



**ISLAMIC EMIRATE OF AFGHANISTAN**  
**KABUL MUNICIPALITY**  
**URBAN INFRASTRUCTURE DIRECTORATE**



**Construction of Road From Qala-e- Zaman Khan Road To Kabul - Nangarhar Road**

امور ساختمان سرک از سرک عمومی قلعه زمانخان الی سرک کابل - ننگرهار

District: 9th & 16th





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Date	Revision	Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:



KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road  
to Kabul Jalalabad Road

Drawing Title:

INDEX PAGE

Drawn:	Signature:
Matullah Hussainzai	
Designed:	Signature:
Matullah Hussainzai	
Checked:	Signature:
Hasibullah Shalizi	

Date:  
26/11/1445

Status  
FINAL  
DESIGN

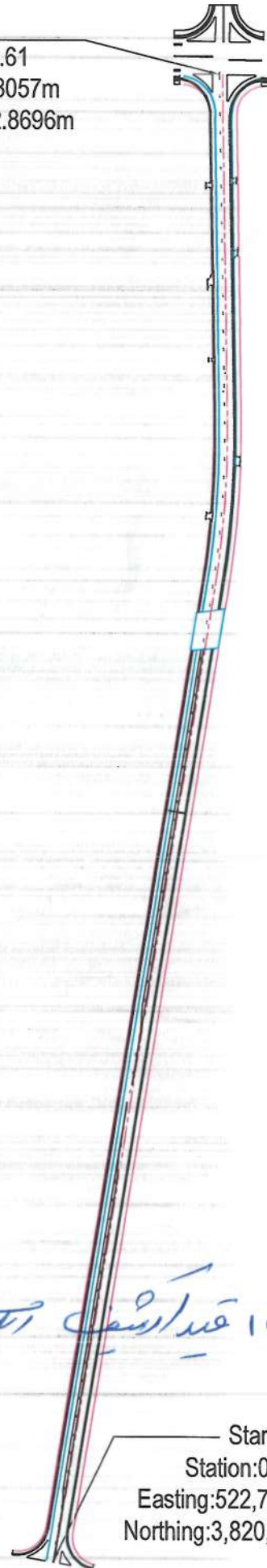
Project Code

SHEET	REVISION
TCS-01 OF 01	00



# DESIGN LAYOUT

End  
Station:1+644.61  
Easting:522,934.8057m  
Northing:3,822,512.8696m



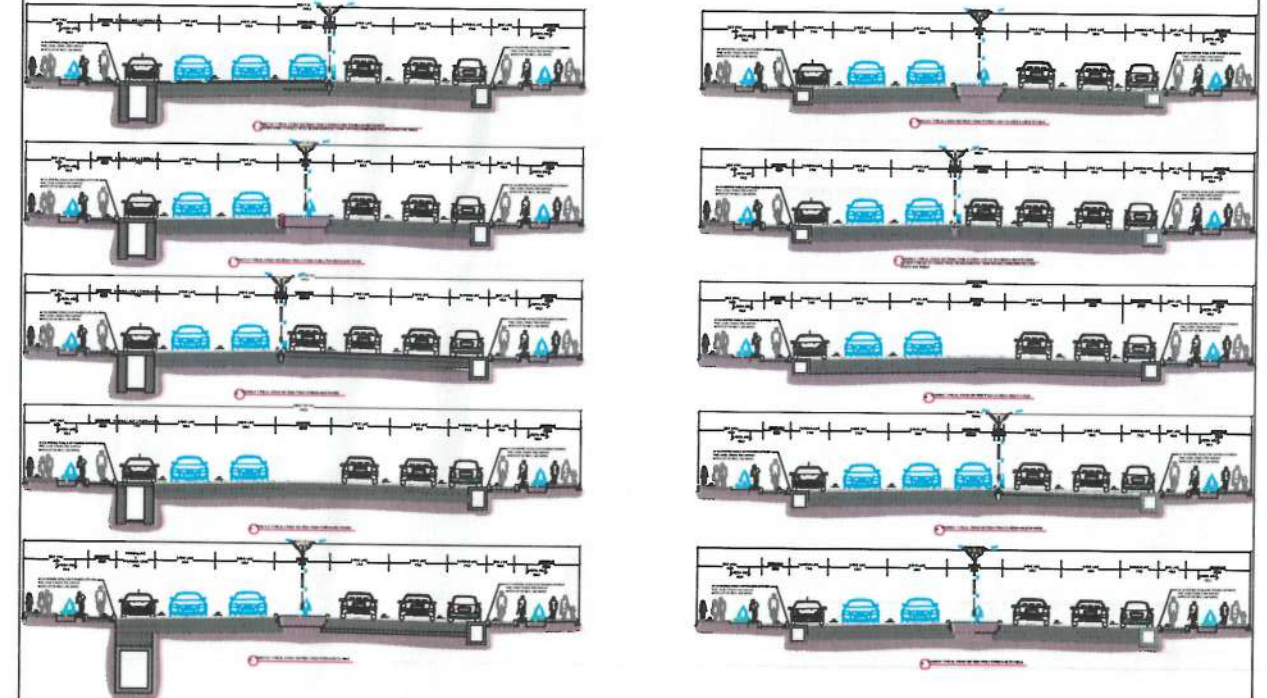
Start  
Station:0+000  
Easting:522,750.3116m  
Northing:3,820,883.5910m



Location: 08<sup>th</sup> & 16<sup>th</sup> Districts  
Right of Way: 30M  
Length: 1644.61M  
Pavement Type: Flexible Pavement  
Cross Section Elements: Flexible Pavement, Median, Side Drains, Bike Lanes, Green Areas, and Sidewalks.



## PROPOSED TYPICAL CROSS SECTIONS ALONG THE ROUTE.



## امور ساختمان سرک از سرک قلغه زمان خان الی سرک کابل - جلال آباد

سروی کننده ها: نور الرحمن قهاری فرهاد احمدی	امضا:	توضیحات: اسناد تخنیکي این پروژه بعد از امضا سروی کننده ها، ترسیم کننده ها، دیزاین کننده ها، بررسی کننده، تایید کننده و منظوری مقام محترم شاروالی کابل درین صفحه و همچنین امضا سروی کننده ها، ترسیم کننده، دیزاین کننده، بررسی کننده و مهر این ریاست در صفحات بعدی این پروژه قابل طی مراحل بعدی بوده و تطبیق میگردد.
بررسی کننده سروی: مسید عتیق شیرزی امر سروی	امضا:	اسناد تخنیکي پروژه هذا نظر به پلان پروژه های انکشافی بودجه داخلی سال ۱۴۰۳ که تحت شماره ۷۸ به نام پروژه امور ساختمان سرک اعتبار از سرک عمومی قلعه زمان خان الی سرک کابل- ننګرهار میباشد و با در نظر داشت پلان مسیر سرک در یک شیت به پلان املای توسط آمریت های پلان گذاری و سروی این ریاست تهیه و تحت شماره (۱۲۲۰) مؤرخ ۱۳۴۵/۱۱/۲۸ قید ارفیق این ریاست میباشد ترتیب گردیده است.
ترسیم کننده ها: مطیع الله حسین زی منهاج الرحمن	امضا:	منظوری مقام محترم شاروالی کابل درین صفحه بیان کننده منظوری تمام صفحات بعدی این بسته اسناد تخنیکي می باشد.
دیزاین کننده ها: مطیع الله حسین زی باز محمد	امضا:	تصویر: طبق معیارات تخنیکي و ترانسپورتی در مسیر پروژه یاد شده در بعضی قسمت ها محدوده اعمار (کنسٹرکشن لمت) حسب سفارشات راپور چیونکتیک مدنظر گرفته شده و احجام کنسٹرکشن و پرکاری آن نیز محاسبه گردیده است. اهالی محترم اطراف سرک ممکن حین تطبیق و با بعد از تطبیق پروژه دیوار های احاطه خویش را در کنار سرک اعمار نمایند که در صورت اعمار این دیوارها طبق معیارات ضرورت به محدوده اعمار (کنسٹرکشن لمت) نمیباشد اما در صورت عدم اعمار جهت مصوونیت و حفاظت کناره های بیرونی سرک به این محدوده اعمار (کنسٹرکشن لمت) ضرورت پنداشته شده که باید حسب معیارات و پیشنهادات راپور چیونکتیک مدنظر گرفته شود.
بررسی کننده دیزاین: حسین الله شالیزی امر دیزاین	امضا:	قرار مشاهده سروی توپوگرافی و اصل ساحه بعضی بایه های برق، تاسیسات و شبکه کاری شهری در مسیر پروژه متذکره قرار دارد، در حصه موقعیت دهی آن طبق قانون، مقررات و تفاهنامه های منعقد بین ادارات زیربط اجراء صورت خواهد گرفت.

مختصات، نوعیت و فاصله بین درختان و سایر نباتات در هماهنگی با ریاست محترم سرسبزی و حفظ ساحات سبز تعیین و در ساحه تطبیق می گردد.

تحت شماره ۱۳۹۱ مورخ ۱۴۰۵/۱۱/۱۱ قید ارفیق این پروژه زیر بنای کابل

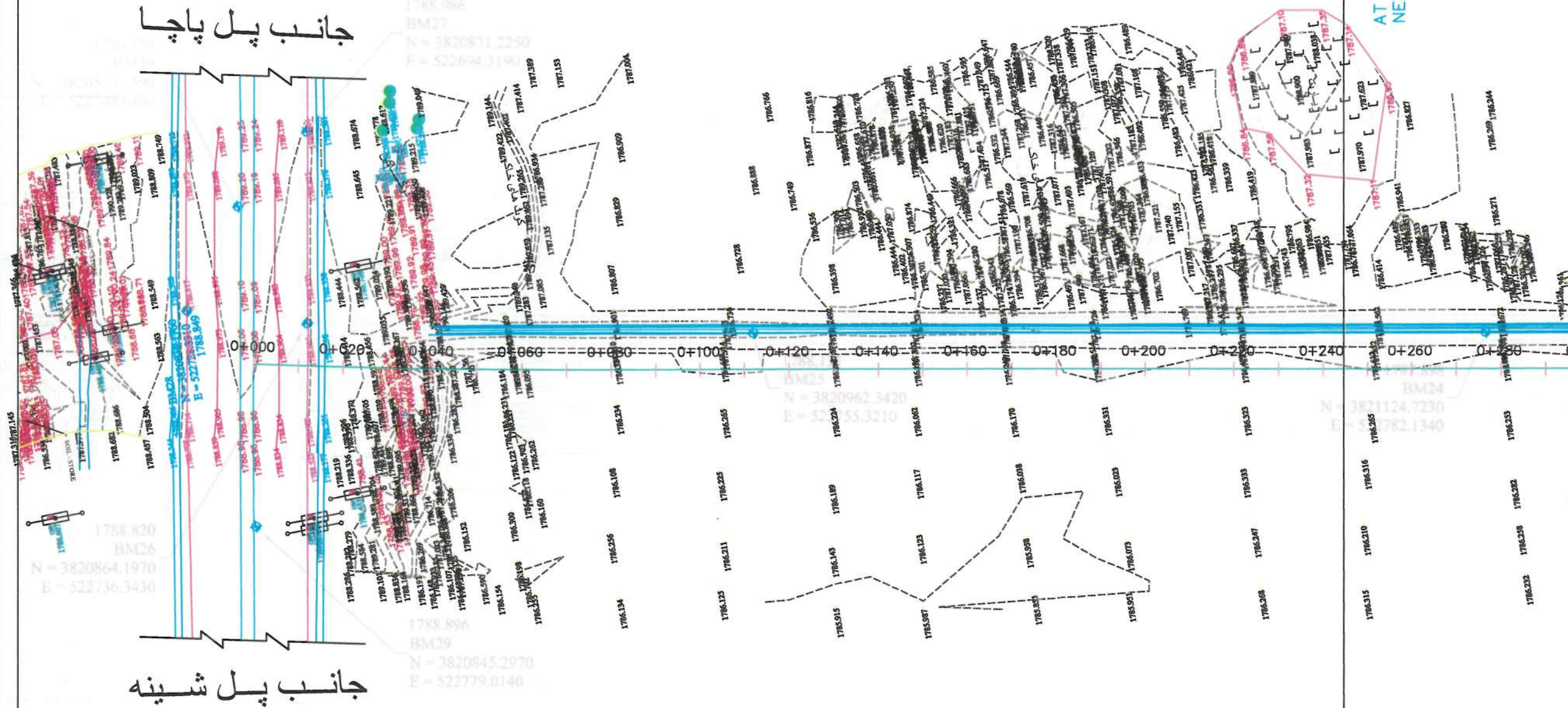
تایید کننده:  
المنیر فلیق احمد نسل  
رئیس زیر بنای شهری

۱۴۰۵/۱۱/۲۸



جانب پل پاچا

جانب پل شینه



MATCH LINE - 1  
AT STATION - 0+245.00  
NEXT SHEET NUMBER: 2

NOTE:  
1. ALL DIMENSIONS ARE IN METERS  
UNLESS OTHERWISE INDICATED

**LEGENDS**

SYMBOLS	DESCRIPTION	CODE
CL	CENTER LINE	CL
BL	BUILDING	BL
TCN	TOP OF CANAL	TCN
BCN	BOTTOM OF CANAL	BCN
TD	TOP OF DITCH	TD
BM	BENCHMARK	BM
STA	STATION	STA
CEP	EXISTING CEMENT PAVEMENT	CEP
RE	ROAD EDGE	RE
TRV	TOP OF RIVER	TRV
BRV	BOTTOM OF RIVER	BRV
WALL	WALL	WALL
TCU	TOP OF CULVERT	TCU
CEM	CEMENTERY	CEM
BR	EXISTING BRIDGE	BR
TREE	TREE	TREE
MSQ	MASQUE	MSQ
HP	HAND PUMP	HP
WELL	WELL	WELL
TP	TRAVEL POST	TP
CN	CONTAINER	CN
TCU	CULVERT	TCU
TL	TRAIL	TL
BLP	BUILDING LINE	BLP
CONTOUR	CONTOUR	CONTOUR
PAVED ROAD	PAVED ROAD	PAVED ROAD
ASPHALT ROAD	ASPHALT ROAD	ASPHALT ROAD

امارت اسلامی افغانستان

شاروالی کابل  
معینیت ساختمانی  
ریاست زیربناها  
آمریت سروی

نام پروژه:  
اسور ساختمان سرک اعتبار از سرک عمومی  
قلعه زمان خان الی سرک کابل-ننگرهار

نام پلان:  
سروی توپوگرافی

سروی کننده ها

انجنیر نورالرحمن

انجنیر فرهاد

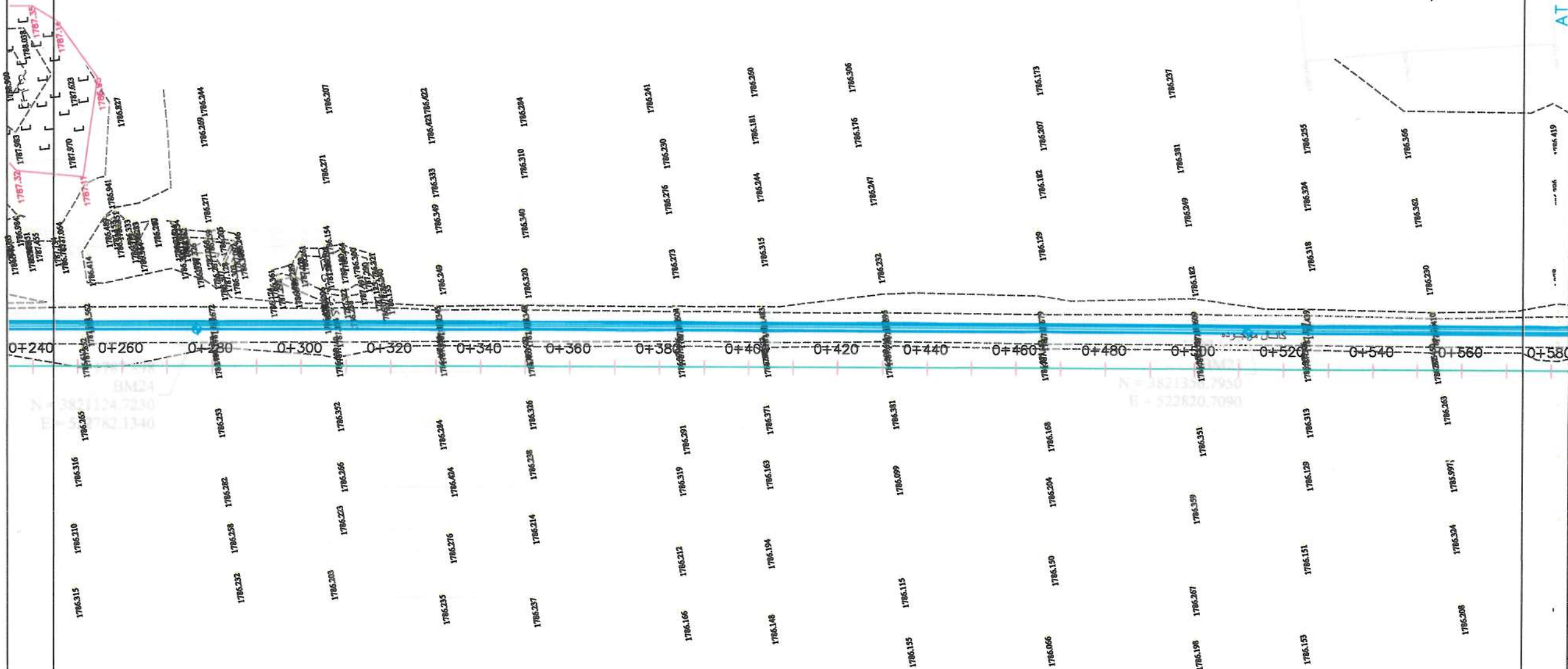
مرور کننده سروی  
انجنیر عبدالرشید

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PROJECT CODE:  
DRAWING #: 1

د افغانستان اسلامي امارت  
د کابل ښاروالی  
د ښاري زیر بناو ریاست



AT STATION - 0+245.00  
PREVIOUS SHEET NUMBER - 1



MATCH LINE - 2  
AT STATION - 0+574.00

NOTE:  
1. ALL DIMENSIONS ARE IN METERS  
UNLESS OTHERWISE INDICATED

LEGENDS		
SYMBOL	DESCRIPTION	CODE
CL	CENTER LINE	CL
BL	BUILDING	BL
TCN	TOP OF CANAL	TCN
BCN	BOTTOM OF CANAL	BCN
TD	TOP OF DITCH	TD
BM	BENCHMARK	BM
STA	STATION	STA
CEP	CHIEF ENGINEER'S OFFICE	CEP
RE	ROAD EDGE	RE
TRV	TOP OF RIVER	TRV
BRV	BOTTOM OF RIVER	BRV
TCU	TOP OF CULVERT	TCU
BR	EXISTING BRIDGE	BR
MSQ	MASQUE	MSQ
HP	HAND PUMP	HP
WEL	WELL	WEL
TP	TRIP	TP
CN	CONTAINER	CN
TCU	CULVERT	TCU
PR	PRIVACY	PR
GR	GRASS	GR
CON	CONTOUR	CON
PRD	PAVED ROAD	PRD
ASR	ASPHALT ROAD	ASR

امارت اسلامی افغانستان

شماره ۱۱۱  
معماری و مهندسی  
ریاست زیربنای  
امریت سوری

نام پروژه:  
امور ساختمان سرک اعتبار از سرک عمومی  
قلعه زمان خان الی سرک کابل-ننگرهار

نام پلان:  
سروی توپوگرافی

سروی کننده ها

تصویر نورسرحمن

تصویر فرهاد

مورر کننده سروی

تصویر مسعود علی محمد  
امور سروی

DATE: SCALE: 1:1000

PROJECT CODE:

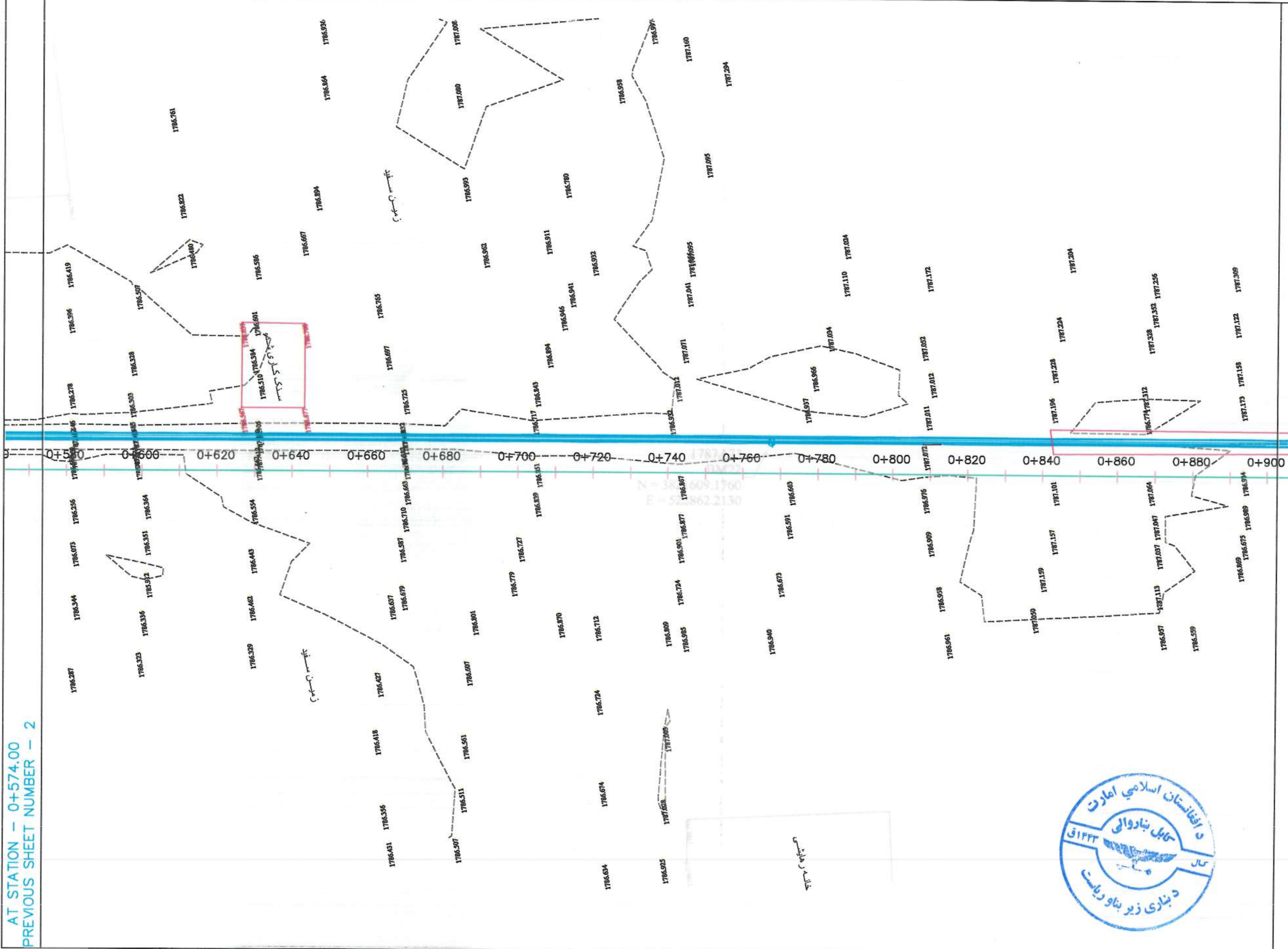
DRAWING #:

2





AT STATION - 0+574.00  
PREVIOUS SHEET NUMBER - 2



MATCH LINE - 3  
AT STATION - 0+903.00

NOTE:  
1. ALL DIMENSIONS ARE IN METERS  
UNLESS OTHERWISE INDICATED

**LEGENDS**

SYMBOLS	DESCRIPTION	CODE
CL	CENTER LINE	CL
BL	BUILDING	BL
TCN	TOP OF CANAL	TCN
BCN	BOTTOM OF CANAL	BCN
TD	TOP OF DITCH	TD
BM	BENCHMARK	BM
STA	STATION	STA
CEP	CULVERT END POINT	CEP
RE	ROAD EDGE	RE
TRV	TOP OF RIVER	TRV
BRV	BOTTOM OF RIVER	BRV
WALL	WALL	WALL
TCU	TOP OF CULVERT	TCU
CEM	CEMETERY	CEM
BR	EXISTING BRIDGE	BR
TREE	TREE	TREE
MSQ	MASQUE	MSQ
HP	HAND PUMP	HP
WELL	WELL	WELL
TP	TOP OF PILE	TP
CN	CONTAINER	CN
TCU	CULVERT	TCU
EL	ELECTRICITY	EL
GP	GPS POINT	GP
CONTOUR	CONTOUR	CONTOUR
PAVED ROAD	PAVED ROAD	PAVED ROAD
ASPHALT ROAD	ASPHALT ROAD	ASPHALT ROAD

امارت اسلامی افغانستان

شاروالی کابل  
معینیت ساختمانی  
ریاست زیربناها  
امریت سروی

نام پروژه  
امور ساختمان سرک اعتبار از سرک عمومی  
قلعه زمان خان الی سرک کابل ننگرهار

نام پلان  
سروی توپوگرافی

سروی کننده ها

التحیر نور الرحمن

التحیر فرید

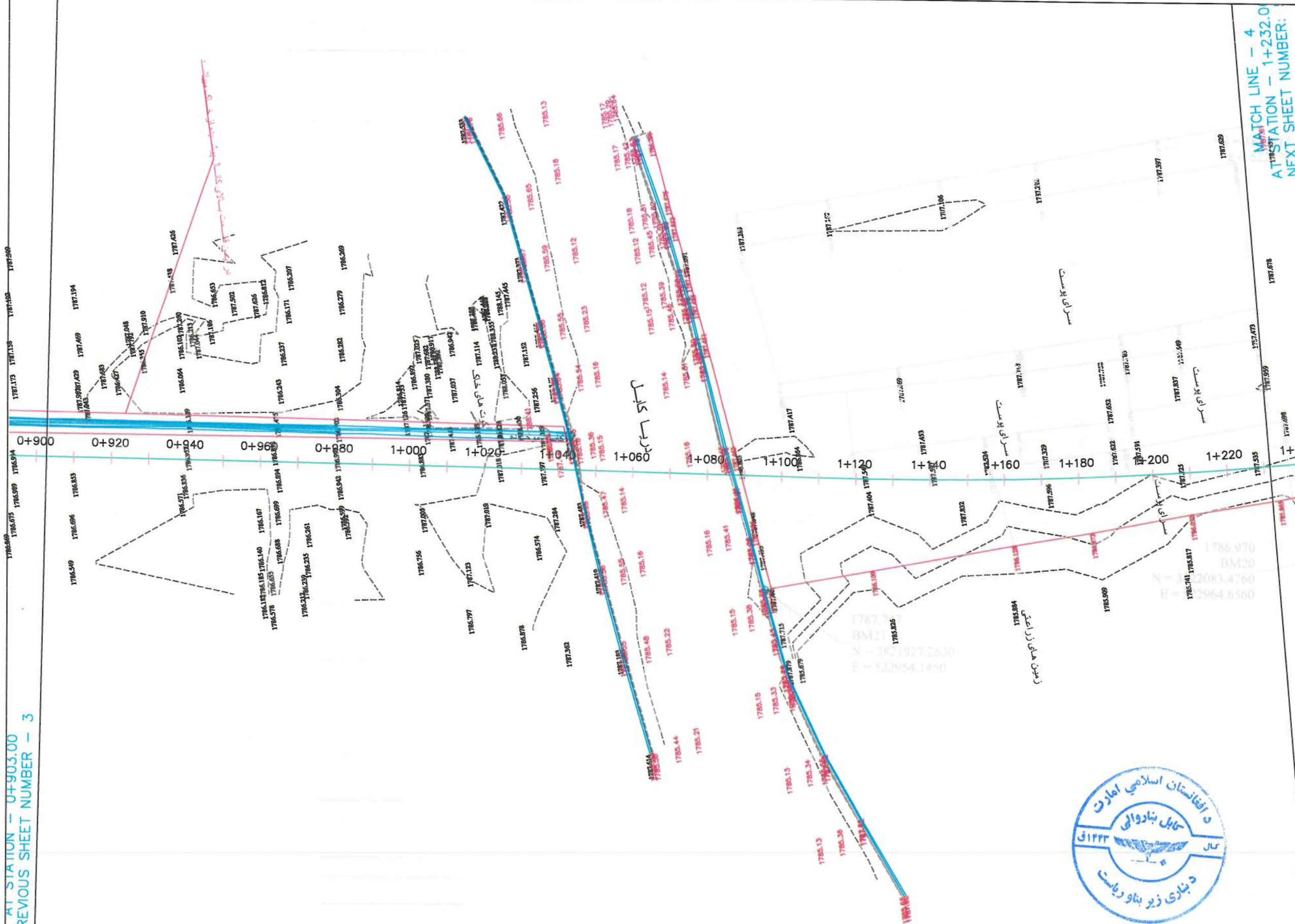
مرور کننده سروی  
التحیر سید علی حسینی  
امر سروی

DATE: ۱۳۳۳ ق  
SCALE: 1:1000  
PROJECT CODE:  
DRAWING #: 3





AT STATION - 0+903.00  
PREVIOUS SHEET NUMBER - 3



MATCH LINE - 4  
AT STATION - 1+232.00  
NEXT SHEET NUMBER: 4

NOTE:  
1. ALL DIMENSIONS ARE IN METERS  
UNLESS OTHERWISE INDICATED

LEGENDS		
SYMBOLS	DESCRIPTION	CODE
	CENTER LINE	CL
	BUILDING	BL
	TOP OF CANAL	TCN
	BOTTOM OF CANAL	BCN
	TOP OF DITCH	TD
	STATION	STA
	ROAD EDGE	RE
	TOP OF RIVER	TRV
	BOTTOM OF RIVER	BRV
	WALL	W
	TOP OF CULVERT	TCU
	CEMETERY	CEM
	EXISTING BRIDGE	BR
	TREE	TR
	MASQUE	MSQ
	HAND PUMP	HP
	WELL	W
	TP	TP
	CONTAINER	CN
	CULVERT	TCU
	STEEL STRUCTURE	SS
	FOUNDATION	FD
	CONTOUR	CON
	PAVED ROAD	PR
	ASPHALT ROAD	AR

امارت اسلامی افغانستان  
شماره ۱ کابل  
معماریت ساختمانی  
ریاست زیربنای  
آمریت سروی

نام پروژه  
امور ساختمان سرک اعتبار از سرک عمومی  
قلعه زمان خان الی سرک کابل-ننگرهار

نام پلان  
سروی توپوگرافی

سروی کننده ها

	الجنیر نور الرحمن
	الجنیر فرهاد

مورر کننده سروی  
الجنیر سید عیسی شاد  
ابو سروی

DATE: SCALE: 1:1000

PROJECT CODE:

DRAWING #: 4







## LEGENDS

امارت اسلامی افغانستان

نام پروژہ  
امور ساختمان سرک اعتبار از سرک عمومی  
قلعہ زمان خان الی سرک کابل ننگر ہار

سام پلان  
سروی توپوگرافی

مروى كننده ها

نجنسیر نور الرحمن

انجنیر فرهاد

مرور کننده روی

امیر سروی

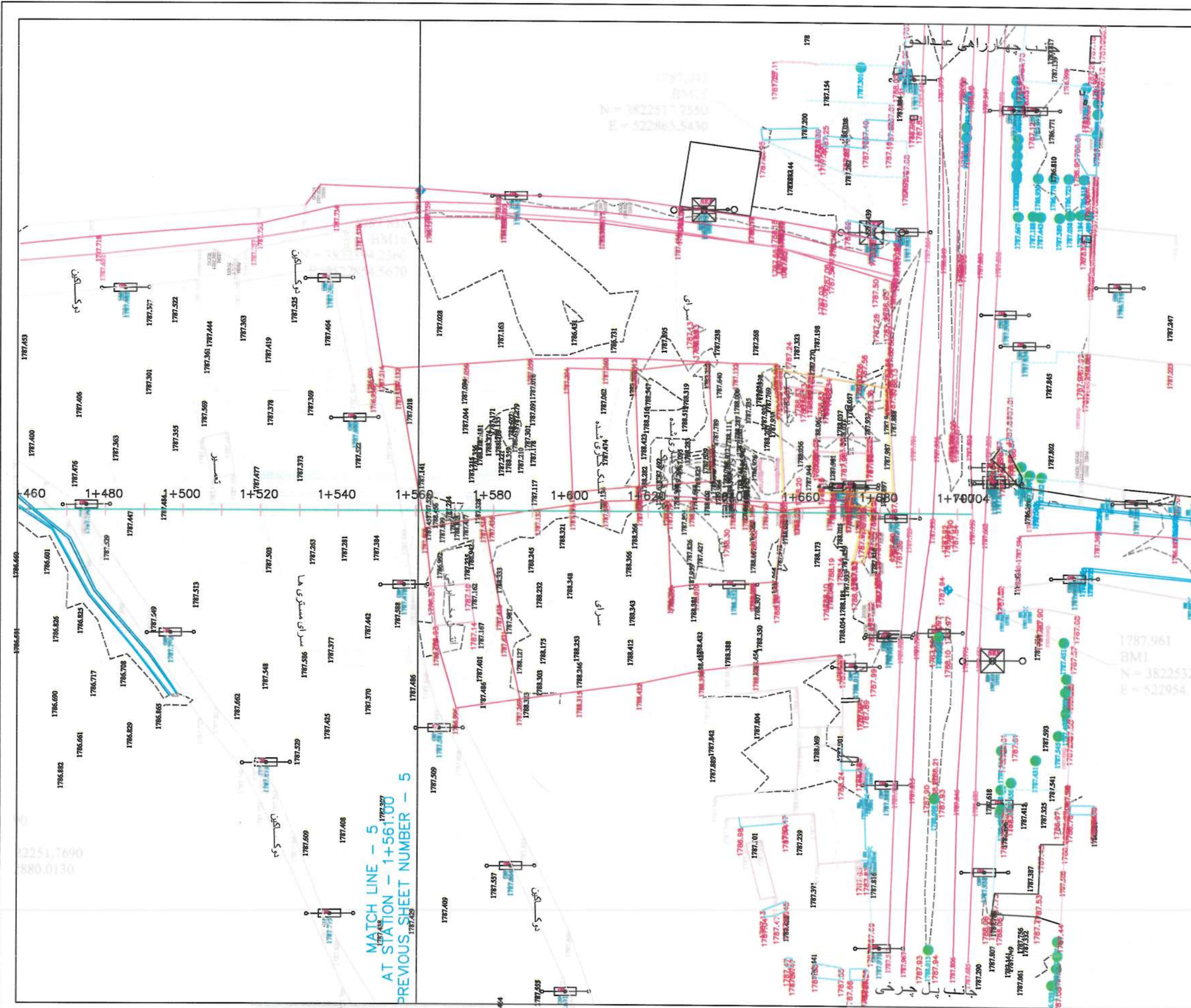
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PROJECT CODE:

DRAWING #:	5	REVISED
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5





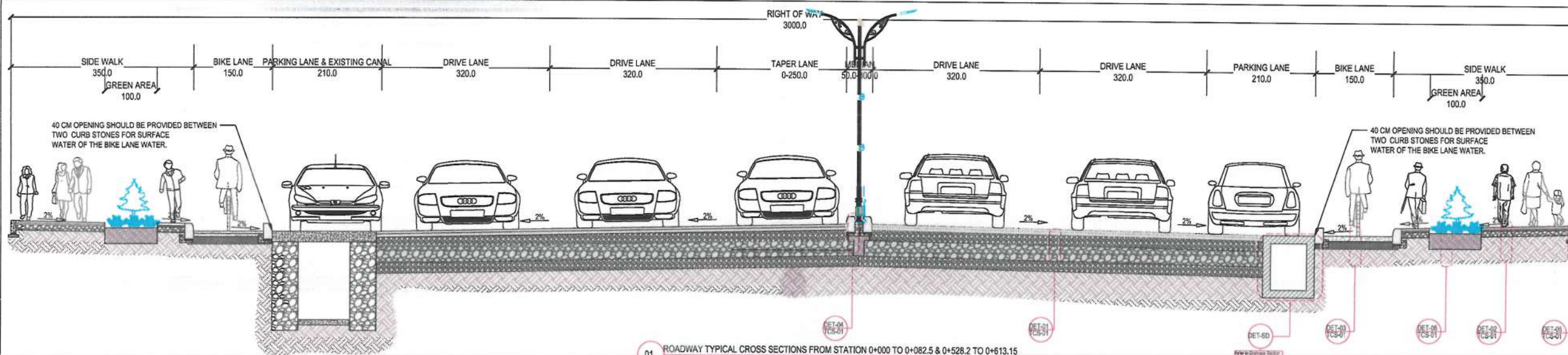
NOTE:  
1. ALL DIMENSIONS ARE IN METERS  
UNLESS OTHERWISE INDICATED

LEGENDS		
SYMBOLS	DESCRIPTION	CODE
—	CENTER LINE	CL
—	BUILDING	BL
—	TOP OF CANAL	TCN
—	BOTTOM OF CANAL	BCN
—	TOP OF DITCH	TD
—	STATION	STA
—	ROAD EDGE	RE
—	TOP OF RIVER	TRV
—	BOTTOM OF RIVER	BRV
—	WALL	W
—	TOP OF CULVERT	TCU
—	CEMETERY	CE
—	EXISTING BRIDGE	BR
—	TREE	TR
—	MASQUE	MSQ
—	HAND PUMP	HP
—	WELL	WL
—	CONTAINER	CN
—	CULVERT	CU
—	PAVED ROAD	PR
—	ASPHALT ROAD	AR

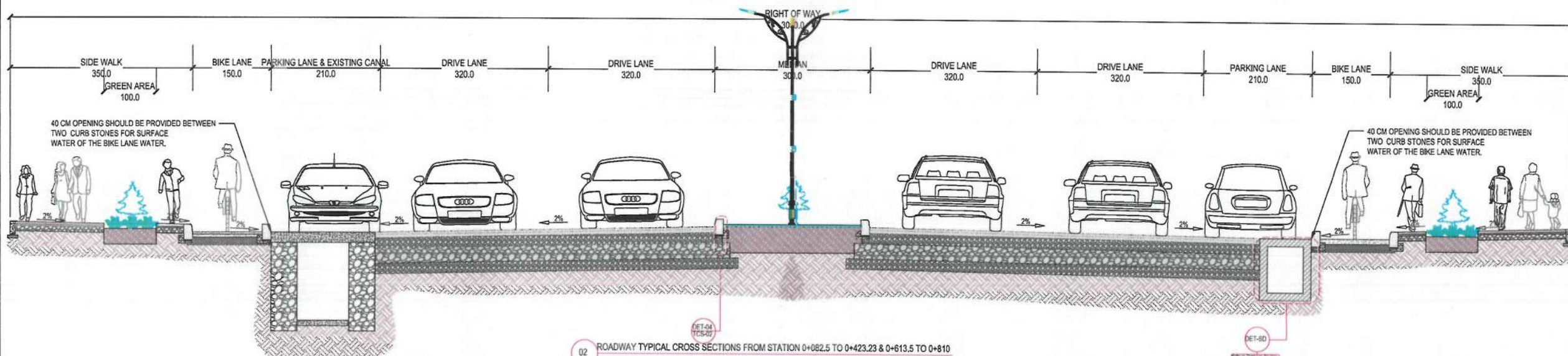
درباره

امارت اسلامی افغانستان	
شماره ۱۱۲۲۳	
معماری زیربناها	
امارت اسلامی افغانستان	
نام پروژه	
امور ساختمان سرک اعتبار از سرک عمومی	
قلمه زمان خان الی سرک کابل-ننگرهار	
نام پلان	
سرری توپوگرافی	
سرری کننده ها	
تجربہ نور الرحمن	تجربہ فرید
مرور کننده سرری	
تجربہ سید عیسیٰ شوری	
امور سرری	
DATE:	SCALE: 1:1000
PROJECT CODE:	
DRAWING #:	6

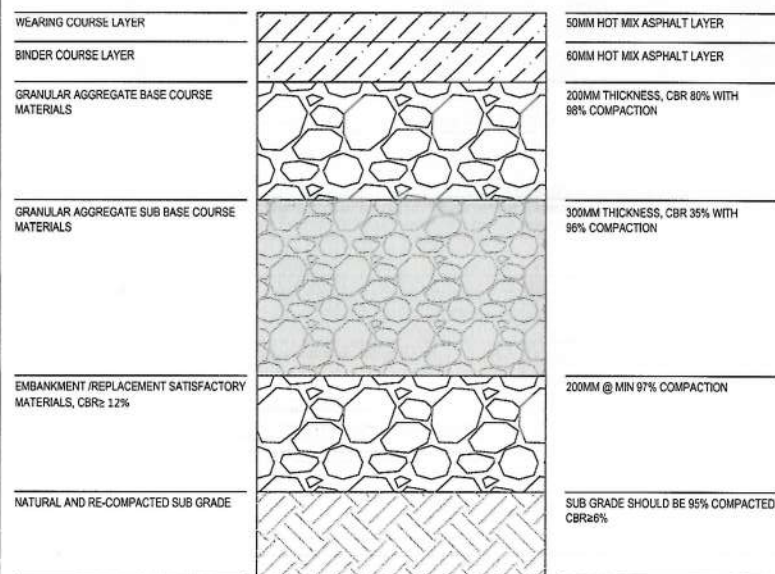




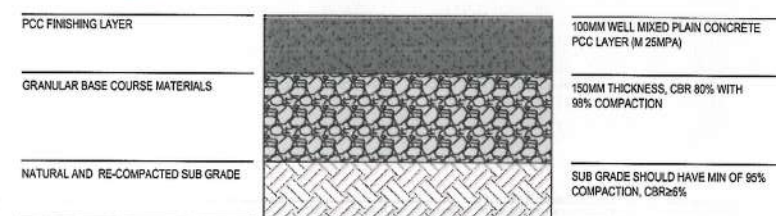
01 ROADWAY TYPICAL CROSS SECTIONS FROM STATION 0+000 TO 0+082.5 & 0+528.2 TO 0+613.15  
STATION 0+000 TO 0+033.7 SHALL BE IMPLEMENTED FROM THE PLAN, CONSIDERING THE CURVE LENGTH AND RADIUS



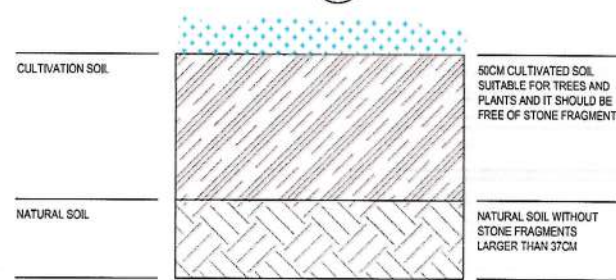
02 ROADWAY TYPICAL CROSS SECTIONS FROM STATION 0+082.5 TO 0+423.23 & 0+613.5 TO 0+810



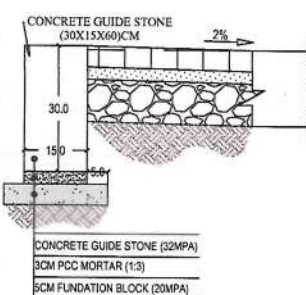
DET-01 ROAD MATERIAL DETAIL  
TCS-01



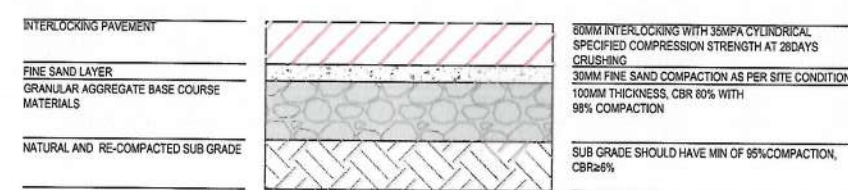
DET-03 BIKE LANE MATERIAL DETAIL  
TCS-01



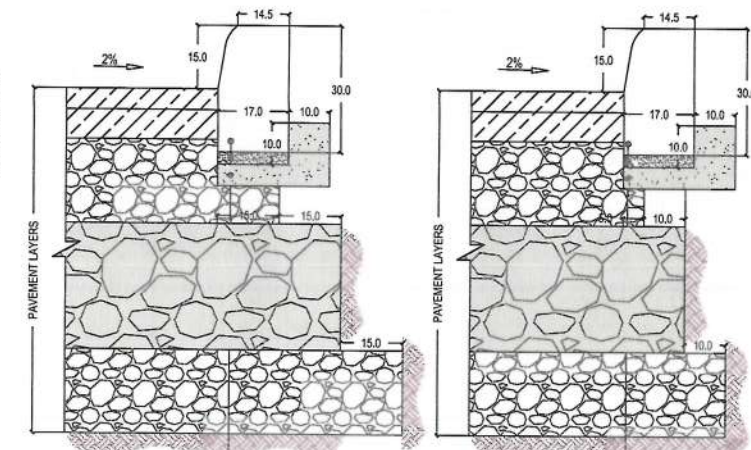
DET-02 GREEN AREA MATERIAL DETAIL  
TCS-01



DET-05 GUIDE STONE DETAIL  
TCS-01



DET-02 SIDE WALK MATERIAL DETAIL  
TCS-01



DET-04 CURB STONE DETAIL  
TCS-01

DET-04 CURB STONE DETAIL  
TCS-01

- NOTE:
1. All dimensions are in Centimeters unless otherwise indicated.
  2. The minimum CBR for sub base layer has been 25% in the KM technical specification for urban streets, but as per the pavement design the required CBR of 35% should be applied to sub base layer.
  3. The subgrade should be screened from oversized, damped, and organic materials.
  4. The curb stone should be painted yellow and black.

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By: KABUL MUNICIPALITY DESIGN TEAM

Project Name: Construction of Road From Qala-e-Zaman Khan Road to Kabul Jalalabad Road

Drawing Title: TYPICAL CROSS SECTIONS

Drawn: Matullah Hussainzai  
Designed: Matullah Hussainzai  
Checked: Habibullah Shalizi

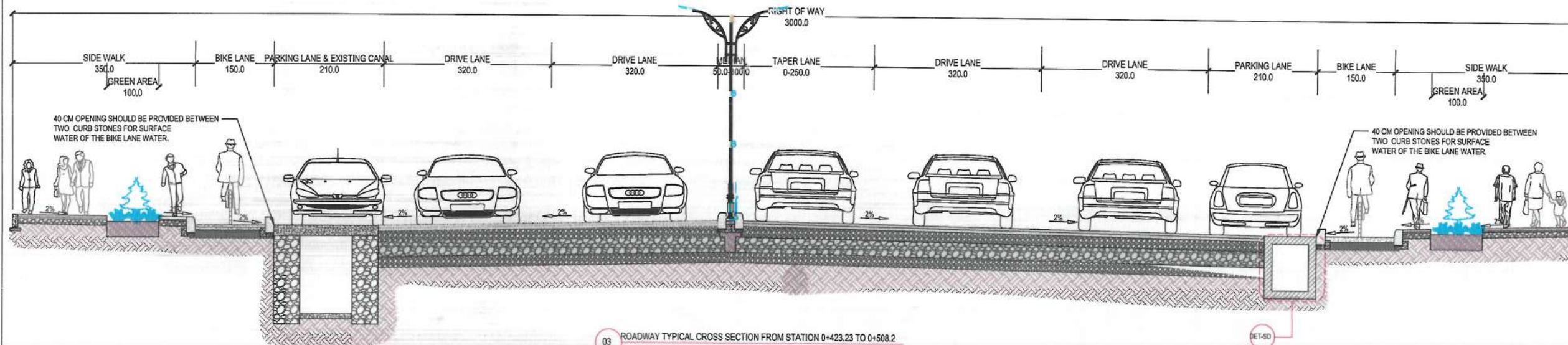
Date: 26/11/1445

Status: FINAL DESIGN

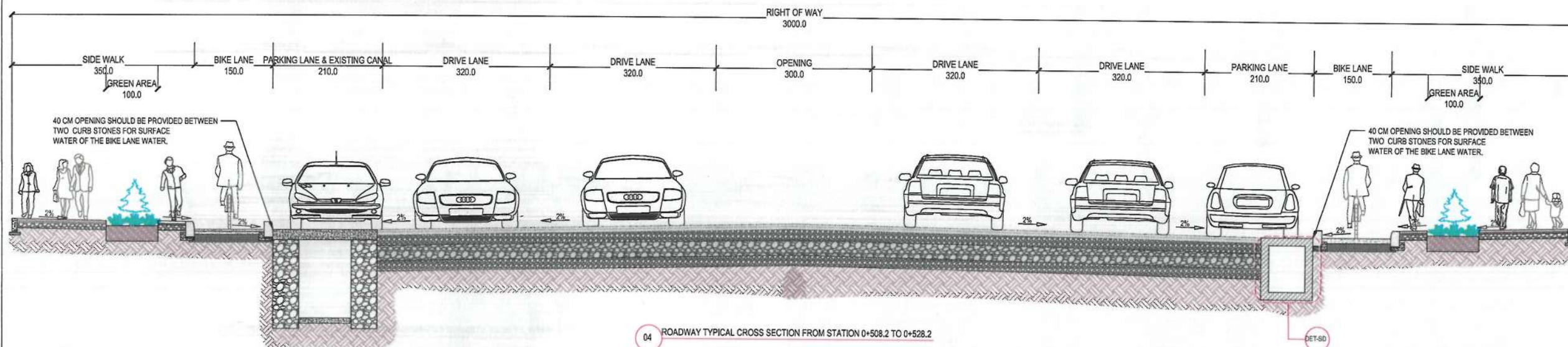
Project Code:

SHEET: TCS-01 OF 04  
REVISION: 00

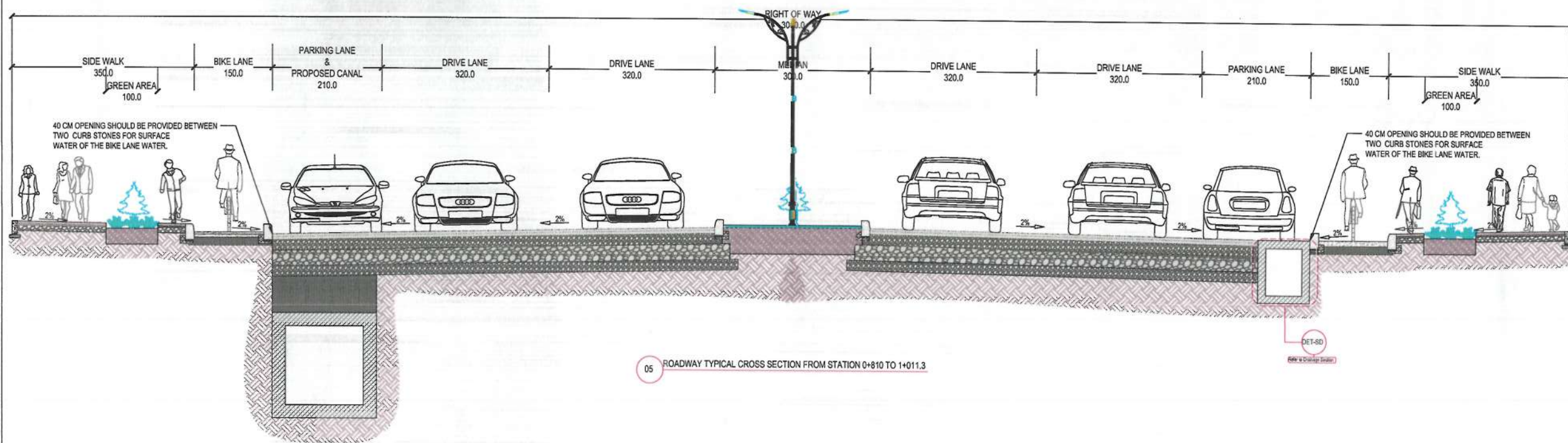




03 ROADWAY TYPICAL CROSS SECTION FROM STATION 0+423.23 TO 0+508.2



04 ROADWAY TYPICAL CROSS SECTION FROM STATION 0+508.2 TO 0+528.2



05 ROADWAY TYPICAL CROSS SECTION FROM STATION 0+810 TO 1+011.3

- NOTE:
1. All dimensions are in Centimeters unless otherwise indicated.
  2. The minimum CBR for sub base layer has been 25% in the KM technical specification for urban streets, but as per the pavement design the required CBR of 35% should be applied to sub base layer.
  3. The subgrade should be screened from oversized, damped, and organic materials.
  4. The curb stone should be painted yellow and black.



Date	Revision	Details	Drawn	Chkd.	Appr.

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:

KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road to Kabul Jalalabad Road

Drawing Title:

TYPICAL CROSS SECTIONS

Drawn	Signature:
Designed	Signature:
Checked	Signature:
Hasanullah Shalizi	

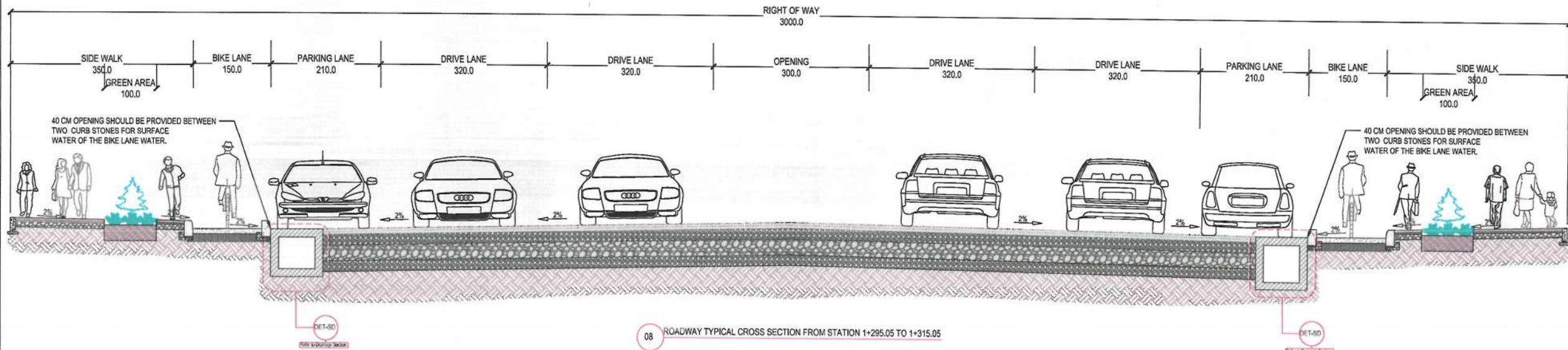
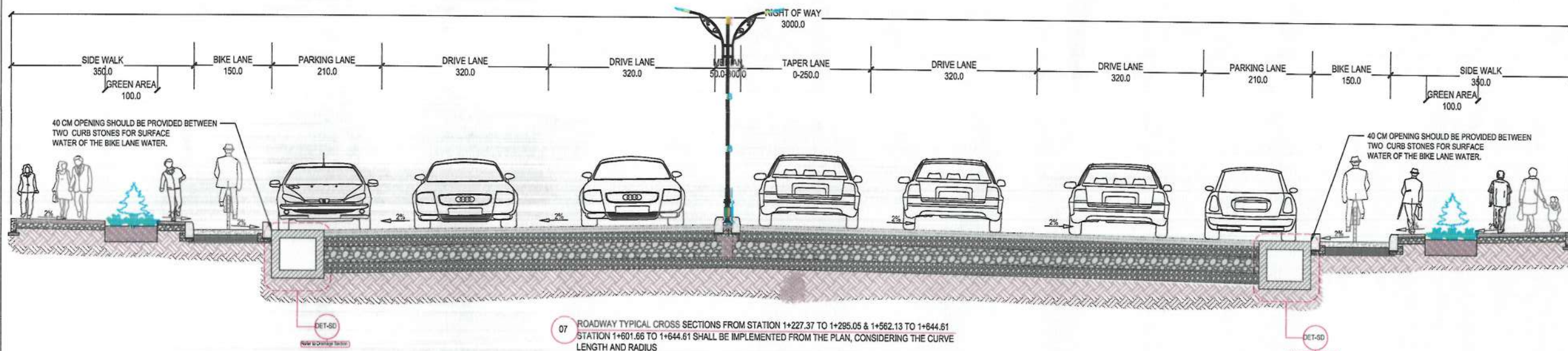
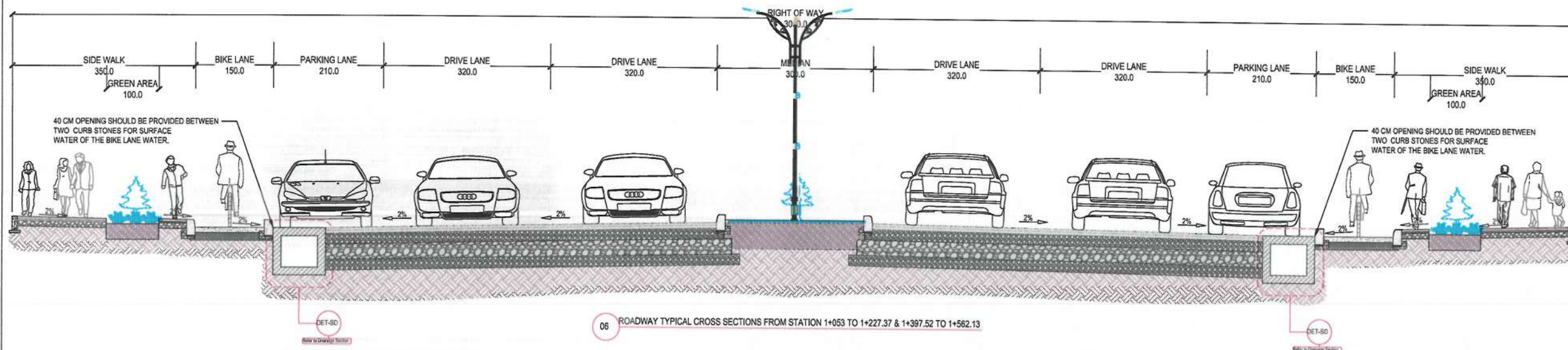
Date: 26/11/1445

Status: FINAL DESIGN

Project Code

SHEET	REVISION
TCS-02 OF 04	00





- NOTE:
1. All dimensions are in Centimeters unless otherwise indicated.
  2. The minimum CBR for sub base layer has been 25% in the KM technical specification for urban streets, but as per the pavement design the required CBR of 35% should be applied to sub base layer.
  3. The subgrade should be screened from oversized, dumped, and organic materials.
  4. The curb stone should be painted yellow and black.



Date	Revision	Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qals-e Zaman Khan Road to Kabul Jalalabad Road

Drawing Title:  
TYPICAL CROSS SECTIONS

Drawn:	Signature:
Designed:	Signature:
Checked:	Signature:
Haqibullah Shalizi	

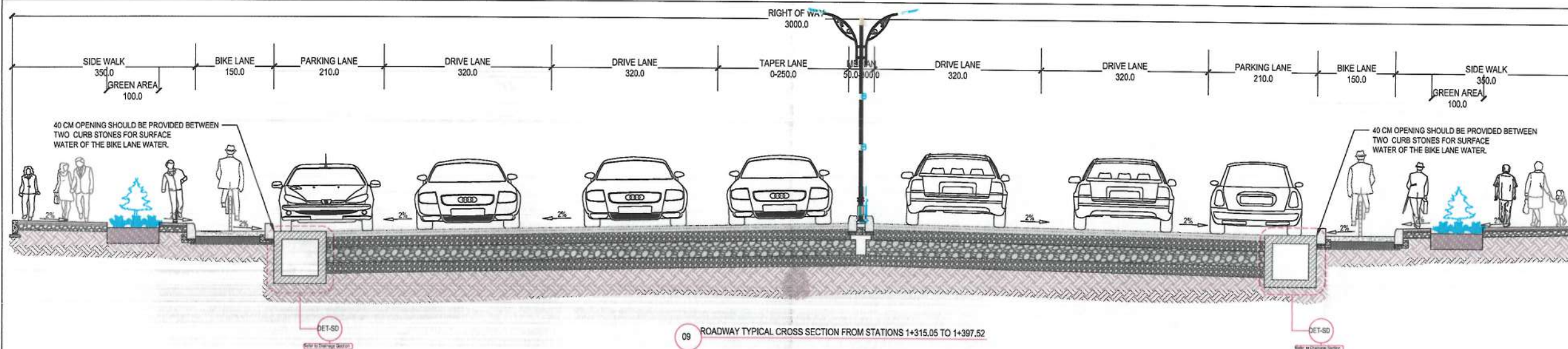
Date:  
26/11/1445

Status:  
FINAL DESIGN

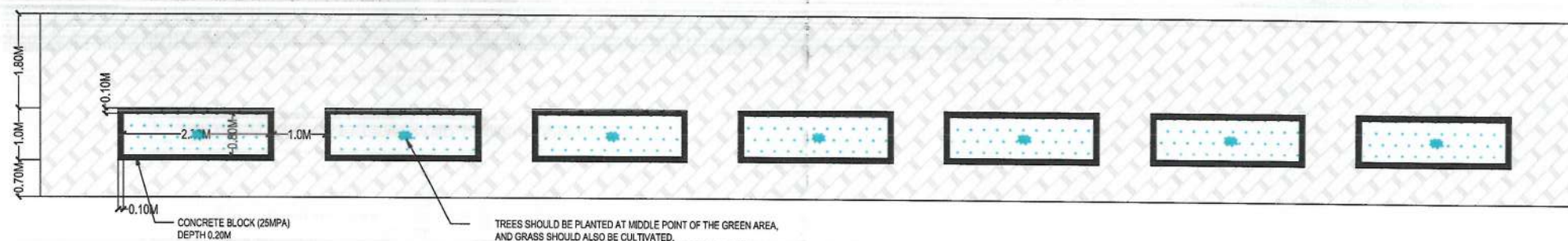
Project Code

SHEET	REVISION
TCS-03 OF 04	00





- NOTE:
- All dimensions are in Centimeters unless otherwise indicated.
  - The minimum CBR for sub base layer has been 25% in the KM technical specification for urban streets, but as per the pavement design the required CBR of 35% should be applied to sub base layer.
  - The subgrade should be screened from oversized, damped, and organic materials.
  - The curb stone should be painted yellow and black.



Date	Revision	Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e- Zaman Khan Road to Kabul Jalalabad Road

Drawing Title:  
TYPICAL CROSS SECTIONS

Drawn:	Signature:
Matullah Hussainzai	Signature:
Designed:	Signature:
Matullah Hussainzai	Signature:
Checked:	Signature:
Haydullah Shalizi	Signature:

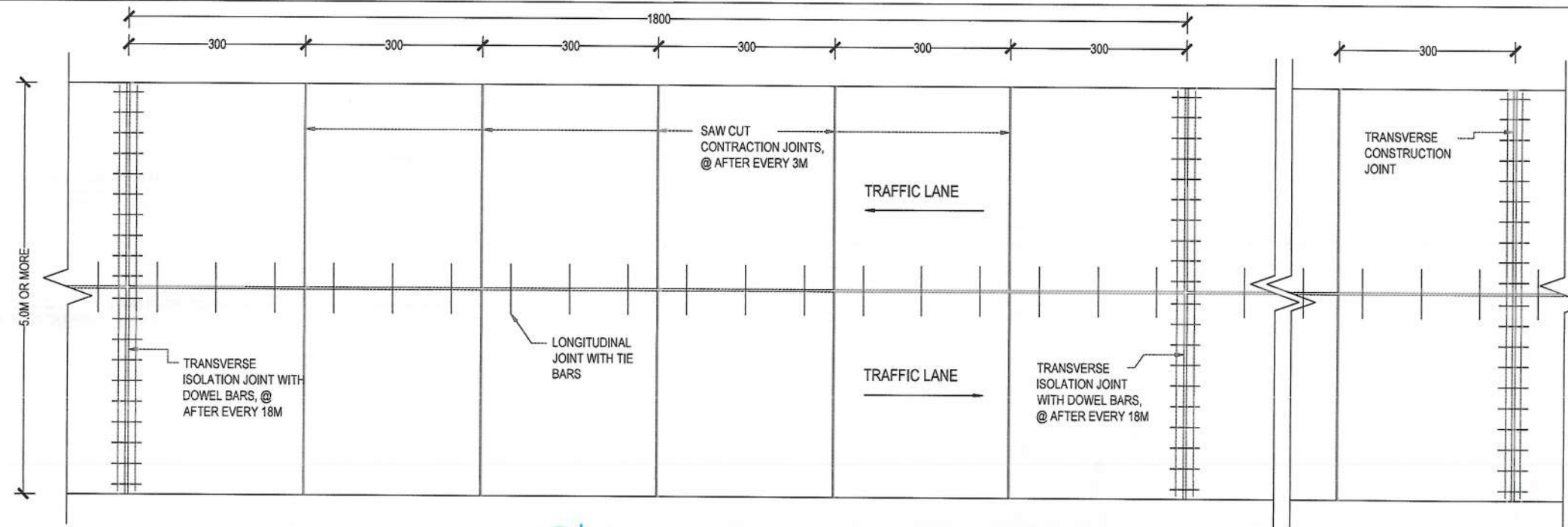
Date: 26/11/1445

Status: FINAL DESIGN

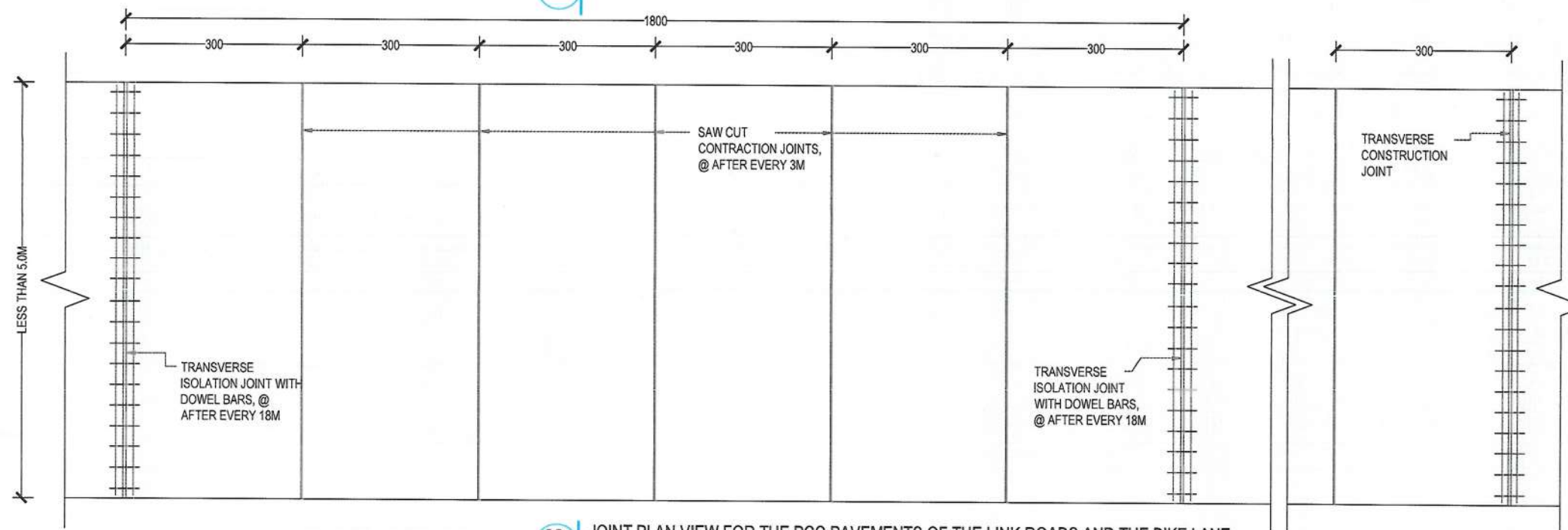
Project Code:

SHEET	REVISION
TCS-04 OF 04	00

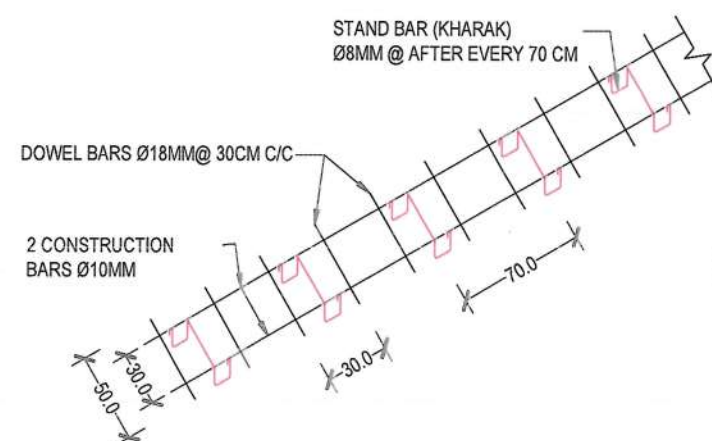




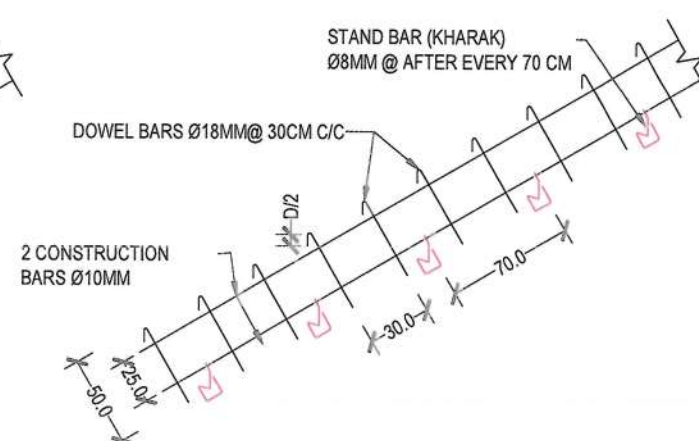
01 JOINTS PLAN VIEW FOR THE PCC PAVEMENTS OF THE LINK ROADS



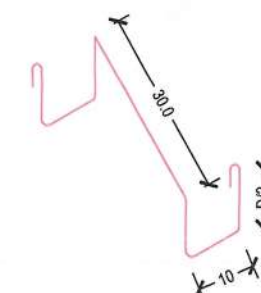
02 JOINT PLAN VIEW FOR THE PCC PAVEMENTS OF THE LINK ROADS AND THE BIKE LANE



03 ISOLATION JOINT REINFORCEMENT



04 CONSTRUCTION JOINT REINFORCEMENT



05 ISOLATION JOINT STAND DETAIL



06 CONSTRUCTION JOINT STAND DETAIL

- NOTE:
- 1) FOR MORE DETAILS PLEASE SEE PCC PAVEMENT JOINTS SECTION DETAILS.
  - 2) TRANSVERSE JOINTS LENGTH MUST BE ACCORDING TO PAVEMENT CROSS WIDTH.
  - 3) REMOVE WOODEN PANEL, ONE SIDE CONSTRUCTION BAR AND STAND (KHARAK) FROM CONSTRUCTION JOINT.
  - 4) ALL UNITS ARE IN CM.

