THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

MINISTRY OF AGRICULTURE, LIVESTOCK, LANDS AND IRRIGATION

PROJECT MANAGEMENT UNIT

Integrated Watershed & Water Resources Management Project

REFERENCE ONLY

Bidding Documents

For

Improvements to Muthuiyankaddu Tank Bund & Spillway at Muthuiyankaddu Scheme in Muthuiyankaddu Division Mullaitivu Range

Contract No: LK-MoMDE-539127-CW-RFB

Issued: 6th October 2026

Bidder Number	
Name	
Address	

REFERENCE ONLY

MINISTRY OF AGRICULTURE, LIVESTOCK, LANDS AND IRRIGATION

IWWRMP

INVITATION FOR BIDS

Integrated Watershed and Water Resources Management Project (IWWRMP)

Project No: P166865, Loan No: IDA-6619-LK

1. The Government of the Democratic Socialist Republic of Sri Lanka has applied for financing from the International Development Association (World Bank) towards the cost of **Integrated Watershed and Water Resources Management Project (IWWRM Project)** and it intends to apply part of the proceeds of this credit to payment under the contracts mentioned in the schedule below.

2. Project Director of IWWRM Project, invites sealed bids from eligible and qualified bidders for the following **Rehabilitation work under Northern Provincial Council Irrigation Department** as given in the Table 01, on behalf of the Chairman, Project Procurement Committee of Integrated Watershed and Water Resources Management Project.

Table 01

No.	Contract No.	Description of Work	Experience / CIDA Registration	Bid Security Validity Period	Average annual volume of construction work & The minimum amount of liquid assets and/or credit facilities (Rs.)(With VAT)
1	LK-MOMDE-539127-CW-RFB	**Improvements to Muthuiyankaddu Tank bund & Spillway** (*Contract Period:*180 days)	Grade: C4 or above Specialty: Irrigation & Drainage Canals	Bid security value: Rs. 3,750,000.00 Validity: (147 days) Up to 12-03-2027	300.0 Mn & 125.0 Mn

REFERENCE ONLY

3. To be eligible for a contract award, the successful bidder shall not have been blacklisted and shall meet the requirements in the Bidding Document. Further the successful bidder shall have valid registration Grade in Construction Industry Development Authority (CIDA) as mentioned in above Table under the specialty of Irrigation & Drainage Canals.

4. The Bidding documents may be available for inspection in the **https://www.iwwrmp.lk/web/procurement/section/procurement-notices** website for references.

5. Interested bidders may obtain further information from **Senior Project Specialist (Contracts & Procurements),** IWWRM Project, 2nd Floor, Mahaweli Centre Building, No. 96, Ananda Coomaraswamy Mawatha, Colombo 07 and inspect the bidding documents at the same address given above during 9.00 a.m. to 3.00 p.m. from 06.10.2026 to 15.10.2026 (on working Days) by prior notification. (Contact No: 0112691163)

6. Prospective Bidders can obtain the Bidding Documents by a written request on a company/firm letter head, addressed to the Project Director, IWWRM Project, 2nd Floor, Mahaweli Centre Building, No. 96, Ananda Coomaraswamy Mawatha, Colombo 07. from 06.10.2026 to 15.10.2026 from **9.30 a.m. to 15.00 p.m.** only on working days by **prior notification** (Contact No. 011-2691163), on payment of a non-refundable bid

document fee as given above per set of Bidding Documents (Please refer Table: 02 for the amount) on Cash or sending the written request by email to iwwrmp@sltnet.lk with the scan copy of Bank Payment Slip paid the non-refundable bidding documents fee to the Integrated Watershed and Water Resources Management Project Bank Account no. of **7042633** at Bank of Ceylon, Hyde Park Branch.

7. The pre-bid meeting and site visit will be conducted as mentioned in table 02. Bidders are requested to inspect the sites with the assistance of the relevant officer.

Table 02

No.	Contract No.	Description of Work	Non Refundable Deposit	Site visit	Pre bid meeting	Bid Closing and Opening (Date & Time)
1	LK-MOMDE-539127-CW-RFB	**Improvements to Muthuiyankaddu Tank bund & Spillway**	Rs. 39,000.00	Date:09.10.2026 Time: 9.00 a.m. Location: Irrigation Engineer's office, Muththuiyankaddu Division, Provincial Irrigation Department, Oddusuddan, Mullaitivu.	Date: 12.10.2026 Time: 11.00 a.m. Conference room, IWWRMP 2nd Floor, Mahaweli Centre Building, No.96, Ananda Coomaraswamy Mawatha, Colombo 07.	Date: 16.10.2026 Time: 2.00 p.m.

REFERENCE ONLY

8. All pages of the Bidding Documents shall be signed by the bidder and affixed to his seal.

9. Completed Sealed Bid with **duplicate,** clearly marked the contract name and the number on the top left corner of the envelope may be dispatched either by Registered Post or hand delivered or courier to the **Project Director, IWWRM Project, 2nd Floor, Mahaweli Centre Building, No. 96, Ananda Coomaraswamy Mawatha, Colombo 07** as specified in the **Table 02.** Bids will be opened immediately thereafter. Bidders or their authorized representatives, not exceeding two (2) in numbers, are permitted to be present at the opening of bids.

Project Director,
Integrated Watershed and Water Resources Management Project
2nd Floor, Mahaweli Centre Building,
No.96, Ananda Coomaraswamy Mawatha,
Colombo 07.
06.10.2026

Section - 1

Instructions to Bidders (ITB)

Available in ICTAD Publication Number ICTAD/SBD/02
Second Edition January 2007

REFERENCE ONLY

Instruction to Bidders shall be read in conjunction with Bidding Data under Section 2

REFERENCE ONLY

Section - 2

Bidding Data

Available in ICTAD Publication Number ICTAD/SBD/02
Second Edition January 2007

REFERENCE ONLY

This section shall be read in conjunction with Section 1 – Instructions to Bidders, and is intended to provide specific information in relation to corresponding clauses in Section 1. Whenever there is a discrepancy, the provisions in Section 2- Bidding Data shall supersede these provided in the Section 1 – Instruction to Bidders

REFERENCE ONLY

Section 2 - Bidding Data

Instructions to Bidders Clause Reference	Entry
1.1	**Employer's Name and Address** Name: **Project Director,** **Integrated Watershed & Water Resources Management Project** Address: **2nd Floor, No.96, Ananda Coomaraswamy Mawatha, Colombo 07.**
1.1	**Scope of Works** **Improvement to Mutthuiayankaddu Tank Bund and Spillway at Mutthuiyankaddu Scheme in Mutthuiyankaddu Division Mullaitivi Range** which including i. Earth filling of training bund. ii. Concrete Work iii. Boulder placing iv. Placing Gabion Located at **Muthtuiyankaddu Tank** *in* **Mullaitivu District** ***(Coordinates of the location)*** N: 9°12'13.01", E: 80°37'29.50"
1.2	**Time for Completion** The Time for Completion for the whole of works **shall be 180** ***Calendar Days***
2.1	**Source of funds** The source of funds is ***International Development Association (IDA)*** **– World Bank**
3	Substitute by the following: 3.1 The World Bank requires that the Government of Sri Lanka (including beneficiaries of World Bank financing); bidders (applicants/proposers), consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of World Bank-financed contracts, and refrain from Fraud and Corruption. 3.2 The World Bank requires compliance with its policy in regard to corrupt and fraudulent practices as set forth below. 3.3 In pursuance to this policy, The World Bank: a. Defines, for the purposes of this provision, the terms set forth below as follows: i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party; ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;

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iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;

iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;

v. "obstructive practice" is:

a. deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a World Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

b. Acts intended to materially impede the exercise of the World Bank's inspection and audit rights provided for under paragraph 3.4 below.

b. rejects a proposal for award if the World Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its subconsultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;

c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring mis-procurement, if the World Bank determines at any time that representatives of the Government of Sri Lanka or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without taking timely and appropriate action satisfactory to the World Bank to address such practices when they occur, including by failing to inform the World Bank in a timely manner at the time they knew of the practices;

d. Sanctions, pursuant to the World Bank's Anti-Corruption Guidelines and in accordance with its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework any firm or individual – determined at any time by the World Bank to have engaged in Fraud and Corruption in connection with the procurement process, selection and/or execution of a World Bank-financed contract;

e. Requires that, for World Bank-financed operations to be implemented utilizing national procurement arrangements, as well as PPPs, agreed by the World Bank, bidders (applicants/proposers) and consultants submitting bids/proposals will be required to accept the application of, and agree to comply with, the Anti-Corruption Guidelines during the procurement process, selection and/or contract execution, including the World Bank's right to sanction as set forth in paragraph 2.2 d., and the World Bank's inspection and audit rights as set forth in paragraph 3.4. The Employer shall consult and apply the World Bank Group's lists of firms and individuals suspended or debarred. In the event the Employer signs a contract with a firm or an individual suspended or debarred by the World Bank Group, the World Bank does not finance the related expenditures and may apply other remedies as appropriate; and

f. Requires that, when a United Nations (UN) agency is selected to provide goods,

REFERENCE ONLY

	works, non-consulting services and technical assistance, the above provisions regarding sanctions on Fraud and Corruption shall apply in their entirety to all contractors, consultants, sub-contractors, sub-consultants, service providers, suppliers, and their employees, that signed contracts with the UN agency. 3.4 In further pursuance of this policy, Bidders shall permit and shall cause its agents (whether declared or not), sub-contractors, sub-consultants, service providers, or suppliers and any personnel thereof, to permit the World Bank to inspect all accounts, records and other documents relating to any prequalification process, bid submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the World Bank.
4.1	**Qualification Information** The following information shall be provided in Section 9 - Schedules: • ICTAD registration Registration number …… Grade …… Specialty …… Expiry date …… • VAT registration number ...…….. • Attach construction program • Attach legal status (Sole proprietor, Partnership, Company etc.) • Attach authentication for signatory • Total monetary value of construction work performed for each of the last five years • Experience in works of a similar nature and complexity for each of the last ten years • Construction equipment • Staffing • Attach Work plan and methods;
4.2 (a)	**CIDA registration required** **The registration required;** **Specialty:** ***Irrigation and Drainage Canals*** **Grade: C4 or Above**
4.2 (b)	**Average annual volume of construction work performed in last 10 years** Average annual volume of construction work performed in last five years shall be at least **Rs. 300.00 Million** The last five years meaning that any of five years within last 10 years' period.
4.2 (c)	Experience in works of a similar nature and site for each of the last **10 years** shall be at least **Rs. 125.00 Million (For a Single Work) (Excluding VAT)**

REFERENCE ONLY

4.2 (d) **Essential equipment**

Proposals for the timely acquisition (own, lease, hire, etc.) of the following essential equipment **shall be;**

No.	Equipment Type and Characteristics	Min. Number Required
1.	Crawler excavator - 200 HP, Bucket capacity 1.0 m^3	3
2.	Jack Hammer	1
3.	Loader backhoe	1
4.	Dozer D4D, D6	1
5.	Tractor with trailers	3
6.	Transport equipment / Tipper	4
7.	Water Bowser with sprinkler 5000 L Capacity	1
8.	Mobile Generator 5kVA	2
9.	Plate Compactor	1
10.	Rammer	1
11.	Vibrating Roller	1
12.	Vibrating Sheep foot roller not less than 10 Ton	1
13.	Submersible water pump (3")	2
14.	Concrete Mixture 14/10 Cu.l	4

REFERENCE ONLY

4.2 (e) **Qualifications and experience of the Contract Manager and other Key personnel**

Key personnel	Qualifications	No. of Position	Experience	Similar work Experience
1. Project Manager	Engineering Degree or equivalent qualification in Relevant field	1	10 yrs	03 yrs
2. Site Engineer	B.Sc. (Civil Engineering) degree or equivalent	1	05yrs	03yrs
3. Environmental and Social Officer	Degree or equivalent qualification in Relevant field	1	01 yrs	-
4. Health and Safety Officer	Degree or equivalent qualification in Relevant field	1	01 yrs	-
5.Engineering Assistant (Civil)	NDT or equivalent	1	03 yrs	01 yrs
6. Work Supervisor (Civil)	NCT	3	03 yrs	01 yrs

The Bidder must demonstrate that it will have suitably qualified Project Manager and suitably qualified other key personnel in adequate numbers, as described in the table above.

4.2 (f)	**Liquid assets and/or credit facilities required** The minimum amount of liquid assets and/or credit facilities, net of other contractual commitments and exclusive of any advance payments which may be made under the Contract**, shall be not less than Rs. 125.00 Million**
8.3	The employer may conduct a site visit concurrently with the pre-bid meeting referred to in Clause 19. The site visit will be conduct as follow. Date & Time: **09.10.2026 at 11:00 a.m.** Commencing Venue: **Irrigation Engineer's office, Muthuiyankaddu Division, Provincial Irrigation Department, Oddusuddan, Mullaitivu**.
10.1	**Clarification of Bidding Documents** Employer's address for clarification of bidding documents is: **Name of Officer:** **Project Director, IWWRMP** **Address:** **2nd Floor, Mahaweli Centre Building,** **No. 96, Ananda Coomaraswamy Mawatha, Colombo 07.** **Phone:** **0112691163** **Facsimile:** **0112691163** **E-mail:** iwwrmp@sltnet.lk
13.1(A) (j) **13.1(B) (d)**	The Bidder shall submit the following additional documents in its Bid: **Code of Conduct (ESHS)** The Bidder shall submit its Code of Conduct that will apply to Contractor's Personnel (as defined in Sub-clause 1.1.2.7 of the GC), to ensure compliance with its Environmental, Social, Health and Safety (ESHS) obligations under the contract. *[Note: Complete and include the risks to be addressed by the Code in accordance with Schedule 10, e.g. risks associated with: labor influx, spread of communicable diseases, sexual harassment, gender-based violence, sexual exploitation and abuse, illicit behavior and crime, and maintaining a safe environment etc.]* In addition, the Bidder shall detail how this Code of Conduct will be implemented. This will include: how it will be introduced into conditions of employment/engagement, what training will be provided, how it will be monitored and how the Contractor proposes to deal with any breaches. The Contractor shall be required to implement the agreed Code of Conduct. **Management Strategies and Implementation Plans (MSIP) to manage the (ESHS) risks** The Bidder shall submit Management Strategies and Implementation Plans (MSIP) to manage the following key Environmental, Social, Health and Safety (ESHS) risks. The Contractor shall be required to submit for approval, and subsequently implement, the Contractor's Environment and Social Management Plan (C-ESMP), in accordance with the Particular Conditions of Contract Sub-Clause 4.1, that includes the agreed Management Strategies and Implementation Plans described here.

REFERENCE ONLY

	*[**Note:** The extent and scope of these requirements should reflect the significant ESHS risks or requirements set out in Schedule 10 as advised by Environmental/Social specialist/s. The key risks to be addressed by the Bidder should be identified by Environmental/Social specialist/s, for example, from the Environmental and Social Impact Assessment (ESIA), Environmental and Social Management Plan (ESMP), Resettlement Action Plan (RAP), and/or Consent Conditions (regulatory authority conditions attached to any permits or approvals for the project), up to a maximum of four. The risks may arise during mobilization or construction phases, and may include construction traffic impacts on the community, pollution of drinking water, depositing on private land and impacts on rare species etc. The management strategies and/or implementation plans to address these could include, as appropriate: mobilization strategy, strategy for obtaining consents/permits, traffic management plan, water resource protection plan, bio-diversity protection plan and a strategy for marking and respecting work site boundaries etc.]*
14.4	**Adjustments for change in cost** The Contract **is subjected** to price adjustment
15.1	**Currency of Bid** Rates and prices shall be quoted by the bidders entirely in **Sri Lankan rupees.**
16.1	**Period of Bid validity:** **The Bid shall be valid up to 119 days** from the bid submission deadline date **(up to 12th February 2027)**
17.1	**Amount of Bid security:** **The amount of Bid Security is Sri Lanka Rupees Three Million Seven Hundred Fifty Thousand Only (LKR 3,750,000.00)** The Bid Security shall be in the form of an unconditional bank guarantee issued from a reputed **bank recognized by the Central Bank of Sri Lanka**, where the issuing bank is **located in Sri Lanka**. The format of the bid security should be in accordance with the specimen form of bid security included in the bidding document (Section 11)
17.2	**Validity of Bid Security:** **The bid security shall be valid up to 147 days from the date of closing of the bids (excluding closing date) 12th March 2027**
17.6 (c) (ii)	Furnish the required Performance Securities including the Environmental, Social, Health and Safety (ESHS) Performance Security pursuant to ITB 35.1.
19.1	**Pre-Bid meeting** Pre-Bid meeting ***will be held in hybrid mode*** *(MS Teams + in person)* Venue, time, and date of the pre-bid meeting. **Date: 12th October 2026** **Time: 11:00 a.m.** **Venue:** PMU Conference room, Integrated Watershed & Water Resources Management Project 2nd Floor, Mahaweli Centre Building, No. 96, Ananda Coomaraswamy Mawatha, Colombo 07.

REFERENCE ONLY

21.2 (a)	**Employer's Address for Bid Submission** Employer's Address for the purpose of bid submission is: **Project Director** **Integrated Watershed & Water Resources Management Project** **2nd Floor, Mahaweli Centre Building,** **No.96, Ananda Coomaraswamy Mawatha,** **Colombo 07.**
21.2 (b)	**Identification number of Contract** Identification Number of the Contract is: **LK-MoMDE-539127-CW-RFB**
22.1	**Deadline for submission of Bids** Deadline for submission of Bids**: 16th October 2026** Time: **2.00 p.m.**
25.1	**Bid opening** **Venue, time, and date of bid opening.** ***Venue:*** PMU Conference Room, IWWRM Project, 2nd Floor, Mahaweli Centre Building, No. 96, Ananda Coomaraswamy Mawatha, Colombo 07. **Time: 2.00 p.m.** **Date: 16th October 2026**
31.1	**Preference for Domestic Bidders: Not Applicable**
35.1	**Amount of Performance Security** The Standard Form of Performance Security acceptable to the Employer shall be a Guarantee from an Agency accepted and stated in the Procurement Guidelines. The amount of the Performance Security is ***7%*** of the Initial Contract Price. The Performance Security shall be valid until 28 Days beyond the Time for Completion …… ***(date)***. In addition, the successful Bidder ***shall*** submit an Environmental, Social, Health and Safety (ESHS) Performance Security within 14 Days of receipt of the Letter of Acceptance. The amount of the Environmental, Social, Health and Safety (ESHS) Performance Security is ***3%*** of the initial Contract Price. The Environmental, Social, Health and Safety (ESHS) Performance Security shall be valid until 28 days beyond the defects liability period …… ***(date).*** Performance security shall only be an unconditional guarantee issued by a bank recognized by the Central Bank of Sri Lanka in accordance with the format given.

REFERENCE ONLY

35.3	Additionally, performance guarantee will be added up to 10% on the situation where the evaluated price having considerable gap, which would be decided by PE.
37	Fees and types of reimbursable expenses to be paid to the Adjudicator shall be on a case-to-case basis and shall be shared equally by the Contractor and the Employer.

