7+895.98	687653.2381	3653899.7132	200.00	61.75	31.124	17.6907	S79° 27' 52.08"W

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Deputy Director Construction-III
Provincial Government Project
C&W Department, Peshawar



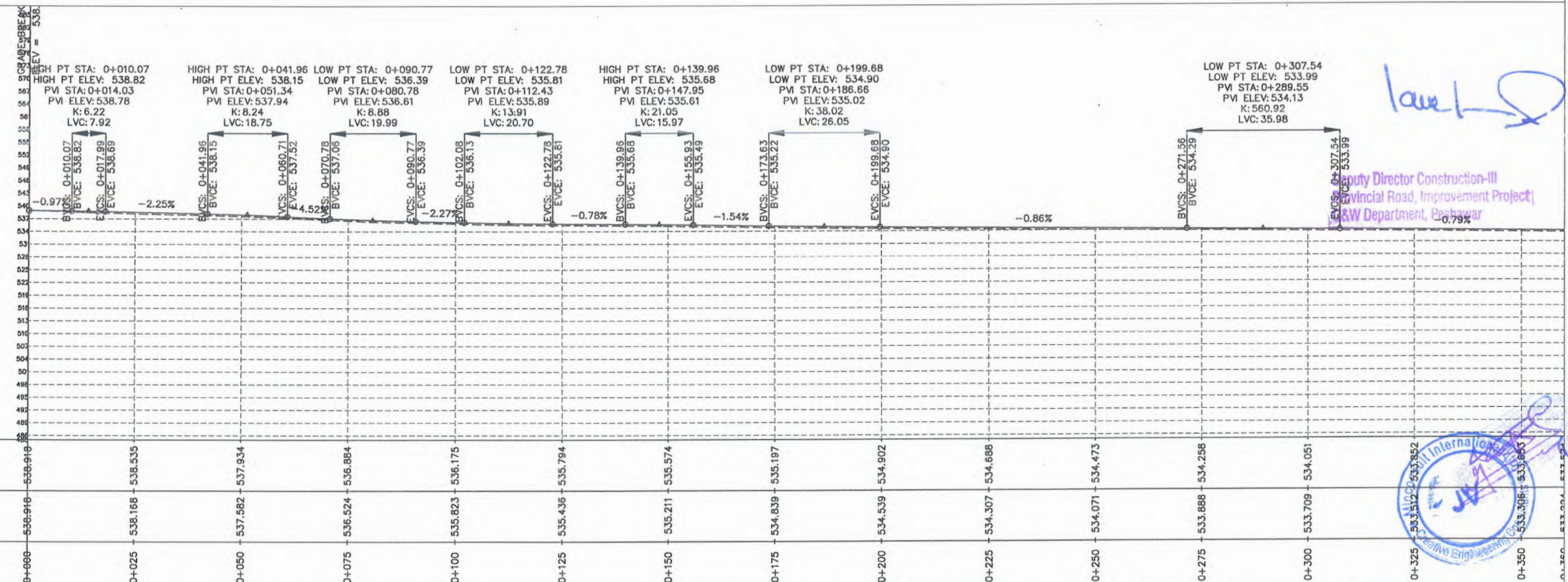
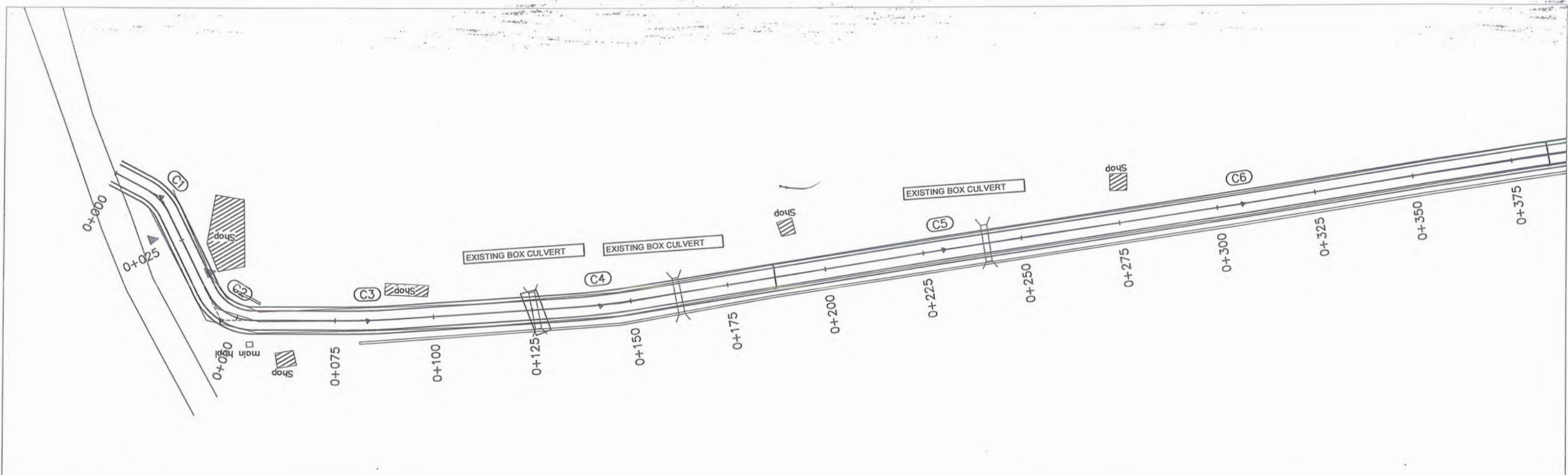
CLIENT:	DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024	Tender Drawings.	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH	NTS	CURVE DATA	
		a			DRAWN	IFTIKHAR ABBAS					
		b			CHECKED	S.DURRANI					
		c			APPROVED	AQEEL YOUNIS				ACCESS ROAD	SEP, 2024.

PLAN & PROFILE DRAWINGS

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Deputy Director Construction-III
Provincial Road, Improvement Project,
C&W Department, Peshawar



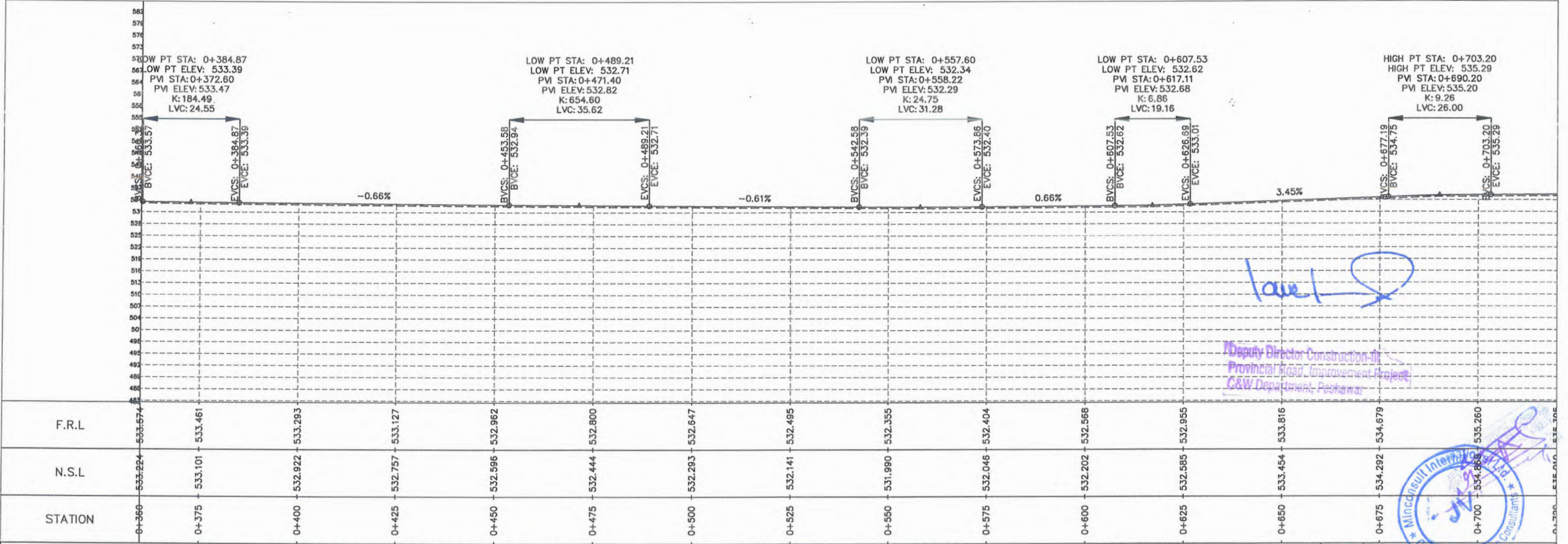
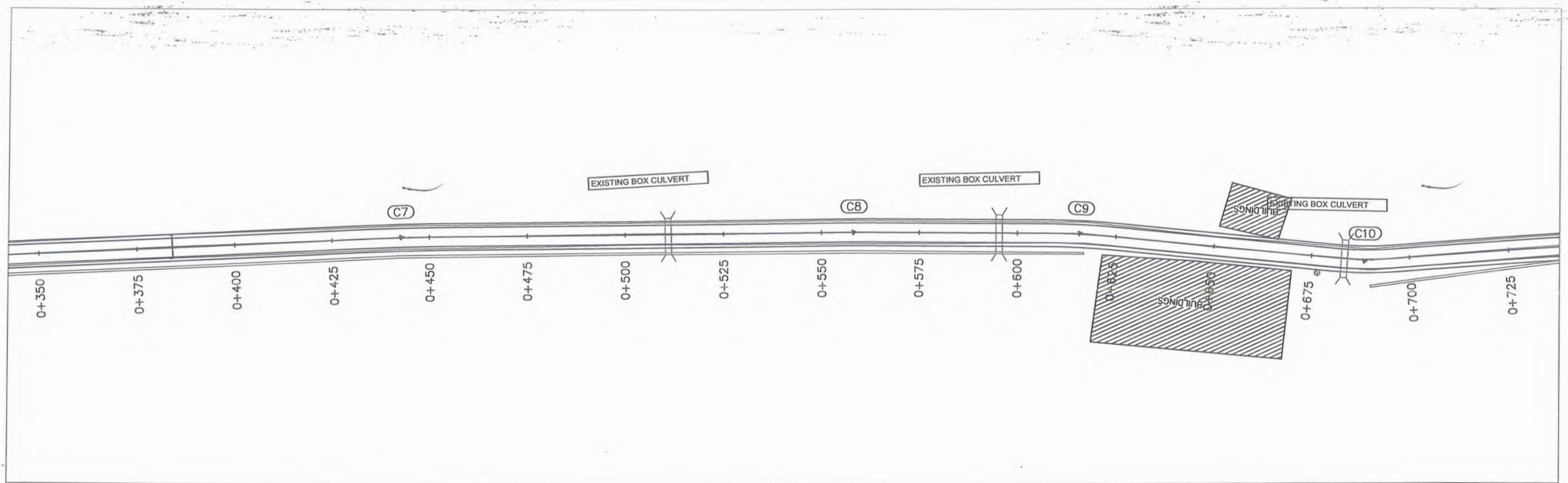