NOTE:  
1. All dimensions are in Centimeters unless otherwise indicated.



Rev: Date Revision Details Drawn Chkd Appd

ISLAMIC EMIRATE OF AFGHANISTAN

KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e Zaman Khan Road to Kabul Jalalabad Road

Drawing Title:

JOINT DETAIL

Drawn: Matinullah Hussainzai  
Designed: Matinullah Hussainzai  
Checked: Hashbullah Shaizi

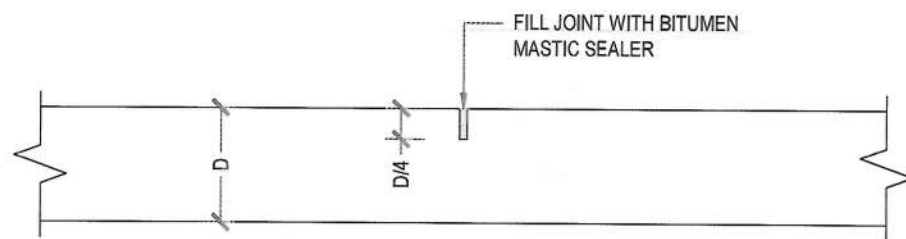
Date: 26/11/1445 Scale:

Status: FINAL DESIGN

Project Code:

SHEET: JD-01 OF 02 REVISION: 00

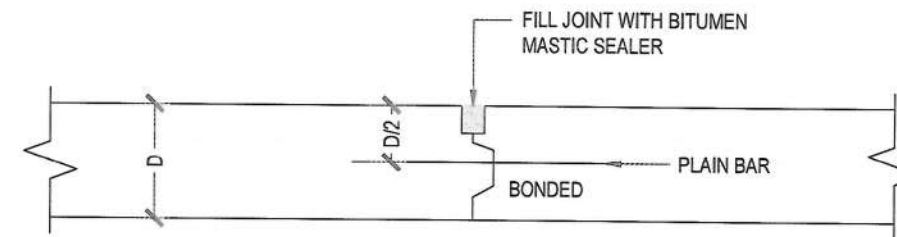




## 06 TRANSVERSE CONTRACTION JOINT DETAIL

NOTE:

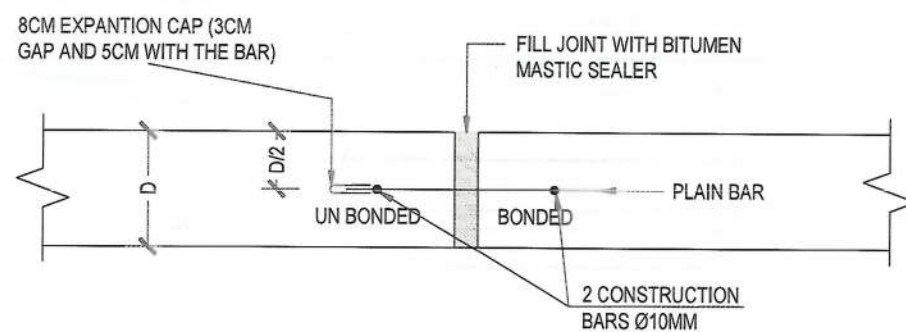
- 1) FORM JOINTS BY SAW CUTTING
- 2) SPACING OF CONTRACTION JOINTS @ AFTER EVERY 3 METER
- 3) FILL JOINTS WITH BITUMEN MASTIC SEALER TO PREVENT WATER PENETRATION IN TO PAVEMENTS
- 4) JOINT WIDTH = 0.5-1.0 CM



## 07 TRANSVERSE EXPANSION CONSTRUCTION JOINT DETAIL

NOTE:

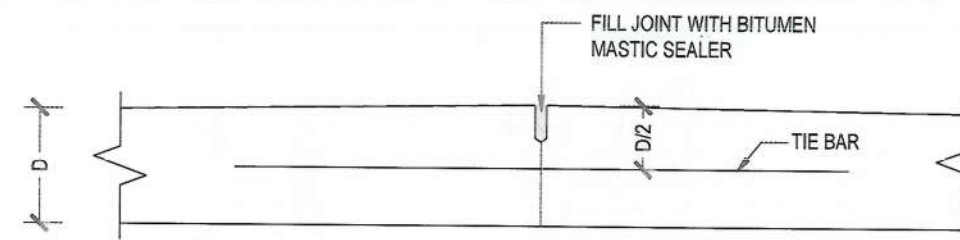
- 1) FORM JOINT WITH WOODEN PANEL, AND REMOVED IT AFTER JOINT FORMED.
- 2) USE DOWEL BARS Ø18MM, @30CM C/C & 50 CM LONG
- 3) PROVIDE CONSTRUCTION JOINT @ THE END OF EVERY DAILY WORK AND WHEN THE WORK STOP FOR ONE HOUR OR MORE BECAUSE OF SOME REASONS.
- 4) FILL JOINTS WITH BITUMEN MASTIC SEALER TO PREVENT WATER PENETRATION IN TO PAVEMENTS.
- 5) JOINT WIDTH = 2.0CM-2.5CM



## 08 TRANSVERSE EXPANSION ISOLATION JOINT DETAIL

NOTE:

- 1) FORM JOINT WITH POLYSTYRENE PANEL, AND REMOVED IT AFTER JOINT FORMED.
- 2) USE DOWEL BARS Ø18MM, @30CM C/C & 50 CM LONG
- 3) SPACING MUST BE ACCORDING TO RELATED JOINTS PLAN VIEW.
- 4) FILL JOINTS WITH BITUMEN MASTIC SEALER TO PREVENT WATER PENETRATION IN TO PAVEMENTS.
- 5) JOINT WIDTH = 2.0CM-2.5CM
- 6) FROM THE MIDDLE POINT OF DOWEL BAR ONE SIDE SHOULD BE BONDED WITH PCC, BUT THE ANOTHER ONE SHOULD BE COATED WITH GREASE & WRAPPED WITH PLASTIC TO MAKE UN BONDED WITH PCC,



## 09 LONGITUDINAL EXPANSION JOINT DETAIL

NOTE:

- 1) FORM JOINT WITH SAW CUTTING.
- 2) USE TIE BARS Ø12MM, @76CM C/C & 60 CM LONG
- 3) PROVIDE LONGITUDINAL JOINT @ THE MID POINT (CROWN) OF CROSS SECTION.
- 4) FILL JOINTS WITH BITUMEN MASTIC SEALER TO PREVENT WATER PENETRATION IN TO PAVEMENTS.
- 5) JOINT WIDTH = 0.5CM-1.0CM

NOTE:

1. All dimensions are in meters unless otherwise indicated.

Rev. Date Revision Details Drawn Chkd. Appd.

ISLAMIC EMIRATE OF  
AFGHANISTAN

KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road  
to Kabul Jalalabad Road

Drawing Title:

JOINT DETAIL

Drawn: Matullah Hussainzai  
Designed: Matullah Hussainzai  
Checked: Hasibullah Shalizi

Date: 26/11/1445 Scale:

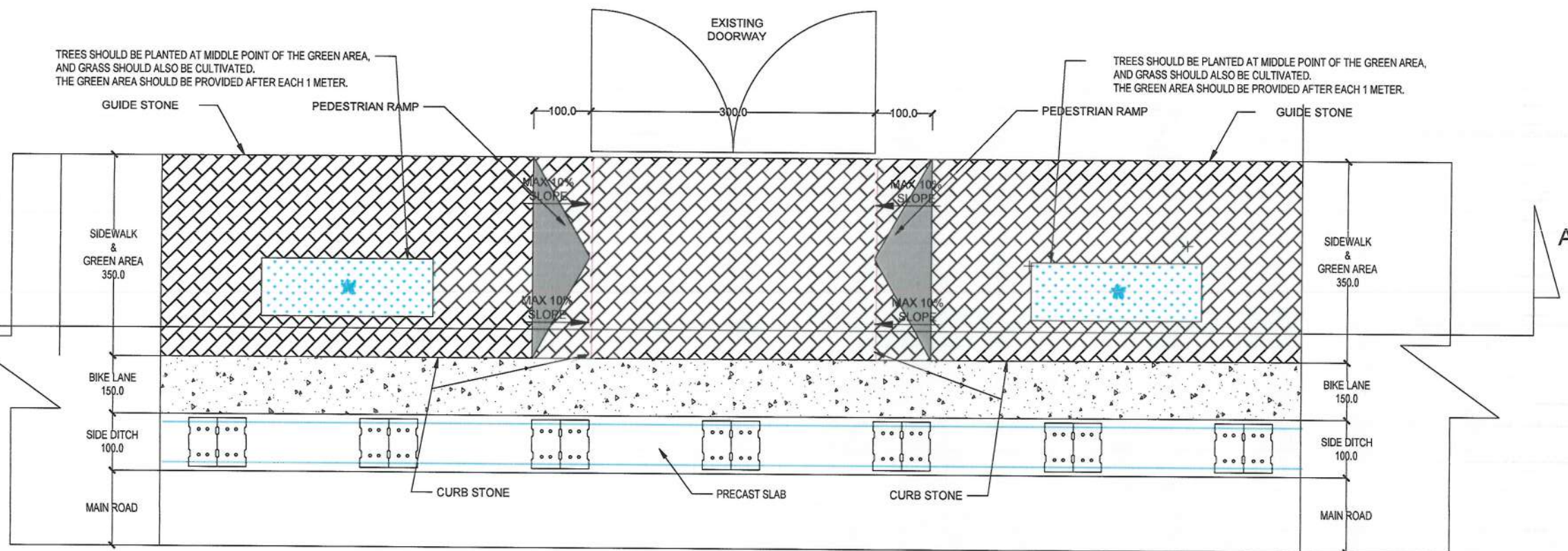
Status: FINAL  
DESIGN

Project Code

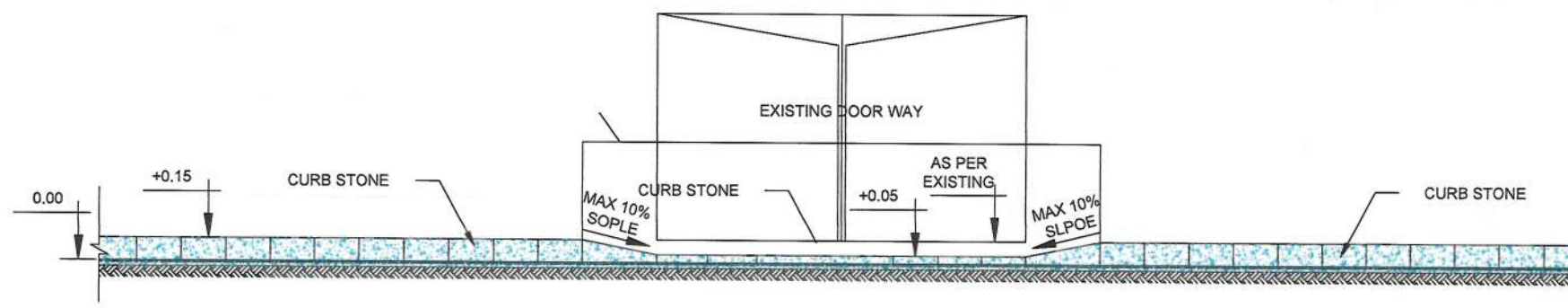
SHEET  
JD-02 OF 02

REVISION  
00





DOOR ENTRANCE & PEDESTRIAN CROSSING TYPICAL SECTION



SECTION A-A

NOTE:  
1. All dimensions are in Centimeter unless otherwise indicated.



Rev.	Date	Revision Details	Drawn	Chkd.	Appd.

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:

KABUL MUNICIPALITY DESIGN TEAM

Project Name:

Construction of Road From Qala-e-Zaman Khan Road to Kabul Jalalabad Road

Drawing Title:

DOOR ENTRANCE & PEDESTRIAN CROSSING TYPICAL SECTION & DETAIL

Drawn by:

Matullah Hussainzai

Designed by:

Matullah Hussainzai

Checked:

Hasibullah Shalizi

Date: 26/11/1445

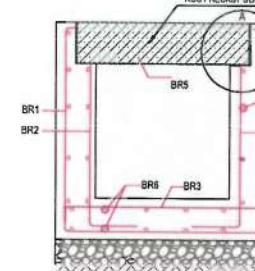
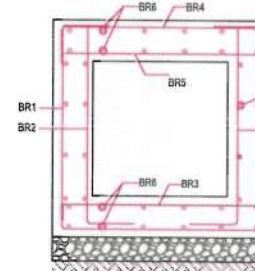
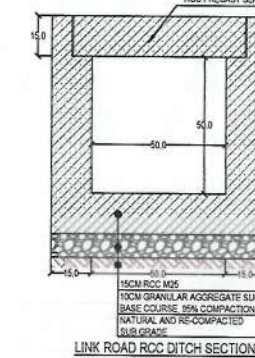
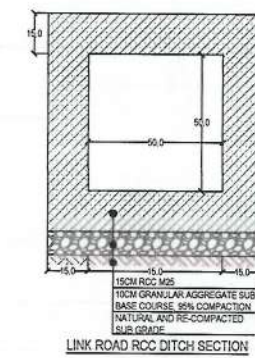
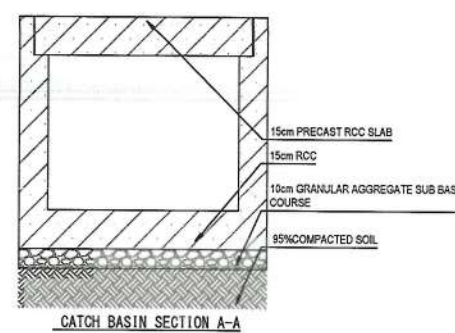
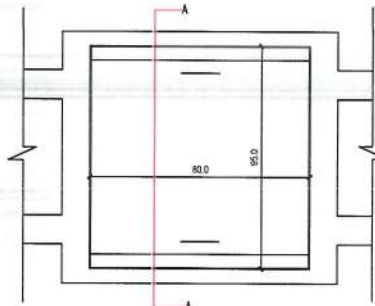
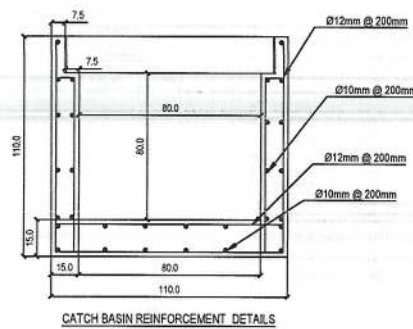
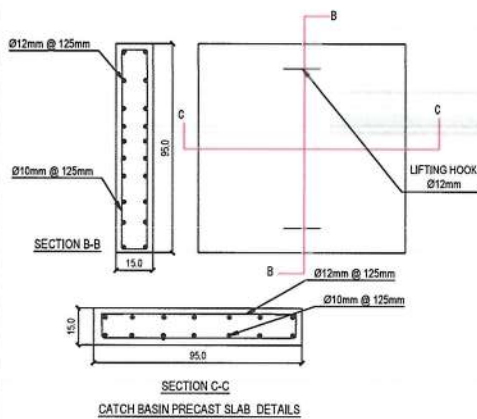
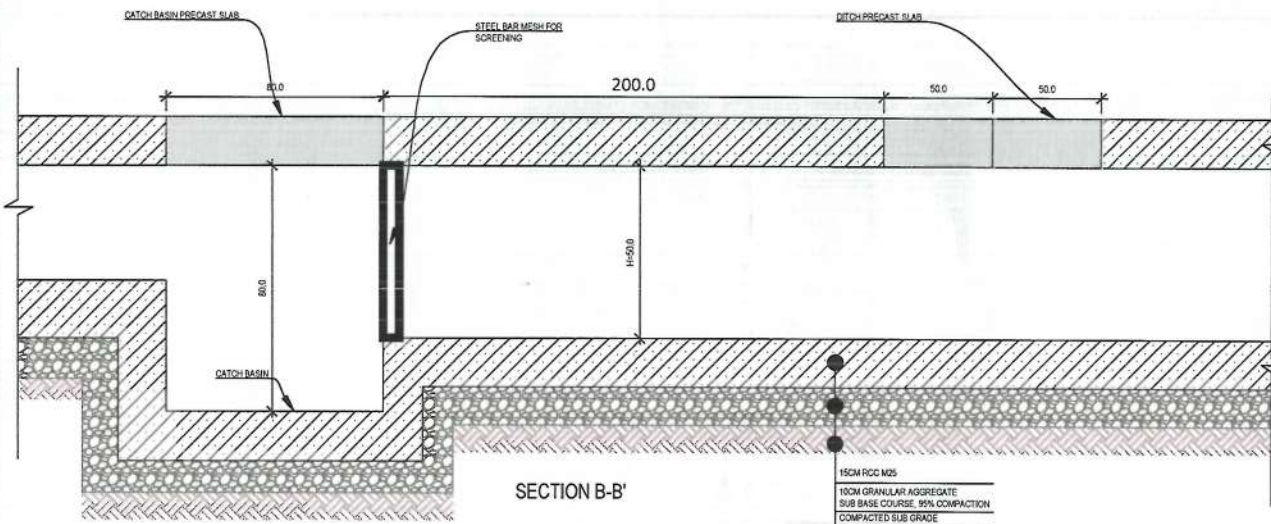
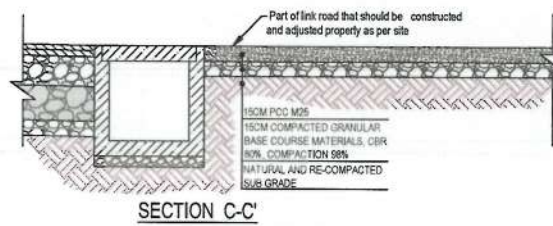
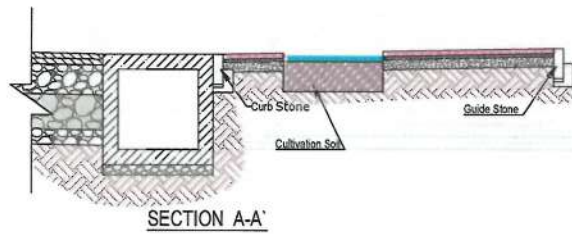
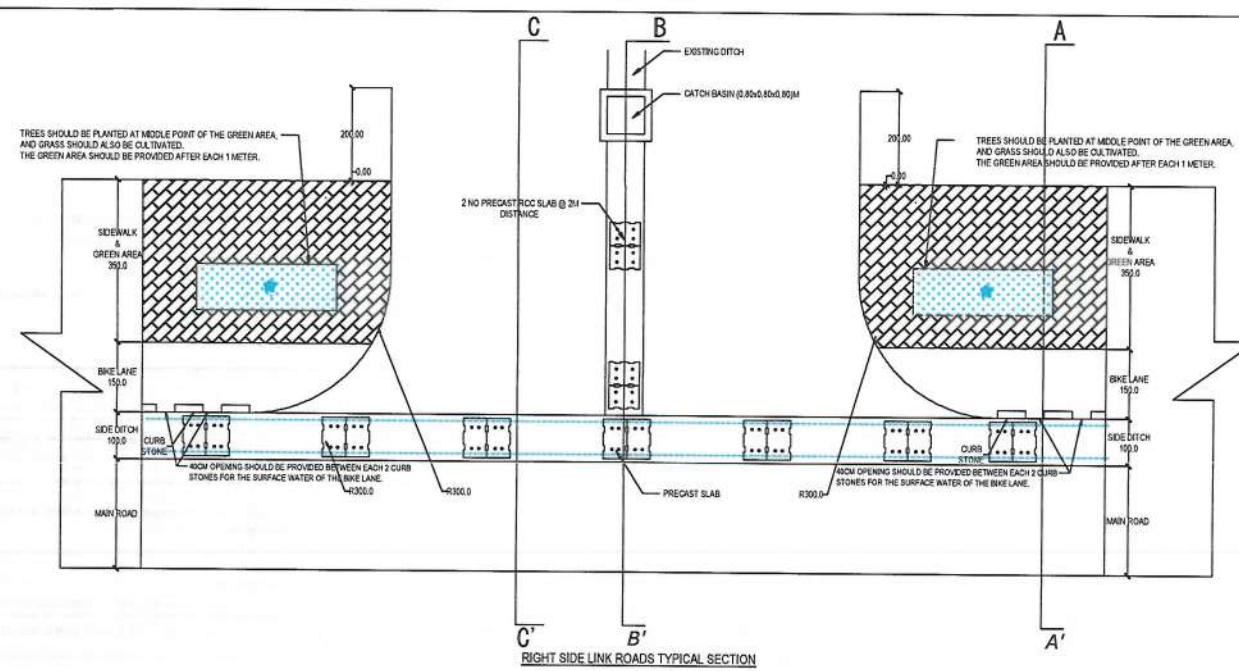
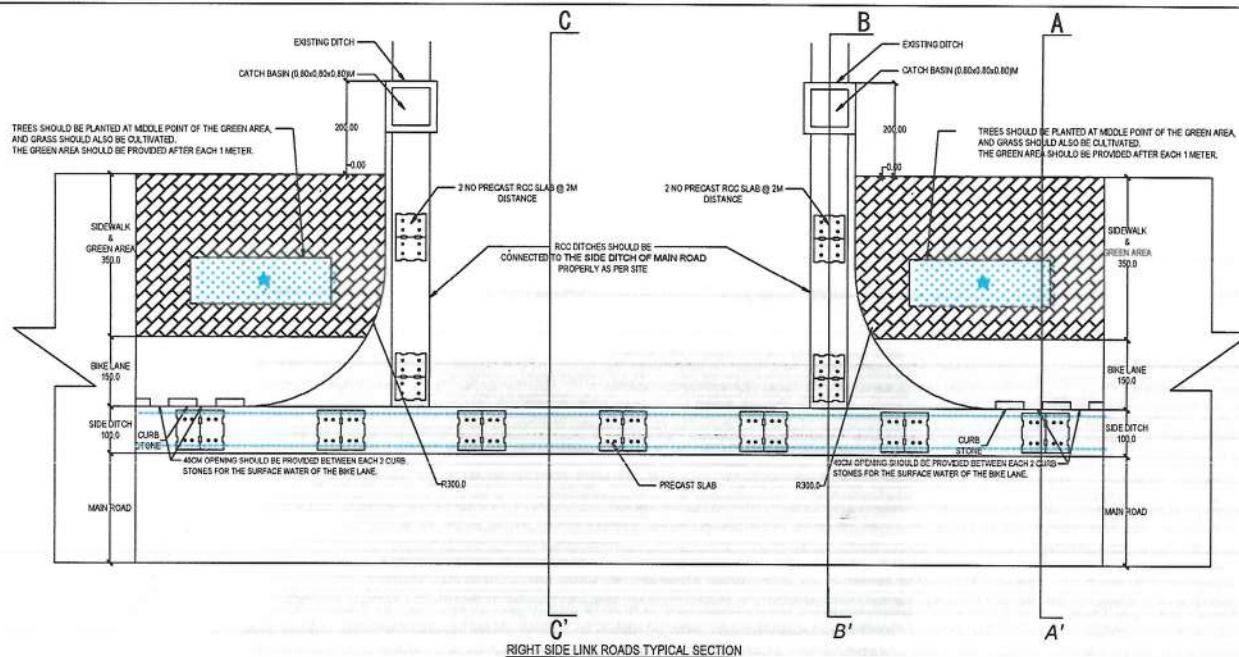
Status: FINAL DESIGN

Project Code

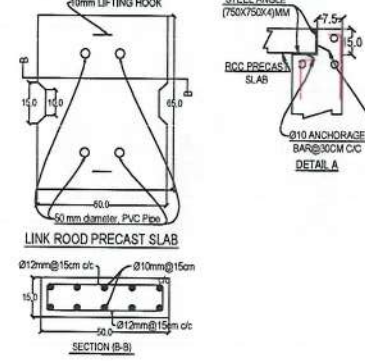
SHEET DE & PC -01 OF 01

REVISION 00





NUM.	BAR SHAPE	Ø(MM)	SPACING (MM)
BR1		Ø12	150
BR2		Ø12	150
BR3		Ø12	150
BR4		Ø12	150
BR5		Ø12	150
BR6		Ø10	150



NOTE:  
1. All dimensions are in Centimeter unless otherwise indicated.

- NOTES:
- According to the Topographic Survey all the Link Roads which have one or two existing side drains, the existing drains shall be connected properly to the proposed catch basin & drains of the link roads and all the link roads which don't have existing drains, the future planned drains shall be connected properly to the proposed catch basin & drains of the Link Roads.
  - All link roads should be connected and adjusted properly to the new designed road as per site.
  - The location of RCC ditch should be followed the existing ditch in each link road and should be properly adjusted as per site.
  - Steel bar mesh should be properly weld to the wall of ditch properly as per site.
  - As per site condition, the catch basins shall be constructed and connected to the drain.



Rev.	Date	Revision Details	Drawn	Chkd	Appd

ISLAMIC EMIRATE OF AFGHANISTAN  
Designed By:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-c- Zaman Khan Road to Kabul Jalalabad Road  
Drawing Title:  
LINK ROADS  
TYPICAL DRAWINGS DETAIL

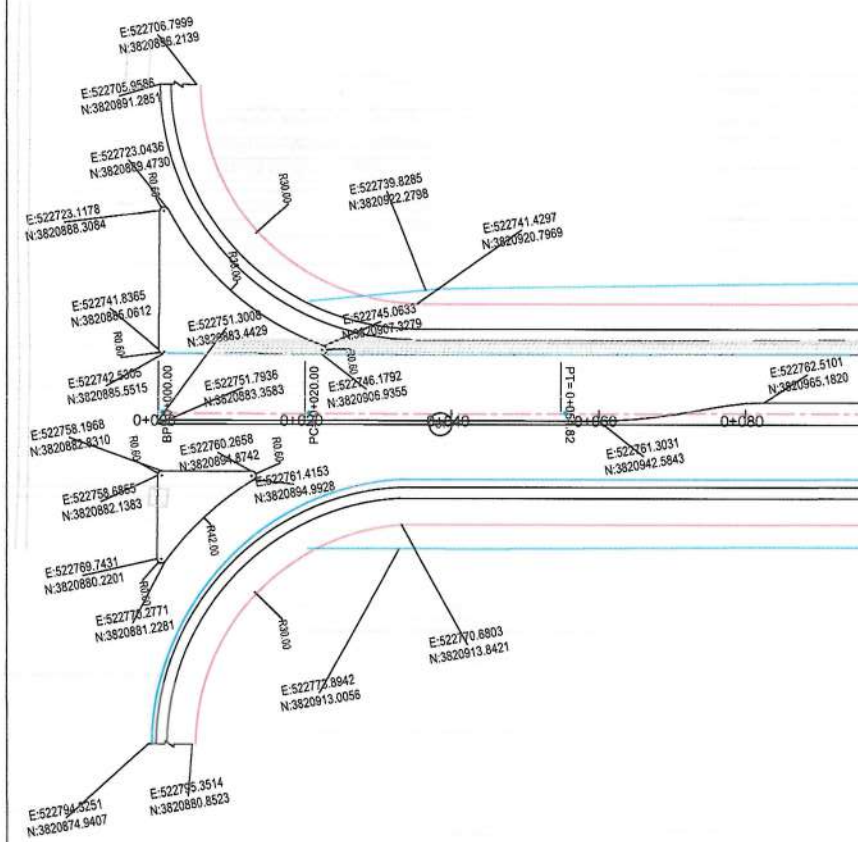
Designed by:  
Matullah Hussainzai & Baz Mohammad Raji  
Checked:  
Hashbullah Shalizi

Date:  
26/11/1445  
Scale:

Status:  
FINAL  
Project Code:

SHEET  
LRT-01 OF 01  
REVISION  
00





CURVE TABLE						
Curve #	Radius	Length	PI Station	Start Station	End Station	Delta Angle
C1	5356.55	34.82	0+037.41	0+020.00	0+054.82	0.37
C2	49288.91	86.34	0+178.74	0+135.57	0+221.91	0.10



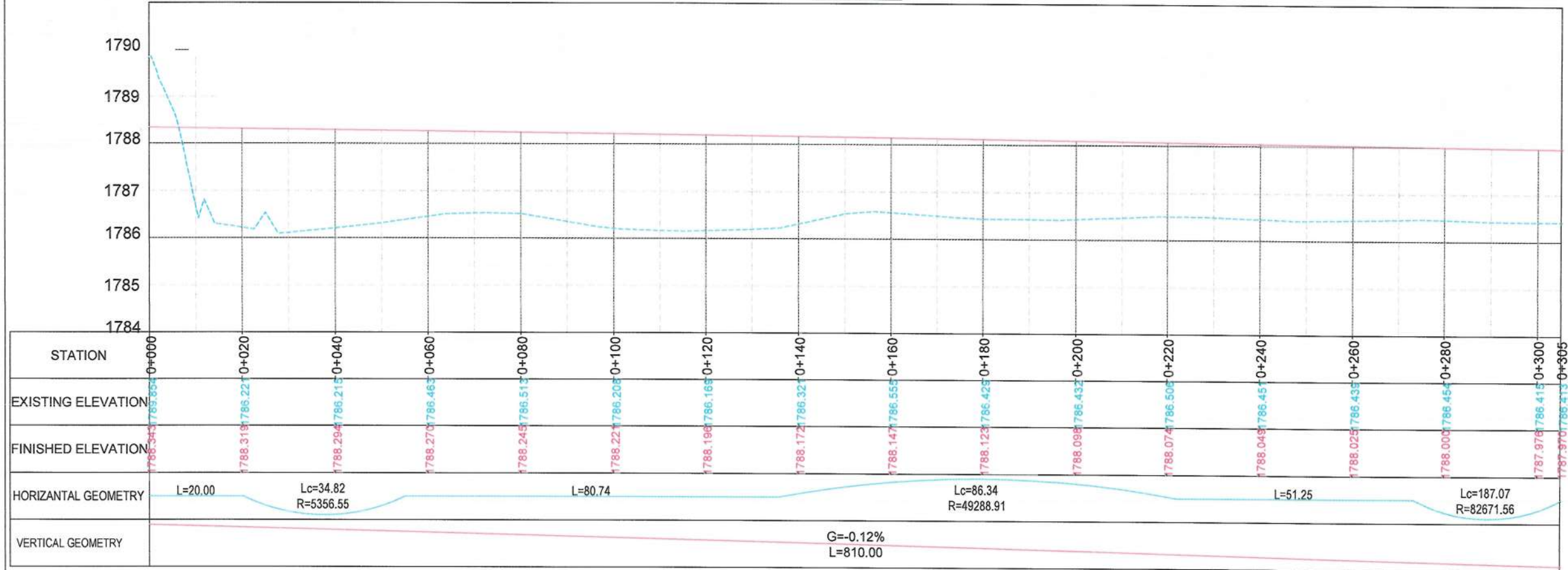
MATCH LINE - 1  
AT STATION - 0+305.00

NOTE:  
1. All dimensions are in meters unless otherwise indicated.

- LEGEND
- 1. ROW
  - 2. PROPOSED CENTER LINE



### PROFILE



Date	Revision Details	Drawn	Chkd	Appr
ISLAMIC EMIRATE OF AFGHANISTAN				
Designed By:				
Project Name: Construction of Road From Qala-e Zaman Khan Road To Kabul - Jalalabad Road				
Drawing Title: PLAN & PROFILE				
Drawn: Matullah Hussainzai	Signature:			
Designed: Matullah Hussainzai	Signature:			
Checked: Habibullah Shalizi	Signature:			
Date: 26/11/1445	Scale: 1:1000			
Status: FINAL DESIGN				
Project Code:				
SHEET P&P-01 OF 06	REVISION		00	



CURVE TABLE						
Curve #	Radius	Length	PI Station	Start Station	End Station	Delta Angle
C3	82671.56	187.07	0+366.70	0+273.16	0+460.23	0.13



MATCH LINE - 2  
AT STATION - 0+610.00

MATCH LINE - 1  
AT STATION - 0+305.00

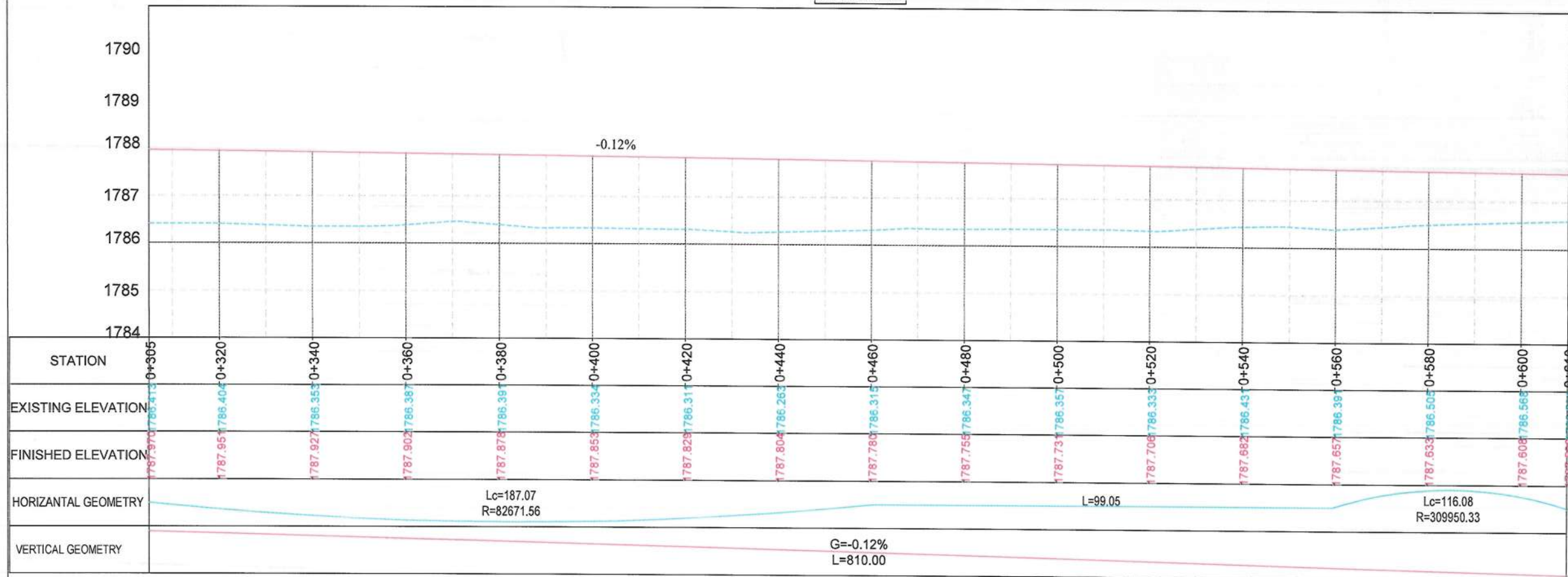
NOTE:  
1. All dimensions are in meters unless otherwise indicated.

LEGEND

1. ROW
2. PROPOSED CENTER LINE



## PROFILE



Date: Revision Details Drawn: Chd. Appr

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:

KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e- Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:

PLAN & PROFILE

Drawn: Signature:

Designed: Signature:

Checked: Signature:

Date: 26/11/1445 Scale: 1:1000

Status: FINAL DESIGN

Project Code

SHEET: P&P-02 OF 06 REVISION: 00



CURVE TABLE						
Curve #	Radius	Length	PI Station	Start Station	End Station	Delta Angle
C4	309950.33	116.08	0+617.32	0+559.28	0+675.36	0.02



MATCH LINE - 3  
AT STATION - 0+915.00

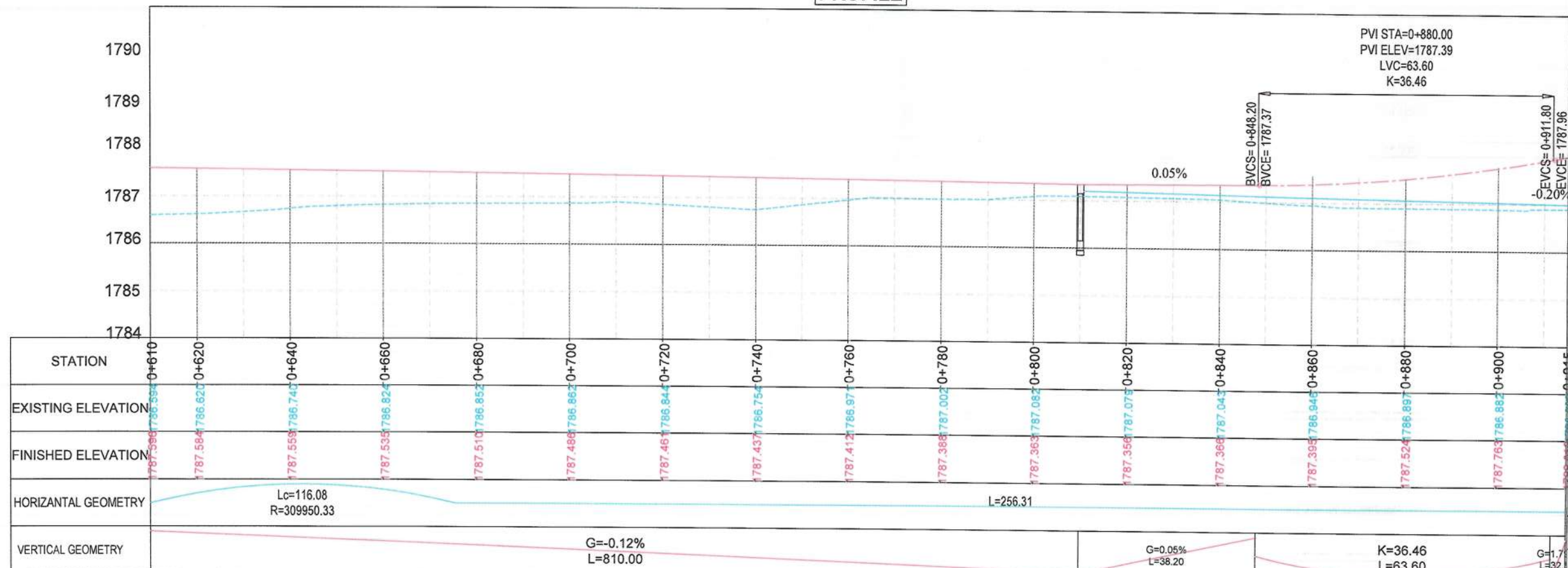
NOTE:  
1. All dimensions are in meters unless otherwise indicated.

LEGEND

- 1. ROW
- 2. PROPOSED CENTER LINE

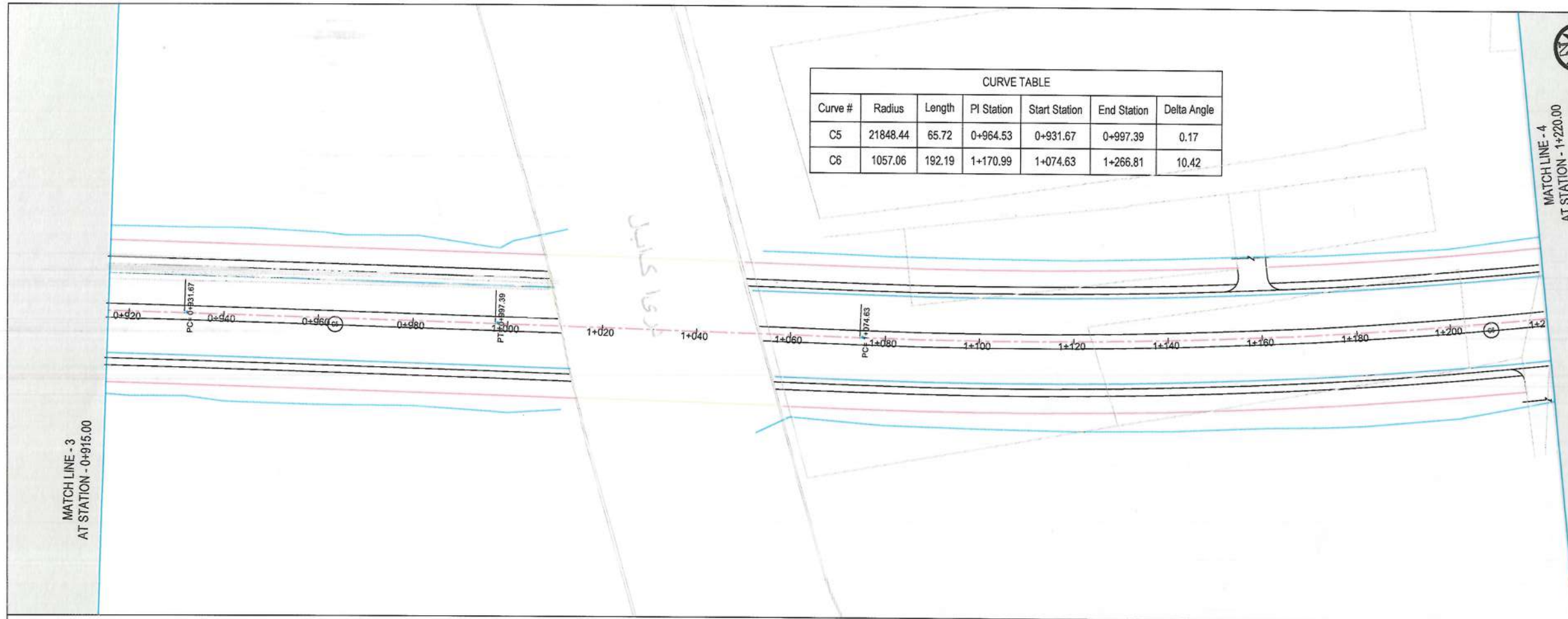


### PROFILE



Date	Revision Details	Drawn	Chkd	Appr
ISLAMIC EMIRATE OF AFGHANISTAN				
Designed By:				
KABUL MUNICIPALITY DESIGN TEAM				
Project Name:				
Construction of Road From Qala-e Zaman Khan Road To Kabul - Jalalabad Road				
Drawing Title:				
PLAN & PROFILE				
Drawn:	Signature:			
Designed:	Signature:			
Checked:	Signature:			
Hasibullah Shalizi				
Date:	26/11/1445	Scale:	1:1000	
Status:	FINAL DESIGN			
Project Code				
SHEET	P&P-03 OF 06		REVISION	
			00	





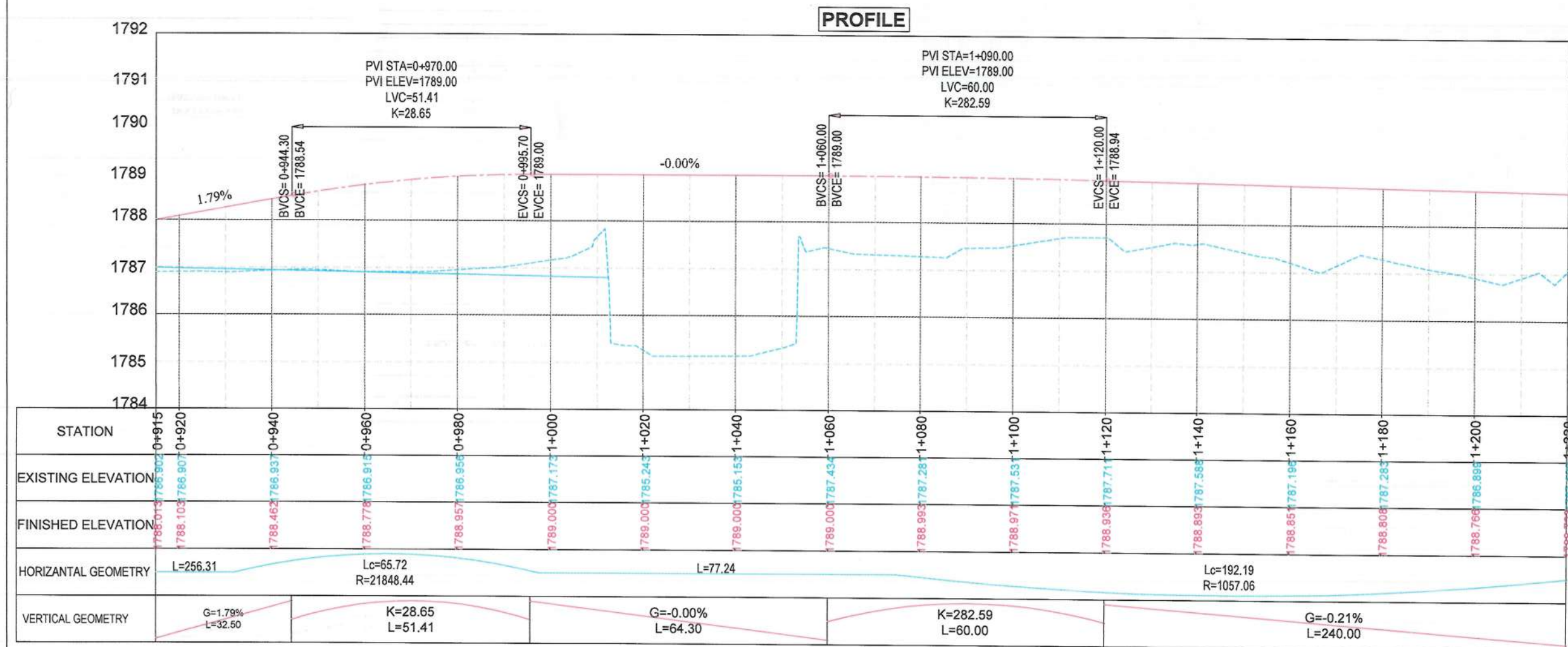
NOTE:

1. All dimensions are in meters unless otherwise indicated.

LEGEND

1. ROW

2. PROPOSED CENTER LINE



Date	Revision Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:

KABUL MUNICIPALITY DESIGN TEAM

Project Name:

Construction of Road From Qala-e-Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:

PLAN & PROFILE

Drawn: Mawdullah Hussainzai

Designed: Mawdullah Hussainzai

Checked: Habibullah Shalizi

Signature: [Signature]

Date: 26/11/1445

Scale: 1:1000

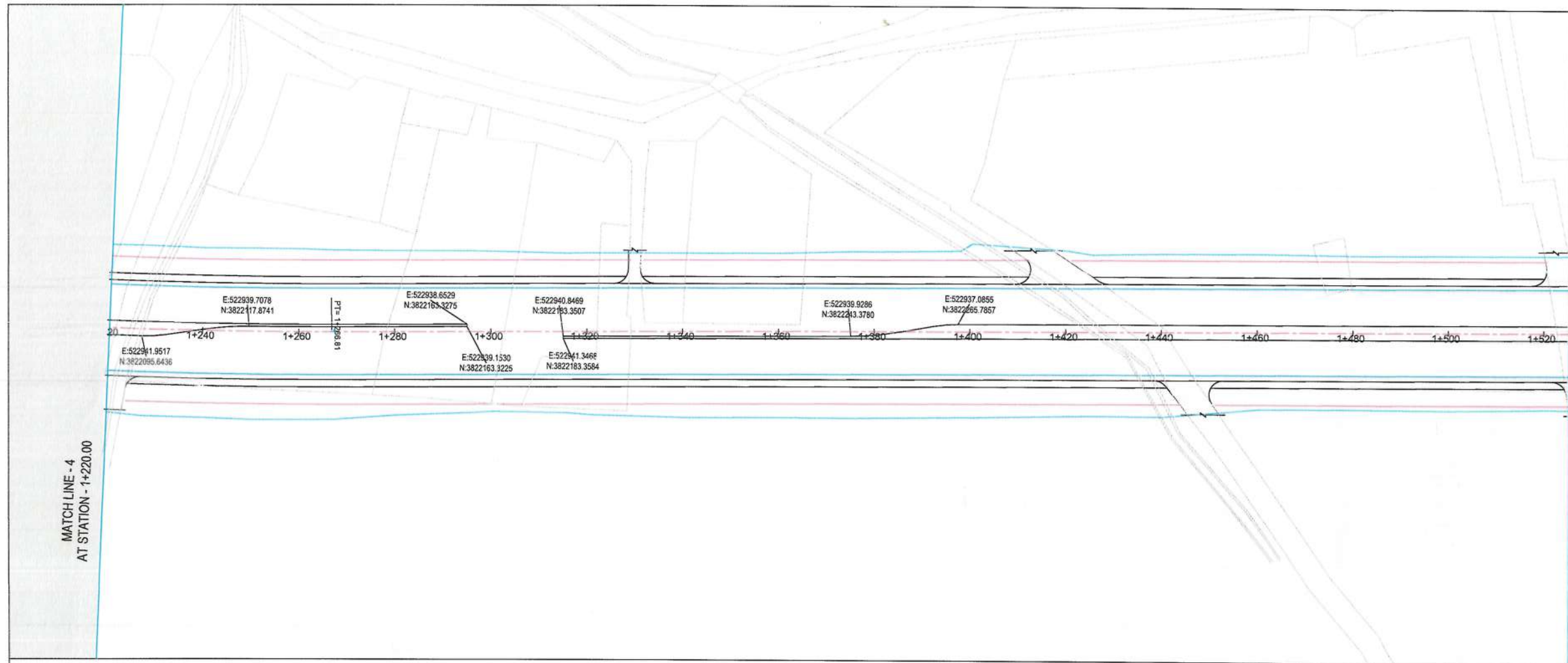
Status: FINAL DESIGN

Project Code

REVISION

00





MATCH LINE - 5  
AT STATION - 1+525.00

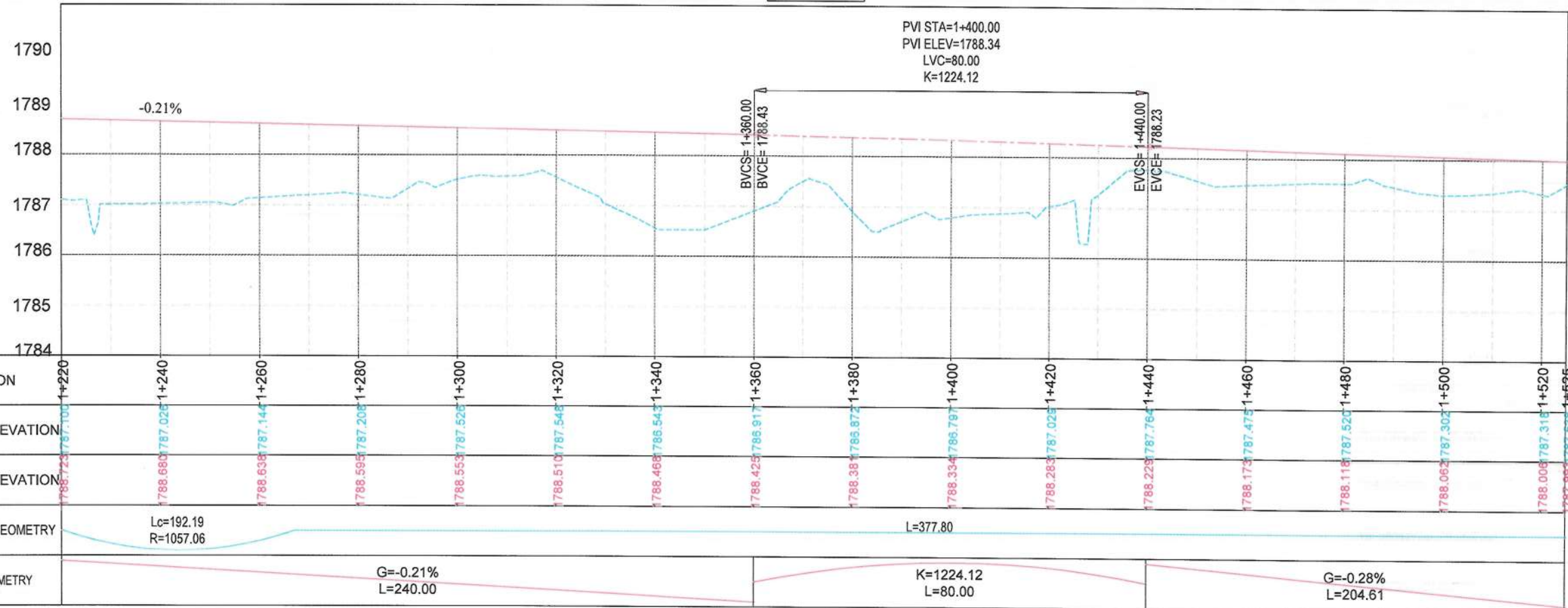
NOTE:  
1. All dimensions are in meters unless  
otherwise indicated.

LEGEND

1. ROW
2. PROPOSED CENTER LINE



PROFILE



Date Revision Details Drawn Chkd Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:

KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road  
To Kabul - Jalalabad Road

Drawing Title:

PLAN & PROFILE

Drawn: Matullah Hussainzai  
Designed: Matullah Hussainzai  
Checked: Matullah Hussainzai  
Signature: [Signature]

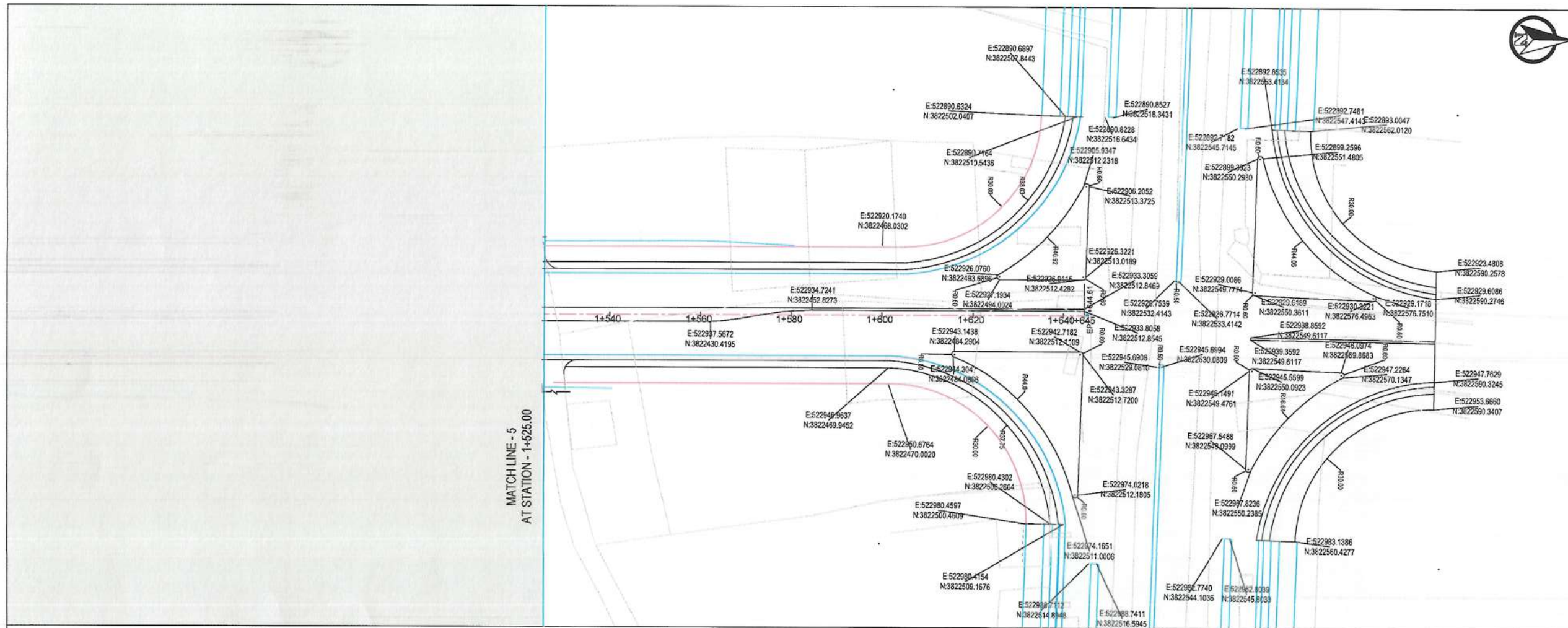
Date: 26/11/1445 Scale: 1:1000

Status: FINAL  
DESIGN

Project Code

SHEET  
P&P-05 OF 06  
REVISION  
00



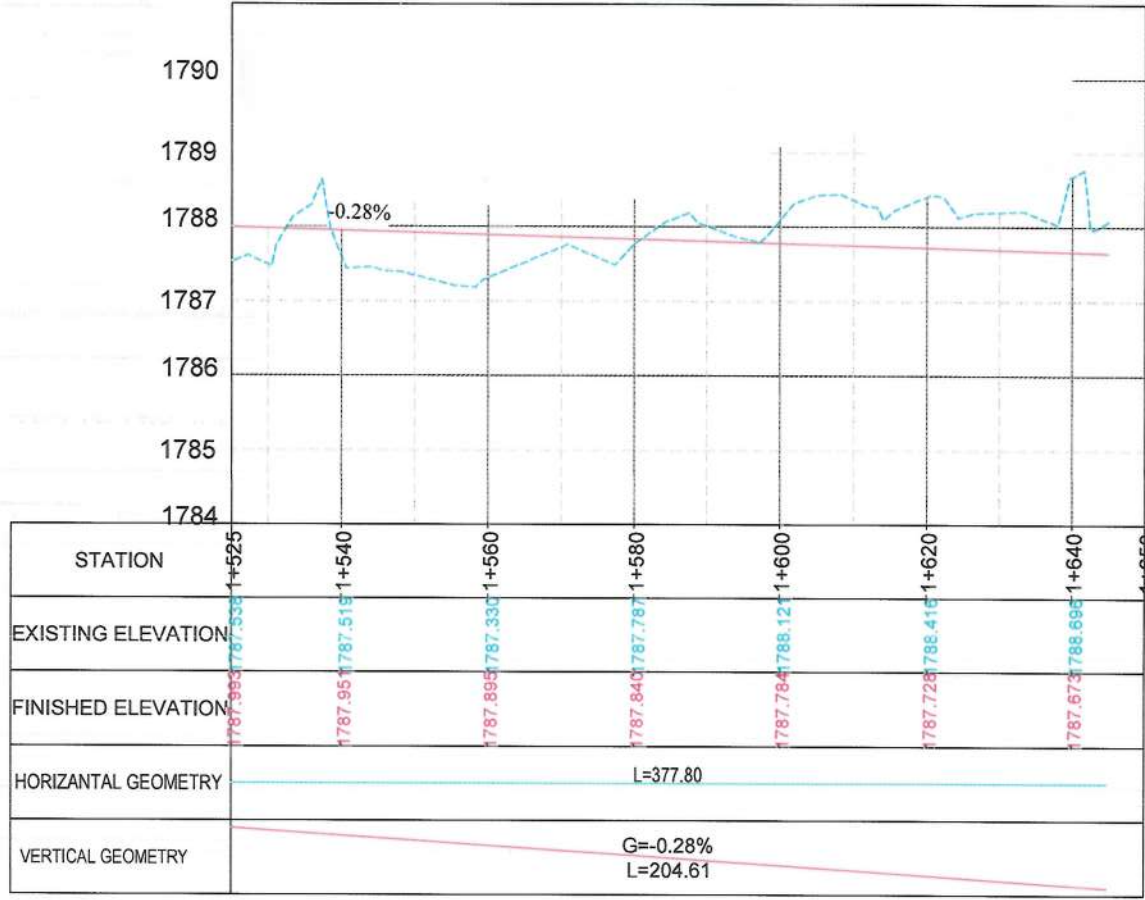



NOTE:  
1. All dimensions are in meters unless otherwise indicated.