REFERENCE ONLY

Section - 3

Conditions of Contract

REFERENCE ONLY

Available in ICTAD Publication Number ICTAD/SBD/02
Second Edition January 2007

Condition of Contract shall be read in conjunction with the
Section 4 – Contract Data

REFERENCE ONLY

Section - 4

Contract Data

This section shall be read in conjunction with Section 3 – Condition of Contract, and is intended to provide specific information in relation to corresponding clauses in Section 3. Whenever there is a discrepancy, the provisions in Section 4- Contract Data shall supersede these provided in the Section 3 – Condition of Contract

REFERENCE ONLY

REFERENCE ONLY

Section 4 – Contract Data

Conditions of Contract Clause Number/s		
(*) 1.1.2.2 & 1.3	Employer's name and address	Name: Project Director, Integrated Watershed & Water Resources Management Project Address : 2nd Floor, Mahaweli Centre Building, No.96, Ananda Coomaraswamy Mawatha, Colombo 07.
1.3	Contractor's name and address	Name: ……. Address: …….
(*) 1.1.2.4 & 1.3	Engineer's name and address	Name: Deputy Director of Irrigation, Mullaitivu Range Address: Deputy Director's office, Mullaitivu Range, Provincial Irrigation Department, Jaffna Road, Mankulam.
	Engineer's Representative name and address	Name: Divisional Irrigation Engineer, Muthuiyankaddu Division. Address: Divisional Irrigation Engineer's Office, Oddusuddan, Mullaitivu.
1.1.2.5 **Contractor's Personnel**	**Key Personnel** The following is added at the end of the sub-clause: "Contractor's Personnel includes Key Personnel as named in the Contract."	
1.1.2.5 Contractor's Representative	Name:……. Address:……	
1.1.2.9	**Replace existing Clause 1.1.2.9 with following:** "Dispute Adjudication Board" (DAB) means three persons appointed under Sub-Clause 19.2 [Appointment of the Dispute Adjudication Board] or Sub-Clause 19.3 [Failure to Agree on the Composition of the Dispute Adjudication Board] of the Conditions of Contract.	
(*) 1.1. 3.3	Time for Completion of the Works	Time for Completion is **180** ***calendar Days from the commencement date.***
(*) 1.1.3.7	Defects Notification Period	Defects Notification Period is **365** Days

REFERENCE ONLY

1.1.6.8	The following is added after Sub-Clause 1.1.6.7 "ESHS" means environmental, social (including sexual exploitation and abuse (SEA) and gender-based violence (GBV)), health and safety.	
(*) 2. 1	Right to access to the Site	**14** Days after Letter of Acceptance
(*) 3.1	Engineer's Duties and Authority	The Engineer shall obtain the specific approval of the Employer before taking action under the following Sub-Clauses of these Conditions: (a) Clause 13, where the final effect of the variations **exceed 5%** of the Contract Price EOT shall be recommended with due justification to the employer. The employer will grant the extension.
4.1 Contractor's General Obligations	Insert in the fifth paragraph after the words "*The Contractor shall, whenever required by the Engineer, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works.*" "Notwithstanding Sub-Clause 8.1, the Contractor shall not carry out any Works, including mobilization and/or pre-construction activities (e.g. limited clearance for haul roads, site accesses and work site establishment, geotechnical investigations or investigations to select ancillary features such as quarries and borrow pits), unless the Engineer is satisfied that appropriate measures are in place to address environmental, social, health and safety risks and impacts. At a minimum, the Contractor shall apply the Management Strategies and Implementation Plans and Code of Conduct, submitted as part of the Bid and agreed as part of the Contract. The Contractor shall submit, on a continuing basis, for the Engineer's prior approval, such supplementary Management Strategies and Implementation Plans as are necessary to manage the ESHS risks and impacts of ongoing works. These Management Strategies and Implementation Plans collectively comprise the Contractor's Environmental and Social Management Plan (C-ESMP). The C-ESMP shall be approved prior to the commencement of construction activities (e.g. excavation, earth works, bridge and structure works, stream and road diversions, quarrying or extraction of materials, concrete batching and asphalt manufacture). The approved C-ESMP shall be reviewed, periodically (but not less than every six (6) months), and updated in a timely manner, as required, by the Contractor to ensure that it contains measures appropriate to the Works activities to be undertaken. The updated C-ESMP shall be subject to prior approval by the Engineer.	
(*) 4.2	Amount of Performance Security	**7%** of the Initial Contract Price, in the currencies and proportions in which the Contract Price is payable. The acceptable form is **Unconditional Guarantee.** Performance Security shall only be an Unconditional on Demand Guarantee issued by a bank recognized by the Central Bank of Sri Lanka in accordance with the format given The ESHS Performance Security will be in the form of a "*Unconditional on Demand Guarantee"* in the amount(s) of **3%** percent of the Accepted Contract Amount and in the same currency (ies) of the Accepted Contract Amount.

REFERENCE ONLY

4.2 Performance Security	Add the following The Contractor shall obtain (at his cost) an Environmental, Social, Safety and Health (ESHS) Performance Security for compliance with the Contractor's ESHS obligations, for 3% of Initial Contract Price. The Contractor shall deliver ESHS Performance Security to the Employer within 14 days after receiving the Letter of Acceptance, and shall send a copy to the Engineer. The ESHS Performance Security shall be issued by a reputable bank selected by the Contractor, and shall be in the form annexed to the Particular Conditions, as stipulated by the Employer in the Contract Data, or in another form approved by the Employer. The Contractor shall ensure that the ESHS Performance Security is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects. If the terms of the ESHS Performance Security specify its expiry date, and the Contractor has not become entitled to receive the Performance Certificate (which, if applicable, includes satisfactory performance of the ESHS obligations), by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the ESHS Performance Security until the Works have been completed and any defects have been remedied. The Employer shall return the ESHS Performance Security to the Contractor within 21 days after receiving a copy of the Performance Certificate.
4.14 Progress Reports	Sub-Clause 4.21 (g) is replaced by the following: **"4.14 (g)** the Environmental, Social, Health and Safety (ESHS) metrics set out in Appendix B" At the end of, and as part of Sub-Clause 4.14 add a new paragraph as follows: "The Contractor shall provide immediate notification to the Engineer of incidents in the following categories. Full details of such incidents shall be provided to the Engineer within the timeframe agreed with the Engineer. (a) confirmed or likely violation of any law or international agreement; (b) any fatality or serious (lost time) injury; (c) significant adverse effects or damage to private property (e.g. vehicle accident, damage from fly rock, working beyond the boundary) (d) major pollution of drinking water aquifer or damage or destruction of rare or endangered habitat (including protected areas) or species; or (e) any allegation of gender-based violence (GBV), sexual exploitation or abuse, sexual harassment or sexual misbehavior, rape, sexual assault, child abuse, or defilement, or other violations involving children.

REFERENCE ONLY

6.8 Contractor's Personnel

Key Personnel

Key personnel	Qualifications	No. of Position	Experience	Similar work Experience
1. Project manager	Engineering Degree or equivalent qualification in Relevant field	1	10 yrs	03 yrs
2. Site Engineer	B.Sc. (Civil Engineering) degree or equivalent	1	05yrs	03yrs
3. Environmental and Social Officer	Degree or equivalent qualification in Relevant field	1	01 yrs	-
4. Health and Safety Officer	Degree or equivalent qualification in Relevant field	1	01 yrs	-
5.Engineering Assistant (Civil)	NDT or equivalent	1	03 yrs	01 yrs
6. Work Supervisor (Civil)	NCT	3	03 yrs	01 yrs

REFERENCE ONLY

Sub-Clauses 6.8 (d) is amended by inserting "or" at the end:

"6.9 (d)……; or"

Sub-Clauses 6.8 (e) is inserted as follows:

"6.9 (e) undertakes behavior which breaches the Code of Conduct (ESHS) (e.g. spreading communicable diseases, sexual harassment, gender-based violence, (GBV), sexual exploitation or abuse, illicit activity or crime)."

After the sentence: "*If appropriate, the Contractor shall then appoint (or cause to be appointed) a suitable replacement person.*" the following is added as a new paragraph:

"The Contractor's Personnel includes Key Personnel. If the Contractor intends to replace a Key Personnel, the Contractor shall, not less than 30 days before the intended date of replacement, give notice to the Engineer, the name, address, academic qualifications and relevant experience of the intended replacement Key Personnel. The Contractor shall not, without the prior consent of the Engineer, revoke the appointment of the Key Personnel or appoint a replacement."

<table>
<tr><td>(*) 8.7</td><td>Liquidated damages for the Works</td><td>0.05 % of the Initial Contract Price per Day</td></tr>
<tr><td>(*) 8.7</td><td>Maximum amount of liquidated damages</td><td>5 % of the Initial Contract Price</td></tr>
<tr><td>12.2 (b)</td><td>Method of Measurement</td><td>The Method of Measurement shall be joint measurement and annexed in Section 8</td></tr>
<tr><td>13.3
Variation procedure</td><td colspan="2">Sub-Clause 13.3. (a) is replaced with the following:

“(a) a description of the proposed work to be performed, a programme for its execution and sufficient ESHS information to enable an evaluation of ESHS risks and impacts;”</td></tr>
<tr><td>(*) 13.4(b)</td><td>Percentage for adjustment of Provisional Sums</td><td>10 %</td></tr>
<tr><td>13.7
Adjustment for changes in Cost</td><td colspan="2">Last paragraph “The weightings for each of the inputs of cost ……” shall be substituted by the following:
“The weightings for each of the inputs of cost given in this Clause shall be adjusted only if they have been rendered unreasonable, unbalanced or inapplicable, as a result of Variations.”</td></tr>
<tr><td>13.7</td><td>Weightings of Inputs</td><td>
<table>
<tr><th>Indices No</th><th>Input Name</th><th>Input Percentage (%)</th></tr>
<tr><td>P1</td><td>Small Equipment</td><td>14.94</td></tr>
<tr><td>M4</td><td>Cement</td><td>14.23</td></tr>
<tr><td>M13</td><td>Reinforcement</td><td>13.68</td></tr>
<tr><td>L3</td><td>Unskilled Labour</td><td>12.24</td></tr>
<tr><td>P2</td><td>Heavy Equipment</td><td>11.13</td></tr>
<tr><td>M6</td><td>Rubble</td><td>5.81</td></tr>
<tr><td>P3</td><td>Fuel</td><td>4.97</td></tr>
<tr><td>M7</td><td>Metal</td><td>4.65</td></tr>
<tr><td>M8</td><td>Sand</td><td>3.39</td></tr>
<tr><td>L1</td><td>Skilled Labour</td><td>2.81</td></tr>
<tr><td>M45</td><td>Earth</td><td>2.15</td></tr>
<tr><td colspan="2">Total</td><td>90.0</td></tr>
</table>
Nonadjustable element shall be: All P.Sum & L.Sum items
</td></tr>
<tr><td>(*) 14.2</td><td>Total Advance Payment</td><td>Payment, equivalent to 40% of the Initial Contract Price (excluding provisional sums and contingencies), will be made upon the submission of the “Un conditional On Demand” Advanced Guarantee which is obtained from the Bank registered under Central Bank, Sri Lanka.
Further, the payment is subjected to the Engineer’s Recommendation.</td></tr>
</table>

REFERENCE ONLY

(*) 14.3(c)	Percentage of retention	10 %

(*) 14.3(c)	Limit of Retention Money	5 % of the Initial Contract Price
14.5	Minimum amount of Interim Payment Certificates.	Rs. 25,000,000.00 (With VAT)
(*) 14.5 Issue of Interim Payment Certificate	The following is added to the third paragraph as (c): i. if the Contractor was, or is, failing to perform any ESHS obligations or work under the Contract, the value of this work or obligation, as determined by the Engineer, may be withheld until the work or obligation has been performed, and/or the cost of rectification or replacement, as determined by the Engineer, may be withheld until rectification or replacement has been completed. Failure to perform includes, but is not limited to the following: a) failure to comply with any ESHS obligations or work described in the Works' Requirements which may include: working outside site boundaries, excessive dust, failure to keep public roads in a safe usable condition, damage to offsite vegetation, pollution of water courses from oils or sedimentation, contamination of land e.g. from oils, human waste, damage to archeology or cultural heritage features, air pollution as a result of unauthorized and/or inefficient combustion; b) failure to regularly review C-ESMP and/or update it in a timely manner to address emerging ESHS issues, or anticipated risks or impacts; c) failure to implement the C-ESMP e.g. failure to provide required training or sensitization; d) failing to have appropriate consents/permits prior to undertaking Works or related activities; e) failure to submit ESHS report/s (as described in Appendix B), or failure to submit such reports in a timely manner; f) Failure to implement remediation as instructed by the Engineer within the specified timeframe (e.g. remediation addressing non-compliance/s).

REFERENCE ONLY

<table>
<tr><td>(*)14.8</td><td>Alternative method for Payment of Retention</td><td>On reaching the limit of retention, stated in the Contract Data under Sub-Clause 14.3, the Contractor may substitute full retention money with an unconditional guarantee acceptable to the Employer to a value equal to the full retention money, and valid up to 28 Days beyond the end of Defect Notification Period. On receipt of such guarantee the Employer shall repay the full retention money. The guarantee will be released to the Contractor upon the certification of the Engineer that all Defects notified by the Engineer to the Contractor before the end of this period have been corrected.</td></tr>
<tr><td>(*) 18.2</td><td>Third Party Insurance</td><td>This Amount of insurance per occurrence is:
<table>
<tr><td></td><td>Minimum Insurance Amount</td><td>Maximum Deductible</td></tr>
<tr><td>(a) for the works, Plant and materials:</td><td>110% of the contract Price</td><td>Rs 50,000/-</td></tr>
<tr><td>(b) For loss or damage to equipment</td><td>Replacement value of the Equipment’s</td><td>Rs 50,000/-</td></tr>
<tr><td>(c) for losses or damage to property (except the works, plant, Materials, and Equipment) in connection with Contract</td><td>Rs 1.0 million</td><td>Rs 50,000/-</td></tr>
<tr><td>(d) for personal injury or death: (i) of the Contractor’s employees per event</td><td>Rs 1,000,000 per employee</td><td>No Deductible</td></tr>
<tr><td>(ii) of other people per event</td><td>Rs 1,000,000 per person</td><td>No Deductible</td></tr>
</table></td></tr>
</table>

REFERENCE ONLY

	<u>Clause 19.0 Claims, Disputes and Arbitration</u> ***Delete existing sub-clause 19.2 (Dispute Resolution),*** ***Delete existing sub-clause 19.3 (Procedure for Adjudication),*** ***Delete existing sub-clause 19.4 (Replacement of Adjudicator),*** ***Delete existing sub-clause 19.5 (Arbitration), and insert the following new sub-clauses;*** *19.2 Appointment of the Dispute Adjudication Board* *19.3 Failure to Agree on the Composition of the Dispute Adjudication Board* *19.4 Obtaining Dispute Adjudication Board's Decision* *19.5 Failure to Comply with Dispute Adjudication Board's Decision* *19.6 Expiry of Dispute Adjudication Board's Appointment* *19.7 Arbitration*

REFERENCE ONLY

19.2	Appointment of the Dispute Adjudication Board	Any dispute of whatever nature arising out of or in relation to this agreement shall in the first instance be referred to a Dispute Adjudication Board (DAB) for decision in accordance with Sub-Clause 19.4 [Obtaining Dispute Adjudication Board's Decision]. The Parties shall appoint a DAB within 28 Days from the Commencement Date. The DAB shall comprise, three suitably qualified persons ("the members"), who shall be professionals experienced in the type of construction involved in the Works and with the interpretation of contractual documents, one of whom shall serve as chairman. Within 28 Days from the Commencement Date each of the Parties shall appoint one member to serve on the Dispute Adjudication Board (DAB). The Parties shall consult both these members and shall agree upon the third member, who shall be appointed to act as the chairman. The agreement between the Parties and each of the three members shall incorporate by reference the General Conditions of Dispute Adjudication Agreement contained in the Appendix to these Contract Data, with such amendments as are agreed between them. The terms of the remuneration of the three members, including the remuneration of any expert whom the DAB consults, shall be mutually agreed upon by the Parties when agreeing the terms of appointment of the member or such expert (as the case may be). Each Party shall be responsible for paying one-half of this remuneration If a member declines to act or is unable to act as a result of death, disability, resignation or termination of appointment, a replacement shall be appointed in the same manner as the replaced person was required to have been nominated or agreed upon, as described in this Sub-Clause. The appointment of any member may be terminated by mutual agreement of both Parties, but not by the Employer or the Contractor acting alone. Unless otherwise agreed by both Parties, the appointment of the DAB (including each member) shall expire when the discharge referred to in Sub-Clause 14.11 [Discharge] shall have become effective.

REFERENCE ONLY

19.3	Failure to Agree on the Composition of the Dispute Adjudication Board	If any of the following conditions apply, namely: (a) either Party fails to nominate a member of a DAB by such date, (b) the Parties fail to agree upon the appointment of the third member (to act as chairman) of the DAB by such date, or (c) the Parties fail to agree upon the appointment of a replacement person within 42 Days after the date on which the one of the three members declines to act or is unable to act as a result of death, disability, resignation or termination of appointment, Then Institute for Construction Training and Development (ICTAD) shall, upon the request of either or both of the Parties and after due consultation with both Parties, appoint this member of the DAB. This appointment shall be final and conclusive. Each Party shall be responsible for paying one-half of the expenses / disbursements incurred by ICTAD.
19.4	Obtaining Dispute Adjudication Board's Decision	If a dispute (of any kind whatsoever) arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works, including any dispute as to any certificate, determination, instruction, opinion or valuation of the Engineer, either Party may refer the dispute in writing to the DAB for its decision, with copies to the other Party and the Engineer. Such reference shall state that it is given under this Sub-Clause. The DAB shall be deemed to have received such reference on the date when it is received by the chairman of the DAB. Both Parties shall promptly make available to the DAB all such additional information, further access to the Site, and appropriate facilities, as the DAB may require for the purposes of making a decision on such dispute. The DAB shall be deemed to be not acting as arbitrator(s).

REFERENCE ONLY

		Within 84 Days after receiving such reference, or within such other period as may be proposed by the DAB and approved by both Parties, the DAB shall give its decision, which shall be reasoned and shall state that it is given under this Sub-Clause. The decision shall be binding on both Parties, who shall promptly give effect to it unless and until it shall be revised in an amicable settlement or an arbitral award as described below. Unless the Contract has already been abandoned, repudiated or terminated, the Contractor shall continue to proceed with the Works in accordance with the Contract. If either Party is dissatisfied with the DAB's decision, then either Party may, within 28 Days after receiving the decision, give notice to the other Party of its dissatisfaction and intention to commence arbitration. If the DAB fails to give its decision within the period of 84 Days (or as otherwise approved) after receiving such reference, then either Party may, within 28 Days after this period has expired, give notice to the other Party of its dissatisfaction and intention to commence arbitration. In either event, this notice of dissatisfaction shall state that it is given under this Sub-Clause, and shall set out the matter in dispute and the reason(s) for dissatisfaction. Except as stated in Sub-Clause 19.5 [Failure to Comply with Dispute Adjudication Board's Decision] and Sub-Clause 19.6 [Expiry of Dispute Adjudication Board's Appointment], neither Party shall be entitled to commence arbitration of a dispute unless a notice of dissatisfaction has been given in accordance with this Sub-Clause. If the DAB has given its decision as to a matter in dispute to both Parties, and no notice of dissatisfaction has been given by either Party within 28 Days after it received the DAB's decision, then the decision shall become final and binding upon both Parties.
19.5	Failure to Comply with Dispute Adjudication Board's Decision	In the event that a Party fails to comply with a DAB decision which has become final and binding, then the other Party may, without prejudice to any other rights it may have, refer the failure itself to arbitration under Sub-Clause 19.7 [Arbitration]. Sub-Clause 19.4 [Obtaining Dispute Adjudication Board's Decision] shall not apply to this reference.

REFERENCE ONLY

19.6	Expiry of Dispute Adjudication Board's Appointment	If a dispute arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works and there is no DAB in place, whether by reason of the expiry of the DAB's appointment or otherwise: (a) Sub-Clause 19.4 [Obtaining Dispute Adjudication Board's Decision] shall not apply, and (b) the dispute may be referred directly to arbitration under Sub-Clause 19.7 [Arbitration].
19.7	Arbitration	(a) Any dispute of whatever nature arising from, out of or in connection with this agreement, on the interpretation thereof, or the rights, duties, obligations or liabilities of any Party, or the operation, breach, termination, abandonment, foreclosure or invalidity thereof, shall be referred to by either Party to arbitration for final settlement, in accordance with the Arbitration Act No. 11 of 1995, or any amendment thereof, (b) Pending the award in any arbitration proceedings hereunder, (i) this Contract and the rights and obligations of the Parties shall remain in full force and effect and (ii) each of the Parties shall continue to perform their respective obligations under this Contract. The termination of this Contract shall not result in the termination of any arbitration proceedings pending at the time of such termination nor otherwise affect the rights and obligations of the Parties under or with respect to such pending arbitration. (c) Any award rendered by the arbitral tribunal shall determine the extent to which the cost of arbitration is to be borne by each Party. The arbitration centre charges and the compensation to the arbitrator shall be equally shared by the Parties initially.