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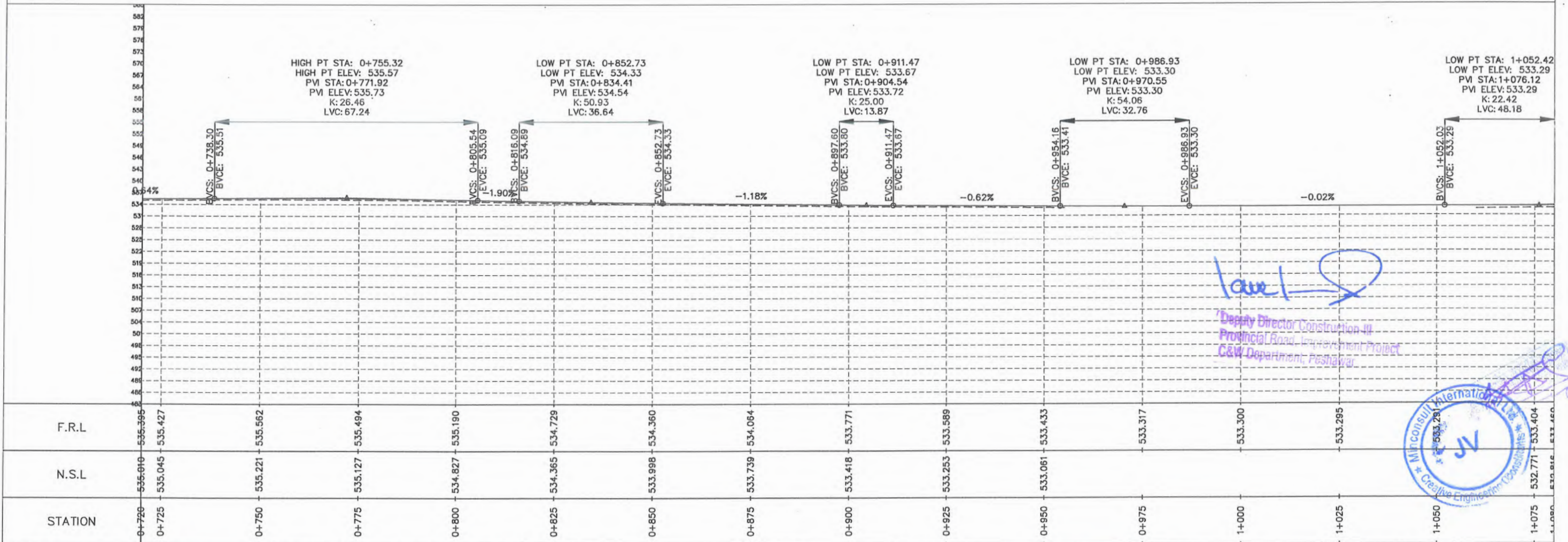
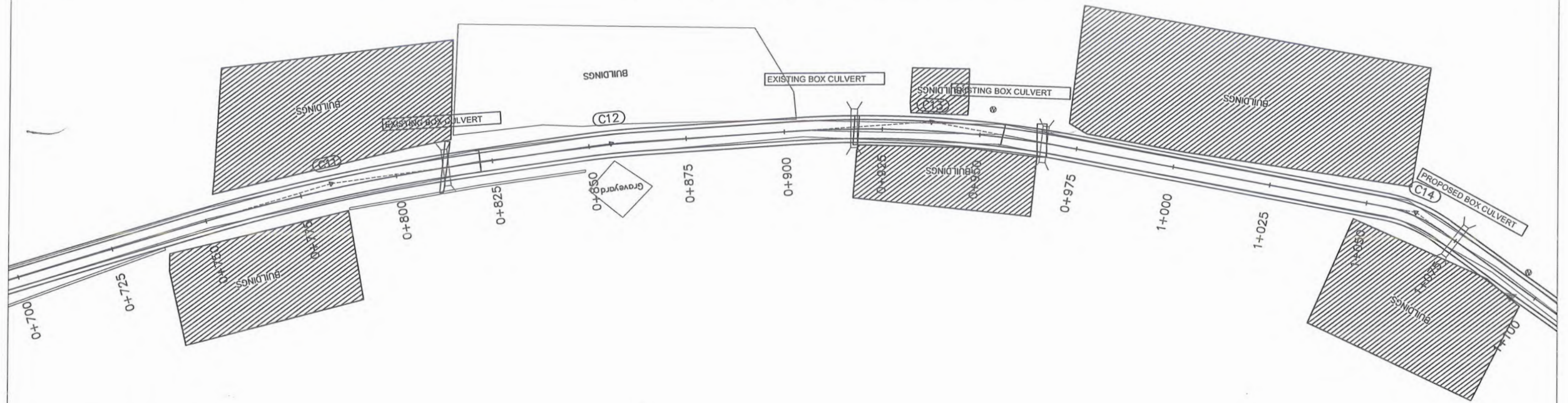
Deputy Director Construction-III
Provincial Road, Improvement Project,
&W Department, Peshawar



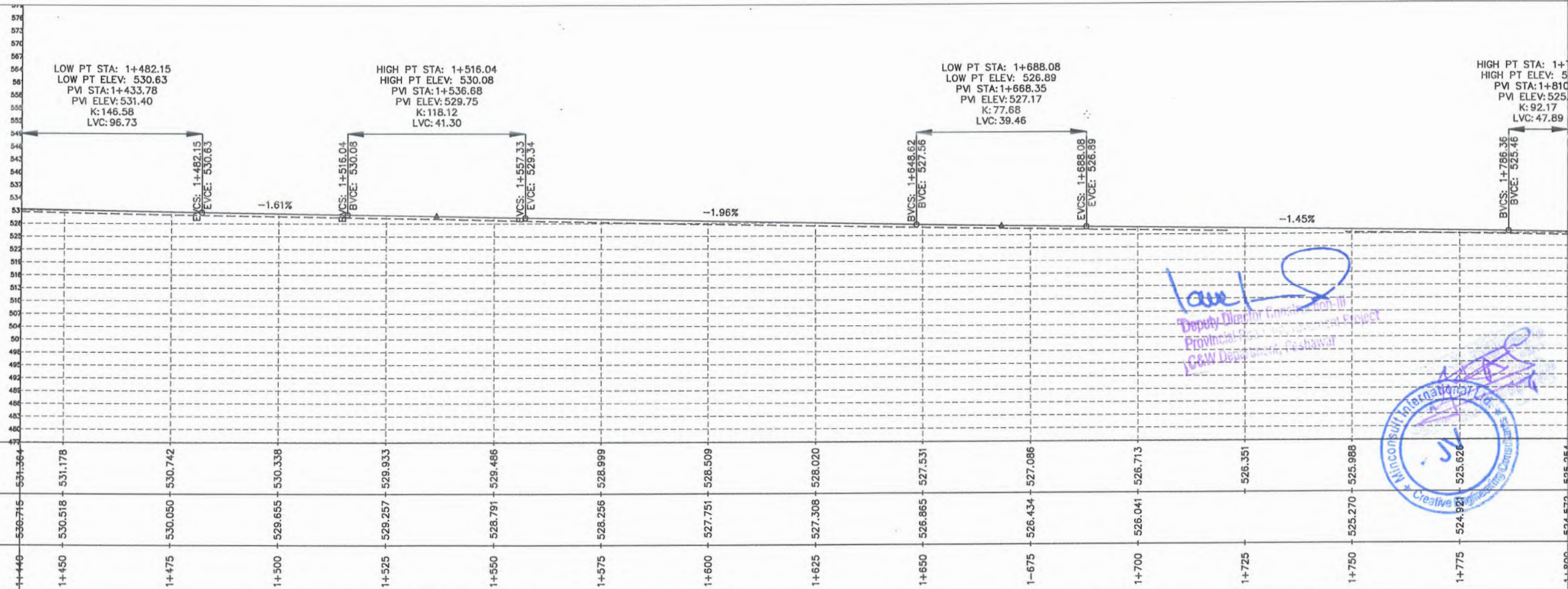
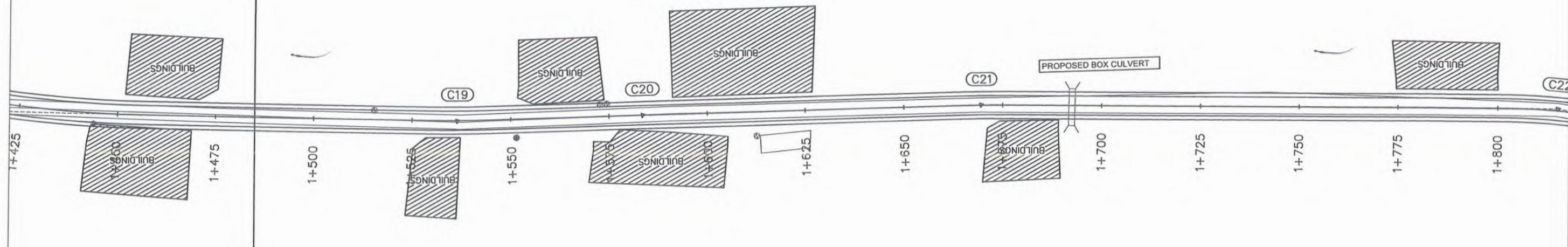
CLIENT: GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	DESIGN CONSULTANT: (MIN - JV - CEC) MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT: KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	ROAD NAME: N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH ACCESS ROAD	SCALE: H=1:1000 V=1:1000 DATE: SEP, 2024.	SHEET CONTENT: PLAN & PROFILE 0+000.00 - 0+360.00 CEC/RRDP/HWIN-KRK-R2/PP/ 1
		0	SEP, 2024	Tender Drawings.	G.DESIGNED	S.DURRANI				
		a			DRAWN	IFTIKHAR ABBAS				
		b			CHECKED	S.DURRANI				
		c			APPROVED	AQEEL YOUNIS				



CLIENT:  GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	DESIGN CONSULTANT: (MIN - JV - CEC)  MINCONSULT SDN BHD (COMPANY NO. 58635-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	REV 0 a b c	DATE SEP, 2024 	DESCRIPTION Tender Drawings. 	NAMES: G.DESIGNED S.DURRANI DRAWN IFTIKHAR ABBAS CHECKED S.DURRANI APPROVED AQEEL YOUNIS	PROJECT: KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	ROAD NAME: N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH ACCESS ROAD	SCALE: H=1:1000 V=1:1000 DATE: SEP, 2024	SHEET CONTENT: PLAN & PROFILE 0+360.00 - 0+720.00 CEC/RRDP/HWN-KRK-R2/PP/ 2
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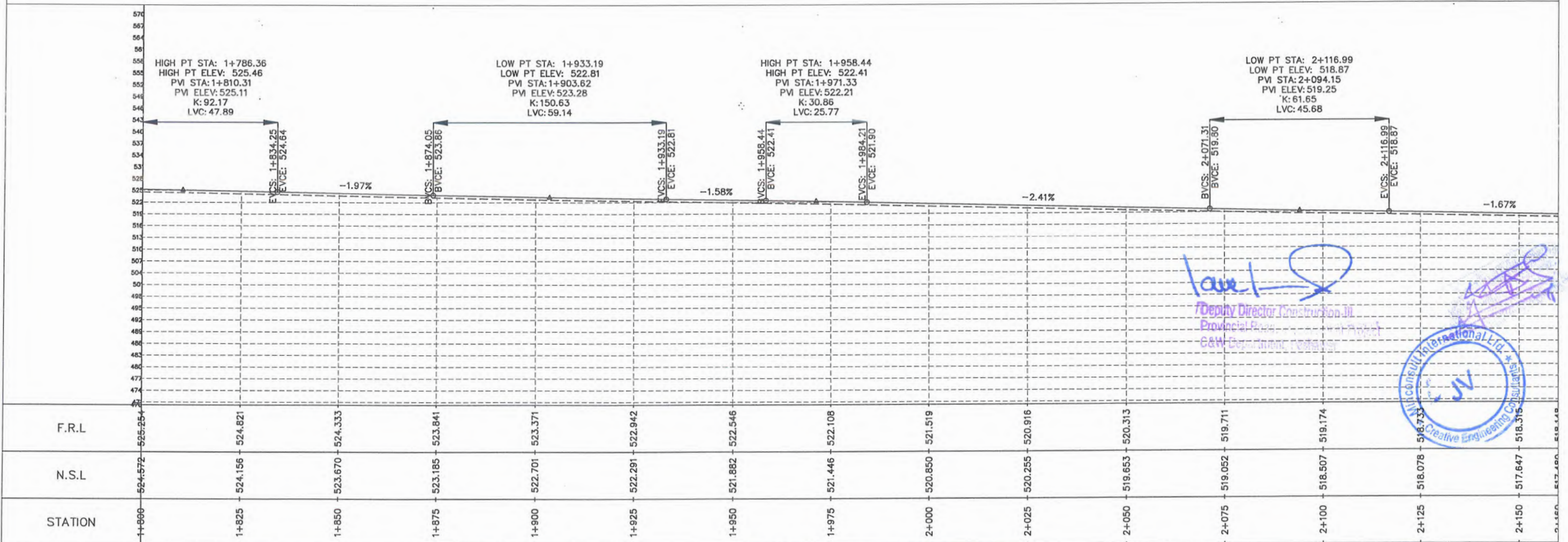
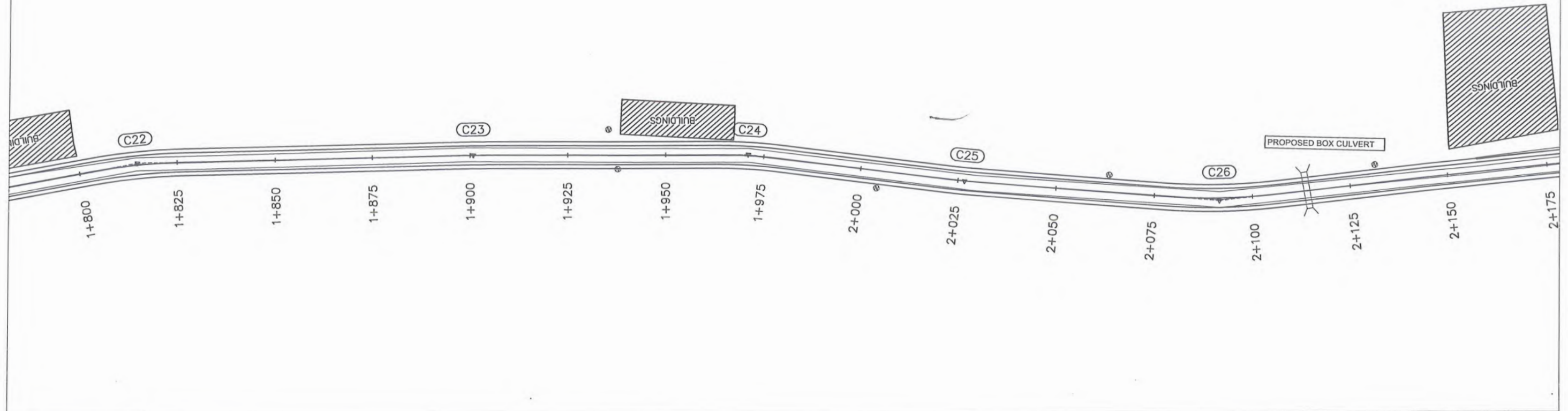
CLIENT:  GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	DESIGN CONSULTANT: (MIN - JV - CEC)  MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	REV 0 a b c	DATE SEP, 2024 	DESCRIPTION Tender Drawings. 	NAMES: G. DESIGNED DRAWN CHECKED APPROVED	S. DURRANI IFTIKHAR ABBAS S. DURRANI AQEEL YOUNIS	PROJECT: KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	ROAD NAME: N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH ACCESS ROAD	SCALE: H=1:1000 V=1:1000 DATE: SEP, 2024	SHEET CONTENT: PLAN & PROFILE 0+720.00 - 1+080.00 CEC/RRDP/HWN-KRK-R2/PP/ 3
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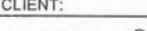