- LEGEND
- 1. ROW
  - 2. PROPOSED CENTER LINE



### PROFILE



Date	Revision Details	Drawn	Chkd	Appr
ISLAMIC EMIRATE OF AFGHANISTAN				
Designed By:				
 KABUL MUNICIPALITY DESIGN TEAM				
Project Name: Construction of Road From Qala-e-Zaman Khan Road To Kabul - Jalalabad Road				
Drawing Title: <b>PLAN &amp; PROFILE</b>				
Drawn:	Signature:			
Designed:	Signature:			
Checked:	Signature:			
Hasitullah Shalizi				
Date: 26/11/1445 Scale: 1:1000				
Status: <b>FINAL DESIGN</b>				
Project Code:				
SHEET P&P-06 OF 06		REVISION 00		

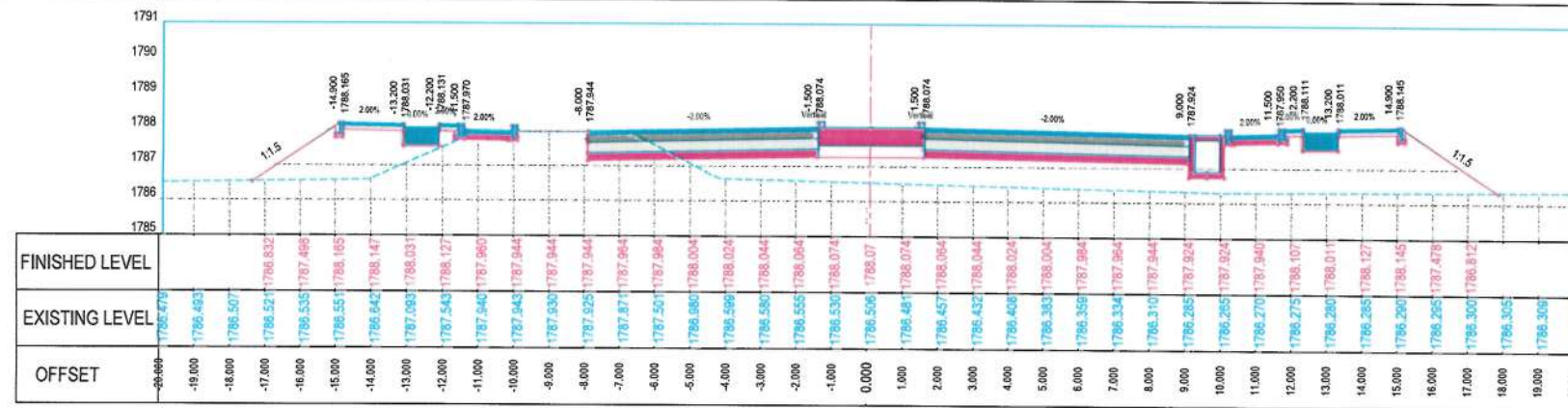




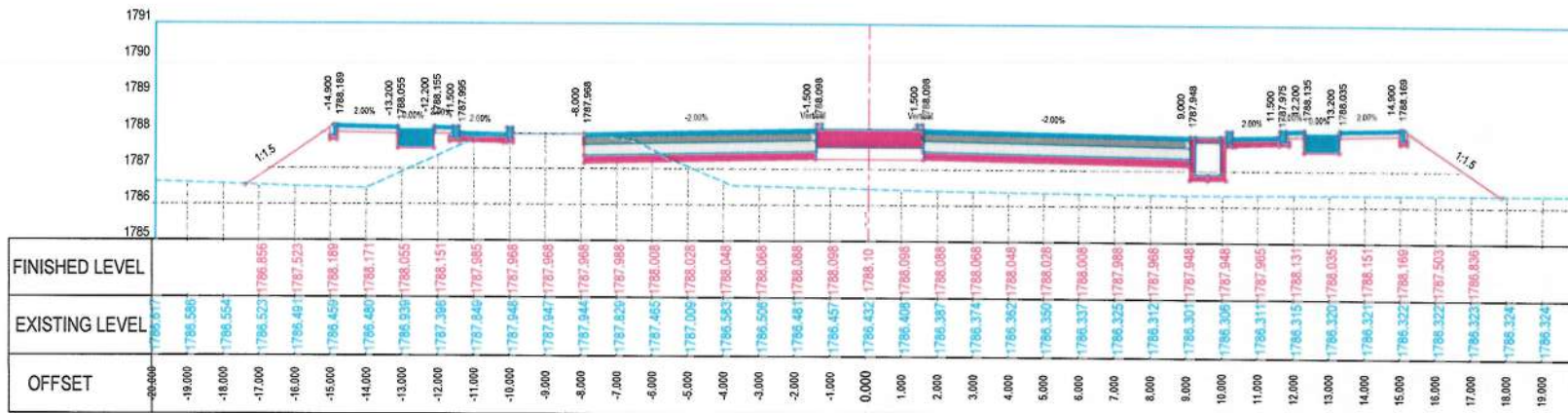




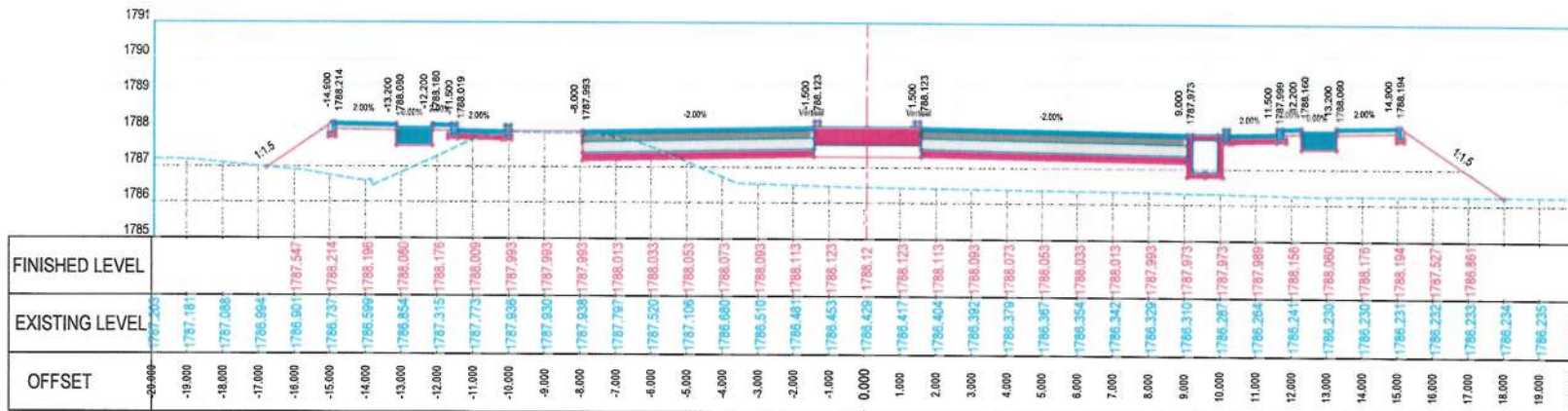




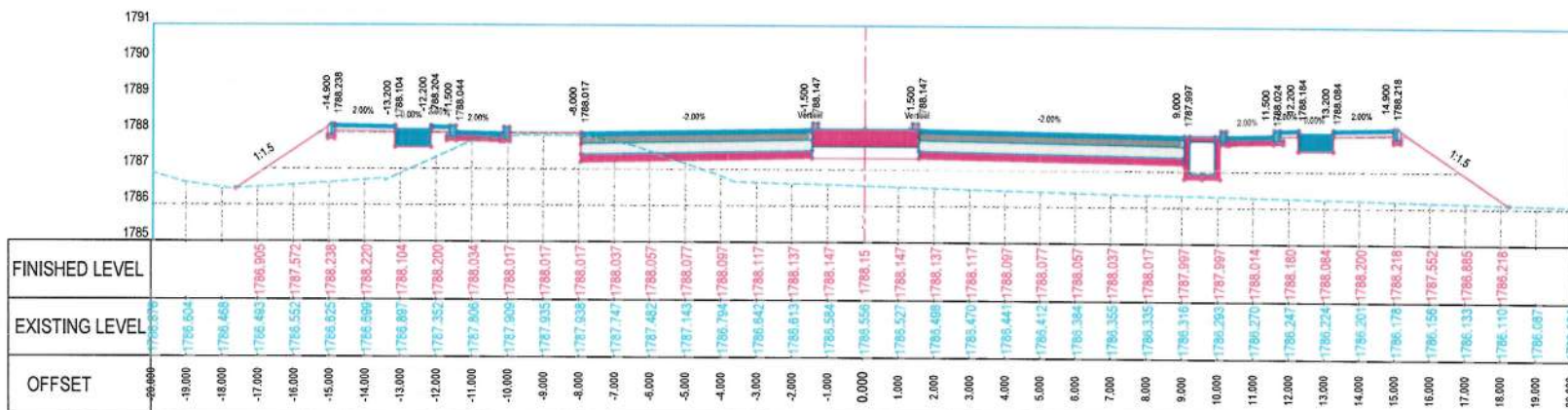
STATION=0+220



STATION=0+200



STATION=0+180



STATION=0+160

NOTE:  
1. All dimensions are in meters unless otherwise indicated.



Date: Revision Details: Drawn: Chkd: Appr:

ISLAMIC EMIRATE OF AFGHANISTAN

Designed by:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e- Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:  
CROSS SECTIONS

Drawn: Matullah Hussainzai  
Designed: Matullah Hussainzai  
Checked: Hasibullah Shalizi

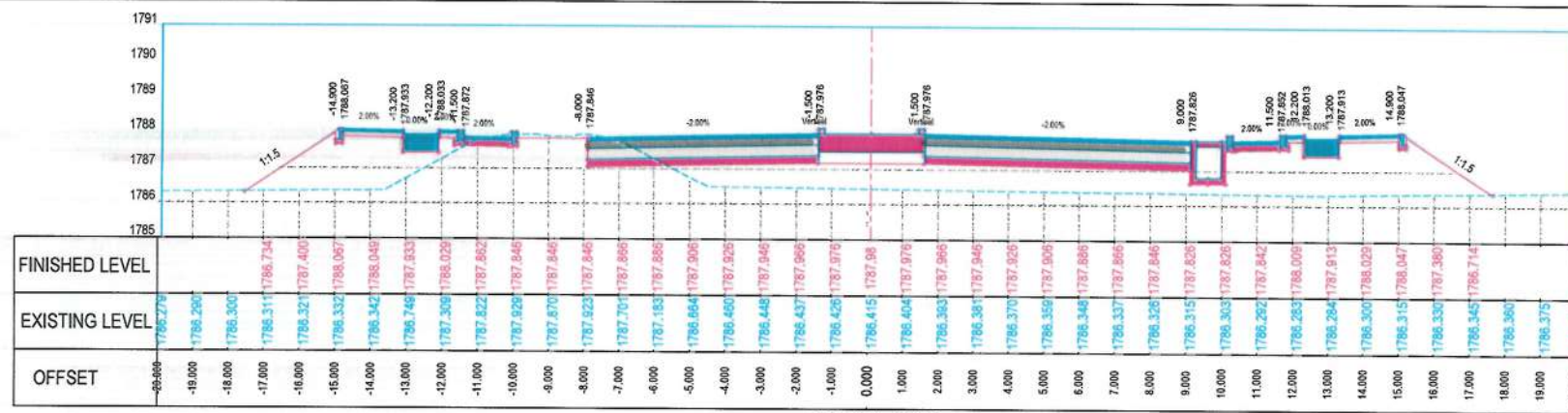
Date: 26/11/1445 Scale: 1:200

Status: FINAL DESIGN

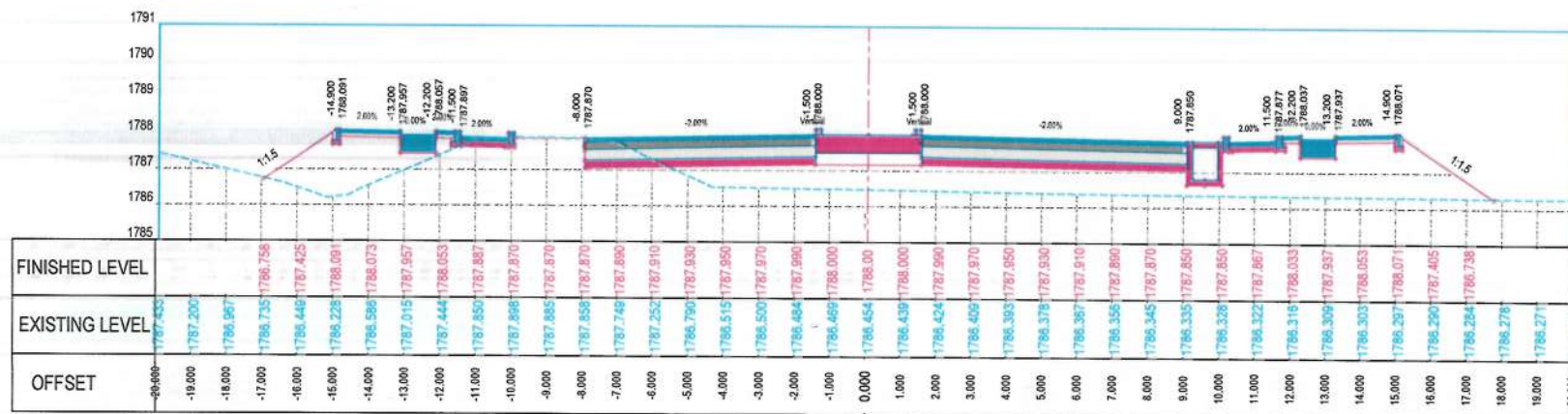
Project Code:

SHEET: CS-03 OF 21 REVISION: 00

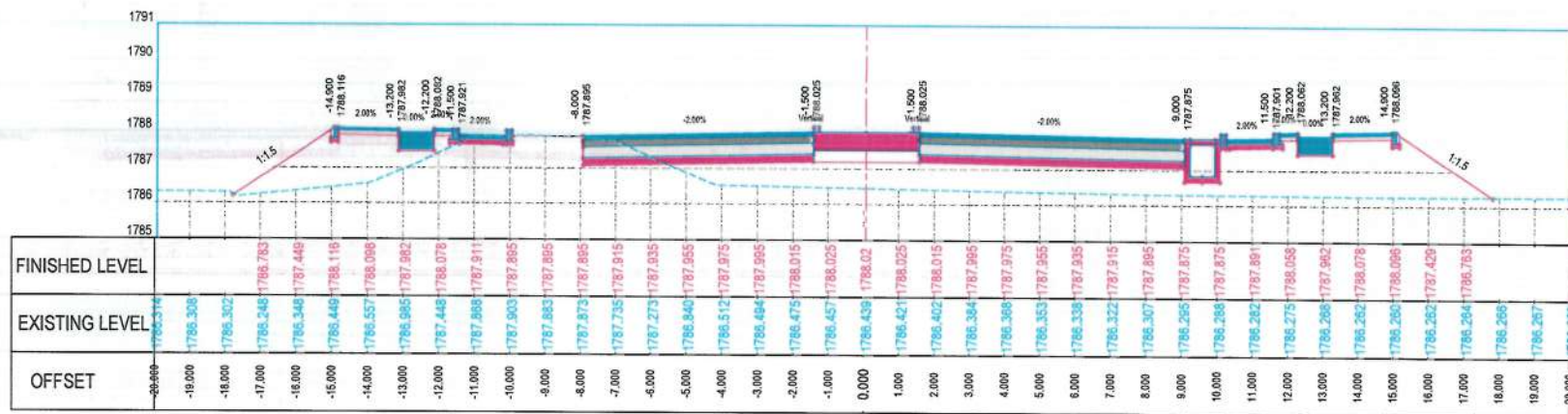




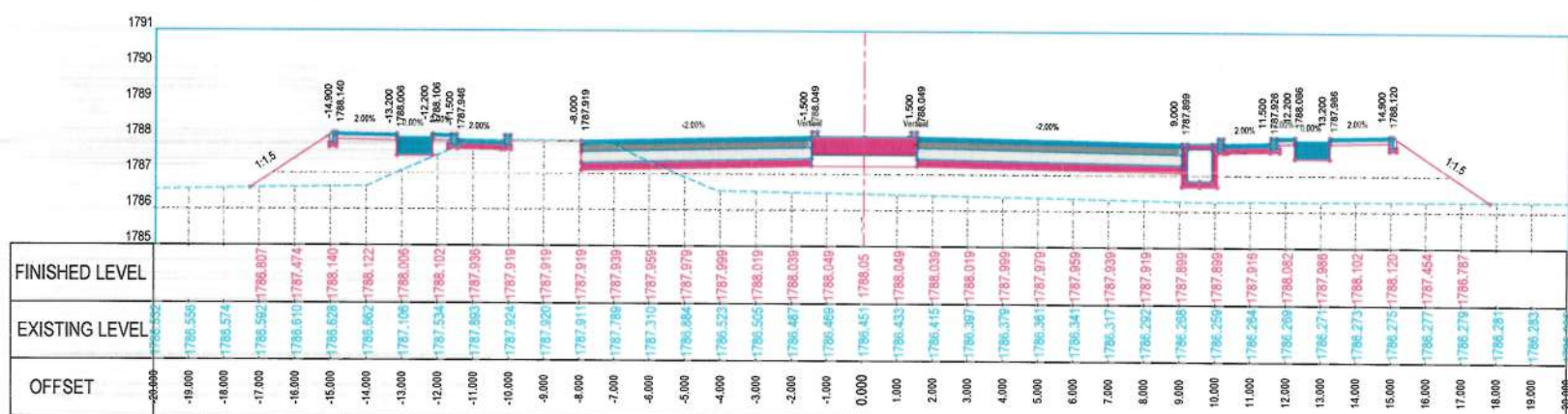
STATION=0+300



STATION=0+280



STATION=0+260



STATION=0+240

NOTE:  
1. All dimensions are in meters unless otherwise indicated.



Date Revision Details Drawn Chkd. Appr

ISLAMIC EMIRATE OF AFGHANISTAN

Designed by:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e- Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:  
CROSS SECTIONS

Drawn: Matjullah Hussainzai  
Designed: Matjullah Hussainzai  
Checked: Hasibullah Shalizi

Date: 26/11/1445 Scale: 1:200

Status: FINAL DESIGN

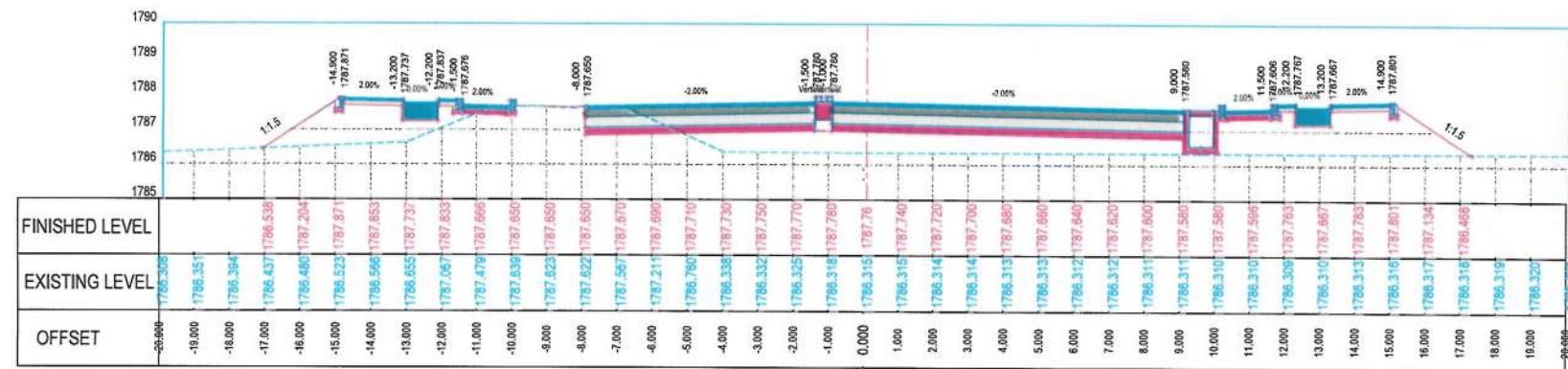
Project Code:

SHEET CS-04 OF 21 REVISION 00

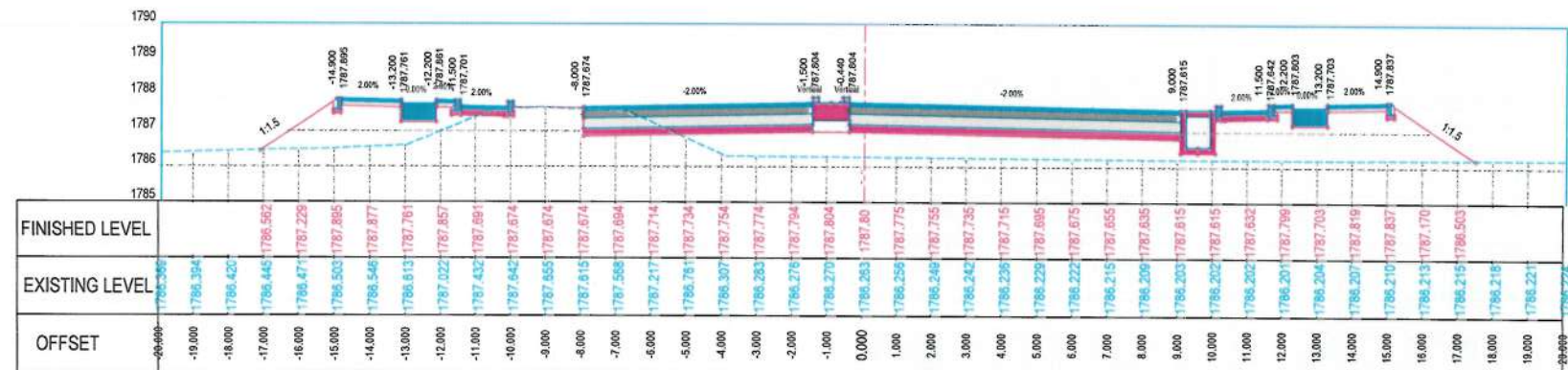




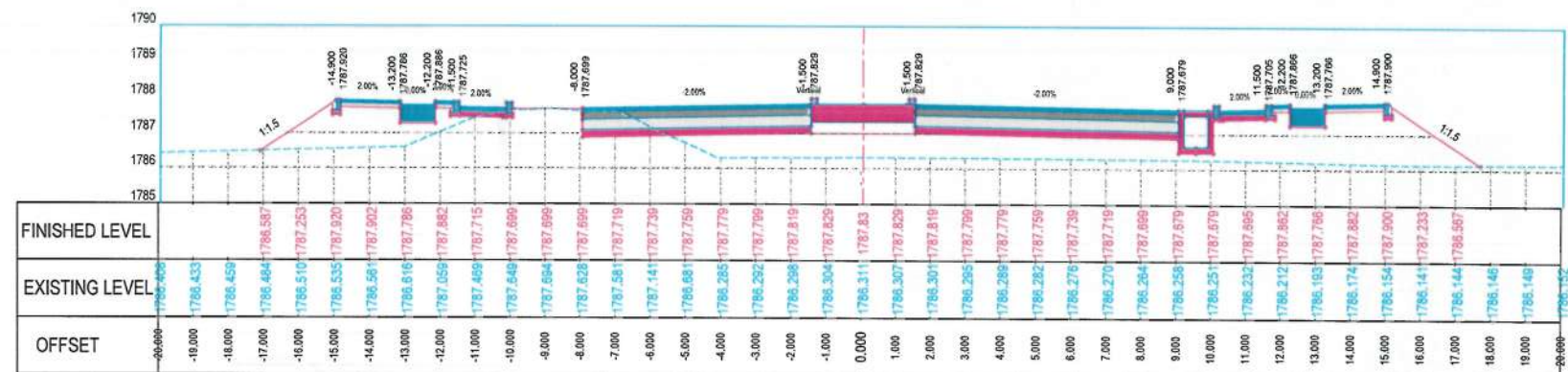




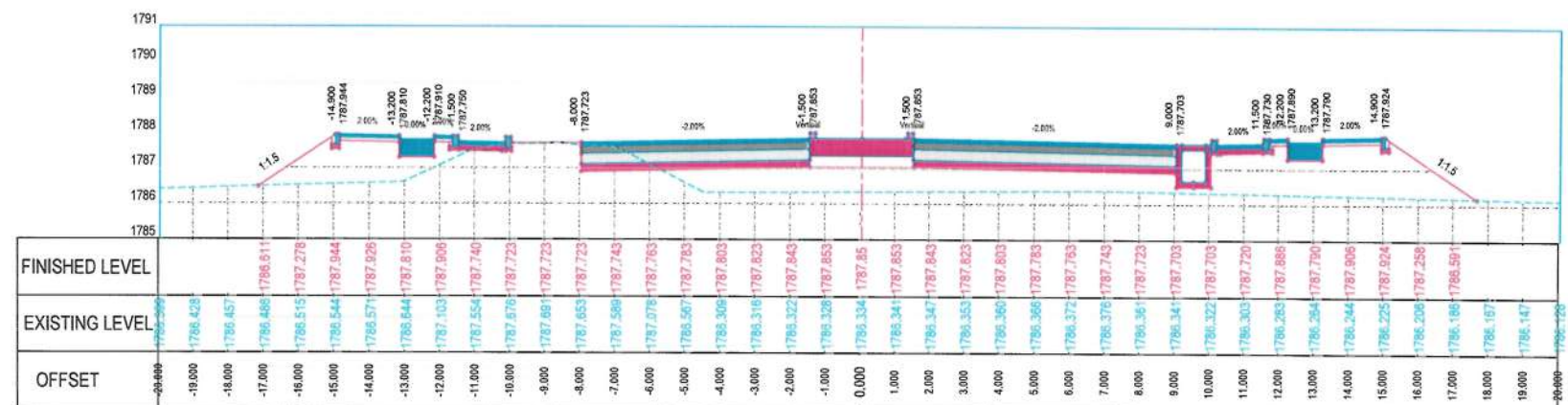
STATION=0+460



STATION=0+440



STATION=0+420



STATION=0+400

NOTE:  
1. All dimensions are in meters unless otherwise indicated.



Date Revision Details Drawn Chkd. Appr.

ISLAMIC EMIRATE OF AFGHANISTAN

Designed by:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qale-e- Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:  
CROSS SECTIONS

Drawn: Matullah Hussainzai  
Designed: Matullah Hussainzai  
Checked: Hamidullah Shalizi

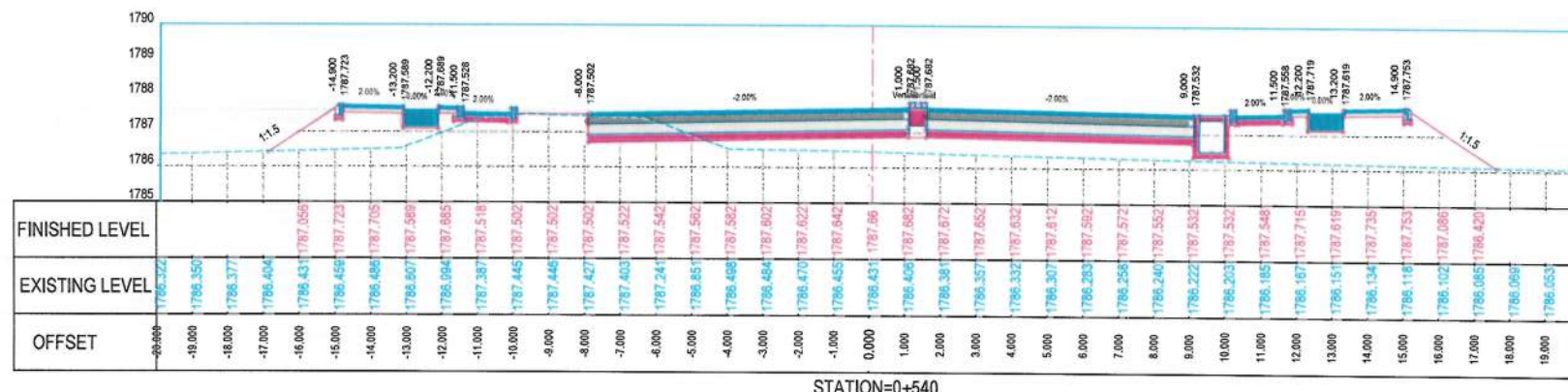
Date: 26/11/1445 Scale: 1:200

Status: FINAL DESIGN

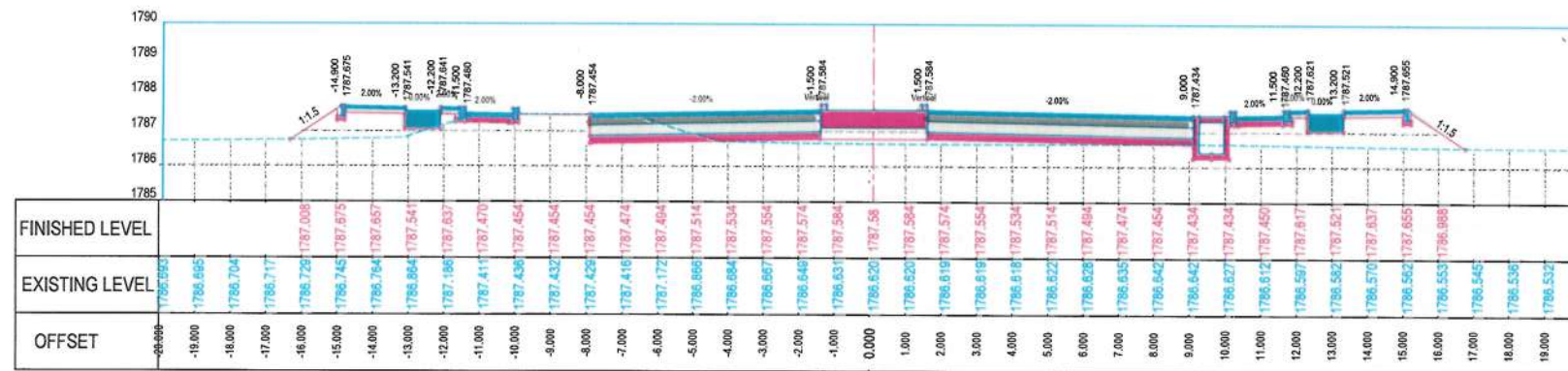
Project Code:

SHEET CS-06 OF 21 REVISION 00

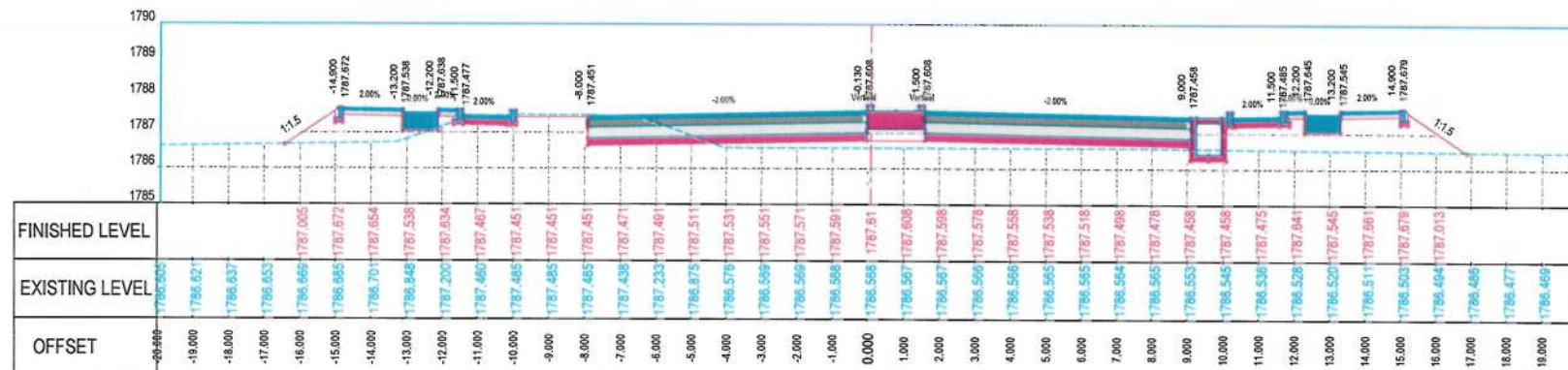




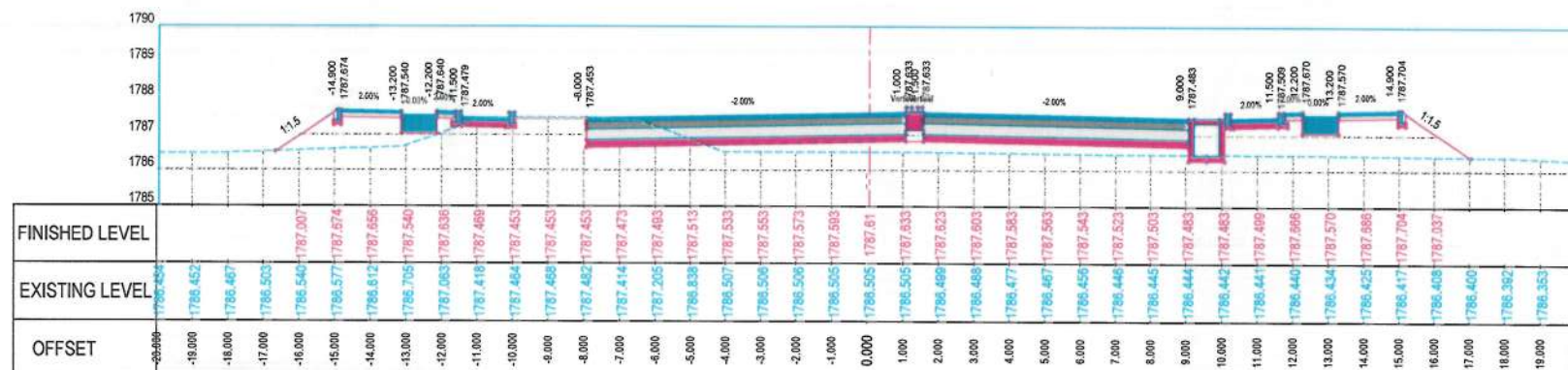




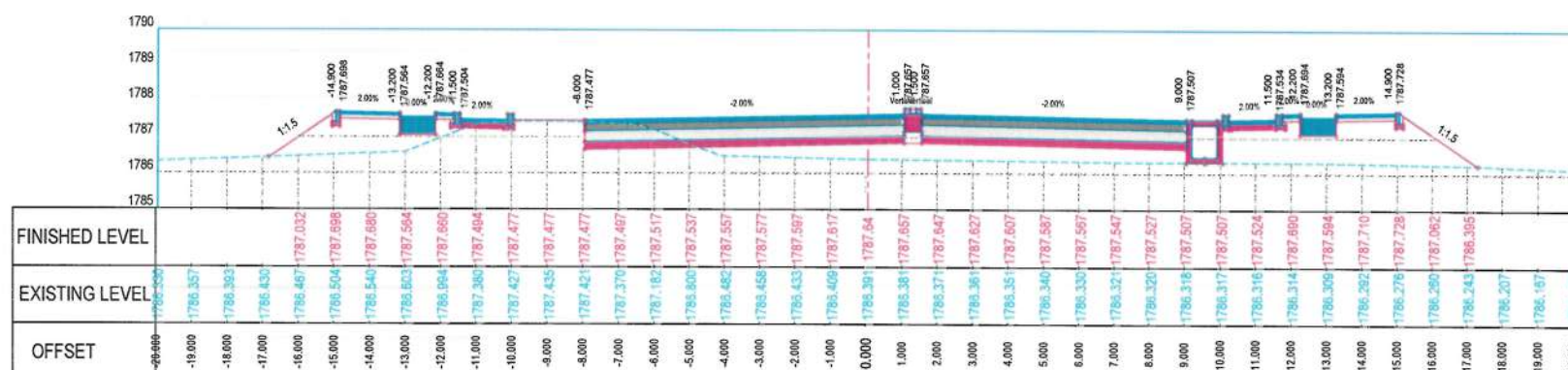
STATION=0+620



STATION=0+600



STATION=0+580



STATION=0+560

NOTE:  
1. All dimensions are in meters unless otherwise indicated.



Date	Revision	Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF AFGHANISTAN

Designed by:  
KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road  
To Kabul - Jalalabad Road

Drawing Title:  
CROSS SECTIONS

Drawn: Matjullah Hussainzai  
Designed: Matjullah Hussainzai  
Checked: Husbullah Shalizi

Date: 26/11/1445  
Scale: 1:200

Status: FINAL  
DESIGN

Project Code

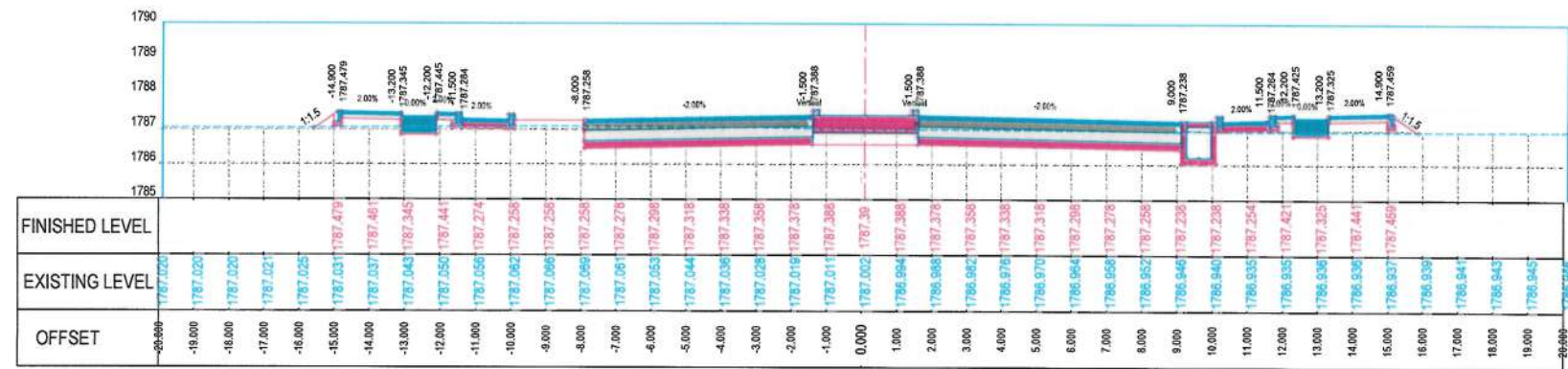
SHEET  
CS-08 OF 21

REVISION  
00

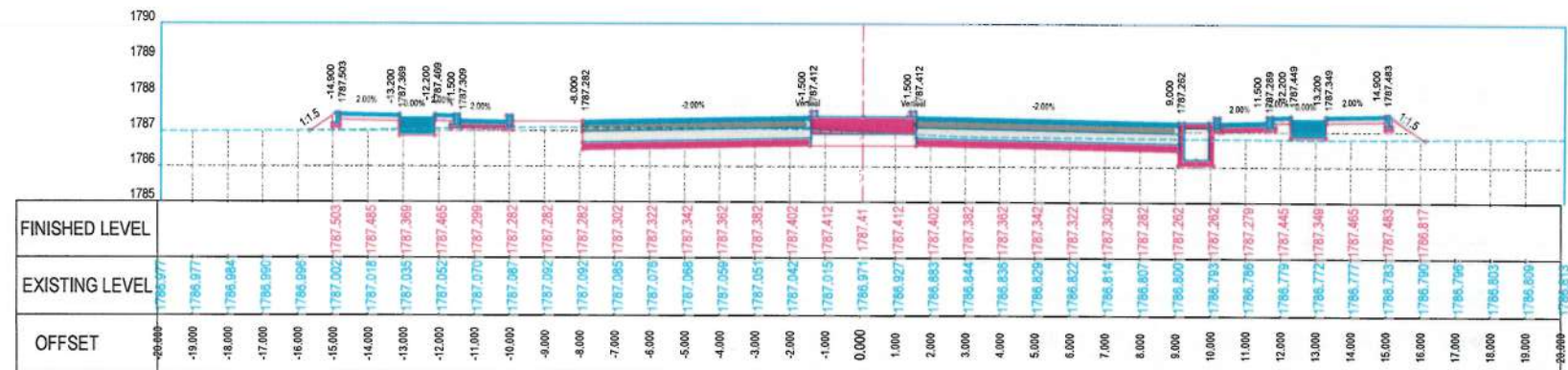




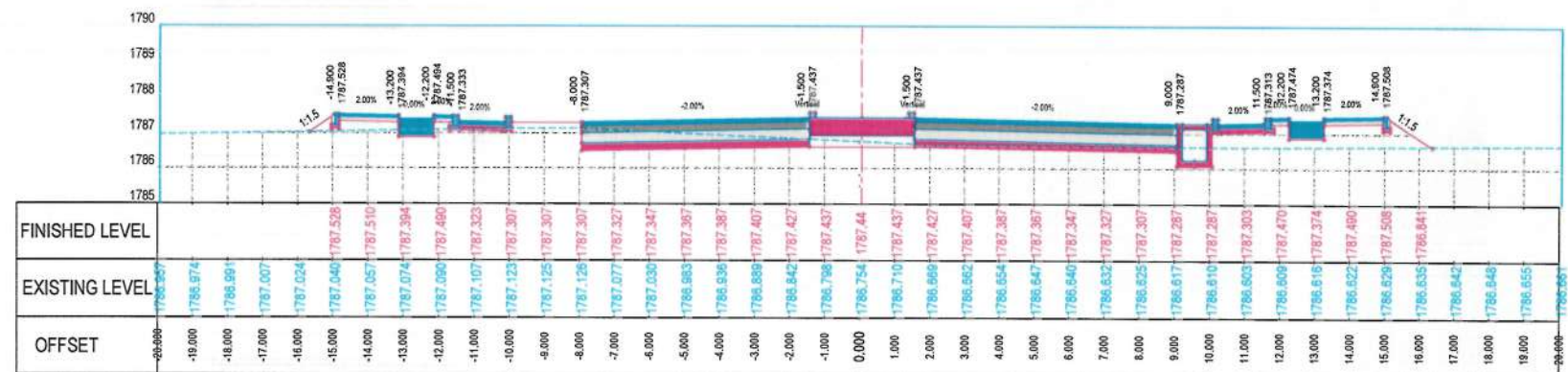




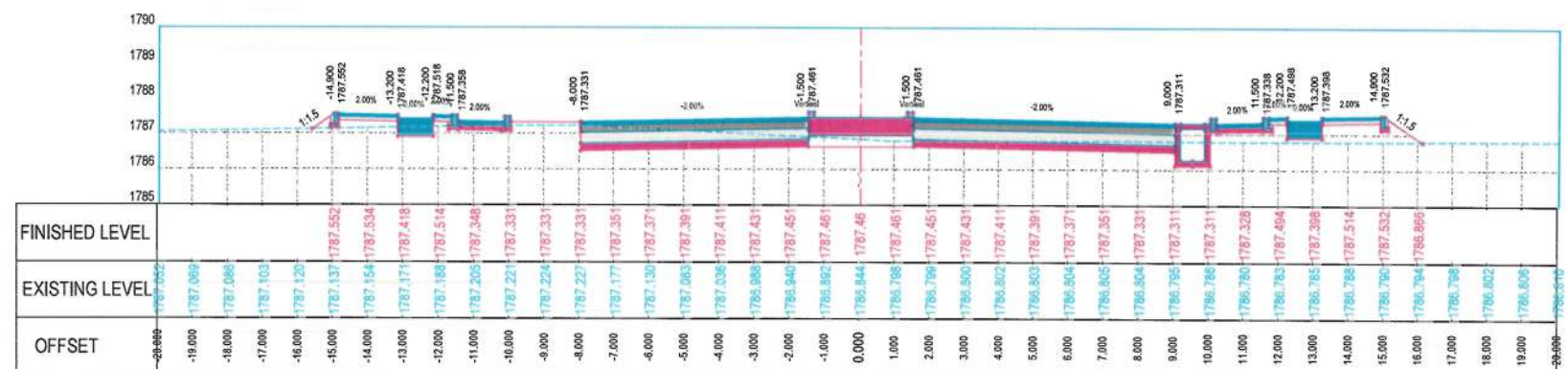
STATION=0+780



STATION=0+760



STATION=0+740



STATION=0+720

NOTE:  
1. All dimensions are in meters unless otherwise indicated.



ISLAMIC EMIRATE OF AFGHANISTAN

Designed by:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e- Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:  
CROSS SECTIONS

Drawn:   
Designed:   
Checked:

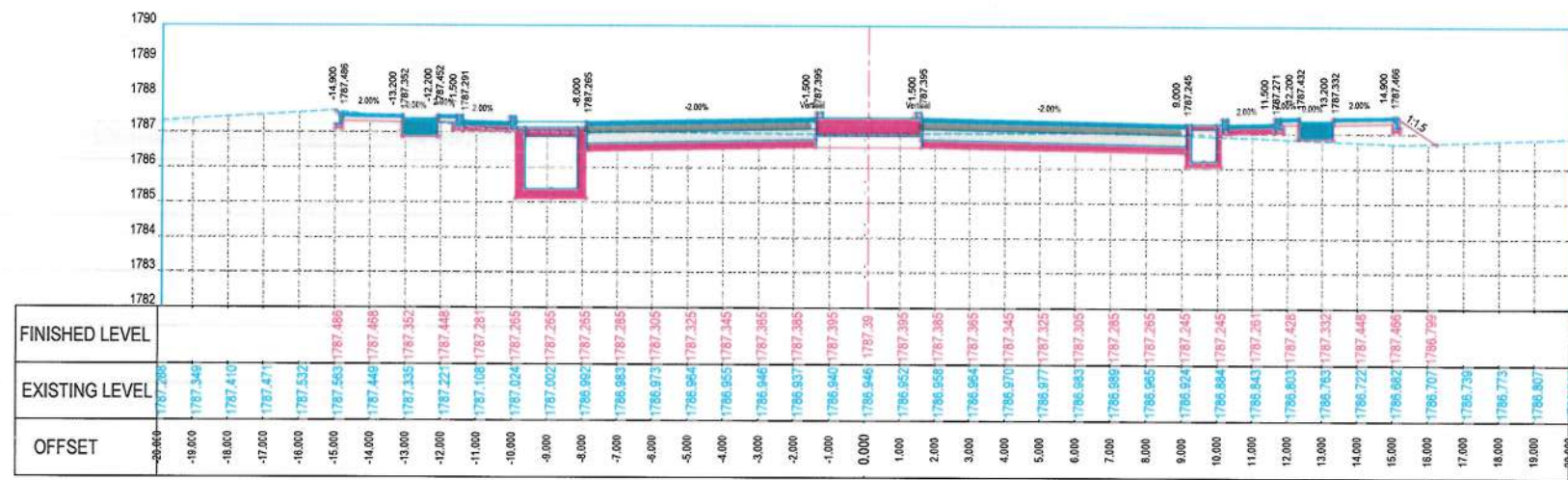
Date: 26/11/1445 Scale: 1:200

Status: FINAL DESIGN

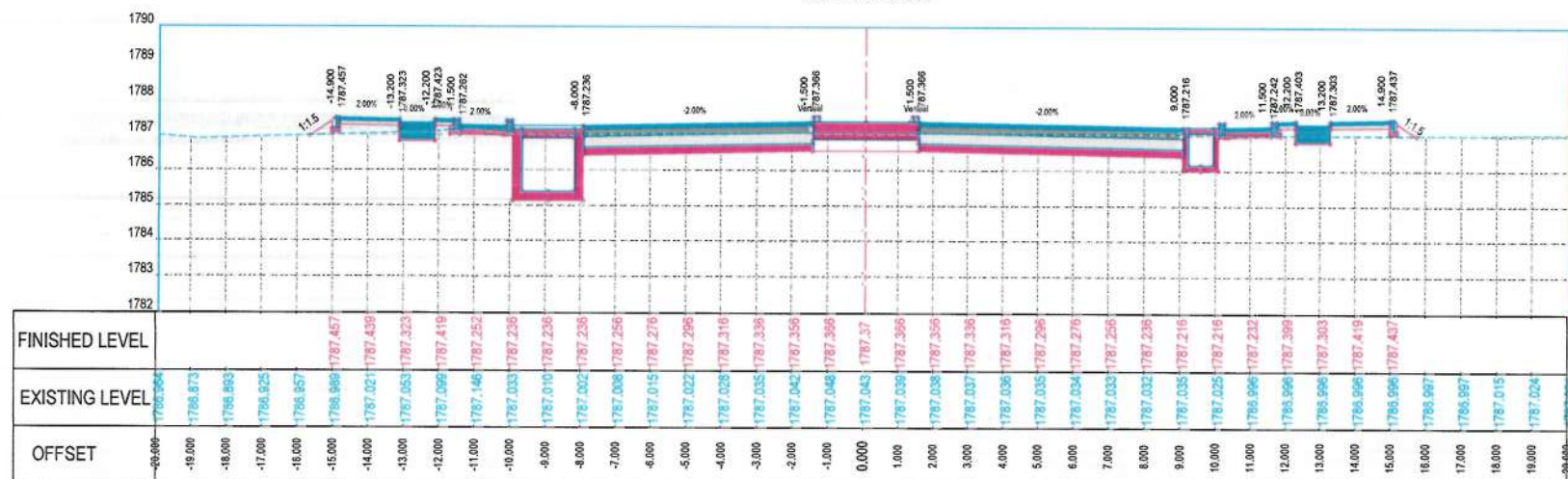
Project Code:

SHEET	REVISION
CS-10 OF 21	00

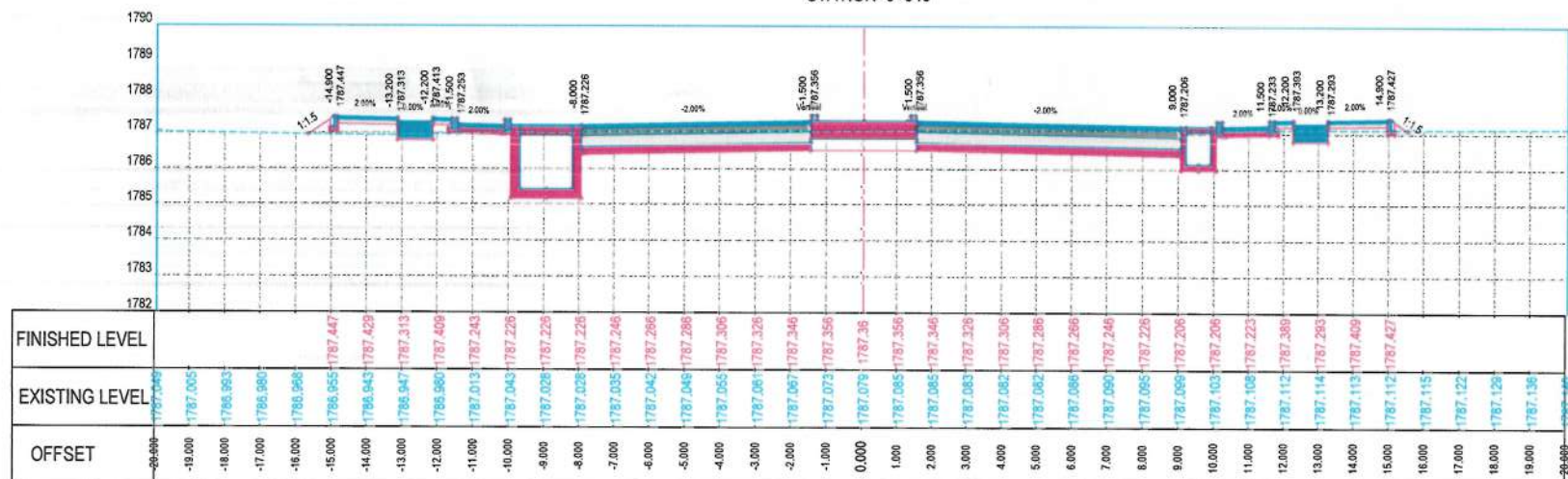




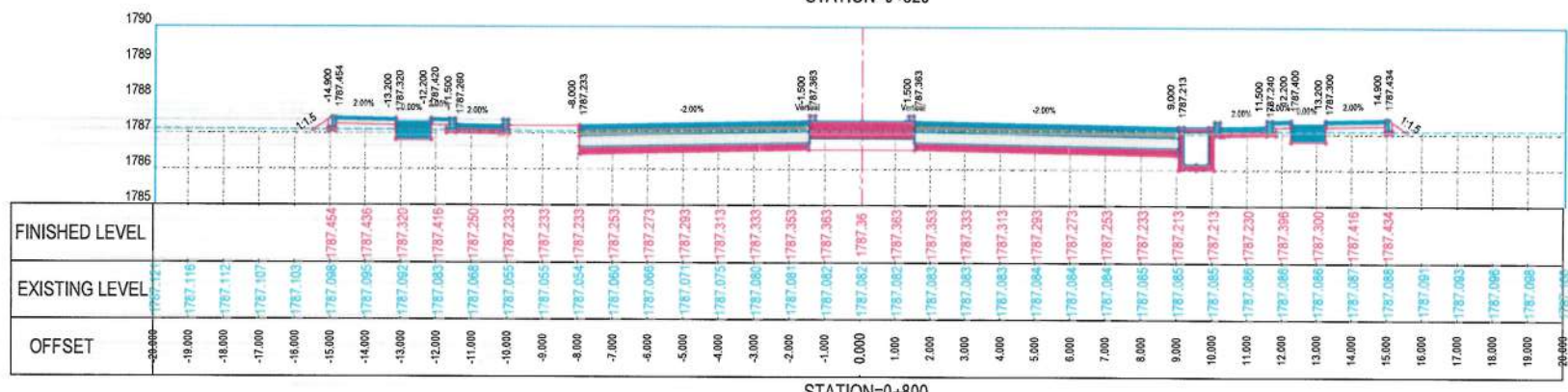
STATION=0+860



STATION=0+840



STATION=0+820



STATION=0+800

NOTE:  
1. All dimensions are in meters unless otherwise indicated.



ISLAMIC EMIRATE OF AFGHANISTAN

Designed by:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e- Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:  
CROSS SECTIONS

Drawn: Matullah Hussainzai  
Designed: Matullah Hussainzai  
Checked: Hasitullah Shalizi

Date: 26/11/1445 Scale: 1:200

Status: FINAL DESIGN

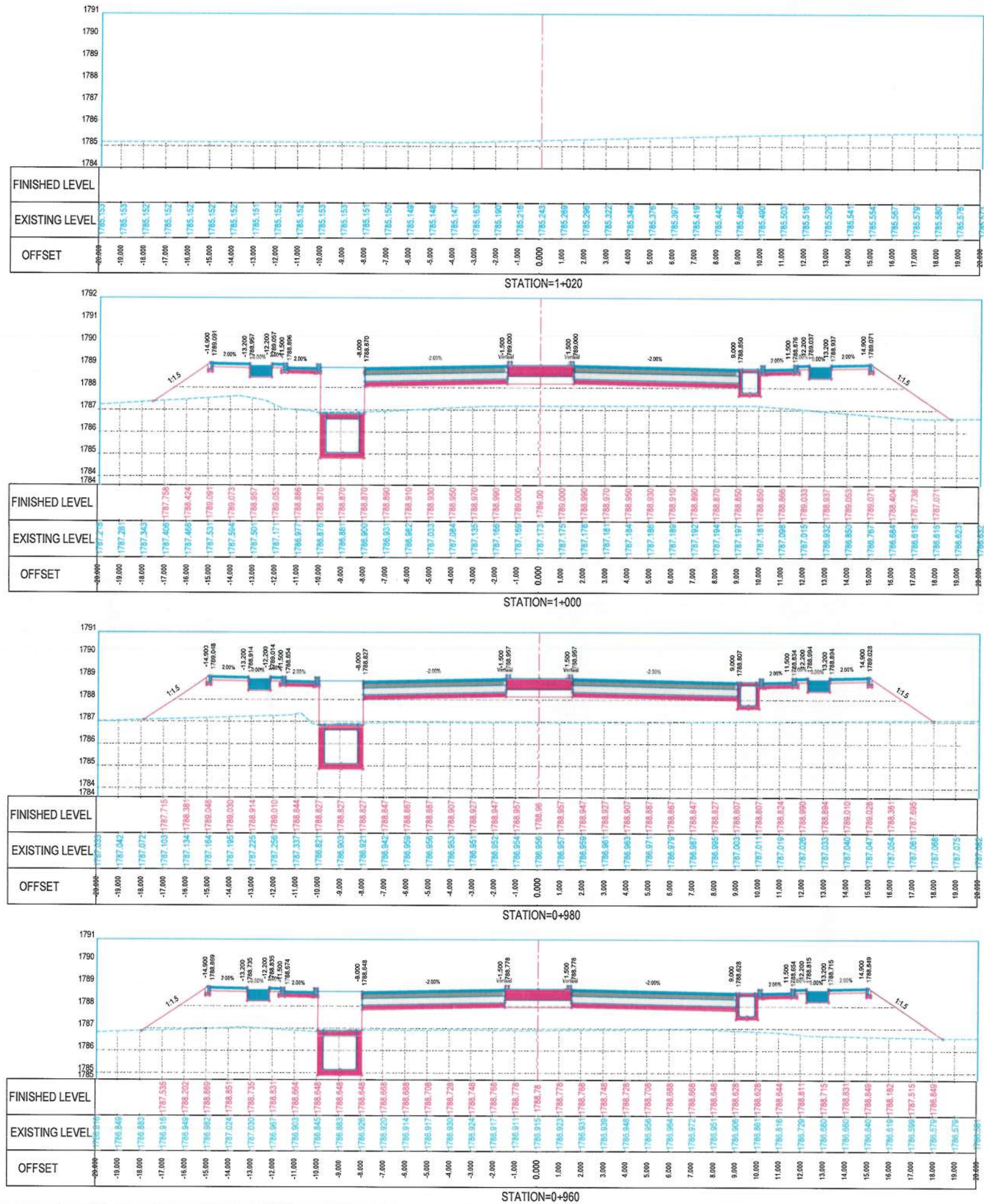
Project Code:

SHEET: CS-11 OF 21 REVISION: 00









NOTE:  
1. All dimensions are in meters unless otherwise indicated.



Date Revision Details Drawn Chkd Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed by:  
KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e- Zaman Khan Road  
To Kabul - Jalalabad Road

Drawing Title:  
CROSS SECTIONS

Drawn: Matullah Hussainzai  
Designed: Matullah Hussainzai  
Checked: Habibullah Shalizi

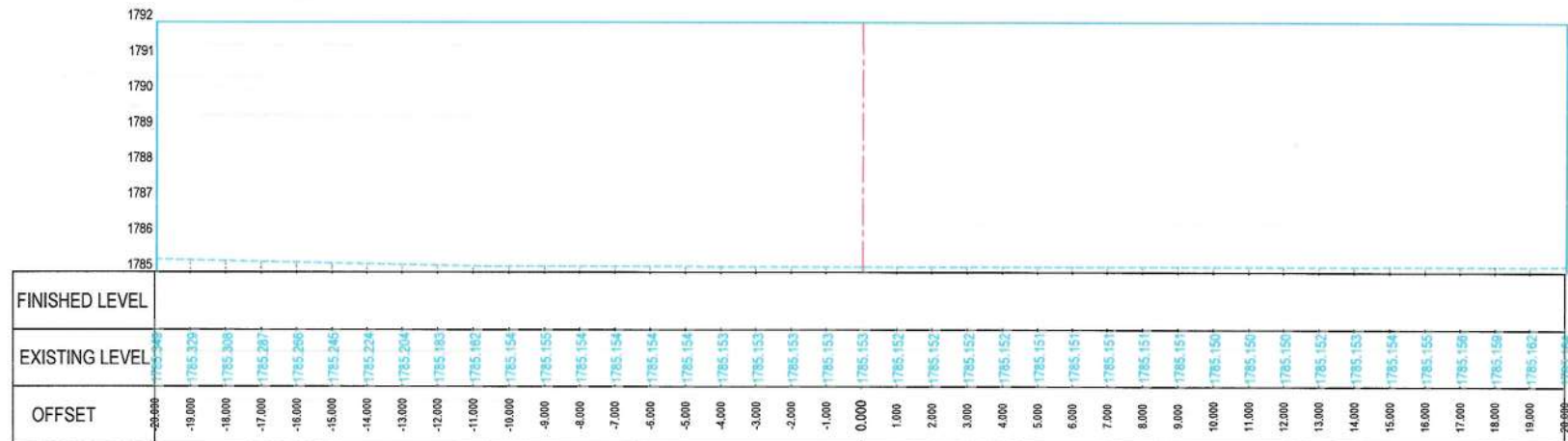
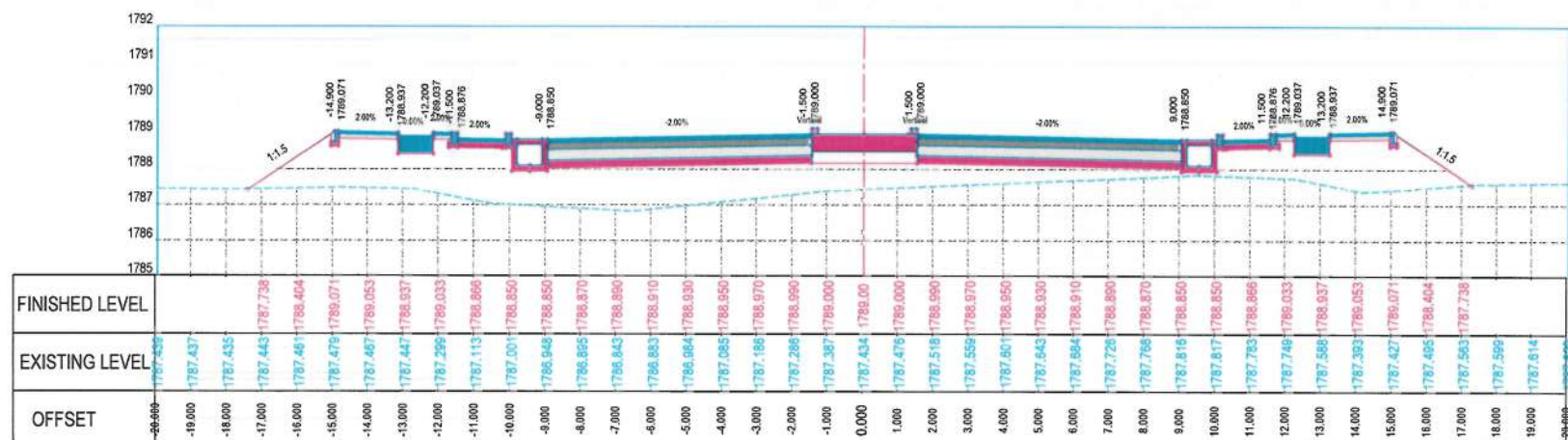
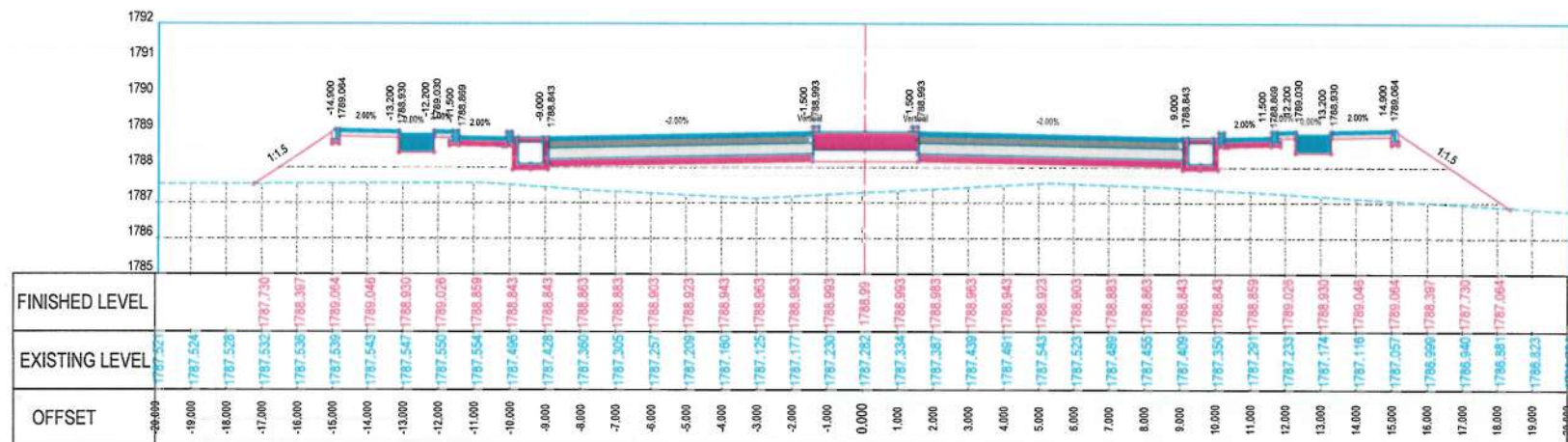
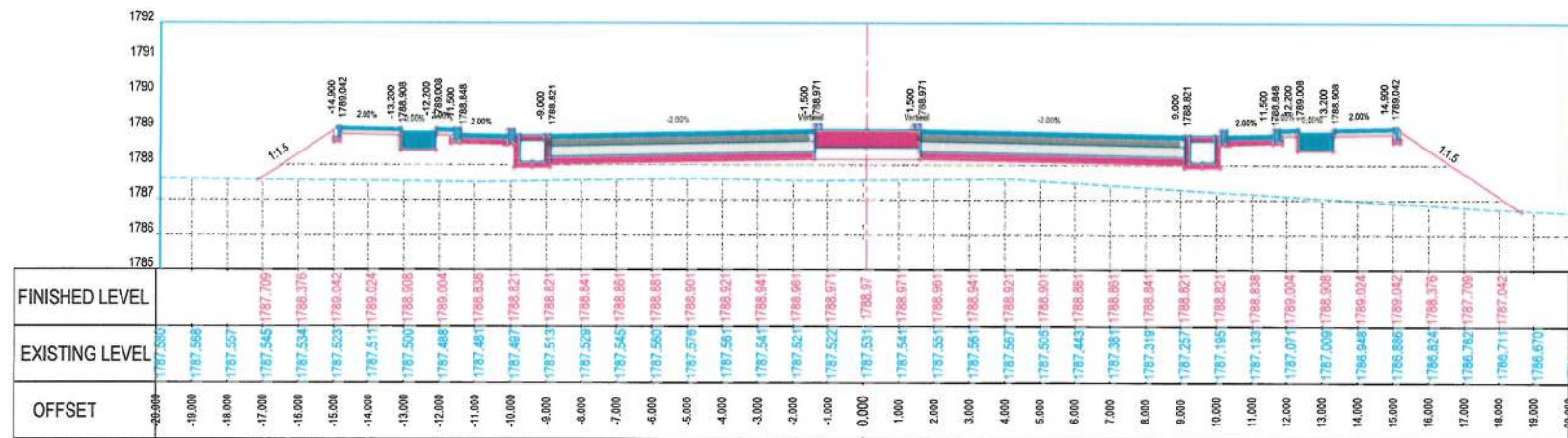
Date: 26/11/1445 Scale: 1:200

Status: FINAL  
DESIGN

Project Code:

SHEET CS-13 OF 21 REVISION 00





NOTE:  
1. All dimensions are in meters unless otherwise indicated.



