DACAAR

داکار

Main Office
Golayee Wazirabad
PO Box 208
Kabul, Afghanistan
Phone: +93 202230752
Mobile: +93 700288232
E-mail: dacaar@dacaar.org
Website: www.dacaar.org

دفتر مرکزی
گولایی وزیرآباد
پست بکس ۲۰۸
کابل، افغانستان
تیلفون: ۰۲۲۳۰۷۵۲+۹۳۲
موبایل: ۰۲۸۸۲۳۲+۹۳۷
ایمیل: dacaar@dacaar.org
وبسایت: www.dacaar.org

INVITATION TO BID

Construction of Two Check Dams for DACAAR Program UNODC Project in Musa Kala and Sangin Districts of Helmand Province

درخواست آفر برای اعمار و ساختمان دو چک دیم در ولسوالی های موسی قلعه و سنگین ولایت هلمند

Date: March 23, 2025

DACAAR ITB 21 PRF-198 to 199/UNODC/2407-UNODC/UHLA1.1.1/03.2025

DACAAR needs Construction of two Check Dam in Roshan Tower Village Musa Kala District and Baba Faqir Village Sangin District of Helmand Province and invites interested parties to submit their sealed offers for the required job mentioned in Annex (I).

داکار برای اعمار و ساختمان دو چک دیم که در ضمیمه (I) از آن به تفصیل ذکر گردیده در قریه روشن تاور ولسوالی موسی قلعه و در قریه بابا فقیر ولسوالی سنگین ولایت هلمند ضرورت دارد، و از تمام داوطلبان واجد شرایط دعوت بعمل میآورد تا آفر های سربسته شانرا قبل از معیاد تعین شده به دفتر داکار مرکزی بسپارند.

The offers must be submitted to DACAAR Main Office Logistics Unit located in Street No. 12, Taimani Project, Qala-e-Fathullah, Kabul Province till 4:00 PM April 12, 2025.

آفرها باید الی تاریخ 12 اپریل 2025 ساعت 4:00 عصر به شعبه لوجستیک دفتر مرکزی داکار واقع پروژه تایمنی پایکوب نصوار سرک 12 قلعه فتح الله ولایت کابل سپرده شود.

The offers will be opened on April 14, 2025 at 10:00am in DACAAR Main Office, Kabul Province and the winner of the biding will be notified shortly after the bid opening session.

مجلس آفرگشایی ساعت 10:00 قبل از ظهر تاریخ 14 اپریل 2025 در دفتر مرکزی داکار در ولایت کابل صورت میگیرد که متعاقباً برنده داوطلبی در اسرع وقت اطلاع خواهد یافت.

Please use Annex (III) for Technical Specification, Annex (II) for Work Plan and Annex (I) for Financial purposes.

لطفاً ضمیمه (I) را بخاطر ارایه آفر، ضمیمه (II) را بخاطر پلان کاری و ضمیمه (III) را بخاطر مشخصات تخنیکی مشاهده نمائید.

Terms and Conditions for Participation/Bid Winner

شرایط قرارداد برای برنده داوطلبی/ اشتراک کننده گان

1. Contractor should Construct the Check Dams in Roshan Tower and Baba Faqir Villages of Musa Qala and Sangin District of Helmand Province based on completion plan mentioned in Annex (II).

1. قرارداد گیرنده مکلف است تا اعمار دو دانه چک دیم را که در قریه های روشن تاور و بابا فقیر ولسوالی های موسی قلعه و سنگین ولایت هلمند موقعیت دارد، طبق پلان کاری که در ضمیمه (II) ذکر گردیده تکمیل نماید.

2. Priority is given to construction companies.

2. حق اولویت به شرکت های ساختمانی داده میشود.

3. Similar works experience as prime contractor in the construction of at least one works in nature and complexity equivalent.

3. داشتن تجربه کاری مشابه حداقل یک پروژه که ماهیت و پیچیدگی آن مشابه به این پروژه باشد.

4. Provision of all tools and equipment's required for the Construction of Check Dam belongs to the contractor.

4. تهیه تمام وسایل و مواد برای اعمار و ساختمان چک دم معه اعاشه و اباطه بدوش قرارداد گیرنده میباشد.

5. Payment will be made within 25 working days after technical team confirmation and successfully completion of the contract.

5. پرداخت پول بعد از تصدیق بخش تخنیکی داکار و تکمیل نمودن مؤفقانه قرارداد در مدت 25 روز کاری اجرا میگردد.

6. The bid winner must deposit 10% amount of total contract value to DACAAR bank account as a Contract Performance Guarantee before signing the contract, the mentioned amount only refundable after successful completion of the contract.

6. برنده داوطلبی مکلف است تا 10% مجموع ارزش قرارداد را بشکل تضمین بانکی از اجرای کامل و مؤفقانه قرارداد قبل از امضأ آن به حساب بانکی داکار بپردازد. مبلغ متذکره در صورت اجرأ مؤفقانه قرارداد قابل باز پرداخت میباشد.

7. In case of delay in contract completion without any logical reasons, 0.5% of total value of the remaining work will be deducted from the payment. This penalty will charge per each official day of delay.

7. در صورت تأخیر در تکمیل قررارداد بدون عذر موجه در وقت معینه آن، مبلغ 0.5% از هر روز کار تأخیر شده بطور جرمانه از مجموع ارزش قرارداد اخذ میگردد.

8. Quotations should be valid for 60 official days.

8. قیمت داده شده باید برای مدت 60 روز کاری مدار اعتبار باشد.

9. Prices shall be given in Afghanis (AFN) and must include all duties, transport cost, loading and unloading costs. Offers without sign and stamp will not be accepted. Manipulated/overwritten offers will automatically be rejected.

9. قیمت ها به افغانی داده شود و باید شامل مالیات، انتقال، قیمت بارگیری و تخلیه باشد و قیمت هائیکه بدون مهر و امضأ قابل قبول نمیباشد. آفرهای قلم خورده گی بطور اتومات رد میگردد.

10. DACAAR's technical team (Site Engineer) will check quality of work. If it is not according to the specifications, DACAAR Technical Team has reserved the right to terminate the contract without any compensation paid to the contractor.

10. هئیت تفتیش و بررسی داکار کیفیت کار را به اساس قرارداد چک و ملاحظه نموده در صورتیکه مطابق به مشخصات قرارداد نباشد، داکار حق دارد تا قرارداد را بدون جبران کدام خساره فسخ نماید.

11. 2% Tax will be applicable on the companies that has valid business license and 7% Tax will be applicable on the companies that have invalid business license, or on individuals who do not have business license, will be deducted from the contractor as a withholding tax and DACAAR will pay that amount to Ministry of Finance, the amount starts from (1 AFN).

11. 2% مالیه برای شرکت هائیکه دارای جواز با اعتبار میباشد، و 7% مالیه برای شرکت هائیکه معیاد جواز آن تکمیل گردیده باشد، و یا اشخاصیکه جواز ندارند توسط داکار وضع گریده و به وزارت مالیه پرداخت میشود، آغاز مبلغ از (1 افغانی).

12. DACAAR does not accept sub-contract, in case if it is found that the contract has given the contract to sub-contracting contractor, the contract will automatically be terminated and the supplier will lose their performance guarantee and no compensation will be paid to the contractor.

12. داکار به هیچ عنوان قرارداد دست دو را نه پذیرفته، در صورت وقوع چنین حالت قرارداد بصورت اتومات فسخ و قرارداد گیرنده پول تضمین و حق اجوره خویش را از دست میدهد.

13. DACAAR will not be responsible for any changes occurred during the contract such as (increment in custom duties, exchange rate etc.)

13. داکار به هیچ عنوان مسؤولیت بلند رفتن مالیات گمرکی، اسعار خارجی وغیره مواردی که باعث بلند رفتن قیمت در جریان قرارداد گردد ندارد.

14. DACAAR (Logistics Unit) adheres to National and International laws on child labour DACAAR makes sure all its suppliers and vendor abide by such laws preventing child labour in all DACAAR activities countrywide.

14. دفتر داکار (شعبه لوژیستیک) با درنظرداشت قوانین ملی و بین المللی برای جلوگیری از کار کودکان مصمم بوده و سعی میکند که تمام فعالیتهای تهیه کننده گان و مشتریان این اداره به این اصل پابند باشند.

15. The Humanitarian Organizations (HO) may conduct on- site visit in the contractor's premises (or may take similar measures) to ensure compliance.

15. سازمان های بشر دوستانه (HO) ممکن است تا از محلات و سایت ها به بخاطر اطمینان خاطر و تطبیق درست کار توسط قرار داد گیرنده بازدید بعمل آورده ویا ممکن است اقدامات مشابه را انجام دهد.

16. DACAAR has a zero-tolerance policy on sexual exploitation, abuse and harassment, which is defined and described in the policy document "DACAAR policy on preventing and handling sexual exploitation, abuse and harassment".

16. داکار دارای پالیسی عدم تحمل در مورد سؤ استفاده، بد رفتاری و آزار و اذیت جنسی میباشد و موقف داکار در همچون مسایل بطور تفصیلی در پالیسی مذکور تشریح شده است.

17. Award of contract will be based on the price, capacity and potentiality of bidder which will be decided after evaluation of the company; it is the right of DACAAR to make the decision of awarding contract.

17. برنده شدن قرارداد نظر به قیمت، توانائی و ظرفیت کاری داوطلب بوده و بعد از بررسی کمپنی صورت خواهد گرفت. البته داکار تنها حق تصمیم گیری در این زمینه را دارا میباشد.

18. All bidders should deposit amount of (50,000 AFN) to DACAAR AIB Bank Afghani Account (0528101008667400) as a Bid Security, otherwise; DACAAR has the right to take the decision.

18. تمامی داوطلبان باید مبلغ 50,000 افغانی را بطور تضمین اشتراک در داوطلبی به حساب افغانی داکار (0528101008667400) در بانک بین المللی افغانستان جمع نموده و رسید بانکی آنرا بداخل پاکت آفر بگذارند، در غیر آن داکار حق تصمیم نهایی را دارا میباشد.

Note: All deposits (Bid Security/ Contract Performance Guarantee) will be refunded on proper application of vendors along with original bank deposit slip. The deposit (bid security/ contract performance guarantee) will not be refunded, if the supplier/ bidder withdraws or quits from the process.

نوت: تمام تضمین ها (تضمین اشتراک در داوطلبی / تضمین اجرائیوی قرارداد) به اساس درخواست اشتراک کننده داوطلبی/ قرارداد کننده و ارایه اصل رسید بانکی پس پرداخت میگردد. دواطلب/ قرارداد گیرنده که از پروسه منصرف میگردد پول تضمین شان دوباره واپس نمیگردد.

For more details, please visit DACAAR Logistics Unit Main Office Kabul, Sunday through Thursday, from 8:00am to 03:00 PM or contact on below Email Addresses:
jamal@dacaar.org, asad.zarmalwal@dacaar.org or wasimullah@dacaar.org

Yours Sincerely,
Manager – Logistics Unit
Date: March 23, 2025

ANNEX (I)

Budget Breakdown/ فورم ارایه آفر

DACAAR ITB 21 PRF-198 to 199/UNODC/2407-UNODC/UHLA1.1.1/03.2025

Lot (I): Construction of Check Dam for DACAAR Program UNODC Project in Roshan Tower village Musa Qala District of Helmand Province:

S.N	Item Name and Specification	Unit	Quantity	Unit Price (AFN) (Including 2% or 7% Government Tax, transportation cost)	Total Price (AFN) (Including 2% or 7% Government Tax, transportation cost)
1	Excavation and removal of excess materials up to 500M	M^3	1,807		
2	Stone Masonry Work 1:4	M^3	985		
3	PCC 1:1.5:3	M^3	46		
4	PCC 1:2:4	M^3	67		
5	Dense Filling with quality Well grade	M^3	613		
6	Pointing 1:3	M^2	738		
7	Gravel in Foundation with 15cm thickness	M^3	100		
8	Installation of Water Proof Concrete 1:4	M	13		
9	Installation of one marble sign board 70*120cm	No	1		
Grand Total: AFN					

Bidder Name: _____ اسم آفر دهنده:

Address and Stamp: _____ آدرس و مهر کمپنی

Contact No: _____ نمبر موبائیل

Email Address: _____ ایمل آدرس

Delivery Period: _____ زمان تحویل دهی

ANNEX (I)

Budget Breakdown/ فورم ارایه آفر

DACAAR ITB 21 PRF-198 to 199/UNODC/2407-UNODC/UHLA1.1.1/03.2025

Lot (II): Construction of Check Dam for DACAAR Program UNODC Project in Baba Faqir Village of Sangin District of Helmand Province

S.N	Item Name and Specification	Unit	Quantity	Unit Price (AFN) (Including 2% or 7% Government Tax, transportation cost)	Total Price (AFN) (Including 2% or 7% Government Tax, transportation cost)
1	Excavation and removal of excess materials up to 500M	M^3	105		
2	Stone Masonry Work 1:4	M^3	190		
3	PCC 1:1.5:3	M^3	12		
4	PCC 1:2:4	M^3	6		
5	Dense Filling with quality well grade	M^3	17		
6	Pointing 1:3	M^2	121		
7	Installation of one marble sign board 70*120cm	No	1		
Grand Total: AFN					

Bidder Name: _____ اسم آفر دهنده:

Address and Stamp: _____ آدرس و مهر کمپنی

Contact No: _____ نمبر موبائیل

Email Address: _____ ایمل آدرس

Delivery Period: _____ زمان تحویل دهی

ANNEX (II)

Tentative Work Plan/ پلان کاری تخمینی

DACAAR ITB 21 PRF-198 to 199/UNODC/2407-UNODC/UHLA1.1.1/03.2025

Lot (I): Construction of Check Dam for DACAAR Program UNODC Project in Roshan Tower village Musa Qala District of Helmand Province:

S/No	Specifications	Unit	Quantity of Work	Start Date of the Contract	End Date of the Contract
1	Excavation and removal of excess materials up to 500M	M^3	1,807	Starts After DACAAR Contract Final Approval	July 30, 2025
2	Stone Masonry Work 1:4	M^3	985		
3	PCC 1:1.5:3	M^3	46		
4	PCC 1:2:4	M^3	67		
5	Dense Filling with quality will grade	M^3	613		
6	Pointing 1:3	M^2	738		
7	Gravel in Foundation with 15cm thickness	M^3	100		
8	Installation of Water Proof Concrete 1:4	M	13		
9	Installation of one marble sign board 70*120cm	No	1		

ANNEX (II)

Tentative Work Plan/ پلان کاری تخمینی

DACAAR ITB 21 PRF-198 to 199/UNODC/2407-UNODC/UHLA1.1.1/03.2025

Lot (II): Construction of Check Dam for DACAAR Program UNODC Project in Faqir Baba village of Sangin District of Helmand Province