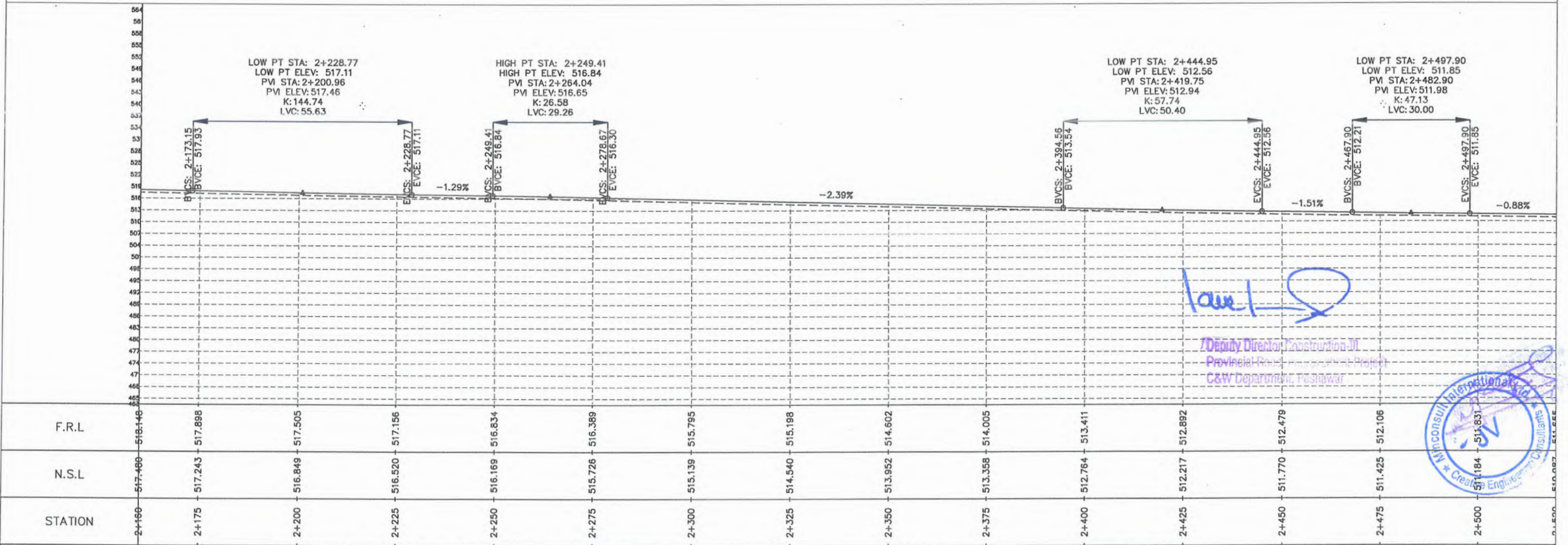
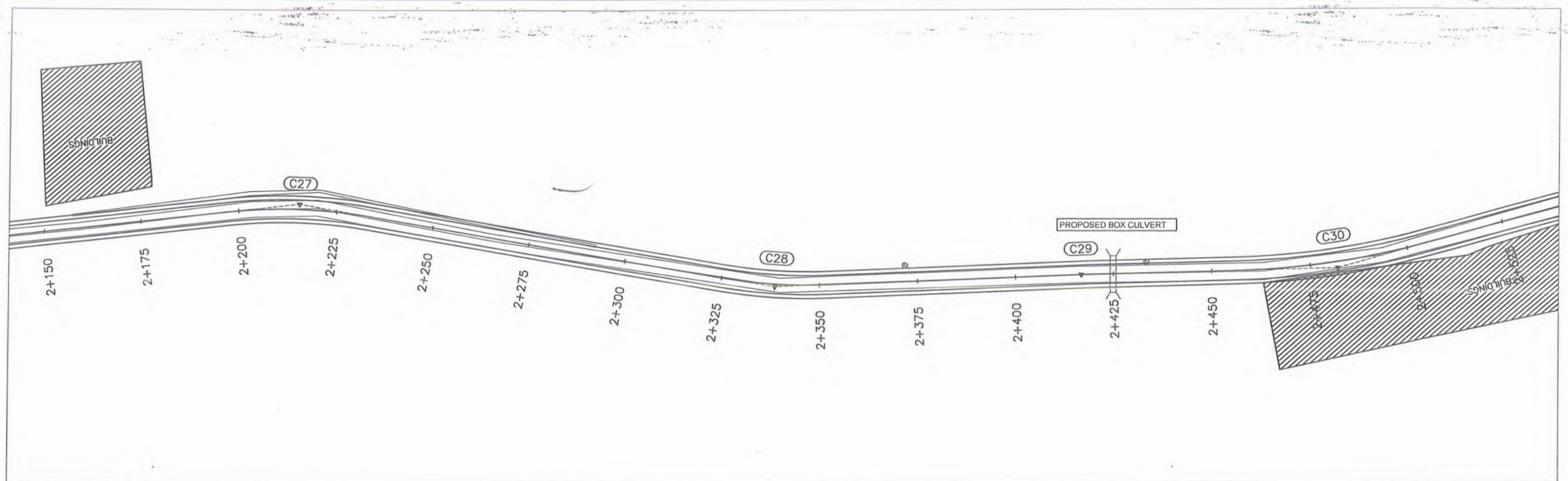
Signature
 Deputy Director (Construction III)
 Provincial Government
 C&W Dept. Banda, Peshawar



CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
	GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		 Minconsult	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP,2024	Tender Drawings.	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH	H=1:1000 V=1:1000	PLAN & PROFILE 1+440.00 - 1+800.00
					a			DRAWN	IFTIKHAR ABBAS				
					b			CHECKED	S.DURRANI		ACCESS ROAD	SEP, 2024.	CEC/RRDP/HWN-KRK-R2/PP/
					c			APPROVED	AQEEL YOUNIS				

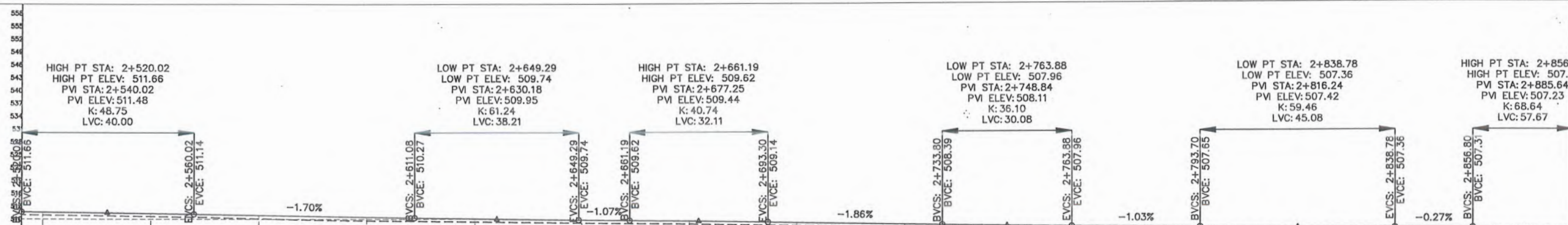
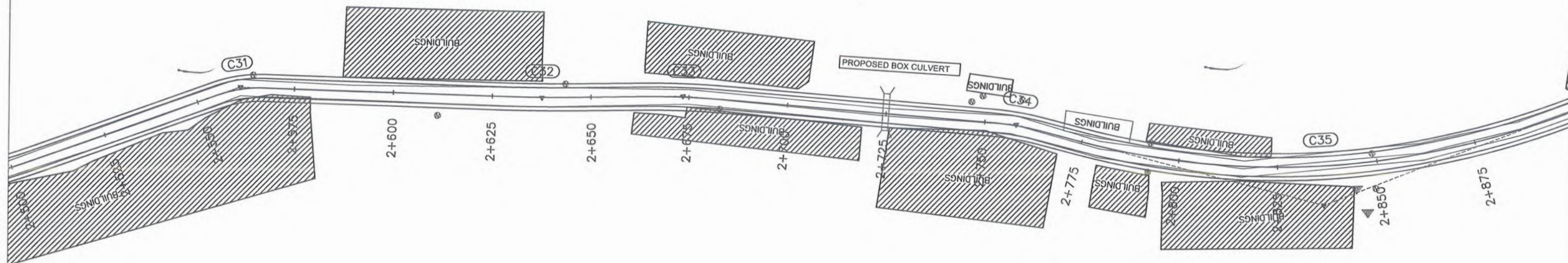


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				a			DRAWN	IFTIKHAR ABBAS							
				b			CHECKED	S.DURRANI							
				c			APPROVED	AQEEL YOUNIS							
										ACCESS ROAD	SEP, 2024.		CEC/RRDP/HWIN-KRK-R2/PP/	6	

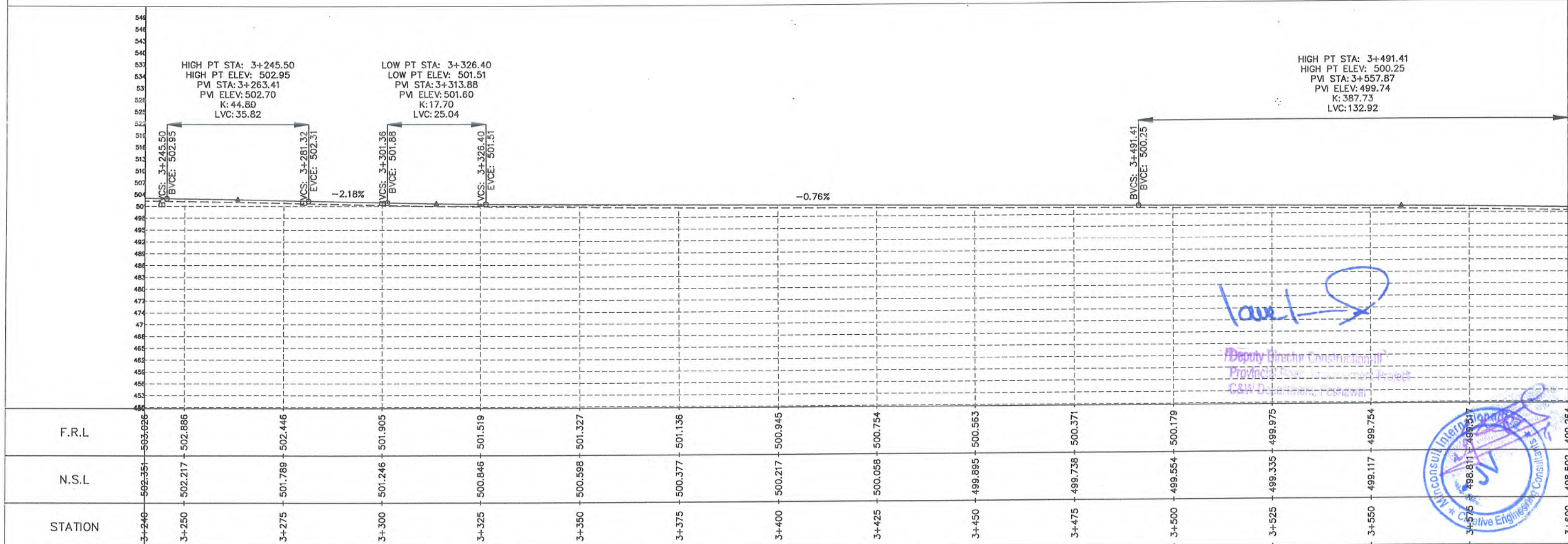
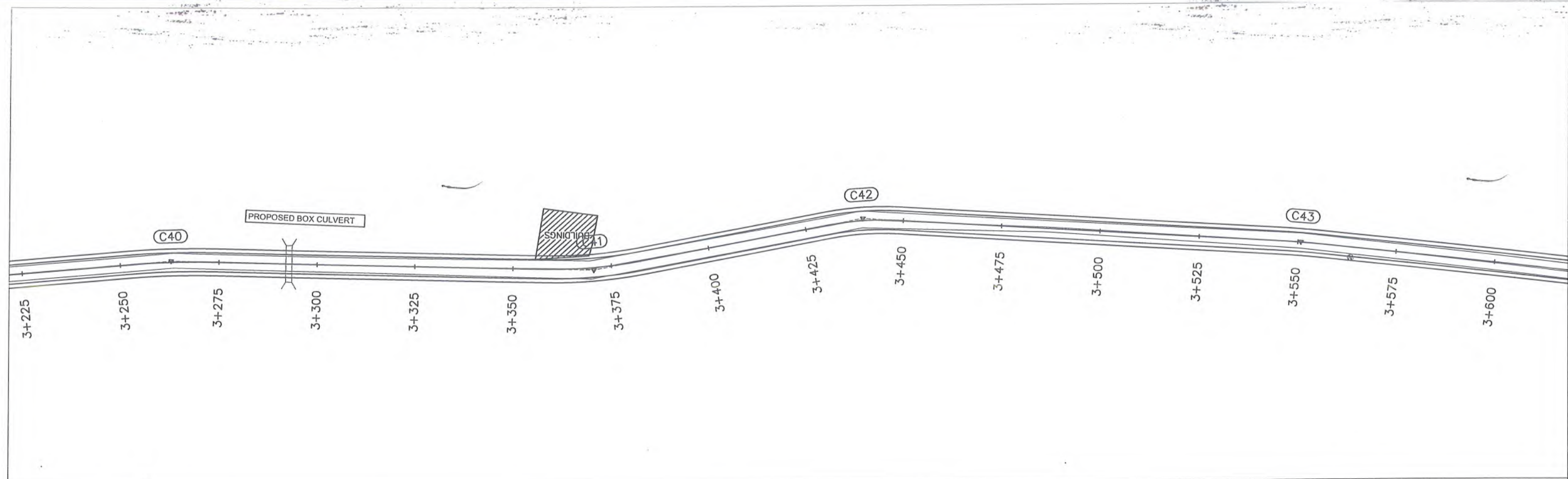