ISLAMIC EMIRATE OF AFGHANISTAN

Designed by:  
KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road  
To Kabul - Jalalabad Road

Drawing Title:  
CROSS SECTIONS

Drawn: Matullah Hussainzai  
Designed: Matullah Hussainzai  
Checked: Hasibullah Shalizi

Date: 26/11/1445 Scale: 1:200

Status: FINAL DESIGN

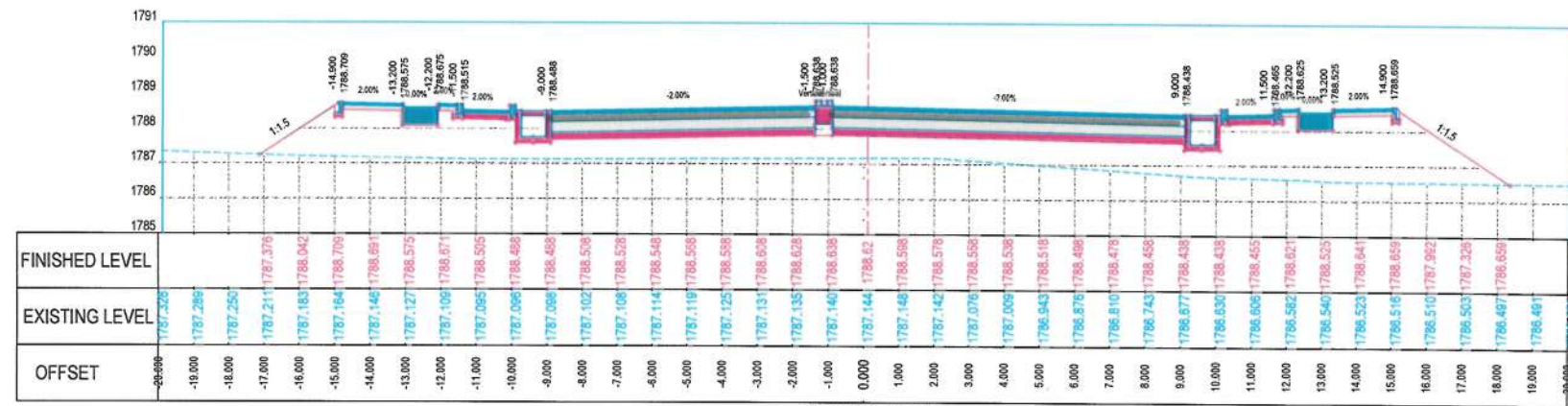
Project Code:

SHEET: CS-14 OF 21  
REVISION: 00

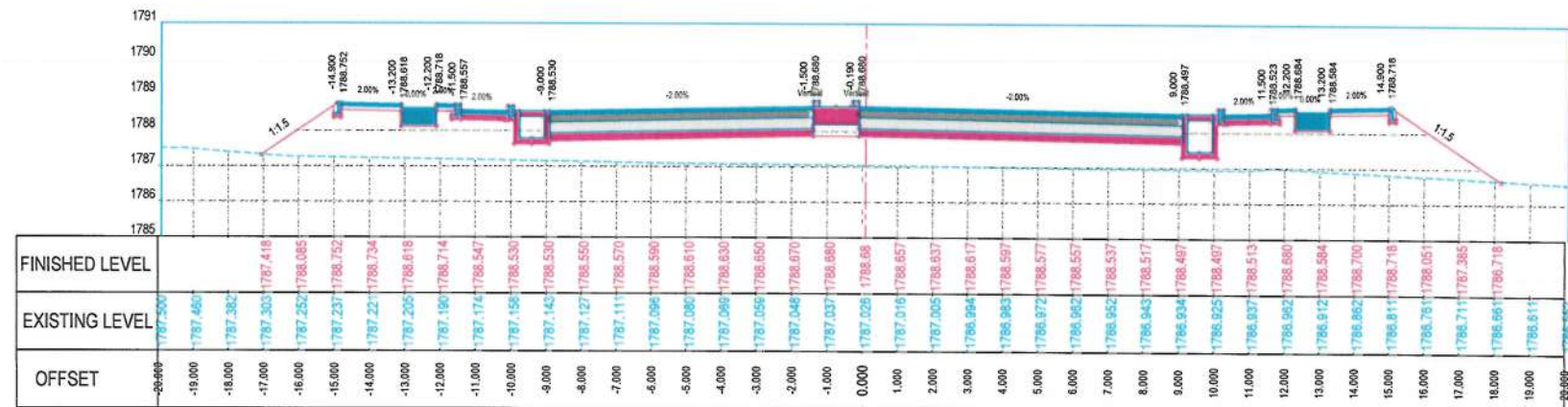




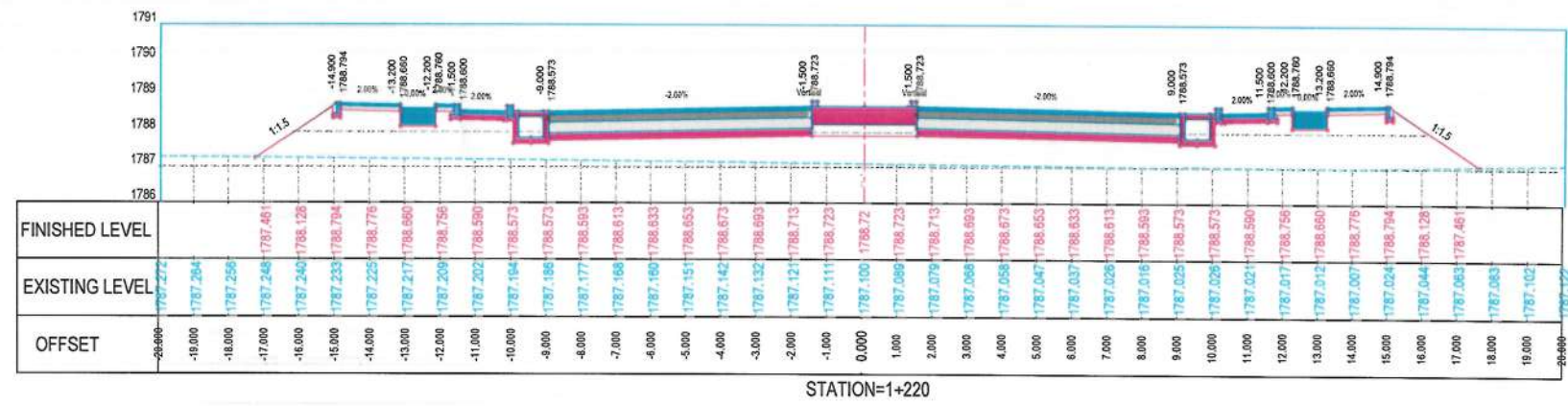




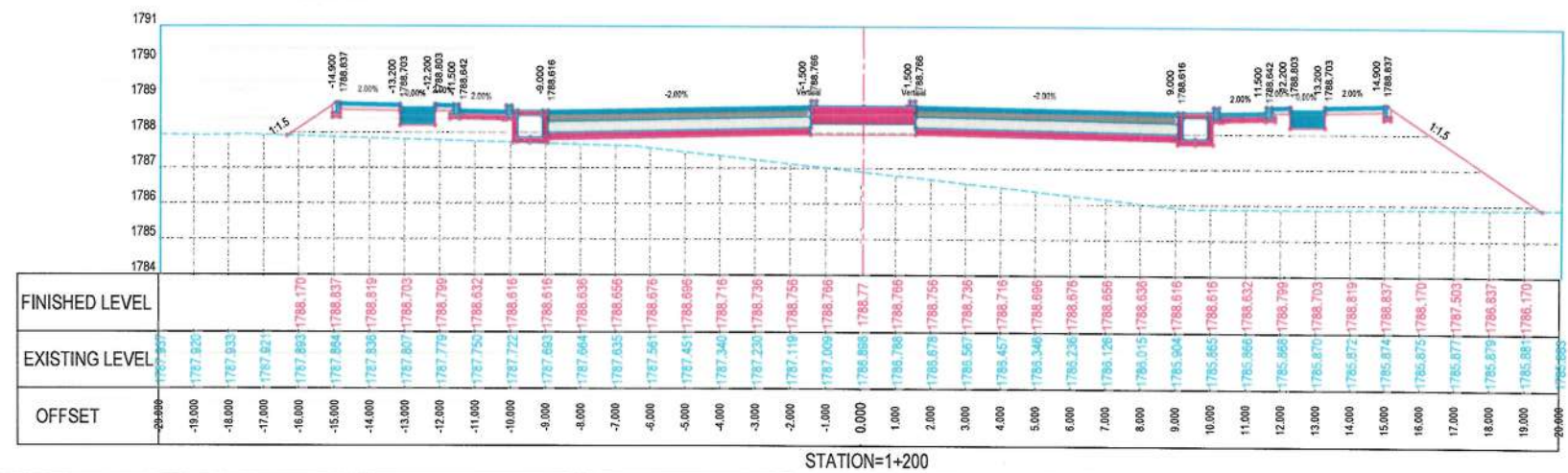
STATION=1+260



STATION=1+240



STATION=1+220



STATION=1+200

NOTE:

- All dimensions are in meters unless otherwise indicated.



Date	Revision Details	Drawn	Chkd	Appr
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ISLAMIC EMIRATE OF AFGHANISTAN

Designed by:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e- Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:  
CROSS SECTIONS

Drawn:   
Designed:   
Checked: 

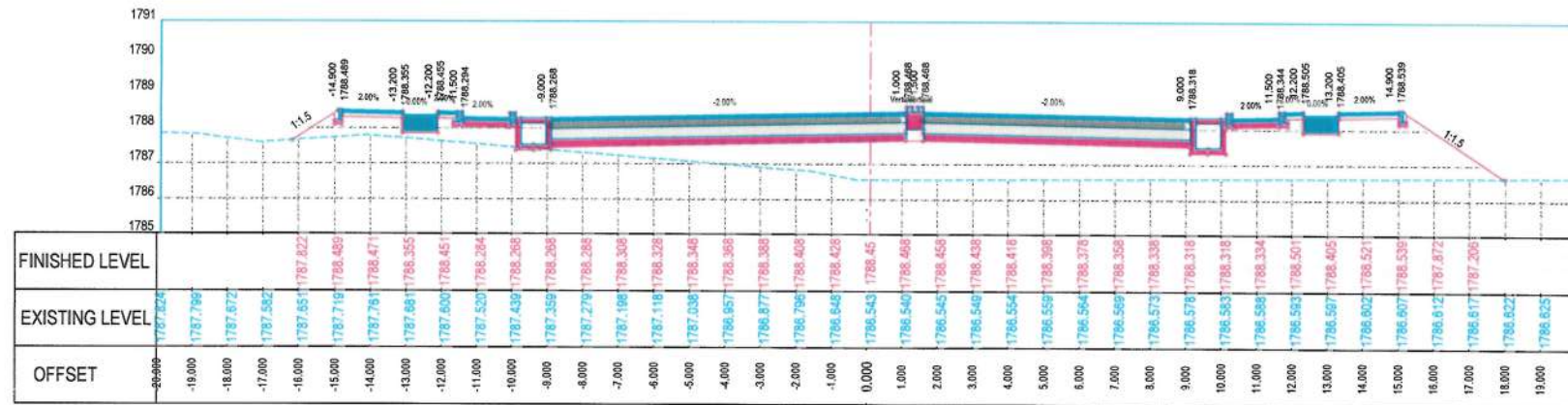
Date: 26/11/1445 Scale: 1:200

Status: FINAL DESIGN

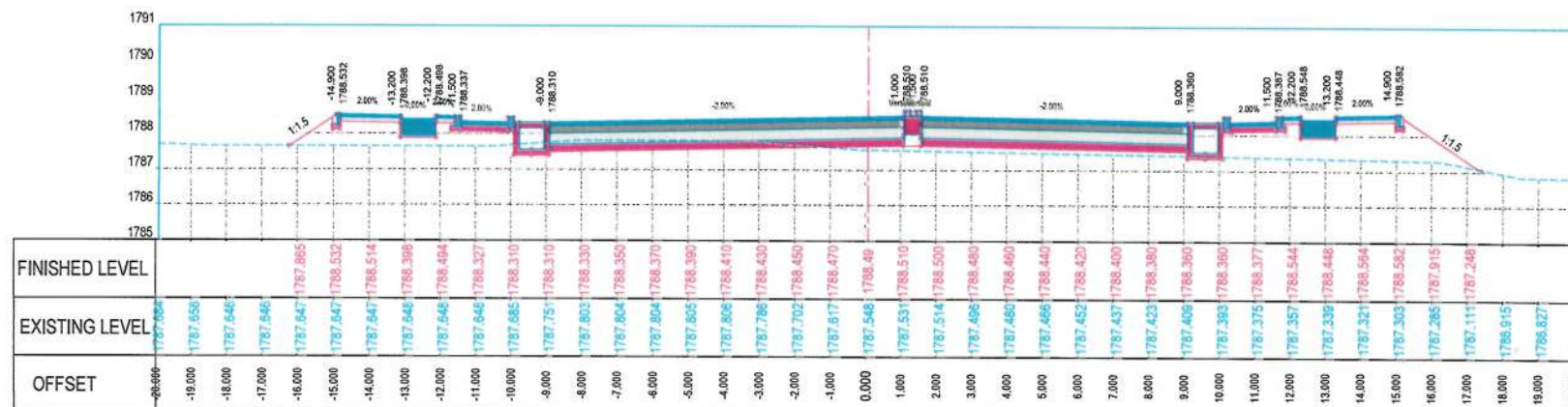
Project Code:

SHEET	REVISION
CS-16 OF 21	00

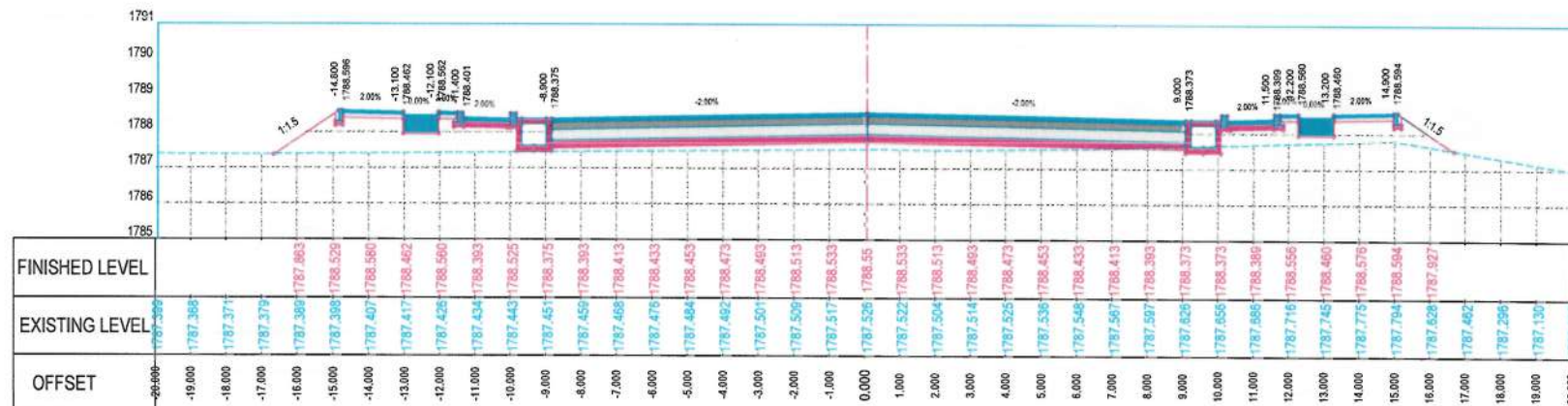




STATION=1+340



STATION=1+320



STATION=1+300



STATION=1+280

NOTE:  
1. All dimensions are in meters unless otherwise indicated.



Date	Revision Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF AFGHANISTAN  
Designed by:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:  
CROSS SECTIONS

Drawn: Matullah Hussainzai  
Designed: Matullah Hussainzai  
Checked: Hamidullah Shalizi  
Signature: [Signature]

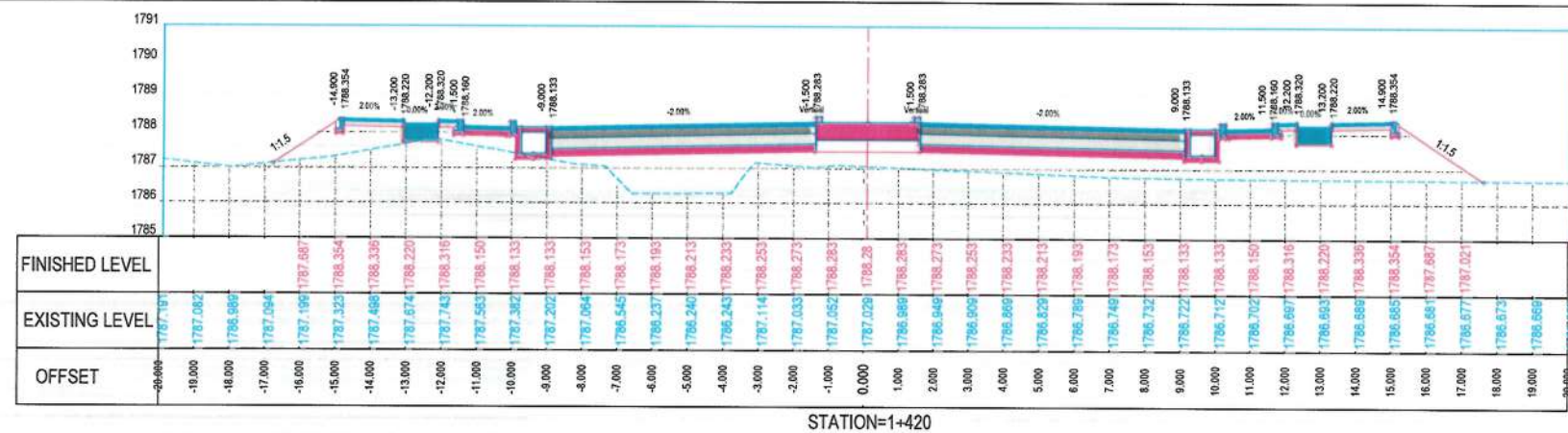
Date: 26/11/1445 Scale: 1:200

Status: FINAL DESIGN

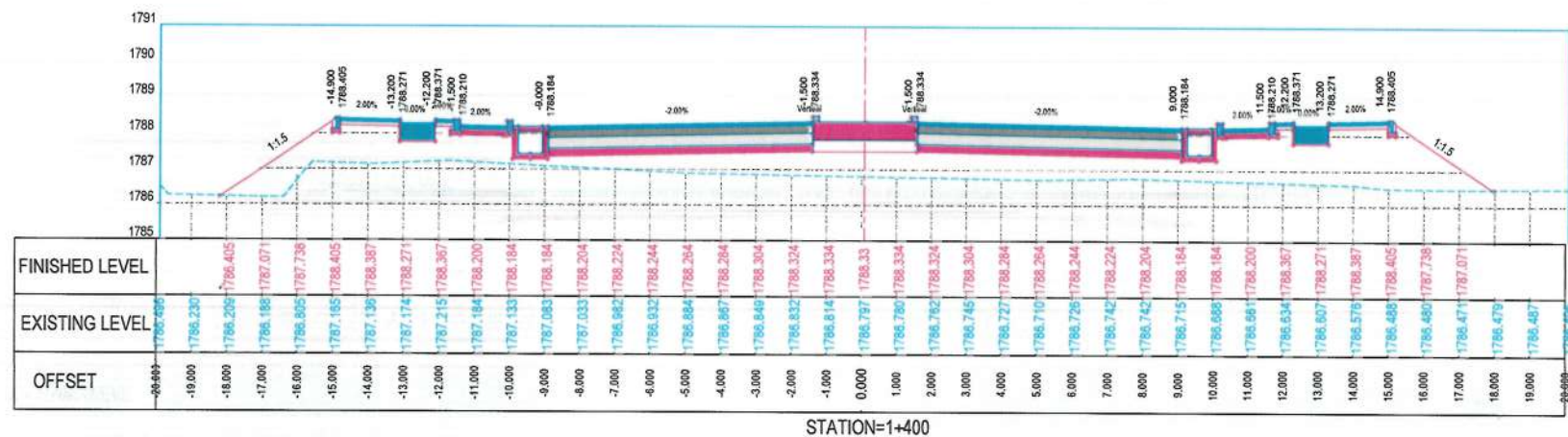
Project Code:

SHEET: CS-17 OF 21 REVISION: 00

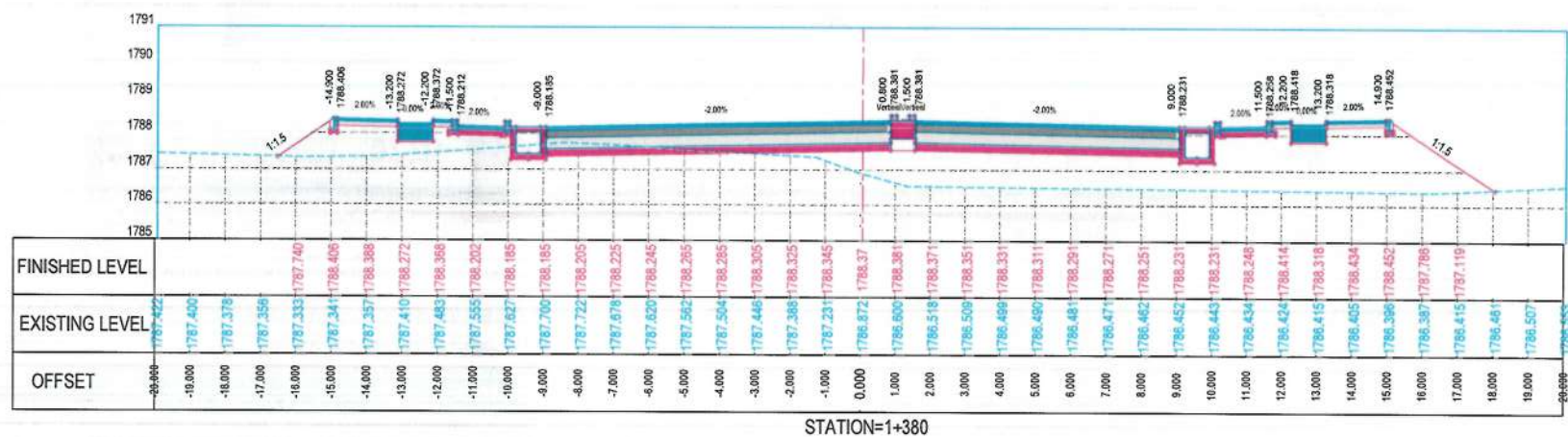




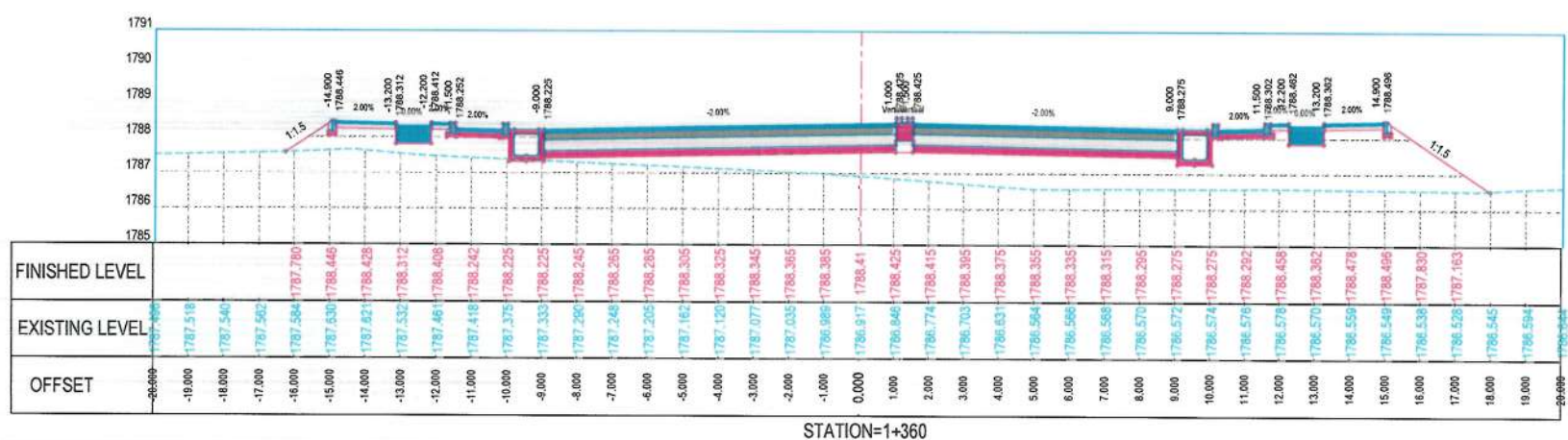
STATION=1+420



STATION=1+400



STATION=1+380



STATION=1+360

NOTE:
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1. All dimensions are in meters unless otherwise indicated.



Date	Revision Details	Drawn	Chkd.	Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed by:



Project Name:  
Construction of Road From Qala-c- Zaman Khan Road  
To Kabul - Jalalabad Road

Drawing Title:

## CROSS SECTIONS

Drawn: Matu'llah Hussainzai	Signature: 
Designed: Matu'llah Hussainzai	Signature: 
Checked: Hasibullah Shalizi	Signature: 

Date: 26/11/1445 Scale: 1:200

Status: **FINAL  
DESIGN**

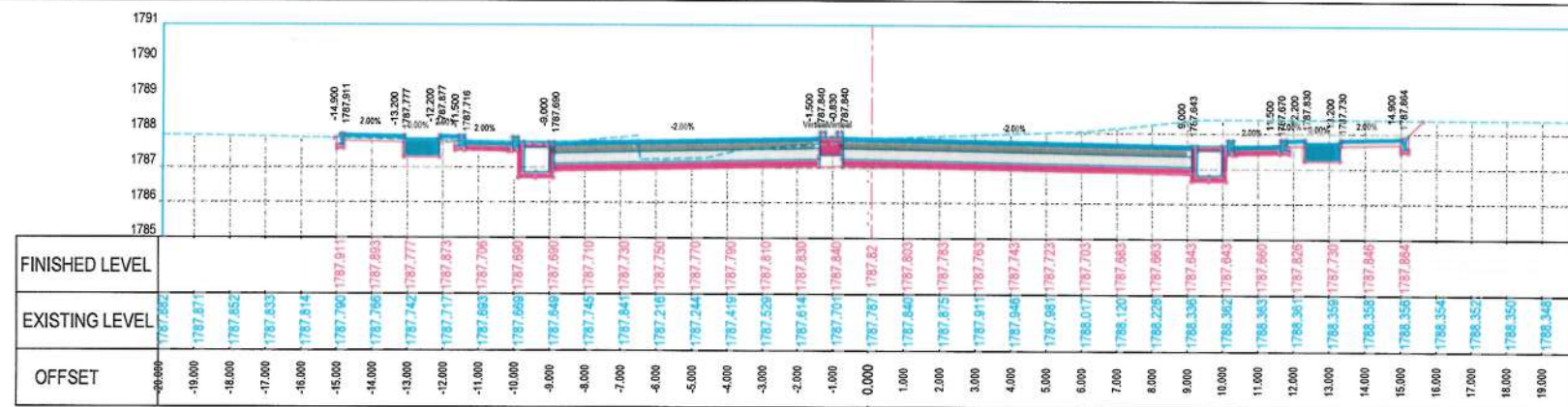
Project Code
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SHEET	REVISION
CS-18 OF 21	00

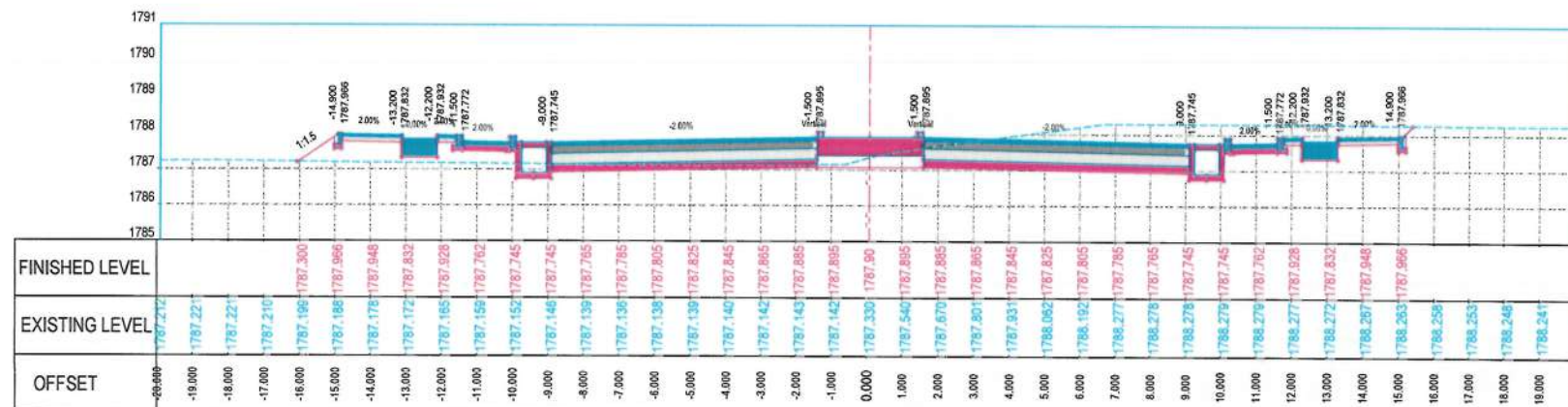




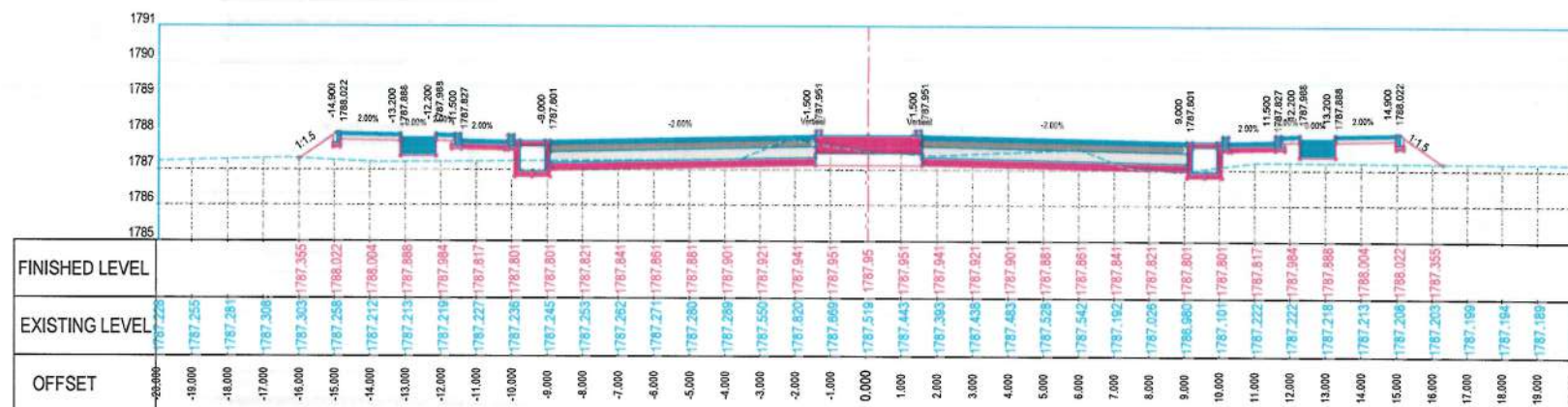




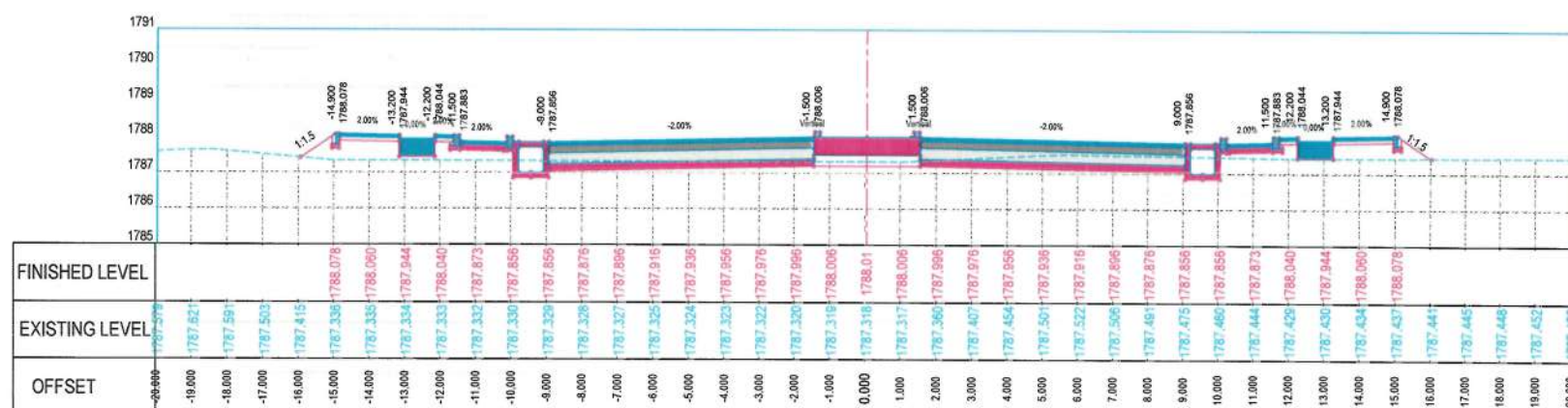
STATION=1+580



STATION=1+560



STATION=1+540



STATION=1+520

NOTE:  
1. All dimensions are in meters unless otherwise indicated.



Date Revision Details Drawn Chkd Appr

ISLAMIC EMIRATE OF AFGHANISTAN

Designed by:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qale-e Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:  
CROSS SECTIONS

Drawn: Signature:   
Designed: Signature:   
Checked: Signature:

Date: 26/11/1445 Scale: 1:200

Status: FINAL DESIGN

Project Code

SHEET CS-20 OF 21 REVISION 00







# Alignment Incremental Station Report

Alignment Name: Construction of Road from Qala-e- Zaman Khan Road To Kabul - Jalalabad Road  
 Station Range: Start: 0+000.00, End: 1+644.61  
 Station Increment: 20.00

Station	Northing	Easting	Tangential Direction
0+000.00	3,820,883.5910m	522,750.3116m	N9° 44' 55"E
0+020.00	3,820,903.3022m	522,753.6981m	N9° 44' 55"E
0+040.00	3,820,923.0196m	522,757.0478m	N9° 32' 05"E
0+060.00	3,820,942.7491m	522,760.3263m	N9° 22' 34"E
0+080.00	3,820,962.4819m	522,763.5846m	N9° 22' 34"E
0+100.00	3,820,982.2147m	522,766.8429m	N9° 22' 34"E
0+120.00	3,821,001.9475m	522,770.1011m	N9° 22' 34"E
0+140.00	3,821,021.6803m	522,773.3596m	N9° 22' 53"E
0+160.00	3,821,041.4121m	522,776.6237m	N9° 24' 16"E
0+180.00	3,821,061.1426m	522,779.8958m	N9° 25' 40"E
0+200.00	3,821,080.8718m	522,783.1758m	N9° 27' 04"E
0+220.00	3,821,100.5997m	522,786.4639m	N9° 28' 27"E
0+240.00	3,821,120.3268m	522,789.7567m	N9° 28' 35"E
0+260.00	3,821,140.0538m	522,793.0496m	N9° 28' 35"E
0+280.00	3,821,159.7810m	522,796.3422m	N9° 28' 18"E
0+300.00	3,821,179.5087m	522,799.6310m	N9° 27' 28"E
0+320.00	3,821,199.2372m	522,802.9151m	N9° 26' 38"E
0+340.00	3,821,218.9665m	522,806.1943m	N9° 25' 49"E
0+360.00	3,821,238.6967m	522,809.4689m	N9° 24' 59"E
0+380.00	3,821,258.4276m	522,812.7386m	N9° 24' 09"E
0+400.00	3,821,278.1593m	522,816.0036m	N9° 23' 19"E
0+420.00	3,821,297.8918m	522,819.2638m	N9° 22' 29"E
0+440.00	3,821,317.6250m	522,822.5192m	N9° 21' 39"E
0+460.00	3,821,337.3591m	522,825.7698m	N9° 20' 49"E
0+480.00	3,821,357.0936m	522,829.0180m	N9° 20' 49"E
0+500.00	3,821,376.8280m	522,832.2662m	N9° 20' 49"E
0+520.00	3,821,396.5625m	522,835.5144m	N9° 20' 49"E
0+540.00	3,821,416.2970m	522,838.7626m	N9° 20' 49"E
0+560.00	3,821,436.0314m	522,842.0108m	N9° 20' 49"E
0+580.00	3,821,455.7658m	522,845.2597m	N9° 21' 02"E
0+600.00	3,821,475.4999m	522,848.5099m	N9° 21' 16"E
0+620.00	3,821,495.2339m	522,851.7613m	N9° 21' 29"E
0+640.00	3,821,514.9676m	522,855.0140m	N9° 21' 42"E
0+660.00	3,821,534.7011m	522,858.2680m	N9° 21' 56"E
0+680.00	3,821,554.4344m	522,861.5232m	N9° 22' 06"E
0+700.00	3,821,574.1677m	522,864.7788m	N9° 22' 06"E
0+720.00	3,821,593.9009m	522,868.0344m	N9° 22' 06"E
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0+800.00	3,821,672.8339m	522,881.0568m	N9° 22' 06"E
0+820.00	3,821,692.5672m	522,884.3124m	N9° 22' 06"E
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0+960.00	3,821,830.6969m	522,907.1197m	N9° 26' 33"E
0+980.00	3,821,850.4244m	522,910.4099m	N9° 29' 42"E
1+000.00	3,821,870.1489m	522,913.7180m	N9° 32' 26"E
1+020.00	3,821,889.8723m	522,917.0329m	N9° 32' 26"E
1+040.00	3,821,909.5957m	522,920.3479m	N9° 32' 26"E
1+060.00	3,821,929.3190m	522,923.6628m	N9° 32' 26"E
1+080.00	3,821,949.0446m	522,926.9643m	N9° 14' 58"E
1+100.00	3,821,968.8138m	522,929.9920m	N8° 09' 55"E
1+120.00	3,821,988.6368m	522,932.6452m	N7° 04' 53"E
1+140.00	3,822,008.5063m	522,934.9229m	N5° 59' 50"E
1+160.00	3,822,028.4155m	522,936.8242m	N4° 54' 48"E
1+180.00	3,822,048.3570m	522,938.3485m	N3° 49' 45"E
1+200.00	3,822,068.3238m	522,939.4953m	N2° 44' 42"E
1+220.00	3,822,088.3087m	522,940.2641m	N1° 39' 40"E
1+240.00	3,822,108.3046m	522,940.6547m	N0° 34' 37"E

1+260.00	3,822,128.3043m	522,940.6669m	N0° 30' 25"W
1+280.00	3,822,148.3022m	522,940.3829m	N0° 52' 35"W
1+300.00	3,822,168.2999m	522,940.0770m	N0° 52' 35"W
1+320.00	3,822,188.2976m	522,939.7711m	N0° 52' 35"W
1+340.00	3,822,208.2952m	522,939.4652m	N0° 52' 35"W
1+360.00	3,822,228.2929m	522,939.1592m	N0° 52' 35"W
1+380.00	3,822,248.2905m	522,938.8533m	N0° 52' 35"W
1+400.00	3,822,268.2882m	522,938.5474m	N0° 52' 35"W
1+420.00	3,822,288.2859m	522,938.2414m	N0° 52' 35"W
1+440.00	3,822,308.2835m	522,937.9355m	N0° 52' 35"W
1+460.00	3,822,328.2812m	522,937.6296m	N0° 52' 35"W
1+480.00	3,822,348.2788m	522,937.3236m	N0° 52' 35"W
1+500.00	3,822,368.2765m	522,937.0177m	N0° 52' 35"W
1+520.00	3,822,388.2742m	522,936.7118m	N0° 52' 35"W
1+540.00	3,822,408.2718m	522,936.4059m	N0° 52' 35"W
1+560.00	3,822,428.2695m	522,936.0999m	N0° 52' 35"W
1+580.00	3,822,448.2671m	522,935.7940m	N0° 52' 35"W
1+600.00	3,822,468.2648m	522,935.4881m	N0° 52' 35"W
1+620.00	3,822,488.2625m	522,935.1821m	N0° 52' 35"W
1+640.00	3,822,508.2601m	522,934.8762m	N0° 52' 35"W
1+644.61	3,822,512.8696m	522,934.8057m	N0° 52' 35"W

## BENCH MARKS

PN	Easting	Northing	Elevation	Description
1	523213.9630m	3822537.0360m	1787.606m	BM36
2	522865.5430m	3822517.7550m	1787.943m	BM15
3	522954.1030m	3822532.8070m	1787.961m	BM1
4	522854.5670m	3822394.2360m	1787.835m	BM16
5	522880.0130m	3822251.7690m	1787.890m	BM17
6	522886.2930m	3822140.8530m	1787.742m	BM18
7	522871.8410m	3822111.1320m	1787.821m	BM19
8	522964.6560m	3822083.4760m	1788.970m	BM20
9	522954.1450m	3821927.2630m	1787.747m	BM21
10	522862.2130m	3821609.1760m	1787.173m	BM22
11	522820.7090m	3821356.7950m	1787.617m	BM23
12	522782.1340m	3821124.7230m	1787.898m	BM24
13	522755.9210m	3820962.3420m	1788.131m	BM25
14	522736.3430m	3820864.1970m	1788.820m	BM26
15	522694.3190m	3820871.2250m	1788.986m	BM27
16	522728.8910m	3820838.1760m	1788.849m	BM28
17	522779.0140m	3820845.2970m	1788.896m	BM29
18	522708.0450m	3820853.2590m	1789.170m	BM30
19	522675.2260m	3820630.6270m	1787.016m	BM31
20	522646.8510m	3820450.6390m	1788.235m	BM32
21	522621.9270m	3820260.5440m	1787.274m	BM33
22	522584.1700m	3820050.2820m	1791.027m	BM34
23	522545.5530m	3819777.1070m	1800.797m	BM35
24	522525.8030m	3819700.8330m	1803.682m	BM36

NOTE:  
 1. All dimensions are in meters unless otherwise indicated.



ISLAMIC EMIRATE OF AFGHANISTAN

Designed by:

KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
 Construction of Road From Qala-e- Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:  
 BENCH MARKS & STAKEOUT REPORT

Drawn: Mutiullah Hussainzai  
 Designed: Mutiullah Hussainzai  
 Checked: Hasibullah Shalizi

Date: 26/11/1445 Scale: 1:200

Status: FINAL DESIGN

Project Code

SHEET  
 BM & SR-01 OF 01

REVISION  
 00



# DRAINAGE SECTION







NOTE:  
1. All dimensions are in meters unless otherwise indicated.

- LEGEND
- Row
  - Proposed Center Line
  - Drainage
  - Proposed Culvert



Date	Revision	Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:  
RIGHT SIDE DRAINAGE PLAN & PROFILE

Drawn: Baz Mohammad Raji  
Designed: Baz Mohammad Raji  
Checked: Habibullah Shalizi

Signature: [Signature]  
Signature: [Signature]  
Signature: [Signature]

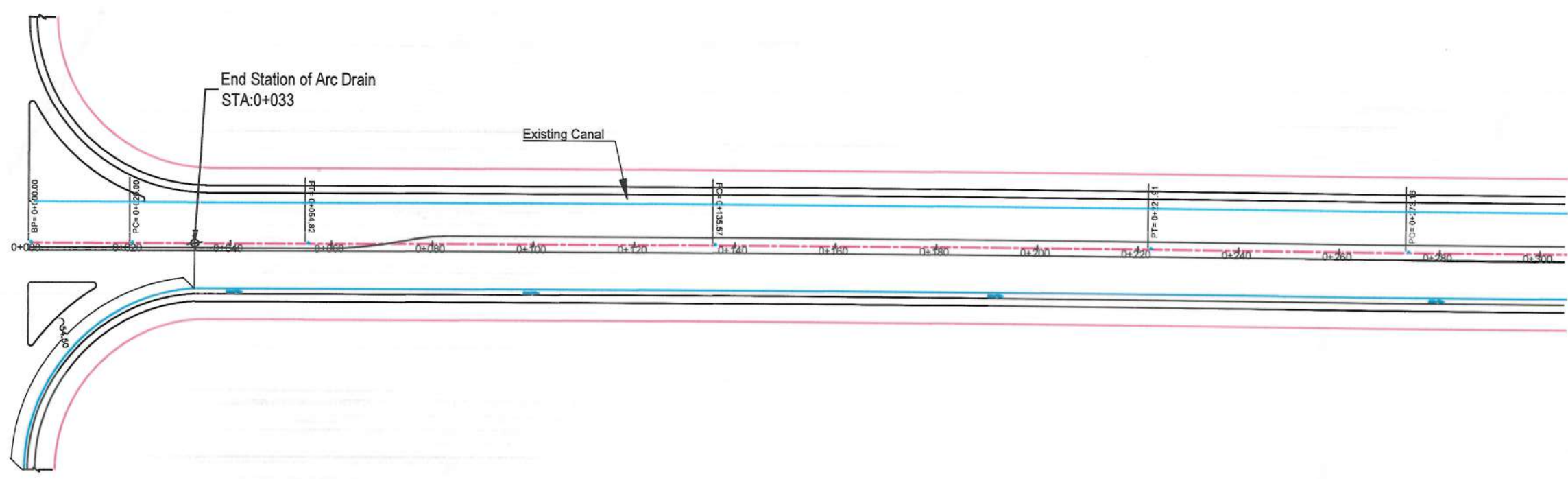
Date: 06/05/2024 Scale: 1:1000

Status: FINAL DESIGN

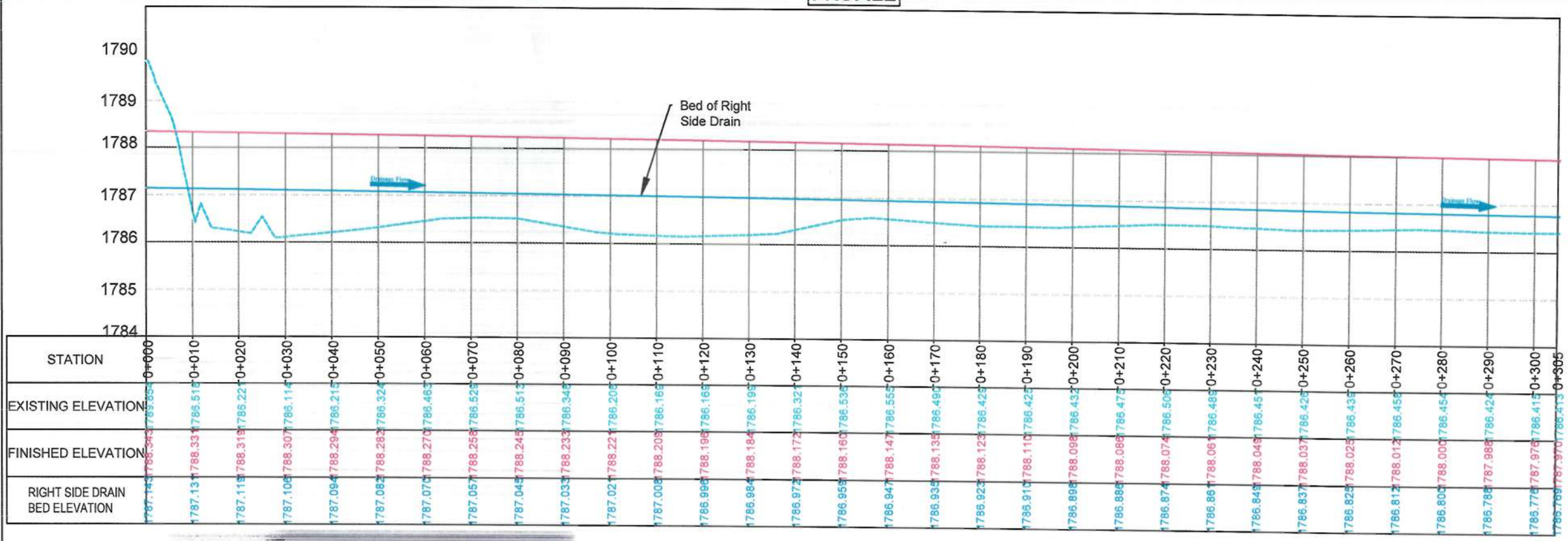
Project Code:

SHEET  
RD P&P-01 OF 06

MATCH LINE - 1  
AT STATION - 0+305.00



PROFILE





MATCH LINE - 1  
AT STATION - 0+305.00

MATCH LINE - 2  
AT STATION - 0+610.00

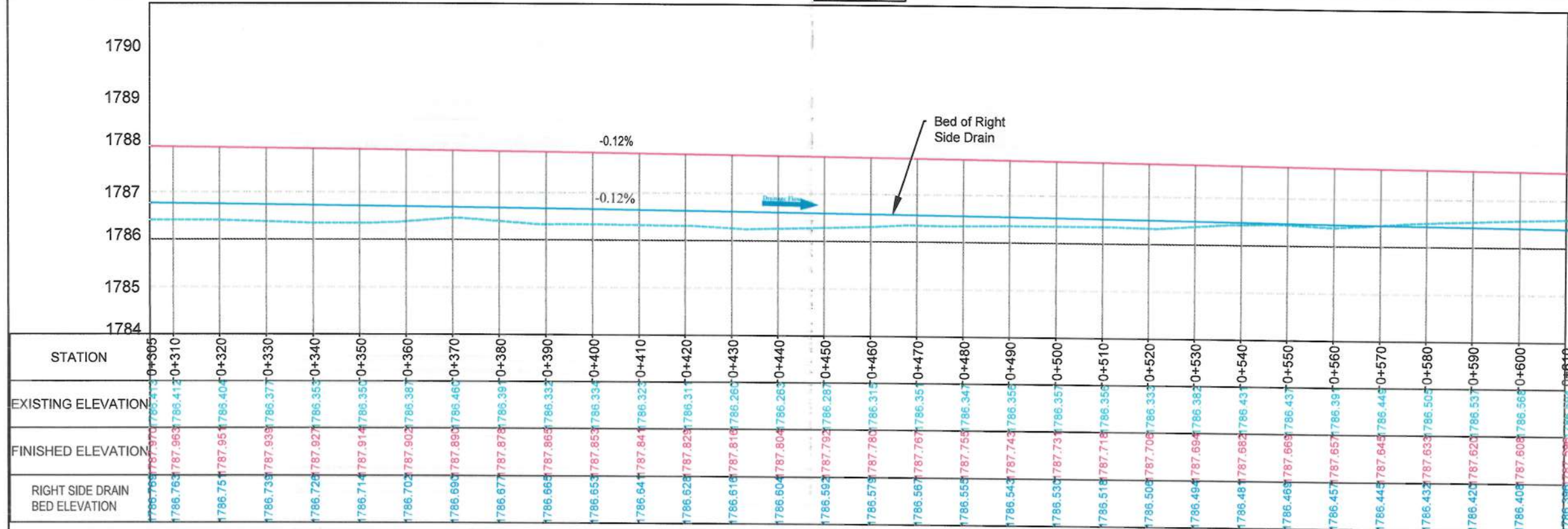


NOTE:  
1. All dimensions are in meters unless otherwise indicated.

LEGEND  
Row  
Proposed Center Line  
Drainage  
Proposed Culvert



### PROFILE







Date	Revision	Details	Drawn	Chkd	Appr
ISLAMIC EMIRATE OF AFGHANISTAN					
Designed By: KABUL MUNICIPALITY DESIGN TEAM					
Project Name: Construction of Road From Qala-e-Zaman Khan Road To Kabul - Jalalabad Road					
Drawing Title: RIGHT SIDE DRAINAGE PLAN & PROFILE					
Drawn:	Signature:		Signature:		
Designed:	Signature:		Signature:		
Checked:	Signature:		Signature:		
Hasibullah Shalizi					
Date:	06/05/2024		Scale: 1:1000		
Status:	FINAL DESIGN				
Project Code					
SHHET					
RD P&T-02 OF 06					





NOTE:  
1. All dimensions are in meters unless otherwise indicated.

LEGEND


- Row   
Proposed Center Line   
Drainage   
Proposed Culvert 



Date	Revision Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:

 KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e- Zaman Khan Road  
To Kabul - Jalalabad Road

Drawing Title

**RIGHT SIDE DRAINAGE  
PLAN & PROFILE**

Drawn:	Signature:
Baz Mohammad Raji	
Designed:	Signature:
Baz Mohammad Raji	
Checked:	Signature:
Hasbullah Shalizi	

Date: 06/05/2024 Scale: 1:1000

Status: **FINAL  
DESIGN**

Project Code

SHEET  
RD P&P-03 OF 06

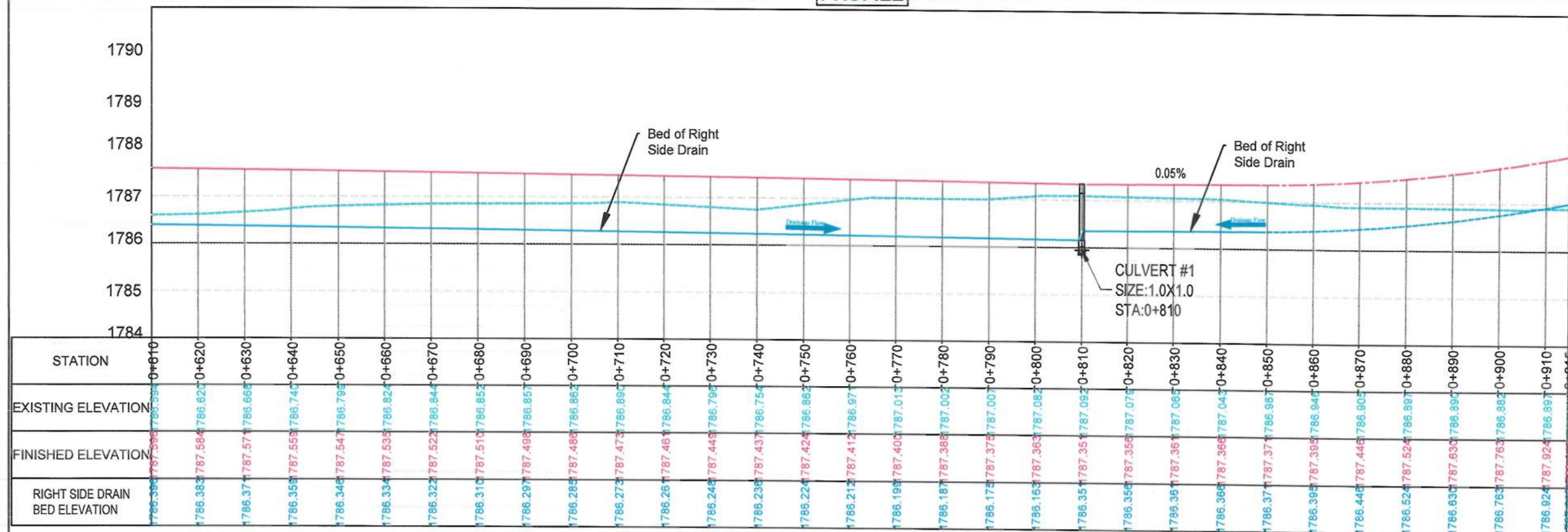
MATCH LINE - 3  
AT STATION - 0+915.00

MATCH LINE - 2  
AT STATION - 0+610.00

Existing Canal

Culvert #1  
Size: 1.0X1.1

**PROFILE**

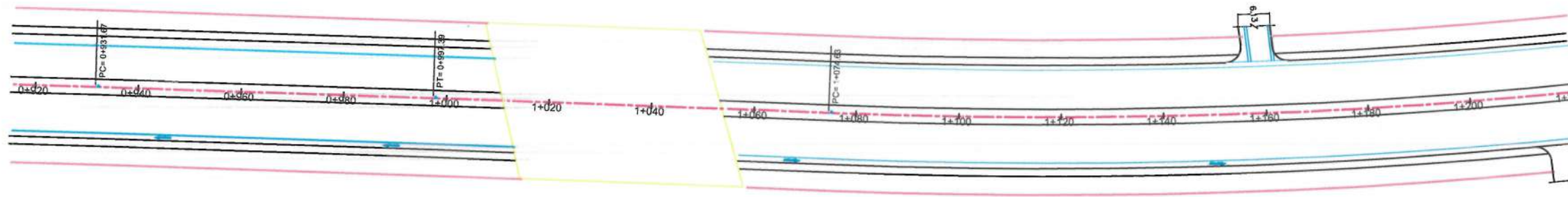




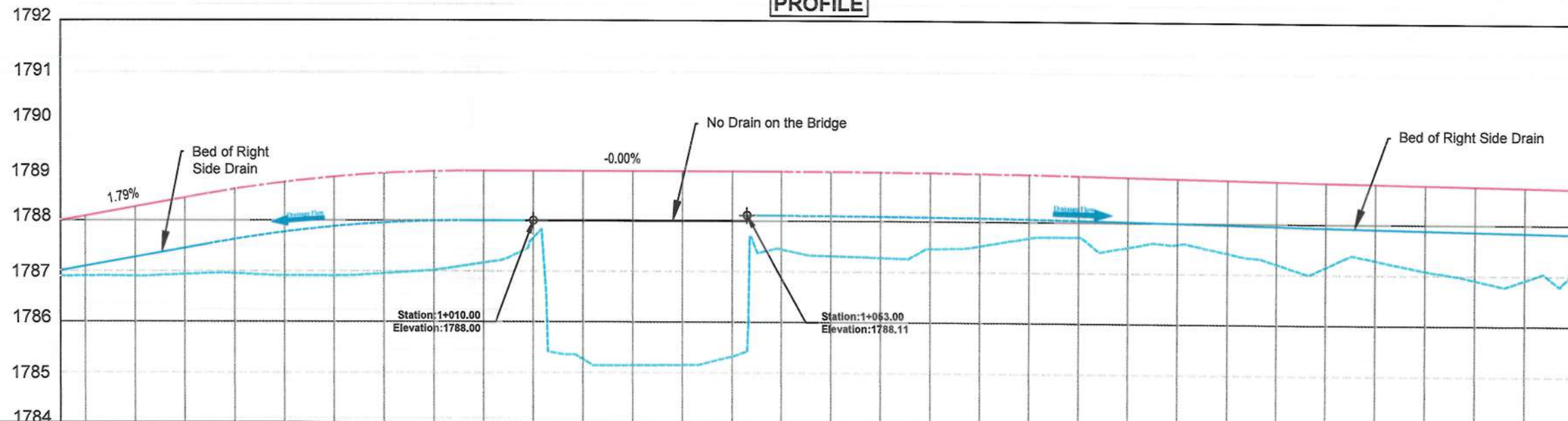
MATCH LINE - 3  
AT STATION - 0+915.00



MATCH LINE - 4  
AT STATION - 1+220.00



### PROFILE



STATION	0+915	0+920	0+930	0+940	0+950	0+960	0+970	0+980	0+990	1+000	1+010	1+020	1+030	1+040	1+050	1+060	1+070	1+080	1+090	1+100	1+110	1+120	1+130	1+140	1+150	1+160	1+170	1+180	1+190	1+200	1+210	1+220
EXISTING ELEVATION	1787.013	1787.103	1787.282	1787.462	1787.638	1787.778	1787.885	1787.957	1788.000	1788.000	1788.000	1788.000	1788.000	1788.000	1788.000	1788.108	1788.104	1788.098	1788.083	1788.072	1788.058	1788.038	1788.014	1787.993	1787.974	1787.951	1787.928	1787.908	1787.887	1787.863	1787.844	1787.823
FINISHED ELEVATION	1787.013	1787.103	1787.282	1787.462	1787.638	1787.778	1787.885	1787.957	1788.000	1788.000	1788.000	1788.000	1788.000	1788.000	1788.000	1788.108	1788.104	1788.098	1788.083	1788.072	1788.058	1788.038	1788.014	1787.993	1787.974	1787.951	1787.928	1787.908	1787.887	1787.863	1787.844	1787.823
RIGHT SIDE DRAIN BED ELEVATION	1787.013	1787.103	1787.282	1787.462	1787.638	1787.778	1787.885	1787.957	1788.000	1788.000	1788.000	1788.000	1788.000	1788.000	1788.000	1788.108	1788.104	1788.098	1788.083	1788.072	1788.058	1788.038	1788.014	1787.993	1787.974	1787.951	1787.928	1787.908	1787.887	1787.863	1787.844	1787.823

NOTE:

- All dimensions are in meters unless otherwise indicated.

### LEGEND

- Row
- Proposed Center Line
- Drainage
- Proposed Culvert



Date	Revision Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:

KABUL MUNICIPALITY  
DESIGN TEAM

Project Name  
Construction of Road From Qala-e- Zaman Khan Road  
To Kabul - Jalalabad Road

Drawing Title:

RIGHT SIDE DRAINAGE  
PLAN & PROFILE

Drawn:	Signature:
Baz Mohammad Raji	
Designed:	Signature:
Baz Mohammad Raji	
Checked:	Signature:
Hasibullah Shalizi	

Date: 06/05/2024 Scale: 1:1000

Status: FINAL  
DESIGN

Project Code

SHBET  
RD P&P-04 OF 06





NOTE:

1. All dimensions are in meters unless otherwise indicated.

LEGEND

- Row
- Proposed Center Line
- Drainage
- Proposed Culvert



Date Revision Details Drawn Chd. Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:

KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road  
To Kabul - Jalalabad Road

Drawing Title:

RIGHT SIDE DRAINAGE  
PLAN & PROFILE

Drawn: Baz Mohammad Raji  
Designed: Baz Mohammad Raji  
Checked: Habibullah Shalizi

Date: 06/05/2024 Scale: 1:1000

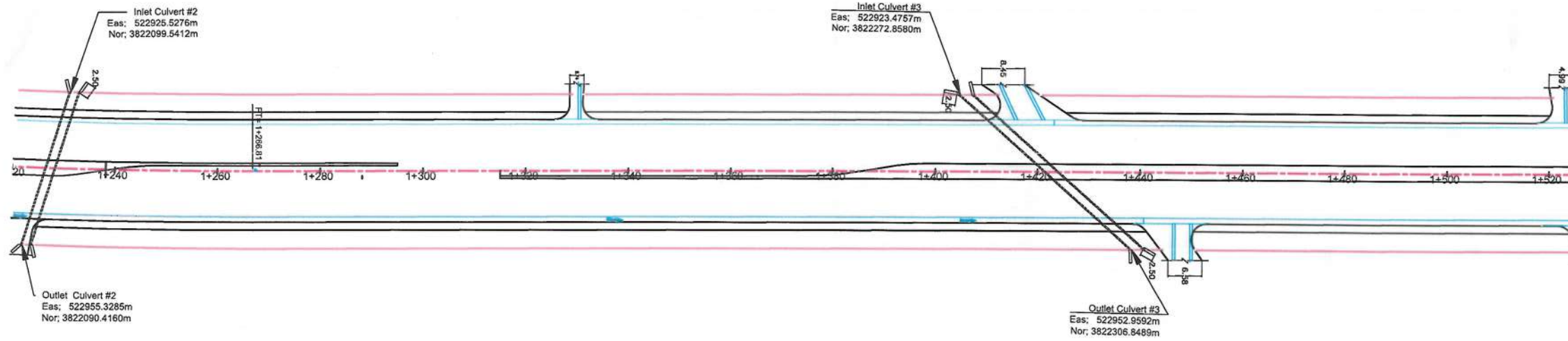
Status: FINAL  
DESIGN

Project Code

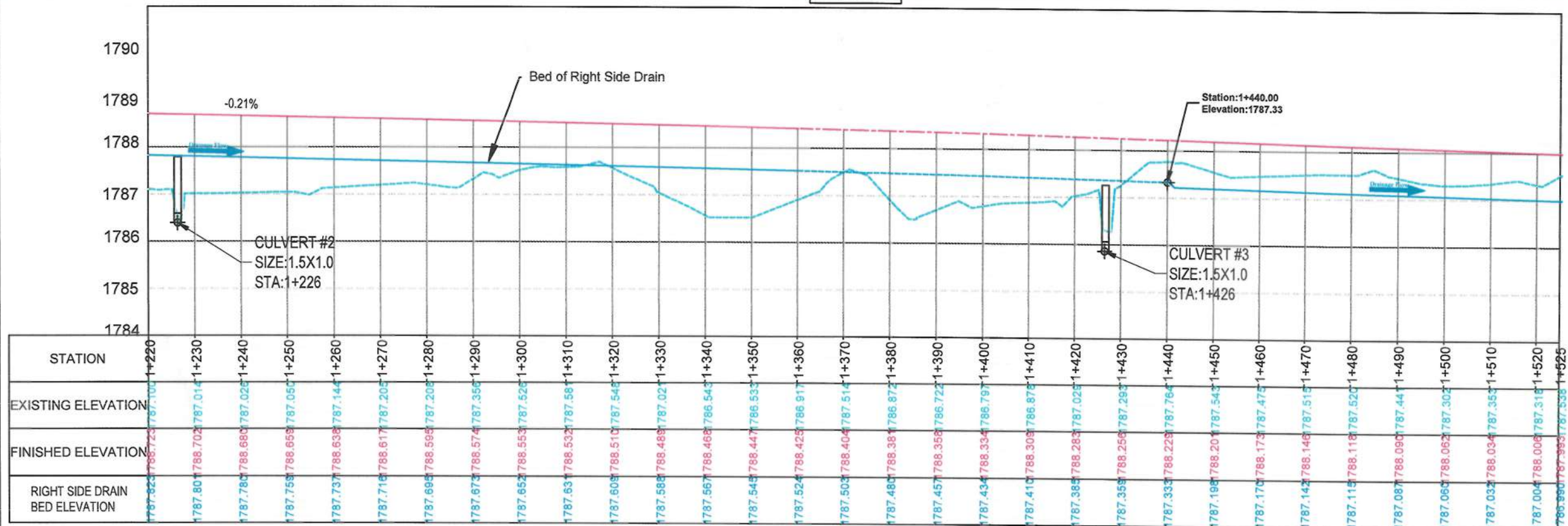
SHEET  
RD P&P-05 OF 06

MATCH LINE - 4  
AT STATION - 1+220.00

MATCH LINE - 5  
AT STATION - 1+525.00



### PROFILE



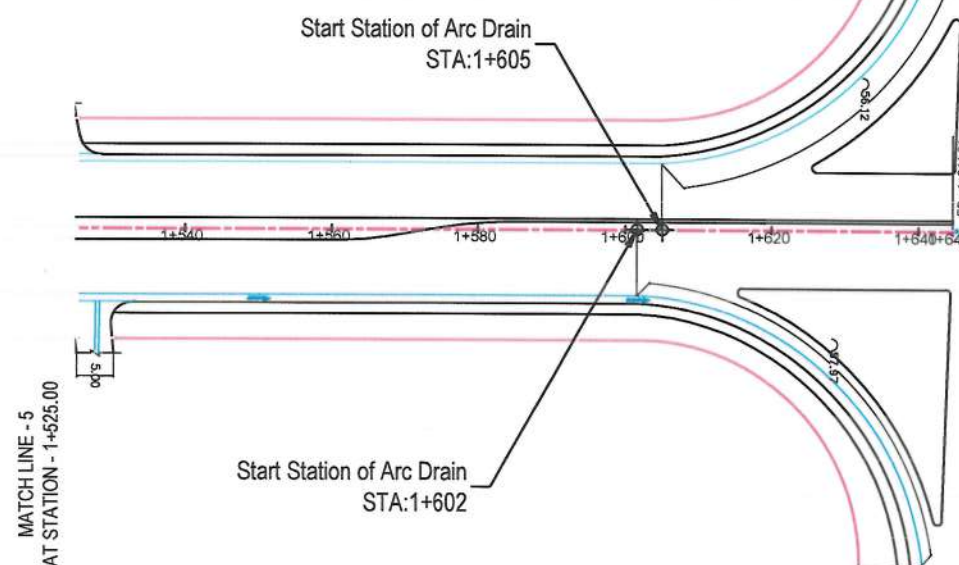




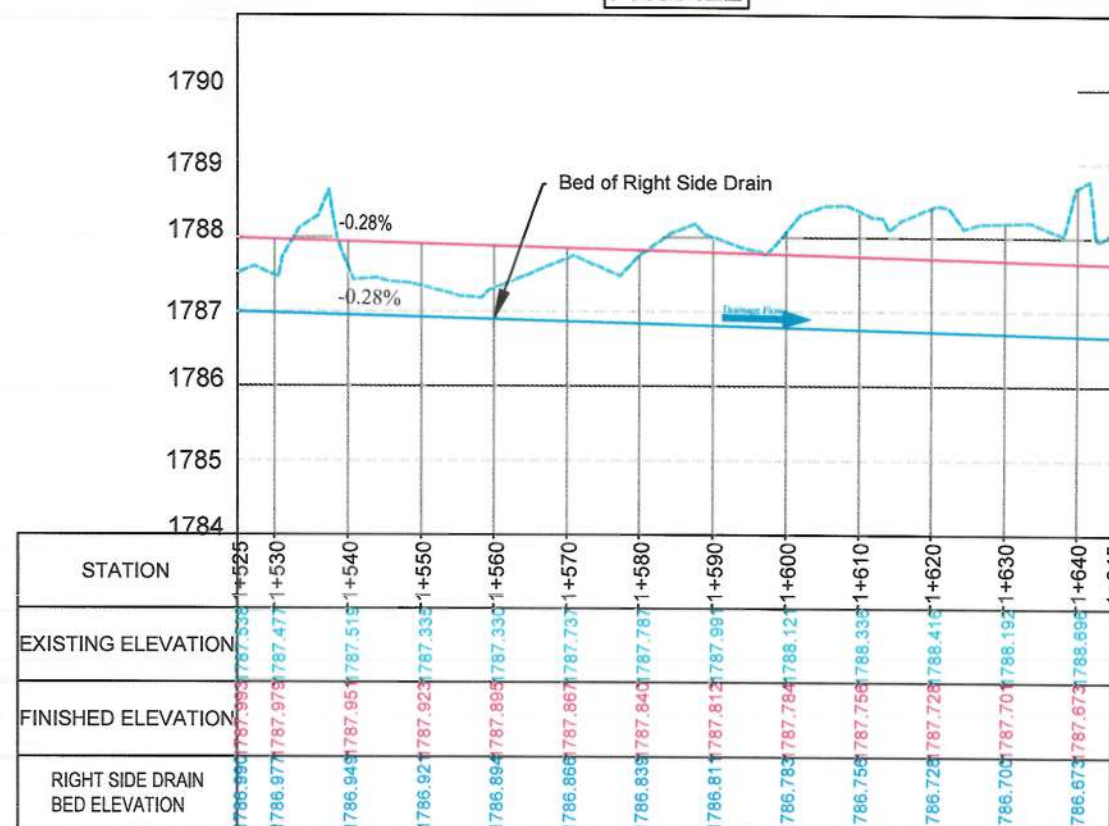
NOTE:  
1. All dimensions are in meters unless otherwise indicated.