REFERENCE ONLY

		Composition of the Arbitral Tribunal: The arbitral tribunal shall consist of a sole arbitrator who shall be appointed in the manner provided in the Selection Procedure as given below. **Selection Procedure:** The Party desiring arbitration shall nominate three arbitrators out of which one to be selected by the other Party within 21 Days of the receipt of such nomination. If the other Party does not select one to serve as Arbitrator within the stipulated period then the Arbitrator shall be appointed in accordance with the Arbitration Act No. 11 of 1995, or any amendments thereof. **Venue & Language:** The venue of arbitration shall be in Sri Lanka. Unless otherwise agreed to by the Parties the proceedings shall be conducted and the award shall be rendered in the English language.
	In the following sub-clauses, the term "Performance Security" is replaced with: "Performance Security and, if applicable, an Environmental, Social, Health and Safety (ESHS) Performance Security": 2.1- Right of Access to the Site 14.2- Advance Payment 14.5- Issue of Interim Payment Certificate 14.11- Discharge 15.5- Employer's Entitlement to Termination for Convenience 16.4(a)- Payment on termination"	

REFERENCE ONLY

APPENDIX TO CONTRACT DATA

APPENDIX A

A General Conditions of Dispute Adjudication Agreement

1. Definitions

Each "Dispute Adjudication Agreement" is a tripartite agreement by and between:

(a) the "Employer";

(b) the "Contractor"; and

(c) the "Member" who is defined in the Dispute Adjudication Agreement as being one of the three persons who are jointly called the "DAB" (or "Dispute Adjudication Board") and, where this is the case, the other two persons are called the "Other Members."

The Employer and the Contractor have entered (or intend to enter) into a contract, which is called the "Contract" and is defined in the Dispute Adjudication Agreement, which incorporates this Appendix. In the Dispute Adjudication Agreement, words and expressions which are not otherwise defined shall have the meanings assigned to them in the Contract.

REFERENCE ONLY

2. General Provisions

Unless otherwise stated in the Dispute Adjudication Agreement, it shall take effect on the latest of the following dates:

(a) the Commencement Date defined in the Contract,

(b) when the Employer, the Contractor and the Member have each signed the Dispute Adjudication Agreement, or

(c) when the Employer, the Contractor and each of the Other Members have respectively each signed a Dispute Adjudication Agreement.

This employment of the Member is a personal appointment. At any time, the Member may give not less than 70 Days notice of resignation to the Employer and to the Contractor, and the Dispute Agreement shall terminate upon the expiry of this period.

3. Warranties

The Member warrants and agrees that he/she is and shall be impartial and independent of the Employer, the Contractor and the Engineer. The Member shall promptly disclose, to each of them and to the Other Members, any fact or circumstance which might appear inconsistent with his/her warranty and agreement of impartiality and independence.

When appointing the Member, the Employer and the Contractor relied upon the Member's representations that he/she is:

(a) experienced in the work which the Contractor is to carry out under the Contract,

(b) experienced in the interpretation of contract documentation, and

(c) fluent in the language for communications defined in the Contract.

4. General Obligations of the Member

The Member shall:

(a) have no interest financial or otherwise in the Employer, the Contractor or Engineer, nor any financial interest in the Contract except for payment under the Dispute Adjudication Agreement;

(b) not previously have been employed as a consultant or otherwise by the Employer, the Contractor or the Engineer, except in such circumstances as were disclosed in writing to the Employer and the Contractor before they signed the Dispute Adjudication Agreement;

(c) have disclosed in writing to the Employer, the Contractor and the Other Members, before entering into the Dispute Adjudication Agreement and to his/her best knowledge and recollection, any professional or personal relationships with any director, officer or employee of the Employer, the Contractor or the Engineer, and any previous involvement in the overall project of which the Contract forms part;

(d) not, for the duration of the Dispute Adjudication Agreement, be employed as a consultant or otherwise by the Employer, the Contractor or the Engineer, except as may be agreed in writing by the Employer, the Contractor and the Other Members;

(e) comply with the annexed procedural rules and with Sub-Clause 19.4 (Obtaining Dispute Adjudication Board's Decision) of the Conditions of Contract;

(f) not give advice to the Employer, the Contractor, the Employer's Personnel or the Contractor's Personnel concerning the conduct of the Contract, other than in accordance with the annexed procedural rules;

(g) not while a Member enter into discussions or make any agreement with the Employer, the Contractor or the Engineer regarding employment by any of them, whether as a consultant or otherwise, after ceasing to act under the Dispute Adjudication Agreement;

(h) ensure his/her availability for all site visits and hearings as are necessary;

(i) become conversant with the Contract and with the progress of the Works (and of any other parts of the project of which the Contract forms part) by studying all documents received which shall be maintained in a current working file;

(j) treat the details of the Contract and all the DAB's activities and hearings as private and confidential, and not publish or disclose them without the prior written consent of the Employer, the Contractor and the Other Members; and

(k) be available to give advice and opinions, on any matter relevant to the Contract when requested by both the Employer and the Contractor, subject to the agreement of the Other Members.

5. General Obligations of the Employer and the Contractor

The Employer, the Contractor, the Employer's Personnel and the Contractor's Personnel shall not request advice from or consultation with the Member regarding the Contract, otherwise than in the normal course of the DAB's activities under the Contract and the Dispute Adjudication Agreement. The Employer and the Contractor shall be responsible for compliance with this provision, by the Employer's Personnel and the Contractor's Personnel respectively.

REFERENCE ONLY

The Employer and the Contractor undertake to each other and to the Member that the Member shall not, except as otherwise agreed in writing by the Employer, the Contractor, the Member and the Other Members:

(a) be appointed as an arbitrator in any arbitration under the Contract;

(b) be called as a witness to give evidence concerning any dispute before arbitrator(s) appointed for any arbitration under the Contract; or

(c) be liable for any claims for anything done or omitted in the discharge or purported discharge of the Member's functions, unless the act or omission is shown to have been in bad faith.

The Employer and the Contractor hereby jointly and severally indemnify and hold the Member harmless against and from claims from which he is relieved from liability under the preceding paragraph.

Whenever the Employer or the Contractor refers a dispute to the DAB under Sub-Clause 19.4 (Obtaining Dispute Adjudication Board's Decision) of the Conditions of Contract, which will require the Member to make a site visit and attend a hearing, the Employer or the Contractor shall provide appropriate security for a sum equivalent to the reasonable expenses to be incurred by the Member. No account shall be taken of any other payments due or paid to the Member.

6. Payment

The Member shall be paid as follows:

(a) a retainer fee per calendar month, which shall be considered as payment in full for:

(i) being available on 28 Days' notice for all site visits and hearings;

(ii) becoming and remaining conversant with all project developments and maintaining relevant files;

(iii) all office and overhead expenses including secretarial services, photocopying and office supplies incurred in connection with his duties; and

(iv) all services performed hereunder except those referred to in sub-paragraphs (b) and (c) of this Clause.

The retainer fee shall be paid with effect from the last day of the calendar month in which the Dispute Adjudication Agreement becomes effective; until the last day of the calendar month in which the Taking-Over Certificate is issued for the whole of the Works.

With effect from the first day of the calendar month following the month in which the Taking-Over Certificate is issued for the whole of the Works, the retainer fee shall be reduced by 50%. This reduced fee shall be paid until the first day of the calendar month in which the Member resigns or the Dispute Adjudication Agreement is otherwise terminated.

REFERENCE ONLY

(b) a daily fee which shall be considered as payment in full for:

(i) each day or part of a day up to a maximum of two Days travel time in each direction for the journey between the Member's home and the site, or another location of a meeting with the Other Members;

(ii) each working day on Site visits, hearings or preparing decisions; and

(iii) each day spent reading submissions in preparation for a hearing.

(c) all reasonable expenses including necessary travel expenses (hotel and subsistence and other direct travel expenses) incurred in connection with the Member's duties, as well as the cost of telephone calls, courier charges, and faxes: a receipt shall be required for each item in excess of five percent of the daily fee referred to in sub-paragraph (b) of this Clause.

The retainer and daily fees shall be as specified in the Dispute Adjudication Agreement. Unless it specifies otherwise, these fees shall remain fixed for the entire duration of the Contract.

The Member shall submit invoices for payment of the monthly retainer quarterly in advance. Invoices for other expenses and for daily fees shall be submitted following the conclusion of a site visit or hearing. All invoices shall be accompanied by a brief description of activities performed during the relevant period and shall be addressed to the Contractor.

REFERENCE ONLY

The Contractor shall pay each of the Member's invoices in full within 56 calendar days after receiving each invoice and shall apply to the Employer (in the Statements under the Contract) for reimbursement of one-half of the amounts of these invoices. The Employer shall then pay the Contractor in accordance with the Contract.

If the Contractor fails to pay to the Member the amount to which he/she is entitled under the Dispute Adjudication Agreement, the Employer shall pay the amount due to the Member and any other amount which may be required to maintain the operation of the DAB; and without prejudice to the Employer's rights or remedies. In addition to all other rights arising from this default, the Employer shall be entitled to reimbursement of all sums paid in excess of one-half of these payments, plus all costs of recovering these sums and financing charges calculated at the rate specified in Sub-Clause 14.7 of the Conditions of Contract.

If the Member does not receive payment of the amount due within 70 days after submitting a valid invoice, the Member may (i) suspend his/her services (without notice) until the payment is received, and/or (ii) resign his/her appointment by giving notice under Clause 7.

7. Termination

At any time: (i) the Employer and the Contractor may jointly terminate the Dispute Adjudication Agreement by giving 42 Days notice to the Member; or (ii) the Member may resign as provided for in Clause 2.

If the Member fails to comply with the Dispute Adjudication Agreement, the Employer and the Contractor may, without prejudice to their other

rights, terminate it by notice to the Member. The notice shall take effect when received by the Member.

If the Employer or the Contractor fails to comply with the Dispute Adjudication Agreement, the Member may, without prejudice to his other rights, terminate it by notice to the Employer and the Contractor. The notice shall take effect when received by them both.

Any such notice, resignation and termination shall be final and binding on the Employer, the Contractor and the Member. However, a notice by the Employer or the Contractor, but not by both, shall be of no effect.

8. Default of the Member

If the Member fails to comply with any of his obligations under Clause 4 (a) - (d) above, he shall not be entitled to any fees or expenses hereunder and shall, without prejudice to their other rights, reimburse each of the Employer and the Contractor for any fees and expenses received by the Member and the Other Members, for proceedings or decisions of the DAB which are rendered void or ineffective by the said failure to comply.

If the Member fails to comply with any of his obligations under Clause 4 (e) - (k) above, he shall not be entitled to any fees or expenses hereunder from the date and to the extent of the non-compliance and shall, without prejudice to their other rights, reimburse each of the Employer and the Contractor for any fees and expenses already received by the Member, for proceedings or decisions of the DAB which are rendered void or ineffective by the said failure to comply.

9. Disputes

Any dispute or claim arising out of or in connection with this Dispute Adjudication Agreement, or the breach, termination or invalidity thereof, shall be finally settled in accordance with Arbitration Act No 11, 1995 of Sri Lanka with a sole Arbitrator..

REFERENCE ONLY

PROCEDURAL RULES

1. Unless otherwise agreed by the Employer and the Contractor, the DAB shall visit the site at intervals of not more than 70 days, including times of critical construction events, at the request of either the Employer or the Contractor. Unless otherwise agreed by the Employer, the Contractor and the DAB, the period between consecutive visits shall not be less than 35 days, except as required to convene a hearing as described below.

2. The timing of and agenda for each site visit shall be as agreed jointly by the DAB, the Employer and the Contractor, or in the absence of agreement, shall be decided by the DAB. The purpose of site visits is to enable the DAB to become and remain acquainted with the progress of the Works and of any actual or potential problems or claims, and, as far as reasonable, to endeavour to prevent potential problems or claims from becoming disputes.

3. Site visits shall be attended by the Employer, the Contractor and the Engineer and shall be co-ordinated by the Employer in co-operation with the Contractor. The Employer shall ensure the provision of appropriate conference facilities and secretarial and copying services. At the conclusion of each site visit and before leaving the site, the DAB shall prepare a report on its activities during the visit and shall send copies to the Employer and the Contractor.

4. The Employer and the Contractor shall furnish copy each to the members of the DAB all documents which the DAB may request, including Contract documents, progress reports, variation instructions, certificates and other documents pertinent to the performance of the Contract. All communications between the DAB and the Employer or the Contractor shall be copied to the other Party.

5. If any dispute is referred to the DAB in accordance with Sub-Clause 19.4 (Obtaining Dispute Adjudication Board's Decision) of the Conditions of Contract, the DAB shall proceed in accordance with Sub-Clause 19.4 (Obtaining Dispute Adjudication Board's Decision) and these Rules. Subject to the time allowed to give notice of a decision and other relevant factors, the DAB shall:

   (a) act fairly and impartially as between the Employer and the Contractor, giving each of them a reasonable opportunity of putting his case and responding to the other's case, and

   (b) adopt procedures suitable to the dispute, avoiding unnecessary delay or expense.

6. The DAB may conduct a hearing on the dispute, in which event it will decide on the date and place for the hearing and may request that written documentation and arguments from the Employer and the Contractor be presented to it prior to or at the hearing.

7. Except as otherwise agreed in writing by the Employer and the Contractor, the DAB shall have power to adopt an inquisitorial procedure, to refuse admission to hearings or audience at hearings to any persons other than representatives of the Employer, the Contractor and the Engineer, and to proceed in the absence of any party who the DAB is satisfied received notice of the hearing; but shall have discretion to decide whether and to what extent this power may be exercised.

8. The Employer and the Contractor empower the DAB, among other things, to:

   (a) establish the procedure to be applied in deciding a dispute,

   (b) decide upon the DAB's own jurisdiction, and as to the scope of any dispute referred to it,

   (c) conduct any hearing as it thinks fit, not being bound by any rules or procedures other than those contained in the Contract and these Guidelines,

REFERENCE ONLY

(d) take the initiative in ascertaining the facts and matters required for a decision,

(e) make use of its own specialist knowledge, if any,

(f) decide upon the payment of financing charges in accordance with the Contract,

(g) decide upon any provisional relief such as interim or conservatory measures, and

(h) open up, review and revise any certificate, decision, determination, instruction, opinion or valuation of the Engineer, relevant to the dispute.

9. The DAB shall not express any opinions during any hearing concerning the merits of any arguments advanced by the Parties. Thereafter, the DAB shall make and give its decision in accordance with Sub-Clause 19.4 (Obtaining Dispute Adjudication Board's Decision), or as otherwise agreed by the Employer and the Contractor in writing. The DAB:

(a) shall convene in private after a hearing, in order to have discussions and prepare its decision;

(b) shall endeavour to reach a unanimous decision: if this proves impossible the applicable decision shall be made by a majority of the Members, who may require the minority Member to prepare a written report for submission to the Employer and the Contractor; and

(c) Member fails to attend a meeting or hearing, or to fulfill any required function, the other two Members may nevertheless proceed to make a decision, unless:

(i) either the Employer or the Contractor does not agree that they do so, or

(ii) the absent Member is the chairman and he/she instructs the other Members to not make a decision.

REFERENCE ONLY

DISPUTE ADJUDICATION AGREEMENT

[for each member of a three - person DAB]

Name and details of Contract
Name and address of Employer
Name and address of Contractor
Name and address of Member

Whereas the Employer and the Contractor have entered into the Contract and desire jointly to appoint the Member to act as one of the three persons who are jointly called the Dispute Adjudication Board (DAB) *[and desire the Member to act as chairman of the* DAB*]*

The Employer, Contractor and Member jointly agree as follows:

1. The conditions of this Dispute Adjudication Agreement comprise the "General Conditions of Dispute Adjudication Agreement" which is appended to the General Conditions of the "Standard Bidding Document, Procurement of Works, Major Contracts - Second Edition, January 2007" and the following provisons. In these provisions, which include amendments and additions to the General Conditions of Dispute Adjudication Agreement, words and expressions shall have the same meanings as are assigned to them in the General Conditions of Dispute Adjudication Agreement.

2. *[Details of amendments to the General Conditions of Dispute Adjudication Agreement, if any*

   For example:

   In the procedural rules annexed to the General Conditions of Dispute Adjudication Agreement, Rule_____ is deleted and replaced by: "……."*]*

3 In accordance with Clause 6 of the General Conditions of Dispute Adjudication Agreement the Member shall be paid as follows:

   A retainer fee of _____ per calendar month,

   plus a daily fee of _____ per day.

4 In consideration of these fees and other payments to be made by the Employer and the Contractor in accordance with Clause 6 of the General Conditions of Dispute Adjudication Agreement, the Member undertakes to serve, as described in this Dispute Adjudication Agreement, as one of the three persons who are jointly to act as the DAB.

5 The Employer and the Contractor jointly and severally undertake to pay the Member, in consideration of the carrying out of these services, in accordance with Clause 6 of the General Conditions of Dispute Adjudication Agreement.

6 This Dispute Adjudication Agreement shall be governed by the law of _____

SIGNED by:_____	SIGNED by:_____	SIGNED by:_____
for and on behalf of the employer in the presence of	for and on behalf of the Contractor in the presence of	the Member in the presence of
Witness:_____	Witness: _____	Witness : _____
Name: _____	Name: _____	Name : _____
Address:_____	Address: _____	Address : _____
Date: _____	Date: _____	Date: _____

REFERENCE ONLY

APPENDIX B

Environmental, Social, Health and Safety (ESHS)

Metrics for Progress Reports

Metrics for regular reporting:

a. environmental incidents or non-compliances with contract requirements, including contamination, pollution or damage to ground or water supplies;

b. health and safety incidents, accidents, injuries and all fatalities that require treatment;

c. interactions with regulators: identify agency, dates, subjects, outcomes (report the negative if none);

d. status of all permits and agreements:

i. work permits: number required, number received, actions taken for those not received;

ii. status of permits and consents:

- *List areas/facilities with permits required (quarries, asphalt & batch plants), dates of application, dates issued (actions to follow up if not issued), dates submitted to resident engineer (or equivalent), status of area (waiting for permits, working, abandoned without reclamation, decommissioning plan being implemented, etc.);*
- *list areas with landowner agreements required (borrow and spoil areas, camp sites), dates of agreements, dates submitted to resident engineer (or equivalent);*
- *identify major activities undertaken in each area in the reporting period and highlights of environmental and social protection (land clearing, boundary marking, topsoil salvage, traffic management, decommissioning planning, decommissioning implementation);*
- *for quarries: status of relocation and compensation (completed, or details of activities and current status in the reporting period).*

REFERENCE ONLY

e. health and safety supervision:

i. safety officer: number days worked, number of full inspections & partial inspections, reports to construction/project management;

ii. number of workers, work hours, metric of PPE use (percentage of workers with full personal protection equipment (PPE), partial, etc.), worker violations observed (by type of violation, PPE or otherwise), warnings given, repeat warnings given, follow-up actions taken (if any);

f. worker accommodations:

i. number of expats housed in accommodations, number of locals;

ii. date of last inspection, and highlights of inspection including status of accommodations' compliance with national and local law and good practice, including sanitation, space, etc.;

iii. actions taken to recommend/require improved conditions, or to improve conditions.

g. HIV/AIDS: provider of health services, information and/or training, location of clinic, number of non-safety disease or illness treatments and diagnoses (no names to be provided);

h. gender (for expats and locals separately): number of female workers, percentage of workforce, gender issues raised and dealt with (cross-reference grievances or other sections as needed);

i. training:

i. number of new workers, number receiving induction training, dates of induction training;

ii. number and dates of toolbox talks, number of workers receiving Occupational Health and Safety (OHS), environmental and social training;

iii. number and dates of HIV/AIDS sensitization and/or training, no. workers receiving training (in the reporting period and in the past); same questions for gender sensitization, flag person training.

iv. number and date of GBV /SEA sensitization and/or training, number of workers receiving training on code of conduct (in the reporting period and in the past), etc.

j. environmental and social supervision:

i. environmentalist: days worked, areas inspected and numbers of inspections of each (road section, work camp, accommodations, quarries, borrow areas, spoil areas, swamps, forest crossings, etc.), highlights of activities/findings (including violations of environmental and/or social best practices, actions taken), reports to environmental and/or social specialist/construction/site management;

ii. sociologist: days worked, number of partial and full site inspections (by area: road section, work camp, accommodations, quarries, borrow areas, spoil areas, clinic, HIV/AIDS center, community centers, etc.), highlights of activities (including violations of environmental and/or social requirements observed, actions taken), reports to environmental and/or social specialist/construction/site management; and

iii. Community liaison person(s): days worked (hours community center open), number of people met, highlights of activities (issues raised, etc.), reports to environmental and/or social specialist /construction/site management.

k. Grievances: list new grievances (e.g. allegations of GBV / SEA) received in the reporting period and unresolved past grievances by date received, complainant, how received, to whom referred to for action, resolution and date (if completed), data resolution reported to complainant, any required follow-up (Cross-reference other sections as needed):

i. Worker grievances;

ii. Community grievances

l. Traffic and vehicles/equipment:

i. traffic accidents involving project vehicles & equipment: provide date, location, damage, cause, follow-up;

ii. accidents involving non-project vehicles or property (also reported under immediate metrics): provide date, location, damage, cause, follow-up;

iii. overall condition of vehicles/equipment (subjective judgment by environmentalist); non-routine repairs and maintenance needed to improve safety and/or environmental performance (to control smoke, etc.).

m. Environmental mitigations and issues (what has been done):

i. dust: number of working bowsers, number of waterings/day, number of complaints, warnings given by environmentalist, actions taken to resolve; highlights of quarry dust control (covers, sprays, operational status); % of rock/spoil lorries with covers, actions taken for uncovered vehicles;

REFERENCE ONLY

ii. erosion control: controls implemented by location, status of water crossings, environmentalist inspections and results, actions taken to resolve issues, emergency repairs needed to control erosion/sedimentation;

iii. quarries, borrow areas, spoil areas, asphalt plants, batch plants: identify major activities undertaken in the reporting period at each, and highlights of environmental and social protection: land clearing, boundary marking, topsoil salvage, traffic management, decommissioning planning, decommissioning implementation;

iv. blasting: number of blasts (and locations), status of implementation of blasting plan (including notices, evacuations, etc.), incidents of off-site damage or complaints (cross-reference other sections as needed);

v. spill cleanups, if any: material spilled, location, amount, actions taken, material disposal (report all spills that result in water or soil contamination;

vi. waste management: types and quantities generated and managed, including amount taken offsite (and by whom) or reused/recycled/disposed on-site;

vii. details of tree plantings and other mitigations required undertaken in the reporting period;

viii. details of water and swamp protection mitigations required undertaken in the reporting period.

n. compliance:

i. compliance status for conditions of all relevant consents/permits, for the Work, including quarries, etc.): statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance;

ii. compliance status of C-ESMP/ESIP requirements: statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance

iii. compliance status of GBV/SEA prevention and response action plan: statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance

iv. compliance status of Health and Safety Management Plan re: statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance

v. other unresolved issues from previous reporting periods related to environmental and social: continued violations, continued failure of equipment, continued lack of vehicle covers, spills not dealt with, continued compensation or blasting issues, etc. Cross-reference other sections as needed.