S/No	Specifications	Unit	Quantity of Work	Start Date of the Contract	End Date of the Contract
1	Excavation and removal of excess materials up to 500M	M^3	105	Starts After DACAAR Contract Final Approval	July 30, 2025
2	Stone Masonry Work 1:4	M^3	190		
3	PCC 1:1.5:3	M^3	12		
4	PCC 1:2:4	M^3	6		
5	Dense Filling with quality will grade	M^3	17		
6	Pointing 1:3	M^2	121		
7	Installation of one marble sign board 70*120cm	M^3	1		

DACAAR
Program/Technical & Coordination Unit
Survey & Design Team

Hosake Roshan Tower Check Dam Drawings

Project Location:
Province:.....Helmand
District:.....Mosa Qala
Village:..... **Hosake Roshan Tower**

Date: Jan 2025

DACAAR

LIST OF DRAWINGS

DISCRIPTION	DRAWING NO.
LIST OF DRAWINGS	01
LEGEND AND ABBREVIATIONS	02
TECHNICAL SPECIFICATION	03
TOPO PLAN	04
Site Plan	05
Plan Of Check Dam	06
Section A-A,B-B,C-C,D-D,F-F,G-G,H-H,I-I	07
Section E-E,J-J	08
Excavations	09
Cross Section	10
Long Section	11

DACAAR / PROGRAM	Funded By	UNODC	Village	Hosake Roshan Tower	Survey by	Eng. Sayed Zaki Sadat		Scale Meter	Sheet Index 01 11	Project Title: CheckDam
	Implemented By	DACAAR	District	Mosa Qala	Drawn & Designed by	Eng. Sayed Zaki Sadat				Drawing Title: LIST OF DRAWINGS
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal				Date : Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih				

LEGEND:-

- Center Line
- Direction of flow
- Grouted Stone Masonry/Pitching Section
- Mass concrete Section
- Brick Masonry
- P.C.C Block
- Gabion
- Gabion Section
- Wash/River Bed Material
- Geotextile Mattress
- Plain Cement Concrete
- Reinforced Cement Concrete
- Bank Protection
- Compacted Soil
- Hill
- H.F.L / M.W.L
- Elevation of the point is (100m) in section veiw
- Elevation of the point (100m) in Plan view
- Traverse Station (ST-1)
- Benchmark (B.M-1)
- Lined Slope
- Earthen Slope
- Ground Level
- Stone Pitching/Rip Rap

ABBREVIATION:-

Av	AVERAGE
BM	BENCH MARK
B	WIDTH
C/C	CENTER TO CENTER
D	DEPTH OF WATER
DRG	DRAWING
DIA , Ø	DIAMETER
D.W.L	DESIGN WATER LEVEL
D/S	DOWNSTREAM
EL.	ELEVATION
F.B	FREE BOARD
HFL	HIGH FLOOD LEVEL
HT.	HEIGHT
H.G.L	HYDRAULIC GRADE LINE
KM , km	KILOMETERE
M ,m	METRE
Chkd	CHECKED
Apprvd	APPROVED
M . W .L	MAXIMUM WATER LEVEL
MIN	MINIMUM
No(s)	NUMBER(S)
N.G.L	NATURAL GROUND LEVEL
P.C.C	PLAIN CEMENT CONCRETE
R.C.C	REINFORCED CEMENT CONCRETE

ST	STATION
THK	THICKNESS
TYP	TYPICAL
HFL	HIGH FLOOD LEVEL
U/S	UPSTREAM
YRS	YEARS
Q	DESIGN DISCHARGE
W.L	WATER LEVEL
N.T.S	NOT TO SCALE

0 500 1000 — SCALE 1:200 (A3) — CENTEMETERS

0 100 200 300 400 500 — SCALE 1:100 (A3) — CENTEMETERS

0 10 20 30 40 50 — SCALE 1:10 (A3) — CENTEMETERS

0 50 100 — SCALE 1:20 (A3) — CENTEMETERS

0 50 100 150 200 — SCALE 1:50 (A3) — CENTEMETERS

Notes:

1- All dimensions are in cm or as specified on drawing.
2- For concrete class and stone masonry type refer to Contract Specifications.
3- All cut-offs to be constructed against undisturbed soil.
4-Location of the structure, setting out and elevations to be confirmed by the WMD representative before construction.
5-The contractor shall construct and maintain all necessary channels,diviersion and other temporary works necessary to ensure that irrigation water supplies are not interrupted during construction works.
6-All elevations are based on local benchmark.
7-Coordinates and elevatoin of local bechmark are attached to every single site.
8-Contraction joint in concrete coping at wall top shall be provided at 1.0m centers
9.Contraction joint in concrete base slab shall be provided at 2m centers.
10-Minimum concrete cover to steel reinforcement shall be 50mm.
11-Steel reinforcement shall have a minimum yield stress of 250N/mm2.
12-For retaining wall more than 12m in length, expansion joint shall be provided at 12m centers.
13-Abbreviations used:
GI stands for galvanized iron
EW stands for each way
EF stands for each face
FB stands for free board
Dia stands for diameter
MS stands for mild steel

DACAAR / PROGRAM	Funded By	UNODC	Village	Hosake Roshan Tower	Survey by	Eng. Sayed Zaki Sadat	Scale Meter	Sheet Index 02 11	Project Title	CheckDam
	Implemented By	DACAAR	District	Mosa Qala	Drawn & Designed by	Eng. Sayed Zaki Sadat			Drawing Title	ABBREVIATION
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal			Date :	Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih				

BRIEF TECHNICAL SPECIFICATIONS

CONCRETE WORKS:

1 - All air - entrainiing plain cement concrete should be M-200 by wright or be as specified on the drawings.

2 - All PCC to have cement, sand and aggregate as specified on the drawiings.

3 - Concrete design should be based on a compressive strength of fc = 200kg/cm2 or as specified on the drawings.

4 - Weight per unit volume of concrete W=2400kg/m3.

5- Sand or fine aggregate shall be free from salt, Alkali, Calcium sulphate or Vegetation and it shall not contain more than 0.5 percent by weight clay.

6 - Aggregate:- Coarse aggregate shall consist of crushed gravel with the maximum size of 20mm.

7 - The maximum slump for concrete should be between (5 - 7.5)cm. (For difrent concrete type refer to general specification).

8 - To increase the workability of the concrete provide the chemical admixture (Super plasticizer, If required).

9 - Water used for concrete mixture and concrete curing shall be from a source approved by the Engineer and at the time of use shall be free from contaminants.

10- Concrete compaction should be done by using concrete vibrator at the time of pouring in such a way to form a solid compact concrete.

11- Concrete curing should by continued for 28 days.

12- During cold weather concreting should be stopped or the contractor has to consider cold weather concreting procedure as accepted by the Engineer. (Or refer to general specification).

13- Concrete shuttering / formwork should be of steel or wooden type.

14- Concrete shuttering can be removed as per below minimum duration:
Side of beams, Walls, Columns (16 - 24 Hours).
Forms from beneath the slabs (Spaning up to 6m.) 14 Days.
Forms from beneath the slabs (Spaning above 6m.) 21 Days

15- All air entrained concrete with 4.5% - 7% of air volumes should be used instead of normal concrete works by adding approved admixture.

16- All RCC should be M-25.

17- All blinding PCC shall be M-10.

18- Reinforcement yield strength fy shall not be less that (2500kg/cm2).

MASONRY WORKS:

1 - Plum / Mass air - entraining concrete shall contain a maximum of 40% stone with a maximum stone size as 20cm.
The concrete ratio shall be M-20.

2 - Stone for Stone masonry, Gabion and grouted stone pitching should be of good quality and approved by Engineer.

3 - All stone masonry for foundations should be with ratio of (1:3).

4 - All masonry cutoff wall shall be with (1:3) Cement sand mortar or as specified on the drawing.

EARTH WORKS:

1 - Backfilling material should be properly tested and selected to be suitable as per standard practice.

2 - For backfilling maximum thickness of each loose soil layer should not more than 15cm. According to general specification.

3 - Standard compaction tests should be carried out for the backfilling.

4 - The percentage of compaction should be not less than (92 - 95)% of the maximum dry density of selected material by the Engineer.

GABION WORKS:

1 - Stone size for gabion shall range from (20 - 30cm) dia. According to general specification.

2 - Galvinized iron wier of specified thickness (2.7- 3.0)mm Should be properly woven and knotted together to form the required mesh in hexagonal / rectangular shape of size (8 - 10cm) for gabion basket and (10 - 12cm) for gabion mattress to fabricate gabion boxes to the saftsfaction of the Engineer.

3 - Principal wire along the gabion edges (Selvedges) for gabion boxes should be of galvanized iron having minimum thickness of (4mm).

4 - Gabion galvanized iron wire tensile strength should be (350 - 575 N / mm2).

OTHERS:

1 - Bitumen coating should be used in all contraction / Expansion joints.

2 - All quality control field tests should be carried out by the contractor in a specified laboratory as accepted by the client.

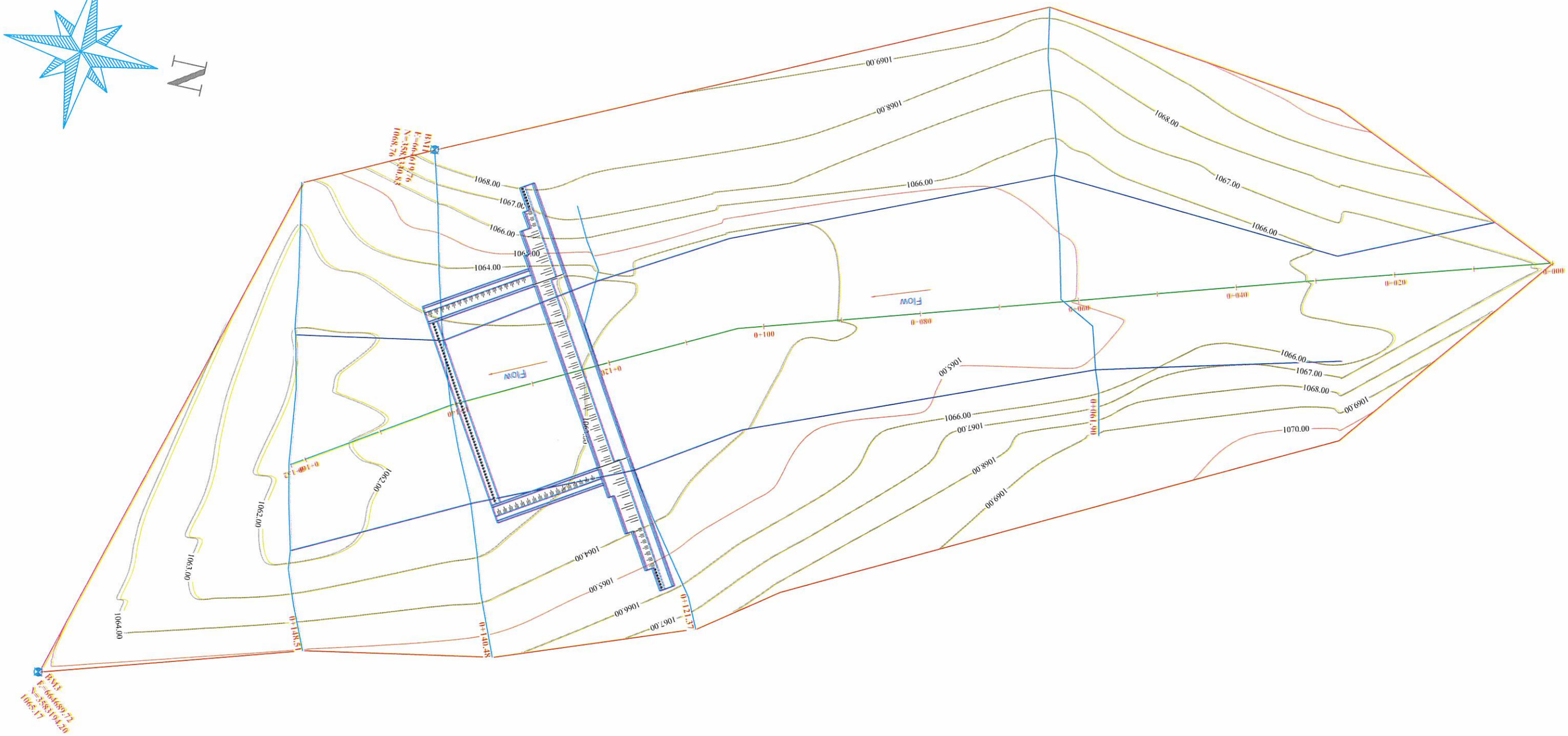
3 - Construction joints for PCC and masonry walls should be provided as (15 - 20m) center to center.

4- All diversions and flood protection works is contractor responsibility.

DACAAR / PROGRAM	Funded By	UNODC	Village	Hosake Roshan Tower	Survey by	Eng. Sayed Zaki Sadat		Scale Meter	Sheet Index 03 11	Project Title	CheckDam
	Implemented By	DACAAR	District	Mosa Qala	Drawn & Designed by	Eng. Sayed Zaki Sadat				Drawing Title	BRIEF TECHNICAL SPECIFICATIONS
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal				Date :	Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih					