#### LEGEND

Row  
Proposed Center Line  
Drainage  
Proposed Culvert



#### PROFILE



Date	Revision	Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:

KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e Zaman Khan Road  
To Kabul - Jalalabad Road

Drawing Title:  
**RIGHT SIDE DRAINAGE  
PLAN & PROFILE**

Drawn: Baz Mohammad Raji	Signature:
Designed: Baz Mohammad Raji	Signature:
Checked: Hasibullah Shalizi	Signature:

Date: 06/05/2024 Scale: 1:1000

Status: **FINAL  
DESIGN**

Project Code

SHEET  
RD P&P-06 OF 06





NOTE:  
1. All dimensions are in meters unless otherwise indicated.

LEGEND

Row  
Proposed Center Line  
Drainage  
Proposed Culvert



Date Revision Details Drawn Chkd Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:

KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road  
To Kabul - Jalalabad Road

Drawing Title:

LEFT SIDE DRAINAGE  
PLAN & PROFILE

Drawn: Baz Mohammad Raji  
Designed: Baz Mohammad Raji  
Checked: Habibullah Shalizi

Date: 06/05/2024 Scale: 1:1000

Status: FINAL  
DESIGN

Project Code

SHEET  
LD P&P-01 OF 04

MATCH LINE - 3  
AT STATION - 0+915.00

MATCH LINE - 2  
AT STATION - 0+610.00

Existing Canal

Culvert #1  
Size: 1.0X1.0

Start of RCC Proposed Canal  
At the start, the bed of RCC Proposed  
Canal should be adjusted with bed of  
Existing Stone Masonry Canal

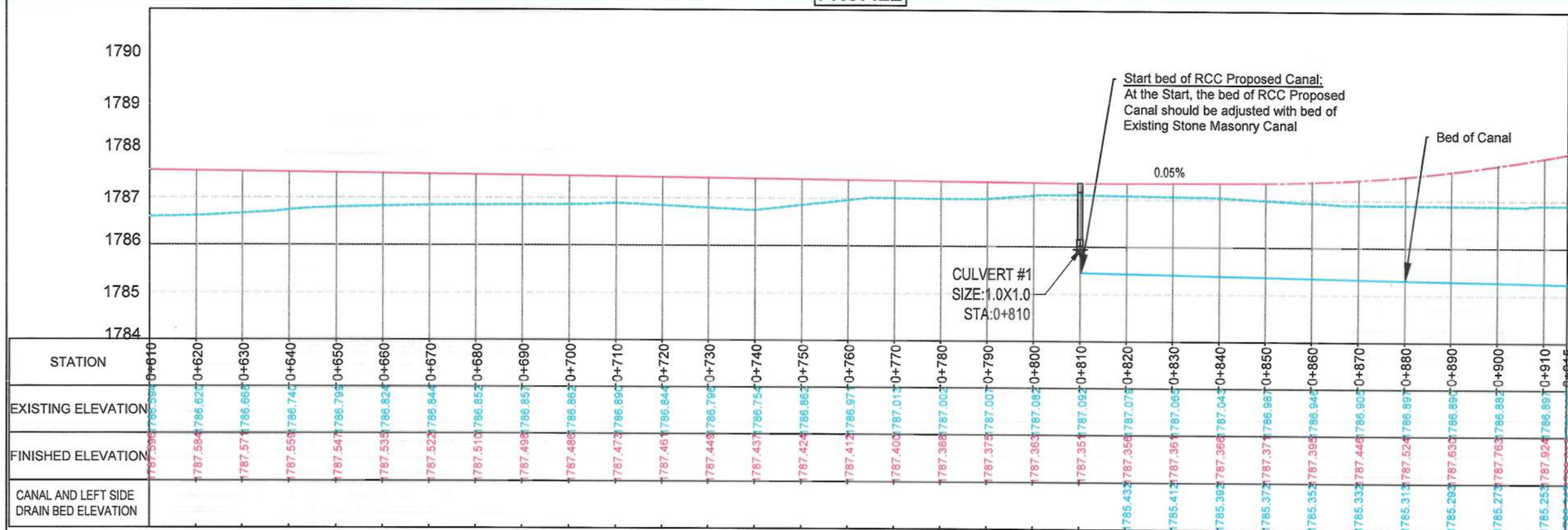
PROFILE

CULVERT #1  
SIZE: 1.0X1.0  
STA: 0+810

Start bed of RCC Proposed Canal:  
At the Start, the bed of RCC Proposed  
Canal should be adjusted with bed of  
Existing Stone Masonry Canal

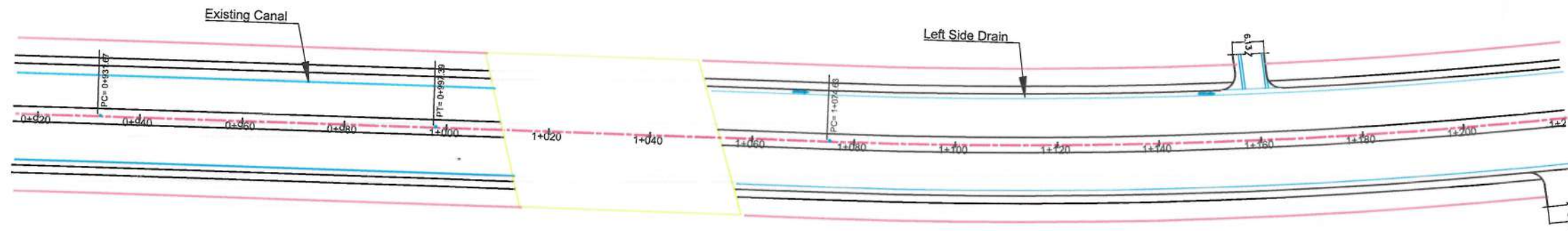
Bed of Canal

0.05%





MATCH LINE - 3  
AT STATION - 0+915.00



MATCH LINE - 4  
AT STATION - 1+220.00

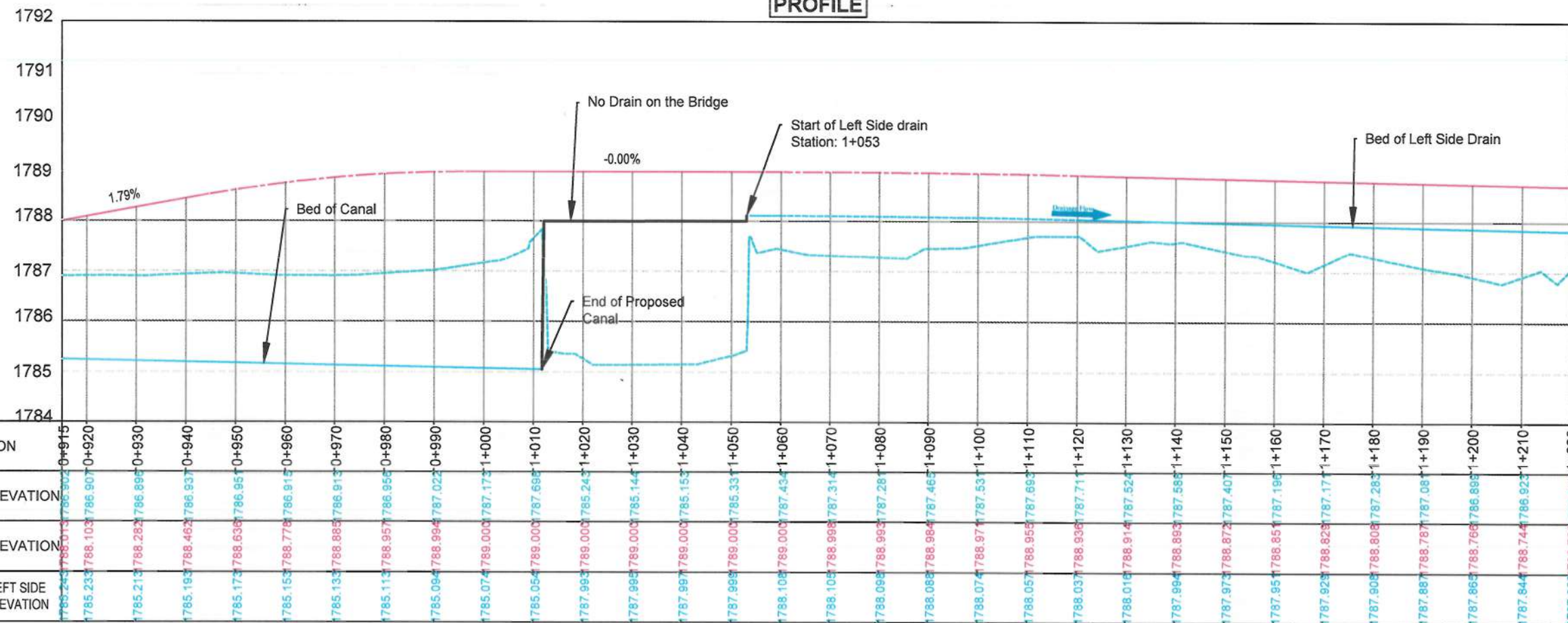
NOTE:  
1. All dimensions are in meters unless  
otherwise indicated.

LEGEND

- Row  
Proposed Center Line  
Drainage  
Proposed Culvert



PROFILE



STATION	0+915	0+920	0+930	0+940	0+950	0+960	0+970	0+980	0+990	1+000	1+010	1+020	1+030	1+040	1+050	1+060	1+070	1+080	1+090	1+100	1+110	1+120	1+130	1+140	1+150	1+160	1+170	1+180	1+190	1+200	1+210
EXISTING ELEVATION	1785.243	1785.103	1786.902	1785.233	1785.103	1786.907	1786.282	1786.937	1786.022	1787.173	1786.951	1785.243	1785.145	1785.153	1785.331	1787.431	1787.314	1787.281	1787.465	1787.531	1787.693	1787.711	1788.521	1787.581	1787.401	1787.161	1787.171	1787.281	1787.081	1786.891	1786.921
FINISHED ELEVATION	1785.243	1785.103	1786.902	1785.233	1785.103	1786.907	1786.282	1786.937	1786.022	1787.173	1786.951	1785.243	1785.145	1785.153	1785.331	1787.431	1787.314	1787.281	1787.465	1787.531	1787.693	1787.711	1788.521	1787.581	1787.401	1787.161	1787.171	1787.281	1787.081	1786.891	1786.921
CANAL AND LEFT SIDE DRAIN BED ELEVATION	1785.243	1785.103	1786.902	1785.233	1785.103	1786.907	1786.282	1786.937	1786.022	1787.173	1786.951	1785.243	1785.145	1785.153	1785.331	1787.431	1787.314	1787.281	1787.465	1787.531	1787.693	1787.711	1788.521	1787.581	1787.401	1787.161	1787.171	1787.281	1787.081	1786.891	1786.921

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:

KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e- Zaman Khan Road  
To Kabul - Jalalabad Road

Drawing Title:

LEFT SIDE DRAINAGE  
PLAN & PROFILE

Drawn: Baz Mohammad Raji  
Designed: Baz Mohammad Raji  
Checked: Hasbullah Shalizi

Date: 06/05/2024 Scale: 1:1000

Status: FINAL  
DESIGN

Project Code

SHEET  
LD P&P-02 OF 04





NOTE:  
1. All dimensions are in meters unless otherwise indicated.

LEGEND  
Row  
Proposed Center Line  
Drainage  
Proposed Culvert



Date	Revision	Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:  
LEFT SIDE DRAINAGE PLAN & PROFILE

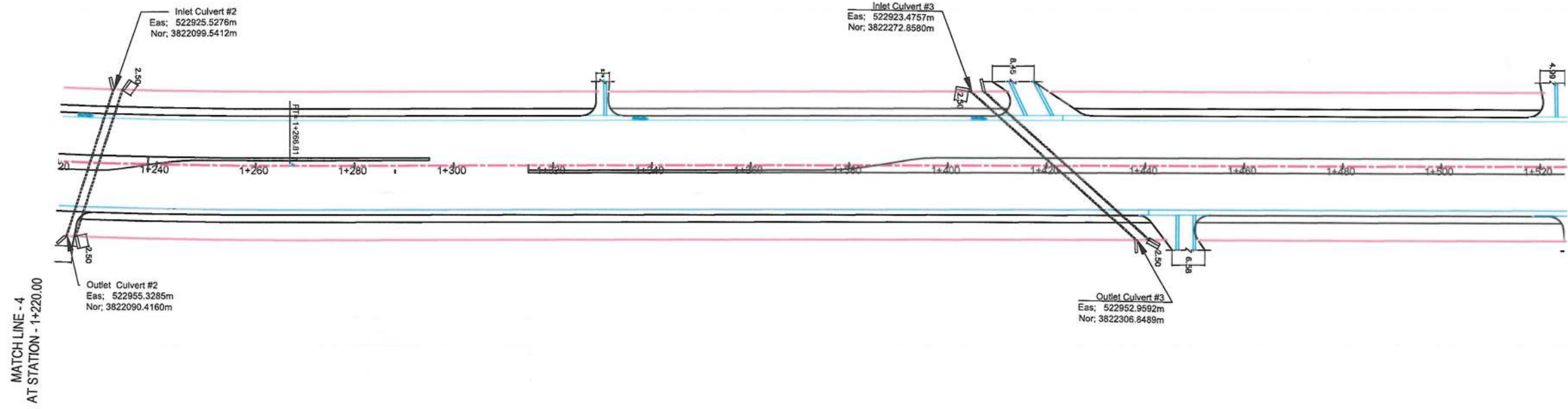
Drawn: Baz Mohammad Raji  
Designed: Baz Mohammad Raji  
Checked: Habibullah Shalizi

Date: 06/05/2024 Scale: 1:1000

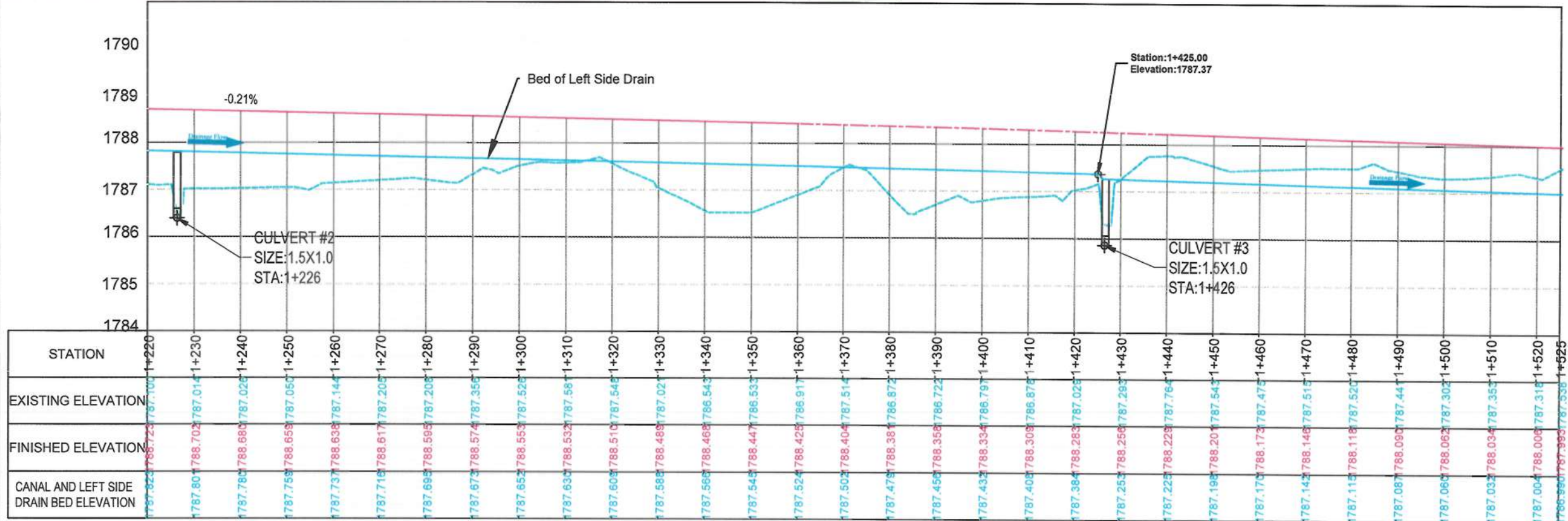
Status: FINAL DESIGN

Project Code

SHEET  
LD P&P-03 OF 04



PROFILE







NOTE:  
1. All dimensions are in meters unless otherwise indicated.

#### LEGEND

Row  
Proposed Center Line  
Drainage  
Proposed Culvert



Date Revision Details Drawn Chkd Appr

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:

KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road  
To Kabul - Jalalabad Road

Drawing Title:

LEFT SIDE DRAINAGE  
PLAN & PROFILE

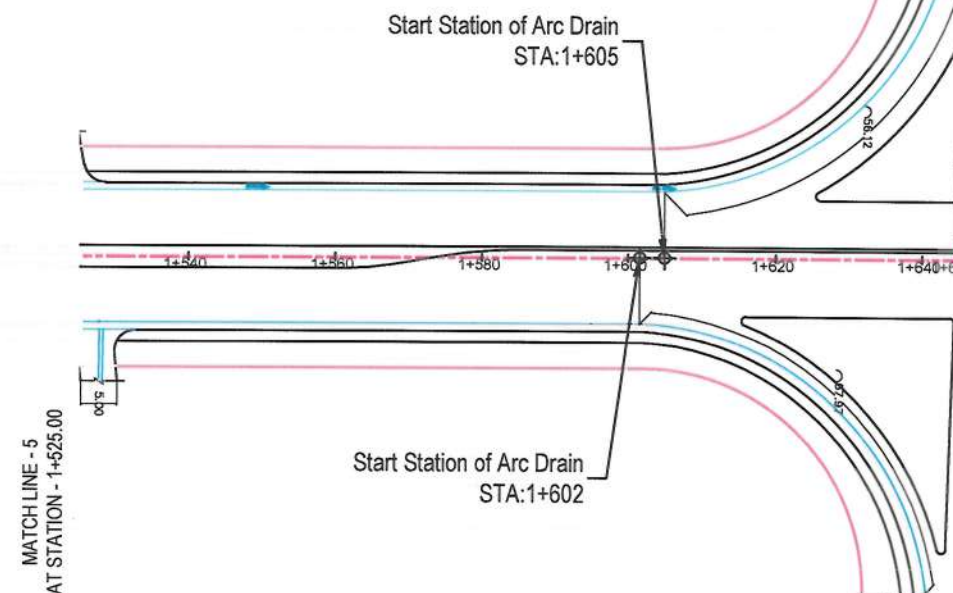
Drawn: Baz Mohammad Raji  
Designed: Baz Mohammad Raji  
Checked: Habibullah Shalizi

Date: 06/05/2024 Scale: 1:1000

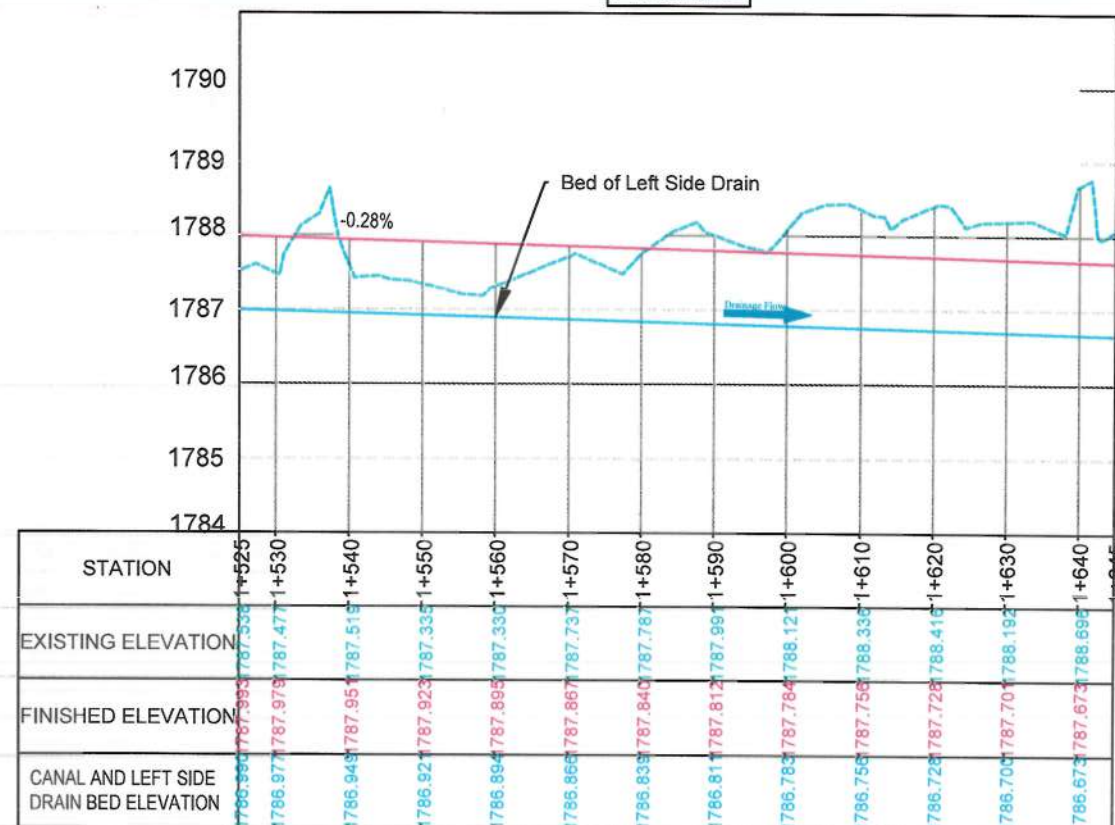
Status: FINAL DESIGN

Project Code

SHEET  
1.D P&P-04 OF 04

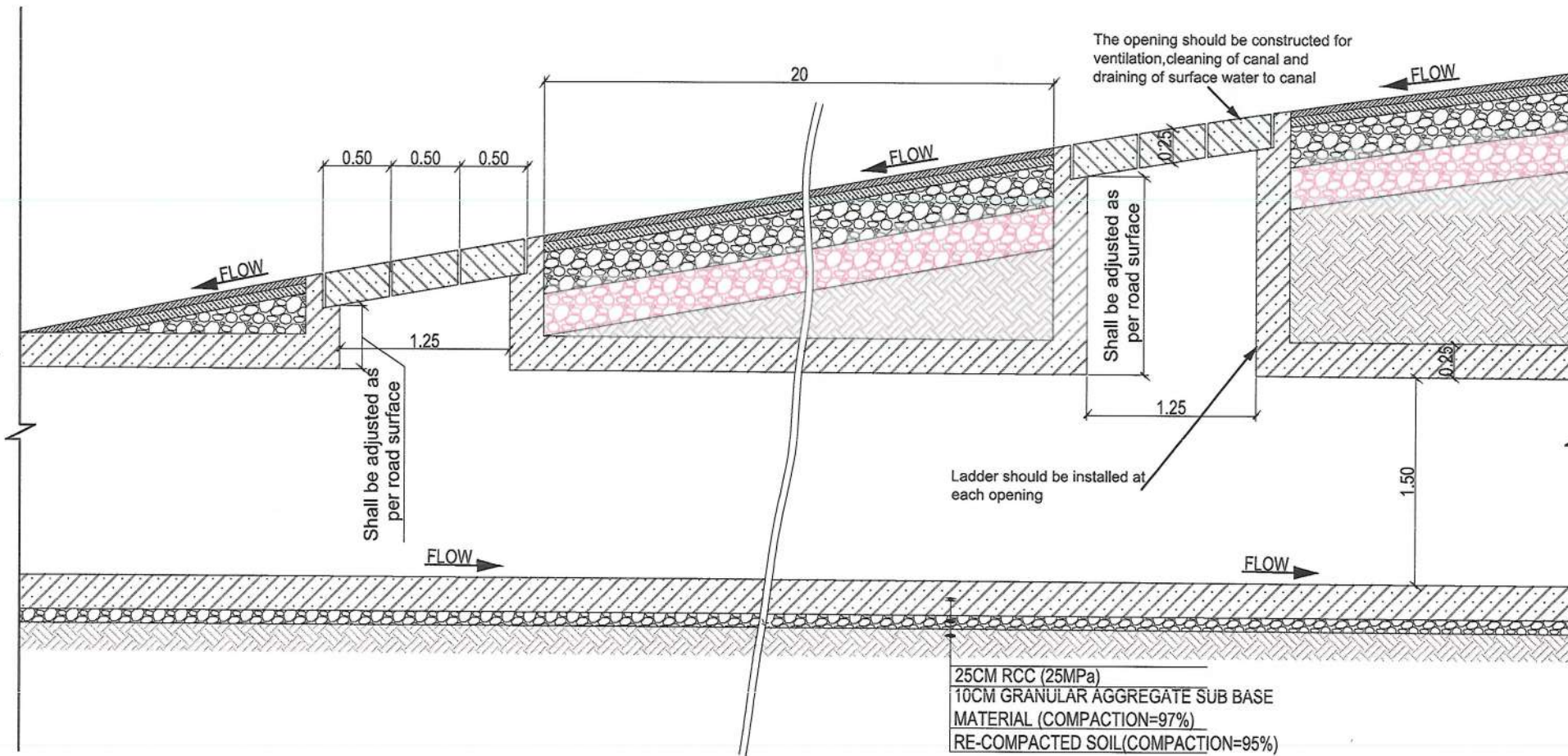
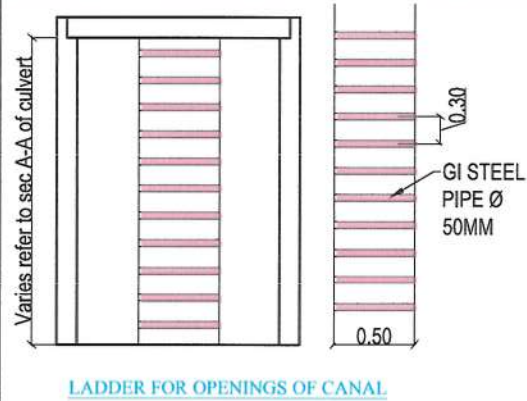
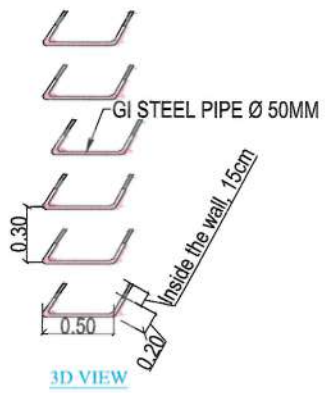
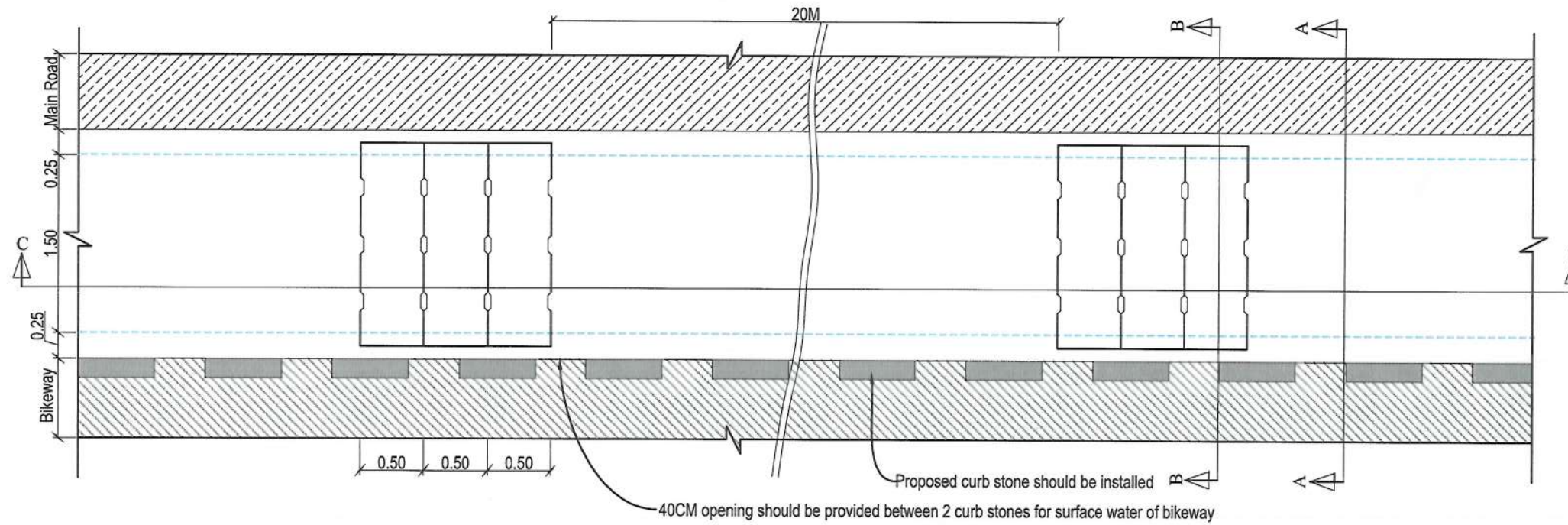


#### PROFILE





# CANAL PLAN ( STATION 0+810 TO 1+011)



## SEC C-C OF CANAL ( STATION 0+810 TO 1+011)

NOTE:  
1. All dimensions are in meter unless otherwise indicated.

NOTE:  
1. An extra bar shall be provided if the spacing available for reinforcement is more than  $n$  times the spacing between bars (where  $n$  is an integer).  
2. Subgrade should be screened from oversized, damped, and organic materials.



Rev.	Date	Revision Details	Drawn	Chd.	Appd.

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road to Kabul Jalalabad Road

Drawing Title:  
CANAL PLAN, LONGITUDINAL SECTION&DETAILS

Drawn By: Menhaj Rahman  
Designed By: Baz Mohammad Raji  
Checked By: Hasibullah Shalizi

Date: 05-06-2024  
Scale:

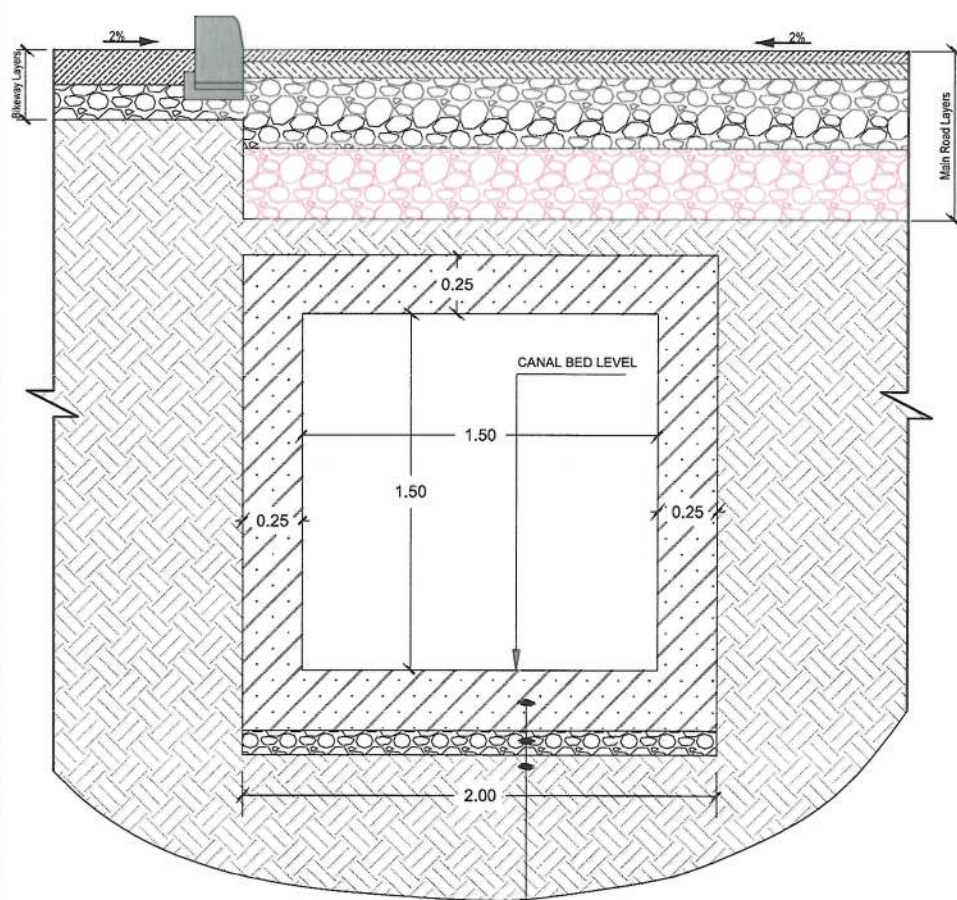
Status: FINAL DESIGN

Project Code

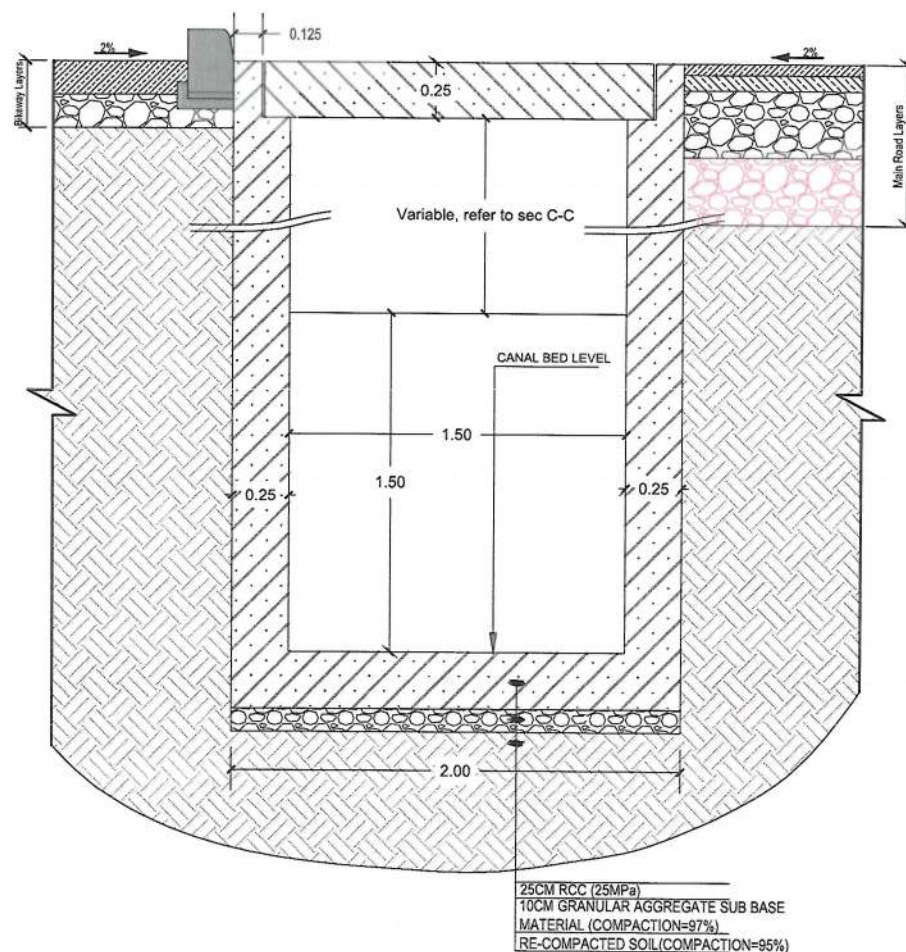
SHEET  
CSD-01 OF 02

REVISION  
00

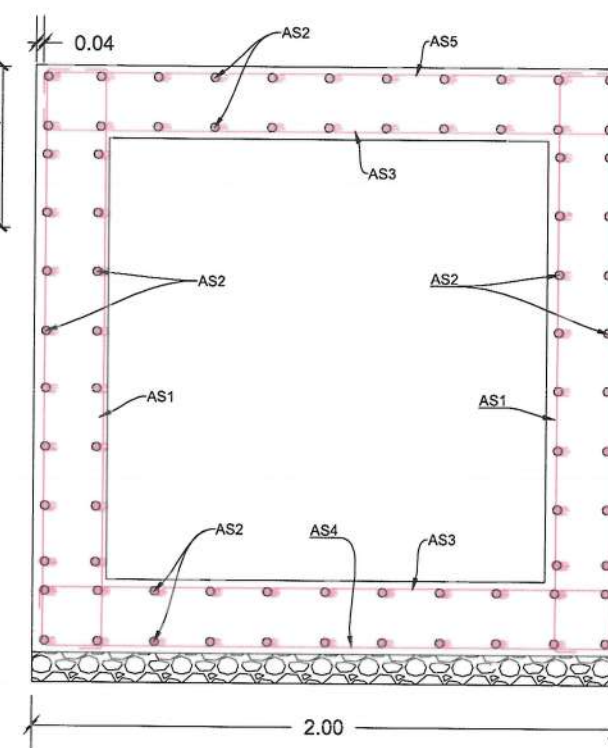




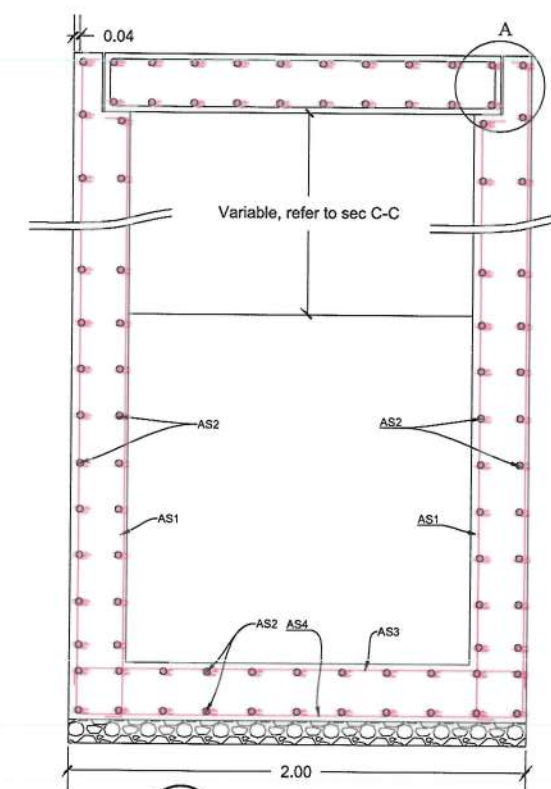
CANAL SECTION A-A, DIMENSION AND MATERIAL DETAIL



CANAL SECTION B-B, DIMENSION AND MATERIAL DETAIL



CANAL SECTION A-A, REINFORCEMENT DETAIL

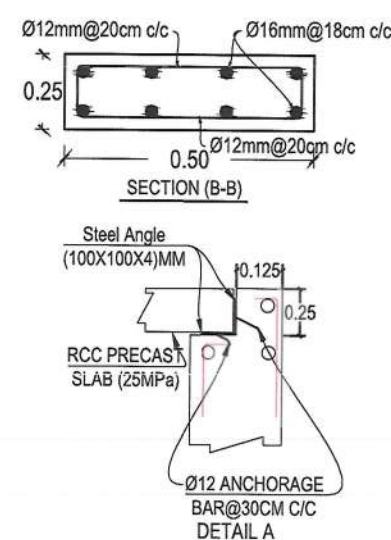
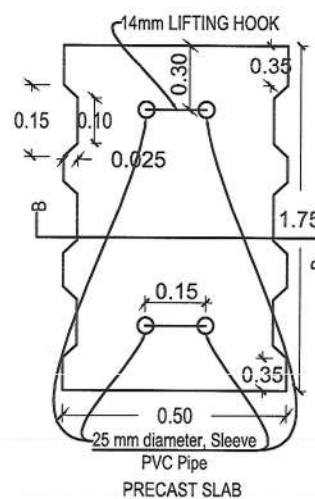


CANAL SECTION B-B, REINFORCEMENT DETAIL

CANAL (1.50X1.50)M REINFORCEMENT SCHEDULE				
Bar.No	Bar Shape	Ø (mm)	Spacing (mm)	Remark
As1		16	180	
As2		12	200	
As3		16	180	
As4		14	180	
As5		14	180	



Lifting hook detail  
Lifting hook shall be fixed with strong steel brace fastener



NOTE:  
1. All dimensions are in meter unless otherwise indicated.

NOTE:  
1. An extra bar shall be provided if the spacing available for reinforcement is more than n times the spacing between bars (where n is an integer).  
2. Subgrade should be screened from oversized, damped, and organic materials.



Rev.	Date	Revision Details	Drawn	Chkd.	Appd.

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road to Kabul Jalalabad Road

Drawing Title:  
CANAL SECTIONS&DETAILS

Drawn By: Menhaj Rahman  
Designed By: Baz Mohammad Raji  
Checked By: Hasibullah Shalizi

Date: 05/06/2024  
Scale:

Status: FINAL DESIGN

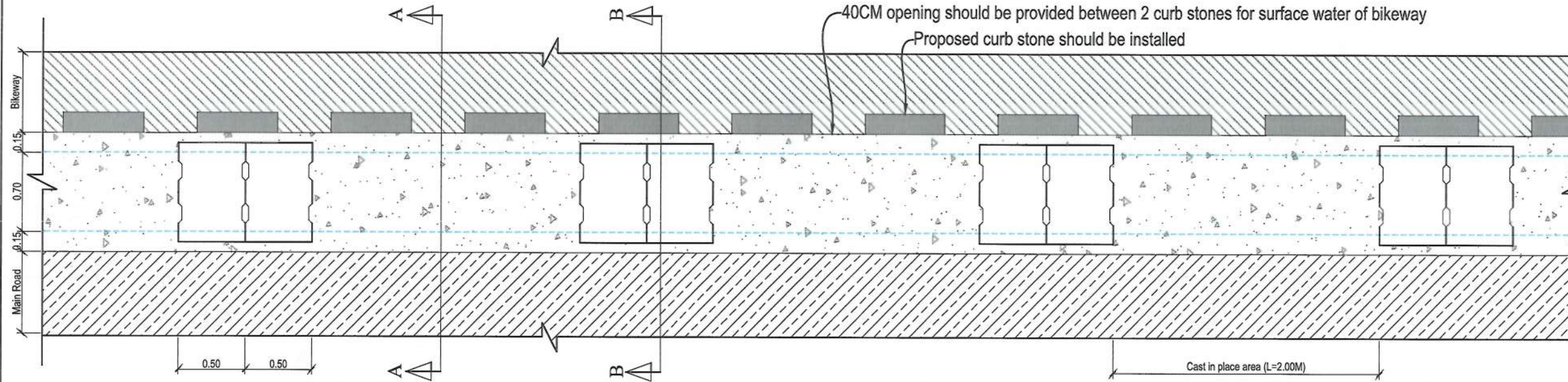
Project Code

SHEET  
CSD-02 OF 02

REVISION  
00

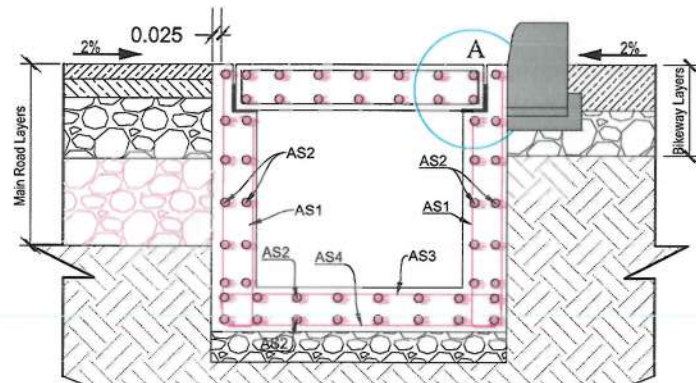


# RIGHT SIDE DRAIN (STATION 1+053 TO 1+440) TYPE A

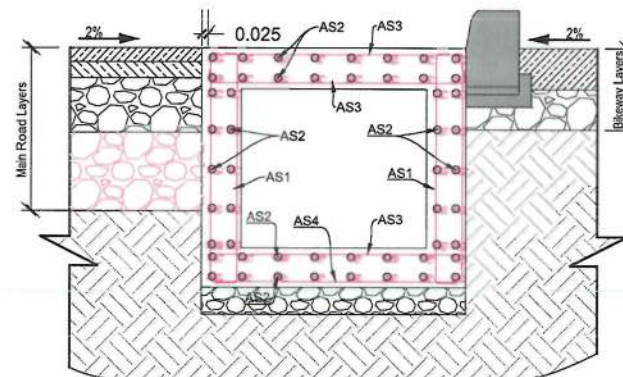


NOTE:  
1. All dimensions are in meter unless otherwise indicated.

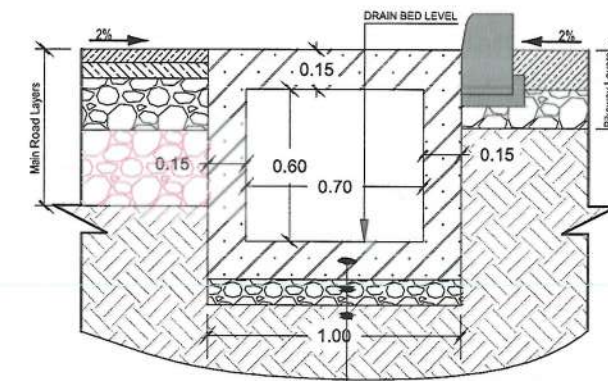
NOTE:  
1. An extra bar shall be provided if the spacing available for reinforcement is more than n times the spacing between bars (where n is an integer).  
2. Subgrade should be screened from oversized, damped, and organic materials.



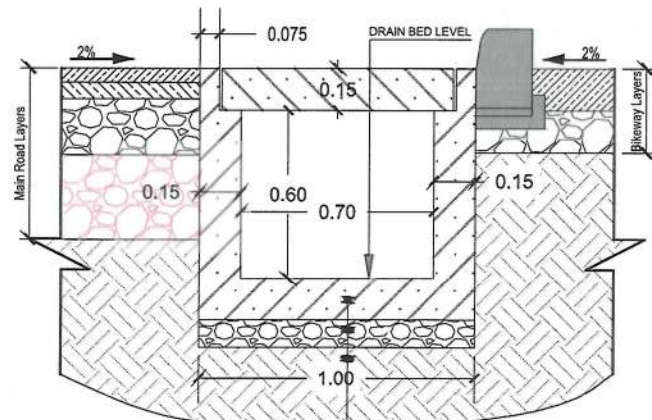
TYPE A SECTION B-B, REINFORCEMENT DETAIL



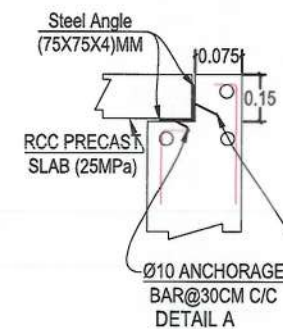
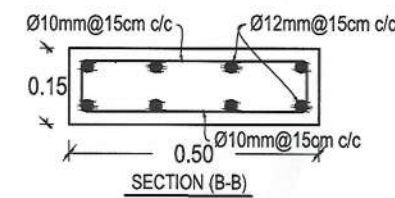
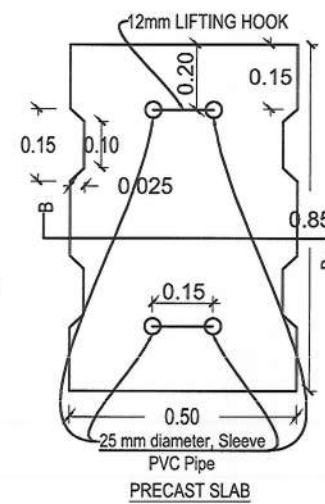
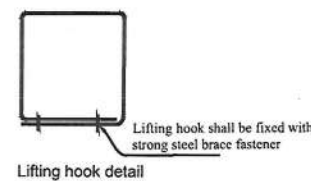
TYPE A SECTION A-A, REINFORCEMENT DETAIL



TYPE A SECTION A-A, DIMENSION AND MATERIAL DETAIL



TYPE A SECTION B-B, DIMENSION AND MATERIAL DETAIL



TYPE A SIDE DITCH (0.7X0.60)M REINFORCEMENT SCHEDULE

Bar.No	Bar Shape	Ø (mm)	Spacing (mm)	Remark
As1		12	150	
As2		10	150	
As3		12	150	
As4		12	150	

Rev.	Date	Revision Details	Drawn	Chkd.	Appd.

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road to Kabul Jalalabad Road

Drawing Title:  
TYPE A RIGHT SIDE DRAIN PLAN, SECTIONS&DETAILS

Drawn By: Menhaj Rahnman  
Designed By: Baz Mohammad Raji  
Checked By: Hasibullah Shalizi

Date: 05/06/2024  
Scale:

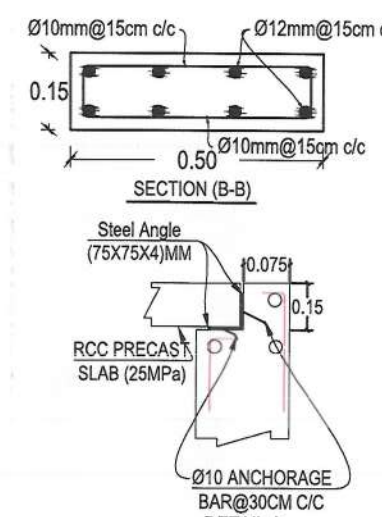
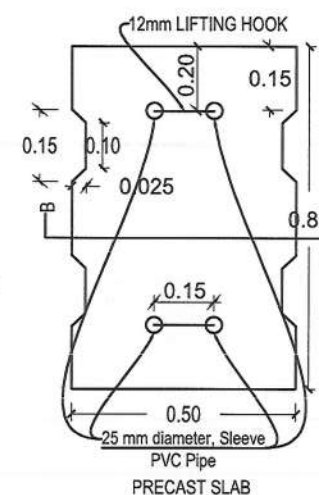
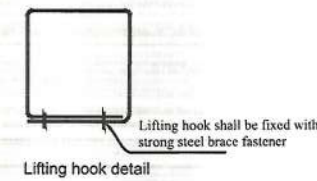
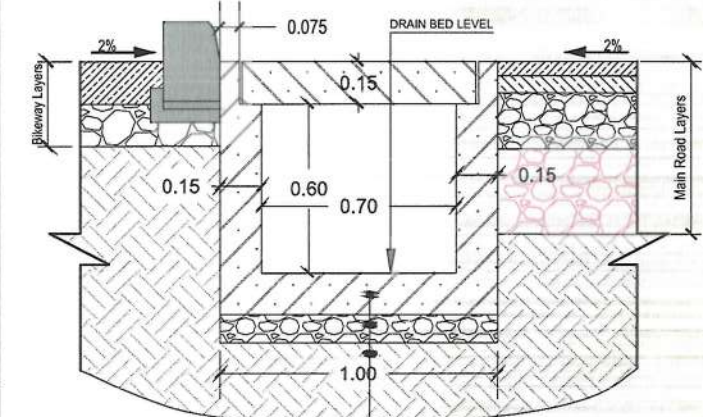
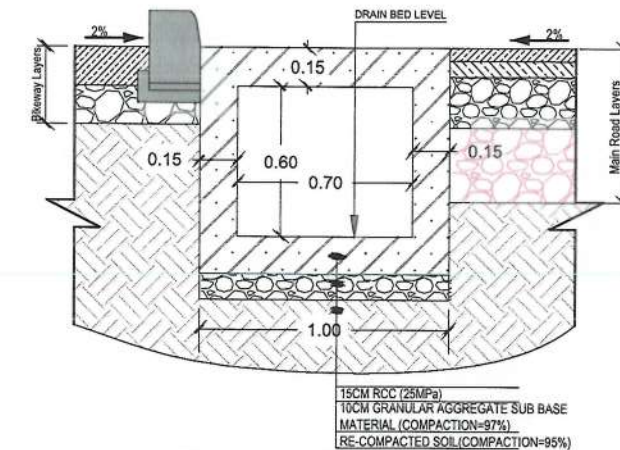
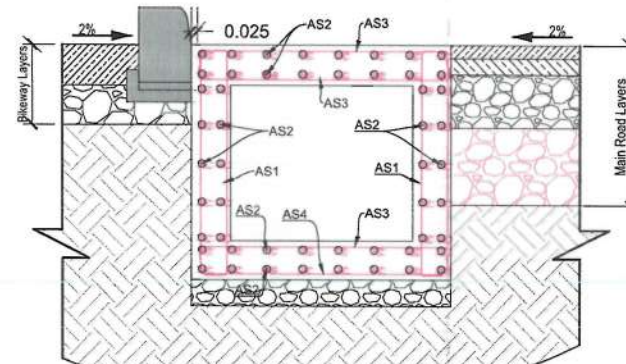
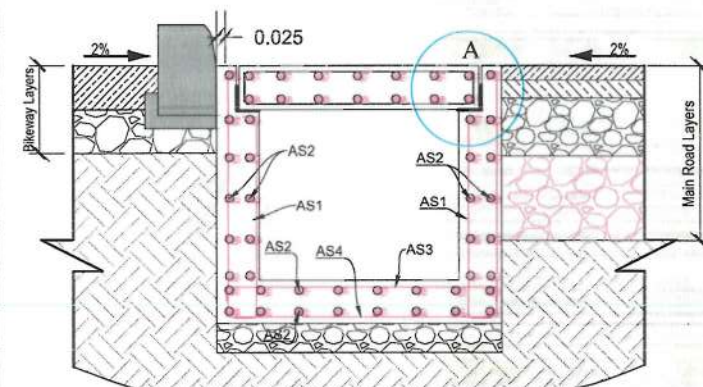
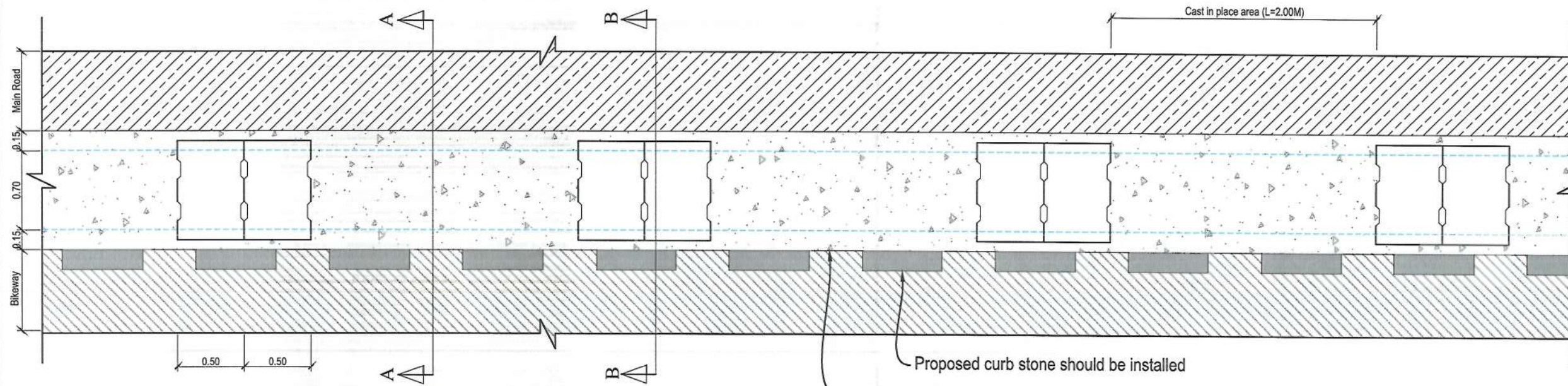
Status: FINAL DESIGN

Project Code:

SHEET: SDPSD-01 OF 05  
REVISION: 00



# LEFT SIDE DRAIN ( STATION 1+053 TO 1+425) TYPE A



TYPE A SIDE DITCH (0.7X0.60)M REINFORCEMENT SCHEDULE				
Bar.No	Bar Shape	Ø (mm)	Spacing (mm)	Remark
As1		12	150	
As2		10	150	
As3		12	150	
As4		12	150	

NOTE:  
1. All dimensions are in meter unless otherwise indicated.

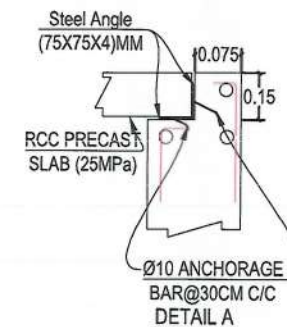
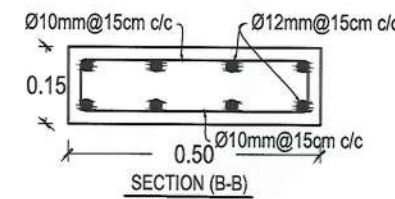
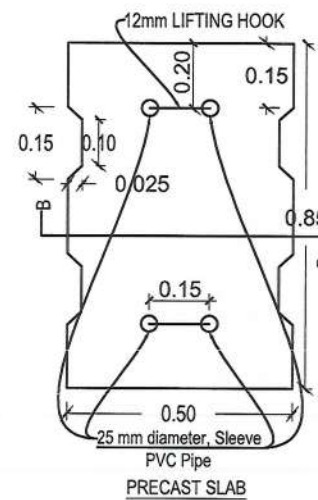
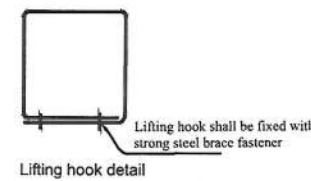
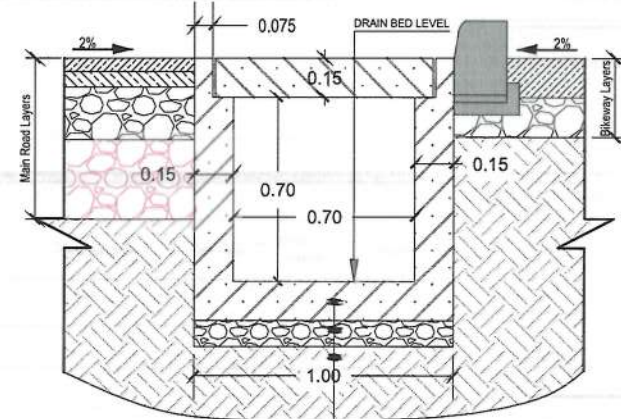
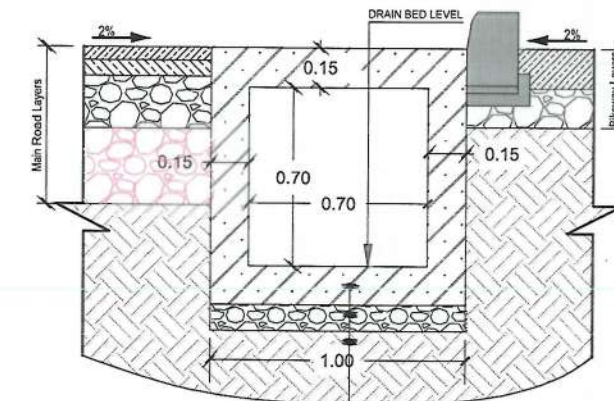
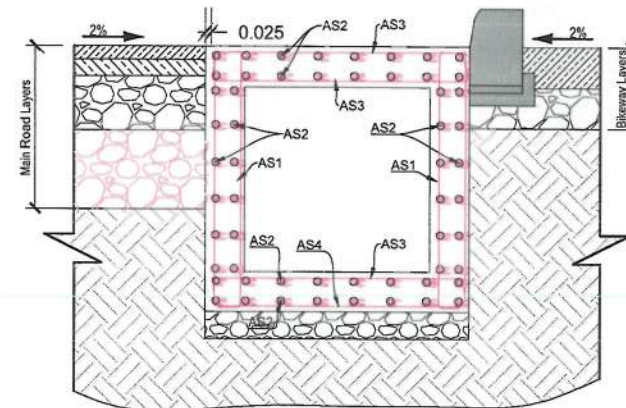
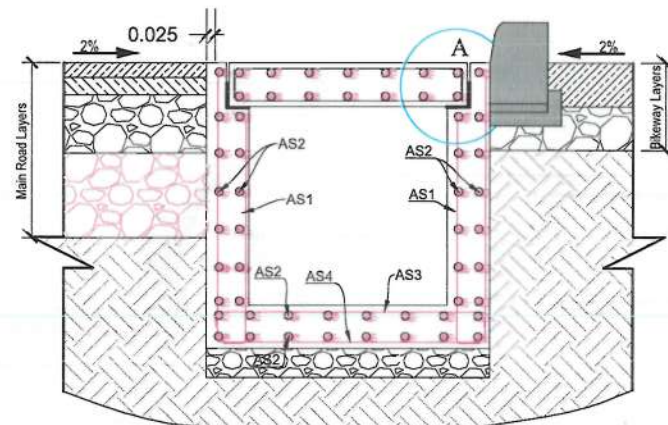
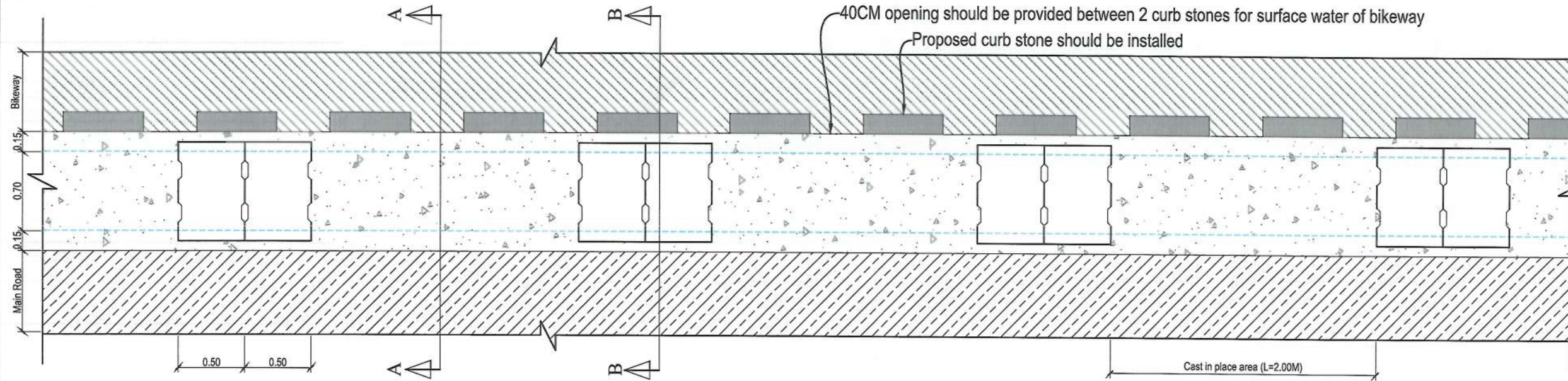
NOTE:  
1. An extra bar shall be provided if the spacing available for reinforcement is more than n times the spacing between bars (where n is an integer).  
2. Subgrade should be screened from oversized, damped, and organic materials.



Rev.	Date	Revision Details	Drawn	Chkd	Appd.
ISLAMIC EMIRATE OF AFGHANISTAN					
Designed By:					
KABUL MUNICIPALITY DESIGN TEAM					
Project Name:					
Construction of Road From Qala-e-Zaman Khan Road to Kabul Jalalabad Road					
Drawing Title:					
TYPE A LEFT SIDE DRAIN PLAN, SECTIONS&DETAILS					
Drawn By:			Signature:		
Designed By:			Signature:		
Checked By:			Signature:		
Date:			Scale:		
05/06/2024					
Status: FINAL DESIGN					
Project Code:					
SHEET			REVISION		
SDPSD-02 OF 05			00		



# RIGHT SIDE DRAIN (STATION 0+810 TO 1+011 AND 1+440 TO 1+645) TYPE B



TYPE B SIDE DITCH (0.7X0.7)M REINFORCEMENT SCHEDULE				
Bar.No	Bar Shape	Ø (mm)	Spacing (mm)	Remark
As1		12	150	
As2		10	150	
As3		12	150	
As4		12	150	

NOTE:  
1. All dimensions are in meter unless otherwise indicated.

NOTE:  
1. An extra bar shall be provided if the spacing available for reinforcement is more than n times the spacing between bars (where n is an integer).  
2. Subgrade should be screened from oversized, dumped, and organic materials.



Rev.	Date	Revision Details	Drawn	Chkd	Appd.