REFERENCE ONLY

Section - 5

Standard Forms (Contract)

REFERENCE ONLY

- Letter of Acceptance
- Agreement
- Performance Security
- ESHS Performance Security
- Advance Payment Security
- Retention Money Guarantee
- ESHS Declaration

REFERENCE ONLY

Notes on Form of Letter of Acceptance

The Letter of Acceptance will be the basis for formation of the Contract as described in Clause 34 of the Instructions to Bidders. This Form of Letter of Acceptance should be filled in and sent to the successful bidder only after evaluation of Bids and after obtaining approval from the relevant authority.

FORM OF LETTER OF ACCEPTANCE

[Letter heading paper of the procuring entity]

……. *[date]*

To: ---------- [*name and address of the Contractor]* ---------

This is to notify you that your bid dated ---------- *[insert date]* for the construction and remedying defects of the **Improvements to Muthuiyankaddu Tank bund & Spillway (LK-MOMDE-539127-CW-RFB)** for the Contract price of ----------[*name of currency]* ----------[*amount in figures and words]* as corrected in accordance with Instructions to Bidders and/ or modified by a Memorandum of Understanding is hereby accepted.

REFERENCE ONLY

You are hereby instructed to proceed with the execution of the said Works in accordance with the Contract documents.

The Commencement Date shall be: …… *(fill the date as per Clause 8.1 of Conditions of Contract).*

The amount of Performance Security is *:* …… *(fill the amount as per Clause 4.2 of Conditions of Contract).*

The Performance Security shall be submitted on or before ……... *(fill the date as per Clause 4.2 of Conditions of Contract).*

Authorized Signature : ……

Name and title of Signatory : …….

FORM OF AGREEMENT

This Agreement made the ……. *[day]* of …… *[month]* 20……. *[year]*, between ……. *[name and address of Employer]* (hereinafter called and referred to as "the Employer"), of the one part, and ……. *[name and address of Contractor*] (hereinafter called and referred to as "the Contractor"), of the other part:

Whereas the Employer desires that the Contractor execute **Improvements to Muthuiyankaddu Tank bund & Spillway (LK-MOMDE-539127-CW-RFB)** *(hereinafter called and referred to as "the Works")* and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and remedying of any defects therein.

The Employer and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract.

2. In consideration of the payments to be made by the Employer to the Contractor as indicated in this Agreement, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.

3. The Employer hereby covenants to pay the Contractor in consideration of the execute and complete the Works and remedy any defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

REFERENCE ONLY

In Witness whereof the parties hereto have caused this Agreement to be executed the day and year aforementioned in accordance with laws of Sri Lanka.

…….. ……..

Authorized signature of Contractor **Authorized signature of Employer**

COMMON SEAL COMMON SEAL

In the presence of
Witnesses:

1. Name and NIC No. …….
   Signature …….
   Address ……

2. Name and NIC No. ……..
   Signature ……..
   Address ……

FORM OF PERFORMANCE SECURITY
(Unconditional)

---------- *[Issuing Agency's Name, and Address of Issuing Branch or Office]* ----------

Beneficiary: ---------- *[Name and Address of* Employer*]*

Date: ----------

PERFORMANCE GUARANTEE No.: ----------

We have been informed that ---------- *[name of Contractor]* (hereinafter called "the Contractor") has entered into Contract No. **LK-MOMDE-539127-CW-RFB** dated ---------- with you, for the ---------- *[insert "construction"]* of **Improvements to Muthuiyankaddu Tank bund & Spillway** (hereinafter called "the Contract").

Furthermore, we understand that, according to the Conditions of the Contract, a performance guarantee is required.

At the request of the Contractor, we ---------- *[name of Agency]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of ---------- *[amount in figures]* (----------) *[amount in words]*, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

REFERENCE ONLY

This guarantee shall expire, no later than the …. day of ……, 20…. *[insert date, 28 days beyond the Time for Completion]* and any demand for payment under it must be received by us at this office on or before that date.

_____
[signature(s)]

Form of Environmental, Social, Health and safety (ESHS) Performance Security

ESHS Demand Guarantee

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[insert name and Address of* Employer*]*

Date: _ *[Insert date of issue]*

ESHS PERFORMANCE GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that _____ (hereinafter called "the Applicant") has entered into Contract No. _____ dated _____ with the Beneficiary, for the execution of _____ (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

REFERENCE ONLY

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (_____),[1] such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its Environmental and/or Social and/or Health and/or Safety (ESHS) obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the …. Day of ……, 2… [2], and any demand for payment under it must be received by us at this office indicated above on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

---

[1] *The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, less provisional sums, if any, and denominated either in the currency (cies) of the Contract or a freely convertible currency acceptable to the Beneficiary.*

[2] *Insert the date twenty-eight days after the expected completion date as described in GC Clause 11.9. The Employer should note that in the event of an extension of this date for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."*

_____

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

REFERENCE ONLY

FORM OF ADVANCE PAYMENT SECURITY

---------- *[Name and address of Agency, and Address of Issuing Branch or Office]* ------

Beneficiary: ---------- *[Name and Address of* Employer*]*

Date: ----------

ADVANCE PAYMENT GUARANTEE No.: ----------

We have been informed that ---------- *[name of Contractor]* (hereinafter called "the Contractor") has entered into Contract No. **LK-MOMDE-539127-CW-RFB** dated ---------- with you, for the ---------- construction of **Improvements to Muthuiyankaddu Tank bund & Spillway** (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum ---------- *[amount in figures]* (----------) *[amount in words]* is to be made against an advance payment guarantee.

At the request of the Contractor, we ---------- *[name of issuing agency]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of ---------- *[amount in figures]* (----------) *[amount in words]* upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation in repayment of the Advance Payment under the Contract.

REFERENCE ONLY

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor.

This guarantee shall expire on …… [*Insert the date, 28 days beyond the Time of Completion]*

Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

_____
[signature(s)]

FORM OF RETENTION MONEY GUARANTEE

----------*[Issuing Agency's Name, and Address of Issuing Branch or Office]* ----------

Beneficiary: ---------- *[Name and Address of* Employer*]* ----------

Date: ----------

RETENTION MONEY GUARANTEE No.: ----------

We have been informed that ---------- *[name of Contractor]* (hereinafter called "the Contractor") has entered into Contract No. **LK-MOMDE-539127-CW-RFB** *[reference number of the contract]* dated ---------- with you, for the execution of **Improvements to Muthuiyankaddu Tank bund & Spillway** (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, when the works have been taken over and the first half of the Retention Money has been certified for payment, payment of the second half of the Retention Money may be made against a Retention Money guarantee.

At the request of the Contractor, we ---------- *[name of agency]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of ----------*[amount in figures]* (----------) *[amount in words]* upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor has not attended to the defects in accordance with the Contract.

This guarantee shall expire, at the latest, ---------- [*insert 28 Days after the end of the Defects Liability Period*]. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

REFERENCE ONLY

_____

[signature(s)]

Form of ESHS Declaration

Date: _____
Bid No.: _____

To: _____
We, the undersigned, declare that civil work contracts *have/ have not been* suspended or terminated and/or performance security called by an employer for reasons related to the non-compliance of any environmental, or social, (including sexual exploitation and abuse (SEA) and gender based violence (GBV)), or health or safety requirements or safeguard in the past five years.

(Note: If suspended, terminated or Performance Security is called give details)

Year	**Suspended or terminated portion of contract**	**Contract Identification**	**Total Contract Amount (current value, currency, exchange rate and US$ equivalent)**
[insert year]	*[insert amount and percentage]*	Contract Identification: *[indicate complete contract name/ number, and any other identification]* Name of Employer: *[insert full name]* Address of Employer: *[insert street/city/country]* Reason(s) for suspension or termination: *[indicate main reason(s) e.g. for GBV/ SEA breaches]*	*[insert amount]*
…	…	*[list all applicable contracts]*	…
Performance Security called by an employer(s) for reasons related to ESHS performance			
Year		Contract Identification	Total Contract Amount (current value, currency, exchange rate and US$ equivalent)
[insert year]		Contract Identification: *[indicate complete contract name/ number, and any other identification]* Name of Employer: *[insert full name]* Address of Employer: *[insert street/city/country]* Reason(s) for calling of performance security: *[indicate main reason(s) e.g. for GBV/ SEA breaches]*	*[insert amount]*

REFERENCE ONLY

Signed: _____
In the capacity of _____
Name: _____
Duly authorized to sign the bid for and on behalf of: _____
Dated on _____ day of _____, _____ _____

Corporate Seal (where appropriate)

Section - 6

Specifications

REFERENCE ONLY

REFERENCE ONLY

Specifications

Technical Specifications relevant to this contract consist of two parts.

Part 1 - General Technical Specifications

CIDA/SP/102 [1st Edition – January 2017] – 'Specifications for Irrigation and Drainage Works', are applicable as the general specifications for the Civil Works of this Contract.
These publications are not issued with the Bidding Document package and the Bidder/Contractor should obtain them from a suitable source.

Part 2 - Particular Technical Specifications

Particular Technical Specifications includes project specific specifications and conditions of particular specification which includes modifications and amplifications to the Standard Specifications given in General Technical Specifications.

1. Introduction

The following Particular Technical Specifications are part of the requirements for the work related to the Civil Works which are to be provided according to the stipulation of the Contract. Hence, the instructions given herein form an integral part of the, and are applicable to, all technical and Contract documents issued for Works. Addenda to these specifications may be issued as required during construction phase with both party agreements.

REFERENCE ONLY

These Particular Technical Specifications shall be read in conjunction with the General Technical Specifications (ICTAD), the Conditions of Contract and the Bidding Drawings. The Contractor shall comply with all provisions contained within Contract documents.

The General Technical specifications and the Particular Technical Specifications in conjunction with the Bidding drawings define the technical standard and quality to be achieved during construction.

The Particular Technical Specifications relevant to this contract are given in the following Sub Sections.

Sub-Sections	Page No
Contractor's submittals and Engineer's approval	3
Contractor's Quality Assurance System	3
Site installation, Services, and environmental obligations	3
Safety and health precautions	8
Design documents, Construction and As Built Drawings	10
Site supervision, Construction Schedule, and reporting	11
Preparation of As-built drawings	7
Dealing with Water	13
Care of water	14
Setting Out Works	16
Surface excavation	17
Miscellaneous fill works and rehabilitation measures for embankments	21
Environmental and Social Management Plan	36

It is the intent of these Specifications, together with other relevant documents issued as part of the Contract Documents or to follow later on, to provide the Contractor with complete and detailed information and subsequent instructions necessary to enable him to carry out the design, where and when required, and to execute properly the work prescribed.

It is the intent of these Particular Specifications to establish acceptable standards of quality. On the other hand, they shall also allow the construction of the Works in an efficient and economical way. Minor deviations in details due to selected work procedures and due to the manufacturer's standard shop process will be considered for acceptance provided that, in the opinion of the Engineer, the proposed substitutions are equal in quality to those specified.

The Drawings available shall serve as a basis for detail design drawings to be produced by the Contractor. All work shall be executed according to the Drawings and requirements released for construction, in a professional and diligent manner, and all supplies and work shall comply with the quality requirements defined in the relevant Sections of these Specifications and other Contract Documents. The Contractor shall provide all necessary efforts to comply with the intent of the General and Particular Specifications to the satisfaction of the Engineer.

2. Contractor's Submittals and Engineer's Approval

The Contractor shall provide the Engineer with all submittals as requested in these Specifications and other Contract Documents. Although their extent shall be to the discretion of the Contractor, they shall be complete enough to illustrate adequately their intent and facilitate full for the understanding of the Engineer.

At any time, the Engineer may call for additional information, completion of the submittals. The Contractor shall submit these documents to the Engineer so that, even if not specifically expressed, reasonable time will be given to the Engineer to comment or approve the submittals.

The approval of the Engineer shall always be given in written form prior to the commencement of any work under this Contract and the Contractor shall not be paid for any work that is performed without the express written approval or instruction by the Engineer.

REFERENCE ONLY

3. Contractor's Quality Assurance System

As per Clause 4.17 General Conditions of Contract, the Contractor shall institute a quality assurance system to demonstrate that the Works are being carried out in compliance with the requirements of the Contract. The Contractor shall, within 28 days from the receipt of Letter of Acceptance, submit the quality assurance system he is proposing to adopt in the Contract.

The Contractor shall build the quality assurance system for all his activities from the commencement to completion of the Contract. The system shall include but not limited to the following.

- Contractors site management
- Topographic surveys and setting out
- Construction Drawings
- Safety measures adopted
- Environmental Management
- Traffic Management
- Maintenance of Roads
- Construction Methods adopted
- Quality Control
- Progress monitoring
- Monthly Bills

The quality assurance system instituted by the Contractor is a requirement under the Contract and no payment will be made to the Contractor for this work.

4. Site Installation, Services and Environmental Obligations

4.1 Scope of work

The Contractor shall be responsible for providing plant, equipment, materials and labour for the provision of all necessary site installations, temporary works and services adequate for the realization of the works under this Contract.
The Contractor shall design, furnish, install, maintain and operate all site installations, temporary works and Contractor's equipment for his own use and for the use of the Engineer and Subcontractors, and as required for third parties, including workshops, warehouses, storage and assembly areas, all machinery, vehicles, scaffolding, equipment, water and power supply, etc.
Site installations, temporary works and services provided by the Contractor for his own use as well as for that of the Engineer or for third parties shall conform to the applicable standards, codes and sanitary requirements set down by the Sri Lankan authorities for such purpose.
The construction, operation and maintenance of the Contractor's site installations, temporary works and services shall be subject to inspection and written consent by the Engineer.

The scope of the works includes but is not limited to following site installation parts:

a) All temporary structures required for the performance of the works such as access roads, temporary construction roads or temporary working platforms.
b) Stores, Warehouses, Materials Yards.
c) Materials testing laboratory.
d) Construction equipment.
e) Power supply and illumination.
f) Water supply.
g) Sanitation, sewerage and waste disposal.
h) Communication System.
i) Site security

REFERENCE ONLY

All installations of any Subcontractors shall comply with these Specifications.

4.2 Submittals

Within 30 days from the date of contract award the Contractor shall submit to the Engineer updated layout plans showing, at adequate scale, the locations and arrangement of all site installations. These plans shall be consistent with the plan submitted by the Contractor with his Bid as well as with any amendments and additions.

Within 14 days from the date of contract award the Contractor shall submit to the Engineer an updated project schedule showing all the activities he intends to perform to meet his obligations in is contract and to complete the works within its stipulated time for completion. This baseline schedule will be used for monitoring progress each month and for evaluating the impacts of any departures from the baseline schedule.

4.3 Prior to construction works

The Contractor shall carry out all necessary surveying work required for the approved performance of the works and shall ensure that the position and elevation of all works thus constructed are correct. The measuring methods and devices used must meet the standard of accuracy required for this purpose.

4.4 Access works

The construction and maintenance of permanent and temporary access roads or access ramps from public roads to the sites, including crossings, shall be the Contractor's responsibility to the approval of the Engineer.
In general, all roads within the site area shall be the Contractor responsibility, construction and maintenance, during the works until final handover to the Engineer.
Proper maintenance of all roads being used by the Contractors during the entire construction period, both permanent existing ones as well as temporary roads, shall be the Contractor's responsibility.
Additional roads and ramps which have to be built to transport equipment and materials shall be constructed by the Contractor at his own expense and with the Engineer's prior approval, and the maintenance of such roads during the construction period shall also be at the Contractor's expense. The same applies for existing public roads and bridges used by the Contractor in the vicinity of the site for the execution of the works.
Any work, improvement or modification at the existing access roads made by the Contractor, for his own convenience, and without being ordered by the Engineer, shall be at the Contractor's own risk and expense.
If any damage or pollution occurs during the execution of the works, the Contractor must restore and clean the roads immediately at his own cost.
After completion of the Contract and before delivering the work to the Engineer (final takeover), all temporary structures shall be removed to the satisfaction of the Engineer.

4.4.1 Road Access to the Site

REFERENCE ONLY

Transport of Materials

Prior to moving any heavy construction traffic onto highways, roads and bridges, the Contractor shall make suitable arrangements with the appropriate Government Authorities and obtain their approval for the passage of such traffic.

Special Protection

Where Government Authorities require and specify any special protection or strengthening of highways, roads and bridges. The Contractor shall submit to the Engineer his proposals for such work after their approval by the authority concerned and shall carry-out this work as directed.

Tracked Vehicles

The Contractor shall not travel tracked vehicles or plant on any bituminous sealed road surface. Rubber-tyred vehicles conforming to applicable load restrictions will be permitted to use bituminous sealed roads.

4.4.2 Construction of Additional Roads

The Contractor shall design, construct, and maintain all temporary access and haul roads to, in, and around his camp area, the various working sites and designated borrow and disposal areas, required for the Works. These roads shall include all associated drainage and stream crossing facilities. The location of these roads shall be in accordance with the Contractor's proposals submitted with his Tender.
During the period of the Contract, the Contractor shall allow the Employer and such other parties free and unrestricted use of all access and haul roads and shall not restrict the access of authorized persons to these roads, look-outs or viewing points as may be instructed.

4.5 Contractor's Offices, Camp and Facilities

4.5.1 General

The Contractor shall provide a main office and site offices for his staff. The main office shall be located in the vicinity of the dam site. Site offices may be mobile field offices so that, when work at one site is complete, the office may be moved to another site. The Engineer will allocate a portion of the Works area at the dam site where the Contractor shall provide and maintain such offices, stores, workshops, housing and adequately fenced store and delivery compounds as are necessary for the execution of the Works, including all necessary services for water supply, drainage, lighting, roads, paths, parking places, sewerage and garbage disposal.