DACAAR

N



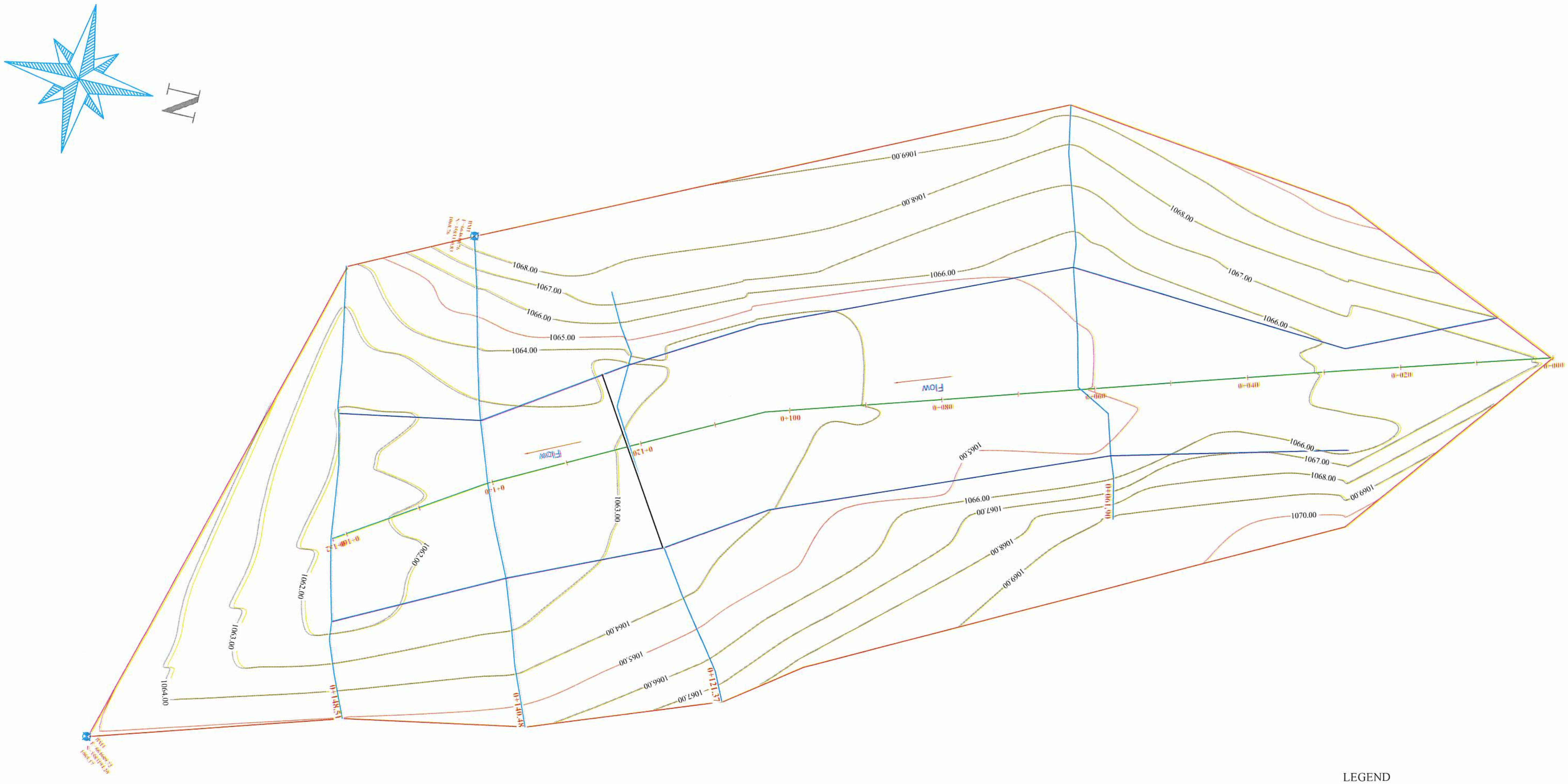
LEGEND

	Bench Mark
	Water Storage Contour
	Canal
	Bed
As per Site	

Point Table				
Item	Elevation	Northing	Easting	Description
135	1063.59	3583143.03	666469.76	BM2
137	1062.76	3583229.09	666469.26	BM1
138	1062.17	3583194.20	666468.72	BM3

Topo Plan of Check Dam

DACAAR / PROGRAM	Funded By	UNODC	Village	Hosake Roshan Tower	Survey by	Eng. Sayed Zaki Sadat	Scale Meter	Sheet Index 04 11	Project Title	CheckDam
	Implemented By	DACAAR	District	Mosa Qala	Drawn & Designed by	Eng. Sayed Zaki Sadat			Drawing Title	Topo Plan Of Check Dam
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal			Date :	Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih				



DACAAR

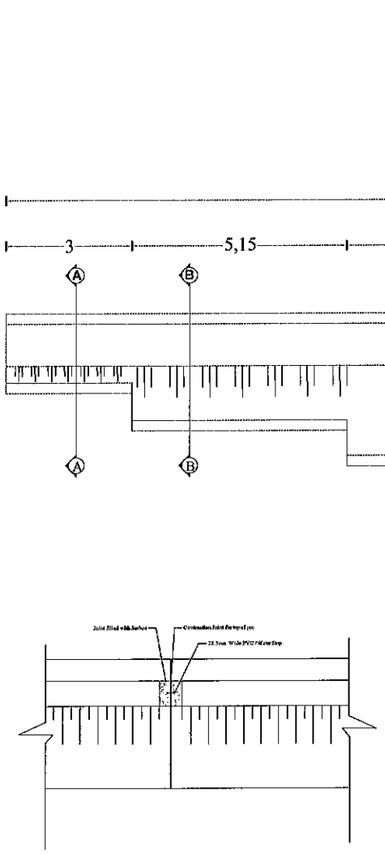
Site Plan of Check Dam

LEGEND

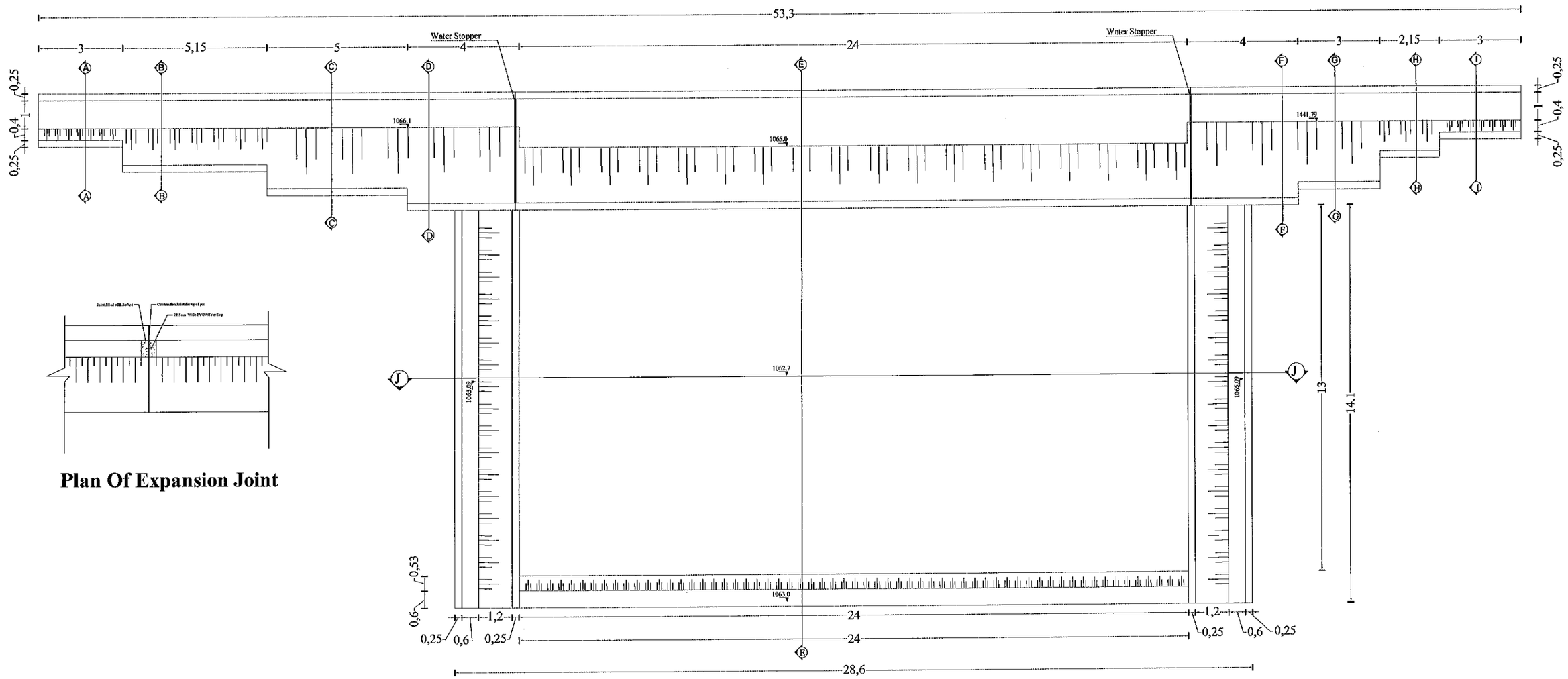
	Bench Mark
	Water Storage Contour
	Canal
	Bed
As per Site	

Point Table				
Point	Elevation	Northing	Easting	Description
135	1065.59	3583330.83	664619.76	BM2
137	1068.76	3583229.69	664616.26	BM1
138	1065.17	3583194.20	664639.72	BM3

DACAAR / PROGRAM	Funded By	UNODC	Village	Hosake Roshan Tower	Survey by	Eng. Sayed Zaki Sadat		Scale	Sheet Index	Project Title	CheckDam
					Drawn & Designed by	Eng. Sayed Zaki Sadat					
	Implemented By	DACAAR	District	Mosa Qala	Reviewed By	Eng. Sayed Najib Jalal		Meter	05 / 11	Drawing Title	Site Plan Of Check Dam
			Province	Helmand	Checked & Approved By	Eng. Abdul Wali Muslih				Date :	Jan-2025



Plan Of Expansion Joint

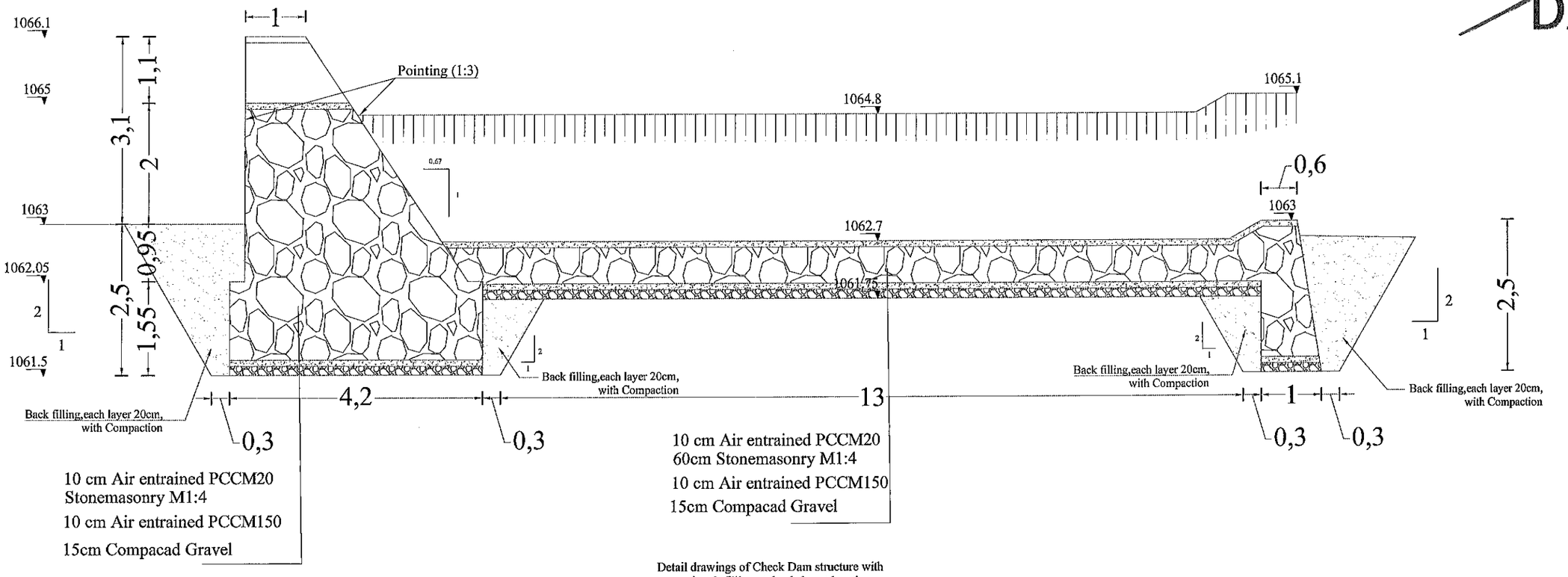


Plan Of Check Dam

Note:

- All dimensions are in M.
- All Excavated material can be use it upstream and downstream faces fillings with 90% Compaction.
- Filling layers must not be Pave more than (15-20)cm thickness.

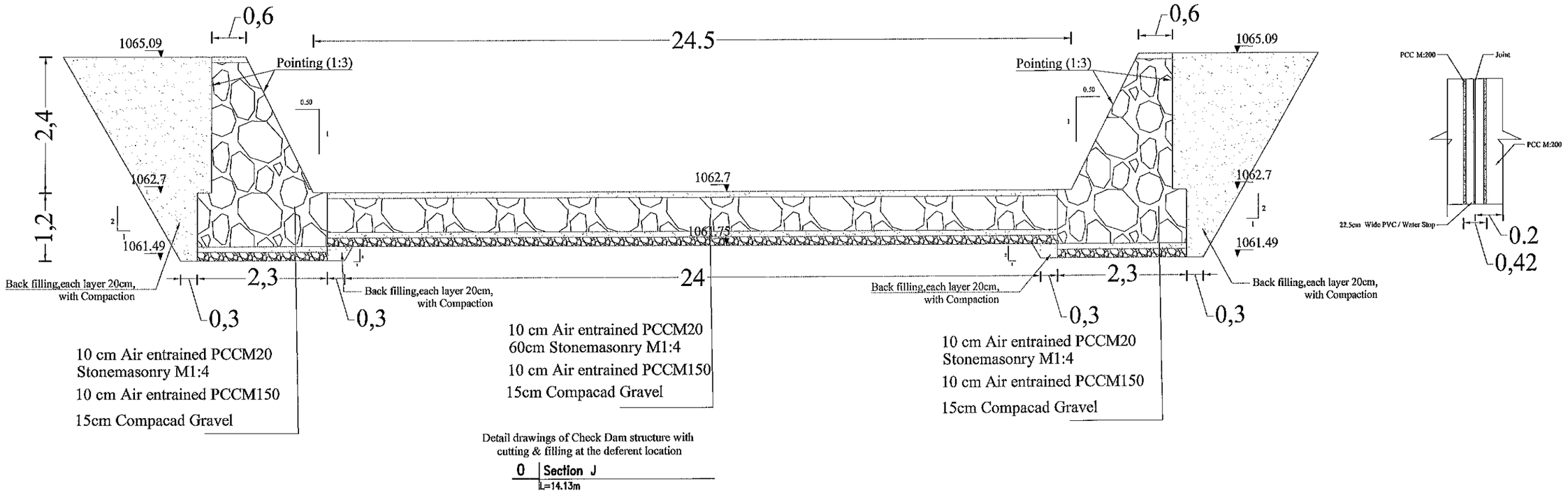
DACAAR / PROGRAM	Funded By	UNODC	Village	Hosake Roshan Tower	Survey by	Eng. Sayed Zaki Sadat		Scale Meter	Sheet Index 06 11	Project Title: CheckDam
	Implemented By	DACAAR	District	Mosa Qala	Drawn & Designed by	Eng. Sayed Zaki Sadat				Drawing Title: Plan Of Check Dam
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal				Date : Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih				



Detail drawings of Check Dam structure with cutting & filling at the deferent location

0 | Section E

L=24m

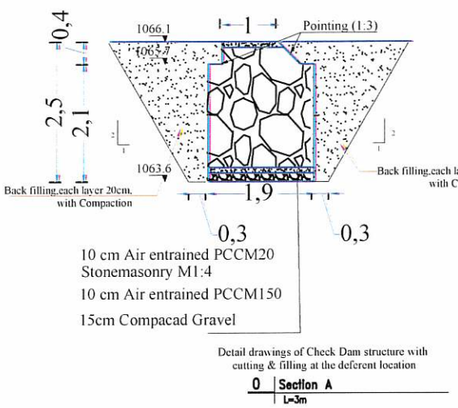


Detail drawings of Check Dam structure with cutting & filling at the deferent location