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GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)		0	SEP, 2024	Tender Drawings.	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH ACCESS ROAD	H=1:1000 V=1:1000 DATE: SEP, 2024.	PLAN & PROFILE 2+160.00 - 2+520.00 CEC/RRDP/HWN-KRK-R2/PII
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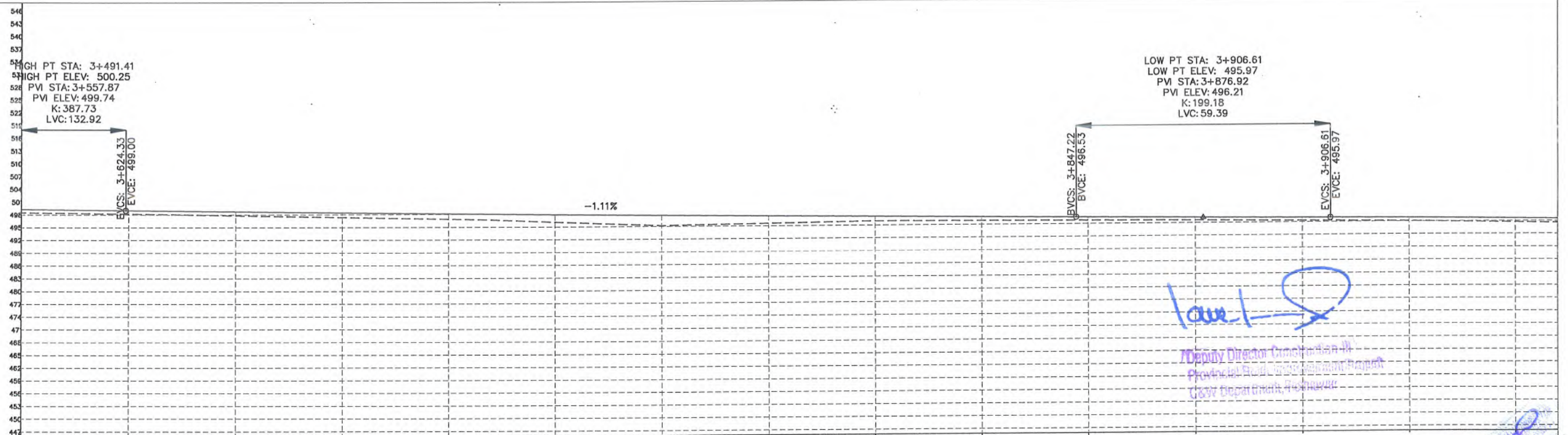
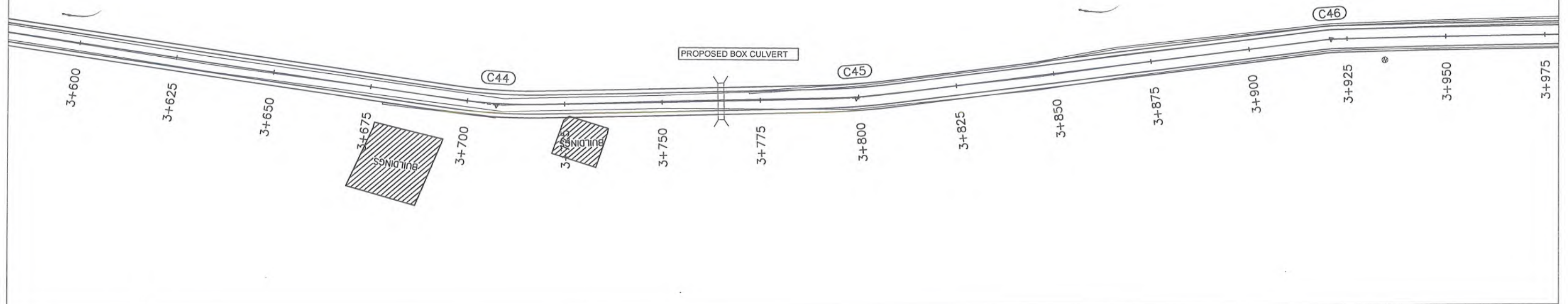


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Deputy District Construction Officer
Provincial Road Development Project
C&W Department, Peshawar

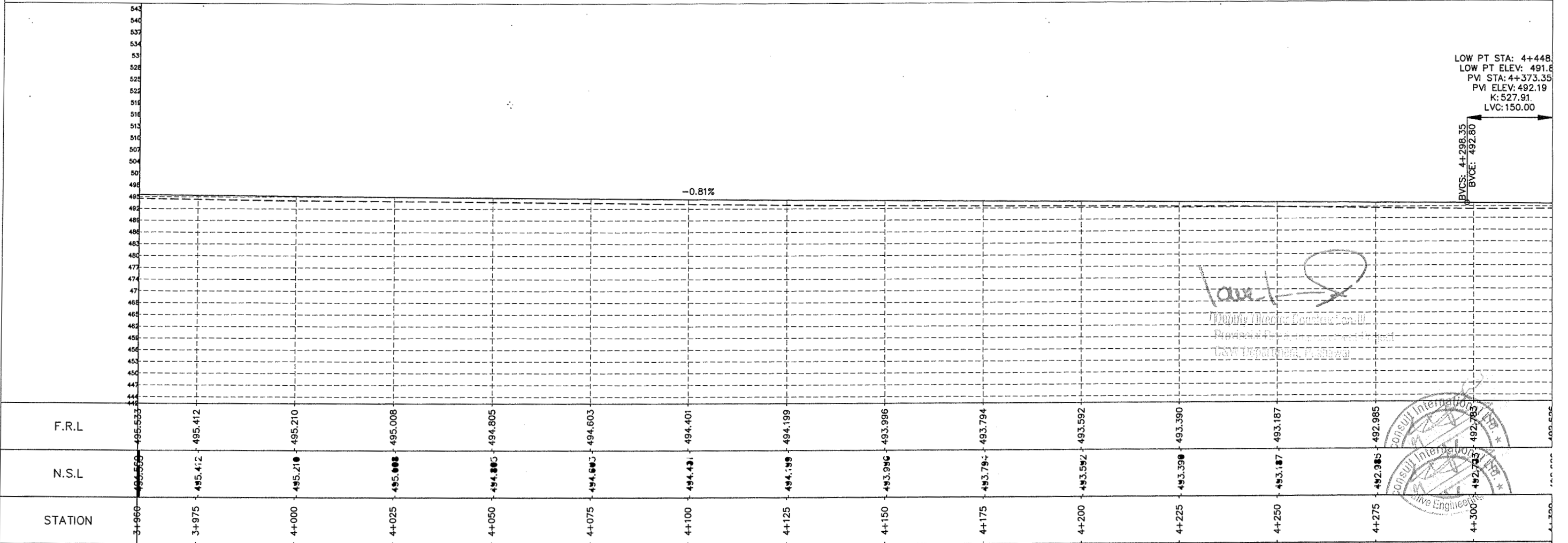
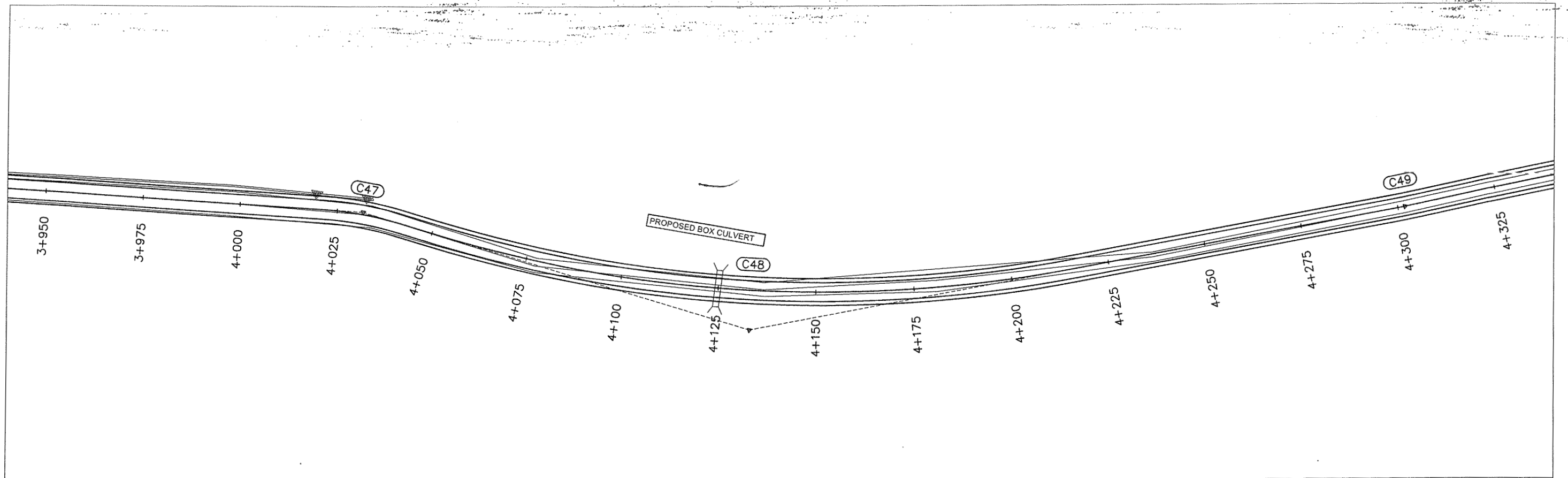


CLIENT:  GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	DESIGN CONSULTANT:  MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT: KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	ROAD NAME: N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH ACCESS ROAD	SCALE: H=1:1000 V=1:1000 DATE: SEP, 2024	SHEET CONTENT: PLAN & PROFILE 3+240.00 - 3+600.00 CEC/RRDP/HWN-KRK-R2/PP/ 10
		0	SEP, 2024	Tender Drawings.	G.DESIGNED	S.DURRANI				
		a			DRAWN	IFTIKHAR ABBAS				
		b			CHECKED	S.DURRANI				
		c			APPROVED	AQEEL YOUNIS				

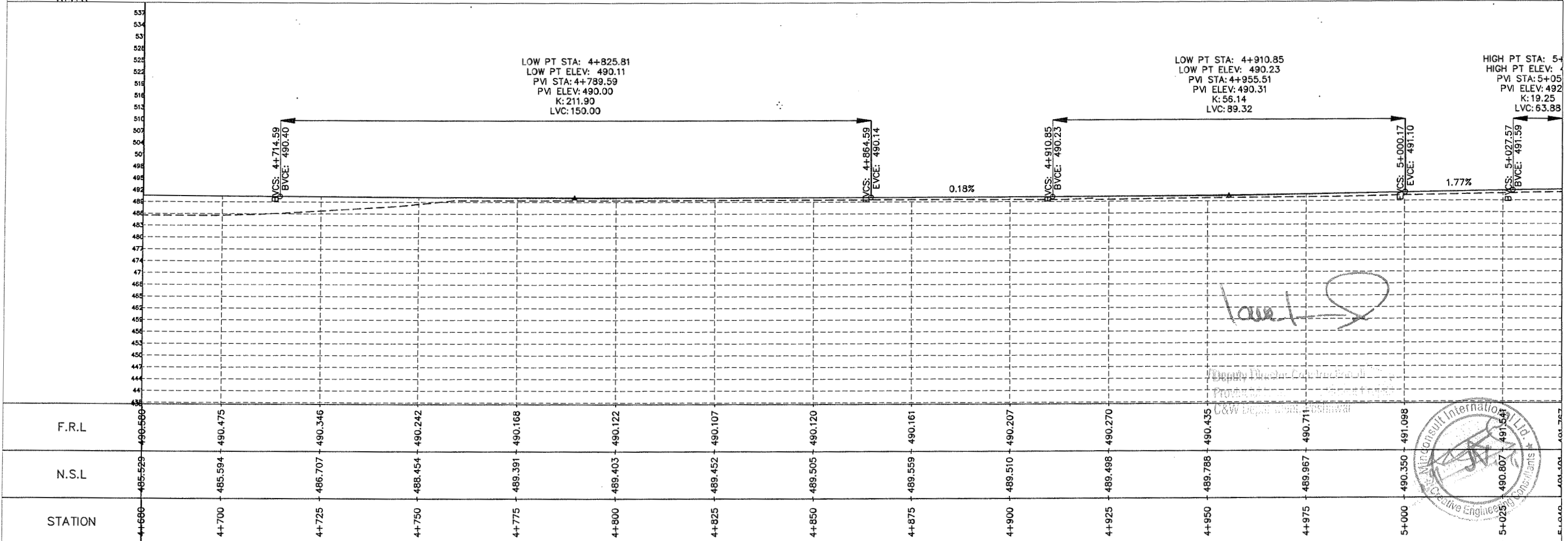
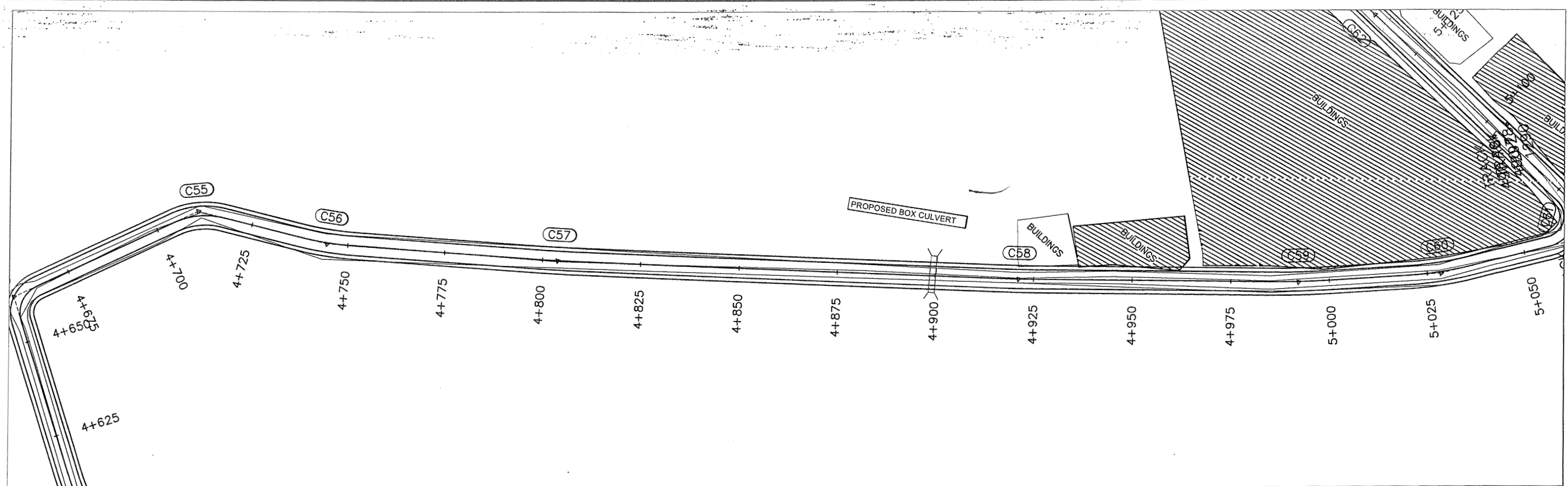