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:

KABUL MUNICIPALITY DESIGN TEAM

Project Name:

Construction of Road From Qala-e-Zaman Khan Road to Kabul Jalalabad Road

Drawing Title:

TYPE B RIGHT SIDE DRAIN PLAN, SECTIONS&DETAILS

Drawn By: Menhaji Rahman

Designed By: Baz Mohammad Raji

Checked By: Hasibullah Shalizi

Date: 05-06-2024

Status: FINAL DESIGN

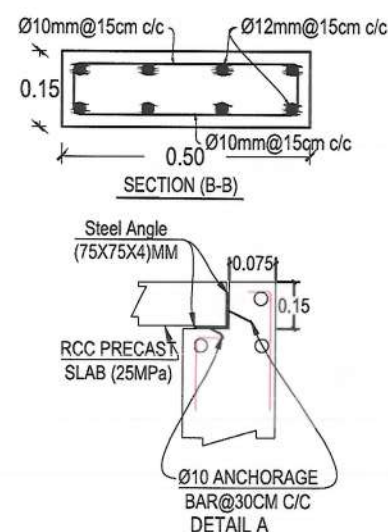
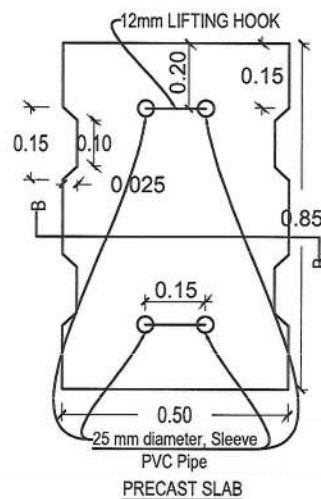
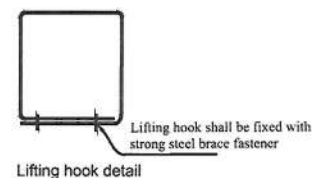
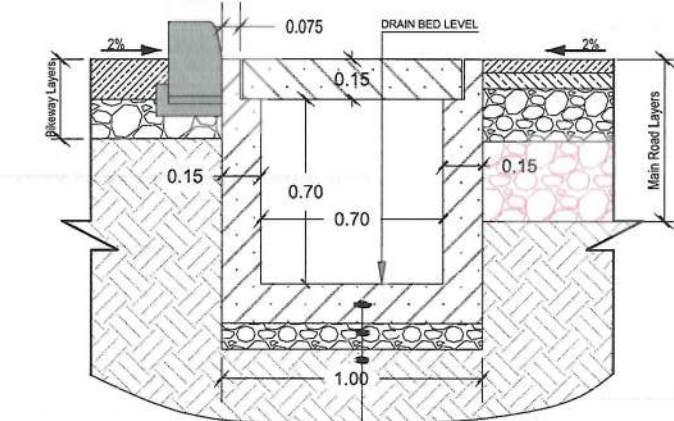
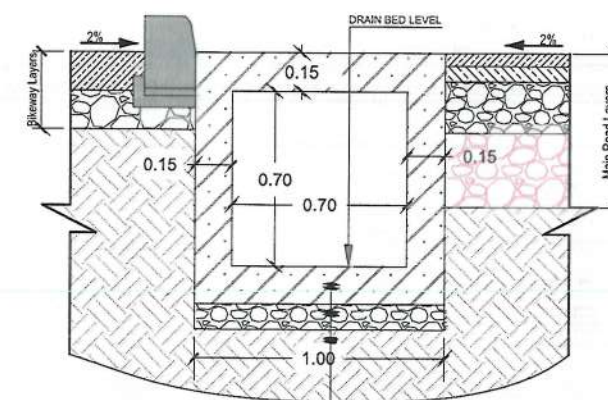
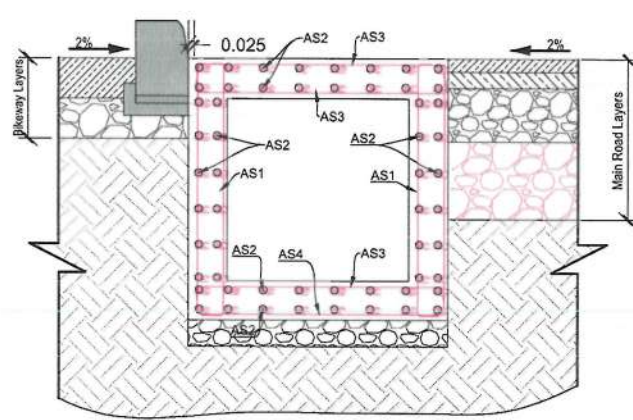
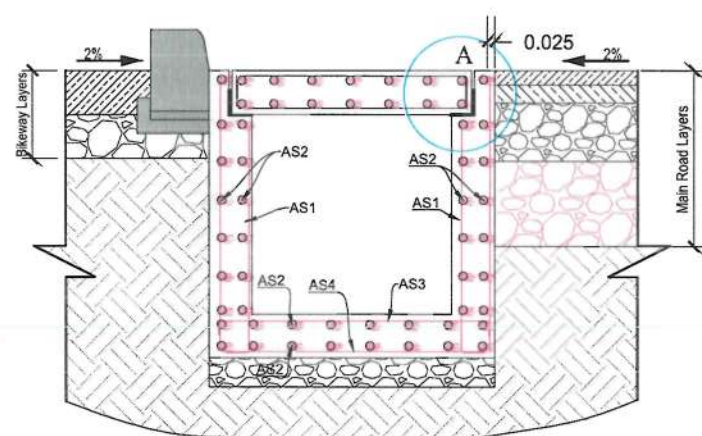
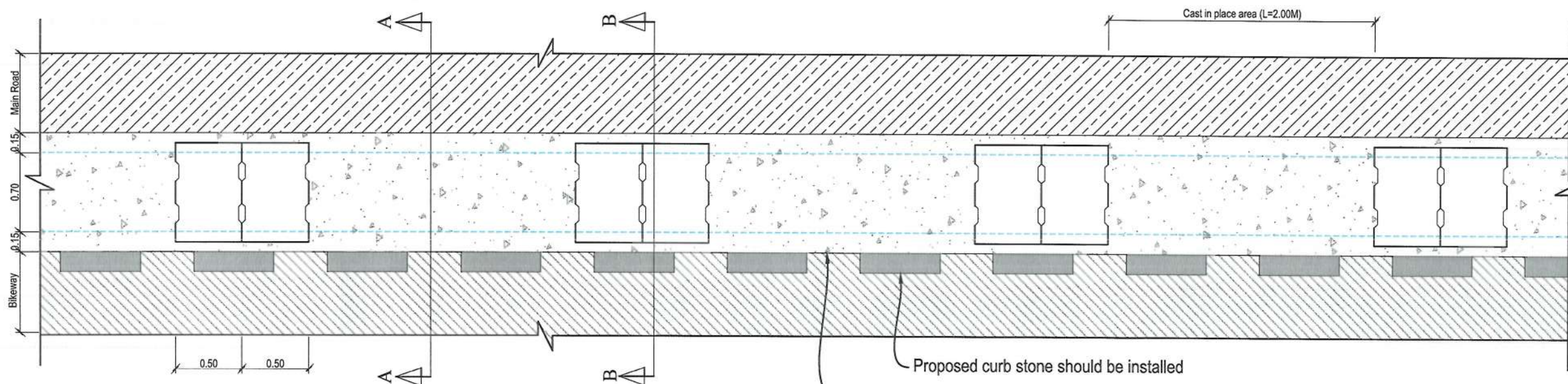
Project Code

SHEET SDPSD-03 OF 05

REVISION 00



# LEFT SIDE DRAIN ( STATION 1+425 TO 1+645) TYPE B



TYPE B SIDE DITCH (0.7X0.70)M REINFORCEMENT SCHEDULE				
Bar.No	Bar Shape	Ø (mm)	Spacing (mm)	Remark
As1		12	150	
As2		10	150	
As3		12	150	
As4		12	150	

NOTE:  
1. All dimensions are in meter unless otherwise indicated.

NOTE:  
1. An extra bar shall be provided if the spacing available for reinforcement is more than n times the spacing between bars (where n is an integer).  
2. Subgrade should be screened from oversized, damped, and organic materials.



Rev.	Date	Revision Details	Drawn	Chkd.	Appd.

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:

KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road to Kabul Jalalabad Road

Drawing Title:  
TYPE B LEFT SIDE DRAIN PLAN, SECTIONS&DETAILS

Drawn By: Menhaj Rahman  
Designed By: Baz Mohammad Raji  
Checked By: Hasibullah Shalizi

Date: 05-06/2024  
Scale:

Status: FINAL DESIGN

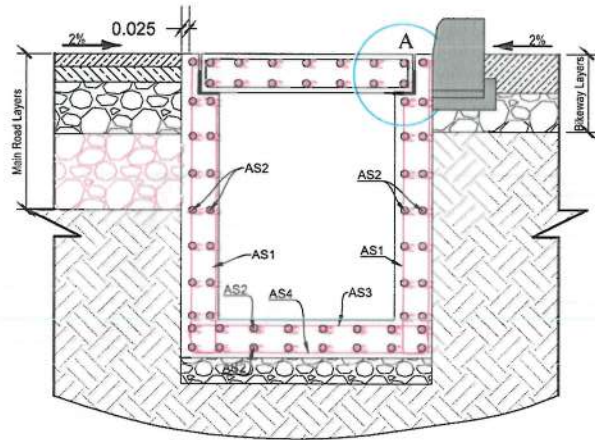
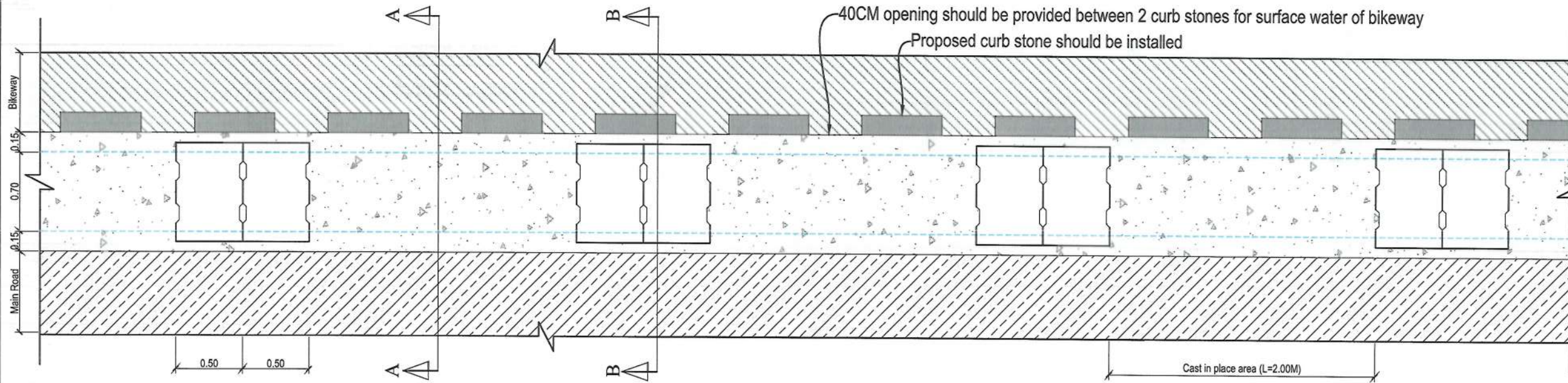
Project Code

SHEET  
SDPSD-04 OF 05

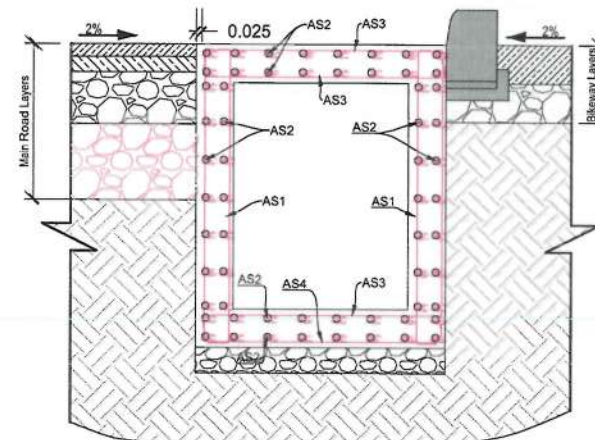
REVISION  
00



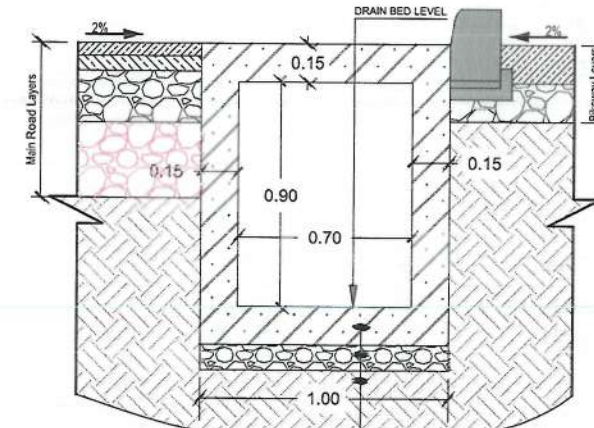
# RIGHT SIDE DRAIN ( STATION 0+000 TO 0+810) TYPE C



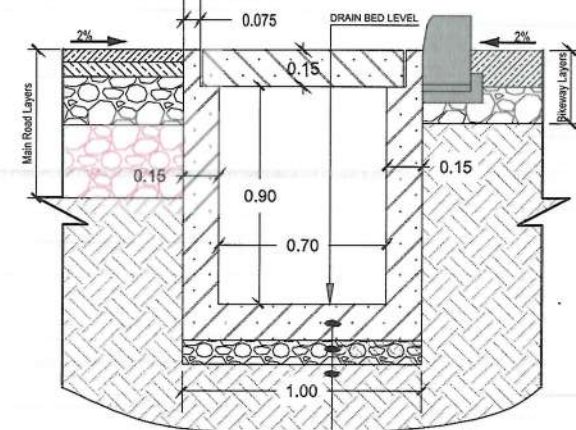
TYPE C SECTION B-B, REINFORCEMENT DETAIL



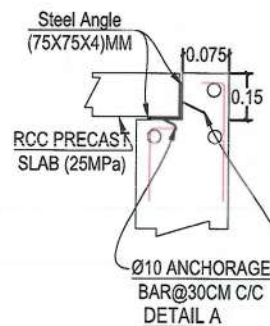
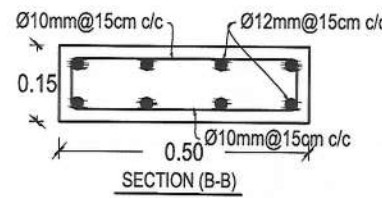
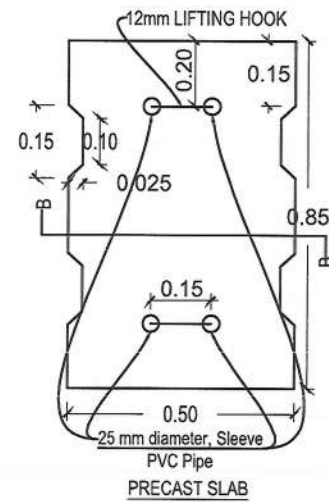
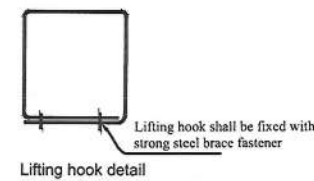
TYPE C SECTION A-A, REINFORCEMENT DETAIL



TYPE C SECTION A-A, DIMENSION AND MATERIAL DETAIL



TYPE C SECTION B-B, DIMENSION AND MATERIAL DETAIL



TYPE C SIDE DITCH (0.7X0.90)M REINFORCEMENT SCHEDULE				
Bar.No	Bar Shape	Ø (mm)	Spacing (mm)	Remark
As1		12	150	
As2		10	150	
As3		12	150	
As4		12	150	

NOTE:  
1. All dimensions are in meter unless otherwise indicated.

NOTE:  
1. An extra bar shall be provided if the spacing available for reinforcement is more than n times the spacing between bars (where n is an integer).  
2. Subgrade should be screened from oversized, damped, and organic materials.



Rev.	Date	Revision Details	Drawn	Chkd.	Appd.

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road to Kabul Jalalabad Road

Drawing Title:  
TYPE C SIDE DRAIN PLAN, SECTIONS&DETAILS

Drawn By: Menhajou Rahman  
Designed By: Baz Mohammad Raji  
Checked By: Hasibullah Shalizi

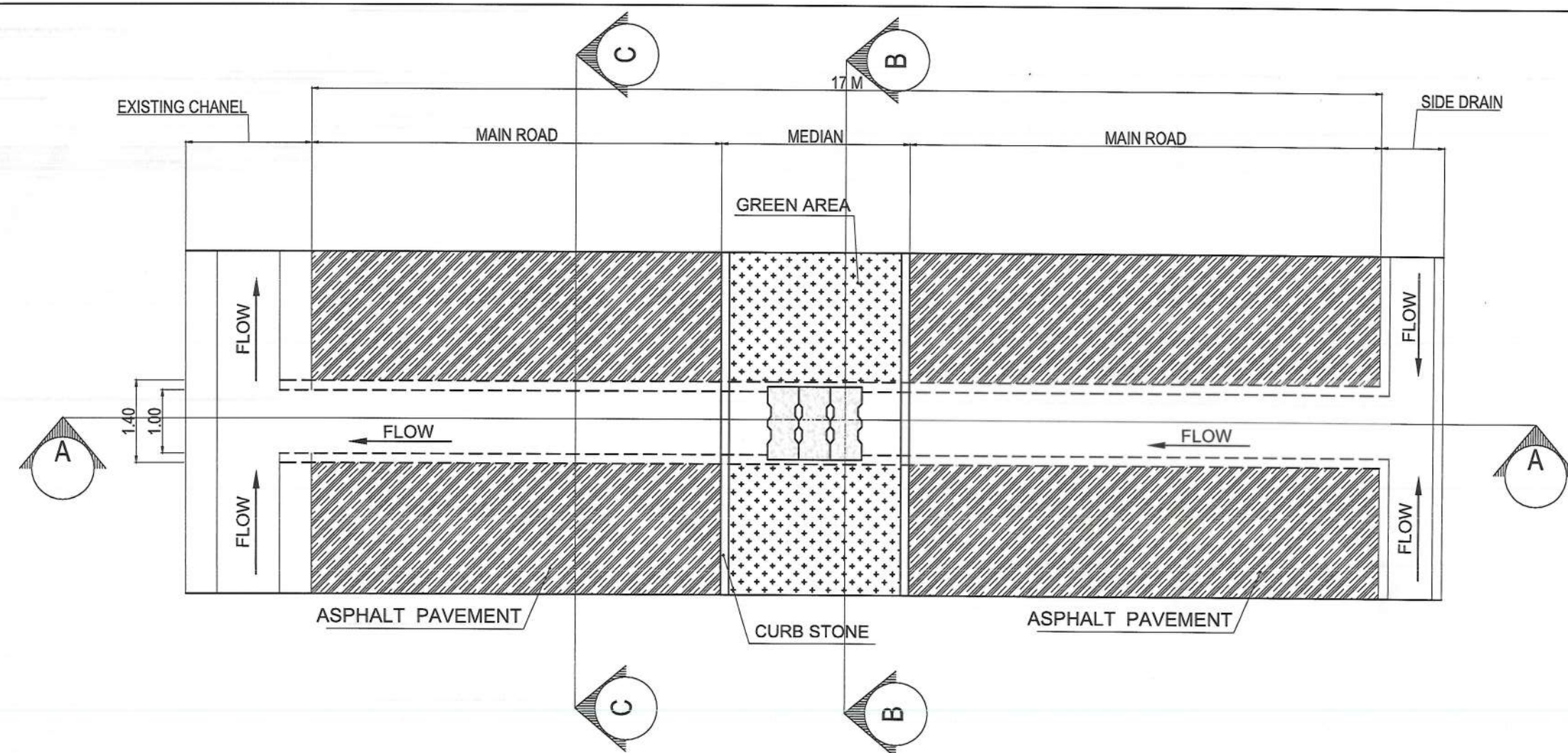
Date: 05-06-2024  
Scale:

Status: FINAL DESIGN

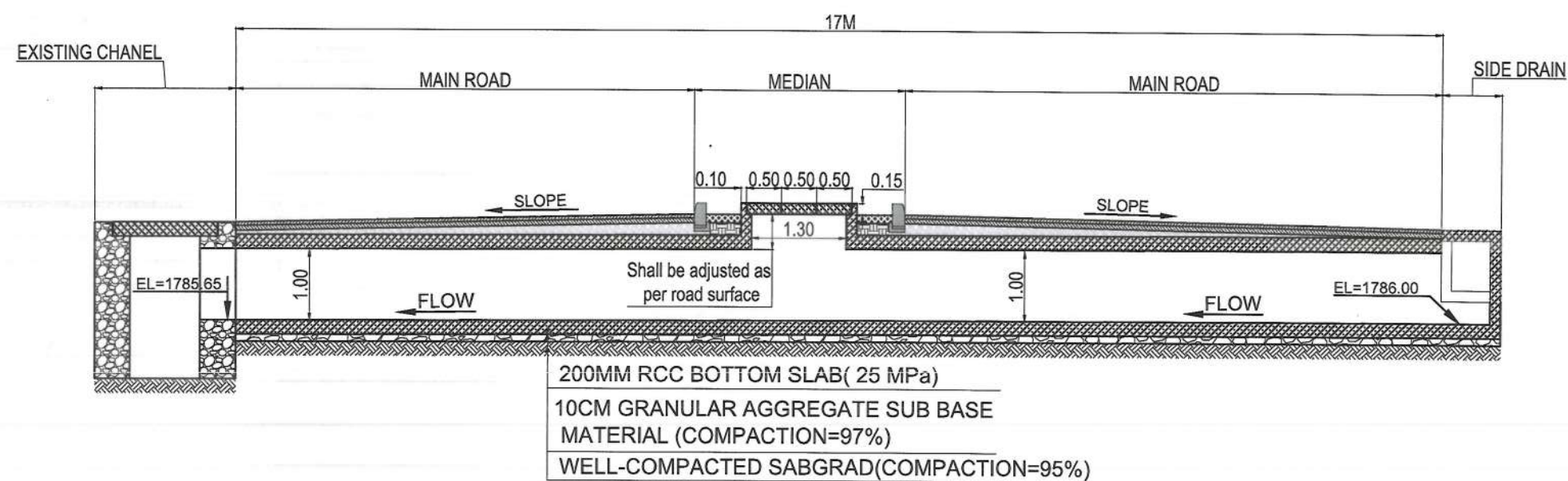
Project Code:

SHEET	REVISION
SDPSD-05 OF 05	00





PLAN OF RCC CULVERT #01 STATION (0+810)



RCC CULVERT SECTION A-A

NOTE:  
1. All dimensions are in meters unless otherwise indicated.

NOTE:  
Subgrade should be screened from oversized, damp, and organic materials.



Rev.	Date	Revision Details	Drawn	Chkd.	Appd.

ISLAMIC EMIRAT OF  
AFGHANISTAN

Designed by:  
KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-  
Zaman Khan Road to Kabul Jalalabad  
Road

Drawing Title:  
CULVERT #01 PLAN AND  
LONGITUDINAL SECTION

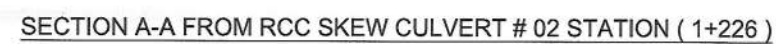
Drawn by:  
Menhaj Rahman  
Designed by:  
Baz Mohammad Raji  
Checked by:  
Hasibullah Shalizi

Date:  
05/06/2024  
Scale:

Status:  
FINAL DESIGN

SHEET	REVISION
CPLS-01 OF 01	00



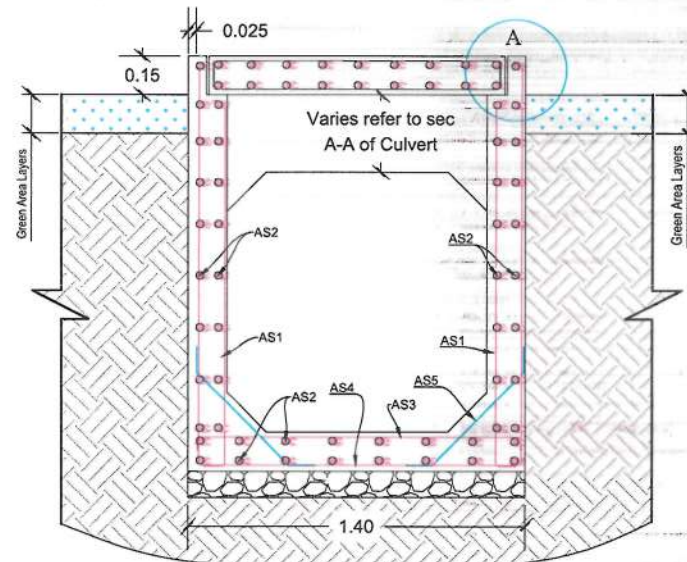


SHEET		REVISION
CPLS-01 OF 01		00

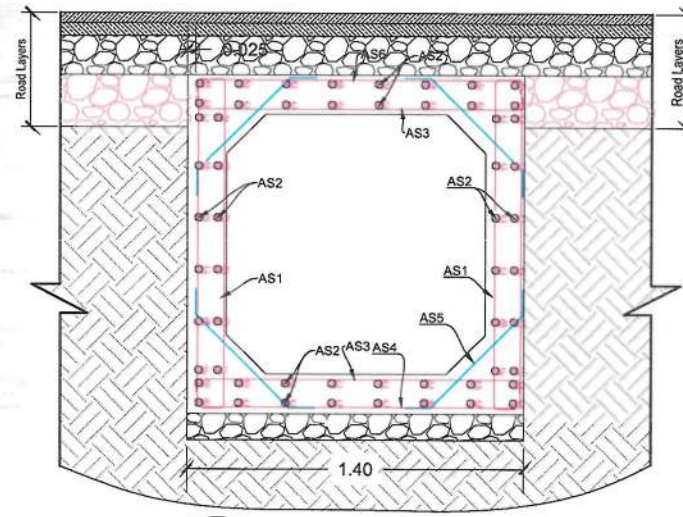




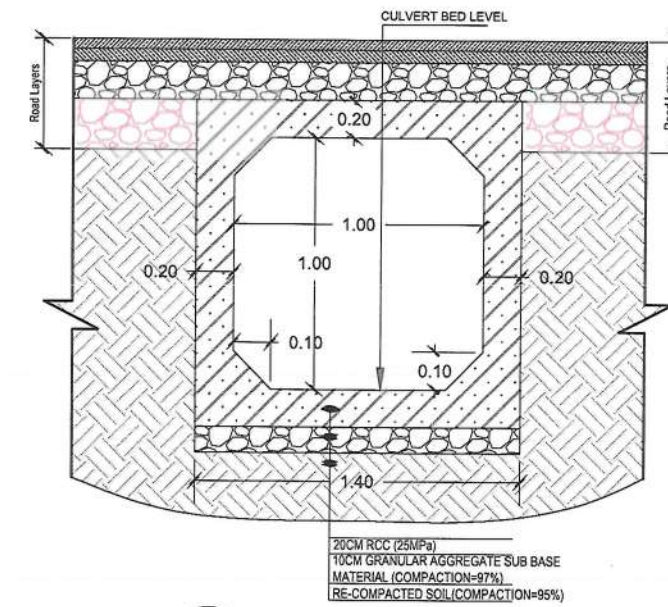




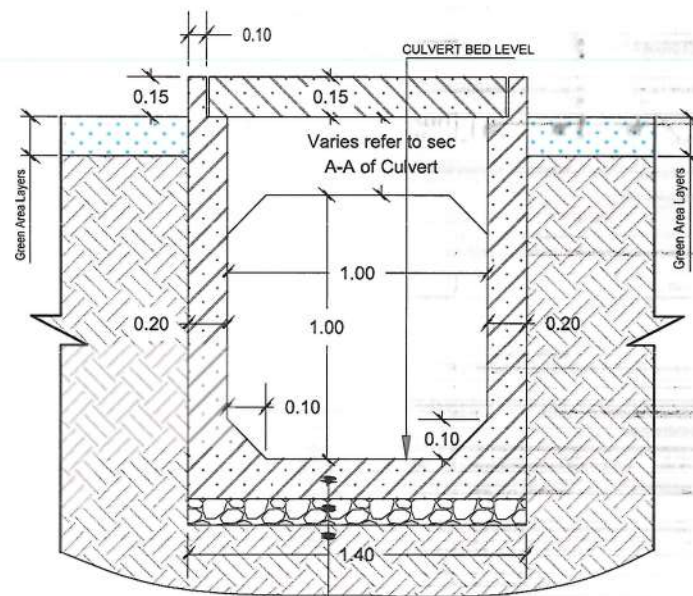
CUL #1 SECTION B-B, REINFORCEMENT DETAILS



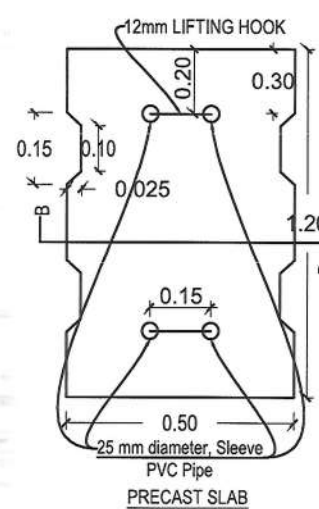
CUL#1 SECTION A-A, REINFORCEMENT DETAIL



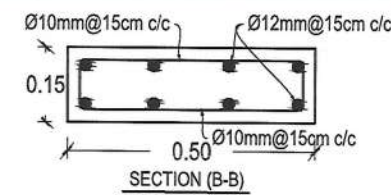
CUL#1 SECTION A-A, DIMENSION AND MATERIAL DETAILS



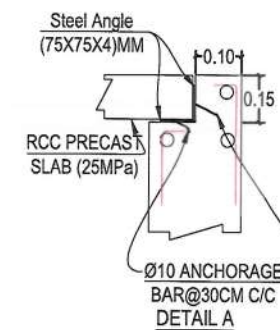
CUL #1 SECTION B-B, DIMENSION AND MATERIAL



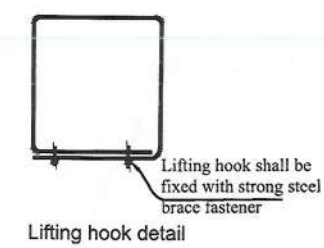
PRECAST SLAB



SECTION (B-B)



DETAIL A



Lifting hook detail

CULVERT (1.00X1.00)M REINFORCEMENT SCHEDULE

Bar.No	Bar Shape	Ø (mm)	Spacing (mm)	Remark
As1		14	180	
As2		12	200	
As3		14	180	
As4		12	180	
As5		12	200	
As6		12	180	

NOTE:  
1. All dimensions are in meter unless otherwise indicated.

NOTE:  
1. An extra bar shall be provided if the spacing available for reinforcement is more than n times the spacing between bars (where n is an integer).  
2. Subgrade should be screened from oversized, damped, and organic materials.



Rev.	Date	Revision Details	Drawn	Chkd.	Appd.

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:  
KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road to Kabul Jalalabad Road

Drawing Title:  
CULVERT # 01  
SECTIONS & DETAILS

Drawn By: Menhaji Rahman  
Designed By: Baz Mohammad Raji  
Checked By: Hasibullah Shalizi

Date: 05/06/2024  
Scale:

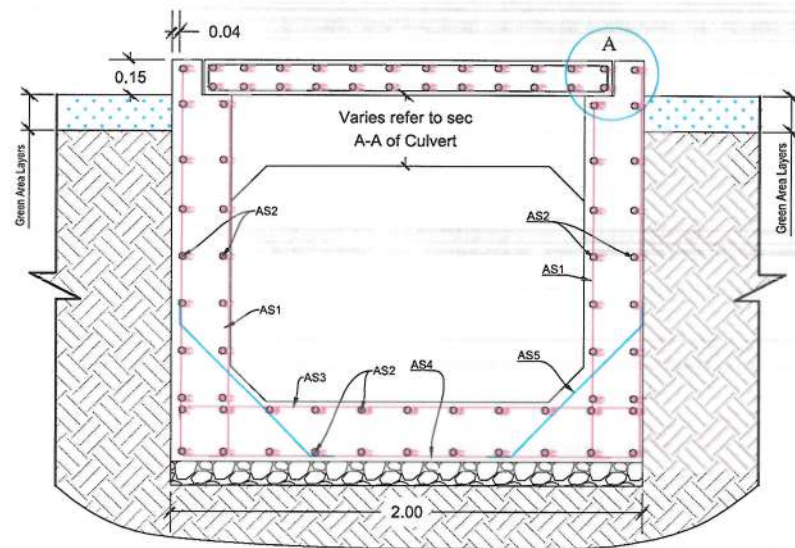
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Project Code

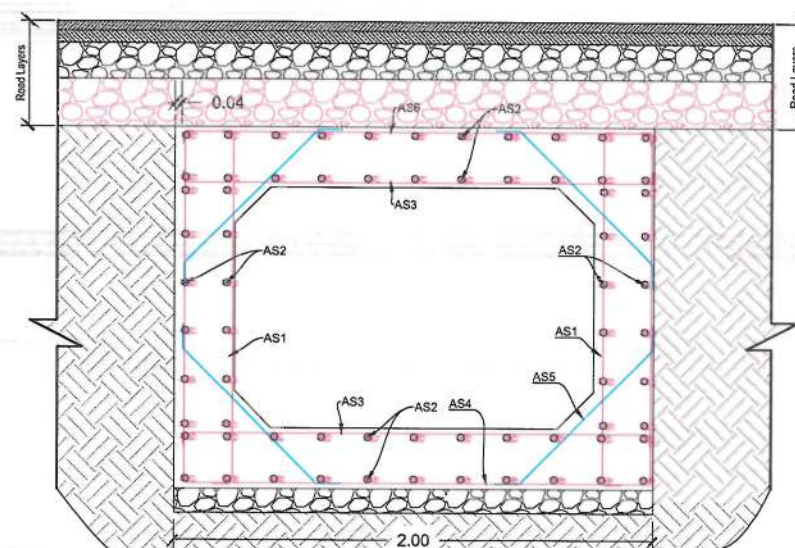
SHEET  
CSD#1-01 OF 01

REVISION  
00

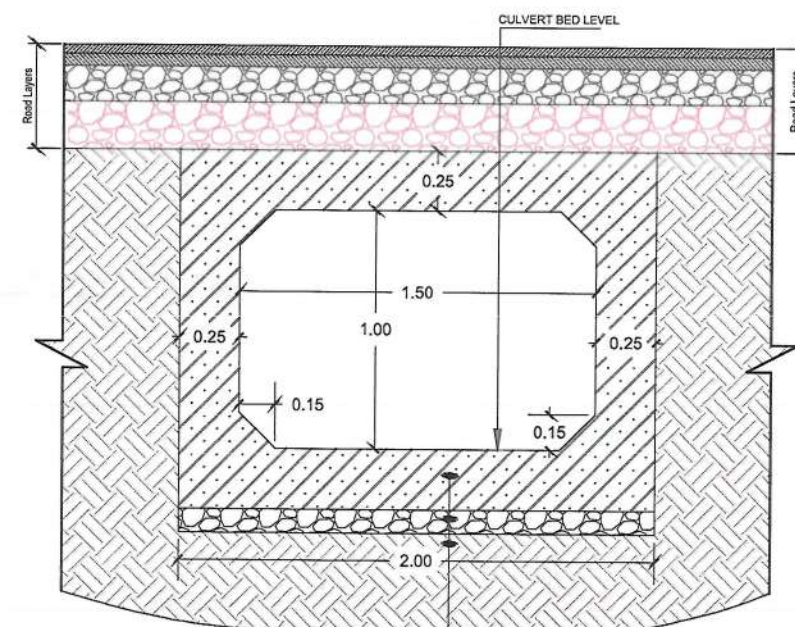




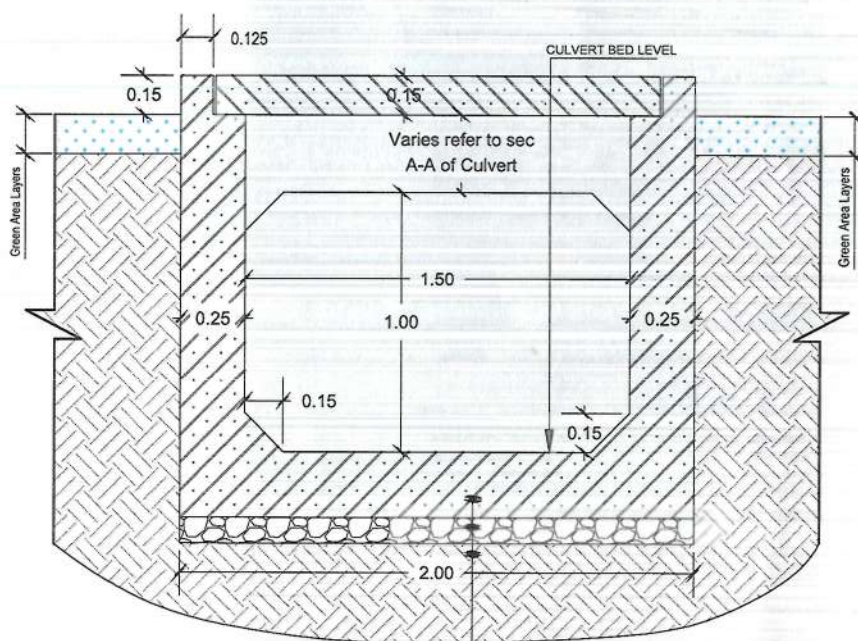
CUL #2 AND #3 SECTION B-B, REINFORCEMENT DETAILS



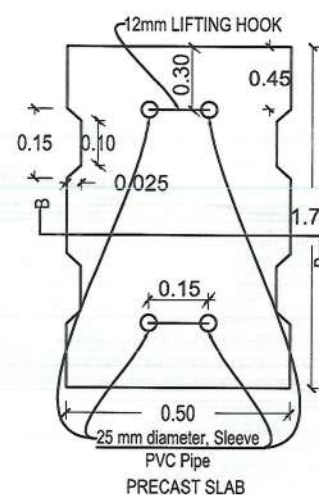
CUL #2 AND #3 SECTION A-A, REINFORCEMENT DETAIL



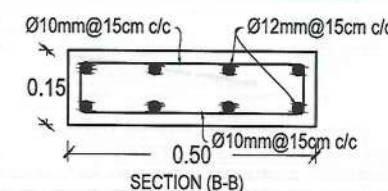
CUL #2 AND #3 SECTION A-A, DIMENSION AND MATERIAL DETAILS



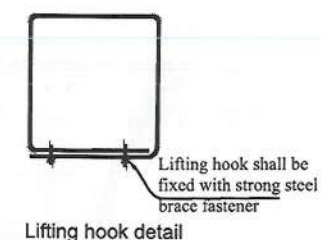
CUL #2 AND #3 SECTION B-B, DIMENSION AND MATERIAL



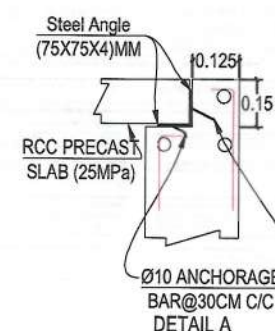
PRECAST SLAB



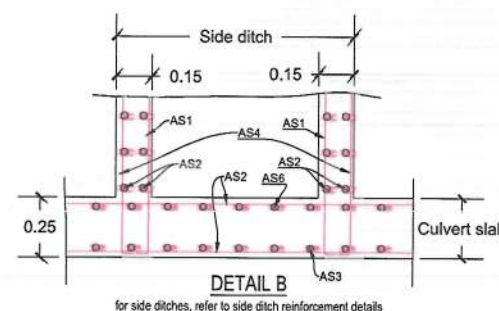
SECTION (B-B)



Lifting hook detail



DETAIL A



DETAIL B

for side ditches, refer to side ditch reinforcement details

CULVERT (1.50X1.00)M REINFORCEMENT SCHEDULE

Bar.No	Bar Shape	Ø (mm)	Spacing (mm)	Remark
As1		14	200	
As2		12	200	
As3		14	200	
As4		12	200	
As5		12	200	
As6		12	200	

NOTE:  
1. All dimensions are in meter unless otherwise indicated.

NOTE:  
1. An extra bar shall be provided if the spacing available for reinforcement is more than n times the spacing between bars (where n is an integer).  
2. Subgrade should be screened from oversized, damped, and organic materials.



Rev.	Date	Revision Details	Drawn	Chkd.	Appd.

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:

KABUL MUNICIPALITY DESIGN TEAM

Project Name:

Construction of Road From Qala-e-Zaman Khan Road to Kabul Jalalabad Road

Drawing Title:

CULVERT #02 AND #03 SECTIONS & DETAILS

Drawn By:

Menhaj Rahman

Signature:

Designed By:

Baz Mohammad Raji

Signature:

Checked By:

Hasibullah Shalizi

Signature:

Date:

05/06/2024

Scale:

Status:

FINAL DESIGN

Project Code:

SHEET

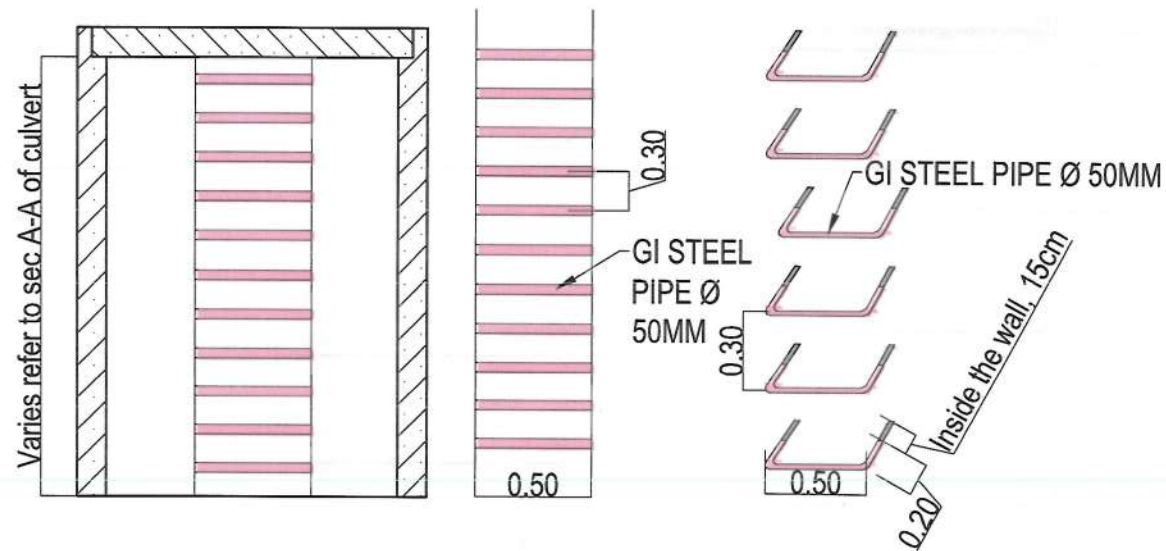
CSD #2 AND #3-01 OF 01

REVISION

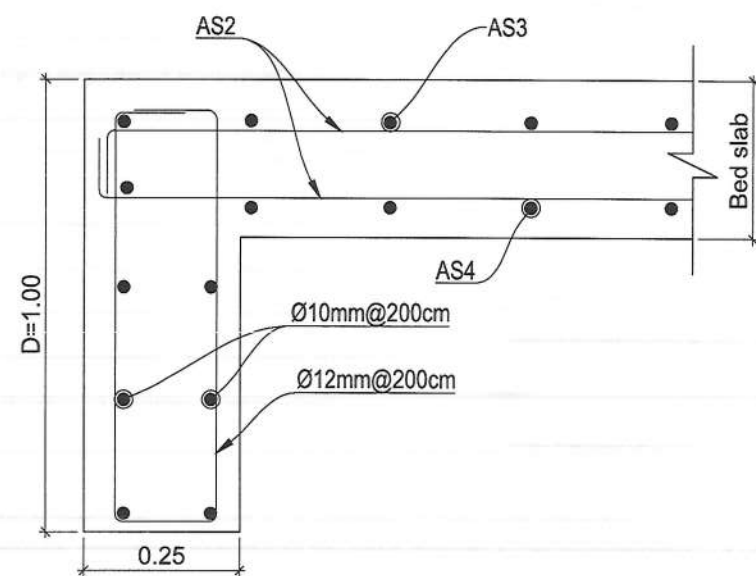
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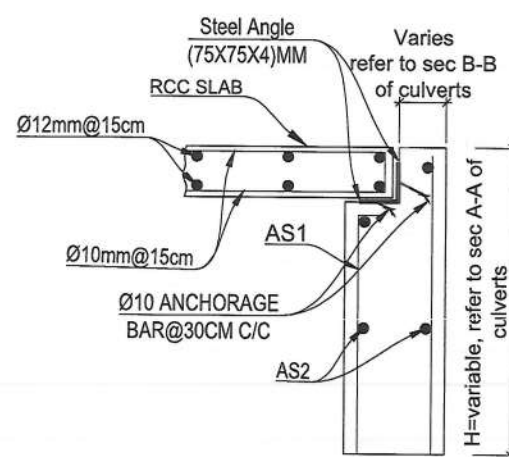
Proposed Culvert List							
NO	Staion	Type of Structure	Proposed Size-m		Condition	Lenght (m)	Remark
			W(m)	H(m)			
01	0+810	RCC Box Culvert	1.00	1.00	Straight	17	
02	1+226	RCC Box Culvert	1.50	1.00	Skew	31.20	
03	1+430	RCC Box Culvert	1.50	1.00	Skew	45	



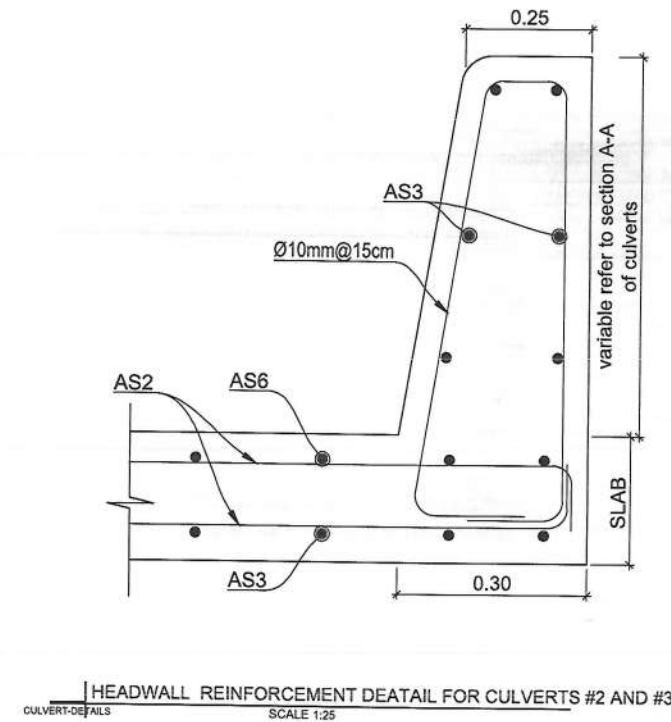
### 3D VIEW



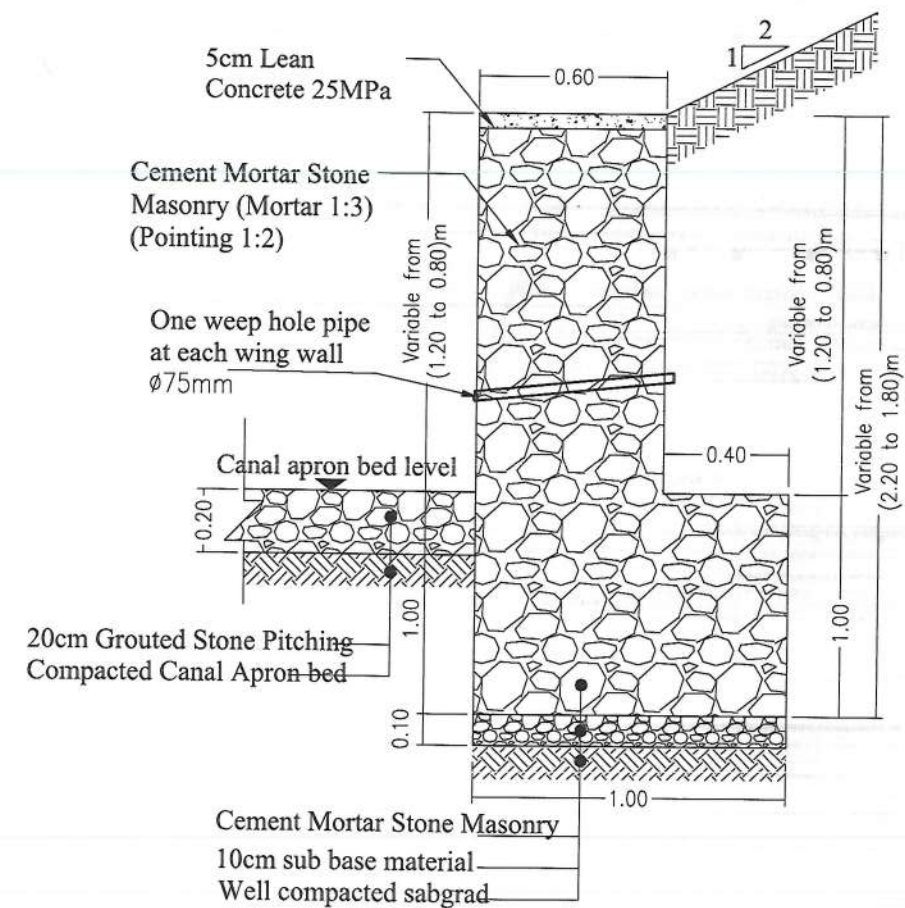
CUT- OFF WALL REINFORCEMENT DETAIL FOR CULVERTS #2 AND #3



OPENING WALL REINFORCEMENT DETAIL FOR ALL CULVERTS.



HEADWALL REINFORCEMENT DETAIL FOR CULVERTS #2 AND #3  
T-DETAILS SCALE 1:25



WING WALL DETAIL FOR CULVERTS #2 AND #3  
SCALE 1:25

**NOTE:**  
Subgrade should be screened from oversized, damp, and organic materials.



Rev.	Date	Revision Details	Drawn	Chkd.	Appd.

Designed By:



KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-  
Zaman Khan Road to Kabul Jalalabad  
Road

Drawing Title:

### CULVERTS DETAILS

Drawn By: Menhaju Rahman	Signature: 
Designed By: Baz Mohammad Raji	Signature: 
Checked By: Hasibullah Shafizi	Signature: 
Reviewed By:	Signature: 

Date: 05-06-2024	Scale: 1:200
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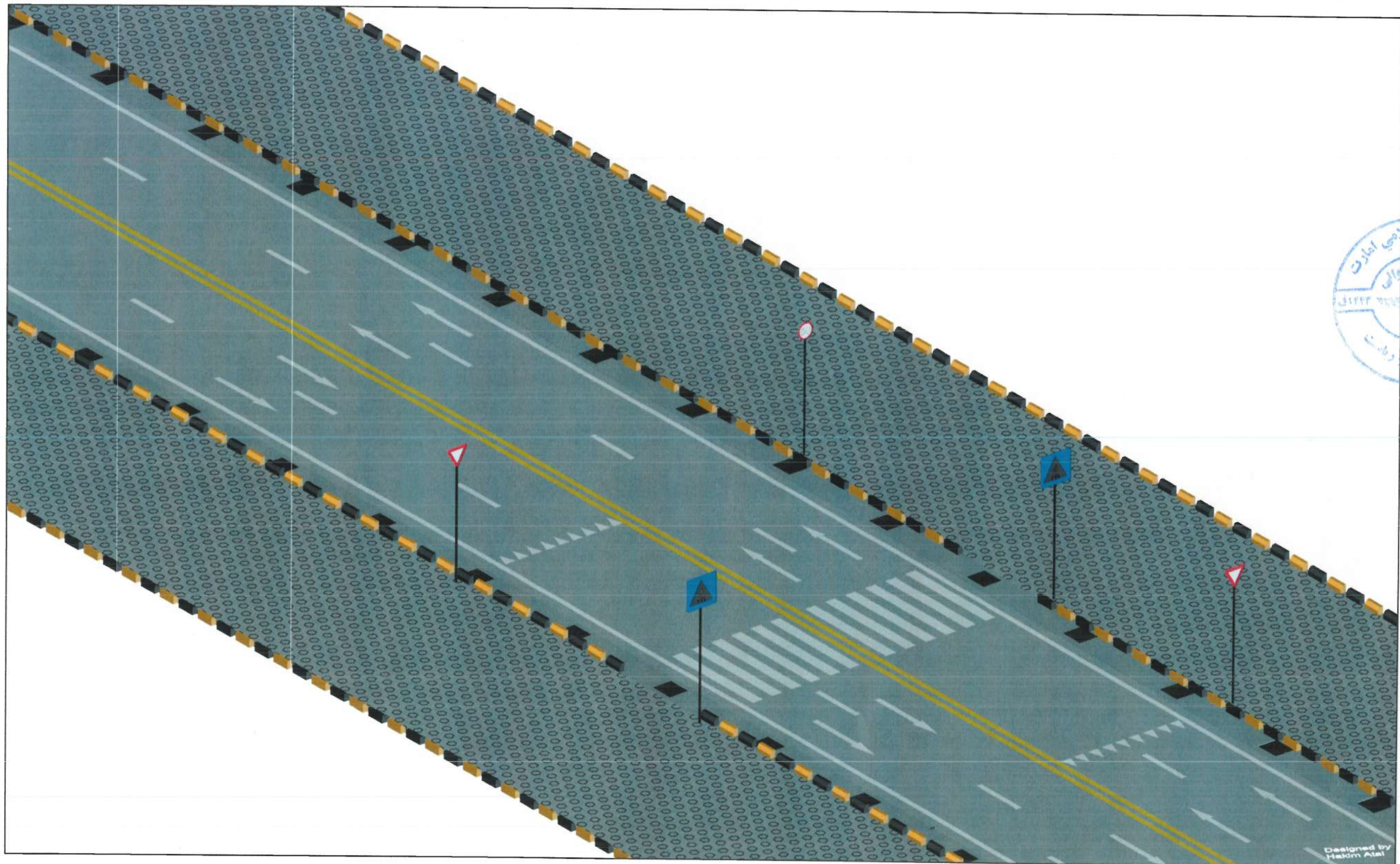
Status: **FINAL DESIGN**

Project Code

SHEET		REVISION
CD-01 OF 01		00



## ROAD MARKING & SIGNAGE SECTION



Designed by  
Hakim Ahsan





NOTE:  
- All dimensions are in meter unless mentioned.

LEGEND:  
Side ditch line.  
Center line.  
Solid line white.  
Solid line Yellow.  
Broken line.  
Dotted line.  
Curb stone.  
Sidewalk.  
Green area.  
Bollard.  
Traffic sign foundation.



Rev.	Date	Revision Details	Drawn	Chkd.	Appd.



ISLAMIC IMARAT  
OF  
AFGHANISTAN



KABUL  
MUNICIPALITY

Design Consultant:

City Infrastructures Directorate

Project Name:

Construction of Road from Qale-e-Zaman Khan road  
to Kabul-Jalal Abad Road.

Drawing Title:

ROAD MARKING

Drawn & Designed:  
Hakim Atae

Checked:  
Shafullah Stoman

Checked:  
Shamsullah Najafi

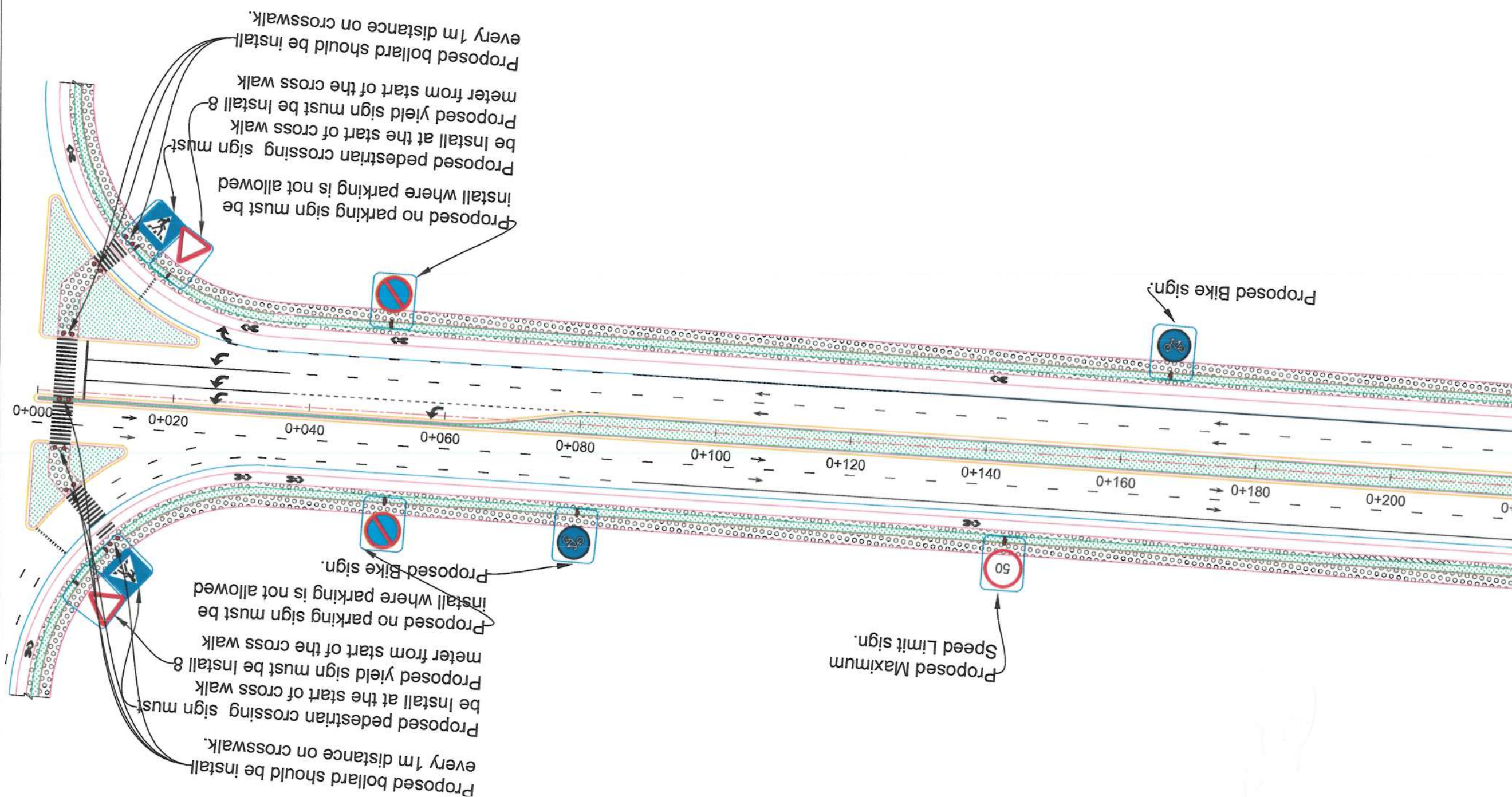
Date:  
2024/06/06

Status:  
FINAL DESIGN

Project Code

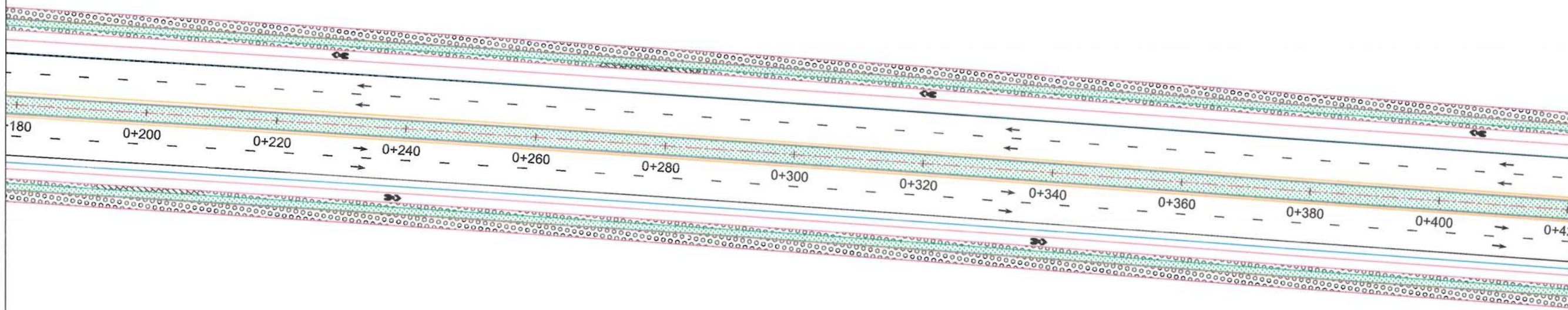
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01

Revision  
01



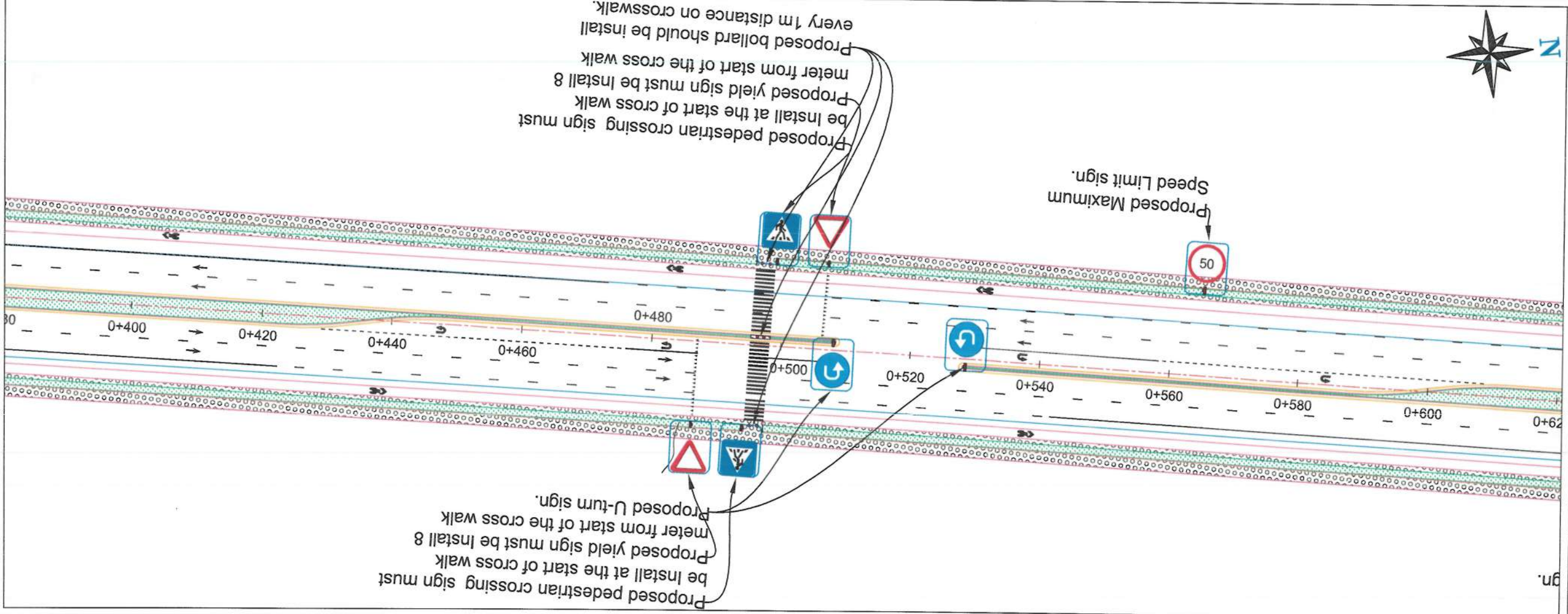


Propose




NOTE:  
- All dimensions are in meter unless mentioned.


- LEGEND:
- Side ditch line.
  - Center line.
  - Solid line white.
  - Solid line Yellow.
  - Broken line.
  - Dotted line.
  - Curb stone.
  - Sidewalk.
  - Green crea.
  - Bollard.
  - Traffic sign foundation.



Rev.	Date	Revision Details	Drawn	Chkd.	Appd.



ISLAMIC IMARAT  
OF  
AFGHANISTAN



KABUL  
MUNICIPALITY

Design Consultant:


City Infrastructures Directorate

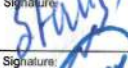
Project Name:


Construction of Road from Qale-o-Zaman Khan road to Kabul-Jalai Abad Road.

Drawing Title:

**ROAD MARKING**

Drawn & Designed:   
Hakim Atae

Checked:   
Shafullah Stoman

Checked:   
Shamsullah Najafi

Date:

2024/06/06

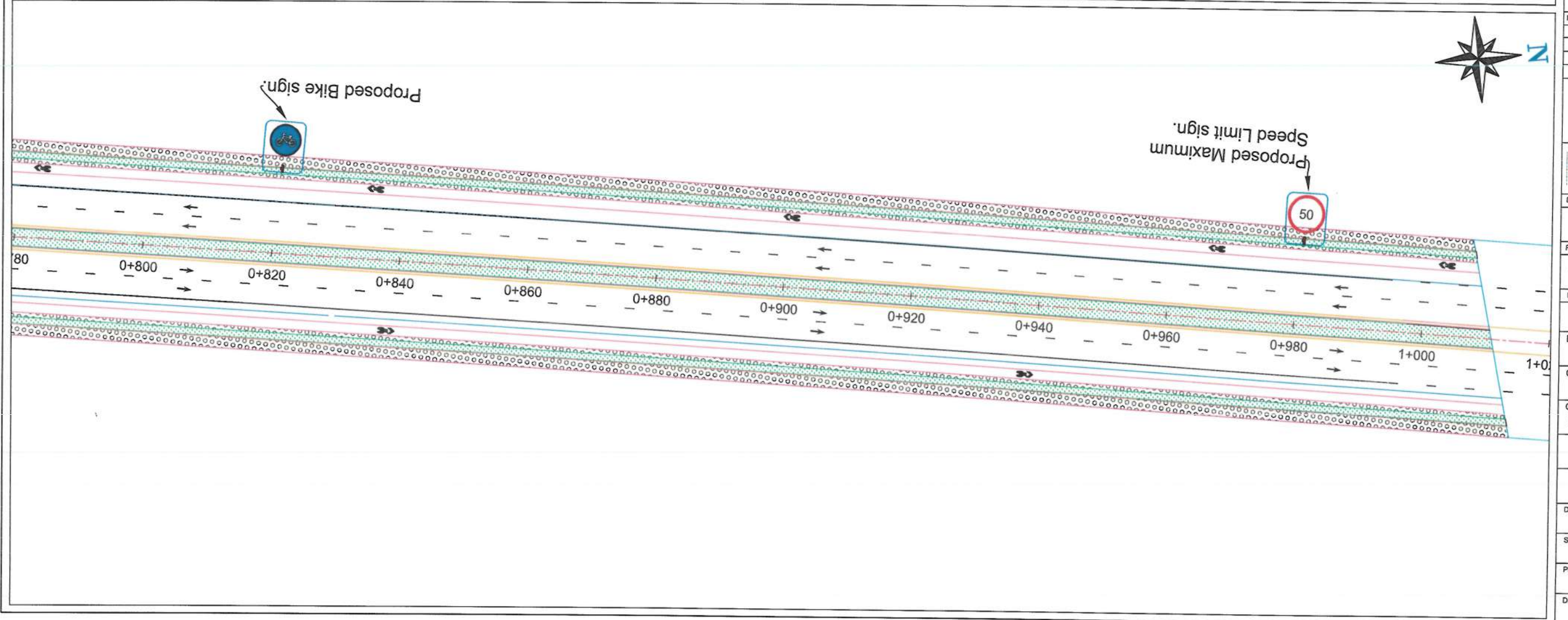
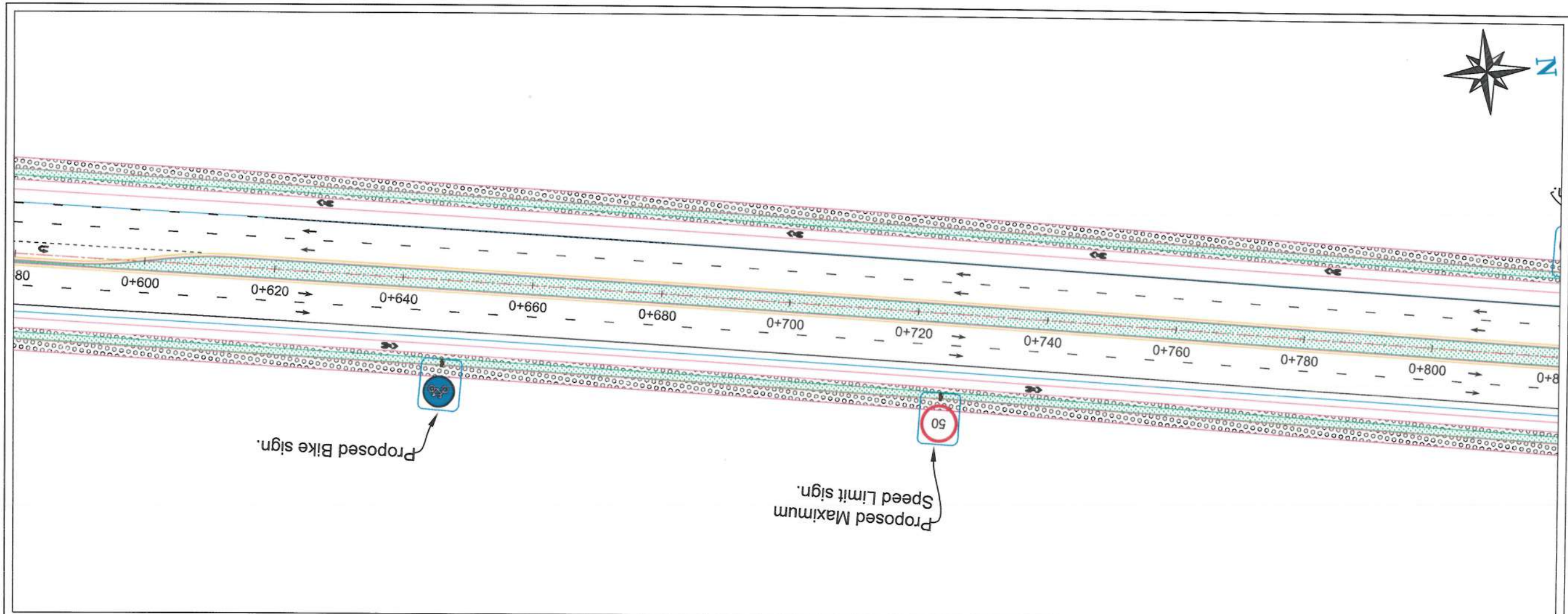
Status:

FINAL DESIGN

Project Code

Drawing Number	Revision
02	01





NOTE:  
- All dimensions are in meter unless mentioned.