0 | Section J

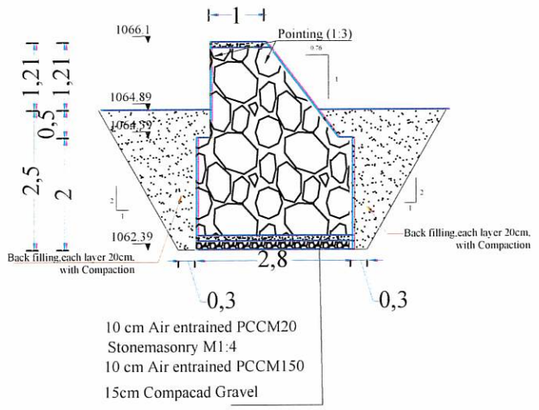
L=14.13m

DACAAR / PROGRAM	Funded By	UNODC	Village	Hosake Roshan Tower	Survey by	Eng. Sayed Zaki Sadat		Scale: Meter	Sheet Index: 07 / 11	Project Title	CheckDam
	Implemented By	DACAAR	District	Mosa Qala	Drawn & Designed by	Eng. Sayed Zaki Sadat				Drawing Title	Detail drawings of Check Dam
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal				Date :	Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih					



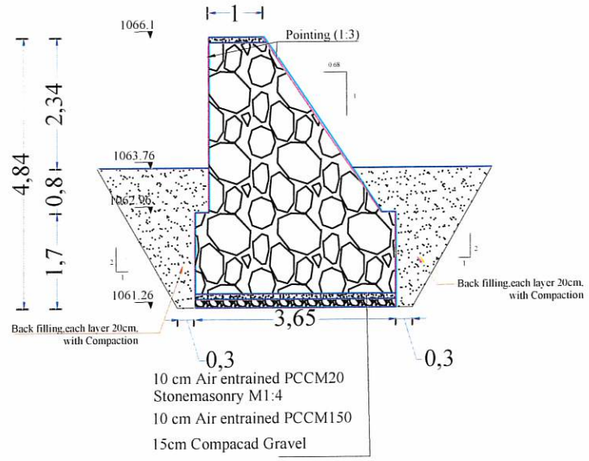
Detail drawings of Check Dam structure with cutting & filling at the deferent location

0 | Section A L=3m



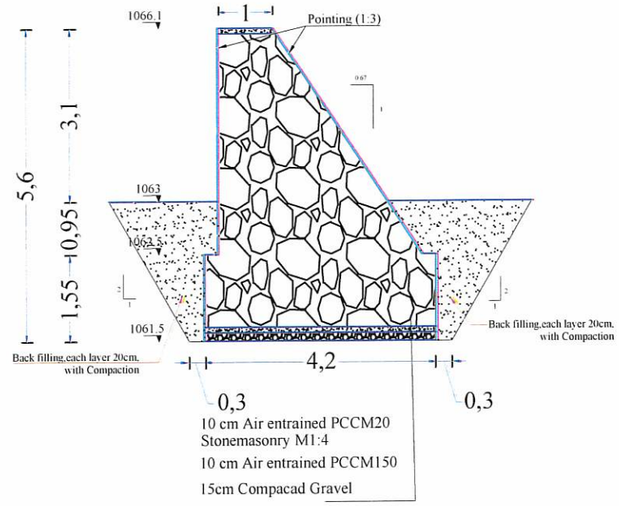
Detail drawings of Check Dam structure with cutting & filling at the deferent location

0 | Section B L=5.15m



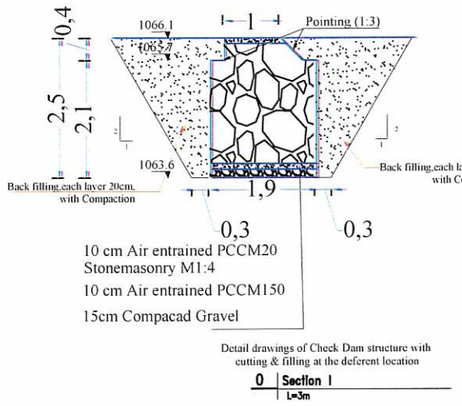
Detail drawings of Check Dam structure with cutting & filling at the deferent location

0 | Section C L=5m



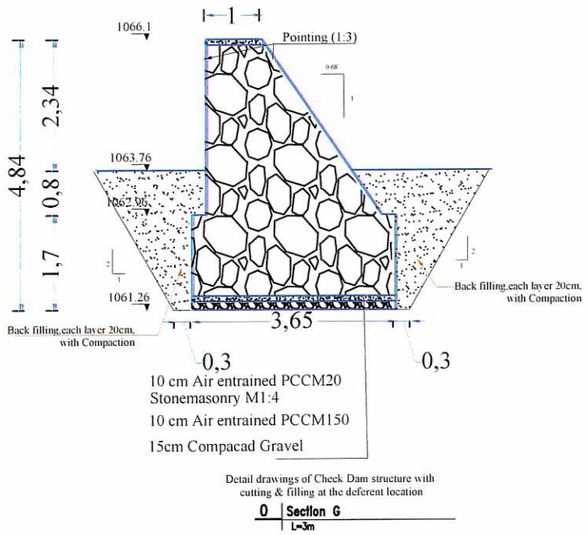
Detail drawings of Check Dam structure with cutting & filling at the deferent location

0 | Section D L=4m



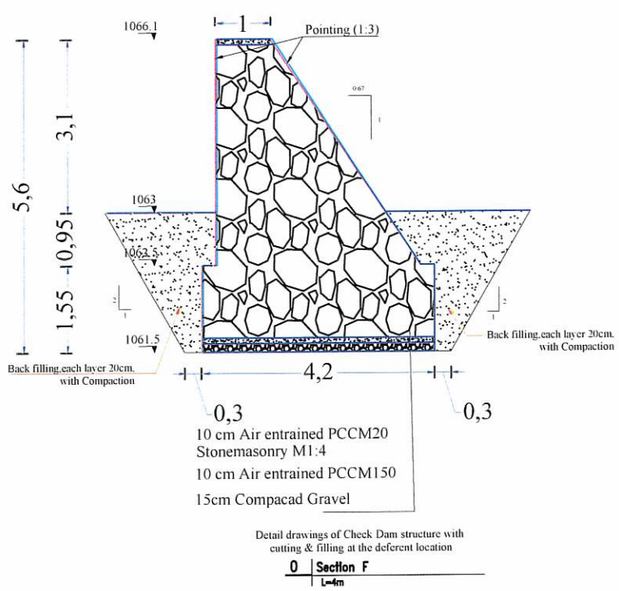
Detail drawings of Check Dam structure with cutting & filling at the deferent location

0 | Section I L=3m



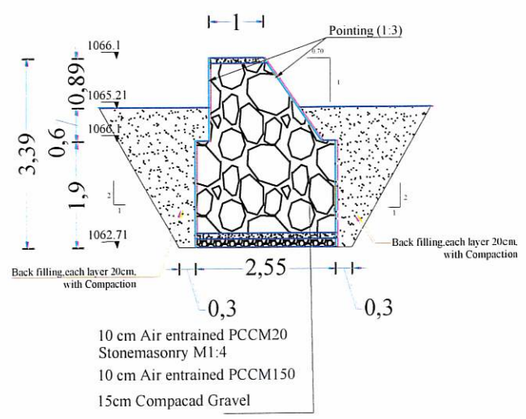
Detail drawings of Check Dam structure with cutting & filling at the deferent location

0 | Section G L=3m



Detail drawings of Check Dam structure with cutting & filling at the deferent location

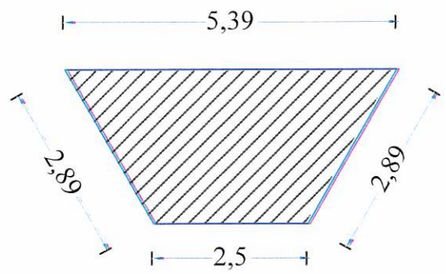
0 | Section F L=4m



Detail drawings of Check Dam structure with cutting & filling at the deferent location

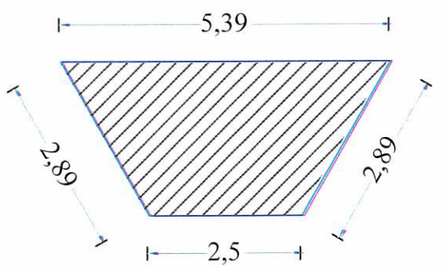
0 | Section H L=2.15m

DACAAR / PROGRAM	Funded By	UNODC	Village	Hosake Roshan Tower	Survey by	Eng. Sayed Zaki Sadat		Scale Meter	Sheet Index 08 11	Project Title	CheckDam
	Implemented By	DACAAR	District	Mosa Qala	Drawn & Designed by	Eng. Sayed Zaki Sadat				Drawing Title	Detail drawings of Check Dam
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal				Date :	Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih					



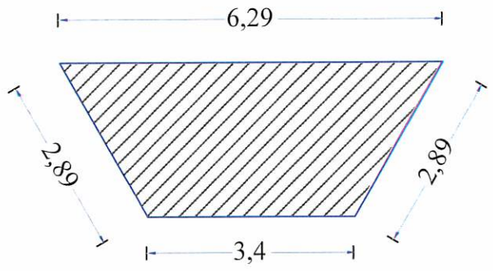
Excavation Area=9.86m2

0 | Section I
L=3m



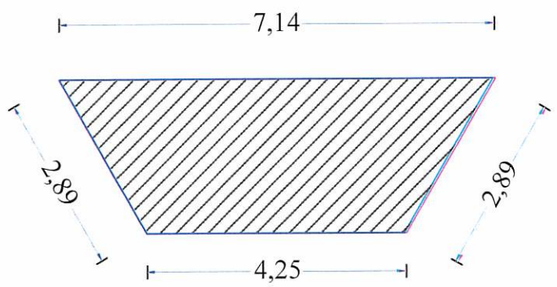
Excavation Area=9.86m2

0 | Section A
L=3m



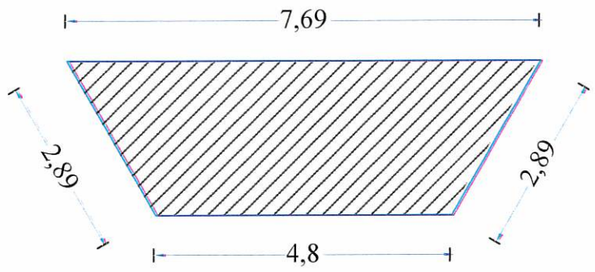
Excavation Area=12.11m2

0 | Section B
L=5.15m



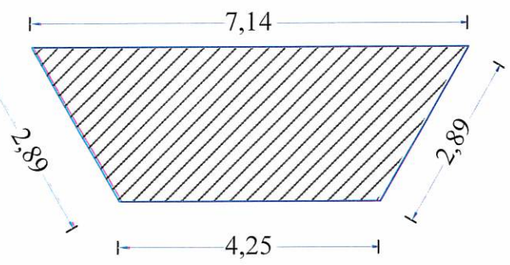
Excavation Area=14.23m2

0 | Section C
L=5m



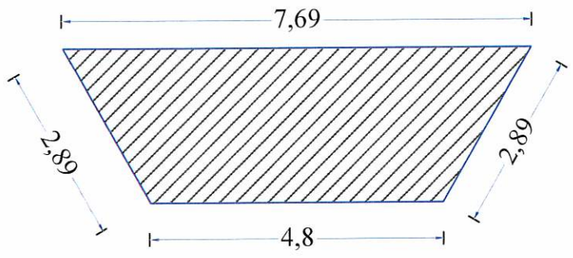
Excavation Area=15.61m2

0 | Section D
L=4m



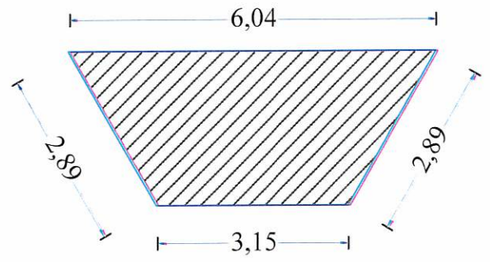
Excavation Area=14.23m2

0 | Section G
L=3m



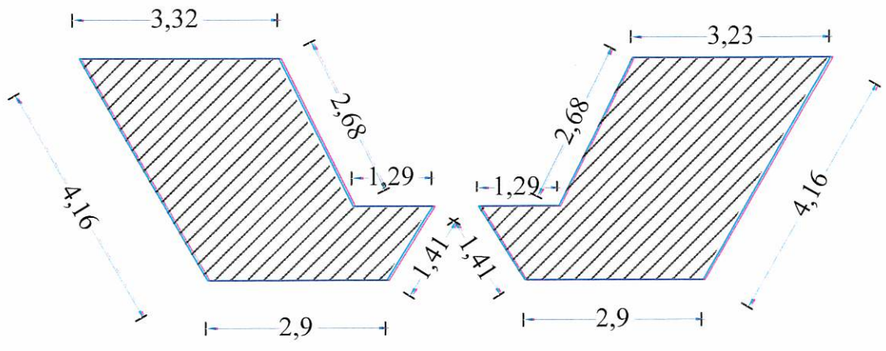
Excavation Area=15.61m2

0 | Section F
L=4m



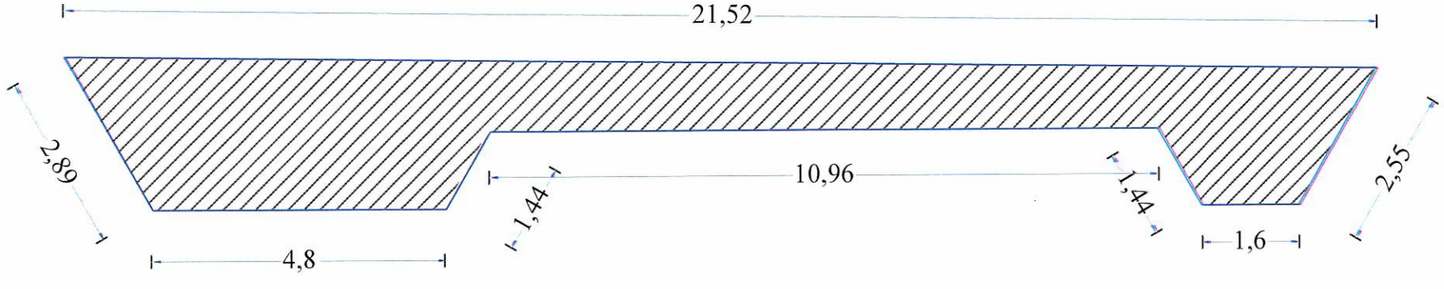
Excavation Area=11.5m2

0 | Section H
L=2.15m



Excavation Area=23.74m2

0 | Section J
L=14.13m



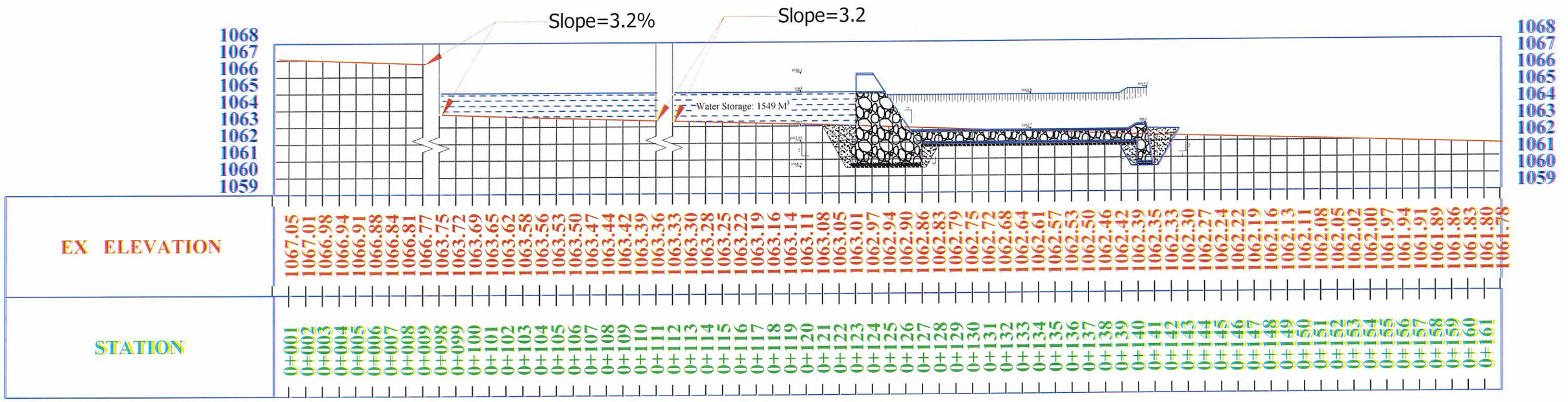
Excavation Area=32.85m2

0 | Section E
L=24m

DACAAR / PROGRAM	Funded By	UNODC	Village	Hosake Roshan Tower	Survey by	Eng. Sayed Zaki Sadat		Scale Meter	Sheet Index	Project Title	CheckDam
	Implemented By	DACAAR	District	Mosa Qala	Drawn & Designed by	Eng. Sayed Zaki Sadat			09 11	Drawing Title	Cutting Section
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal				Date :	Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih					