F.R.L	499.264	498.995	498.718	498.441	498.164	497.888	497.611	497.334	497.057	496.780	496.504	496.246	496.020	495.817	495.614
N.S.L	498.592	498.193	497.786	497.342	496.894	496.422	495.962	495.569	495.148	494.780	494.454	494.162	493.907	493.688	493.504
STATION	3+600	3+625	3+650	3+675	3+700	3+725	3+750	3+775	3+800	3+825	3+850	3+875	3+900	3+925	3+950

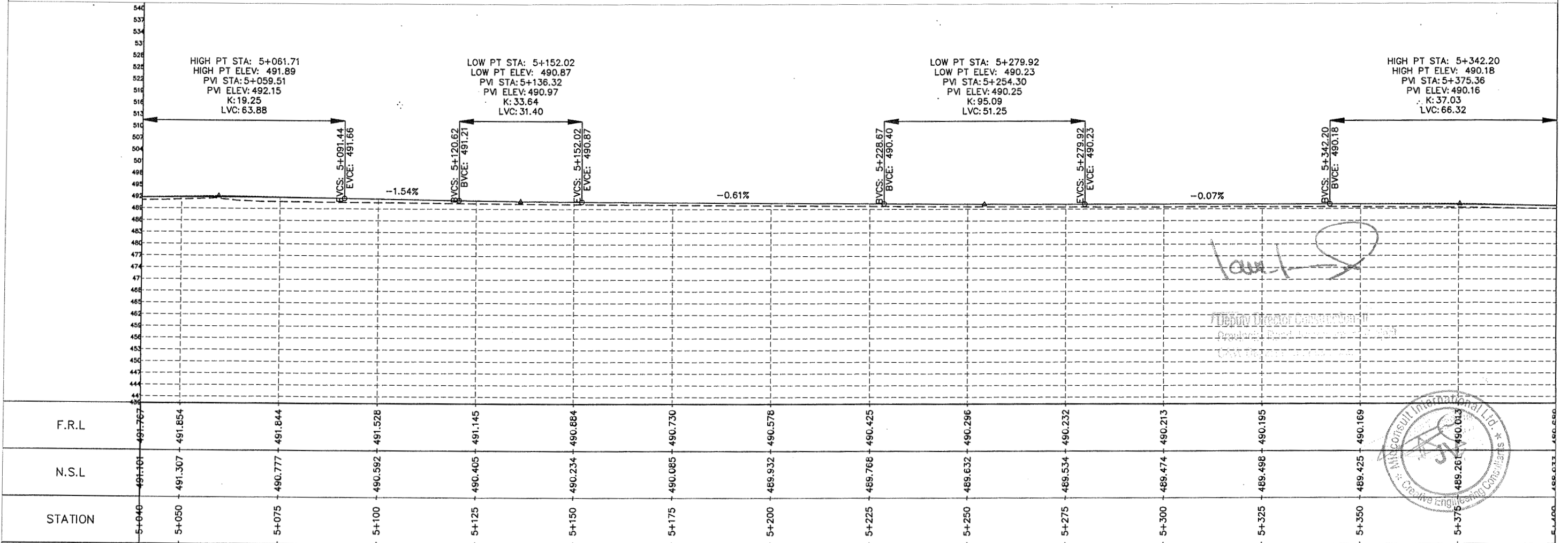
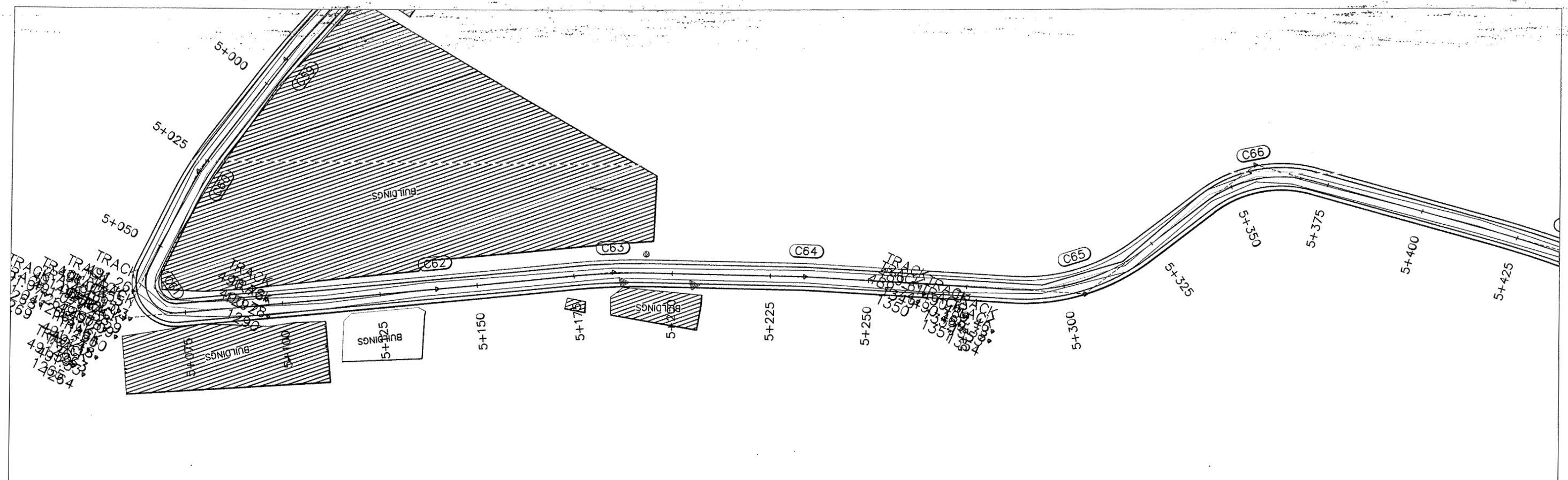
GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT: KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	ROAD NAME: N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH ACCESS ROAD	SCALE: H=1:1000 V=1:1000 DATE: SEP, 2024.	SHEET CONTENT: PLAN & PROFILE 3+600.00 - 3+960.00 CEC/RRDP/HWN-KRK-R2/PP/ 11
		0	SEP, 2024	Tender Drawings.	G.DESIGNED	S.DURRANI				
		a			DRAWN	IFTIKHAR ABBAS				
		b			CHECKED	S.DURRANI				
		c			APPROVED	AQEEL YOUNIS				



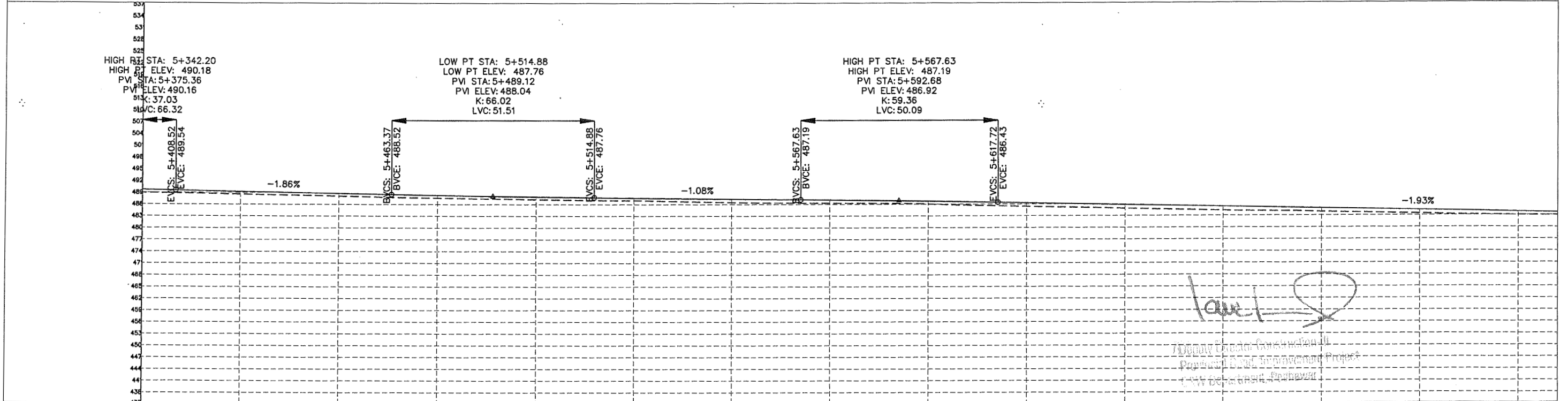
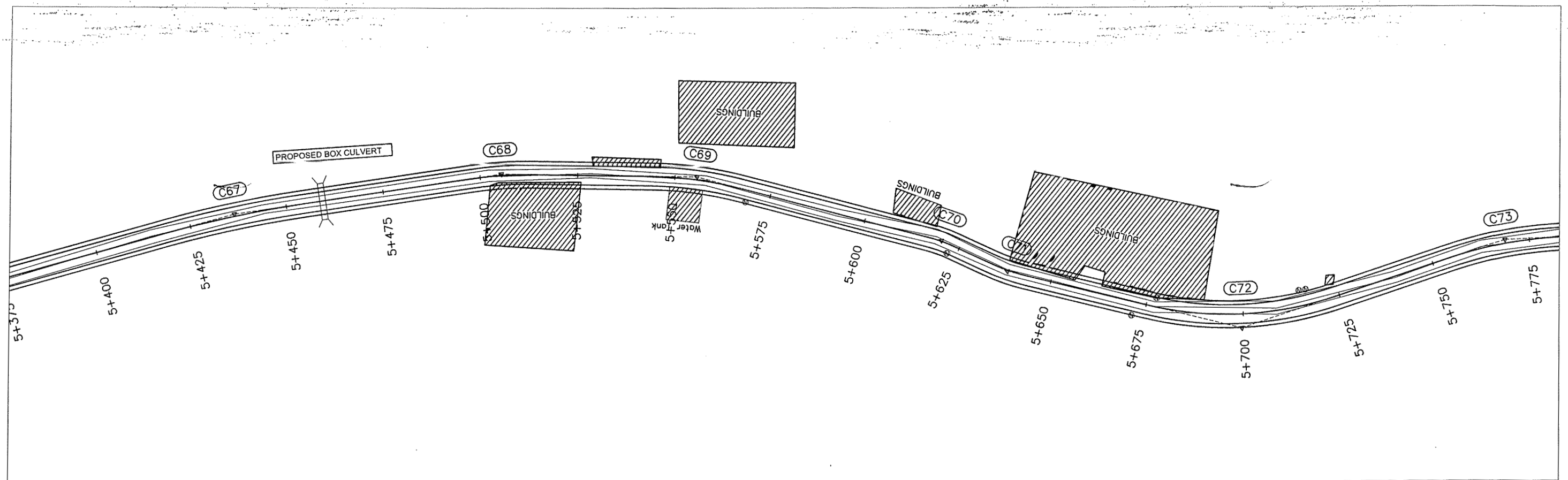
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 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024	Tender Drawings.	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAL KALAH	H=1:1000 V=1:1000	DATE:	PLAN & PROFILE 3+960.00 - 4+320.00			
		a			DRAWN	IFTIKHAR ABBAS								
		b			CHECKED	S.DURRANI								
		c			APPROVED	AQEEL YOUNIS								
								ACCESS ROAD	SEP, 2024.	CEC/RRDP/HWN-KRK-R2/PP/	12			