4.5.2 Construction Camp

The Contractor shall set up his camp as proposed in his Tender for housing, camps and for other required facilities and amenities for his employees and for the employees of his sub-contractors.
The Contractor shall be deemed to have inspected these sites and made his own evaluation as to their adequacy and suitability for the development of the required camp facilities.
The Contractor shall appoint a Camp Manager who shall be responsible for the administration ad maintenance, and for all matters relating to the allocation of space, discipline and use of buildings and facilities.

All buildings shall always be open to inspection by the Engineer. Any instruction given by the Engineer for the proper cleaning, disinfection and general maintenance of any building in the sanitary and hygienic condition of any building must be forthwith carried-out by the Contractor. Before any buildings are occupied the Contractor shall draw up a code of rules and regulations for their control which shall be approved by the Engineer.

REFERENCE ONLY

4.5.3 Stores, warehouse, workshops, and material yards

The Contractor shall provide and equip, for his own and his Subcontractors' use, warehouses, materials storage areas and fuel storage areas, all of which shall be maintained in good condition until the completion of works.

Listed hereunder are the buildings, workshops and warehouses expected to be constructed and equipped by the Contractor for use in the performance of the work under this Contract, in addition to facilities explicitly specified elsewhere in these specifications:

a) Workshop and service facilities for vehicles and construction equipment
b) Main warehouse and parts store
c) Storage facilities for all materials applied within the conduction of the rehabilitation works

4.6 Temporary Works

4.6.1 General

The Contractor shall execute, erect, maintain and remove upon completion of the Works, all Temporary Works in accordance with the proposals submitted with the Tender or with such modifications as approved by the Engineer from time to time.

4.6.2 Approval of Temporary Works

The Contractor shall submit to the Engineer for approval drawings and full particulars of all Temporary Works which he intends to construct at least 30 days before he desire to commence constructing such works.

The submission to, or approval by, the Engineer of any such proposals by the Contractor shall not relieve the Contractor of any of his responsibility for the sufficiency of the Temporary Works for their intended purpose.

The Contractor shall also obtain any necessary approval from local statutory or other Government authorities before commencing construction. Such work shall not be started without prior approval.

4.7 Contractor's Equipment

The Contractor shall supply, install, operate, maintain, and subsequently remove all the Contractor's equipment required for the execution of the Works. In particular, the Contractor shall supply all those items listed on the Technical Proposal in the Contract at the time stated therein or at such other time as may be deemed necessary in the opinion of the Engineer.

The Contractor's equipment shall not be removed from the Site without the written approval of the Engineer. If during the execution of the Works any item of the Contractor's equipment in the opinion of the Engineer, is unsuitable so as to fail to perform the services required in the execution of the Works, the Contractor shall replace such construction equipment with another suitable one at his own cost.

The Engineer may, if he considers it necessary for the execution of the Works in accordance with the Contract, order the Contractor to supply additional items of Contractor's equipment or extend the period for which the Contractor's equipment is required. The Contractor shall supply and stock all essential spare parts for his equipment to ensure the efficient execution of the Works.

REFERENCE ONLY

The Contractor shall submit a Monthly Equipment Report, which lists the following information about the Contractor's equipment.

a. List of all equipment located at the Site.
b. Daily working and operation record of each item of equipment.
c. Inspection, repair and maintenance records.
d. Quality of work.
e. Quantities of fuel, lubricant, oil and tires consumed.
f. Overhauling record.
g. Accident report.
h. List of unserviceable equipment and action being taken to put back in operation

4.8 Utilities

4.8.1 Power supply and illumination

The Contractor shall supply, install, operate and maintain an adequate power supply system and illumination for running the site and other site installation facilities during the whole construction period. The concept shall be approved by the Engineer.

4.8.2 Water supply

The Contractor shall provide, install, operate and maintain adequate and suitable water supplies for the works within the contract including storage for drinking purposes, sanitation, construction, cleaning, testing and commissioning of the various equipment items and plant components of the construction lot.

The water supplies shall be continuously available during working hours and rated to meet the maximum demand required during construction on the basis of 'firm supply' and shall supply all temporary installations.

The drinking water provided shall at all times meet the criteria of the local health authority.

4.8.3 Sanitation, sewerage, and waste disposal

The installations shall meet the requirements of the local health authorities and environmental regulations. The Contractor shall collect waste material and garbage from the site on a daily basis and transport it to an approved area where it shall be treated and disposed of in accordance with local environmental requirements.
The Site shall be always kept clean and free of refuse. No waste shall be dumped in areas other than those approved by the Engineer for waste disposal. No waste of any kind shall be deposited in any water courses.

4.9 Demobilization/ removal of temporary works

REFERENCE ONLY

On completion of the Works, all Temporary Works constructed by the Contractor or handed-over to the Contractor by the Engineer, unless otherwise specified or instructed by the Engineer, shall be removed from the Site, as approved by the Engineer.

The Contractor shall make safe all areas affected by Temporary Works and reinstate natural drainage. The Contractor shall finish, reinstate, clean up and relinquish parts of the Site at the end of the Defects Liability Period or such earlier times as instructed by the Engineer.

Buildings and facilities removed from the Site will become the Contractor’s property. Foundations of buildings and structures shall be broken up and removed from the Site.

4.10 Environmental obligations

The Contractor shall, during the whole period of the works comply fully with all national Sri Lankan laws and regulations relating to environmental protection, mitigating measures for reducing environmental impacts and remedial works on completion of the works. This obligation shall extend to the construction sites themselves and all of the Contractor’s site installations.

Notwithstanding any specific obligations as these may be specified in prevailing Sri Lankan laws and regulations, the Contractor shall at all times comply with the following particular requirements for the protection of the environment, the local population and the workers at the construction site:

Collect, treat, remove from site and dispose of in accordance with the regulations and to the satisfaction of the Engineer all domestic and industrial waste and excess construction materials (both solid and liquid), fuel, chemicals and other matter.

All excavated areas shall be filled, graded, and dressed in a clean and orderly condition acceptable to the Engineer. As far as possible such areas should conform to the natural appearance of the landscape.

- Make every effort to minimize the harmful effects of transport to and from the site, in particular vehicle emissions and noise and the control of dust on roads.

The Contractor shall maintain close contact with local representatives and government institutions in addressing issues arising from the construction activities. Such issues needing particular attention are the following.

- Pollution caused by construction work.
- Disruption to the local community
- Disputes related to the use of land for construction activities and/or site installations etc.
- Disputes arising from traffic congestion and restrictions on the use of the main project access road and roads in the project area.

- All matters relating to road safety and the reduction to a minimum of the risk of traffic accidents.

4.11 Social obligations

As far as may be reasonably practicable, the Contractor shall recruit his unskilled labour from those persons from the local community who may apply for work. Suitably skilled workers in the local community should also be recruited wherever practicable.

5. Safety and Health Precautions

5.1 General

This section covers the precautions that have to be taken for the health and safety of all personnel on Site that the Contractor and his Sub-Contractors shall apply in all civil construction and equipment erection works during the construction time.

REFERENCE ONLY

5.2 Safety precautions

5.2.1 Safety programme and its implementation

A safety program shall detail policies, procedures, and plans which the Contractor intends to implement to ensure the safety and health of his employees. It shall comply with the standards and regulations in force in the country of the works applicable to construction safety.

The Contractor shall designate a competent employee specially trained and experienced to act as Safety Officer, who will administer and be responsible for the implementation of the safety program. He shall carry out frequent and regular safety inspections of the working areas, materials, and equipment. The name and qualifications of the Safety Officer shall be submitted for approval to the Engineer prior to his appointment.

The Contractor shall be responsible for the implementation of health and safety provisions for his subcontractors employed at Site.

All serious and fatal injuries and diseases caused by the progress of work shall be immediately investigated by the Contractor and a comprehensive report shall be submitted to the Engineer.

In case of a fatal accident, only rescue and emergency teams and operations shall be permitted at the place of the occurrence until the Engineer gives permission to resume normal operations.

5.3 Safety standards

In addition to the requirements of the following specified herein, the Contractor shall comply with all currently applicable safety documents and/or organizations:

5.4 Safety of personnel

The Contractor shall be responsible for the safety of all personnel on the Site and shall provide his employees and his sub-contractors employees working on the Site, the Engineer's staff and all visitors to the Site with safety equipment appropriate to the tasks upon which they are engaged, including helmets, high visibility vests or jackets, safety footwear and, where required, gloves, lamps, waterproof clothing, dust masks and/or safety belts. The use of such safety equipment shall be compulsory, as deemed necessary by the Engineer.

During drilling works and in areas where the personnel are exposed to harmful noise levels and dust, ear protectors and masks shall be furnished and required to wear.

Employees engaged in work having an inherent danger of eye or face injury shall be furnished and required to wear protective glasses, goggles or masks. Where irritant or toxic substances may come in contact with the skin or clothing, employees shall be wearing protective clothing or shall be required to apply a protective ointment by a competent physician.

Personnel working on steep slopes or otherwise subject to possible falls from levels not protected by fixed guardrails or safety nets, shall be secured by safety belts and lifelines.

Portable ladders shall be wooden or steel ladders sufficiently strong and of suitable size for the use intended. Wooden ladders shall have the steps fixed to the longitudinal posts by assembly. The use of ladders with steps nailed or wired along the longitudinal posts is not permitted.

REFERENCE ONLY

5.5 security of personnel and working areas

The Contractor shall always take the necessary measures to ensure the safety and security of all persons, work, and property. This shall include but not be limited to the following:

- Access control to all areas related to the works
- Installation of fences
- Security patrols

5.6 Maintenance of traffic and safety on roads and site

The Contractor shall be responsible for the safety on the roads related to the Site. He shall take all necessary precautions for the protection of the work and the safety of the public on the roads affected by his activities. Where the work will be carried out at the site of, or close to an existing road, the Contractor shall maintain the vehicular and pedestrian traffic safe at all times. If his operations can cause traffic hazards, he shall repair or fence or take other measures for ensuring safety which are satisfactory to the Engineer.

Roads subjected to interference with the work shall be kept open or suitable detours shall be provided and maintained by the Contractor, who shall provide, erect, and maintain all necessary barricades, suitable and sufficient flashlights, flagmen, danger signals, and signs.

Roads which will be closed to traffic shall be protected by effective barricades on which acceptable warning and detour signs shall be placed. All barricades and all lights shall be kept burning from sunset to sunrise.

The Contractor shall provide all necessary signs for the Works. These shall include, but not be limited to;

- Standard road signs
- Warning signs

- Danger signs
- Safety signs
- Control signs; and
- Direction signs

Wording on all signs shall be in the English, Tamil and Sinhalese languages. The size, colour, lettering and location of all signs will be subject to approval of the Engineer and the international sign convention shall, where applicable, be followed.

The Contractor shall maintain all signs placed by himself as well as those placed by the Employer.

The Contractor shall submit his weekly activities schedule and the locations of his work along the existing public roads to the authorities concerned and obtain all necessary approvals prior to commencement of the respective work.

The Contractor shall provide temporary passes and bridges to give an access to the existing villages, houses, etc., to the satisfaction of the Engineer and the authorities concerned whenever he disturbs such existing ways during the execution of the works.

5.7 Weather precautions

In order that the works may proceed according to the programme, the Contractor is to undertake at his expense all necessary precautions for protection against inclement weather, which shall be subject to the approval of the Engineer.

REFERENCE ONLY

5.8 Health precautions

5.8.1 First Aid

Prior to the commencement of construction, the Contractor shall organize and train a first aid team composed of his employees. This team shall be capable of rendering help after accidents.

The first aid team shall be organized in such a way that sufficient number of members will be ready for action at any time until the completion of the work.

The team members shall be instructed and trained for their task by a qualified and experienced person. Each team member shall be skilled in giving first aid, dealing with appliances for artificial respiration, and firefighting equipment.

and shall possess a good local knowledge. Adequate equipment for reaching even the remotest working area shall be at their disposal.

The Contractor shall submit the details of the proposed first aid team organization to the Engineer for approval.

5.9 Noise control

The Contractor shall take the provisions required to assure that noise from his construction activities and from the operations of any plants are within the limits established by the WHO for the health of his personnel or shall provide his personnel with ear protectors. Ear protectors shall be provided to all personnel subject to noise levels above 85 dB on a continuous basis during work shifts.

6. Design Documents and Construction Drawings

6.1 Contract Documents

The Contractor will be provided with one set of the Contract Documents for his own use. A complete set of Contract Documents supplied by the Employer and all further instructions issued by him shall be always kept by the Contractor on the Site and made available to the Engineer and his staff.

6.2 Construction Drawings

Based on the Bidding drawings assigned design engineers shall develop designs and prepare associated design documents and construction drawings to be approved by the Engineer. The Contractor shall ensure that design work is only allocated to personnel with adequate qualifications and relevant experience to perform the required tasks whereby drawings and calculations shall be signed by qualified personnel responsible for the design. All drawings and calculations submitted for approval shall be signed, checked, and signed by the Contractor prior to submission.

All Contractor's working drawings and shop drawings required to be submitted for approval in accordance with the Specification, shall be provided in electronic format (AutoCAD computer software) and 03 printed copies, plus copies of design calculations where required, specification and parts catalogues in duplicate. Within 30 days after receiving such designs, design calculations, parts catalogues, specifications and detailed drawings, the Engineer shall give his approval or request modifications. The Contractor shall modify the design and drawings as may be required by the Engineer. The Contractor will be responsible for the control of the design activities performed as well as their verification. The Contractor shall control and document any revised information in the same manner as drawings and specifications, to assure correct communication through the design interfaces.

REFERENCE ONLY

The work shall be constructed in accordance with the approved drawings, and a copy of such drawings shall be kept on the Site at all times until the completion of the Contract. All drawings on which changes are made shall have the revisions clearly marked.

Construction, fabrication or manufacture of any portion of the Works shall not commence until the design and drawings have been approved in writing by the Engineer and thereafter no change shall be made to any drawings so approved without the permission of the Engineer. Permission to make such changes shall be requested by sending 01 electronic copy and 01 print of each revised drawing to the Engineer for approval.

6.3 As-built Drawings

The Contractor shall submit the 4 copies of "As-built Drawings" on a format agreed between the Contractor and Engineer.

During the construction and commissioning period any variations between the "Construction Drawings" and the "As-built Drawings" shall be agreed between the Contractor and Engineer at site. These As-built drawings shall be prepared from the Construction drawings incorporating any authorized changes carried out during construction. Once completed these drawings shall become the property of the Employer and shall be submitted before issue of the Taking -over certificate.

All agreed modifications will be marked up by the Contractor's draughtsman and included on the originals at site. A complete set of these mark ups shall remain at site. The Contractor shall allow for the provision of a draughtsman as required at site to co-ordinate and include all modifications on the drawings. The originals shall then be returned to the Contractor's head office, and these shall form the basis of the "As-built Drawings".

The Contractor shall submit to the Engineer all final revisions of all original drawings depicting the "As-built" situation for the works. All drawings and documents prepared exclusively for the project shall become the property of the Engineer.

Final drawing prints shall be size A1 or smaller. Reproducible of the final drawings shall be supplied as follows:

- 2 prints of each drawing to the Engineer.
- 2 CDs with original AutoCAD drawing files to the Engineer.

Where drawings are reduced, an appropriate scale shall be included on the reduced print. To accompany the drawings, the Contractor shall provide a Master Schedule of "As Built" drawings.

7. Site Supervision, Construction Programme and Reports

7.1 Site supervision

REFERENCE ONLY

The Contractor is responsible for providing proper supervision of his site activities by employing suitably qualified and experienced site management and supervisory personnel so that he can carry out his obligations under the Contract.

For the Contractor's information, the Engineer has issued a Construction Supervision Manual, which is intended for use by the Engineer and his staff for the supervision of the works. This manual includes standard forms which will be used during construction for control of the work. It is available to view in the office of the Engineer.

7.2 Construction and Contractual Program

a. Within 01 month of the award of Contract, the Contractor shall submit a revision of the construction program attached to the Tender, for approval.

   ✓ The construction program shall be prepared using the latest computer software such as MS Project or other similar software approved by the Engineer. This program in Gantt chart form shall outline the Contractor's activities necessary to complete the Works within the stipulated time period. The program shall show the following minimum details:

   ✓ The duration, sequence and logic links between major activities and any other activities or group of activities which comprise the Works, necessary to define the critical path and logic of the program required for completion and to achieve the Time for Completion. For the purpose of this clause, major activities are those which are greater than one percent of the Contract Price;

   ✓ The planned dates for start and completion of the Works and each Section of the Works;

   ✓ The critical path(s) for the Works and each Section of the Works;

- ✓ Information on shutdown periods, vacation days and other non-working time periods;
- ✓ The estimated value of work to be done each month;
- ✓ Reasons for any changes to timing, work order, method, or resources from the program submitted at the time of tender, or if submitting an updated construction program, reasons for such changes from the previously submitted program.

  The construction program submitted in accordance with the provisions of this clause shall in the opinion of the Engineer be reasonable in all respects. The Contractor's program, when approved, shall be known as the Contractual Program.

b. Whenever the Contractor proposes to change the Contractual Program, he shall immediately advise the Engineer in writing and if the Engineer considers the change is a major one, the Contractor shall submit a revised program for approval. If such a change in the program affects the Engineer's design and the drawing approval program, the Employer will not be responsible for the consequences of the late issue of any drawings, which are attributable to that change.

c. If the Contractor falls behind the revised Contractual Program be shall, within 14 days of the date of such default, submit for approval a revision of the program showing the proposed measures, including additional plant, labour and material resources, to complete the Permanent Works on time.

d. When instructed, the Contractor shall promptly furnish a detailed sub-program of the Contractual Program for particular sections of the Permanent Works.

e. The Contractor shall also attend weekly meetings with the Engineer and provide, not less than 2 days prior to each meeting as required by the Engineer, detailed programs showing separately the various activities of the Contractor anticipated over the forthcoming two-week period as well as the progress achieved over the preceding week relative to the program applicable to that period.

REFERENCE ONLY

7.3 Monthly Progress Report

Before the tenth day of each month, the Contractor shall submit three copies of a monthly progress report in a form acceptable to the Engineer detailing the progress during the preceding month. The monthly progress report shall show the amount of work completed, materials actually used, materials in storage and the cumulative results of all operations completed or in progress and shall be summarized in terms of percentage of completion referenced to the approved programme for the works.

The monthly progress report shall include at least the following:

- ✓ Total percentage of work completed, and total percentage programmed to be completed by the end of the reporting period.
- ✓ Actual percentage of each main work items completed including temporary works, as well as their scheduled percentage, both total and for the reporting period together with the estimated quantities.
- ✓ List of manpower by trade and by position for the reporting period.
- ✓ List of equipment and operational days for the reporting period and materials on site at the end of the period.
- ✓ Description of weather conditions for the period including records of each rainfall duration and recorded water levels of the Tank.
- ✓ List of any accident except of minor nature and any damage that occurred.

- ✓ Any matter which affected or may affect the progress of the work, problems encountered and proposed remedial measures.
- ✓ Colour photographs with imprinted date, not smaller than 100 mm by 150 mm of the work progress during the period for all major components of the Works. The Contractor shall also provide digital versions as well as 5 sets of hard copies of these photographs in albums with titles.

Further the Contractor shall submit financial statements, purchasing and expediting reports, shipping reports, and any other data which the Engineer may reasonably ask for. Additional to the photographs included in the progress reports, the Contractor shall arrange for the taking of progress colour photographs every month, covering all aspects of the work. Two copies of such photographs, suitably dated and captioned, shall be submitted to the Engineer, plus a CD with all relevant files.

The Contractor shall submit the final report not later than one month after completion of the work. This report shall include all relevant information related to the works in a format approved by the Engineer. The Contractor shall submit to the Engineer one copy of the draft report. The final report shall be submitted in triplicate. The final report shall also be made available electronically in pdf format or alternative approved format. The submission of the final report shall follow within one week of acceptance of the draft report.