DACAAR

HOSAK ROSHAN YOWER PROJECT PROFILE

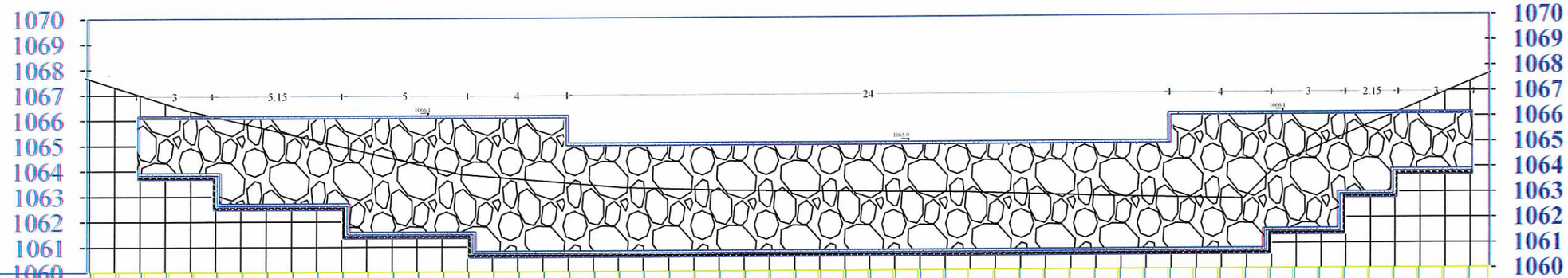


ROSHAN TOWER CHECK DAM 0N RIVER L- SECTION

DACAAR / PROGRAM	Funded By	UNODC	Village	Hosake Roshan Tower	Survey by	Eng. Sayed Zaki Sadat		Sheet Index	Project Title	CheckDam
	Implemented By	DACAAR	District	Mosa Qala	Drawn & Designed by	Eng. Sayed Zaki Sadat	Scale Meter	10 11	Drawing Title	L- SECTION
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal			Date :	Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih				

DACAAR

0+121.37



EXISTING ELEVATIONS	1067.64	1067.32	1067.00	1066.68	1066.37	1066.14	1065.90	1065.67	1065.43	1065.20	1064.96	1064.73	1064.49	1064.26
PROPOSED ELEVATIONS	1067.64	1067.32	1067.00	1066.68	1066.37	1066.14	1065.90	1065.67	1065.43	1065.20	1064.96	1064.73	1064.49	1064.26
OFFSET	-35.00	-34.00	-33.00	-32.00	-31.00	-30.00	-29.00	-28.00	-27.00	-26.00	-25.00	-24.00	-23.00	-22.00

EXISTING ELEVATIONS	1064.02	1063.83	1063.75	1063.67	1063.58	1063.50	1063.42	1063.33	1063.29	1063.26	1063.23	1063.20	1063.18	1063.17
PROPOSED ELEVATIONS	1064.02	1063.83	1063.75	1063.67	1063.58	1063.50	1063.42	1063.33	1063.29	1063.26	1063.23	1063.20	1063.18	1063.17
OFFSET	-21.00	-20.00	-19.00	-18.00	-17.00	-16.00	-15.00	-14.00	-13.00	-12.00	-11.00	-10.00	-9.00	-8.00

EXISTING ELEVATIONS	1063.16	1063.14	1063.13	1063.12	1063.11	1063.09	1063.08	1063.07	1063.04	1063.01	1062.97	1062.94	1062.91	1062.88
PROPOSED ELEVATIONS	1063.16	1063.14	1063.13	1063.12	1063.11	1063.09	1063.08	1063.07	1063.04	1063.01	1062.97	1062.94	1062.91	1062.88
OFFSET	-7.00	-6.00	-5.00	-4.00	-3.00	-2.00	-1.00	0	1.00	2.00	3.00	4.00	5.00	6.00

EXISTING ELEVATIONS	1062.86	1062.84	1062.81	1062.79	1062.88	1063.83	1064.44	1064.86	1065.28	1065.69	1066.11	1066.52	1066.94	1067.35
PROPOSED ELEVATIONS	1062.86	1062.84	1062.81	1062.79	1062.88	1063.83	1064.44	1064.86	1065.28	1065.69	1066.11	1066.52	1066.94	1067.35
OFFSET	7.00	8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00

ROSHAN TOWER CHECK DAM 0N RIVER X- SECTION AT CH:0+121.73

DACAAR / PROGRAM	Funded By	UNODC	Village	Hosake Roshan Tower	Survey by	Eng. Sayed Zaki Sadat	Scale	Sheet Index	Project Title: CheckDam
					Drawn & Designed by	Eng. Sayed Zaki Sadat	Meter	11 11	Drawing Title: X- SECTION AT CH:0+121.73
	Implemented By	DACAAR	District	Mosa Qala	Reviewed By	Eng. Sayed Najib Jalal			
			Province	Helmand	Checked & Approved By	Eng. Abdul Wali Muslih			Date : Jan-2025

DACAAR - Program
Technical and Coordination Unit/Survey and DesignTeam
Bill of Quantity (BOQ)for Construction of Hosake Roshan Tower Check Dam

Province: Helmand
District: Mosa Qala
Village: Hosake Roshan Tower

Subproject Name:Hosake Roshan Tower
Estimation Date: 26.01.2025
Submitting Date: 26.01.2025

No.	Item	Activities %	Quantity	Unit	Unit cost Afs	Total cost Afs	Contribution CDC, Afs	Contribution DACAAR, Afs
1	Mobilization: includes the price of all activities such as the transfer of personnel, tools, vehicles, field establishment office and other activities for the implementation of the project and demobilization.		1	LS				
2	"Excavating normal works: which means digging works that were done without hydraulic machines and removal of excess materials up to 500 meters or according to the instructions of the field engineer. For more clarification, refer to paragraph 2.02 of technical specifications		1,807	M3				
3	Dense filling" refers to the filling of material with the quality of Will Grade, which can be verified from one area and its density is not less than 90% of Proctor Mody Fide ATM. If the compaction is done by machine, the thickness of the soil should not be increased from 20 cents, in the images of compacting the soil by manual machines, its thickness should not be increased from 10 cents.		613	M3				
4	Stone Masonry work M(1:4): Wall stonework with a compromise of 1:4, with all its positive features, the stone must be solid, clean and free of dust according to the plan and opinion of the supervising engineer of the area.		985	M3				
5	15cm thick sea gravel in the lower part of the tahadab: preparing, pouring and compacting the gravel filter made of vale-graded materials, it is poured under the paving stones or gabions (first, the tahadab is tamped, then the sea gravel carpet, then the paving stones or gabion work should be started.) These materials are a combination of sea sand with sea gravel or crushed gravel, which is the combination of the same sand and well Graded gravel. Approval of materials and type of work should be approved by the field engineer.		100	M3				
6	PCC M(1:1.5:3):Concrete without spikes with 20 MPa brand preparation, pouring, compacting and watering of 20 brand concrete, including molding with positive things according to the plan, technical specifications and approval of the supervising engineer.		46	M3				
7	PCC M(1:2:4):Concrete without spikes with 15 MPa mark: preparation, pouring, compacting and watering of concrete mark 15, including molding with positive things according to the plan, technical specifications and approval of the supervising engineer.		67	M3				
8	Pointing,M (1:3): Pointing work is done with a ratio of cement and sand of 1:3, which includes materials, workers, soil, watering, etc. be executed Previously, from the beginning of the work, the seams should be cleaned up to 3 cm, then the work should be started. At the end of the work on the stones, the excess material should be cleaned in its correct shape. For more clarification, refer to paragraph 4.05 of the technical specifications.		738	M2				
9	Installation of waterproof PCC concrete (1:4): with positive aspects under the supervision of the supervising engineer.		13	m				
	Total Cost in Afg					**0 Afs**		
	Total Cost in USD					**$0**	**$0**	

Prepared by:
Name: Sayed Zaki Sadat
Position: Survey & Design Engineer
Signature:
26/01/2025

Review and Checked by :
Name : Sayed Najib Jalal
Position: Survey & design Coordinator
Signature:
11/02/2025

Authorized by:
Name: Eng.Ab.Wali Muslih
Position: Manager Technical & Coordination Unit
Signature:
26/01/25

Approved by:
Name: Eng. Shah Wali
Position: Deputy Director/Head of Program
Signature:
12.02.25

DACAAR - Program
Technical and Coordination Unit/Survey and DesignTeam
Bill of Quantity (BOQ)for Construction of Hosake Roshan Tower Check Dam

Province: Helmand
District: Mosa Qala
Village: Hosake Roshan Tower

Subproject Name: Hosake Roshan Tower
Estimation Date: 26.01.2025
Submitting Date: 26.01.2025

S/N	Description	QNT	Unit	Weeks											
				1	2	3	4	5	6	7	8	9	10	11	12
1	Mobilization: includes the price of all activities such as the transfer of personnel, tools, vehicles, field establishment office and other activities for the implementation of the project and demobilization.	1	LS												
2	"Excavating normal works: which means digging works that were done without hydraulic machines and removal of excess materials up to 500 meters or according to the instructions of the field engineer. For more clarification, refer to paragraph 2.02 of technical specifications	1,807	m3												
3	Dense filling" refers to the filling of material with the quality of Will Grade, which can be verified from one area and its density is not less than 90% of Proctor Mody Fide ATM. If the compaction is done by machine, the thickness of the soil should not be increased from 20 cents, in the images of compacting the soil by manual machines, its thickness should not be increased from 10 cents.	613	m3												
4	Stone Masonry work M(1:4): Wall stonework with a compromise of 1:4, with all its positive features, the stone must be solid, clean and free of dust according to the plan and opinion of the supervising engineer of the area.	985	m3												
5	15cm thick sea gravel in the lower part of the tahadab: preparing, pouring and compacting the gravel filter made of vale-graded materials, it is poured under the paving stones or gabions (first, the tahadab is tamped, then the sea gravel carpet, then the paving stones or gabion work should be started.) These materials are a combination of sea sand with sea gravel or crushed gravel, which is the combination of the same sand and well Graded gravel. Approval of materials and type of work should be approved by the field engineer.	100	m3												
6	PCC M(1:1.5:3):Concrete without spikes with 20 MPa brand preparation, pouring, compacting and watering of 20 brand concrete, including molding with positive things according to the plan, technical specifications and approval of the supervising engineer.	46	m3												
7	PCC M(1:2:4):Concrete without spikes with 15 MPa mark: preparation, pouring, compacting and watering of concrete mark 15, including molding with positive things according to the plan, technical specifications and approval of the supervising engineer.	67	m3												
8	Pointing,M (1:3): Pointing work is done with a ratio of cement and sand of 1:3, which includes materials, workers, soil, watering, etc. be executed Previously, from the beginning of the work, the seams should be cleaned up to 3 cm, then the work should be started. At the end of the work on the stones, the excess material should be cleaned in its correct shape. For more clarification, refer to paragraph 4.05 of the technical specifications.	738	m2												
9	Installation of waterproof PCC concrete (1:4): with positive aspects under the supervision of the supervising engineer.	13	m												

Prepared by:
Name: **Sayed Zaki Sadat**
Position: **Survey & Design Engineer**
Signature:

26,01,2025

Review and Checked by :
Name : **Sayed Najib Jalal**
Position: **Survey & Design Coordinator**
Signature:

11/02/2025

Authorized by :
Name: **Eng.Ab.Wali Muslih**
Position : **Manager Technical & Coordination Unit**
Signature:

12/2/25

Approved by:
Name: **Eng. Shah Wali**
Position: **Deputy Director/Head of Program**
Signature:

12.02.25

DACAAR - Program

Technical and Coordination Unit/Survey and DesignTeam

Bill of Quantity (BoQ) For Construction of Hosake Roshan Tower Check Dam

Province: Helmand
District: Mosa Qala
Village: Hosake Roshan Tower
Contract:
Subproject Name: Hosake Roshan Tower Check Dam