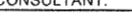
CLIENT:		DESIGN CONSULTANT: (MIN - JV - CEC)		REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP,2024	Tender Drawings.	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH	H=1:1000 V=1:1000	PLAN & PROFILE 4+680.00 - 5+040.00		
		a			DRAWN	IFTIKHAR ABBAS						
		b			CHECKED	S.DURRANI			ACCESS ROAD		DATE: SEP, 2024.	
		c			APPROVED	AQEEL YOUNIS						
										CEC/RRDP/HWN-KRK-R2/PP/	14	

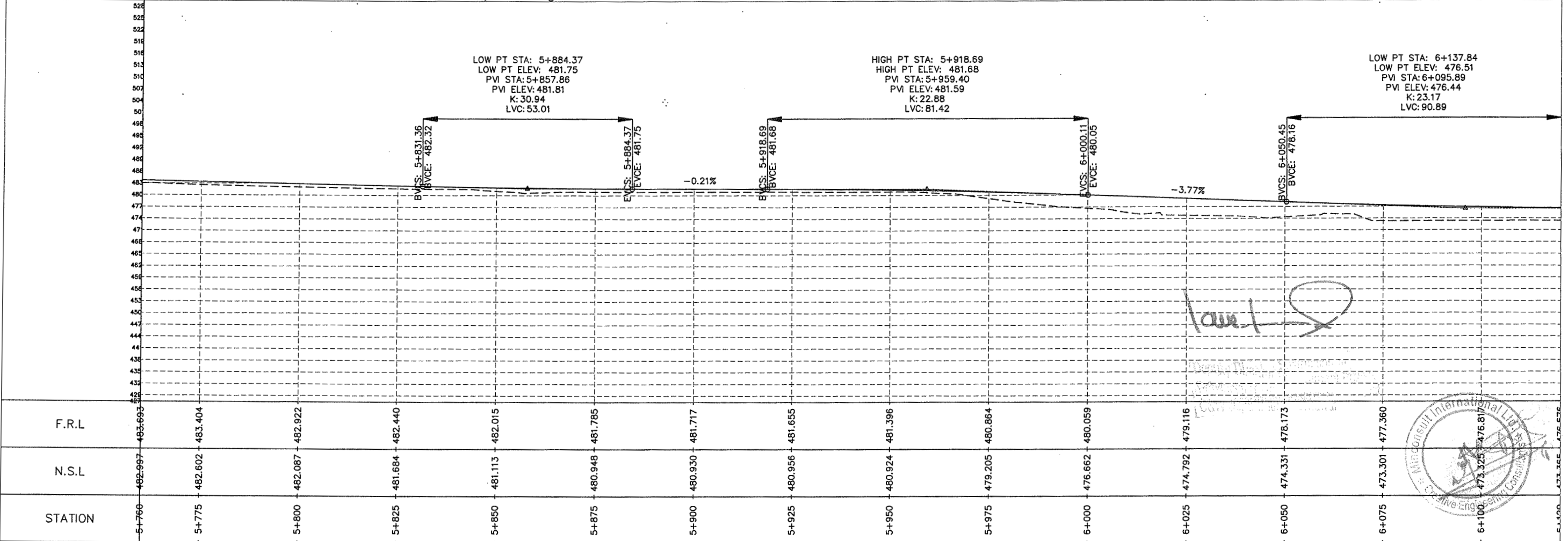
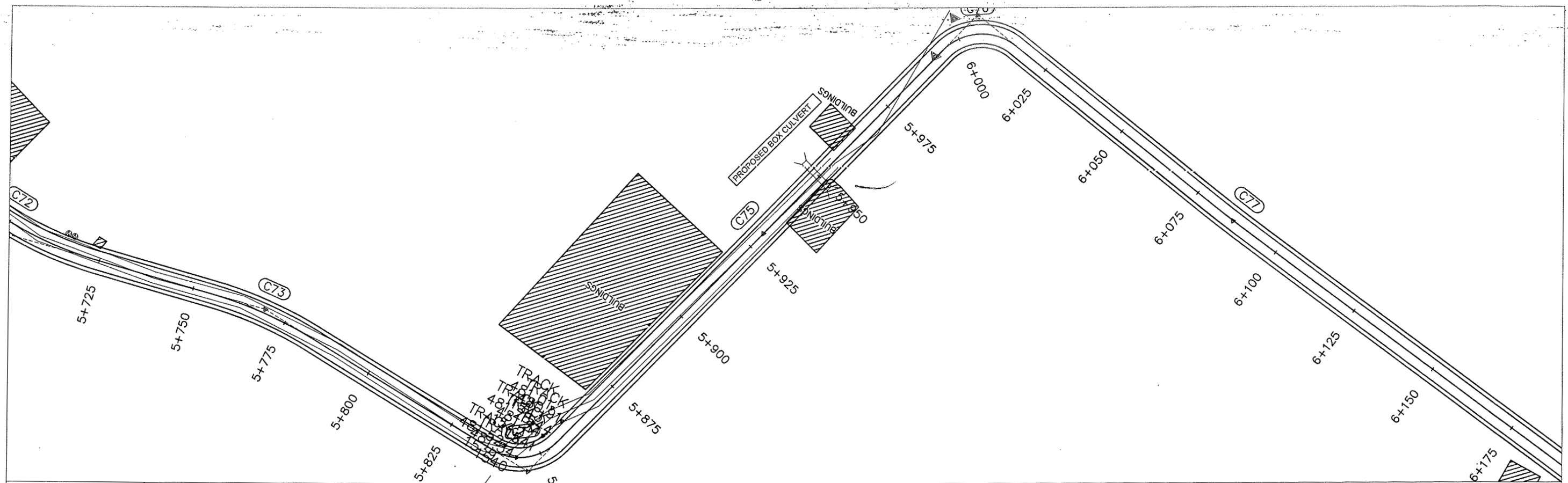


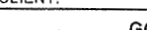
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GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)		0	SEP, 2024	Tender Drawings.	G. DESIGNED	S. DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH ACCESS ROAD	H=1:1000 V=1:1000 DATE: SEP, 2024.	PLAN & PROFILE 5+040.00 - 5+400.00 CEC/RRDP/HWN-KRK-R2/PP/
				a			DRAWN	IFTIKHAR ABBAS				
				b			CHECKED	S. DURRANI				
				c			APPROVED	AQEEL YOUNIS				

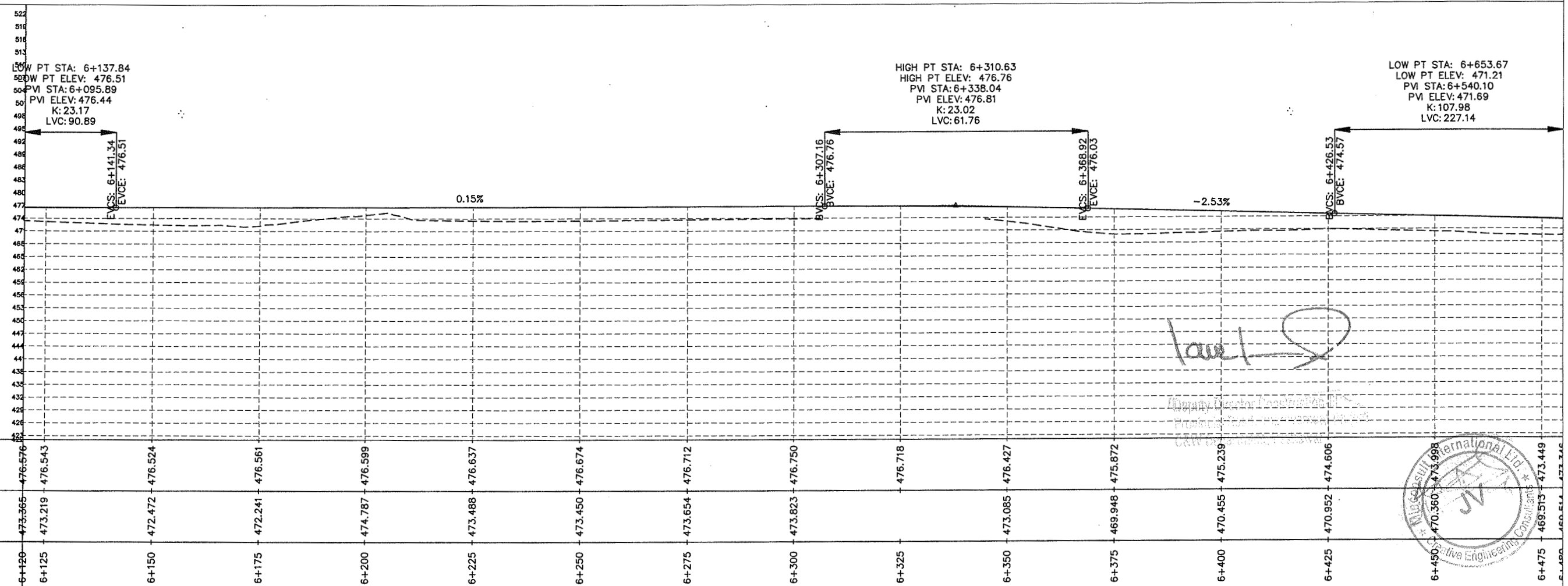
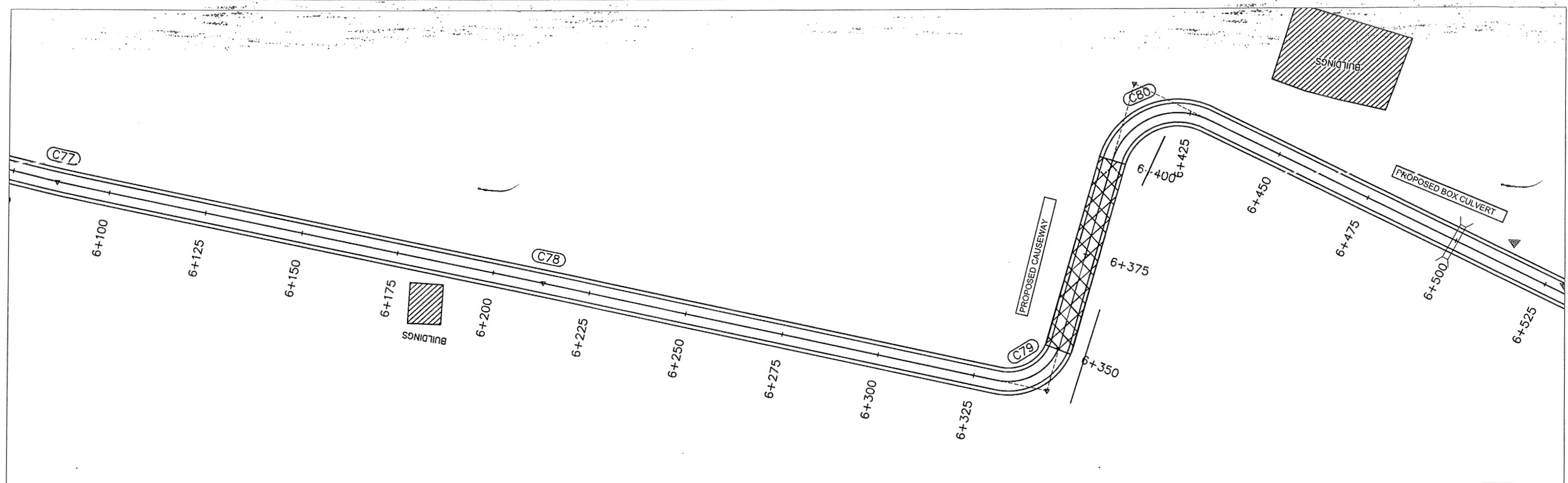


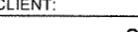
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N.S.L	488.933	488.566	488.097	487.611	487.243	486.972	486.500	486.284	486.022	485.374	484.847	484.279	483.913	483.404	483.034	482.603	482.170
STATION	5+400	5+425	5+450	5+475	5+500	5+525	5+550	5+575	5+600	5+625	5+650	5+675	5+700	5+725	5+750	5+775	5+800