- LEGEND:
- Side ditch line.
  - Center line.
  - Solid line white.
  - Solid line Yellow.
  - Broken line.
  - Dotted line.
  - Curb stone.
  - Sidewalk.
  - Green area.
  - Bollard.
  - Traffic sign foundation.



Rev.	Date	Revision Details	Drawn	Chkd.	Appd.

ISLAMIC IMARAT  
OF  
AFGHANISTAN

KABUL  
MUNICIPALITY

Design Consultant:

City Infrastructures Directorate

Project Name:

Construction of Road from Qala-e-Zaman Khan road to Kabul-Jalal Abad Road.

Drawing Title:

**ROAD MARKING**

Drawn & Designed:	Signature:
Hakim Ataee	
Checked:	Signature:
Shafullah Stoman	
Checked:	Signature:
Shamsullah Najafi	

Date:

2024/06/06

Status:

FINAL DESIGN

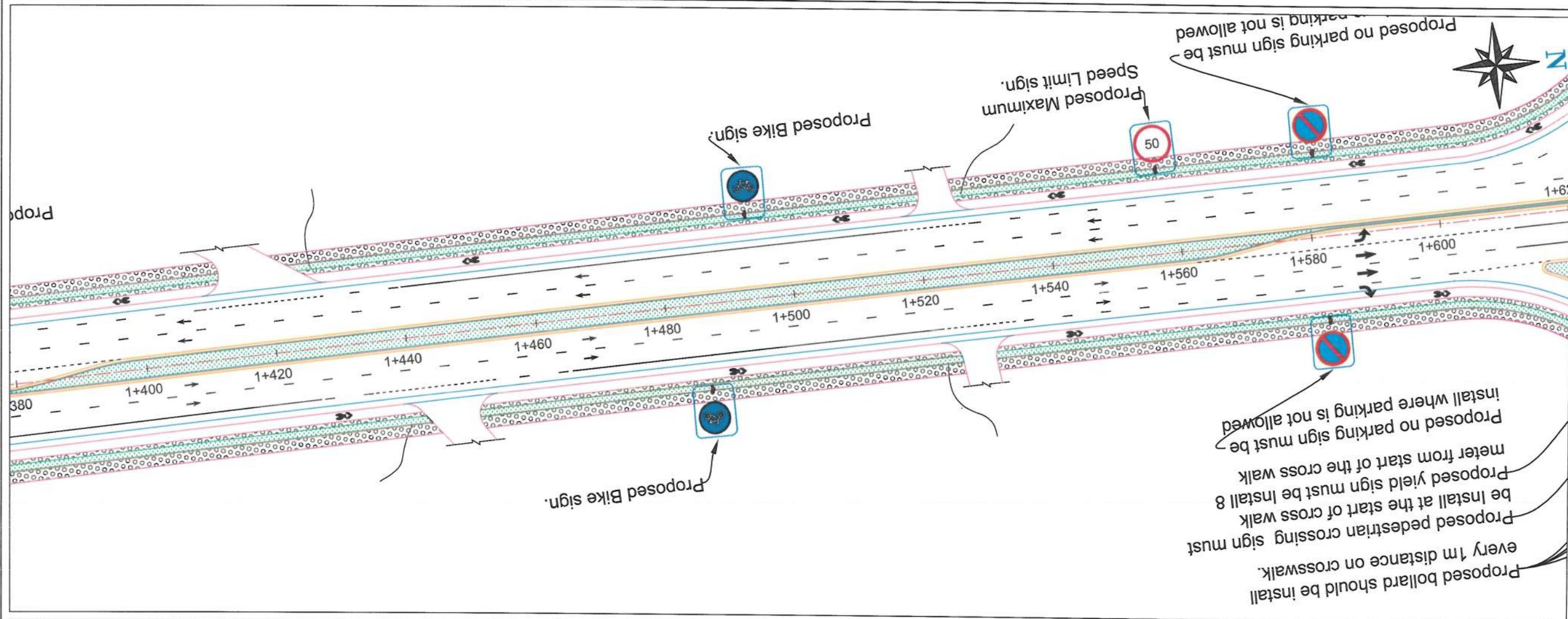
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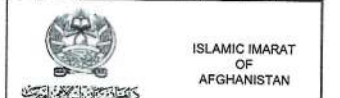


NOTE:  
- All dimensions are in meter unless mentioned.

- LEGEND:
- Side ditch line.
  - Center line.
  - Solid line white.
  - Solid line Yellow.
  - Broken line.
  - Dotted line.
  - Curb stone.
  - Sidewalk.
  - Green area.
  - Bollard.
  - Traffic sign foundation.



Rev.	Date	Revision Details	Drawn	Chkd.	Appd.



ISLAMIC IMARAT  
OF  
AFGHANISTAN

KABUL  
MUNICIPALITY

Design Consultant:

City Infrastructures Directorate

Project Name:

Construction of Road from Qala-e-Zaman Khan road to Kabul-Jalal Abad Road.

Drawing Title:

ROAD MARKING

Drawn & Designed: Signature:

Checked: Signature:

Checked: Signature:

Date: 2024/06/06

Status: FINAL DESIGN

Project Code

Drawing Number 05

Revision 01





NOTE:  
- All dimensions are in meter unless mentioned.

- LEGEND:
- Side ditch line.
  - Center line.
  - Solid line white.
  - Solid line Yellow.
  - Broken line.
  - Dotted line.
  - Curb stone.
  - Sidewalk.
  - Green area.
  - Bollard.
  - Traffic sign foundation.



Rev.	Date	Revision Details	Drawn	Chkd.	Appd.



Design Consultant: City Infrastructures Directorate

Project Name: Construction of Road from Qals-e-Zaman Khan road to Kabul-Jalal Abad Road.

Drawing Title: ROAD MARKING

Drawn & Designed: Hakim Atae

Checked: Shafullah Stoman

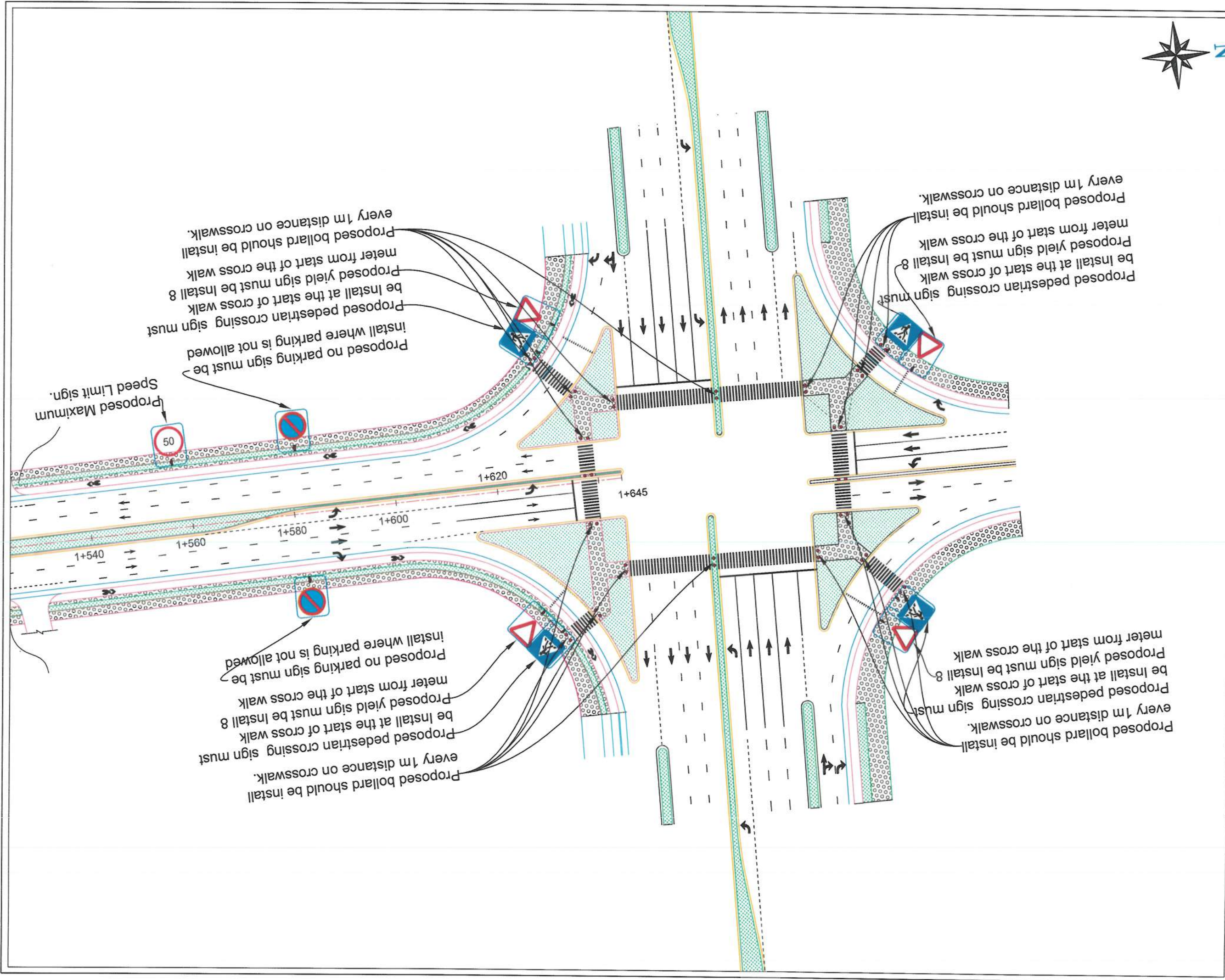
Checked: Shamsullah Najafi

Date: 2024/06/06

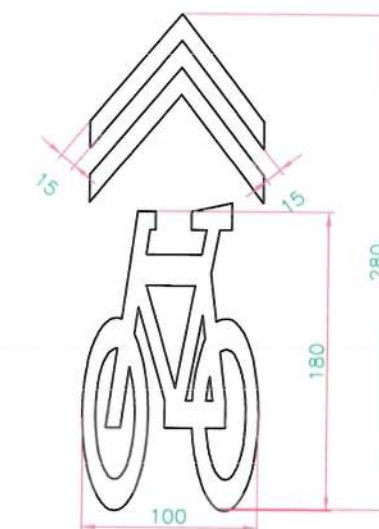
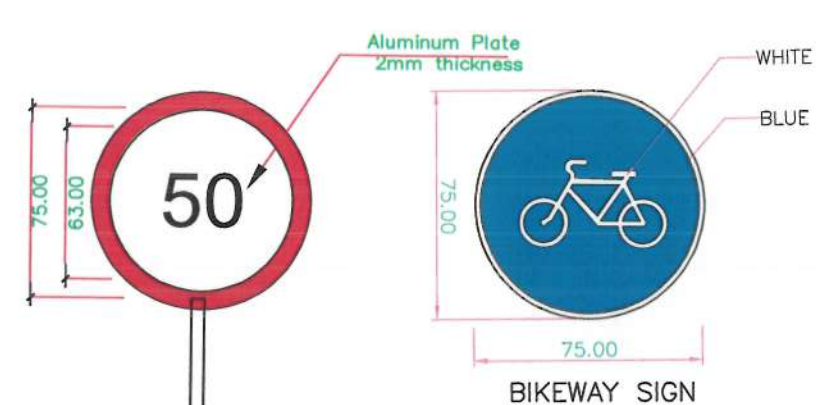
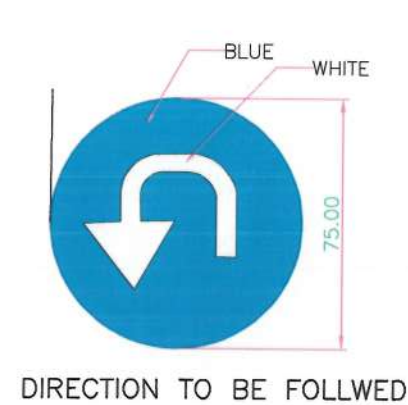
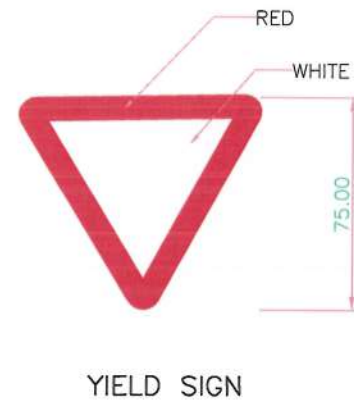
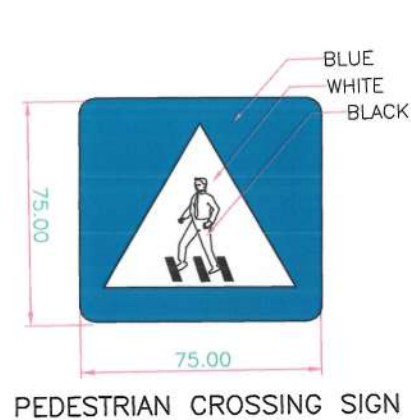
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Project Code

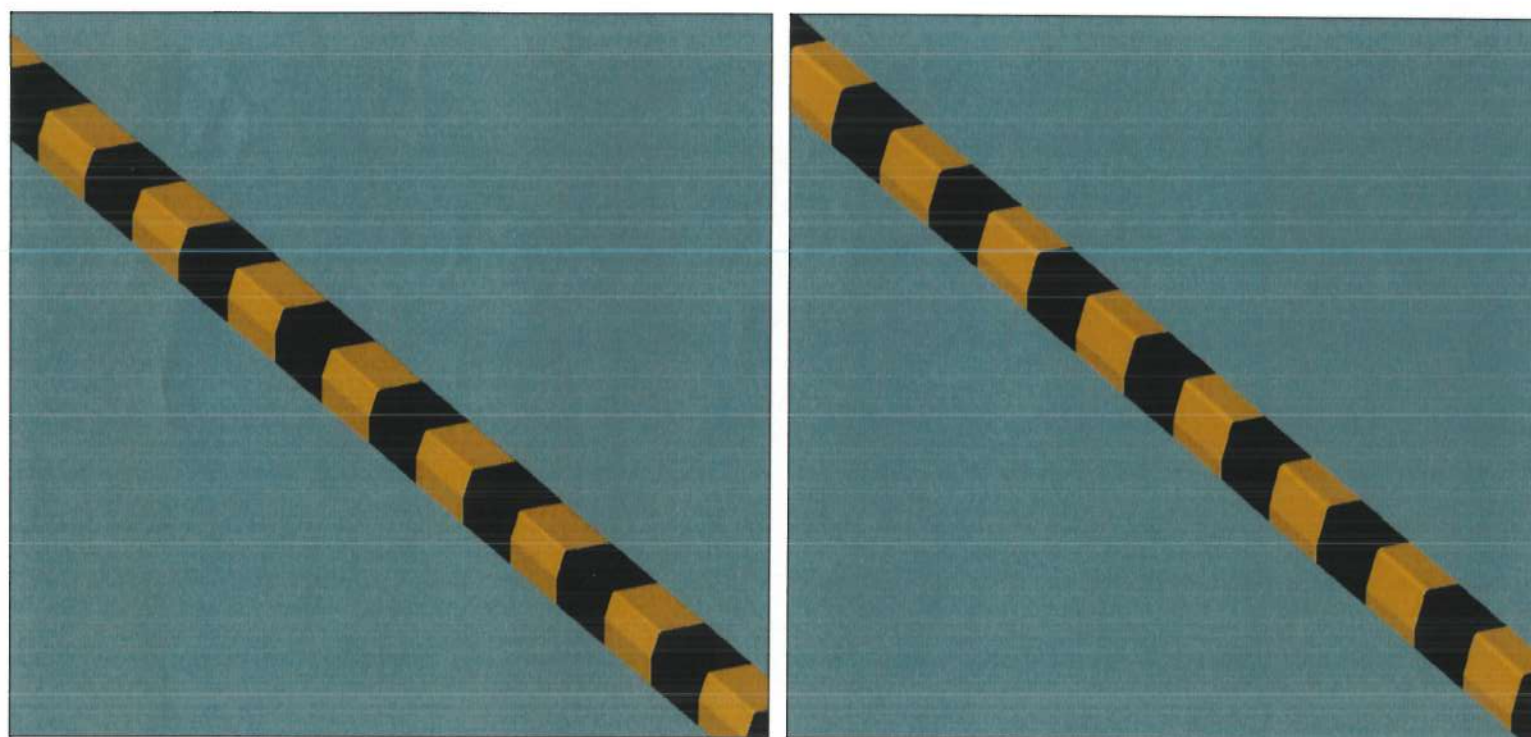
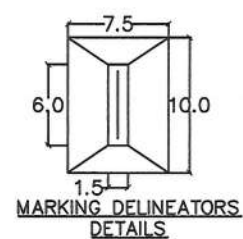
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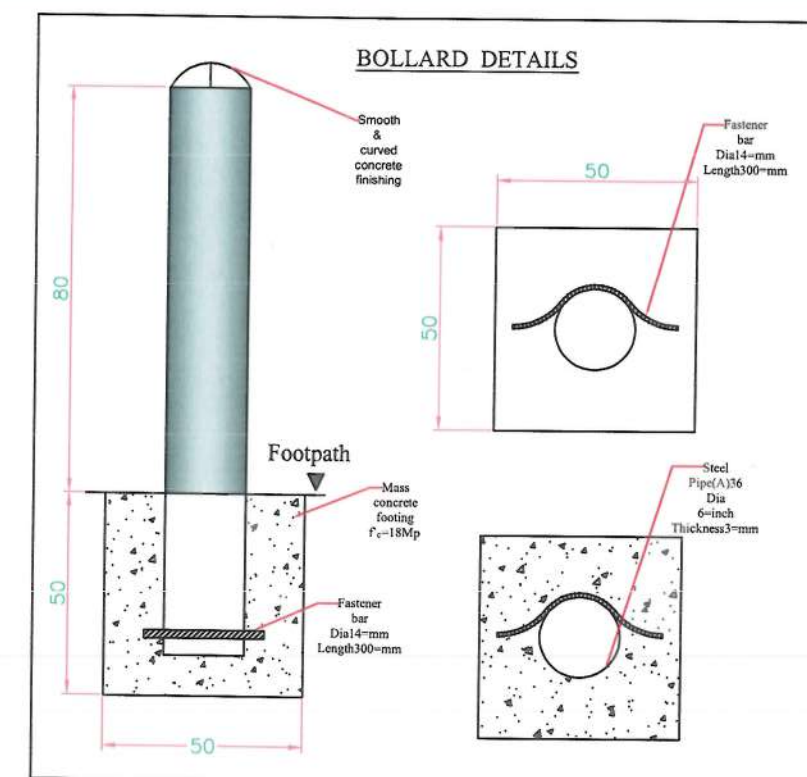




Bikeway road marking install should be every 100m.



All of installed curb stone should be painted with black and yellow colors.

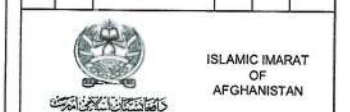


NOTE:  
- All dimensions are in meter unless mentioned.

LEGEND:  
Side ditch line.  
Center line.  
Solid line white.  
Solid line Yellow.  
Broken line.  
Dotted line.  
Curb stone.  
Sidewalk.  
Green area.  
Bollard.  
Traffic sign foundation.



Rev.	Date	Revision Details	Drawn	Chkd.	Appd.



Design Consultant:

City Infrastructures Directorate

Project Name:

Construction of Road from Qala-e-Zaman Khan road to Kabul-Jalal Abad Road.

Drawing Title:

ROAD MARKING

Drawn & Designed: Hakim Atae

Checked: Shafuallah Soman

Checked: Shamsullah Najafi

Date: 2024/06/06

Status: FINAL DESIGN

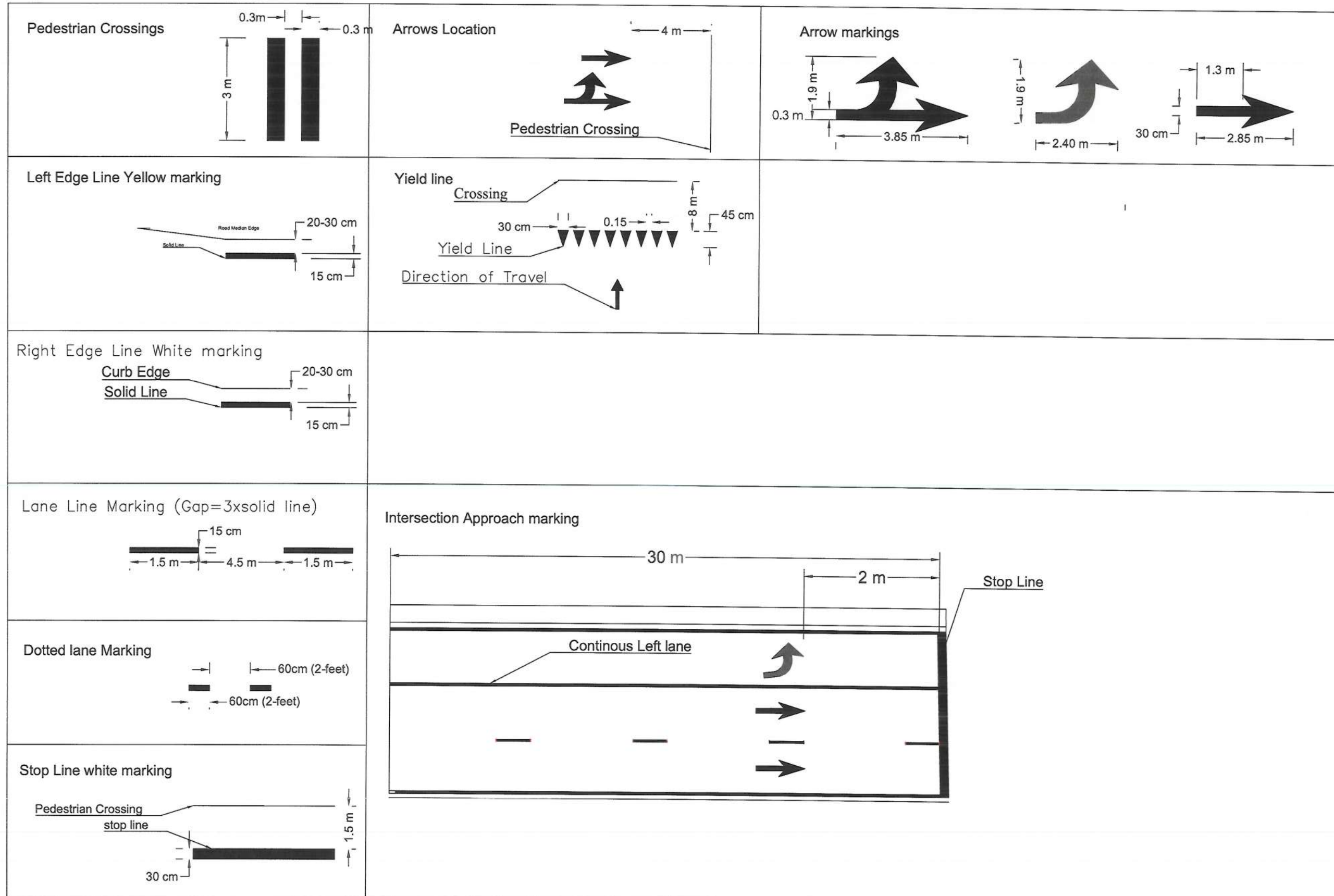
Project Code

Drawing Number 07

Revision 01



## TYPICAL DETAIL OF MARKINGS



**NOTE:**  
- All dimensions are in meter unless mentioned.

**LEGEND:**  
Side ditch line.

Center line.

Solid line white.

Solid line Yellow.

Broken line.

Dotted line.

Curb stone.

Sidewalk.

Green area.

Bollard.

Traffic sign foundation.



Rev.	Date	Revision Details	Drawn	Chkd.	Appd.



**KABUL MUNICIPALITY**

Design Consultant:

City Infrastructures Directorate

Project Name:

Construction of Road from Qala-e-Zaman Khan road to Kabul-Jalal Abad Road.

Drawing Title:

**ROAD MARKING**

Drawn & Designed:

Checked:

Checked:

Date: 2024/06/06

Status: FINAL DESIGN

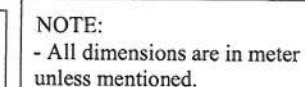
Project Code

Drawing Number 08

Revision 01



D1- Sign post: Galvanized steel pipe  $\varnothing 60\text{mm}$  / 2.4" Thickness 2.9 mm  
D2: Sign plate : Aluminum 8 gauge with tolerance  $\pm 0.18\text{mm}$   
D3: post caps: to fit pipe size out size diameter 65mm  
D4,5 Reflective Sticker for traffic Signs  
D6: Post clamp thickness 2mm.  
D7: Galvanized U-channel thickness 2mm or weight-2lbs/ft  
D8: Nut bolt size M10(10mm) full threat.  
D9: Space between post clamp and U channel 8mm.  
D10: Fillet R5mm.  
D11: Fillet R30mm.



LEGEND.  
Side ditch line.

Center line.

Solid line white.

Solid line Yellow.

Brokin line.

Dotted line.

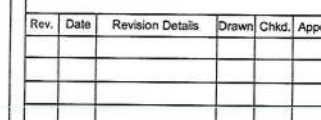
Curb stone.

Sidewalk.

Green area.

Bollard.

Traffic sign foundation.



ISLAMIC IMARAT  
OF  
AFGHANISTAN

KABUL  
MUNICIPALITY

Design Consultant:

City Infrastructures Directorate

Project Name:

Construction of Road from Qala-e-Zam  
to kabul-Jalal Abad Road.

Drawing Title:

## ROAD MARKING

Drawn & Designed:

Hakim Ataee

Checked:
----------

Checked: \_\_\_\_\_

Checked:  
Shamsullah

Ornithischia	

[illegible]

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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Date: \_\_\_\_\_

2024/06

Status:	
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100

Project Code

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Drawing Number

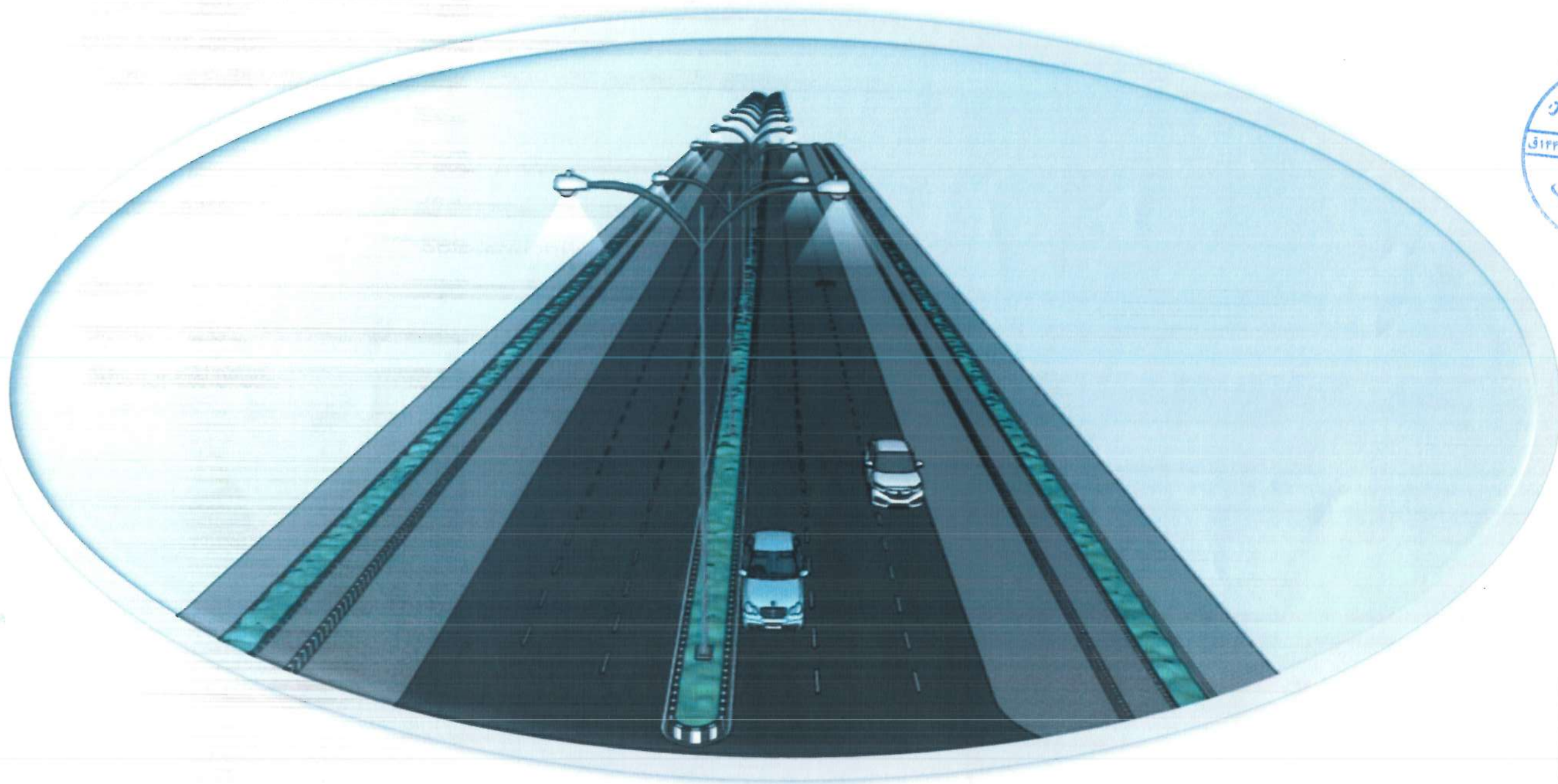
09

Revision
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1



# STREET LIGHTING SECTION





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01 OF 22	COVERAGE OF PROJECT	
	CIVIL- ELECTRIC LIGHT LAYOUT PLAN FOR	
02 OF 22	TABLE OF CONTENT	
03 OF 22	ELECTRIC LIGHT LAYOUT PLAN 1/3	
04 OF 22	ELECTRIC LIGHT LAYOUT PLAN 2/3	
05 OF 22	ELECTRIC LIGHT LAYOUT PLAN 3/3	
	ELECTRIC POLE DETAILS	
06 OF 22	DETAILS FOR ELECTRIC POLES	
07 OF 22	DETAILS FOR ELECTRIC POLES	
08 OF 22	DETAILS FOR ELECTRIC POLES	
09 OF 22	DETAILS FOR ELECTRIC POLES	
10 OF 22	DETAILS FOR ELECTRIC POLES	
	ELECTRIC MANHOLES	
11 OF 22	DETAILS FOR MANHOLE	
12 OF 22	DETAILS FOR PIPE TRENCH SECTION	
13 OF 22	DETAILS FOR MANHOLE	
14 OF 22	DETAILS FOR MANHOLE	
	ELECTRIC POWER DISTRIBUTION BOARD	
15 OF 22	ELECTRIC CABAL CALCULATION	
16 OF 22	ELECTRIC CABAL CALCULATION	
17 OF 22	ELECTRIC CABAL CALCULATION	
18 OF 22	ELECTRIC CABAL CALCULATION	
19 OF 22	CONTROL CIRCUIT DIAGRAM	
20 OF 22	DETAILS FOR ELECTRIC POLE DISTRIBUTION BOARD	
21 OF 22	DETAILS FOR ELECTRIC GROUNDING	
22 OF 22	ELECTRIC CABAL VOLTAGE LOSSES CALCULATION	

NOTE:



Date	Revision Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:

KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Gala-e-  
Zaman Khan Road To Kabul -  
Jalalabad Road

Drawing Title:

TABLE OF CONTENTS

Drawn: Jamalulha Nazari	Signature:
Designed: Jamalulha Nazari	Signature:
Checked by: Hasbullah Shalizi	Signature:
	Signature:
Approved by:	Signature:

Date: 3 June 2024

Status: FINEL  
DESIGN

Project Code

SHEET  
T - C -01

REVISION  
00





NOTE:

- 1-All cables to be used for street lighting shall be XPLE PVC type
- 2-the conduit crossing under the carriageway shall have at least 1200mm cover from the road surface.
- 3-A galvanized or PVC coated pull wire shall be installed in all conduits.

LEGENDS

- Double pole street light
- 4x6mm<sup>2</sup> Conduit & Conductor
- 4x10mm<sup>2</sup> Conduit & Conductor
- Steel-Pipe Φ 50-mm
- MANHOLE-ELE
- MDP



Date Revision Details Drawn Chkd. Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:

KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e- Zaman Khan Road  
To Kabul - Jalalabad Road

Drawing Title:

PLAN & PROFILE

Drawn: Jamalulha Nazari	Signature:
Designed: Jamalulha Nazari	Signature:
Checked: Hassanullah Shalizi	Signature:

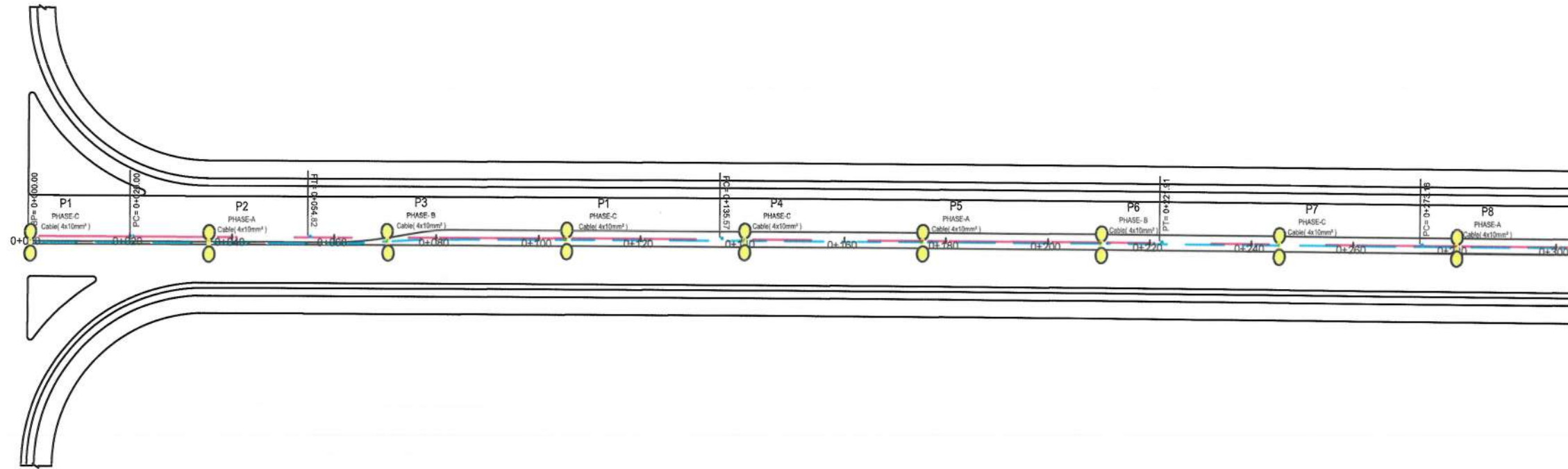
Date: 5 June 2024 Scale: 1:1000

Status: FINAL  
DESIGN

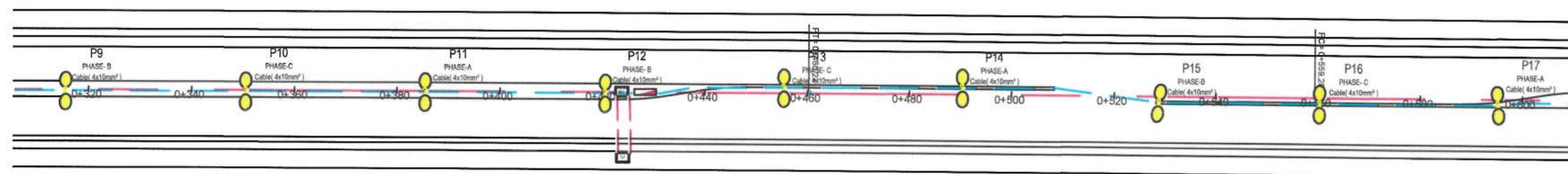
Project Code

SHEET E&P-01 OF 03	PAGE NO	REVISION 00
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MATCH LINE - 1  
AT STATION - 0+305.00



MATCH LINE - 2  
AT STATION - 0+610.00



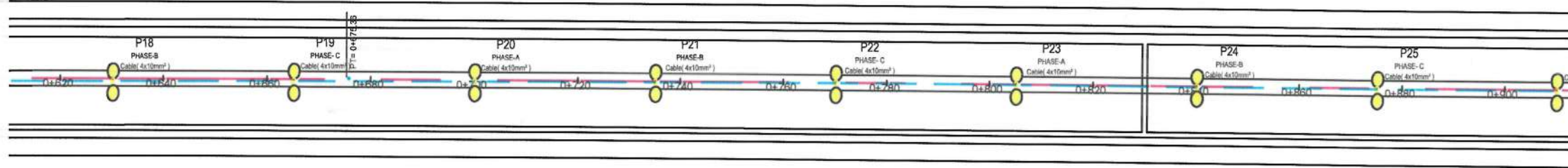
MATCH LINE - 1  
AT STATION - 0+305.00

Note :the top of electrical polls foundation in U- turns shall be adjusted us per the width of median.

Note : Power sources and electrical mane holes are approximate in the map, contractor and Project Manager coordination with DABS to recognize the Electrical sources and electrical mane hole position , According to voltage losses.

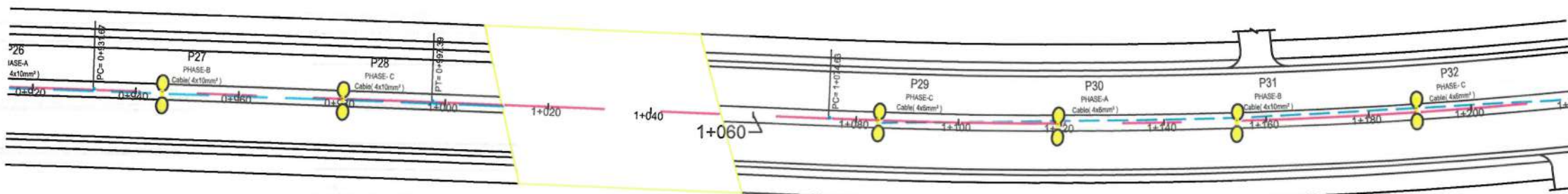


MATCH LINE - 2  
AT STATION - 0+610.00



MATCH LINE - 3  
AT STATION - 0+915.00

MATCH LINE - 3  
AT STATION - 0+915.00



MATCH LINE - 4  
AT STATION - 1+220.00



- NOTE:
- 1-All cables to be used for street lighting shall be XPLE PVC type
  - 2-the conduit crossing under the carriageway shall have at least 1200mm cover from the road surface.
  - 3-A galvanized or PVC coated pull wire shall be installed in all conduits.

- LEGENDS
- Double pole street light
  - 4x6mm² Conduit & Conductor
  - 4x10mm² Conduit & Conductor
  - Steel-Pipe Φ 50-mm
  - MANHOLE-ELE
  - MDP



Date	Revision Details	Drawn	Chkd	Appr
ISLAMIC EMIRATE OF AFGHANISTAN				
Designed By:				
Project Name:				
Construction of Road From Qala-e-Zaman Khan Road To Kabul - Jalalabad Road				
Drawing Title:				
PLAN & PROFILE				
Drawn:	Signature:			
Jamalullah Nazari				
Designed:	Signature:			
Jamalullah Nazari				
Checked:	Signature:			
Hasibullah Shalizi				
Date: 5 June 2024 Scale: 1:1000				
Status: FINAL DESIGN				
Project Code:				
SHEET				
E&P-02 OF 03				
REVISION				
00				





NOTE:  
1-All cables to be used for street lighting shall be XPLE PVC type  
2-the conduit crossing under the carriageway shall have at least 1200mm cover from the road surface.  
3-A galvanized or PVC coated pull wire shall be installed in all conduits.

- LEGENDS
- Double pole street light
  - 4x6mm<sup>2</sup> Conduit & Conductor
  - 4x10mm<sup>2</sup> Conduit & Conductor
  - Steel-Pipe  $\Phi$  50-mm
  - MANHOLE-ELE
  - MDP



Date	Revision	Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:



Project Name:  
Construction of Road From Qala-e- Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:

PLAN & PROFILE

Drawn: Jamalullah Nazari	Signature:
Designed: Jamalullah Nazari	Signature:
Checked: Husnillah Shalizi	Signature:

Date: 5 June 2024 Scale: 1:1000

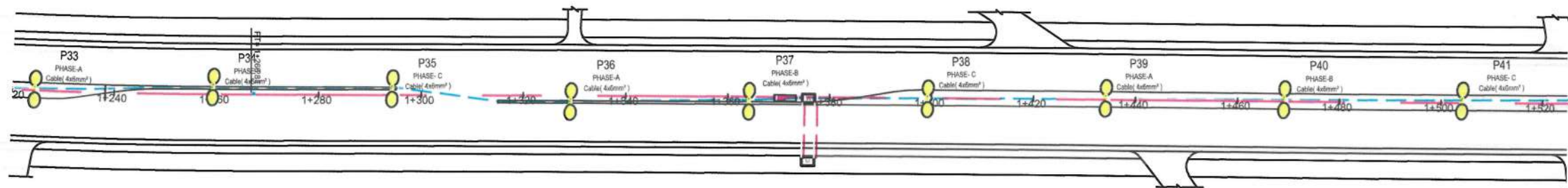
Status: FINAL DESIGN

Project Code

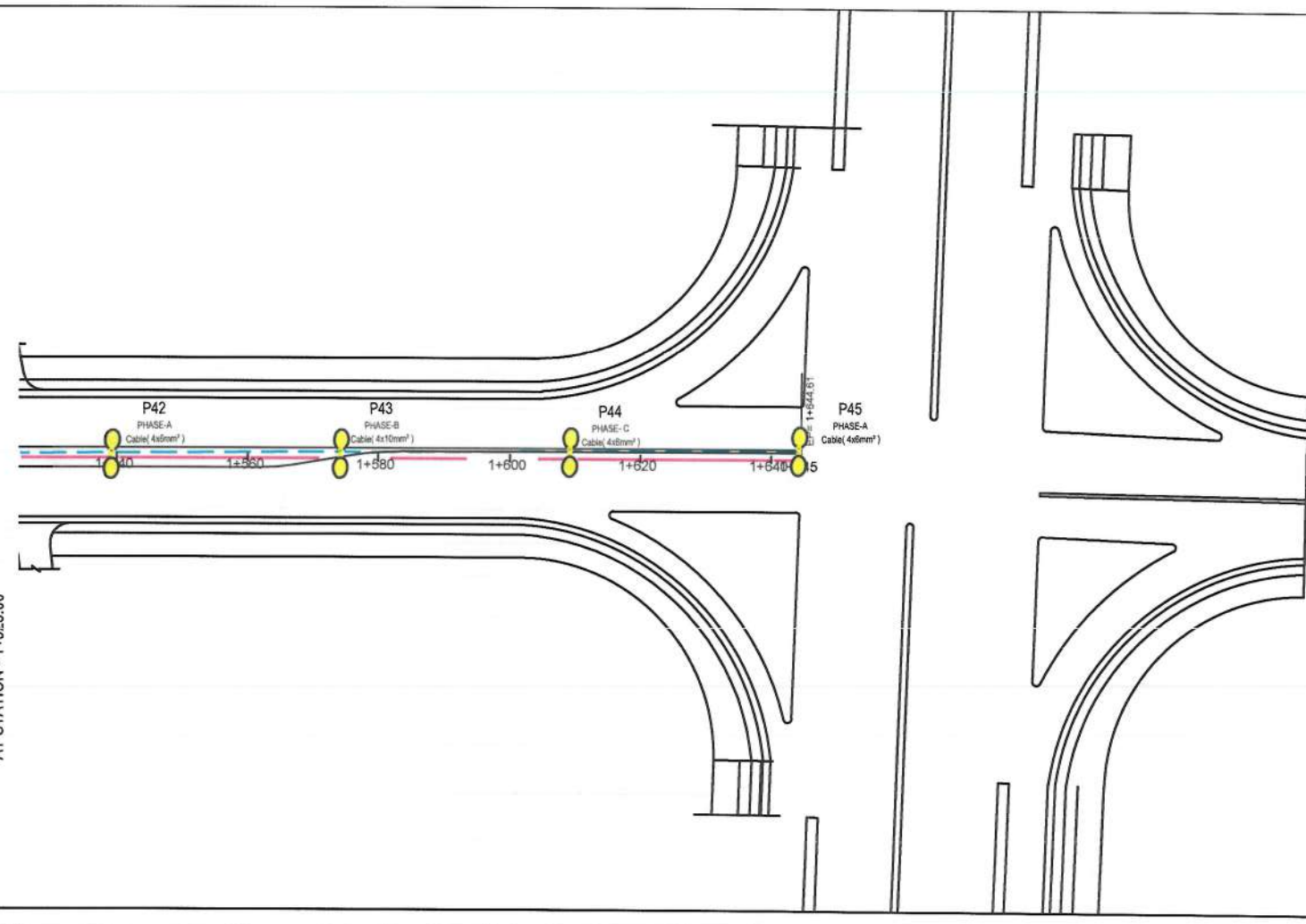
SHEET	PAGE NO	REVISION
F&P-03 OF 03		00

MATCH LINE - 4  
AT STATION - 1+220.00

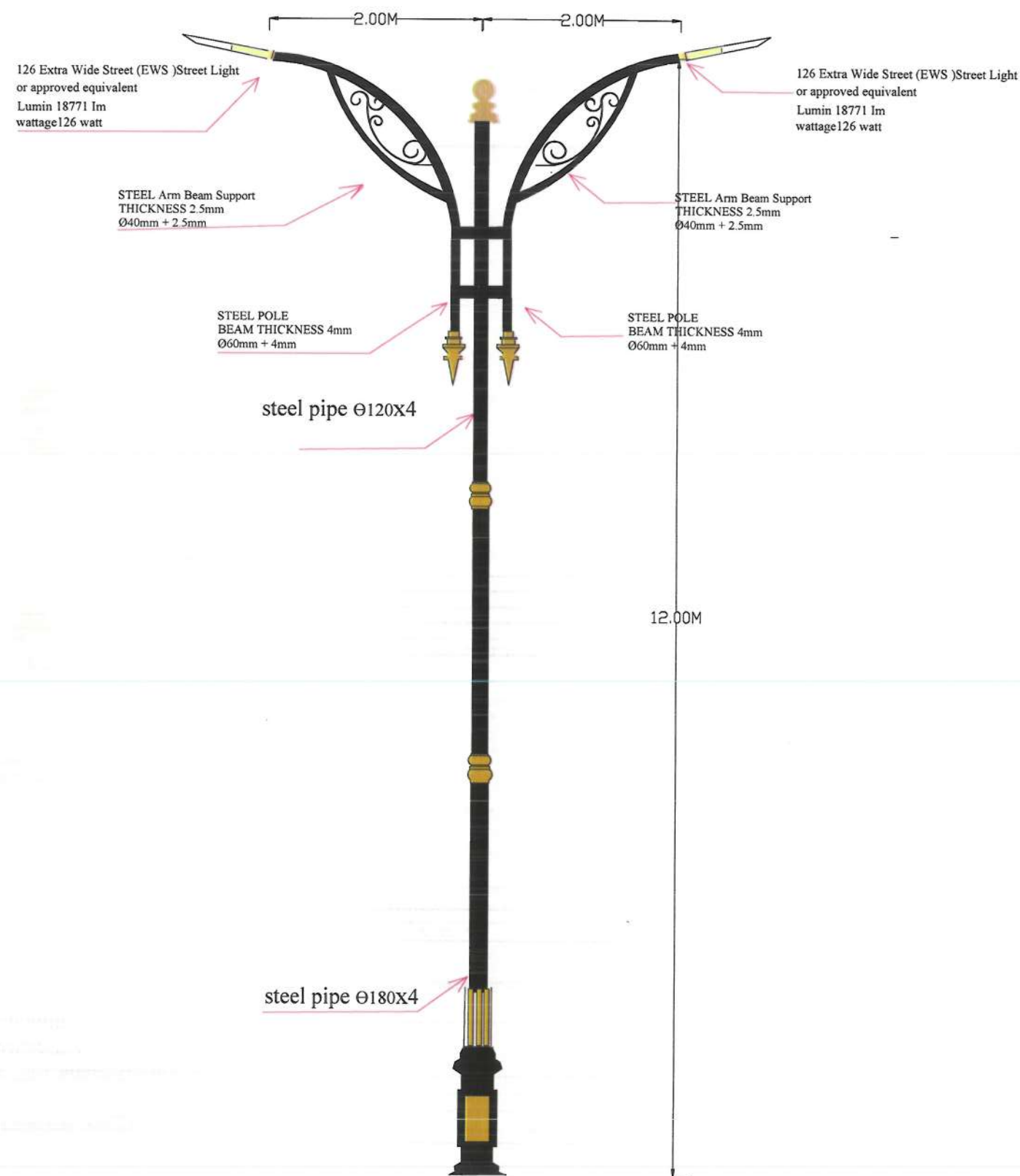
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AT STATION - 1+525.00



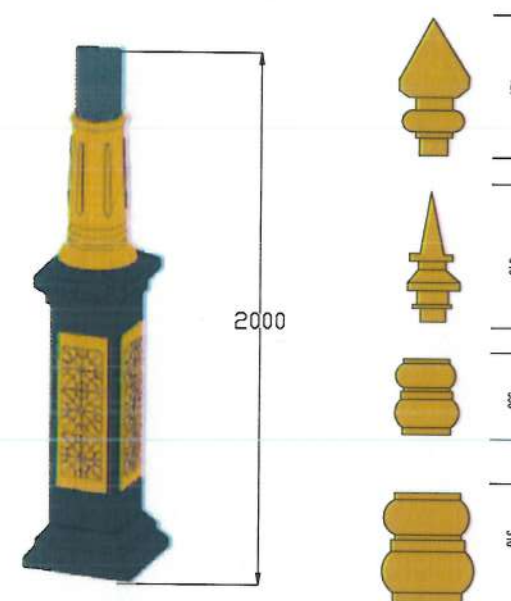
MATCH LINE - 5  
AT STATION - 1+525.00







Double Arm Street Light pole at each  
35m should be arranged on  
the sidegreen area



- Height : 12 meters
- pipe and base plate material: steel ST -37.
- decorative piece material : casting aluminum.
- color covering Electrostatic or polyurethane .  
in specific circumstances , multiple galvanized covering with  
color can be used on steel pieces)
- type covering : Warm galvanized According ASTM A123
- pole diameters of 180 , 120mm.
- Body's thickness : 4mm
- pipes connection : Utilizing ring and semi - automatic CO2 welding.
- Mountable Light Type : All types of street lights.

NOTE:



Date	Revision Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:



KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Gala-e-  
Zaman Khan Road To Kabul -  
Jalalabad Road

Drawing Title:

Street Lighting Details

Drawn: Jamalulha Nazari

Signature:

Designed: Jamalulha Nazari

Signature:

Checked by:

Signature:

Approved by:

Signature:

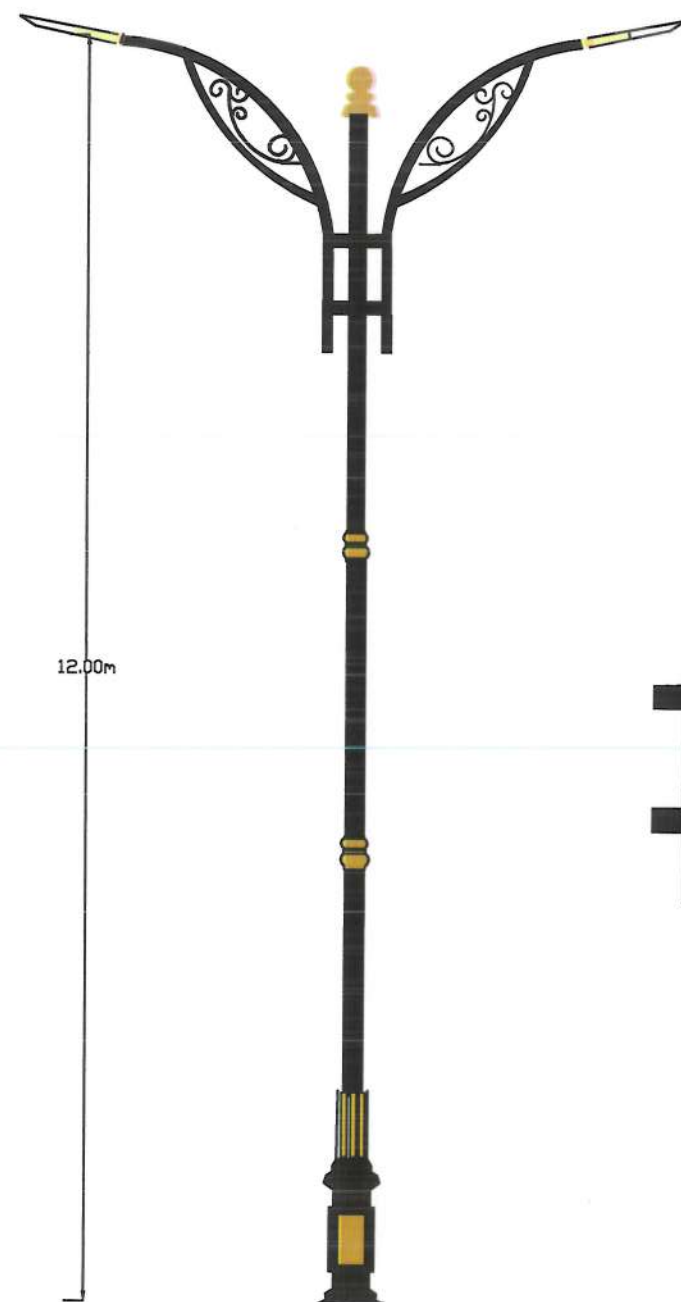
Date: 3 June 2024

Status: FINEL DESIGN

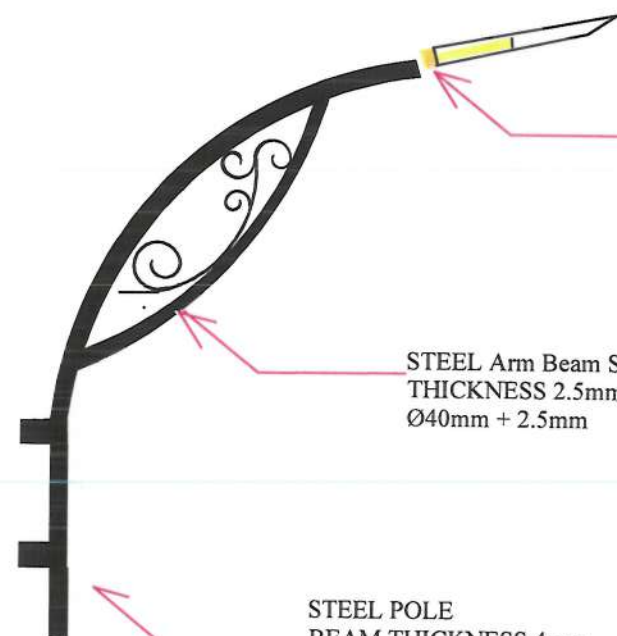
Project Code:

SHEET	PAGE NO	REVISION
S-L-D-01	01	01





12.00m



126 Extra Wide Street (EWS )Street Light  
or approved equivalent  
Lumin 18771 Im  
wattage 126 watt

STEEL Arm Beam Support  
THICKNESS 2.5mm  
Ø40mm + 2.5mm

STEEL POLE  
BEAM THICKNESS 4mm  
Ø60mm + 4mm



#### NOTE

1. All dimensions are in meters unless otherwise indicated



Date	Revision	Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:

KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-  
Zaman Khan Road To Kabul -  
Jalalabad Road

Drawing Title:

Street Lighting Details

Drawn: Jamalulha Nazari	Signature:
Designed: Jamalulha Nazari	Signature:
Checked by: Hosbullah Shalizi	Signature:
	Signature:
Approved by:	Signature:

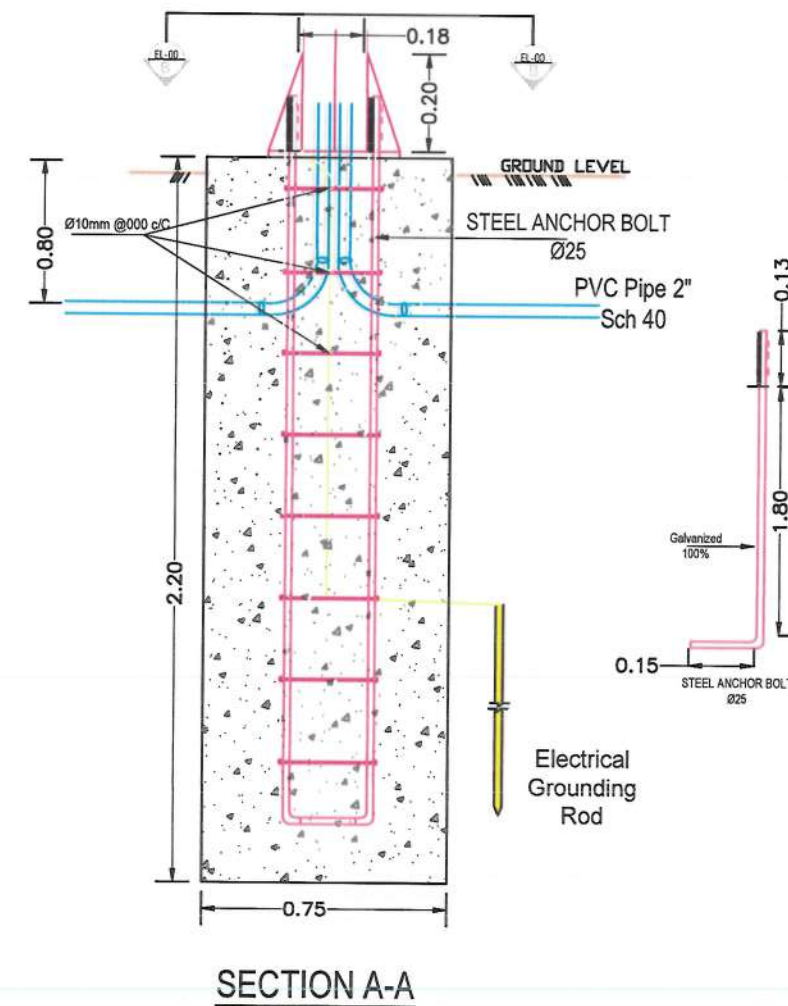
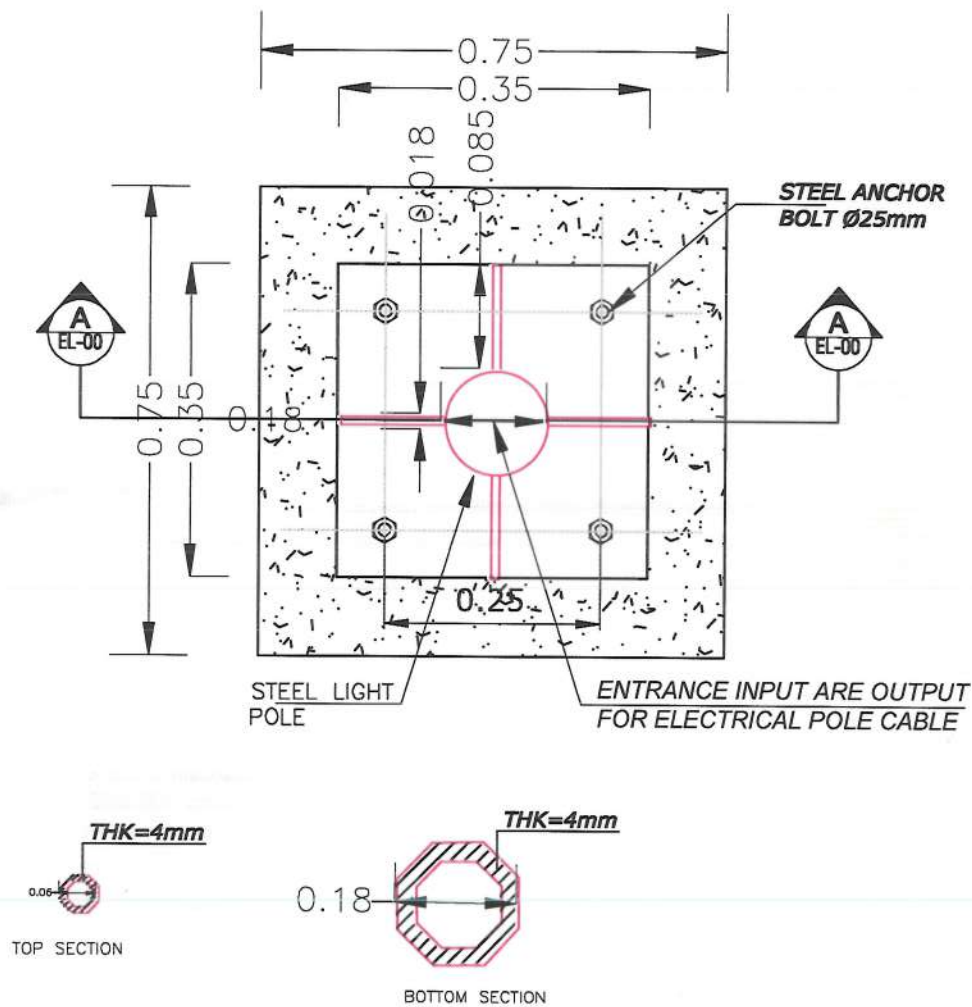
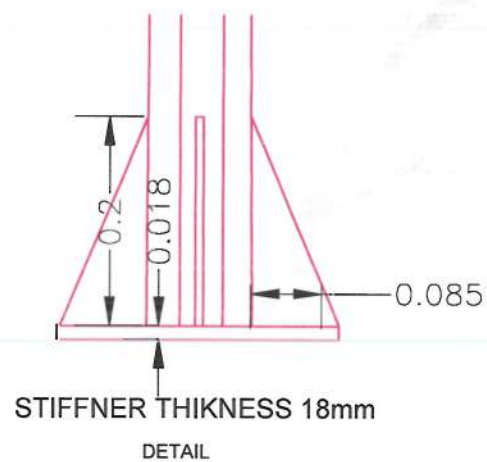
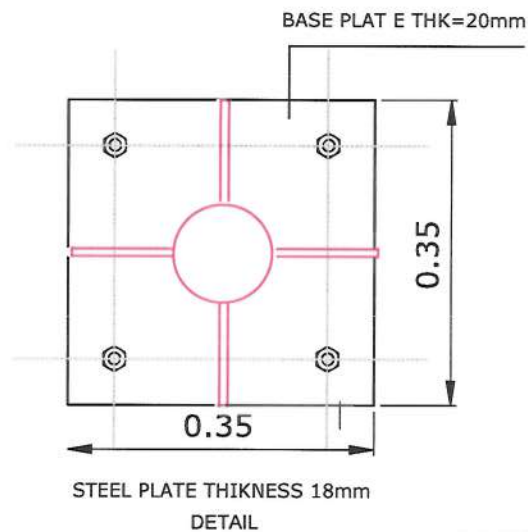
Date: 3 June 2024

Status: FINEL  
DESIGN

Project Code:

SHEET	PAGE NO	REVISION
S-L-D-02		00





Hot Dip Galvanized steel street light pole type below.

Light Pole Location	Pole Length	Base Plate Size	Base Plate Thickness	Top Diameter	Bottom Diameter	Sheet Thickness of pole	Foundation Depth
	mm	mm	mm	mm	mm	mm	mm
SideGreen Area	12000	350	18	120	180	4	2200

NOTE:

1. All dimensions are in meters unless otherwise indicated



Date Revision Details Drawn Chkd Appr

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:

KABUL MUNICIPALITY DESIGN TEAM

Project Name: Construction of Road From Gala-e-Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:

Street Lighting Details

Drawn: Jamalulha Nazari  
Designed: Jamalulha Nazari  
Checked by: Hasibullah Shalizi  
Signature: [Signature]  
Signature: [Signature]  
Signature: [Signature]  
Approved by: [Signature]

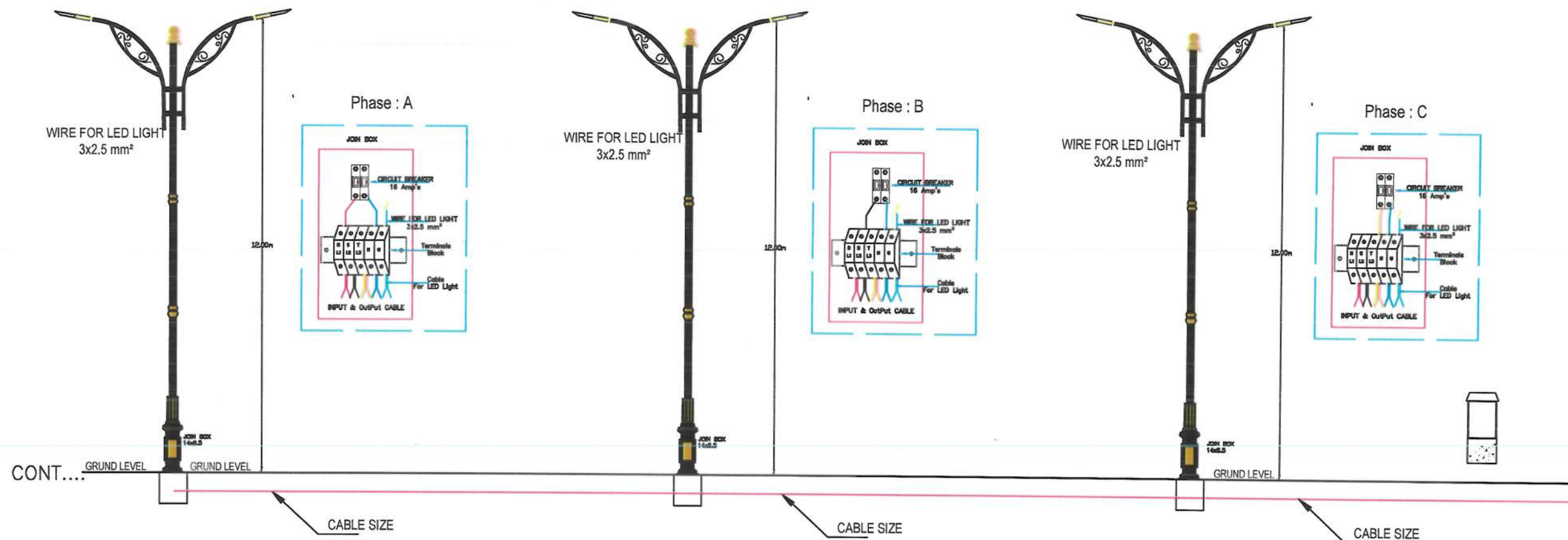
Date: 3 June 2024

Status: FINEL DESIGN

Project Code

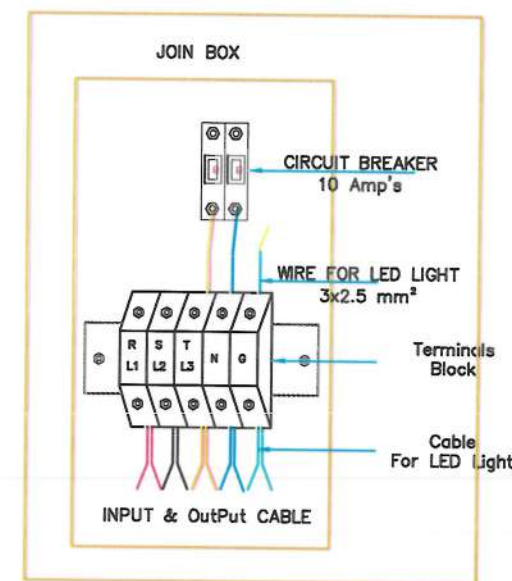
SHEET S-L-D-03 PAGE NO REVISION





Note:  
all dimension are in Meter

Note:  
Its to be noted that during the project implementation, the electrical source should be selected by Project Manager and DABS team from nearest and proper Source.