1 - BOQ Detail

Date Prepared: 12.02.2025

Title	No.	Item	Norm/ Factor	Quantity	Unit	Unit cost Afs	Total cost Afs
A1	1	**Excavation**		**1807.00**	**m3**	-	-
	1.01	Unskilled labor on site	0.5	903.50	md	-	-
A2	2	**Stone Masonry M(1:4) work**		**985.00**	**m3**	0	-
	2.01	Stone including transportation	1.1	1083.50	m3	-	-
	2.02	Sandy gravel including Transportation	0.378	372.33	m3	-	-
	2.03	Cement including transportation	114	112290.00	kg	-	-
	2.04	Water	57	56145.00	liter	0.00	-
	2.05	Skilled labor on site	0.5	492.50	md	-	-
	2.06	Unskilled labor on site	1	985.00	md	-	-
A3	5	**Gravel including transportation**		**100.00**	**m3**	-	-
	5.01	Gravel	1.1	110.00	m3	-	-
	5.02	Unskilled labor on site	0.5	50.00	md		
A4	7	**Pointing of stone work M(1:3)**		**738.00**	**m2**		
	7.01	Sand including Transportation	0.024	17.71	m3	-	-
	7.02	Cement M(1:3) including transportation	2	1476.00	kg	-	-
	7.03	Water	1	738.00	liter	-	-
	7.04	Skilled labor on site	0.17	125.46	md	-	-
	7.05	Unskilled labor on site	0.05	36.90	md		-
A5	8	**Filling with soil/gravel and compaction**		**613.00**	**m3**	-	-
	8.01	Unskilled labor on site	0.5	306.50	md	-	-
A6	10	**PCC M (1:1.5:3)**		**46.00**	**m3**	-	-
	10.01	Sand Gravel including transportation	1.055	48.53	m3	-	-
	10.02	Cement including transportation	250	11500.00	kg	-	-
	10.03	Water	200	9200.00	liter	-	-
	10.04	Skilled labor on site	0.7	0.78	md	-	-
	10.05	Unskilled labor on site	3.6	3.90	md	-	-
A7	11	**PCC M (1:2:4)**		**67.00**	**m3**	0	-
	11.01	Sand Gravel including transportation	1.157	77.52	m3	-	-
	11.03	Cement including transportation	230	15410.00	kg		-
	11.04	Water	115	7705.00	liter		-
	11.05	Skilled labor on site	0.65	43.55	md	-	-
	11.06	Unskilled labor on site	3.25	217.75	md	-	-
A8	8	Installation of Waterproof PCC concret		**13.00**	m		
A9	9	**Moblization**		**1.00**	*LS*	0	0.00
						Total Cost in Afg	

Prepared by:
Name: Sayed Zaki Sadat
Position: Survey & Design Engineer
Signature:

Authorized by:
Name: Eng.Ab.Wali Muslih
Position: Manager Technical & Coordination Unit
Signature:

Review and Checked by :
Name : Sayed Najib Jalal
Position: Survey & Design Coordinator
Signature:
12/02/2025

Approved by:
Name: Eng.Shah Wali
Position: Deputy Director/Head of Program
Signature:
12.02.25

DACAAR

Program/Technical & Coordination Unit

Survey & Design Team

Baba Faqir Check Dam Drawings

Project Location:

Province:.....Helmand

District:.....Sangin

Village:..... **Baba Faqir**

Date: Jan 2025

LIST OF DRAWINGS

DACAAR

DISCRIPTION	DRAWING NO.
LIST OF DRAWINGS	01
LEGEND AND ABBREVIATIONS	02
TECHNICAL SPECIFICATION	03
TOPO PLAN	04
Site Plan	05
Plan Of Check Dam	06
Section A-A,B-B ,C-C	07
Excavations	08
Cross Section	09
Long Section	10

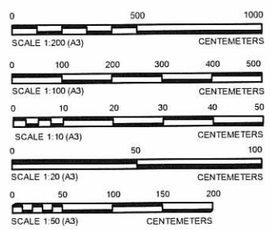
DACAAR / PROGRAM	Funded By	UNODC	Village	Baba Faqir	Survey by	Eng. Sayed Zaki Sadat	Scale Meter	Sheet Index 01 10	Project Title	CheckDam
	Implemented By	DACAAR	District	Sangin	Drawn & Designed by	Eng. Sayed Zaki Sadat			Drawing Title	LIST OF DRAWINGS
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal			Date :	Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih				

LEGEND:-

- Center Line
- Direction of flow
- Grouted Stone Masonry/Pitching Section
- Mass concrete Section
- Brick Masonry
- P.C.C Block
- Gabion
- Gabion Section
- Wash/River Bed Material
- Geotextile Mattress
- Plain Cement Concrete
- Reinforced Cement Concrete
- Bank Protection
- Compacted Soil
- Hill
- H.F.L / M.W.L
- Elevation of the point is (100m) in section veiw
- Elevation of the point (100m) in Plan view
- Traverse Station
- Benchmark
- Lined Slope
- Earthen Slope
- Ground Level
- Stone Pitching/Rip Rap

ABBREVIATION:-

Av	AVERAGE
BM	BENCH MARK
B	WIDTH
C/C	CENTER TO CENTER
D	DEPTH OF WATER
DRG	DRAWING
DIA , Ø	DIAMETER
D.W.L	DESIGN WATER LEVEL
D/S	DOWNSTREAM
EL.	ELEVATION
F.B	FREE BOARD
HFL	HIGH FLOOD LEVEL
HT.	HEIGHT
H.G.L	HYDRAULIC GRADE LINE
KM , km	KILOMETERE
M ,m	METRE
Chkd	CHECKED
Apprvd	APPROVED
M . W .L	MAXIMUM WATER LEVEL
MIN	MINIMUM
No(s)	NUMBER(S)
N.G.L	NATURAL GROUND LEVEL
P.C.C	PLAIN CEMENT CONCRETE
R.C.C	REINFORCED CEMENT CONCRETE
ST	STATION
THK	THICKNESS
TYP	TYPICAL
HFL	HIGH FLOOD LEVEL
U/S	UPSTREAM
YRS	YEARS
Q	DESIGN DISCHARGE
W.L	WATER LEVEL
N.T.S	NOT TO SCALE



Notes:
1- All dimensions are in cm or as specified on drawing.
2- For concrete class and stone masonry type refer to Contract Specifications.
3- All cut-offs to be constructed against undisturbed soil.
4-Location of the structure, setting out and elevations to be confirmed by the WMD representative before construction.
5-The contractor shall construct and maintain all necessary channels,diviersion and other temporary works necessary to ensure that irrigation water supplies are not interrupted during construction works.
6-All elevations are based on local benchmark.
7-Coordinates and elevatoin of local bechmark are attached to every single site.
8-Contraction joint in concrete coping at wall top shall be provided at 1.0m centers
9.Contraction joint in concrete base slab shall be provided at 2m centers.
10-Minimum concrete cover to steel reinforcement shall be 50mm.
11-Steel reinforcement shall have a minimum yield stress of 250N/mm2.
12-For retaining wall more than 12m in length, expansion joint shall be provided at 12m centers.
13-Abbreviations used:
GI stands for galvanized iron
EW stands for each way
EF stands for each face
FB stands for free board
Dia stands for diameter
MS stands for mild steel

DACAAR / PROGRAM	Funded By	UNODC	Village	Baba Faqir	Survey by	Eng. Sayed Zaki Sadat	Scale Meter	Sheet Index 02 10	Project Title	CheckDam
	Implemented By	DACAAR	District	Sangin	Drawn & Designed by	Eng. Sayed Zaki Sadat			Drawing Title	ABBREVIATION
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal			Date :	Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih				

BRIEF TECHNICAL SPECIFICATIONS

CONCRETE WORKS:

1 - All air - entraining plain cement concrete should be M-200 by wright or be as specified on the drawings.

2 - All PCC to have cement, sand and aggregate as specified on the drawings.

3 - Concrete design should be based on a compressive strength of fc = 200kg/cm2 or as specified on the drawings.

4 - Weight per unit volume of concrete W=2400kg/m3.

5- Sand or fine aggregate shall be free from salt, Alkali, Calcium sulphate or Vegetation and it shall not contain more than 0.5 percent by weight clay.

6 - Aggregate:- Coarse aggregate shall consist of crushed gravel with the maximum size of 20mm.

7 - The maximum slump for concrete should be between (5 - 7.5)cm. (For difrent concrete type refer to general specification).

8 - To increase the workability of the concrete provide the chemical admixture (Super plasticizer, If required).

9 - Water used for concrete mixture and concrete curing shall be from a source approved by the Engineer and at the time of use shall be free from contaminants.

10- Concrete compaction should be done by using concrete vibrator at the time of pouring in such a way to form a solid compact concrete.

11- Concrete curing should by continued for 28 days.

12- During cold weather concreting should be stopped or the contractor has to consider cold weather concreting procedure as accepted by the Engineer. (Or refer to general specification).

13- Concrete shuttering / formwork should be of steel or wooden type.

14- Concrete shuttering can be removed as per below minimum duration:
Side of beams, Walls, Columns (16 - 24 Hours).
Forms from beneath the slabs (Spaning up to 6m.) 14 Days.
Forms from beneath the slabs (Spaning above 6m.) 21 Days

15- All air entrained concrete with 4.5% - 7% of air volumes should be used instead of normal concrete works by adding approved admixture.

16- All RCC should be M-25.

17- All blinding PCC shall be M-10.

18- Reinforcement yield strength fy shall not be less that (2500kg/cm2).

MASONRY WORKS:

1 - Plum / Mass air - entraining concrete shall contain a maximum of 40% stone with a maximum stone size as 20cm.
The concrete ratio shall be M-20.

2 - Stone for Stone masonry, Gabion and grouted stone pitching should be of good quality and approved by Engineer.

3 - All stone masonry for foundations should be with ratio of (1:3).

4 - All masonry cutoff wall shall be with (1:3) Cement sand mortar or as specified on the drawing.

EARTH WORKS:

1 - Backfilling material should be properly tested and selected to be suitable as per standard practice.

2 - For backfilling maximum thickness of each loose soil layer should not more than 15cm. According to general specification.

3 - Standard compaction tests should be carried out for the backfilling.

4 - The percentage of compaction should be not less than (92 - 95)% of the maximum dry density of selected material by the Engineer.

GABION WORKS:

1 - Stone size for gabion shall range from (20 - 30cm) dia. According to general specification.

2 - Galvinized iron wier of specified thickness (2.7- 3.0)mm Should be properly woven and knotted together to form the required mesh in hexagonal / rectangular shape of size (8 - 10cm) for gabion basket and (10 - 12cm) for gabion mattress to fabricate gabion boxes to the saftsfaction of the Engineer.

3 - Principal wire along the gabion edges (Selvedges) for gabion boxes should be of galvanized iron having minimum thickness of (4mm).

4 - Gabion galvanized iron wire tensile strength should be (350 - 575 N / mm2).

OTHERS:

1 - Bitumen coating should be used in all contraction / Expansion joints.

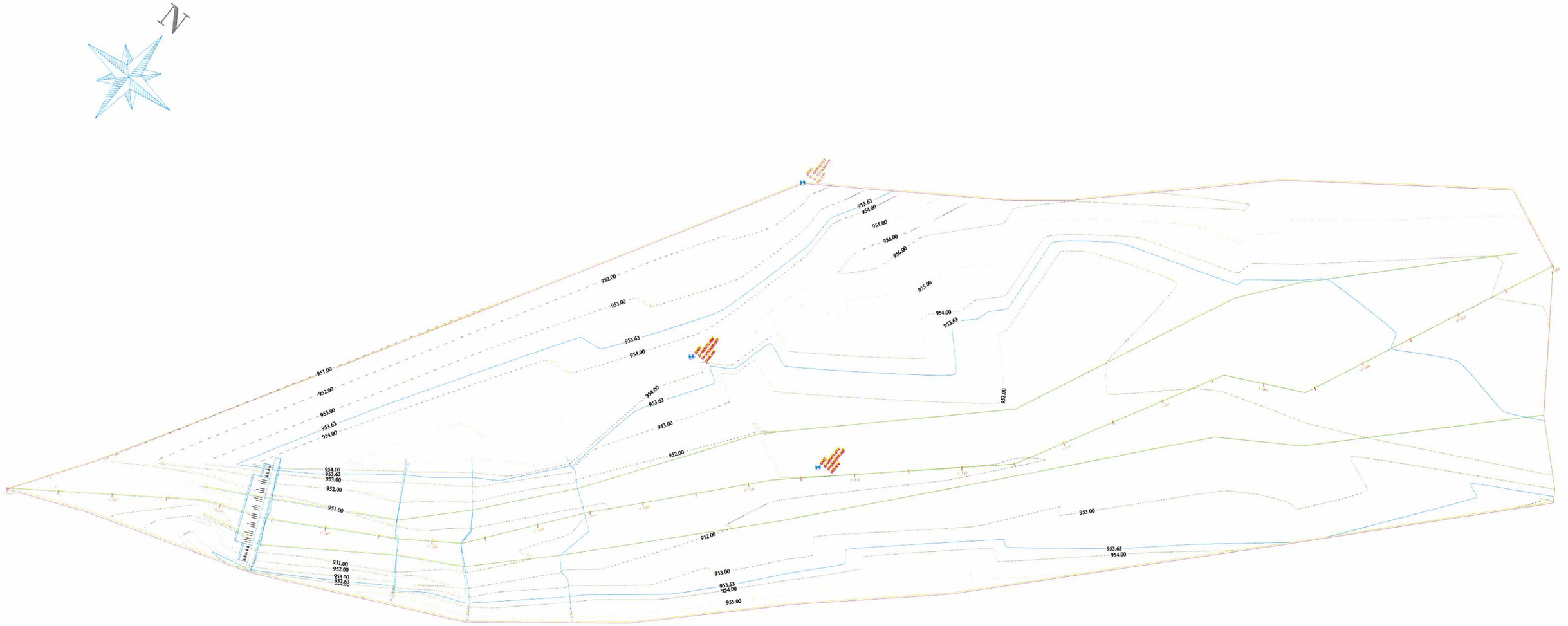
2 - All quality control field tests should be carried out by the contractor in a specified laboratory as accepted by the client.

3 - Construction joints for PCC and masonry walls should be provided as (15 - 20m) center to center.