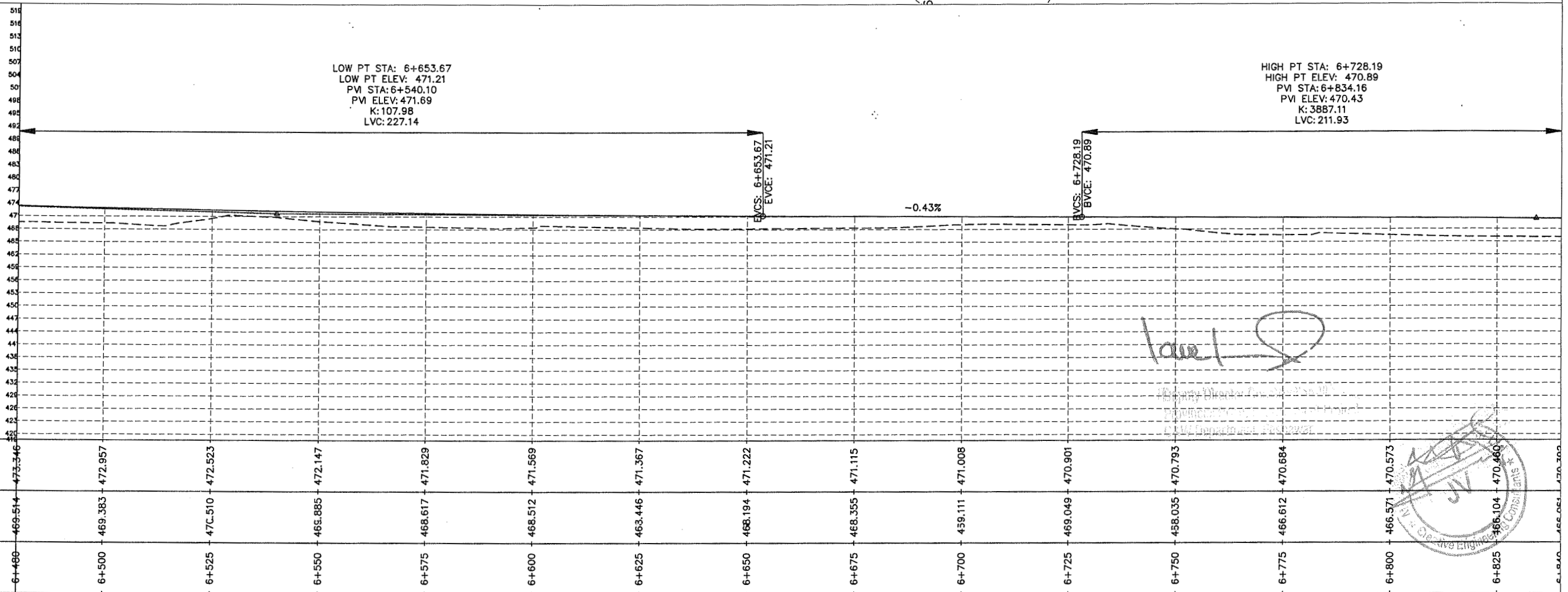
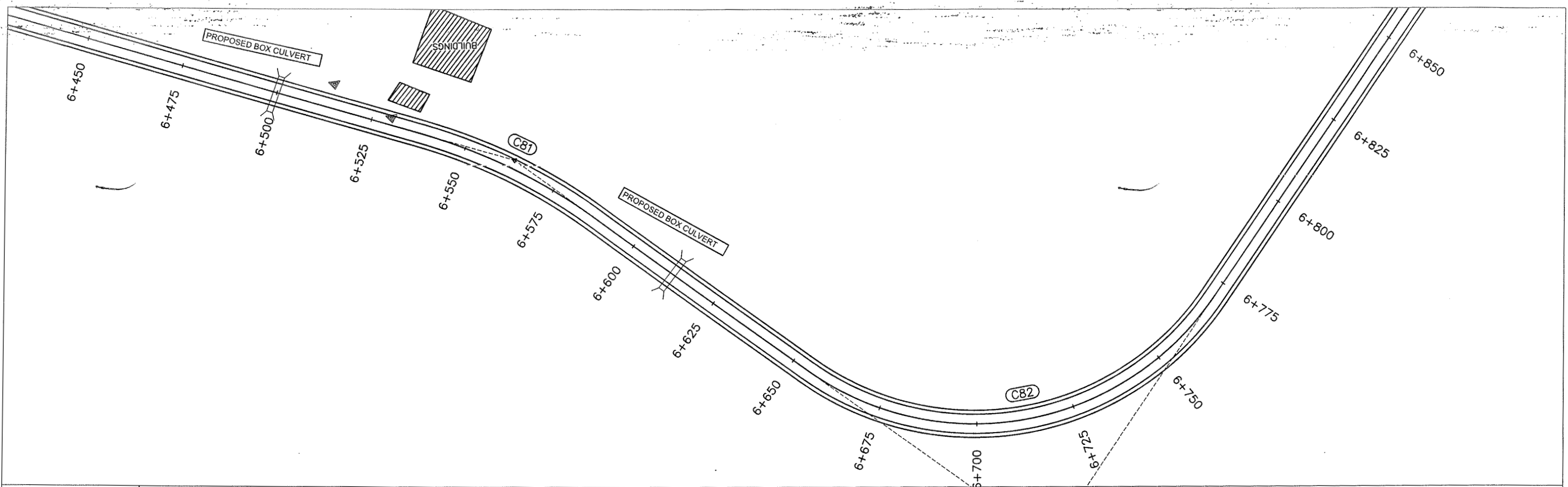
CLIENT:	DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP,2024	Tender Drawings.	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH	H=1:1000 V=1:1000	PLAN & PROFILE 5+400.00 - 5+760.00	
		a			DRAWN	IFTIKHAR ABBAS					
		b			CHECKED	S.DURRANI			DATE:		
		c			APPROVED	AQEEL YOUNIS			SEP, 2024.		CEC/RRDP/HWN-KRK-R2/PP/

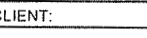


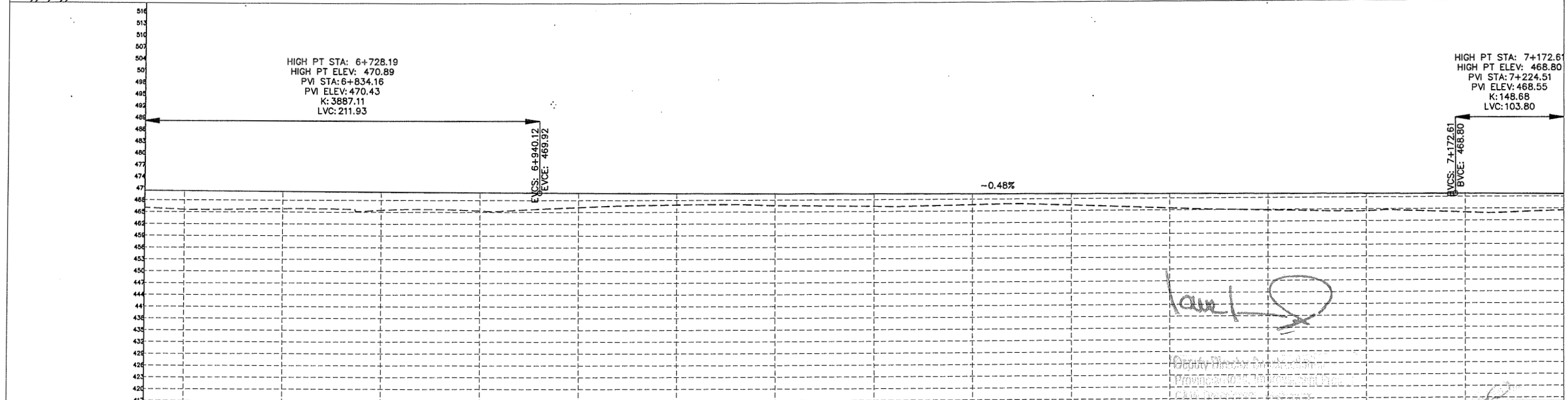
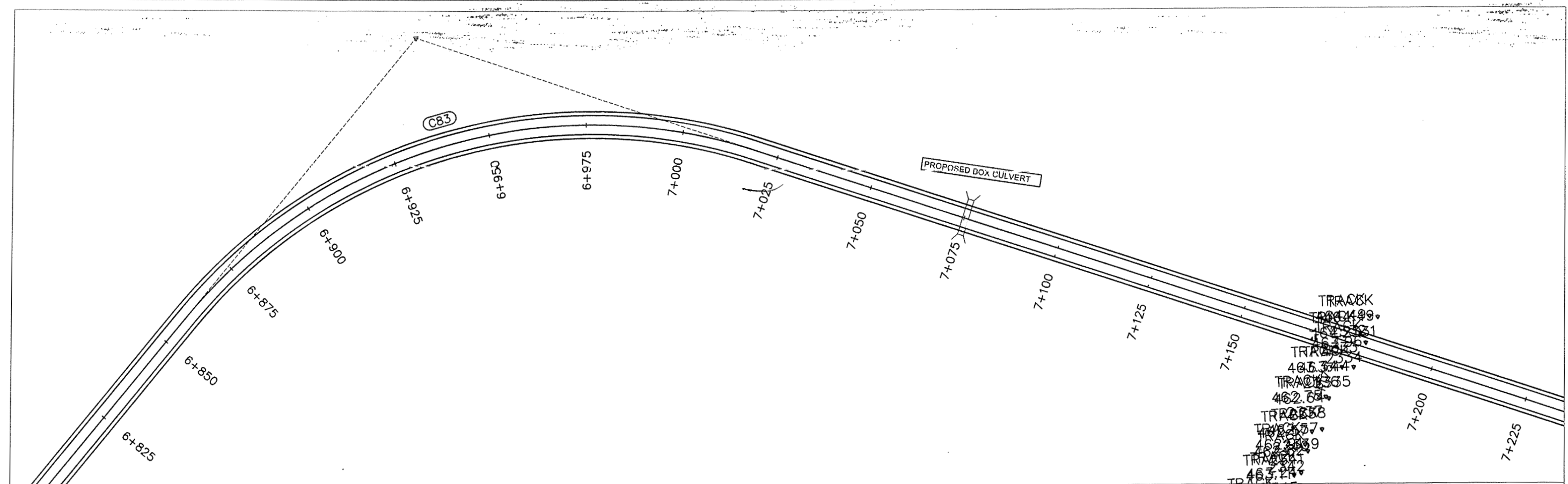
CLIENT:		DESIGN CONSULTANT: (MIN - JV - CEC)		REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC) 	0	SEP, 2024	Tender Drawings.	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH	H=1:1000 V=1:1000	PLAN & PROFILE 5+760.00 - 6+120.00		
		a			DRAWN	IFTIKHAR ABBAS			DATE:			
		b			CHECKED	S.DURRANI						
		c			APPROVED	AQEEL YOUNIS			SEP, 2024.		CEC/RRDP/HWN-KRK-R2/PP/	17



CLIENT:	DESIGN CONSULTANT:	(MIN - JV - CEC)	REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024	Tender Drawings.	G. DESIGNED	S. DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH	H=1:1000 V=1:1000	PLAN & PROFILE 6+120.00 - 6+480.00	
		a			DRAWN	IFTIKHAR ABBAS					
		b			CHECKED	S. DURRANI				DATE:	
		c			APPROVED	AQEEL YOUNIS				SEP, 2024.	CEC/RRDP/H/WN-KRK-R2/PP/
								ACCESS ROAD			

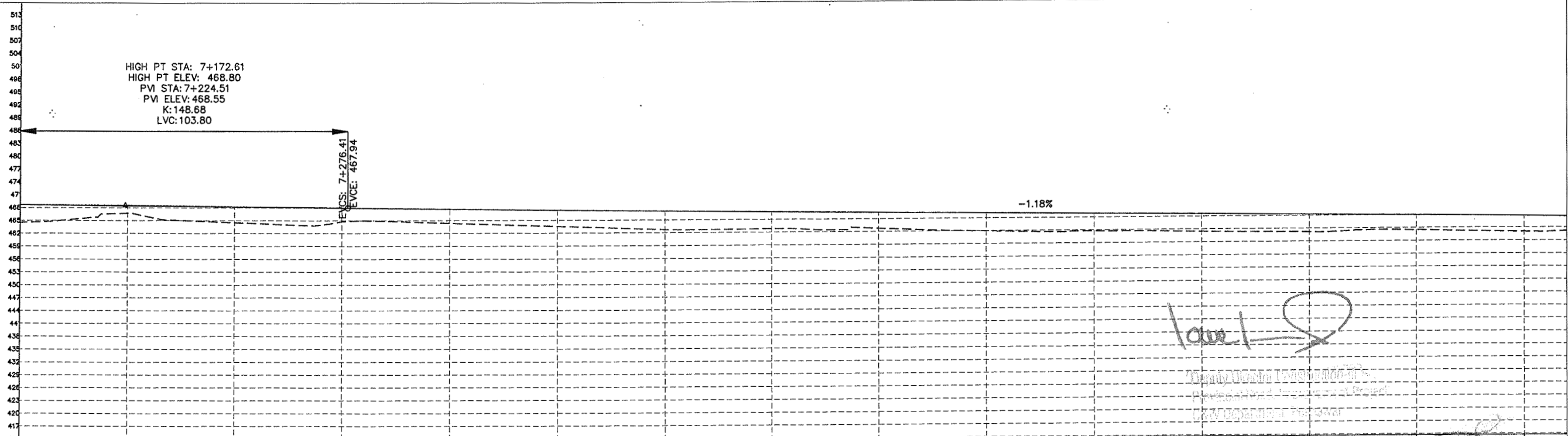
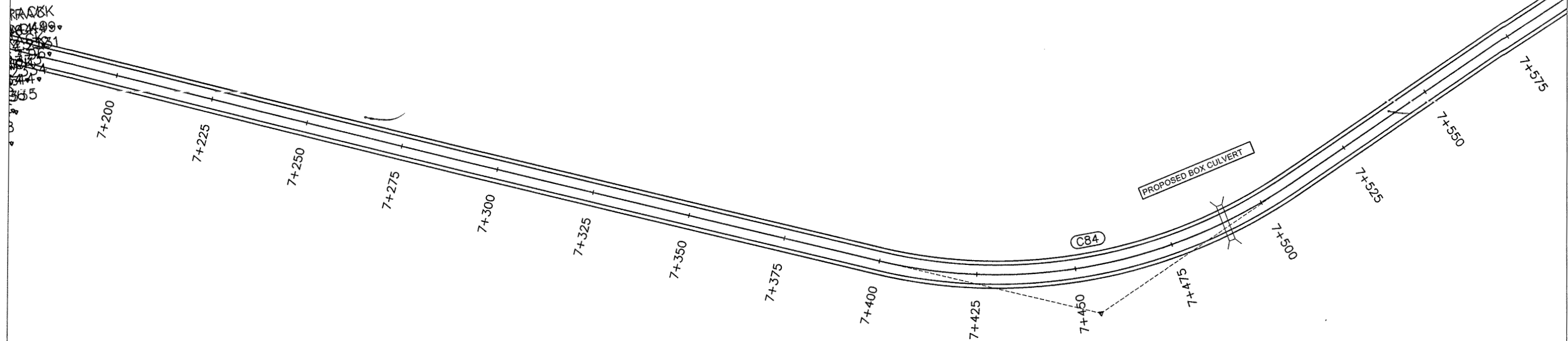