NOTE:  
1. All dimensions are in meters unless otherwise indicated.



Date	Revision	Details	Drawn	Chkd.	Appr.

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:

KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Gala-e-  
Zaman Khan Road To Kabul -  
Jalalabad Road

Drawing Title:

Street Lighting Details

Drawn: Jamsil Khan Nasari	Signature:
Designed: Jamsil Khan Nasari	Signature:
Checked by: Huseinullah Shalal	Signature:
Approved by:	Signature:

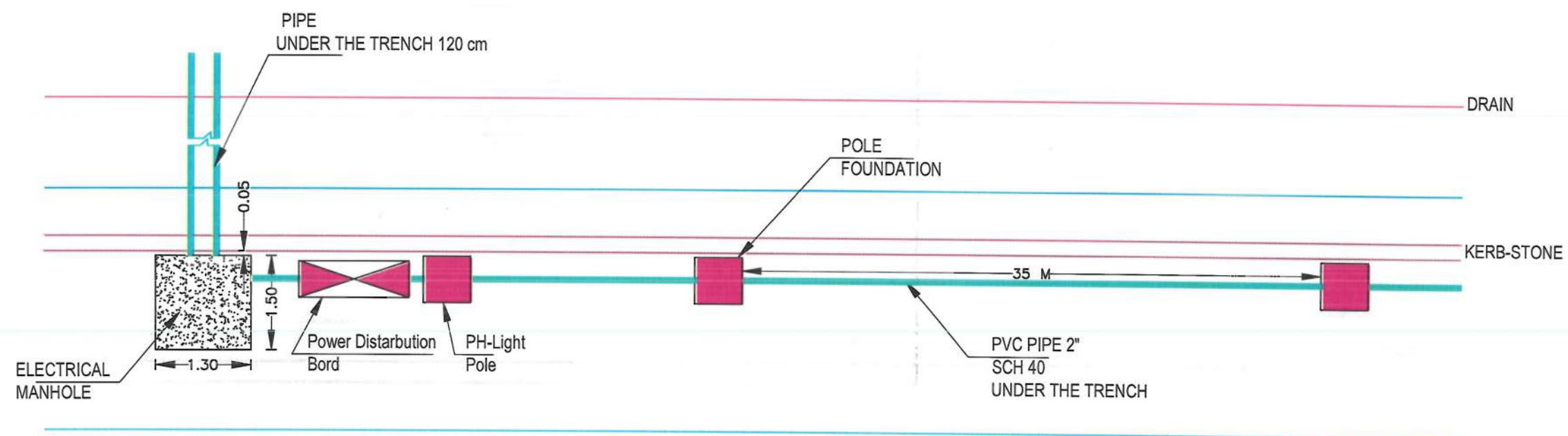
Date: 3 June 2024

Status: FINAL  
DESIGN

Project Code

SHEET	PAGE NO	REVISION
SL-D-04	01	01





NOTE



Date	Revision Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:



KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:

Construction of Road From Gala-e-  
Zaman Khan Road To Kabul -  
Jalalabad Road

Drawing Title:

Street Lighting Details

Drawn: Jamalluha Nazari

Signature:

Designed:

Jamalluha Nazari

Signature:

Checked by:

Hasibullah Shalizi

Signature:

Signature:

Approved by:

Signature:

Date: 3 June 2024

Status:

FINEL  
DESIGN

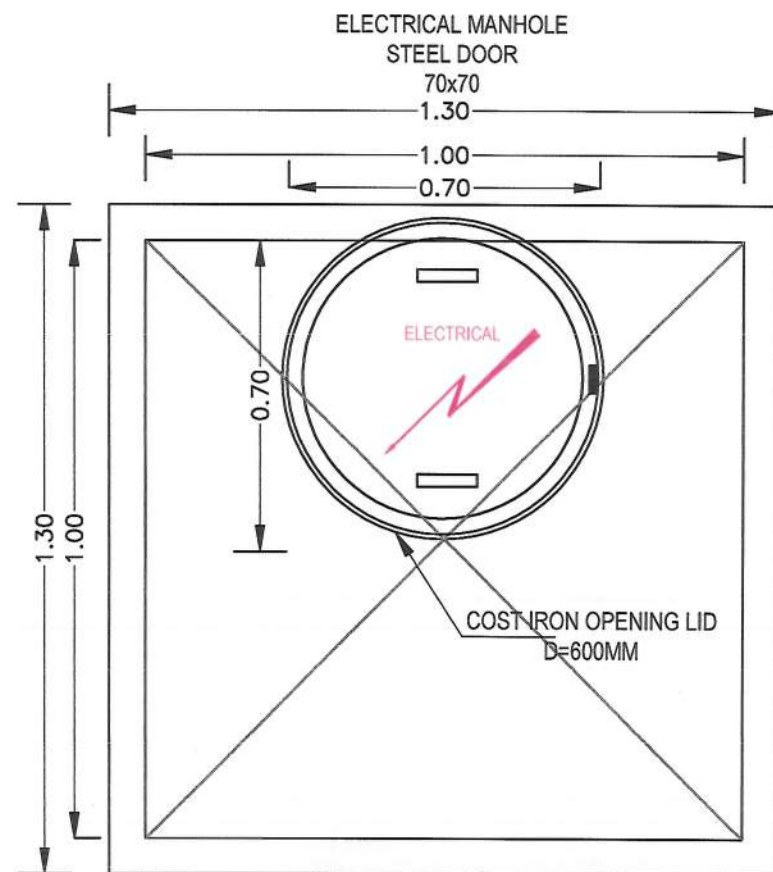
Project Code

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S-L-D-05

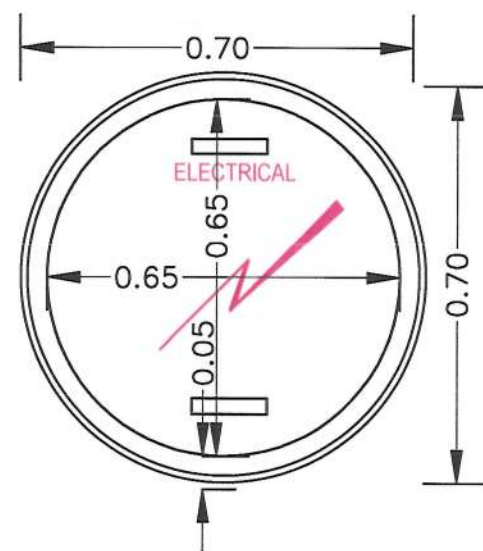
PAGE NO

REVISION

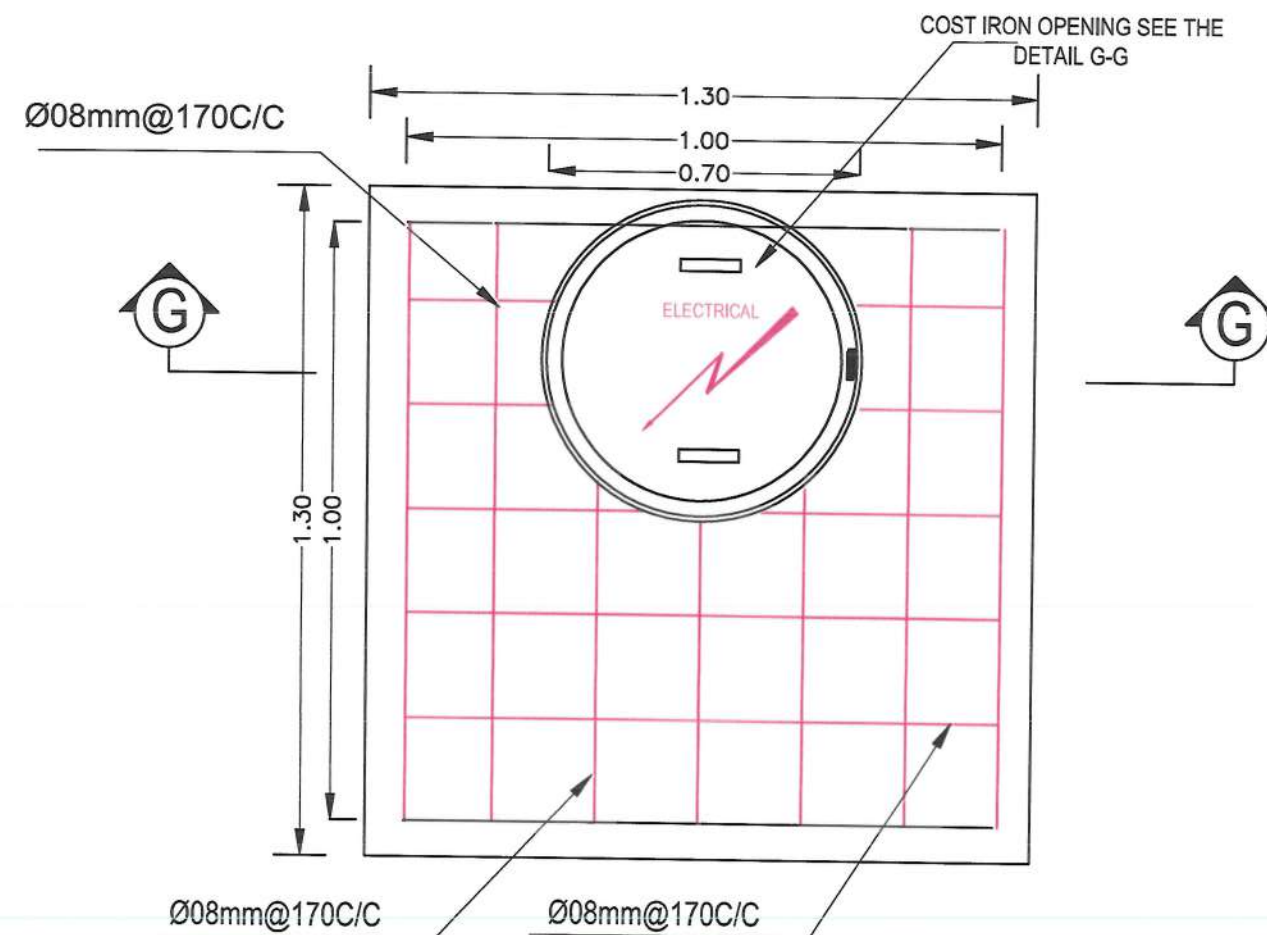




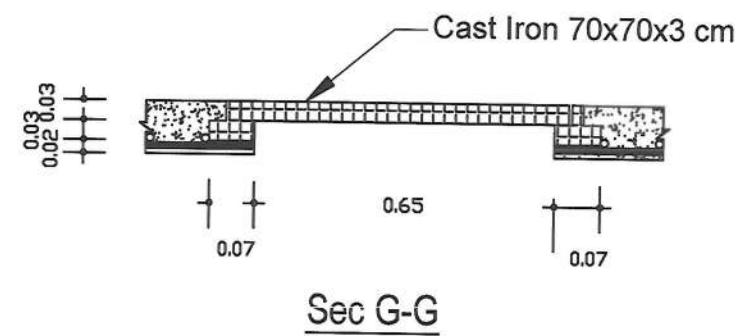
MANHOLE OPENING PLAN



Manhole opening Plan 70x70



STEEL BAR PLAN



NOTE



Date	Revision	Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:

KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:

ELECTRICAL MANE HOLE

Drawn: Jamalulha Nazari	Signature:
Designed: Jamalulha Nazari	Signature:
Checked by: Hasibullah Shilizi	Signature:
	Signature:
	Signature:

Date: 3 June 2024

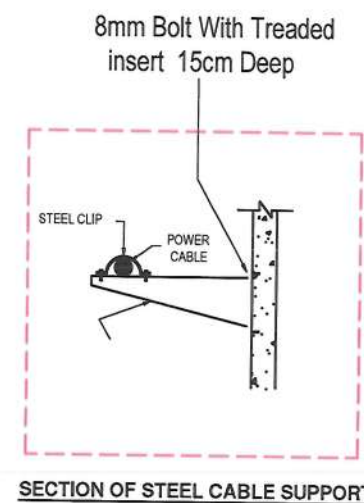
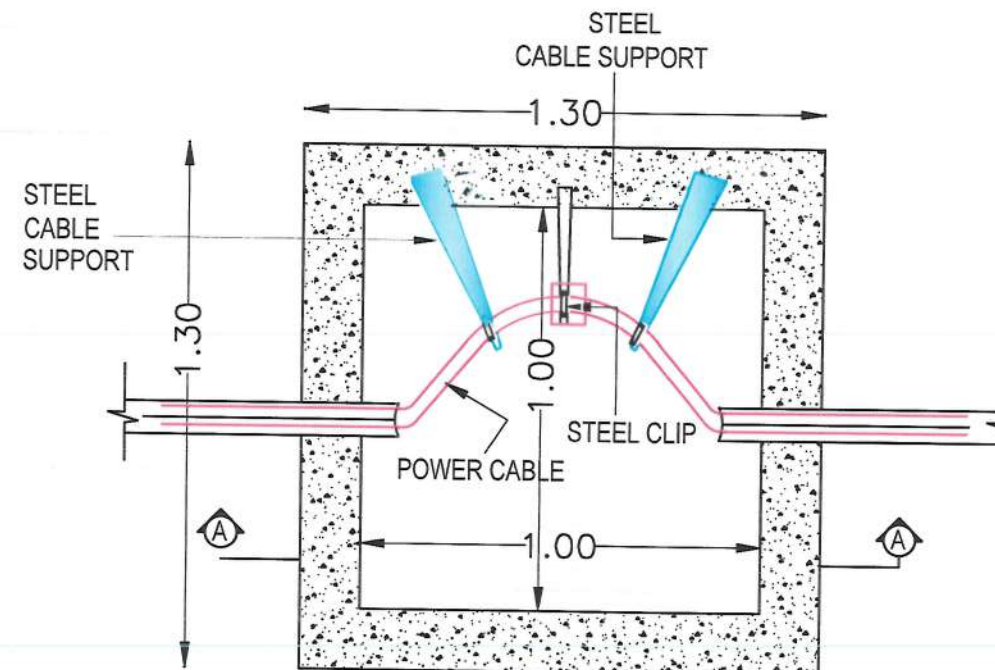
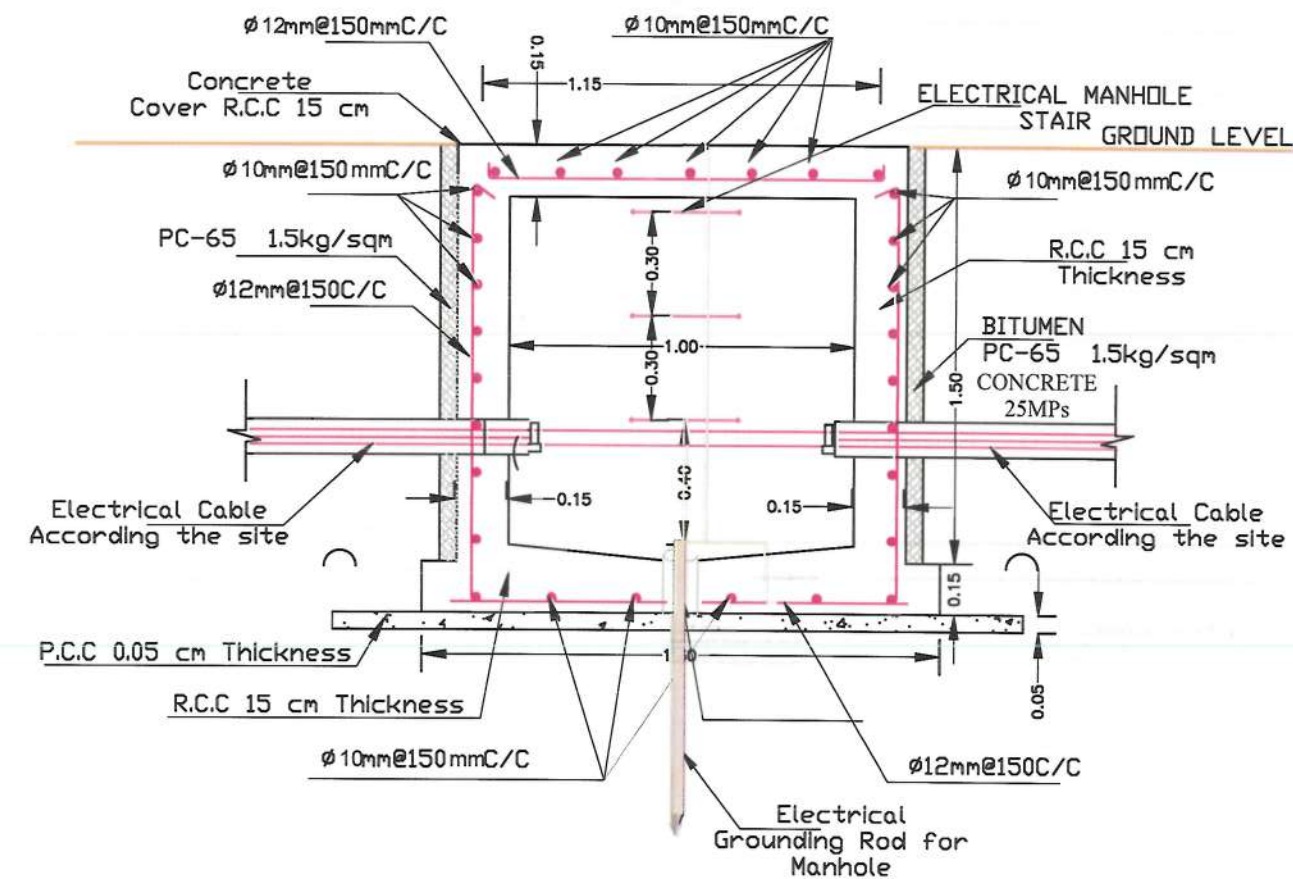
Status: FINEL DESIGN

Project Code

SHEET	PAGE NO	REVISION
E-M-H-01		



NOTE



SECTION OF STEEL CABLE SUPPORT



Date	Revision	Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:

KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Gola-e-Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:

ELECTRICAL MANE HOLE

Drawn: Jamalulha Nazari

Designed:

Jamalulha Nazari

Checked by:

Habibullah Shalizi

Signature:

Signature:

Signature:

Signature:

Date: 3 June 2024

Status:

FINEL

DESIGN

Project Code:

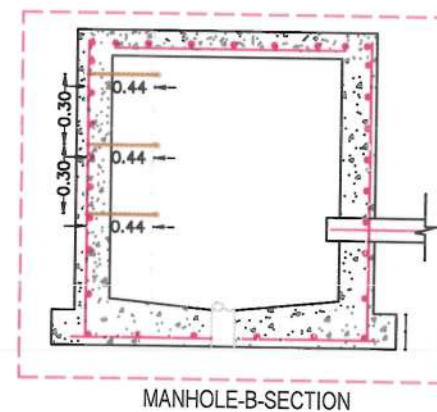
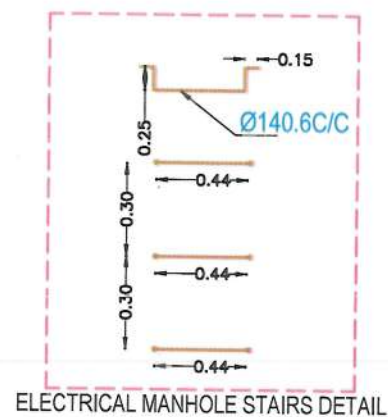
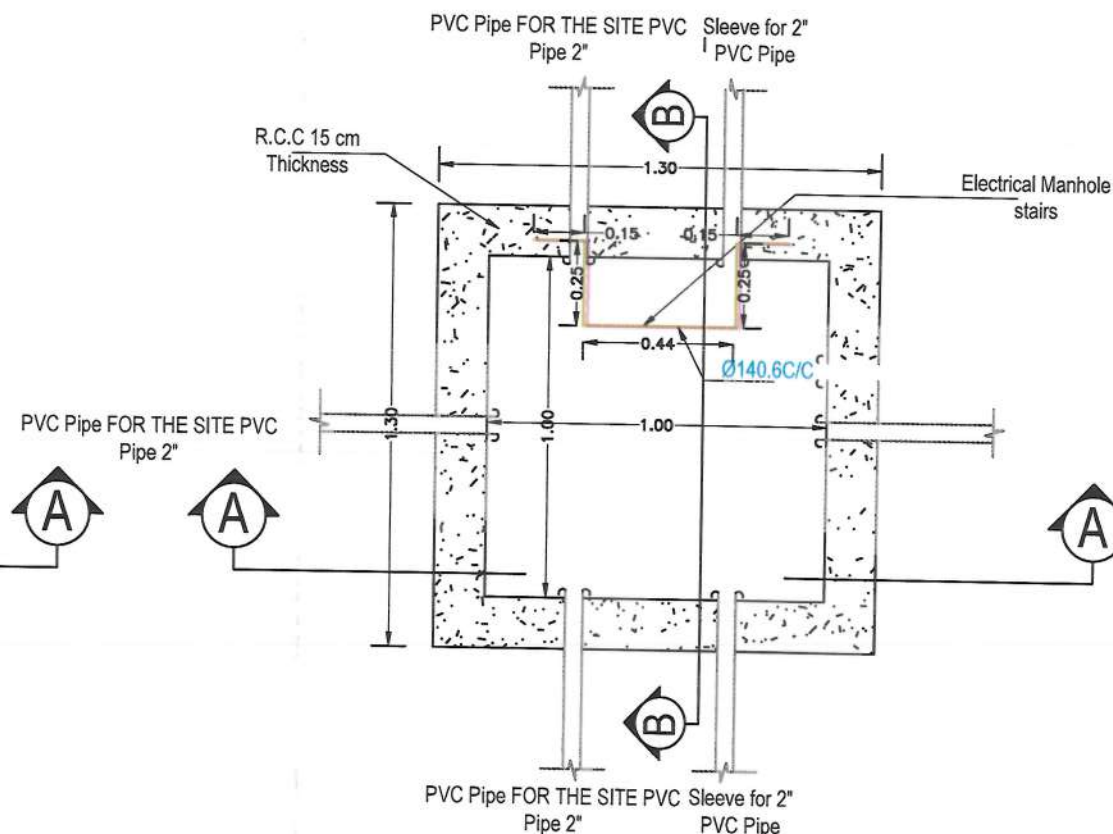
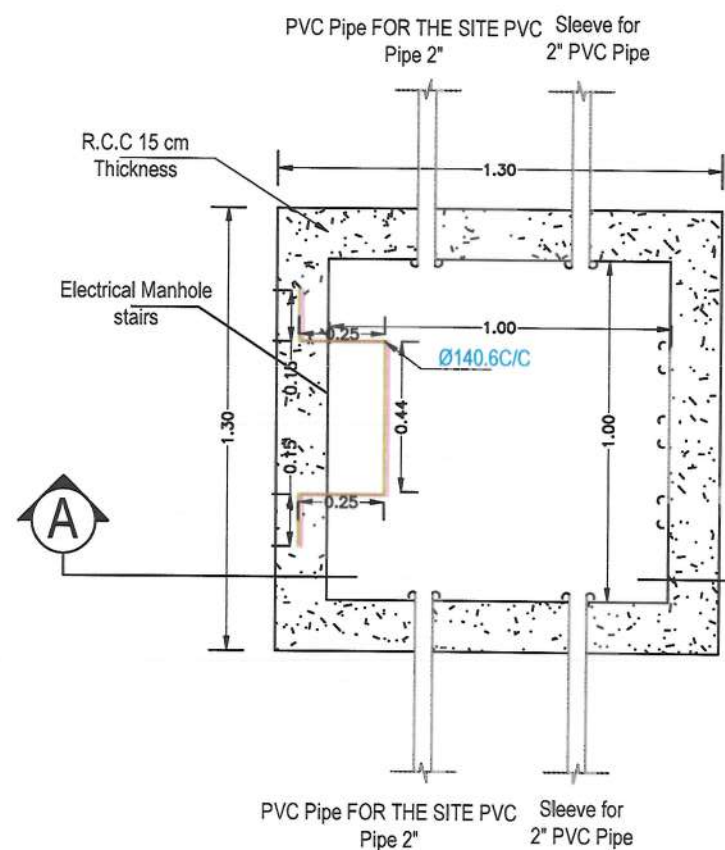
SHEET

E-M-H-02

PAGE NO

REVISION





NOTE:



Date	Revision	Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:

KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Gala-e-  
Zaman Khan Road To Kabul -  
Jalalabad Road

Drawing Title:

ELECTRICAL MANE HOLE

Drawn: Jamalulha Nazari

Designed:

Jamalulha Nazari

Checked by:

Hassibullah Shalizi

Approved by:

Signature:

Date: 3 June 2024

Status: FINEL  
DESIGN

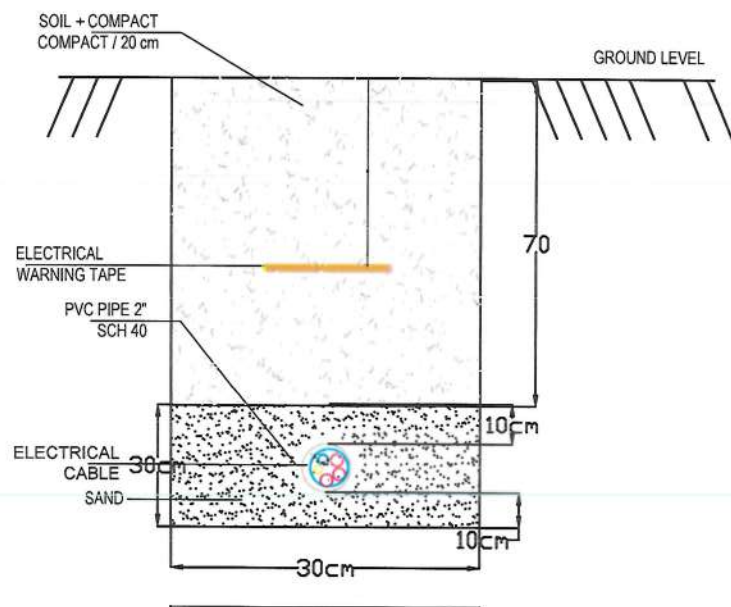
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E-M-11-03

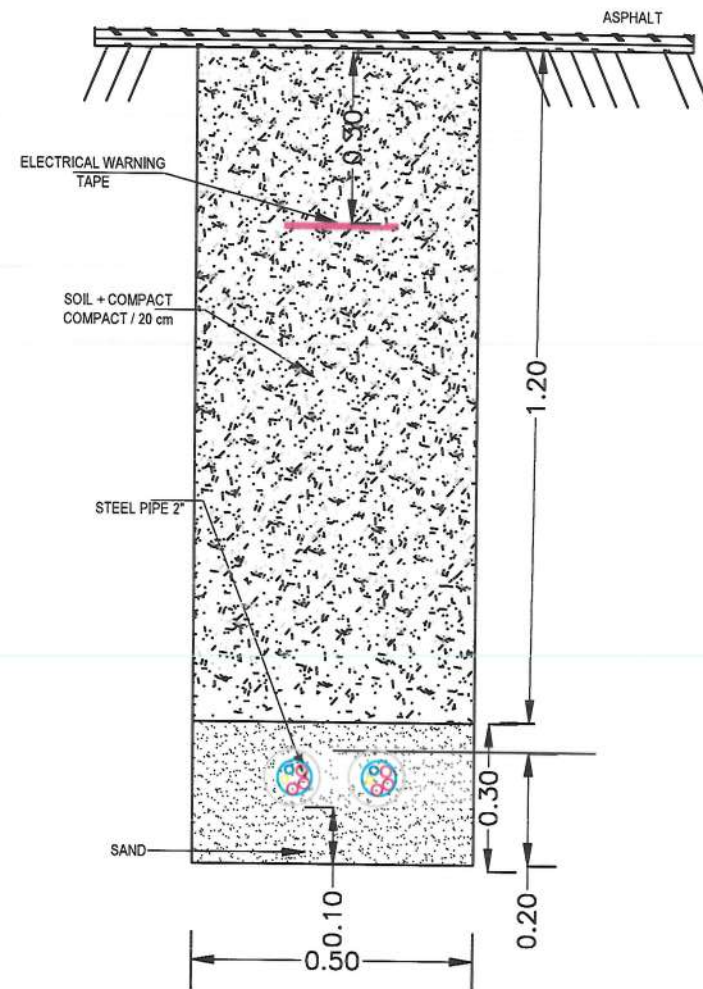
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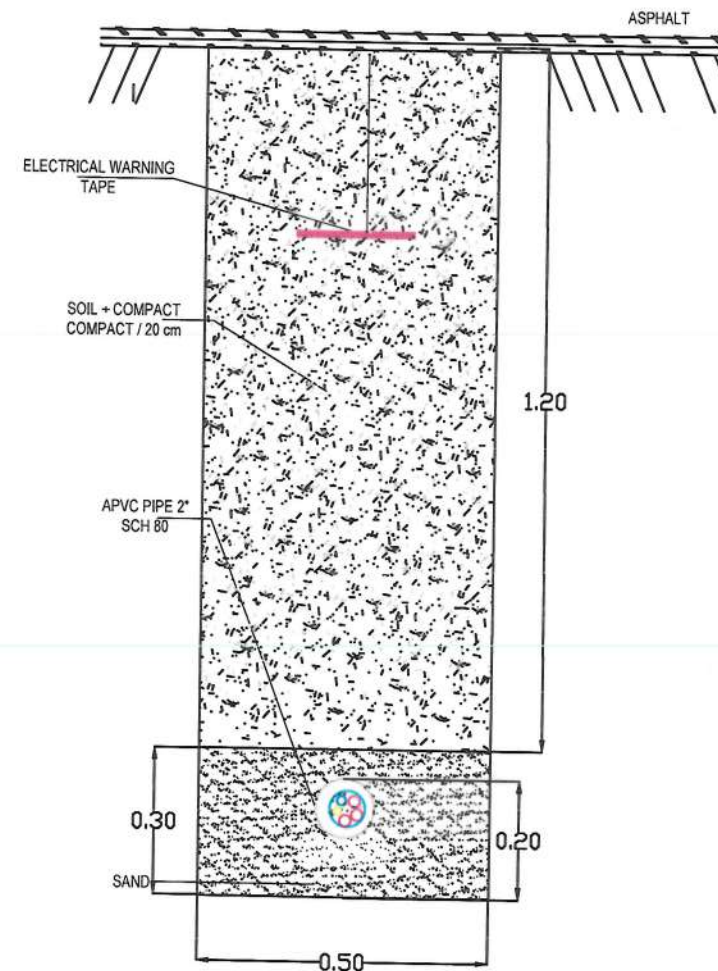




DETAIL-1



Details Manholes to Manholes



Details for U-turn storage lane

NOTE:



Date	Revision	Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:

KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:

Construction of Road From Qala-e- Zaman Khan  
Road To Kabul - Jalalabad Road

Drawing Title:

ELECTRICAL MANE HOLE

Drawn: Jamalulha Nazari	Signature:
Designed: Jamalulha Nazari	Signature:
Checked by: Hasibullah Shalizi	Signature:
	Signature:
	Signature:

Date: 3 June 2024

Status: FINEL  
DESIGN

Project Code:

SHEET	PAGE NO	REVISION
E-M-H-04		



		<b>LIGHTING POWER PANEL BOARD SCHEDULE</b>																<b>MOUNTING , SURFACE PANEL BOARD LOCATION :-</b>		
<b>380V / 220 VOLTS, 3 PHASE , 4 WIRE 50Hz PANEL BOARD</b>		<b>MAIN CIRCUIT BREAKER:-      3 PH-63A</b>																		
<b>WIRE &amp; CONDUIT mm<sup>2</sup></b>	<b>GND WIRE</b>	<b>LOAD DESCRIPTION</b>	<b>DEWEANED (VA)</b>			<b>AMP</b>	<b>POLE</b>	<b>CKT</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>CKT</b>	<b>POLE</b>	<b>AMP</b>	<b>DEWEANED (VA)</b>			<b>LOAD DESCRIPTION</b>	<b>GND WIRE</b>	<b>WIRE &amp; CONDUIT mm<sup>2</sup></b>
			<b>A</b>	<b>C</b>	<b>B</b>										<b>A</b>	<b>B</b>	<b>C</b>			
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING			126	16								16				LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING	126			16								16	126			LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING		126		16								16		126		LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING			126	16								16			126	LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING	126			16								16	126			LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING		126		16								16		126		LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING			126	16								16			126	LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING	126			16								16	126			LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING		126		16								16		126		LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING			126	16								16			126	LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING	126			16								16	126			LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING		126		16								16		126		LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING			126	16								16			126	LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING	126			16								16	126			LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING		126		16								16		126		LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING			126	16								16			126	LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING	126			16								16	126			LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING		126		16								16		126		LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm
2(1C X2.5mm) Ø 20mm	2.5mm <sup>2</sup>	LIGHTING			126	16								16			126	LIGHTING	2.5mm <sup>2</sup>	2(1C X 2.5mm) Ø 20mm</

The diagram illustrates a lighting fixture wiring system. At the top, a circled number '1' is connected to a label '1X126W LED 1 C01'. Below this, a rectangular box represents the fixture, containing a triangular arrangement of three terminals. These terminals are connected to three circular symbols representing conductors. These conductors then pass through a 'WEATHERPROOF JUNCTION BOX' (represented by three circles) before entering a terminal block at the bottom. The terminal block has six terminals, with the three conductors connected to the first three. To the right of the diagram is a legend with the following items:

- CIRCUIT PHASE IDENTIFICATION
- FIXTURE WATTAGE LAMP TYPE
- LED LIGHTING FIXTURE
- FIXTURE ARRANGEMENT NUMBER
- LIGHTING CIRCUIT CONDUCTOR
- FIXTURE TERMINAL BLOCK
- 2.5 SQ.MM CU CONDUCTORS
- WEATHERPROOF JUNCTION BOX

ISLAMIC EMIRATE OF  
AFGHANISTAN

KABUL MUNICIPALITY  
DESIGN TEAM

Drawing Title

ELECTRICAL WIRING

E-W-01		
--------	--	--

SHEET	PAGE NO	REVISION
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E-W-01		
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[illegible]



PANEL :ROAD				VOLTS : 380Y/220				PHASE / WIRE :				LOCATION : Construction of Road From Qala-e- Zaman Khan Road To Kabul - Jalalabad Road											
MAIN BUS : 150 Amp's				MAIN CB : 250 Amp's				NEUTRAL : 100%				SEE NOTE						FAULT DUTY: 30 kAIC MIN					
LOAD INFORMATION				Watt's				BREAKER RATING / POLES						Watt's				LOAD INFORMATION					
LOAD	NOTE	TYPE		PH-A	PH-B	PH-C	CKT	P	CB	PH	CB	P	CKT	PH-A	PH-B	PH-C	TYPE	NOTE	LOAD				
A-SIDE LED street Light				504			1	3	63	A	63	3	2	630					B-SIDE LED street Light				
					504		3			B			4		630								
						504	5			C			6			756							
							7			A	63		8										
							9			B			10										
							11			C			12										
							13			A			14										
							15			B			16										
							17			C			18										
							19			A			20										
							21			B			22										
							23			C			24										
							25			A			26										
							27			B			28										
							29			C			30										
							31			A			32										
							33			B			34										
							35			C			36										
							37			A			38										
							39			B			40										
							41			C			42										
MOUNTING :									A	B	C												
ENCLOSURE :				CONNECTED PHASE (W) :					1134	1134	1260												

#### NOTES :

- 1 . Ground Bus
- 2 . UL-Listed, Nema
3. Bolt on breakers

380V220/V3, PHASE 50HZ		W	A
TOTAL PHASE (A) =		1134	25.4
TOTAL PHASE (B) =		1134	28
TOTAL PHASE (C) =		1260	25.4
TOTAL CONNECTED LOAD		3528	W
DEMAND FACTER		90	%
DEMAND LOAD		3175	W
20% FUTURE		635.4	W
TOTAL LOAD		4.16	KW
TOTAL AMPERE		6.4	AMPS

PANEL SCH - ELECTRICAL CALCULATION

B1# ROAD A SIDE  
Cable Size (4x10 mm<sup>2</sup>)  
Type (XLPE)

B1# ROAD A SIDE  
Cable Size (4x10 mm<sup>2</sup>)  
Type (XLPE)

MAIN CABLE SELECT BY CONTRACTORS AN DABS  
ACCORDING VOLTAGE LOSSES

NOTE:



Date Revision Details Drawn Chkd Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:

KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-  
Zaman Khan Road To Kabul -  
Jalalabad Road

Drawing Title:

ELECTRICAL WIRING

Drawn: Jamalulha Nazari Signature:

Designed: Jamalulha Nazari Signature:

Checked by: Hasibullah Shalizi Signature:

Approved by: Signature:

Date: 3 June 2024

Status: FINEL  
DESIGN

Project Code

SHEET  
E-W-02

PAGE NO

REVISION







PANEL :ROAD				VOLTS : 380Y/220				PHASE / WIRE :				LOCATION : Construction of Road From Qala-e- Zaman Khan Road To Kabul - Jalalabad Road											
MAIN BUS : 150 Amp's				MAIN CB : 250 Amp's				NEUTRAL : 100%				SEE NOTE						FAULT DUTY: 30 kAIC MIN					
LOAD INFORMATION				Watt's				BREAKER RATING / POLES						Watt's				LOAD INFORMATION					
LOAD		NOTE	TYPE	PH-A	PH-B	PH-C	OKT	P	CB	PH	CB	P	OKT	PH-A	PH-B	PH-C	TYPE	NOTE	LOAD				
A-SIDE LED street Light				378			1	3	63	A	63	3	2	378						B-SIDE LED street Light			
					378		3			B			4		252								
						378	5			C			6			378							
							7			A			8										
							9			B			10										
							11			C			12										
							13			A			14										
							15			B			16										
							17			C			18										
							19			A			20										
							21			B			22										
							23			C			24										
							25			A			26										
							27			B			28										
							29			C			30										
							31			A			32										
							33			B			34										
							35			C			36										
							37			A			38										
							39			B			40										
							41			C			42										
MOUNTING :									A	B	C												
ENCLOSURE :				CONNECTED PHASE (W) :						5600	6160	5600											

#### NOTES :

- 1 . Ground Bus
- 2 . UL-Listed, Nema
3. Bolt on breakers

380V220/V3, PHASE 50HZ		W	A
TOTAL PHASE (A) =		756	25.4
TOTAL PHASE (B) =		630	28
TOTAL PHASE (C) =		756	25.4
TOTAL CONNECTED LOAD		2142	W
DEMAND FACTER		90	%
DEMAND LOAD		1927.8	W
20% FUTURE		385.5	W
TOTAL LOAD		2.3	KW
TOTAL AMPERE		3.5	AMPS

PANEL SCH - ELECTRICAL CALCULATION

B1# ROAD A SIDE  
Cable Size (4x6 mm<sup>2</sup>)  
Type (XLPE)

L-P  
1

B1# ROAD A SIDE  
Cable Size (4x6 mm<sup>2</sup>)  
Type (XLPE)

MAIN CABLE SELECT BY CONTRACTORS AN DABS  
ACCORDING VOLTAGE LOSSES

NOTE:



Date Revision Details Drawn Chkd Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:

KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-  
Zaman Khan Road To Kabul -  
Jalalabad Road

Drawing Title:

ELECTRICAL WIRING

Drawn: Jamalulha Nazari

Signature:

Designed: Jamalulha Nazari

Signature:

Checked by:

Hassibullah Shalizi

Signature:

Approved by:

Signature:

Signature:

Date: 3 June 2024

Status: FINEL  
DESIGN

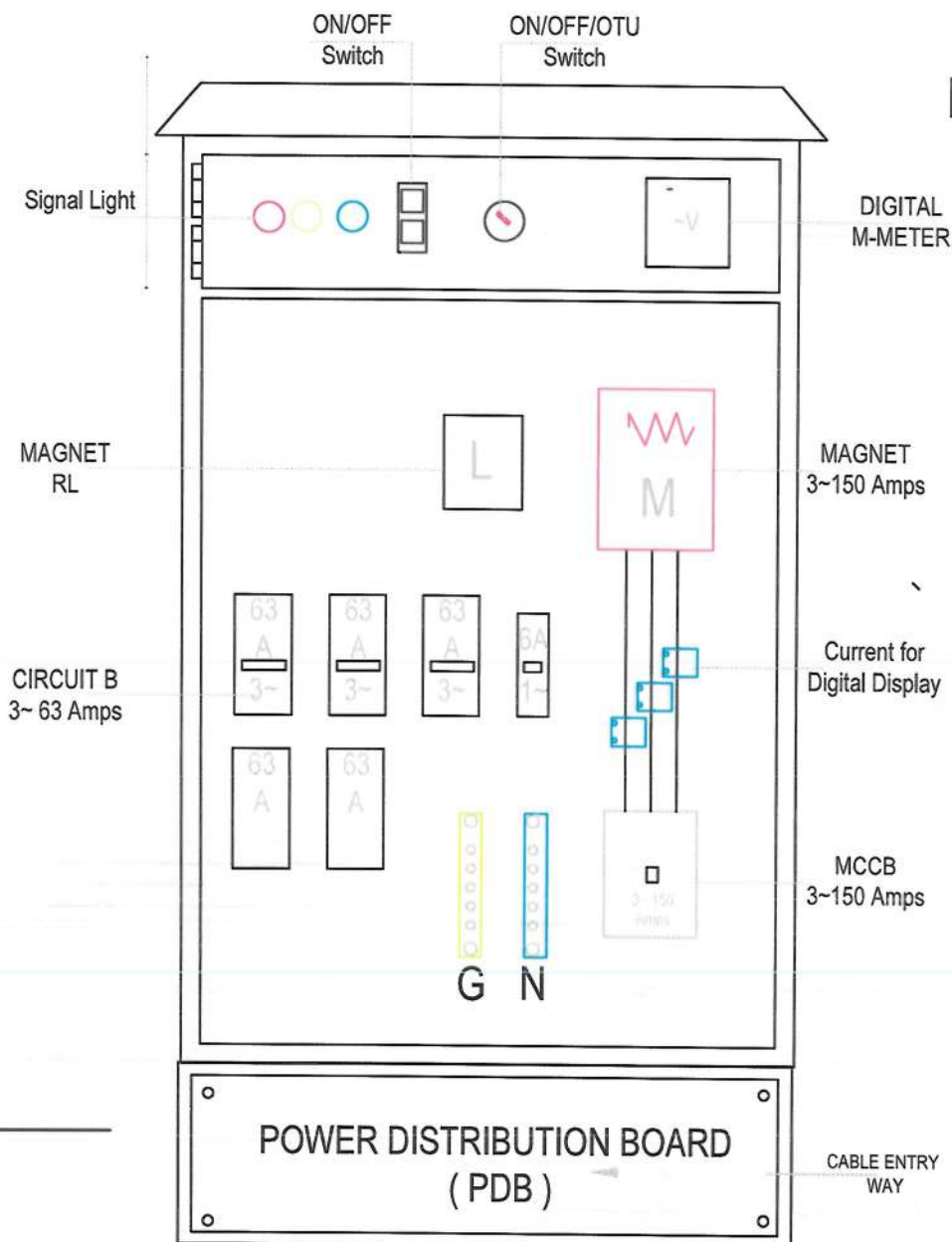
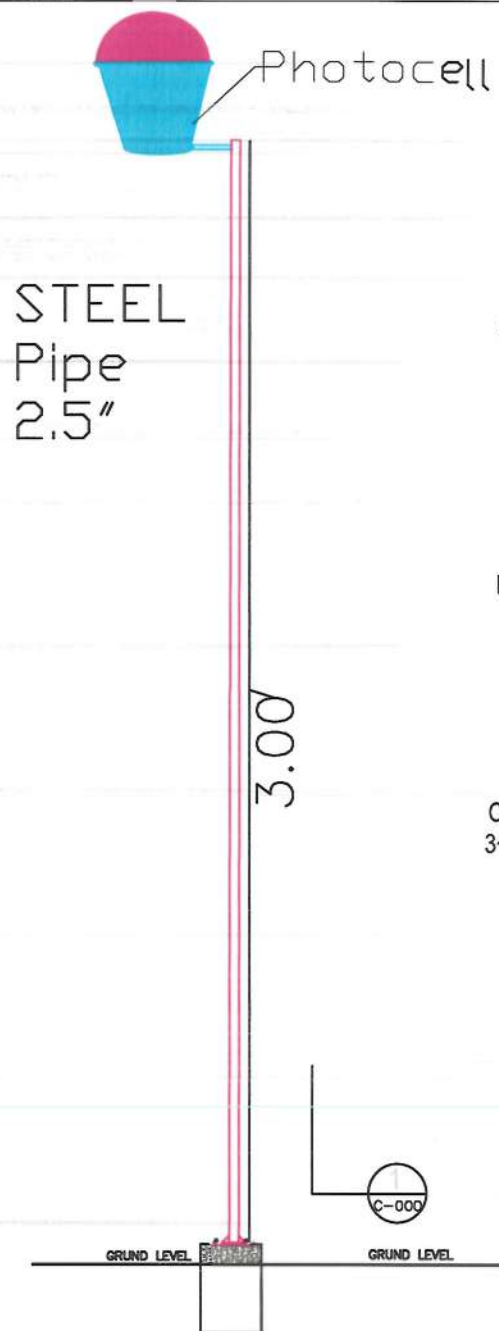
Project Code:

SHEET  
E-W-04

PAGE NO

REVISION

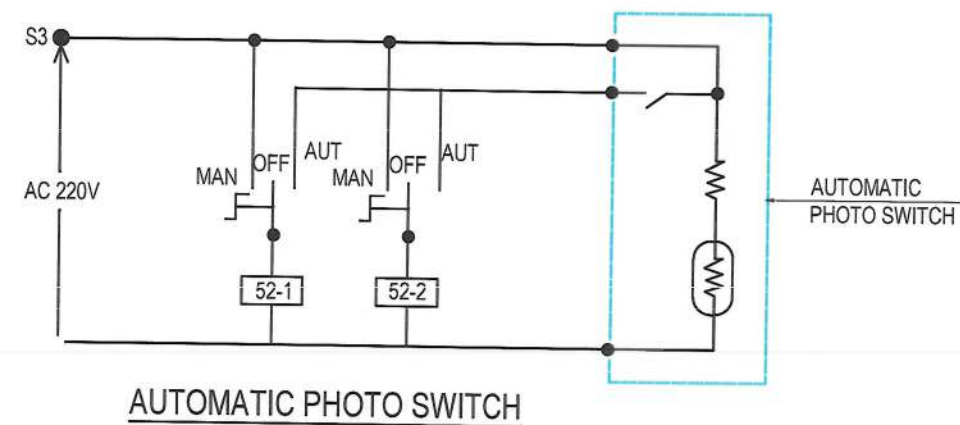
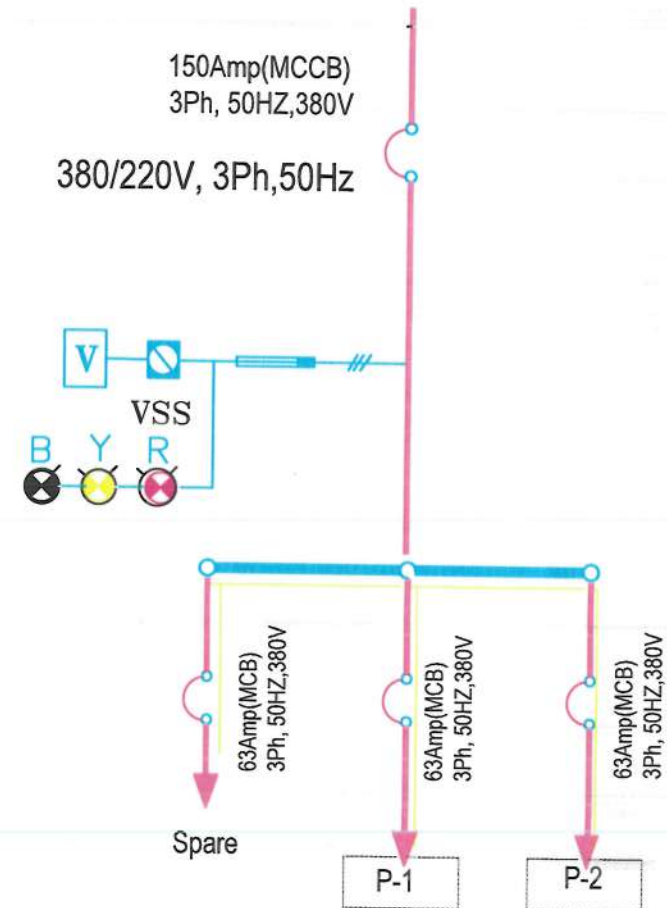




#### COLORS COD

IEC WIRE COLORS (60227)				
GROUND	NEUTRAL	PHASE A	PHASE B	PHASE C
YEL/GRN	BLUE	BROWN	BLACK	GRAY

#### POWER CALCULATION SCHEDULE PLAN



NOTE:



Date	Revision	Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:

KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Dala-e-Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:  
CONTROL CIRCUIT DIAGRAM

Drawn: Jamshidha Nazari	Signature:
Designed: Jamshidha Nazari	Signature:
Checked by: Hasibullah Shalizi	Signature:
	Signature:

Date: 3 June 2024

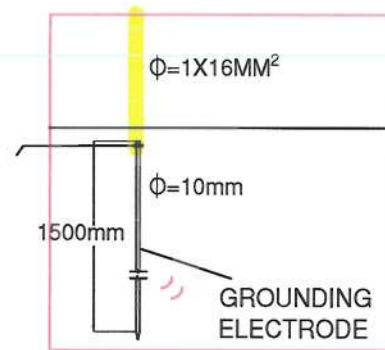
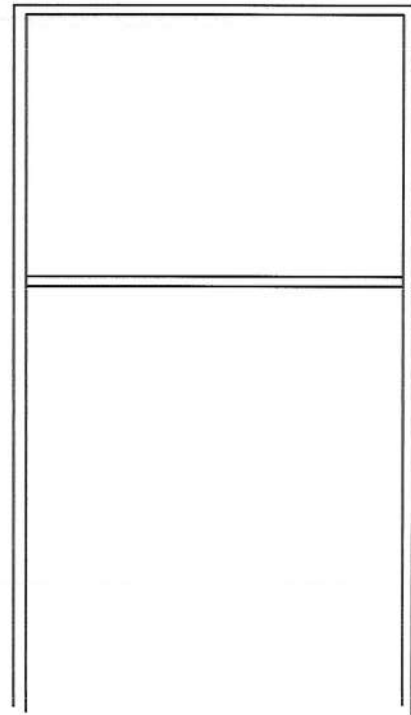
Status: FINEL DESIGN

Project Code:

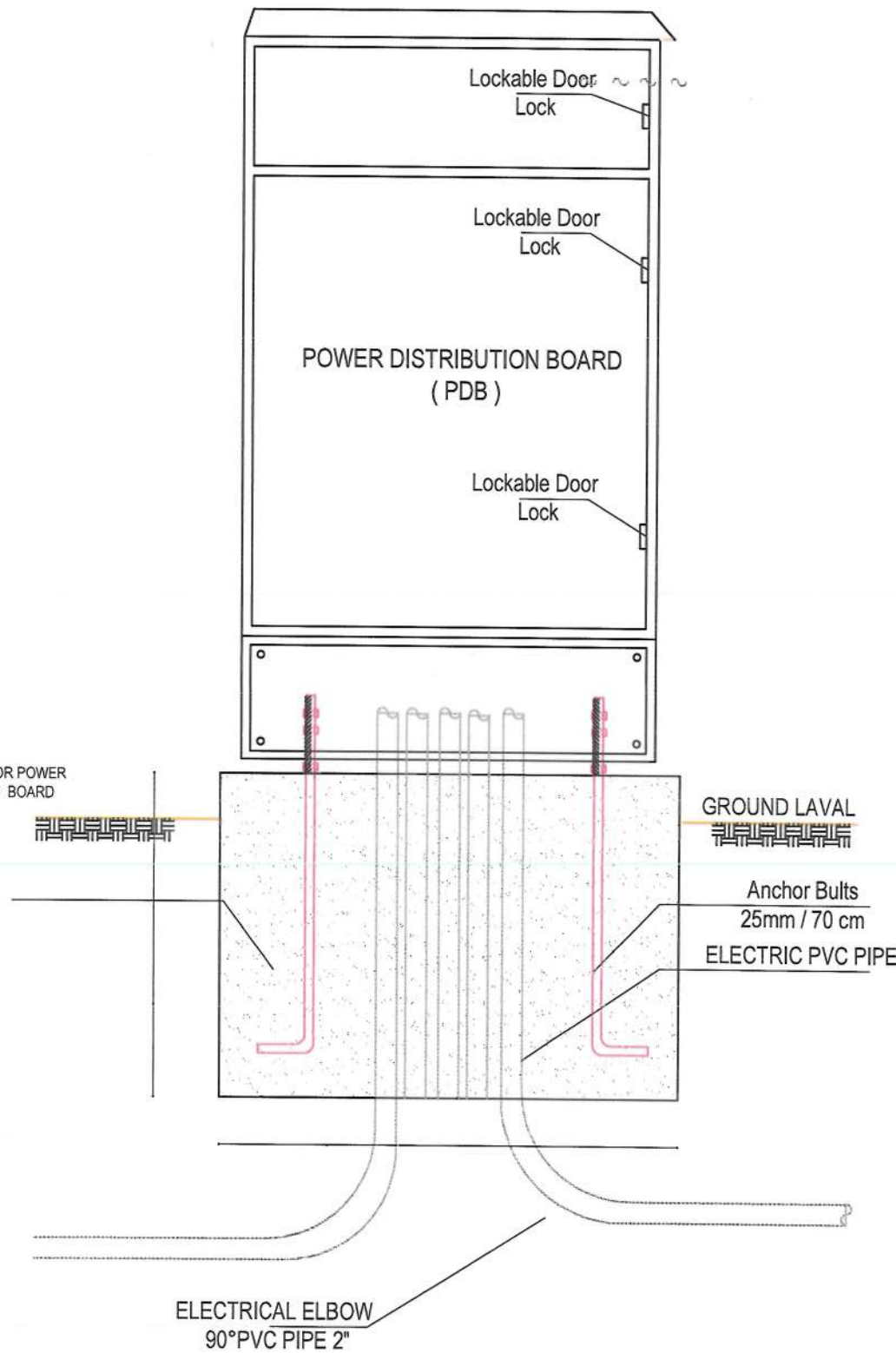
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C-C-D-01		



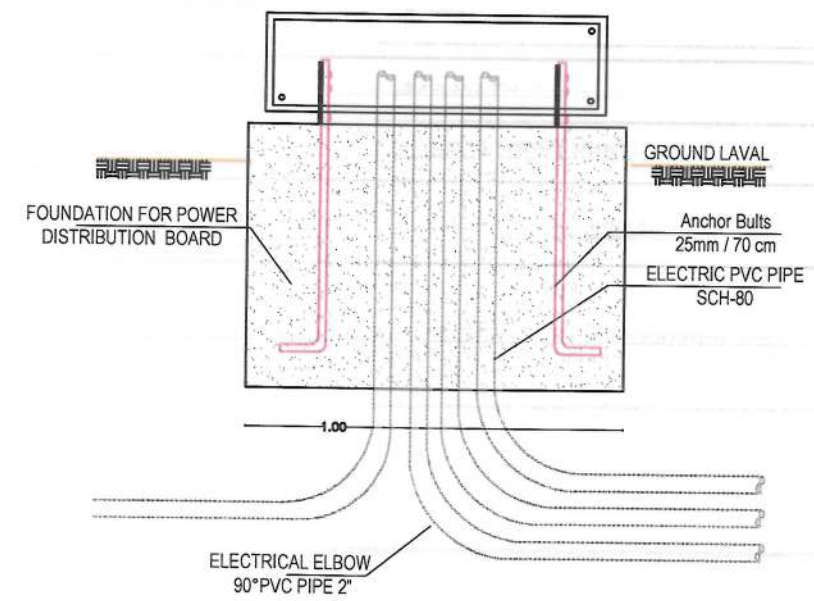
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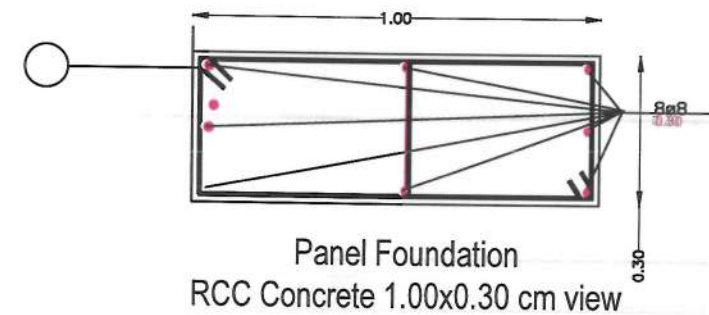
FOUNDATION FOR POWER  
DISTRIBUTION BOARD



ELECTRICAL PANEL FRONT ELEVATION



ELECTRICAL PANEL FRONT ELEVATION



NOTE



Date	Revision	Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:

KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Qala-e-  
Zaman Khan Road To Kabul -  
Jalalabad Road

Drawing Title:

ELECTRIC POLE DISTRIBUTION BOARD

Drawn: Jamalulha Nazari	Signature:
Designed: Jamalulha Nazari	Signature:
Checked by: Hasibullah Shalizi	Signature:
	Signature:
Approved by:	Signature:

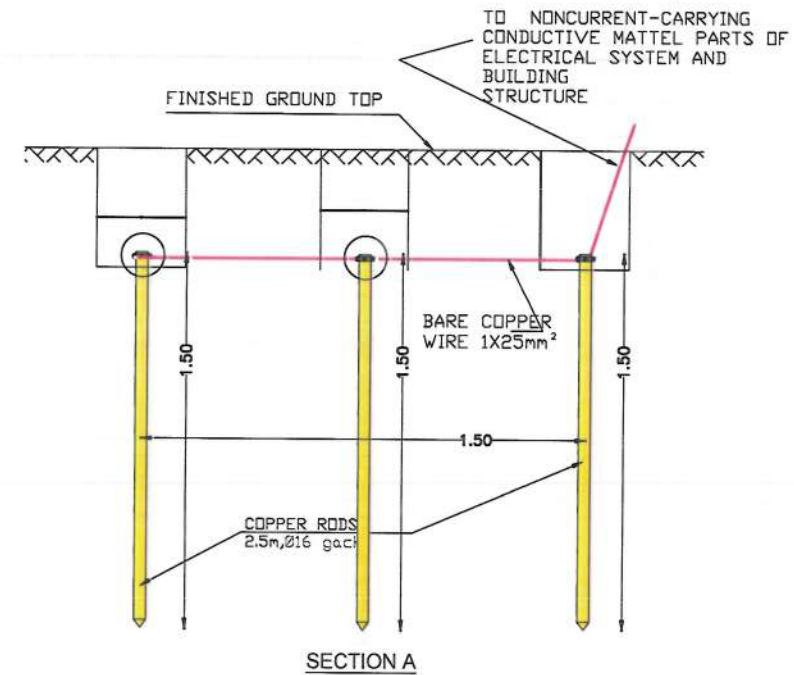
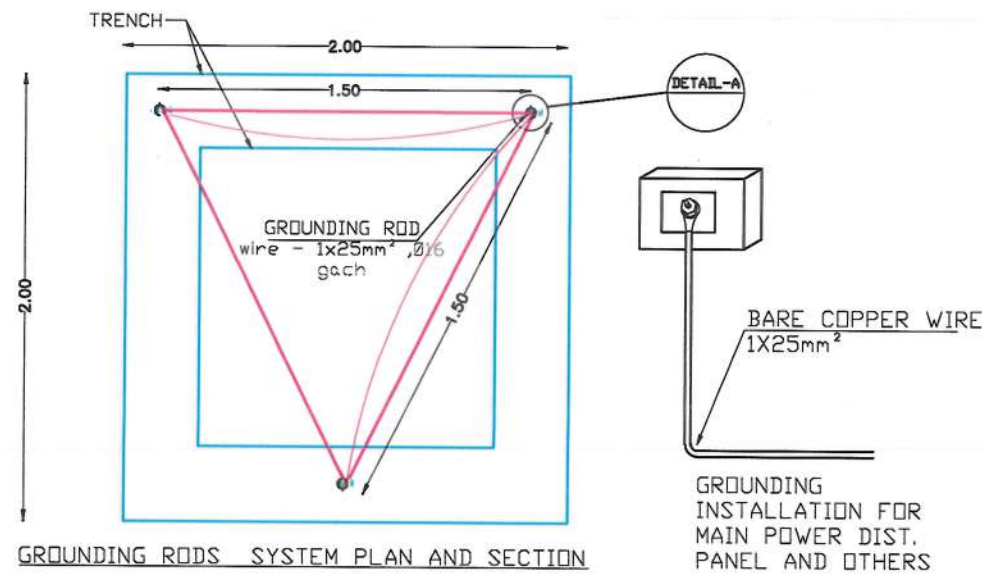
Date: 3 June 2024

Status: FINEL  
DESIGN

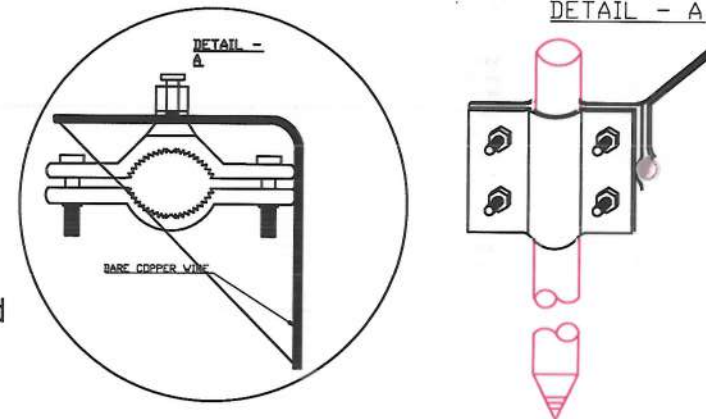
Project Code

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E-P-D-B-0		





1. resistivity OF land must be less than 5 Ohm, National Electric Safety Code rule 96.8 and NEC 250.56 (Loresco grid resistance calculator)
2. Grounding rods shall be free from nonconducting coatings such as paint or enamel. NEC 250.43 (a).
3. Depth of the grid is 0.8 m. NEC 250.53 (F).
4. Spacing of driving rods is 1.50m, 2.2 times the rod length.
5. Grounding rod length and diameter is in compliance With NEC 250.52 (5). {L=2.5m (8") & dia.=1.6 cm (5/8")}
6. Non conductive Metal parts of electrical system in a building or structure must be connected to earth for the purpose of limiting the voltage imposed by lightning, line surges, or in intentional contact With high voltage lines, by shunting the energy to the ground.
7. Different type of clamp are available in local market even special type Will be provided up on the request of contractors.



NOTE



Date	Revision Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF AFGHANISTAN

Designed By:

KABUL MUNICIPALITY DESIGN TEAM

Project Name:  
Construction of Road From Dala-e-Zaman Khan Road To Kabul - Jalalabad Road

Drawing Title:

VOLTAGE LOSSES CALCULATION

Drawn: Jamalulha Nazari	Signature:
Designed: Jamalulha Nazari	Signature:
Checked by: Hasibullah Shalizi	Signature:
	Signature:
	Signature:

Date: 3 June 2024

Status: FINAL DESIGN

Project Code:

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V-L-C-01		



Cable Calculation from Power Panel to Street  
Light Poles

1 conductors per phase utilizing a 12 AWG Copper conductor will limit the voltage drop to 1.49% or less when supplying 3.12 amps for 1837.2feet on a 380 volt system.

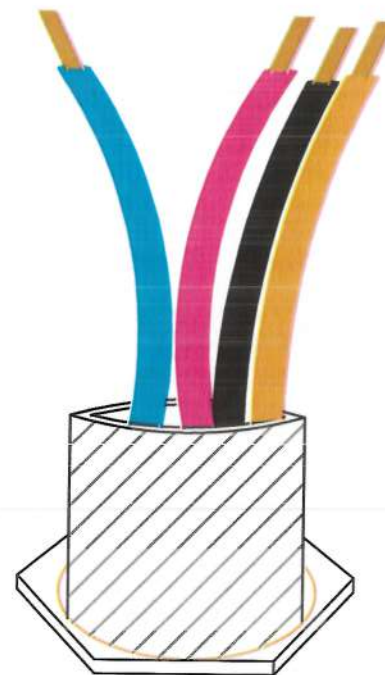
For Engineering Information Only:

10.5 Amps Rated ampacity of selected conductor in selected length.

1.9 Ohms Resistance (Ohms per 3280 feet)

11.4 volts maximum allowable voltage drop at 3%

5.46 Actual voltage drop loss at 1.49% for the circuit



Cable Calculation from Power Panel to Street  
Light Poles

1 conductors per phase utilizing a 12 AWG Copper conductor will limit the voltage drop to 0.7% or less when supplying 1.7 amps for 918.6feet on a 380 volt system.

For Engineering Information Only:

12.1 Amps Rated ampacity of selected conductor in selected length.

3.3 Ohms Resistance (Ohms per 3280 feet)

11.4 volts maximum allowable voltage drop at 3%

2.67 Actual voltage drop loss at 0.7% for the circuit

NOTE:



Date	Revision Details	Drawn	Chkd	Appr

ISLAMIC EMIRATE OF  
AFGHANISTAN

Designed By:

KABUL MUNICIPALITY  
DESIGN TEAM

Project Name:  
Construction of Road From Gala-e-  
Zaman Khan Road To Kabul -  
Jalalabad Road

Drawing Title:

VOLTAGE LOSSES CALCULATION

Drawn: Jamalulla Nazari	Signature:
Designed: Jamalulla Nazari	Signature:
Checked by: Hasibullah Shalizi	Signature:
	Signature:
	Signature:

Date: 3 June 2024

Status: FINEL  
DESIGN

Project Code

SHEET	PAGE NO	REVISION
V-L-C-01		