4- All diversions and flood protection works is contractor responsibility,

DACAAR / PROGRAM	Funded By	UNODC	Village	Baba Faqir	Survey by	Eng. Sayed Zaki Sadat		Scale Meter	Sheet Index 03 10	Project Title: CheckDam
	Implemented By	DACAAR	District	Sangin	Drawn & Designed by	Eng. Sayed Zaki Sadat				Drawing Title: BRIEF TECHNICAL SPECIFICATIONS
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal				Date : Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih				

DACAAR



Topo Plan of Check Dam

LEGEND

	Bench Mark
	Water Storage Contour
	Canal
	Bed
As per Site	

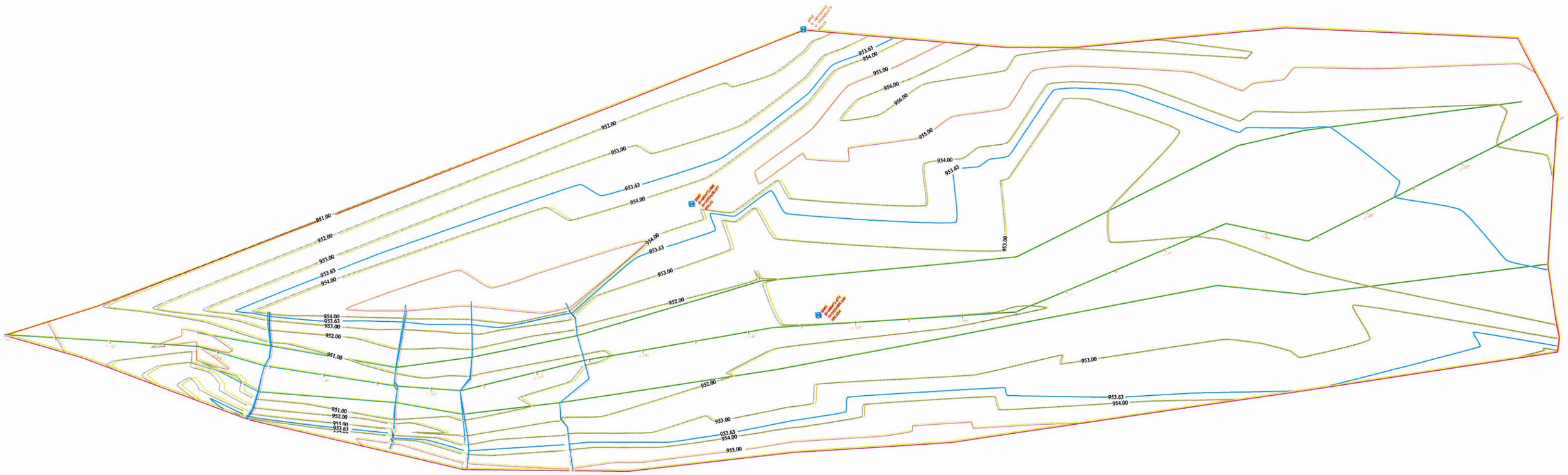
Point Table

Point	Elevation	Northing	Easting	Description
99	952.83	3553599.27	685471.87	BM1
100	951.14	3553634.58	685510.91	BM2
101	954.51	3553630.56	685472.99	BM3

DACAAR / PROGRAM	Funded By	UNODC	Village	Baba Faqir	Survey by	Eng. Sayed Zaki Sadat	Scale Meter	Sheet Index 04 11	Project Title	CheckDam
	Implemented By	DACAAR	District	Sangin	Drawn & Designed by	Eng. Sayed Zaki Sadat			Drawing Title	Topo Plan Of Check Dam
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal			Date :	Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih				

DACAAR

N



Site Plan of Check Dam

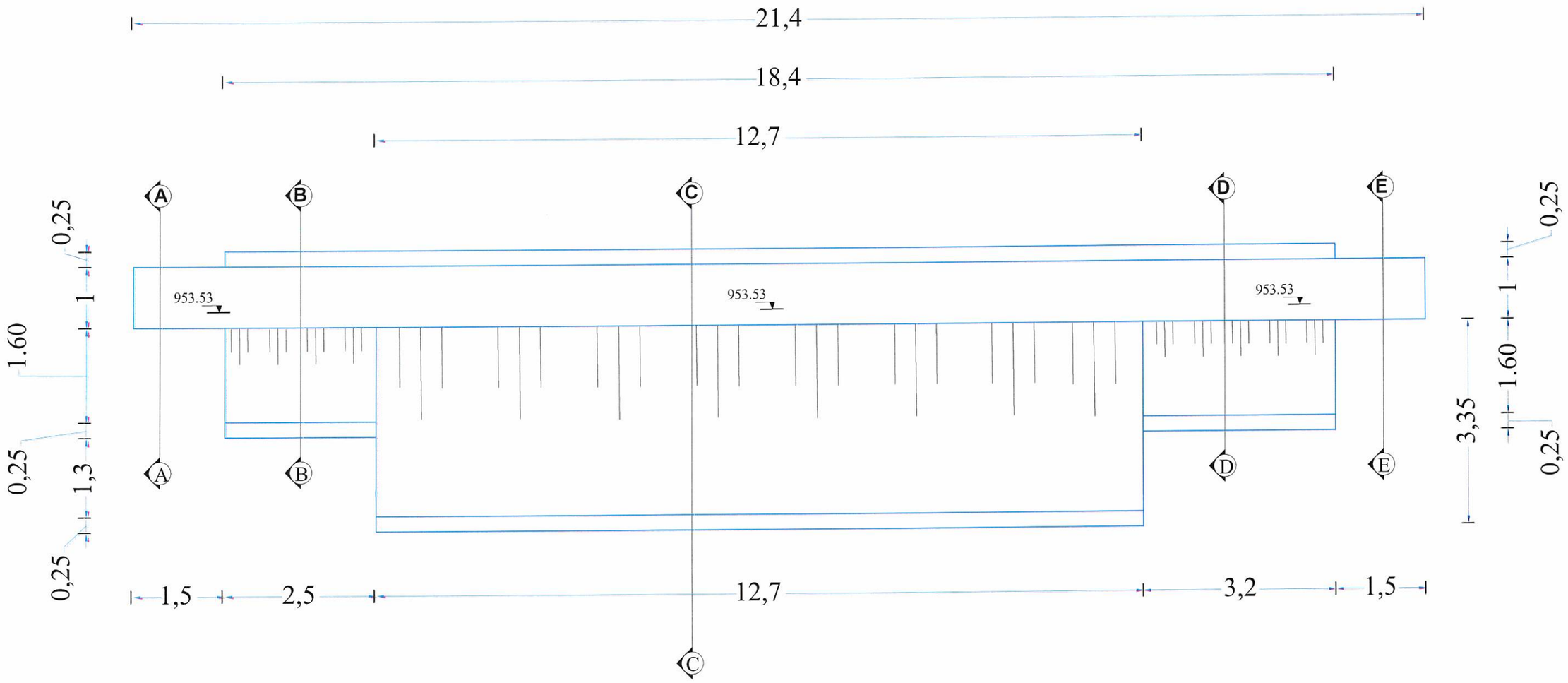
LEGEND

	Bench Mark
	Water Storage Contour
	Canal
	Bed
As per Site	

Point Table

Point #	Elevation	Northing	Easting	Description
99	952.83	3553599.27	685471.87	BM1
100	951.14	3553634.58	685510.91	BM2
101	954.51	3553630.86	685472.99	BM3

DACAAR / PROGRAM	Funded By	UNODC	Village	Baba Faqir	Survey by	Eng. Sayed Zaki Sadat	Scale Meter	Sheet Index 05 10	Project Title	CheckDam
	Implemented By	DACAAR	District	Sangin	Drawn & Designed by	Eng. Sayed Zaki Sadat			Drawing Title	Site Plan Of Check Dam
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal			Date :	Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih				

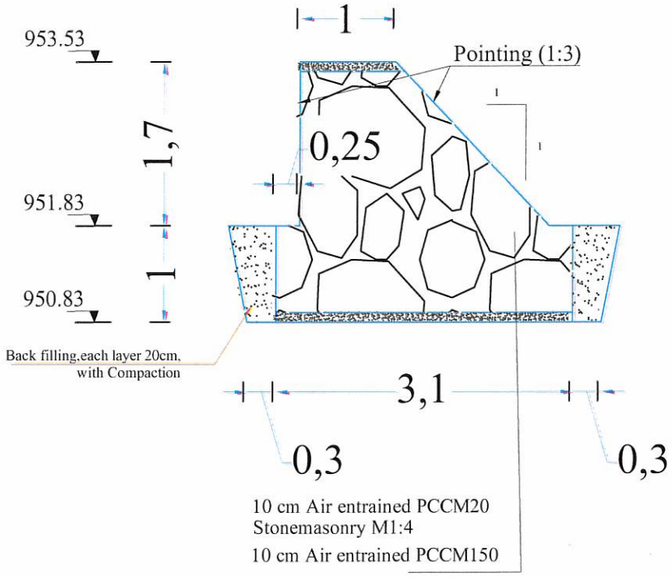


Plan Of Check Dam

Note:

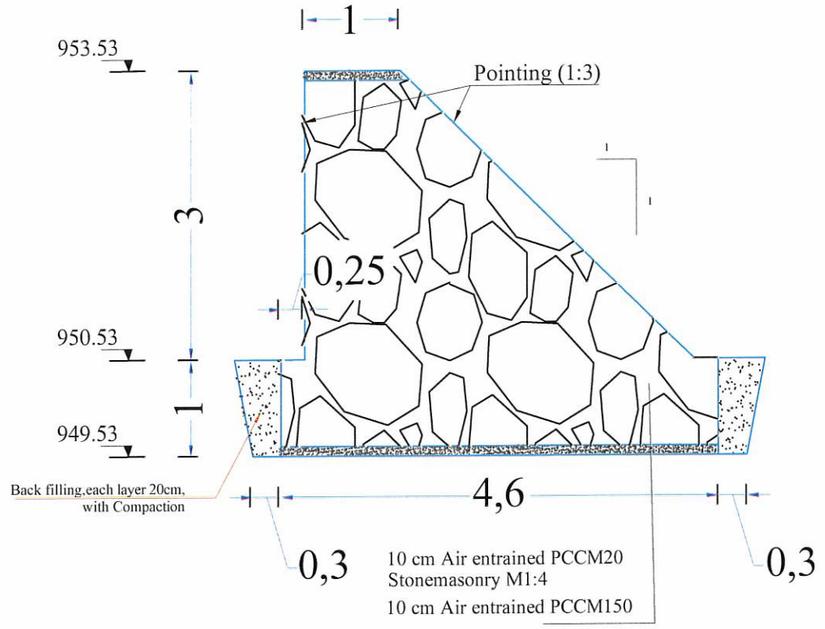
- All dimensions are in M.
- All Excavated material can be use it upstream and downstream faces fillings with 90% Compaction.
- Filling layers must not be Pave more than (15-20)cm thickness.

DACAAR / PROGRAM	Funded By	UNODC	Village	Baba Faqir	Survey by	Eng. Sayed Zaki Sadat	Scale Meter	Sheet Index 06 10	Project Title	CheckDam
	Implemented By	DACAAR	District	Sangin	Drawn & Designed by	Eng. Sayed Zaki Sadat			Drawing Title	Plan Of Check Dam
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal			Date :	Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih				



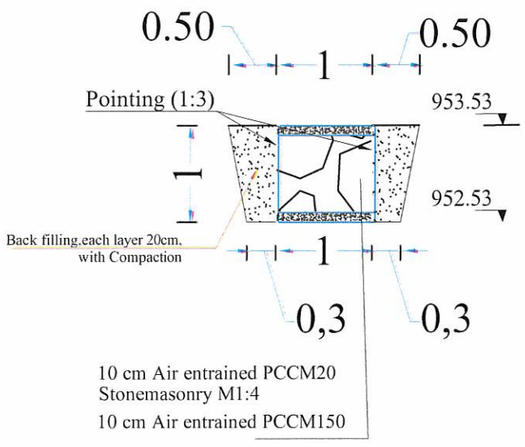
Detail drawings of Check Dam structure with cutting & filling at the deferent location

0 | Section B
L=2.5m



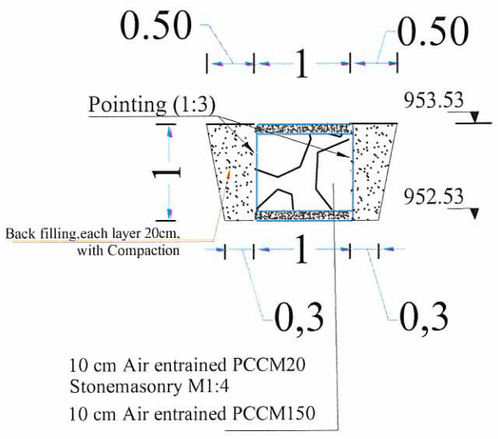
Detail drawings of Check Dam structure with cutting & filling at the deferent location

0 | Section C
L=12,7m



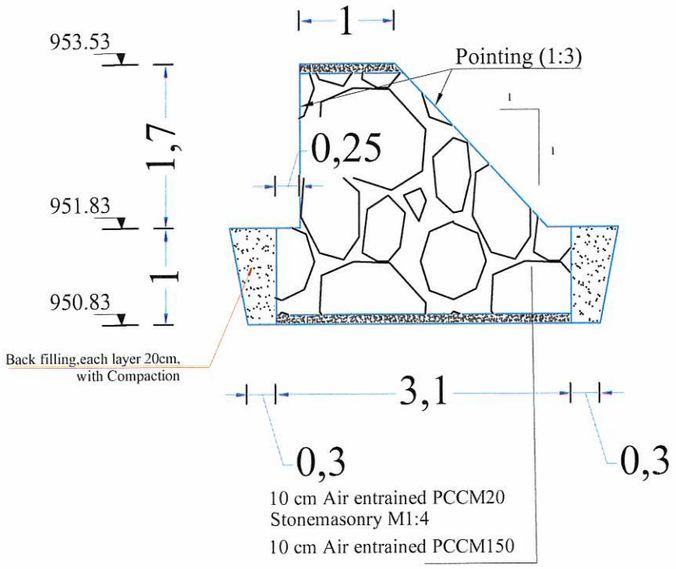
Detail drawings of Check Dam structure with cutting & filling at the deferent location

0 | Section A
L=1.5m



Detail drawings of Check Dam structure with cutting & filling at the deferent location

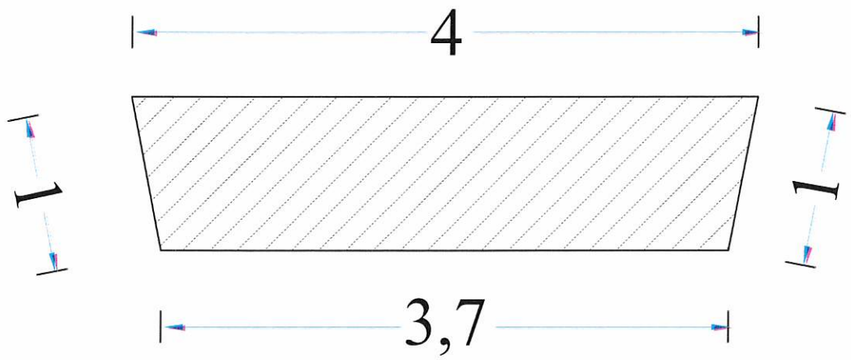
0 | Section C
L=1.5m



Detail drawings of Check Dam structure with cutting & filling at the deferent location

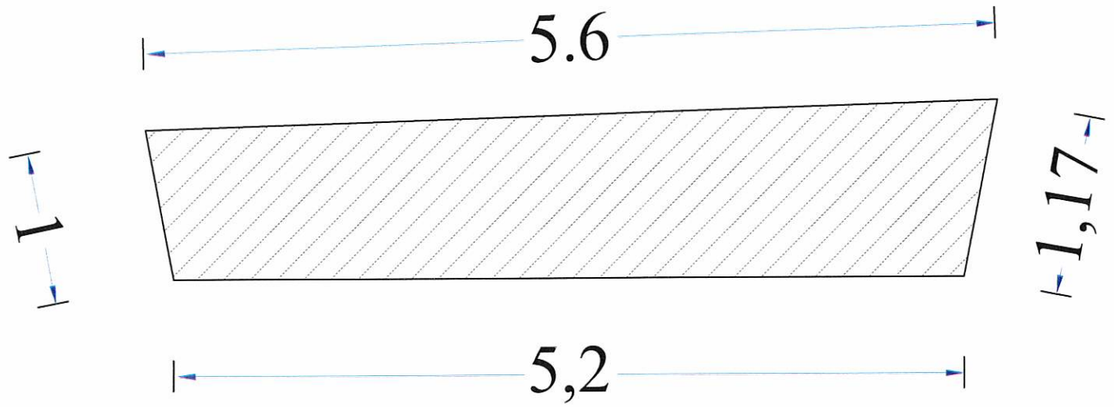
0 | Section D
L=3.2m

DACAAR / PROGRAM	Funded By	UNODC	Village	Baba Faqir	Survey by	Eng. Sayed Zaki Sadat	Scale: Meter; Sheet Index: 07 / 10
	Implemented By	DACAAR	District	Sangin	Drawn & Designed by	Eng. Sayed Zaki Sadat	Project Title: CheckDam
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal	Drawing Title: Detail drawings of Check Dam
					Checked & Approved By	Eng. Abdul Wali Muslih	Date : Jan-2025