8. Dealing with Water

8.1 General

REFERENCE ONLY

Where it is required that construction shall proceed with flow of water in streams and/or issue of irrigation water to canals, it shall be necessary to isolate the site of the structure to be constructed from the flow of water by the construction of suitable cofferdams, canals, flumes, drains, swamps and/or other temporary diversion and protective works without interruption or interference with the flow of water in the streams and/or issue in the canal. The contractor shall construct sufficient temporary works as described above to deal adequately with surface and ground water sources to enable the construction of the permanent works to the satisfaction of the Engineer.

The Contractor shall submit for the approval of the Engineer the location, size and other relevant details including the materials proposed for the construction of the temporary works described above. The contractor shall protect the works during the entire construction period from damage due to rains, surface run-off, floods, etc. and from failure of the temporary protective works constructed by him. Any damage to the works or delay to his operations from such events, whether due to his failure to adequately take such factors into consideration or not shall be corrected by the contractor and will not constitute a basis for claims for additional payment or extension of time. The Contractor shall furnish, maintain, and operate all necessary pumps and other equipment for removal of water from the various parts of the works free from water as required for construction. After having served their purpose, all temporary protective works, unless otherwise directed, shall be removed, or levelled to give a sightly appearance, so as not to interfere with the operation of the other related works.

Unless specifically provided for in the Bill of Quantities, no separate payment will be made for dealing with water. The cost of all operations required for dealing with water shall be included in the respective items of work for which dealing with water is required.

8.2 Approval of Proposals for Dealing with Water

Prior to commencement of any works, the Contractor shall submit a Plan for Dealing with Water with full details of the construction, operation, maintenance, and removal of the temporary protective works.

8.2.1 Right of Use water in the reservoir for cultivation

The farmers will cultivate both Maha and Yala during construction period without foregoing any season. The contractor shall prepare the construction program based on the cultivation pattern and the instruction given by the engineer to Contract. Irrigators and farmers shall have the right to use, without charge, the reservoir water for cultivation as per the cultivation meeting decisions and the access facilities of which the Engineer has given possession to the Contractor or which have been constructed or acquired by the Contractor for use in constructing the Works.

8.2.2 Reducing water level in Reservoir for the work

The water level in the reservoir shall not be reduced before completion of Yala cultivation for the upstream work of the embankment. Once the Yala cultivation is completed water level can be reduced with the approval of the Engineer until the commencement of next monsoonal rain or next Maha cultivation which comes early.

8.3 Removal of Water from Foundations

The Contractor's method of removal of water from foundation excavations shall be subject to the approval of the Engineer. Where the excavation for foundations extends below the water table in common material, the portion below the water table shall be de-watered in advance of excavation. The de-watering shall be accomplished in a manner that will maintain the stability of the excavated slopes and the bottom of the excavation and will result in all construction operations being performed in the dry.

REFERENCE ONLY

The Contractor shall be required to ensure that the bottom of the excavation is free of water prior to placement of concrete or filling material. Such control may require supplementing approved de-watering methods by the use of perforated pipe under-drains leading to sums from which the water shall be pumped. The pipe drains shall be of uniform diameter for each run and provided with grout connections and returns at about 15-meter intervals and shall be embedded in reasonable well graded gravel or similar filter material.

During the placing and compacting of fill material in an excavated cut off trench, the water level at every point in the cut off trench shall be maintained below the bottom of the cut off trench until the compacted fill in the cut off trench at the point has reached a height of 3 meters. Therefore, the water level shall be maintained at 1.5 meters below the top of the compaction fill. When the fill has reached an elevation which will permit the de-watering systems to maintain the water level at or below the designated elevations as determined to the Engineer, the pipe drains, if any, and surrounding filer material shall be filled with approved grout composed of water and cement or clay.

9. Care of Water

9.1 Scope of work

The Contractor shall provide all methods, procedures, labour and materials necessary to protect all existing works under construction and all personnel and equipment. Further he shall design, build, install, operate, maintain, and dismantle any temporary dewatering facilities required to remove service water and natural surface flow or groundwater seepage from the working areas.

9.2 Submittals

After the date of issue of the Notice to Commence, the Contractor shall present the Engineer with conceptual details, designs, method statements, procedures and emergency plans for all required protection and dewatering systems.

9.3 Extent of the works

The work under "Care of Water" to be performed under this Contract shall include but not be limited to:

- Construction and maintenance of temporary cofferdams, drains and other protective works;
- Supply and installation, operation and maintenance of pumping systems for dewatering;
- Control and drainage of the water inflows on surfaces against which concrete shall be poured; and
- Handling of the water supply to areas downstream of the dam during construction.

Care of water during construction comprises all necessary measures to protect the works from the effects of water from any source during the construction period. The Contractor shall be fully responsible for the care of water during the construction of the works, including the construction of the upstream and downstream cofferdams, the sealing of their foundation and the handling of the water supply during construction.

REFERENCE ONLY

The Contractor shall submit with his Tender his proposal and method statement for taking care of water during construction including quantity, type, capacity, arrangement, location, etc., of all required equipment.

The Contractor shall also submit with his Tender his proposal and method statement for the design and construction of the cofferdams and the handling of the water supply for the downstream users during construction.

All works shall be executed in accordance with the specifications of this Contract and in agreement with the Engineer. The approval given by the Engineer shall not relieve the Contractor from being fully responsible for the protection of the works.

9.4 Execution

9.4.1 Drainage and dewatering systems

The Contractor shall design, furnish, construct and install, operate and maintain all care of water facilities, including cofferdams, drainage systems etc. necessary to maintain all work areas as free as possible form water during construction. This shall include all necessary labour, materials, equipment, power supplies and auxiliary works as required for a safe and dry construction of the works.

The water inflow existing on surfaces or against which concrete shall be poured shall be collected through steel and/or plastic pipes or other approved methods and conveyed to drainage ditches and pits. These water collectors shall be sufficient to drain all concentrated water inflows and also possible scattered water inflow that can affect the quality of concrete at the moment of pouring.

The Engineer's approval of any care of water facility under the Contractor's responsibility shall not relieve the Contractor of the full responsibility for any adverse event which may result from the inadequacy of failure of the protective structures.

9.4.2 Dewatering

General

The Contractor shall furnish, operate and maintain all necessary pumps, pipes and other dewatering devices as necessary for keeping all work areas free from water. The Contractor shall be held liable for any damage caused by the failure of the drainage and dewatering systems.

The Contractor shall prepare and submit to the Engineer the design of all temporary drainage and dewatering systems and all auxiliary works required for safe and continuous operation of the drainage and dewatering system throughout the period of the works.

The design and installation shall be such that alterations and extensions of the system during operation are possible.

Diverted or pumped water shall be discharged at locations from which it cannot re-enter the work areas and in a manner which does not cause erosion, pollution, or nuisance to other persons within or adjacent to the site.

REFERENCE ONLY

Duration of drainage and dewatering

Drainage and dewatering shall continue until construction works are completed to a stage where drainage and dewatering are no longer necessary to prevent damage to the works or neighboring works whether from flooding, hydrostatic pressures, flotation or by any other means to prevent hindrances of any kind.
The ceasing of drainage and dewatering measures requires the approval of the Engineer. The removal of dewatering systems and the abandoning, removal or closing of drainage systems requires the express permission of the Engineer.

Pumping systems and power supply

To remove water from various sections of the work and to handle the water supply to areas downstream of the site, pumping systems of sufficient capacity shall be provided. This shall include the supply, installation, operation and maintenance of all items comprising the pumping system.

The Contractor shall seize his power supply and distribution system to have sufficient standby capacity to continue necessary dewatering work in case of failure of his main generating system.

Ready for service condition

The Contractor shall maintain ready for service and regularly clean all dewatering equipment and accessories and shall keep all accesses clear so that they can safely be used without the risk of accidents.

9.4.3 Cofferdams

All cofferdams shall be designed, constructed, and maintained by the Contractor. The complete design of the cofferdams including all calculations, specifications of materials, proposed construction procedures, provisions for protection of existing or already completed works, provisions for protection against erosion, any necessary support work shall be submitted for the approval of the Engineer prior to the commencement of the work. No work shall be started without the written approval of the Engineer.

The Contractor shall be entirely responsible for the water tightness and maintenance of the cofferdams, care of water as well as safety of the works including sole liability for damages due to erosion and/or piping inside the cofferdam.

Where required by the different phases of the work, the Contractor shall modify, remove, or dismantle and reconstruct the cofferdams as approved or directed by the Engineer.

On completion of the works, the Contractor shall remove or dismantle all cofferdams as approved or directed by the Engineer. The materials shall be brought to the approved location and according to the requirements of paragraph 3 of this specification.

REFERENCE ONLY

10. Setting out Works

10.1 Existing Survey Date

The Tender drawings included in the bidding document are prepared based on the surveys carried-out by the Engineer during the design stage.

10.2 Responsibility for Setting Out

The Contractor shall be solely responsible for the correct setting-out of the Works and shall employ experienced qualified surveyors acceptable to the Engineer for this purpose.

The Contractor shall furnish all materials, labor and equipment including stakes, templates, patterns, platforms and special labor that may be required by the Contractor in setting out any part of the Works.

The Contractor shall give the Engineer not less than 24 hours' notice of his intention to set out, survey or give levels for any part of the Works in order that arrangements can be made for checking the accuracy of the setting out, survey or levels. In order that the Engineer can expedite such checking the Contractor shall as soon as practical supply the Engineer with records in an approved form relating to all reference pegs and benchmarks in connection to the set out, survey or levels for any part of the Works which are required to be checked.

10.3 Contractor's Site Staff

The Contractor shall provide competent qualified survey technicians and the necessary support teams to carry-out all survey necessary to set out the Works in a neat and workmanlike manner.

10.4 Survey Operatives for the Engineer

The Contractor shall supply chainmen and laborers as required by the Engineer who are well experienced in such work. Chainmen shall be experienced in assisting Engineer in survey work.

It shall be the discretion of the Engineer to select chainmen and laborers whom he considers reliable and suitable and the Contractor shall maintain the continuity of this staff.

10.5 Permanent Survey Pillars

Using the existing temporary benchmarks shown on the Drawings the Contractor shall establish permanent survey pillars sufficient to define the control survey and as directed. The permanent survey pillars shall be linked to the national map grid and their coordinates shall be shown on the As-Built Drawings.

Establishment of these permanent survey pillars shall be undertaken before any of the existing survey point markers are destroyed by the Contractor's operations.

REFERENCE ONLY

10.6 Detailed Survey

The Contractor shall perform all calculations, surveying and setting out necessary to establish the accurate location of the structures to be constructed.

The Contractor shall submit for the review of the Engineer the methods he intends to employ and the precision he will attain for the setting-out of the Works.

The Contractor shall, under guidance and in the presence of the Engineer, carry-out surveys and measurements for record and payment purposes in accordance with the Conditions of Contract.

In the Engineer's own surveying for checking the Contractor's survey results, the Contractor shall render the Engineer all necessary assistance and services for such check surveys.

11. Surface Excavation

11.1 Scope of work

This section covers all surface excavation work to be performed under this Contract, which shall consist of removing all existing material of whatever nature to the lines and grades shown on the drawings or as otherwise directed by the Engineer in writing. This work shall include excavating, ripping, loading, hauling, double handling and disposal of materials in designated spoil or stockpile areas, according to these Specifications.

11.2 Submittals

Prior to the commencement of any surface excavation, the Contractor shall submit in writing to the Engineer details of the proposed excavation methods and sequences, including necessary safety precautions. Prior to dumping or stockpiling any material, the Contractor shall submit in writing the layout of spoil or stockpile areas to the Engineer and wait the approval in writing. All pertinent data of working methods and provisions for the security, stability and temporary and permanent drainage of the areas shall be included by the Contractor. Details of volumes, material types, heights and grades shall be provided.

11.3 Lines and grades

The final excavation grades shall in general be rock of specified quality. However, where the final excavation grades are defined by line and grade, the Contractor shall take every precaution and use the most appropriate method of excavation, to avoid the loosening of material or the breaking of rock beyond the lines and grades shown on the drawings. Loose weathered rock shall be removed.

The bottoms of all excavations shall be trimmed to line and grade to the satisfaction of the Engineer.

If, for any reason, excavation is carried out beyond the lines and grades shown on the drawings, the Contractor shall remove the excess material and take the necessary measures to restore the required lines and grades with approved backfill or concrete, at his own expense.

Should the Contractor wish to excavate beyond the limits given on the drawings for his own convenience, he may do so, at his own expense but only with the prior written approval of the Engineer.

REFERENCE ONLY

11.4 Slopes, slides, geological overbreak and unsuitable foundations

If geological conditions during the performance of the work do not permit excavation of slopes as shown on the drawings, or where the material is unsuited to forming a firm foundation for the structures, the Contractor shall modify the drawings accordingly or issue a direct request to the Engineer to change the grades. The prior written approval of the Engineer is mandatory.
If, in the Contractor's opinion the slopes as shown on the drawings are objectionable, and in his opinion should be changed, he shall obtain the written agreement of the Engineer prior to starting the work on such modified excavation.

If overbreak, slides or rock falls occur, which are due to improper working methods or negligence by the Contractor, and the effective excavated surfaces are beyond the excavation lines shown on the drawings, the Contractor shall remove all excessive material and place suitable and approved backfill material in the excavated voids. This work and material shall not be paid.

11.5 Execution

The surface excavation shall be performed by any approved method using any excavating and hauling equipment suitable for the work in accordance with the submitted detailed plans and time schedule or approved modifications thereof. The work areas shall be kept dry and drained.

The work areas shall be kept dry and drained at all times during construction.

All final or remaining surfaces shall be protected against damage by erosion and travel of the construction equipment with methods proposed by the Contractor and approved by the Engineer in writing. Any damage caused shall be repaired by the Contractor.

The Contractor shall exercise particular care when excavating in the vicinity of existing structures or those under construction. He shall reinstate any damage to structures or equipment caused by his operations, at his own cost.

The Contractor shall protect the subsoil and particularly the ground water from contamination by fuel or oil from his equipment.

11.5.1 Clearing and grubbing.

Clearing means the removal, transport and appropriate disposal of all trees, brush, stumps, fences, existing structures, spoil, debris and other obstructions in the areas to be occupied by the Permanent works, surfaces of borrow and quarry areas, spoil and stockpile areas, and where interfering with the procedure or functioning of the work.

Grubbing means the removal, transport and disposal of all roots, buried logs, foundations of structures (except concrete or masonry in mortar) and other materials foreign to the natural topsoil in the areas to be occupied by Permanent works and surfaces of borrow and quarry areas.

REFERENCE ONLY

Clearing and grubbing work shall be performed either manually or with mechanical equipment. The Contractor shall make every reasonable effort to salvage such material which may be put to beneficial use.

All materials from clearing and grubbing work shall remain the Employer's property but the Contractor may, subject to written approval from the Engineer, retain any material for his use. Materials which the Contractor does not wish to use shall be disposed of in an approved manner.

Materials to be burnt shall be piled neatly in such a manner and in such locations as to not cause any fire risk and shall be burnt completely so that all material is reduced to ashes.
The Contractor shall have suitable equipment and supplies for fighting fire during the burning of material and shall take all necessary precautions to prevent fire from spreading. Toxic materials such as tyres etc. shall not be burnt but disposed of in the approved manner.

11.5.2 Stripping and loose excavation

Stripping consists of removing all rubbish, humus, vegetable material and all or part of the organic topsoil in the areas and to the depth as indicated on the drawings or as otherwise directed by the Engineer.

Loose Excavation means general excavation of material such as organic topsoil, clay, silt, sand, gravel, and boulders of up to 75mm thickness and soft or disintegrated rock, which can be removed by common earth moving equipment without ripping or blasting.

Stripping and loose excavation shall be accomplished by proper excavation and hauling equipment suitable for the work which allows for an efficient work progress adopted to the soil conditions encountered.

11.5.3 Rock excavation by ripping.

Rippable material is defined as rock which can be loosened or broken down by a bulldozer capable of developing 220 kW (300 PS) of continuous power equipped with a single shank rear-mounted, heavy-duty rock ripper, operating in low gear.

Material which in the opinion of the Contractor should be removed by ripping shall be exposed, and the Engineer notified before proceeding further.

The top of the rock surface shall be surveyed by the Contractor. The survey and classification is subject to the written approval of the Engineer.

Contractor's failure to follow the procedure outlined above will forfeit his right to claim any classification other than that allowed by the Engineer, who, in such case, will classify the excavated quantities.

Ripping shall be performed in such manner that the ripper tooth does not damage the material lying beyond the final excavation lines. Any material remaining to the final excavation lines shall be removed by wedging, barring, broaching or other suitable methods approved by the Engineer.

REFERENCE ONLY

11.6 Excavated materials

All suitable materials from the excavations shall be utilized to the fullest extent practicable as construction materials in permanent and temporary works, subject to the written approval of the Engineer.

The Contractor's excavating techniques shall be such, that as much as practicable, construction materials will be yielded.

The suitable material shall be stockpiled. If the moisture content of excavated materials suitable for embankments or backfill is too high after excavation, the material shall be drained and dried in the stockpile until the moisture content is sufficiently reduced to allow placement, or vice versa moistened if too dry.

11.7 Disposal of excavated materials

Excavated material, which is not suitable for, or are in excess of the construction requirements shall be disposed of in the spoil area as directed or approved by the Engineer.

The spoil tips shall be located where they will not interfere with the natural flow of streams or rivers or other works. No rock material may be dumped into the river bed.

The Contractor shall shape and trim the stockpiles to the lines and grades as directed. Adequate diversion of water courses in such areas and proper drainage shall be provided as proposed by the Contractor and approved by the Engineer. The Contractor shall be liable for any damage to the works or to the property of third parties caused by poor drainage in the spoil or stockpile areas.

11.8 Particular excavation applications

11.8.1 Excavation of parts of an existing embankment

The excavation of part of an existing embankment such as the removal of a distinct part of the crest requires special care to be taken by the Contractor. In this respect the Contractor has to take all precautions to avoid the following:

- To destroy the existing structure to a larger extent than required;
- To demolish the function of any detail of the structure; and
- To be able to re-construct the particular part.

Prior to the start of any work the Contractor shall submit to the Engineer for written approval a method statement describing the procedure required to carry out the specific excavation. The method statement shall include but not be limited to the following:

- Excavation method (including the applied equipment, materials etc.).
- Storage procedure for the excavated materials and details regarding the protection of these.
- Description of all temporary support measures to ensure that the remaining embankment is kept unchanged, if applicable.
- Preparatory works (such as shaping of the slope) required for the reconstruction of the excavated part of the embankment.
- Reconstruction procedure in respect to the different material to be backfilled.

REFERENCE ONLY

11.8.2 Excavation of trenches in existing embankments

The excavation of trenches such as for the removal and/or reconstruction of sluices barrels require special consideration and attention.

The excavation shall be wide enough to allow for backfill compaction parallel to the structure using heavy rolling compaction equipment. The inclination of the embankment slopes shall be as flat as possible to reduce differential strain. The final slope inclinations shall be determined by the Contractor. He shall provide evidence to the Engineer that the inclination he intends to use is sufficiently stable. No work shall start before the Contractor receives the written approval of the Engineer.

The embankment material of the previously excavated slopes shall be cut back to well-compacted material that has not been affected by wetting or drying.

Excavation shall extend to rock foundation, where line, grade and density are uniform. Rocks and/or irregularities at the foundation contact that might create stress concentration should be removed. Cleaning and backfilling should treat existing defects such as soft or pervious soil filling in the rock, fault gouges, fractures, erosion channels or solution cavities that cannot be removed. These defects require removal to an adequate depth and replacement with lean concrete slush grout, dental concrete or specially compacted earth fill as specified or directed by the Engineer.

12. Miscellaneous Fill Works and Rehabilitation Measures for Embankments

12.1 General

The following paragraph deals with general requirements governing the execution of miscellaneous fill works and rehabilitation measures for embankment structures. The rehabilitation works for the embankment structure shall include but not be limited to the following:

- Reconstruction of existing layers of an embankment (particularly after the performance of other remedial measures).

- Backfilling of construction trenches

- Filling of existing cracks.

- Other remedial measures within this context as directed by the Engineer.