CLIENT:		DESIGN CONSULTANT:		(MIN - JV - CEC)	REV	DATE	DESCRIPTION		NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP,2024	Tender Drawings.	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAL KALAH	H=1:1000 V=1:1000 DATE: SEP, 2024.	PLAN & PROFILE 6+480.00 - 6+840.00				
		a			DRAWN	IFTIKHAR ABBAS								
		b			CHECKED	S.DURRANI								
		c			APPROVED	AQEEL YOUNIS								
								ACCESS ROAD			CEC/RRDP/HWN-KRK-R2/PP/	19		



F.R.L	470.392	470.346	470.231	470.113	469.995	469.874	469.754	469.633	469.512	469.392	469.271	469.150	469.030	468.909	468.788
N.S.L	466.061	465.650	465.858	465.499	465.346	466.209	466.861	466.626	466.343	466.620	466.403	465.496	464.858	464.489	464.044
STATION	6+840	6+850	6+875	6+900	6+925	6+950	6+975	7+000	7+025	7+050	7+075	7+100	7+125	7+150	7+175

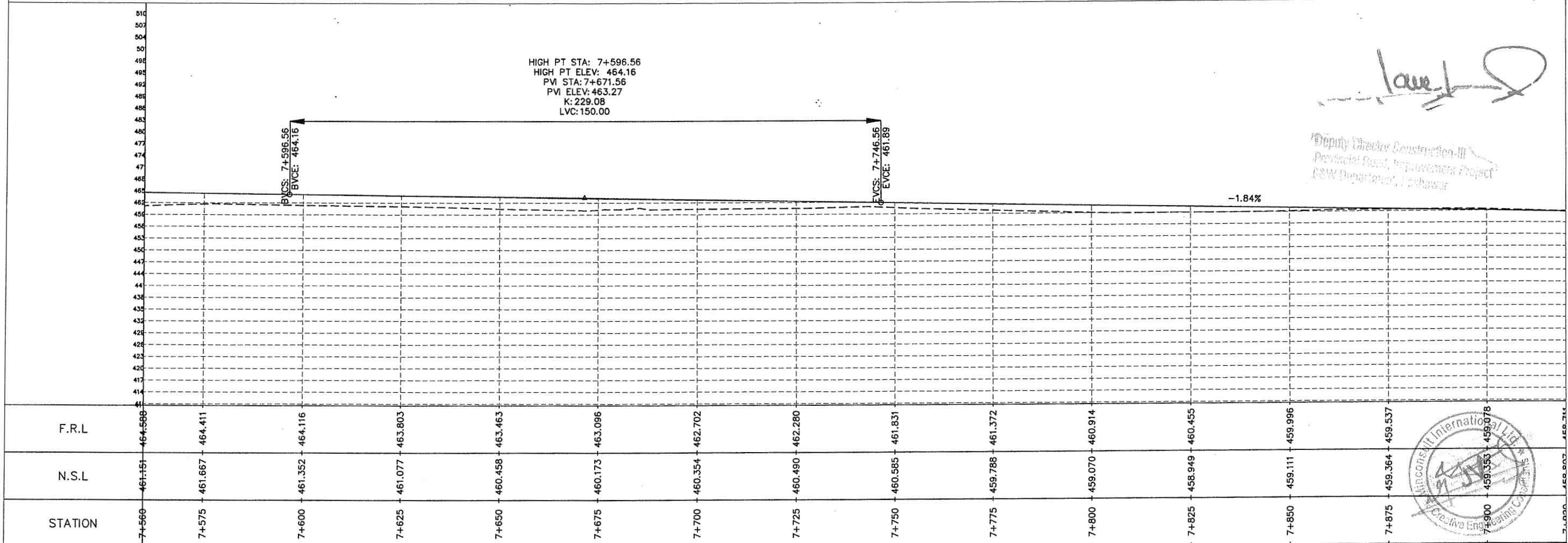
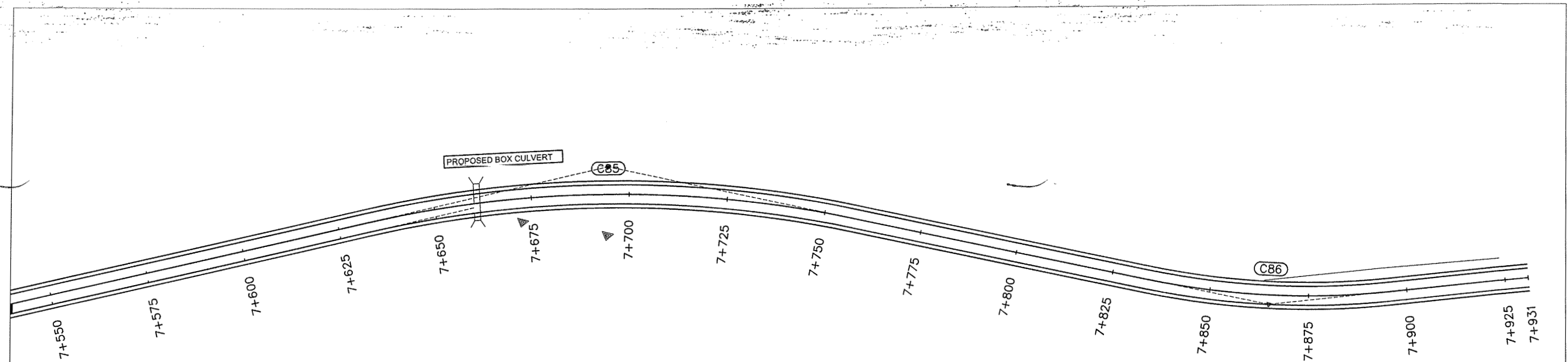
CLIENT: GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)		DESIGN CONSULTANT: (MIN - JV - CEC) MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)		REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT: PLAN & PROFILE 6+840.00 - 7+200.00 CEC/RRDP/HWIN-KRK-R2/PP/ 20
				0	SEP.2024	Tender Drawings.	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAL KALAH	H=1:1000 V=1:1000	
				a			DRAWN	IFTIKHAR ABBAS			DATE:	
				b			CHECKED	S.DURRANI		ACCESS ROAD	SEP. 2024.	
				c			APPROVED	AQEEL YOUNIS				



STATION	7+200	7+225	7+250	7+275	7+300	7+325	7+350	7+375	7+400	7+425	7+450	7+475	7+500	7+525	7+550	7+575
F.R.L	465.643	466.455	468.225	467.953	467.658	467.363	467.068	466.773	466.477	466.182	465.887	465.592	465.297	464.992	464.697	464.402
N.S.L	464.501	466.699	464.527	464.743	464.368	463.571	462.714	462.791	462.752	461.930	461.748	461.443	461.163	460.984	460.705	460.426

GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	REV	DATE	DESCRIPTION	NAMES:	PROJECT: KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	ROAD NAME: N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH ACCESS ROAD	SCALE: H=1:1000 V=1:1000 DATE: SEP, 2024	SHEET CONTENT: PLAN & PROFILE 7+200.00 - 7+560.00
		0	SEP, 2024	Tender Drawings.	G.DESIGNED S.DURRANI				
		a			DRAWN IFTIKHAR ABBAS				
		b			CHECKED S.DURRANI				
		c			APPROVED AQEEL YOUNIS				

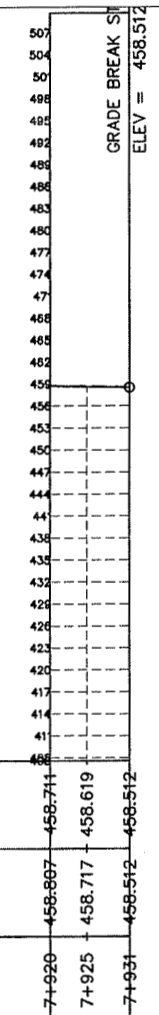
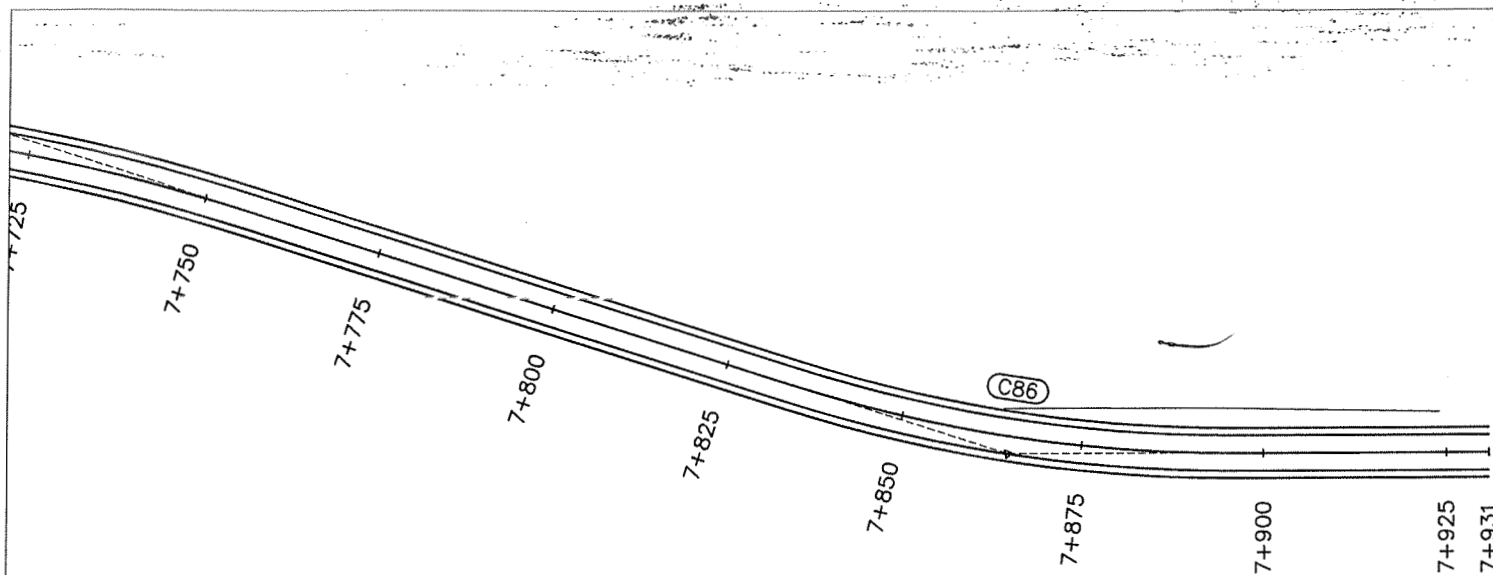




Lawal S

Deputy Director Construction-III
Provincial Road, Improvement Project
C&W Department, Peshawar

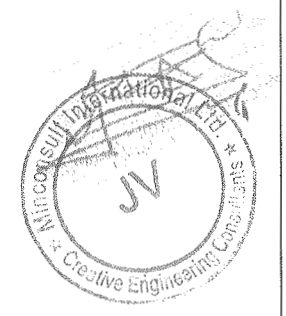
CLIENT:		DESIGN CONSULTANT: (MIN - JV - CEC)		REV	DATE	DESCRIPTION	NAMES:		PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
 GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	 MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V.  CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP,2024	Tender Drawings.	G.DESIGNED	S.DURRANI	KHYBER PAKHTUNKHWA RURAL ROAD DEVELOPMENT PROJECT (KP-RRDP)	N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH	H=1:1000 V=1:1000	PLAN & PROFILE 7+560.00 - 7+920.00		
		a			DRAWN	IFTIKHAR ABBAS					DATE:	
		b			CHECKED	S.DURRANI		ACCESS ROAD	SEP, 2024.			
		c			APPROVED	AQEEL YOUNIS						
CEC/RRDP/HWN-KRK-R2/PP/ 22												



F.R.L	458.711	458.619	458.512
N.S.L	458.807	458.717	458.512
STATION	7+920	7+925	7+931

Lawe

Deputy Director (Construction-III)
Roads & Transport Department
Government of Khyber Pakhtunkhwa



CLIENT:	DESIGN CONSULTANT:	REV	DATE	DESCRIPTION	NAMES:	PROJECT:	ROAD NAME:	SCALE:	SHEET CONTENT:
GOVERNMENT OF KHYBER PAKHTUNKHWA COMMUNICATION & WORKS DEPARTMENT PROJECT IMPLEMENTATION UNIT (PIU)	MINCONSULT SDN BHD (COMPANY NO. 58835-P) J.V. CREATIVE ENGINEERING CONSULTANTS (CEC)	0	SEP, 2024	Tender Drawings.	G. DESIGNED	S. DURRANI	N-KRK-R2 TAKHATE NASRATI BRIDGE TO KHADDA BANDA VIA BHOGARA CULVERT ROSE BAIG KHAIL KALAH ACCESS ROAD	H=1:1000 V=1:1000	PLAN & PROFILE 7+920.00 - 7+930.82 CEC/RRDP/HWN-KRK-R2/PP/ 23
		a			DRAWN	IFTIKHAR ABBAS			
		b			CHECKED	S. DURRANI			
		c			APPROVED	AQEEL YOUNIS			