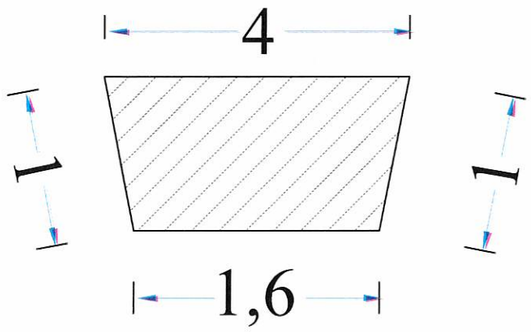
Excavation Area=3.9m2

0 | Section B
L=2.5m



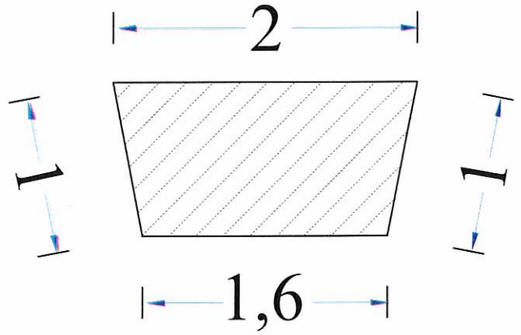
Excavation Area=5.75m2

0 | Section C
L=12,7m



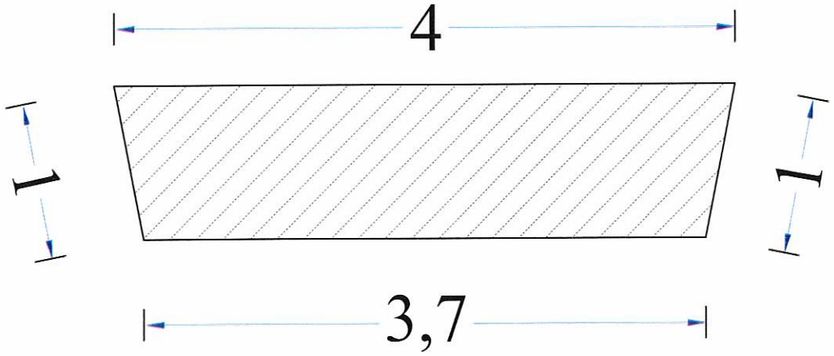
Excavation Area=1.8m2

0 | Section A
L=1.5m



Excavation Area=1.8m2

0 | Section C
L=1.5m



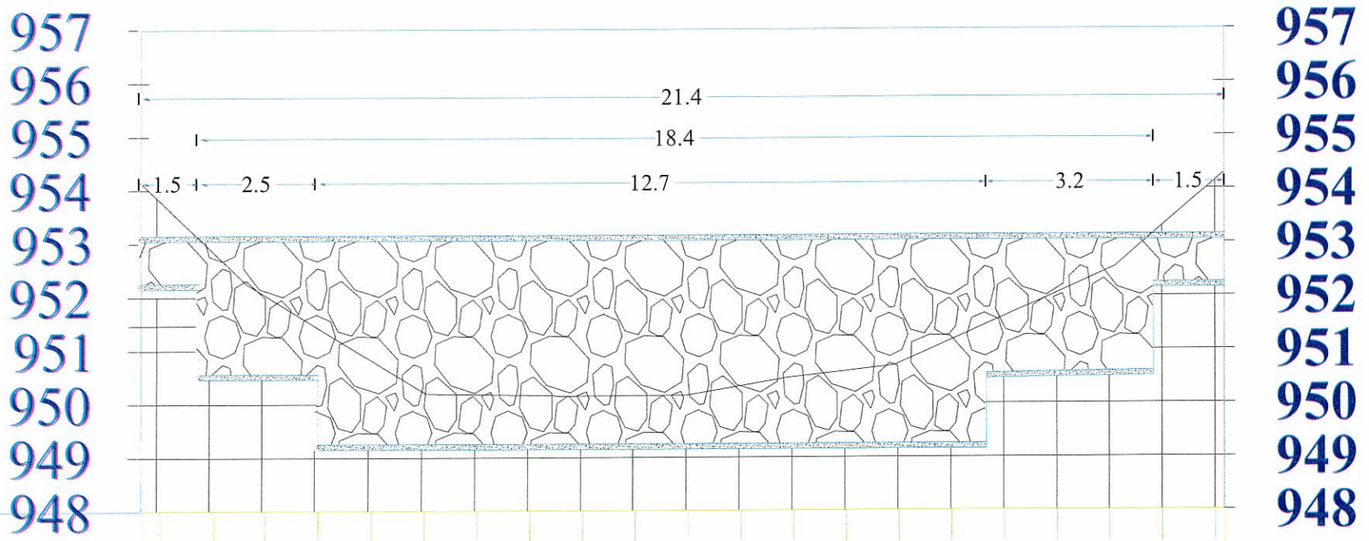
Excavation Area=3.9m2

0 | Section D
L=3.2m

DACAAR / PROGRAM	Funded By	UNODC	Village	Baba Faqir	Survey by	Eng. Sayed Zaki Sadat	Scale Meter	Sheet Index 08 10	Project Title	CheckDam
	Implemented By	DACAAR	District	Sangin	Drawn & Designed by	Eng. Sayed Zaki Sadat			Drawing Title	Cutting Section
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal			Date :	Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih				

DACAAR

0+250.73



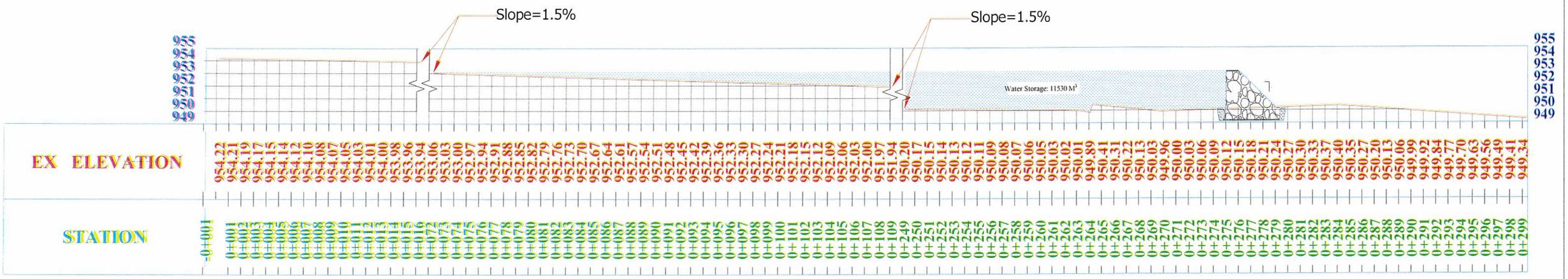
EXISTING ELEVATIONS	953.86	952.92	952.07	951.46	950.86	950.25	950.18	950.17	950.15	950.15	950.16	950.33	950.49	950.60	950.73	951.17	951.61	952.05	952.49	953.29	954.14
PROPOSED ELEVATIONS	953.86	952.92	952.07	951.46	950.86	950.25	950.18	950.17	950.15	950.15	950.16	950.33	950.49	950.60	950.73	951.17	951.61	952.05	952.49	953.29	954.14
OFFSET	-10.00	-9.00	-8.00	-7.00	-6.00	-5.00	-4.00	-3.00	-2.00	-1.00	0	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00

BABA FAQIR CHECK DAM 0N RIVER X- SECTION AT CH:0+250.73

DACAAR / PROGRAM	Funded By	UNODC	Village	Baba Faqir	Survey by	Eng. Sayed Zaki Sadat		Scale Meter	Sheet Index 9 10	Project Title: CheckDam
	Implemented By	DACAAR	District	Sangin	Drawn & Designed by	Eng. Sayed Zaki Sadat				Drawing Title: RIVER X- SECTION AT CH:0+250.73
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal				Date : Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih				

DACAAR

BABA FAQIR PROJECT PROFILE



BABA FAQIR CHECK DAM 0N RIVER L- SECTION AT CH:0+229

DACAAR / PROGRAM	Funded By	UNODC	Village	Baba Faqir	Survey by	Eng. Sayed Zaki Sadat	Scale Meter	Project Title	CheckDam
	Implemented By	DACAAR	District	Sangin	Drawn & Designed by	Eng. Sayed Zaki Sadat	Sheet Index 10/10	Drawing Title	L- SECTION AT CH:0+229
			Province	Helmand	Reviewed By	Eng. Sayed Najib Jalal		Date :	Jan-2025
					Checked & Approved By	Eng. Abdul Wali Muslih			

DACAAR - Program
Technical and Coordination Unit/Survey and DesignTeam
Bill of Quantity (BOQ)for Construction of Baba Faqir Check Dam

Province: Helmand
District: Baba Faqir
Village: Sangin

Subproject Name: Baba Faqir Check Dam
Estimation Date: 16.01.2025
Submitting Date: 16.01.2025

S/N	Description	QNT	Unit	Weeks											
				1	2	3	4	5	6	7	8	9	10	11	12
1	Mobilization: includes the price of all activities such as the transfer of personnel, tools, vehicles, field establishment office and other activities for the implementation of the project and demobilization.	1	LS												
2	"Excavating normal works: which means digging works that were done without hydraulic machines and removal of excess materials up to 500 meters or according to the instructions of the field engineer. For more clarification, refer to paragraph 2.02 of technical specifications	105	m3												
3	Dense filling" refers to the filling of material with the quality of Will Grade, which can be verified from one area and its density is not less than 90% of Proctor Mody Fide ATM. If the compaction is done by machine, the thickness of the soil should not be increased from 20 cents, in the images of compacting the soil by manual machines, its thickness should not be increased from 10 cents.	17	m3												
4	Stone Masonry work M(1:4): Wall stonework with a compromise of 1:4, with all its positive features, the stone must be solid, clean and free of dust according to the plan and opinion of the supervising engineer of the area.	190	m3												
6	PCC M(1:1.5:3):Concrete without spikes with 20 MPa brand preparation, pouring, compacting and watering of 20 brand concrete, including molding with positive things according to the plan, technical specifications and approval of the supervising engineer.	12	m3												
7	PCC M(1:2:4):Concrete without spikes with 15 MPa mark: preparation, pouring, compacting and watering of concrete mark 15, including molding with positive things according to the plan, technical specifications and approval of the supervising engineer.	6	m3												
8	Pointing,M (1:3): Pointing work is done with a ratio of cement and sand of 1:3, which includes materials, workers, soil, watering, etc. be executed Previously, from the beginning of the work, the seams should be cleaned up to 3 cm, then the work should be started. At the end of the work on the stones, the excess material should be cleaned in its correct shape. For more clarification, refer to paragraph 4.05 of the technical specifications.	121	m2												

Prepared by:
Name: **Sayed Zaki Sadat**
Position: **Survey & Design Engineer**
Signature: 16,01, 2025

Review and Checked by :
Name : **Sayed Najib Jalal**
Position: **Survey & Design Coordinator**
Signature: 16/01/2025

Authorized by :
Name: **Eng.Ab.Wali Muslih**
Position : **Manager Technical & Coordination Unit**
Signature: 16/01/25

Approved by:
Name: **Eng. Shah Wali**
Position: **Deputy Director/Head of Program**
Signature: 16.01.25

DACAAR - Program
Technical and Coordination Unit/Survey and DesignTeam
Bill of Quantity (BOQ)for Construction of Baba Faqir Check Dam

Province: Helmand
District: Sangin
Village: Baba Faqir

Subproject Name: Baba Faqir Check Dam
Estimation Date: 16.01.2025
Submitting Date: 16.01.2025

No.	Item	Activities %	Quantity	Unit	Unit cost Afs	Total cost Afs	Contribution CDC, Afs	Contribution DACAAR, Afs
1	Mobilization: includes the price of all activities such as the transfer of personnel, tools, vehicles, field establishment office and other activities for the implementation of the project and demobilization.		1	LS				
2	"Excavating normal works: which means digging works that were done without hydraulic machines and removal of excess materials up to 500 meters or according to the instructions of the field engineer. For more clarification, refer to paragraph 2.02 of technical specifications		105	M3				
3	Dense filling" refers to the filling of material with the quality of Will Grade, which can be verified from one area and its density is not less than 90% of Proctor Mody Fide ATM. If the compaction is done by machine, the thickness of the soil should not be increased from 20 cents, in the images of compacting the soil by manual machines, its thickness should not be increased from 10 cents.		17	M3				
4	Stone Masonry work M(1:4): Wall stonework with a compromise of 1:4, with all its positive features, the stone must be solid, clean and free of dust according to the plan and opinion of the supervising engineer of the area.		190	M3				
6	PCC M(1:1.5:3):Concrete without spikes with 20 MPa brand preparation, pouring, compacting and watering of 20 brand concrete, including molding with positive things according to the plan, technical specifications and approval of the supervising engineer.		12	M3				
7	PCC M(1:2:4):Concrete without spikes with 15 MPa mark: preparation, pouring, compacting and watering of concrete mark 15, including molding with positive things according to the plan, technical specifications and approval of the supervising engineer.		6	M3				
8	Pointing,M (1:3): Pointing work is done with a ratio of cement and sand of 1:3, which includes materials, workers, soil, watering, etc. be executed Previously, from the beginning of the work, the seams should be cleaned up to 3 cm, then the work should be started. At the end of the work on the stones, the excess material should be cleaned in its correct shape. For more clarification, refer to paragraph 4.05 of the technical specifications.		121	M2				
	Total Cost in Afg					**0 Afs**		
	Total Cost in USD					**$0**	**$0**	

Prepared by:
Name: Sayed Zaki Sadat
Position: Survey & Design Engineer
Signature:
16/01/2025

Review and Checked by :
Name : Sayed Najib Jalal
Position: Survey & design Coordinator
Signature:
16/01/2025

Authorized by:
Name: Eng.Ab.Wali Muslih
Position: Manager Technical & Coordination Unit
Signature:
16/01/25

Approved by:
Name: Eng. Shah Wali
Position: Deputy Director/Head of Program
Signature:
16.01.25