12.2 Standards and codes

Except as otherwise specified in this Specification, all materials and workmanship shall comply in all respects with the requirements of the appropriate standard of code issued by the British Standards Institution, American Society of Testing and Materials, US Corps of Engineers, Technical Methods for Highways, or such other standard as the Engineer may approve, current at the date of Invitation to Tender. If, after the date of Invitation to Tender, there is an amendment to a standard relevant to the Contract, the Engineer will direct whether the amendment is to apply.

REFERENCE ONLY

The Contractor shall have available in his site office at all times at least one copy of every standard or code referred to in this Specification, and any additional standard or code which may be referred to therein and shall make these available for reference by the Engineer upon request.

The work included in this section shall comply with the requirements of the following standards and codes, except where this specification differs from these standards and codes, in which case the requirements of the Specification shall take precedence:

- Earth Manual of "Bureau of Reclamation" – US Department of the Interior.
- All standards of the American Society for Testing and Materials (ASTM)
- British Standards (BS)
- US Corps of Engineers
- Technical methods for highways

12.3 Submittals

Prior to the start of any works described herein, the Contractor shall submit to the Engineer details of the proposed excavation methods, placement procedures and main equipment for all fill materials. Daily report forms in agreed format detailing the activities shall be submitted to the Engineer for signature.

12.4 Sources of Fill Material, Stockpiling and Disposal to Spoil

12.4.1 Borrow Areas and Quarries

The Contractor shall explore, locate, investigate, and develop such borrow areas and quarries that he may require to meet the requirements under the Contract. Such development shall include, where applicable, construction, operation and maintenance of the required access roads and haulage arrangements, removal and stockpiling of unsuitable material, processing, stockpiling and transport of suitable material and all related material handling operations including testing.

The Contractor shall be fully responsible for the provision of the fill materials as specified and required for the Works in accordance with the Contract, as well as for the selection of all borrow areas and quarries which may be necessary to satisfy that requirement. The location and extent of the selected borrow areas and quarries for the provision of selected fill material in accordance with the requirements of this Section shall be subject to the approval of the Engineer. The Contractor may develop and/or use the borrow areas and quarries or, subject to the prior approval of the Engineer, develop and/or use other borrow areas and quarries or other sources of excavation materials to meet the requirement of this Specification. Not later than 14 days prior to the commencement of any work for the development of a borrow area or quarry and the provision of fill material from that location the Contractor shall submit details to the Engineer for his approval including the results of field investigations and laboratory tests, if relevant, on the proposed material together with a detailed method statement of all activities required for achieving access to and developing and excavating from the borrow area or quarry. The Contractor shall not commence any work necessary for the development of the area or obtaining the material prior to receiving this approval. Together with his approval of the Contractor's proposed details of any borrow area the Engineer shall notify the Contractor whether that borrow area will have to be backfilled after use for construction. Borrow areas which are not required to be backfilled and which are no longer required, or else within which the supply of suitable fill material has become exhausted, shall be immediately cleared of all debris, and graded and finished, and if required grassed. Unless otherwise agreed by the Engineer, final profiles within each borrow area and associated spoil tips shall be such that in the finished borrow area ponding of water cannot occur, no vertical faces remain, and all slopes are shaped to a finished angle to the horizontal of not greater than 25°.
The cost of all requirements and work specified herein for borrow areas and quarries is deemed to be included in the rates and prices in the Bill of Quantities.

REFERENCE ONLY

12.4.2 Tests for Borrow Areas and Quarries

General

All borrow areas and quarries where materials are to be used for permanent construction works shall be subjected to approval of the Engineer. The Engineer may cause any or all of the under-mentioned tests to be done in the Contractor’s Laboratory with the supervision of Engineer and/or in the Engineer’s Laboratory of the Irrigation Department-Eastern Province.

Tests on Soils

From areas approved out for exploitation the following tests (ASTM or BS) shall be conducted on a sample from the quantum that would be required for exploitation from such areas for placement in different parts of the embankment regularly as determined by the Engineer.

(i) In-situ Moisture Content

(ii) Atterberg Limits

(iii) Sieve Analysis, and

(iv) Standard Proctor Compaction

The particle size grading for the fill materials is generally specified by limiting the range of the grading results obtained for each sieve. Material outside the limits will be accepted or rejected at the Engineer's discretion according to the location on the embankment where the material is to be placed, volume required and the nature of the circumstances for the use of such material.

Tests on Gravel

Materials from approved gravel quarries shall be tested periodically for the following characteristics:

(i) In-situ Moisture Content
(ii) Atterberg Limits
(iii) Sieve Analysis, and
(iv) Standard Proctor Compaction
(v) Field Compaction (Required degree of compaction more than 90)

REFERENCE ONLY

Tests on Sand

Materials from approved sand quarries shall be tested periodically for the following characteristics:

(i) Sieve Analysis
(ii) Specific Gravity, and
(iii) Organic Content

Tests on Rock/Boulders

Rock samples from approved quarries shall be tested periodically for the following characteristics:

(i) Sieve Analysis
(ii) Specific Gravity
(iii) Los Angeles Abrasion Test, and
(iv) Sodium or Magnesium Sulphate Soundness Test

12.5 Material

Before the final selection of the appropriate borrow areas and quarried the Contractor shall make any tests required to demonstrate to the Engineer the suitability of the material.

Prior to the placement of any embankment material at least 2 series of material tests as determined by the Engineer shall be performed.

Testing shall be performed in continuous intervals to reflect the rate of the various materials placed. The schedule of material testing presented by the Contractor shall be approved by the Engineer.

Material for the rehabilitation of embankments shall be equivalent to the existing surrounding material, unless agreed otherwise by the Engineer.

Material to be double handed shall be investigated carefully in regard to possible contamination during the time of storage. If the material is considered to be inappropriate for further use, the Contractor shall propose to the Engineer details of the material he intends to use. In both cases, either the reinstatement or use of new material, the Contractor shall not be allowed to carry out any works prior to the written approval of the Engineer.

All applied materials shall be well graded. Material re-excavated for placement in the embankment will be subject to the same inspection as materials obtained directly from the quarry or excavation.

Preparation required to produce the materials shall include but not be limited to the combination of sieving, crushing, washing, separation and remixing of materials.

Materials shall be obtained, prepared, processed and stockpiled in such a manner that the rehabilitation works shall proceed without delay. The Contractor shall organize his operations taking into account all factors that may delay the work so that the approved schedule of the works is kept.

All applied material shall be well graded and shall be processed to be within the limits of the existing materials, unless otherwise approved by the Engineer.
The tabulation below is a guide for the selection of materials for an embankment.

REFERENCE ONLY

Grading and Plasticity Limits for Earth Embankments

Zone	Characteristics	Absolute Minimum (%)	Absolute Maximum (%)
Low Permeability	Passing 75-micron sieve	30	70
	Liquid Limit	20	50
	Plasticity Index	8	30
Medium or High Permeability	Passing 75-micron sieve	-	70
	0.355 mm sieve	8	-
	2.36 mm sieve	50	-
	25.0 mm sieve	100	100
	Liquid Limit	0	50
	Plasticity Index	0	30

12.6 Stockpiling of Materials

Materials obtained from excavations for the Works and from borrow areas intended for subsequent use as fill in the Works, and which cannot be used immediately, shall be placed in temporary stockpiles nearby.

The manner of stockpiling shall be such as to avoid segregation and damage to the materials, and the areas on which the material is stockpiled shall be cleaned and levelled in order to avoid contamination of stockpiled materials as well as any mixing of different materials which are to be stockpiled separately. Excavated materials with similar characteristics shall be stored, wherever practical, in the same place and separately from those with different characteristics, except where different materials are being specifically placed together to obtain a required mix of different materials. The temporary stockpiles shall be clearly signed to indicate the type of material, its source and designated use.

The material shall not be placed in the stockpiles at a density greater than that required subsequently as fill in the Permanent Works.

12.7 Placing Fill

12.7.1 General

The Contractor shall not commence or perform any fill work using equipment or working methods which deviate in any way from the equipment and methods of execution which have already been approved in writing by the Engineer.

All vegetation, topsoil and any other unsuitable overburden shall be removed from areas on which fill is to be placed. Following the preparation of the commencing surface as specified the surface levels shall be surveyed and the results of the survey including drawings submitted to the Engineer for agreement. The Contractor shall not begin to place fill material until the Engineer has approved the preparation of the commencing surface and the survey results.

REFERENCE ONLY

If filled areas contain material which is susceptible to deterioration due to the excessive absorption or loss of water, it may be necessary to protect such areas by covering with further Permanent Works construction or else with a temporary layer of fill of sufficient thickness to prevent penetration of water into or loss from the permanent fill. Alternatively, a suitable impermeable membrane may be used to protect the permanent fill. Where fill is to be placed in trenches, pits and other places the sides of which are supported, those supports which are to be removed shall as far as practicable be withdrawn ahead of the layer of fill to be compacted and all voids left by the supports shall be filled with fully compacted material.

12.7.2 Placing, Moisture Control and Compaction

The fill shall be placed in uniform layers across the full width and length of the area to be filled so that the area is built up evenly and shall be compacted as soon as practicable after deposition. The width of an embankment layer shall not be extended by means of the deposition of loose materials from the top of the embankment. Materials of differing characteristics shall not be mixed in any one layer and each layer shall be free from lenses and pockets of such material.

Fill material shall be deposited in such a manner that does not cause segregation.

The fill shall be placed so that the surface is sufficiently even, and the surface shall be graded generally level before compaction operations commence while still having sufficient camber to shed surface water and to avoid ponding. The surface on which fill is to be placed shall be scarified if it is too smooth for proper bonding with the layer of fill to be placed. The moisture content of embankment fill material shall be adjusted by suitable conditioning to be within a range of the optimum moisture content required by this Specification or determined by the Engineer, depending on the characteristics of the material, and then compacted.

Compaction equipment shall be capable of achieving the required compaction without having any detrimental effects on the fill material. The equipment shall be carefully controlled to ensure that all areas are uniformly compacted for their full width and depth.

12.7.3 Backfilling

Unless otherwise shown on the Drawings or specified or instructed by the Engineer, excavations which are to be backfilled shall be filled with suitable material, as defined obtained from the excavations or from approved borrow areas.

When placing fill as backfill the Contractor shall make due allowance for settlement and shall ensure that the final lines and levels are as shown in the Drawings. Any areas which subside shall be made good without delay up to the end of the Defects Notification Period. Suitable measures shall be taken to minimize erosion of the refilled excavations during wet weather, including sufficient specific measures to shed runoff water to the downslope side of trenches and avoid the formation of waterways along or parallel to the trenches. No payment will be made for making good any deficiency in refilling or banking material due to the negligence of the Contractor.

REFERENCE ONLY

12.7.4 Refilling or Banking against Structures

The Contractor shall, before the work of backfilling to structures commences, obtain the approval of the Engineer for the material to be used and the methods of the work execution. Prior to the commencement of placing backfilling materials adjacent to structures the location shall be cleared of all remaining concrete forms and other temporary works and shall be subject to the approval of the Engineer. Unless otherwise instructed by the Engineer, backfilling to structures shall not commence until at least 14 days have elapsed after concrete work has been completed. Refilling or banking against water retaining structures will only be permitted after completing testing of the water tightness of the structure to the satisfaction of the Engineer. Wherever practicable backfill shall be placed and compacted evenly on all sides of Permanent Works structures to minimize unbalanced loads on the structures. Such fill shall not contain boulders or any other hard material of a size which in the opinion of the Engineer may result in damage to the structures or incomplete compaction of the fill. The suitable depth of each layer of backfill shall be subject to agreement by the Engineer and shall be dependent on the material source, the placement location and the type of compaction equipment to be used. The moisture content shall

be adjusted by suitable conditioning to be within the range + 2% to - 2% of the optimum moisture content, or else within some other range determined by the Engineer depending on the characteristics of the material and compacted to not less than 98% of the maximum dry density "Standard Proctor" (using Method 3.3 or Method 3.4 of Part 4 of BS 1377). Compaction of backfilling materials above structures shall not be permitted with vibrating rollers within 500 mm vertically of the surface of the concrete except with the prior approval of the Engineer. Backfilling materials shall be placed in such a manner that ensures that they can be satisfactorily compacted without damage to the structures.

12.7.5 Refilling of Trenches

Refilling around pipes is to be carried out as pipe laying proceeds, however no material shall be filled in over the joints or around specials until these have been inspected, tested and approved by the Engineer and permission has been given by him for this refilling to commence. Specially selected soft material without stones shall be used for filling in around the pipework and to a height of at least 150 mm above the top of the pipe, and this material shall be thoroughly and evenly compacted to 98% of the maximum dry density "standard Proctor" (using Method 3.3 or Method 3.4 of Part 4 of BS 1377) unless otherwise required in the Technical Specification or instructed by the Engineer. Unless otherwise specified, in open country away from roads, accesses or built-up areas or where approved by the Engineer the Contractor may then refill the remainder of an excavation from 150 mm above the top of the pipe to the surface of the ground with light compaction. On completion of backfilling the excavation shall be banked to a height of up to 500 mm above the general ground level to allow for settlement, and the Contractor shall be responsible for making good in any area where the back filling subsides below ground level when called upon to do so at any time up to the expiry of the Defects Notification Period without additional payment. Where selected fill is to be placed below the required grade of the underside of the pipe, the amount of selected suitable fill must be sufficient for a layer slightly thicker than that specified to remain after compaction so that after trimming the pipe can be laid true to line and level.

REFERENCE ONLY

12.8 Compaction of Fill

12.8.1 Definitions

The specified thickness of a layer of fill is the thickness after compaction has been completed. Unless otherwise instructed by the Engineer:

(i) the maximum dry density (MDD) "standard Proctor" and the optimum moisture content at which this density is achieved are the values obtained by BS 1377: Part 4 – Methods 3.3 or 3.4; and
The field density tests called for in the Specification are those described under BS 1377: Part 9 – Methods 2.1, 2.2, or 2.4.

12.8.2 General Requirements

Suitable fill shall be compacted to a dry density not less than 98% maximum dry density "modified Proctor", or else as indicated on the Drawings or directed by the Engineer, expressed as a fraction of the maximum dry density and measured by field density tests. If fill has a moisture content too low to permit the specified dry density to be achieved, the Contractor shall incorporate sufficient water by a method acceptable to the Engineer to permit compliance with the Specification. Such operations shall be included in the Contractor's rates. If fill becomes sufficiently wet to cause serious rutting by construction traffic or heaving under compaction plant and to an extent that the required dry density cannot be obtained, placing and compaction shall forthwith cease and shall not be resumed until the Contractor has taken whatever action may be necessary in accordance with Sub-Clause 1.5.4.3 to restore the fill to a proper condition for compaction.

12.8.3 Compactive Effort

Fill shall be compacted using the approved type of equipment (Such as Sheet foot Roller), the depth of layer and the number of passes determined in accordance with this Technical Specification provided that the required dry density is obtained. If the dry density is not obtained, the depth of layer shall be decreased or the number of passes shall be increased, or the type of equipment shall be changed until the required dry density is achieved.

REFERENCE ONLY

12.8.4 Compacting equipment

The type of compact equipment used for embankments, fills and backfills shall be proposed by the Contractor and approved in writing by the Engineer. Only after compaction tests have demonstrated the effectiveness of the equipment, it will be approved by the Engineer.

Compaction of material in areas where it is impracticable to use large equipment shall be performed by approved suitably sized small rollers, vibrating plates or hand power tampers. Vibrating plate mechanical tampers weighing 600 – 800 kg will be required for compacting fills not accessible to the larger equipment. The tampers shall be capable of compacting layer thicknesses up to 50 cm.

Spreading and grading equipment

The Contractor shall provide and maintain in perfect working condition adequate equipment for spreading and grading of all fill materials in accordance with the specifications.

The number and capacity of the equipment shall be sufficient to fulfill the construction schedule requirements.

Water supply and sprinkling equipment

The Contractor shall provide and maintain in perfect working condition suitable equipment such as pumps, tanks, hoses, etc. to provide water for dust prevention, for adjusting the water content of the materials and to wash in any material into cracks amounting up to 200 l per m3 of fill placed or as directed by the Engineer.

12.9 Testing of Materials and Field Control of Compaction

Testing of embankment and backfill material before it is used in construction, and control tests during construction, shall be carried out by the Contractor using his own Site laboratory or an independent laboratory approved by the Engineer. The Contractor shall ensure that the Engineer is informed sufficiently in advance of any tests to be carried out on embankment and backfill material such that the Engineer has the opportunity to witness the test. If so directed by the Engineer, the Contractor shall, in the presence of the Engineer, carry out field density tests at the bottom of excavations for structures in order to investigate the suitability of the foundation material before any concrete works commence. The hole left by the excavation of the sample shall be backfilled with suitable material and compacted to a density no less than the surrounding material, or else shall be backfilled with soil-cement. Laboratory test results of any material that the Contractor proposes to use in the Works shall be submitted to the Engineer for his review and approval before such material is used in the Works. The tests to be carried out by the Contractor, the standard test methods to be used and the testing frequency for materials used during construction and upon completion shall be as detailed in the table below unless an abnormal variability of the results requires a higher frequency. Tests for the maximum dry density and optimum moisture content, the Atterberg limits and particle size analysis shall be made when the placing of fill commences and subsequently in accordance with the minimum test frequencies stipulated in the table below. As a general requirement in addition to the minimum test frequencies given in the table below, not less than three tests of each type shall be performed at each separate fill area.

REFERENCE ONLY

Test	Test Standard	Minimum Test Frequency
Moisture content	ASTM D 2216	1. Before filling material from any source is used. 2. Thereafter, whichever of the following occurs first: (i) for every 1000 m³ placed, or (ii) for every 100 m compacted length (iii) at each change of borrow pit source, or (iv) at each change of material, or (v) 21 days after the last test conducted (where the fill location is still active).
Grain size distribution	ASTM D 422	
Specific gravity & absorption	ASTM C 127	
Specific gravity of soils	ASTM D 854	
Atterberg's limits	ASTM D 4318	
Standard Proctor Compaction Test	BS 1377-4	
	ASTM D 698	
Field density test	USBR Earth Manual E-24/ BS 1377-9 Method 2.1, 2.2 or 2.4	Twice each day (morning and afternoon) at each work location, but at least once for every 100 m³ placed or in each layer, whichever is more frequent. If directed by the Engineer, at the bottom of excavations for structures.
California Bearing Ratio (CBR)	BS 1377-4	Road subgrade: once for every 1 km of road alignment

		constructed, or at least once for each section of road. Granular subbase/ base/ wearing courses: (i) for every new source of material, and (ii) at least once a month.

12.9.1 Costs

The tests required by the Technical Specifications or by the Engineer will be carried out by the Contractor in the either Material Testing Laboratory or in other Laboratories proposed by the Contractor and approved by the Engineer. The cost of such tests, including the preparation and transportation of the samples shall be borne by the contractor if not stated otherwise.

12.9.2 Facilities for Engineer to Take Samples

The Contractor shall provide facilities for the Engineer to take samples for testing of any of the fill, concrete or other materials to be incorporated in the Works. Such samples may be taken before or after incorporation into the Works or at any stage during construction at the discretion of the Engineer.

REFERENCE ONLY

12.10 Rehabilitation of cracks in the existing embankment

The Contractor shall with the Engineer investigate all existing cracks in the embankment. He shall document the findings of this investigation and submit them to the Engineer. During a site investigation the Contractor shall present all observed deficiencies to the Engineer and explain the rehabilitation methods to be applied. These measures shall be subject to the written approval of the Engineer.

The method statement proposed by the Contractor shall include but not be limited to the following:

- **Removal of any loose or foreign material**: With respect to the location and the extent of the affected area, "removal" of material will refer to any measures starting from cleaning of the crack surface up to the excavation of parts of the embankment (e.g. in case the deficiency is caused by an instability of the slope).
- **Re-profiling of the temporary slope**: In the case that parts of the embankment must be removed, the Contractor shall prepare the temporary construction slope by appropriate methods such as cut steps in the remaining embankment material to improve proper compaction.

- **Re-grading of the affected embankment area** with approved methods independent of the extent of the relevant area.
- **Re-construction of the slope protection layer**.

The material to be applied shall conform to the materials used during initial construction. The filter criteria must be maintained for all materials to be applied. It is the Contractor's responsibility to carry out the required measurements and calculations and present these to the Engineer for approval.

No material shall be placed in any section until the foundation of this section has been dewatered (if required) and the temporary construction slope has been adequately prepared and approved by the Engineer.

Methods for re-profiling of the embankment shall be presented by the Contractor for the approval of the Engineer. Various methods may apply. For smaller cracks or openings, “washing-in” of approved material carried out under controlled conditions might apply. In that respect, the Contractor shall take all precautions not to cause any harm to the existing dam structure. Any destruction caused by the works must be repaired at the expense of the Contractor.

12.11 Reconstruction of embankment layers after performance of remedial measures

12.11.1 General

The Contractor shall propose methods and procedures how he intends to carry out the required remedial measures prior to the commencement of any work. The work shall not be started without the written approval of the Engineer.

Any works to be carried out for the reconstruction of the embankment shall be conducted also under the provisions presented in the relevant technical specification. The Contractor shall consider all methods and requirements described herein.

REFERENCE ONLY

12.11.2 Material

All materials the Contractor intends to use shall conform to the specification presented in this section. Any material to be applied throughout the works shall be approved in writing by the Engineer.

The material used to reconstruct the embankment shall be well graded, have a maximum particle size not larger than 5 cm including earth clods and a minimum of 40 percent by weight passing a no. 200 sieve. The Engineer may change the range of acceptable gradation without any extra compensation to the Contractor to suit the material found at site.

Throughout the works the Contractor shall take strict precautions to avoid any contamination of any material to be used. The material shall be free from injurious amounts of brush, sod, roots or any other unsuitable material. Material which is unsuitable in the opinion of the Engineer shall be removed.

If the natural moisture content deviates more than ±3 % of the optimum moisture content, moisture correction measures shall be performed on the stockpiles.

Execution

No embankment shall be reconstructed until that portion has been inspected and approved in writing by the Engineer.

The thickness of the layers to be placed and the compaction required shall be determined by the Contractor and approved by the Engineer.

The placing of embankment material shall be such as to guarantee a homogeneous fill. The material shall be placed in layers having a thickness of about 30 cm and compacted with adequate equipment.

Careful control shall be exercised over the water content of the material by means of regular testing by the Contractor to ensure that adequate compaction is attainable. Water content limits shall be established as part of the field and laboratory testing both prior to and during construction.

100% of all densities of the material in place after compaction shall have a dry density equal or above 98% of the maximum Proctor Standard dry density value (ASTM D698). The maximum water content of the material in place after compaction shall be within a range of ± 3% of the optimum Proctor Standard moisture content.

The placed layers may have to be scarified to guarantee a good bond with the next layer.

Particular attention shall be given to spreading and compacting of material in the vicinity of concrete structures, instrumentation or other equipment. Spreading and compaction shall be performed with adequate equipment and in such a manner that no damage occurs to concrete, instrumentation or other structures. Any damage shall be repaired by the Contractor at his own expense.

When directed by the Engineer, the Contractor shall remove and dispose of unsuitable material placed in the reconstruction area and material rendered unsuitable after being placed.

12.12 Rip Rap Protection for Dam Embankments

12.12.1 General

REFERENCE ONLY

Rip-rap required for protection of embankment shall consist of selected hard, durable rock fragments from quarried rock obtained from approved quarries ad excavations, and individual stone having any one dimension not less than as specified on the drawings and/or as directed by the Engineer. Rip-rap shall consist of individual rock fragments, dense, sound, unweathered (only materials not susceptible to weathering shall be accepted), resistant to abrasion and free of cracks, seams and other defects that would tend to increase unduly their susceptibility to destruction by water action. Angular rock fragments shall preferably be used. Well-rounded cobbles and boulders will not be accepted except on very flat slopes. The minimum dimension of any single rock shall not be less than one-third to one-fourth of its maximum dimension.

12.12.2 Particle size distribution

Rip-rap shall be roughly graded to the specified thickness in such a way to ensure that larger rock fragments are uniformly distributed with the smaller rocks filling the remaining spaces. Pockets of small stones shall be removed and replaced with larger material. Riprap shall be reasonably graded. Sand and rock dust may not exceed 5% of the total weight of the rip-rap material. The maximum size of the boulder shall be limited to the nominal thickness of the riprap. The size of Rubbles in the specified thickness (450 mm) of rip-rap shall be reasonably well grades with passing d15 – 175mm to 250 mm, d50 – 275mm – 350 mm & d85 – 375 mm – 450mm.

12.12.3 Quality of Boulders/ Rubbles

The Rip-rap material shall have specific gravity (saturated surface dry) greater than 2.60. Soundness (sodium sulphate method) less than 5% loss by weight after 5 cycles and Abrasion (Los Angeles Abrasion using grading A) less than 60% loss by weight after 500 revolutions.

12.12.4 Testing of Materials

The particle size distribution of rockfill and rip rap material shall be tested in a manner agreed by the Engineer.

The determination of the bulk density of rockfill material after placement and compaction shall be by re-excavating a sample of not less than 3 m^3 as directed by the Engineer, determining the volume of the hole, and then weighing the excavated material.

12.12.5 Frequency of Testing

The testing specified below shall be performed by the Contractor for his routine quality assurance for the slope protection works prior to placing. The volume of material to be sampled for testing shall be appropriate and sufficient for the respective type of test to be performed. The minimum number of samples which are to be tested shall be one representative sample for each volume of material as stipulated below for each type of test:

Test	Standard	Test frequency
Particle size distribution immediately prior to placement	Visual Inspection	Continuously
Bulk density after placement and compaction	As proposed above	For each 500 m3
Particle mass distribution	ASTM D 422	For each 500 m3 or at every location where the material quality is considered doubtful by the engineer
Sodium Sulphate Soundness	ASTM C88	
Los Angels Abrasion Value	ASTM C535	
Porosity, Water absorption, Specific Gravity	ASTM C 127	

REFERENCE ONLY

Rip Rap shall be placed to the full layer thickness in one operation starting from the bottom of the slope and progressing to the top. Rip-Rap shall be placed in a such manner as to minimize segregation and avoid displacing the underlying filter or transition/bedding material. The finished layer shall be free from pockets of small stones, clusters of large stones, and excessive voids.

Rip-rap shall be well keyed uniform, and dense and stable mass with adjacent stones in close contact but without alignment of longer faces so that open joints are formed. Stones shall have their greatest dimension across the slope and the smaller spaces between stones shall be left open. End tipping from lorries or dumpers is not permitted.

Prior to the following filling works, the contractor shall close all existing voids on the horizontal surface of the upper boulder layer by hand placing smaller rocks with a maximum diameter of 100mm.

12.12.6 Placement of boulders below minimum water level

If placement of material below the minimum water level is required, the Contractor shall place boulders with a diameter of 500 to 700 mm by carefully dumping the material into the water. Placement of boulders shall continue up to 50 cm above the minimum water level. Prior to the following filling works,

the Contractor shall close all existing voids on the horizontal surface of the upper boulder layer by hand placing smaller rocks with a maximum diameter of 100 mm.

13. ENVIRONMENT AND SOCIAL MANAGEMENT PLAN (ESMP)

The Contractor shall comply with the provisions in the **Environment and Social Management Plan (ESMP)** annexed in this section without any cost to Employer. (Annexure I)

13.1 Environmental Control

The Contractor shall:-

- Comply with the provisions of this Section and other environmental protection provisions in the Contract and with the requirements of any statute, by-law, standard and the like related to environmental protection.
- Arrange all work to cause the least possible disturbance to the environment.
- Submit proposals for traffic movement, temporary structures, cleaning up, storage of materials, demolition and the like. Observe the agreed proposals.
- Dispose of all spoil and unsuitable material in accordance with the provisions given in EMP.

13.2 Monitoring

The Contractor shall monitor the environmental aspects of the construction and the control measures implemented to minimize any adverse environmental impact. Should the control measures put in place be found to be unsatisfactory as a result of the monitoring then the Contractor shall amend the control measures to provide a satisfactory result.

REFERENCE ONLY

13.3 Environmental Complaints

The Contractor shall maintain a register of all environmental complaints received and shall notify the Engineer of each complaint. Complaints received by the Engineer and referred to the Contractor shall also be recorded in the register.

The Contractor shall investigate all environmental complaints received and where necessary, undertake measures to address the complaint. All measures undertaken to address complaints shall be detailed in the register.

13.3.1 Environmental Incidents

Should an environmental incident (being environmental nuisance, medium environmental harm, or serious environmental harm) occur during any construction phase, the Contractor shall immediately take the appropriate action to minimize any impact and inform the Engineer. The Contractor shall carry out any instructions received from the Engineer.

The Contractor shall be responsible for the cleanup of any contamination caused by the construction works and no additional payment will be made in this regard.

13.3.2 Environmental Training

The Contractor shall be responsible for ensuring that all employees (including subcontractors) have received training in relation to the Contractor’s environmental operating guidelines.

The Contractor shall ensure that any machinery on site is operated within the appropriate guidelines so as to minimize environmental impact in relation to noise, air and water quality, waste control and contamination. All construction materials used on site shall be utilized in a manner to similarly limit environmental impact.

No additional payment shall be paid to the Contractor and the cost of environmental control measures shall be deemed to have been included in the rates tendered for the Works.

Standard Procedure for Ensuring Occupational Health and Safety When working in Wildlife Area

The Contractor shall comply with the provisions in the Standard Procedure for Ensuring **Occupational Health and Safety When working in Wildlife Area** annexed in this section without any cost to Employer. (Annexure II)

Standard Procedure for Assessing the Requirement of Tree Removals

The Contractor shall comply with the provisions in the **Standard Procedure for Assessing the Requirement of Tree Removals** annexed in this section without any cost to Employer. (Annexure III)

13.3.4 Covid 19 Safety Manual

The Contractor shall comply with the provisions in the **Covid 19 Safety Manual** annexed in this section without any cost to Employer. (Annexure IV)

REFERENCE ONLY

13.3.5 Labor Management Plan (Including site management and camp management measures)

The Contractor shall comply with the provisions in the **Labor Management Plan (Including site management and camp management measures)** annexed in this section without any cost to Employer. (Annexure V)

Annexure 01

REFERENCE ONLY

REFERENCE ONLY

Environmental Social Screening Report (ESSR) and Environmental and Social Management Plan (ESMP)

Improvement of Muthuiyankattu Tank Bund and Spillway at Muthuiyankattu scheme

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Integrated Watershed & Water Resources Management Project (IWWRMP)

Ministry of Agriculture, Livestock, Lands and Irrigation

REFERENCE ONLY





July 2026

Environmental and Social Screening Report (ESSR) & Environmental and Social Management Plan (ESMP)

Name of Sub Project (Activity)	Improvement of Muthuiyankattu Tank Bund and Spillway at Muthuiyankattu scheme
Implementing agency	Northern Provincial Irrigation Department

Declaration of the Project Management Unit

We hereby certify that, the Environmental and Social Screening Report & Environmental and Social Management Plan for Improvement of Muthuiyankaddu Tank Bund and Spillway at Muthuiyankattu scheme was prepared by Safeguard team of IWWRMP and the information given in the report are true and accurate.

Mr. M.M.M. Jawahir, Environmental Specialist, IWWRMP Signature:
Mr. A.K. Pathiraja, Social Specialist, IWWRMP Signature:
Mr. M. F. Famees, Social Officer, IWWRMP Signature:
Mr. Kasun Seneviratne, Environmental Officer, IWWRMP Signature:

Date of Submission to the World Bank	
Date of submission amendments (If any)	
Date of approved by the World Bank	

Copy of ESMP	(Original copy/ Office copy/ Copy to implementing agency/ Site Copy)

REFERENCE ONLY

ABBREVIATIONS

CEA	Central Environmental Authority
DSD	Divisional Secretariat Division
DWLC	Department of Wildlife Conservation
ESMF	Environmental Social Management Framework
ESMP	Environmental Social Management Plan
ESSR	Environmental Social Screening Report
FD	Forest Department
FFPO	Fauna Flora Protection Ordinance
FO	Farmer Organization
FR	Forest Reserve
GND	Grama Niladhari Division
IA	Implementing Agency
IWWRMP	Integrated Watershed and Water Resources Management Project
LSA	Livelihood Support Assistance
NAQDA	National Aquatic Development Agency
NP	National Park
PMU	Project Management Unit
STC	State Timber Corporation
WB	World Bank
ESS	Environmental, Social, and Safety Officer
EPP	Emergency Preparedness Plan

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1. Background

1.1. Introduction

The Government of Sri Lanka (GoSL) with financing from the World Bank (WB) has proposed to undertake an Integrated Watershed & Water Resources Management Project (IWWRMP). The development objective of the project is to improve watershed and water resources planning and enhance the functionality of water resources infrastructure. Functionality refers to improved safety of dams and improved water distribution networks for irrigation.
The Integrated Watershed and Water Resources Management Project is a five-year project which is executed by the Ministry of Agriculture, Livestock, Lands and Irrigation and the total project cost is USD 70.03 Mn. The IWWRMP consists with four components.

- Component 1: Watershed and Water Resources Planning (US$ 5.50 million)
- Component 2: Infrastructure Improvements (US$ 50.03 millions)
- Component 3: Contingent Emergency Response (US$ 12.0 million)
- Component 4: Project Management (US$ 2.5 million)

Improvement of Muthuiyankattu Tank Bund and Spillway at Muthuiyankattu scheme rehabilitation works, for which this ESMP is prepared, fall under the Contingent Emergency Response Component (CERC)- Component 3. This component has been activated following the Ditwah cyclone to address the urgent need of the irrigation systems across the Island. Under the CERC, emergency response activities will prioritize the rapid rehabilitation and restoration of damaged infrastructure to ensure the safety and continued functionality of the affected areas. The scope of work includes the repair and reconstruction of damaged structures, removal and clearing of debris and implementation of essential measures to reinstate services. These interventions will be undertaken promptly to facilitate early recovery while minimizing further risks to surrounding communities and assets.

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Project title	Improvement of Muthuiyankattu Tank Bund and Spillway at Muthuiyankattu scheme
Project Proponent	Northern Province Irrigation Department
Proposed start date	/ /2026
Proposed completion date	/ /2027
Estimated total cost	LKR 292.00Mn

Table 1: Details of the rectification works

2. Project description

2.1. Overview of the Project

The Northern Provincial Council Irrigation Department is responsible for the planning, development, rehabilitation, operation, and maintenance of provincial irrigation systems in Sri Lanka's Northern Province. The department has identified the need for the improvement of Muthuiyankattu Tank Bund and Spillway at Muthuiyankattu scheme.

Muthuiyankaddu Tank (Kulam) is one of the major irrigation reservoirs in the Mullaitivu District of the Northern Province of Sri Lanka and is managed by the Northern Provincial Council Irrigation Department. The reservoir has a catchment area of approximately 171 km² (66 square miles) and is primarily fed by the PerAru and runoff from its surrounding natural watershed during the monsoon seasons, without receiving water through a major inter-basin feeder canal. Water stored in the reservoir is conveyed through the Left Bank Canal and Right Bank Canal to irrigate approximately 6,112 acres of agricultural land through both gravity-fed and lift irrigation systems, predominantly supporting paddy cultivation. This irrigation network sustains the livelihoods of farming communities while contributing significantly to regional agricultural production and food security. In addition to its irrigation function, the tank helps regulate seasonal flood flows, supports groundwater recharge, and provides valuable aquatic and wetland habitats that enhance the local ecosystem.

The Muthuiyankattu Irrigation Scheme has gradually deteriorated over several decades due to prolonged use, ageing of infrastructure, natural weathering, inadequate operation and maintenance resulting from limited financial resources, and the adverse impacts of the prolonged civil conflict in the Northern Province. These factors led to the deterioration of critical irrigation infrastructure, including the head works, feeder canals, distributor canals, and associated structures, resulting in reduced conveyance efficiency, water losses, and unreliable water distribution to the command area.

REFERENCE ONLY

2.1.1. Interventions under Dam Safety and Water Resources Planning Project (DSWRPP)

Recognizing the importance of the scheme for sustaining agricultural production and rural livelihoods, a phased rehabilitation programme was undertaken. The head works, comprising the dam, spillway gates, sluices, and other key hydraulic structures, were fully rehabilitated in 2015 under the World Bank-funded Dam Safety and Water Resources Planning Project (DSWRPP). This intervention restored the structural integrity and operational safety of the reservoir while improving its capacity to regulate and deliver irrigation water.

2.1.2. Interventions under Integrated Watershed and Water Resources Management Project (IWWRMP)

Despite the rehabilitation of the head works, the downstream conveyance system remained in poor condition. Approximately 90% of the feeder and distributor canal network had suffered severe deterioration due to erosion, siltation, damaged canal linings, collapsed structures, and years of inadequate maintenance. Consequently, a comprehensive rehabilitation of the canal system was carried out under component - 2 of the Integrated Watershed and Water Resources Management (IWWRM) Project during the period from

2022 to 2024. The rehabilitation works included the restoration and lining of canals, reconstruction of cross-drainage and control structures, improvement of water regulation facilities, and strengthening of canal embankments. These interventions have substantially improved irrigation water conveyance efficiency, minimized water losses, enhanced the reliability and equity of water distribution across the 6,112-acre command area, and strengthened the long-term sustainability and resilience of the Muthuiyankattu Irrigation Scheme.

2.1.3. Damage to the Spillway Downstream Protection Works Caused by Cyclone Ditwah

The tank and its associated irrigation infrastructure sustained extensive damage due to Cyclone Ditwah, resulting in severe deterioration of the bund, spillway, hydraulic structures, and related facilities. The most critical damage occurred at the spillway downstream, where the spill cushion, retaining walls, drop structures, training bunds, and sections of the bund adjacent to the spillway were breached by high-velocity flood flows. The loss of these protective structures has significantly reduced the effectiveness of energy dissipation, leaving the spillway vulnerable to continuous erosion and scouring during future flood events. Consequently, the structural stability of the recently rehabilitated gated spillway and the bridge crossing the spillway is now at considerable risk. In addition, the damage has adversely affected the reservoir's capacity to safely store and regulate water, increasing the likelihood of further structural deterioration. Immediate rehabilitation of the damaged protection works is therefore essential to safeguard the existing infrastructure and restore the reservoir's operational safety.

REFERENCE ONLY

2.1.4. Downstream Infrastructure Damage and Rehabilitation Under a Separate CERC Package

Further, a structural collapse was observed at Feeder Canal FC-15 in Track 02 of the Right Bank Canal system. A 30 m section of the rectangular canal, which had previously been rehabilitated under the IWWRM Project, collapsed during the flooding caused by Cyclone Ditwah. In addition, the Peraru River, canal bund, spill tail canal, roadway, and surrounding areas were heavily covered with debris, silt, vegetation, tree roots, and other flood-borne materials, resulting in disruption to spill flow and damage to the associated canal infrastructure. The rehabilitation of these damages is also being financed under the CERC activities under a different package. Since this intervention forms part of the recently completed Rehabilitation of Muththiyankaddu Tank Downstream Infrastructure sub-project, and the nature and magnitude of the anticipated environmental and social impacts are similar, the same Environmental and Social Management Plan (ESMP) prepared for the Muththiyankaddu Tank Downstream Infrastructure sub-project will be adopted and implemented during the construction of these rehabilitation works. Therefore, the scope of the present ESMP does not include the interventions related to these downstream rehabilitation works.

2.1.5. Temporary Emergency Measures Implemented and Need of the project.

Following the damage caused by Cyclone Ditwah, the Northern Provincial Council Irrigation Department implemented temporary emergency measures to maintain the basic functionality and safety of the tank and to ensure continued water supply for irrigation. These temporary arrangements were intended solely as short-term interventions and will be carefully removed as part of the proposed rehabilitation works. The rehabilitation will replace the temporary measures with permanent, resilient infrastructure designed to restore the tank to its intended operational capacity and improve its long-term safety and performance.

Given the strategic importance of Muthuiyankaddu Tank to the agricultural economy and the livelihoods of local communities, urgent rehabilitation is required to restore the damaged infrastructure, improve the safety and operational efficiency of the reservoir, ensure a reliable supply of irrigation water, and strengthen the resilience of the irrigation system against future extreme weather events. The proposed rehabilitation works will help safeguard agricultural production, enhance climate resilience, and promote the long-term sustainability of water resources in the region.

2.2. Location of the proposed Project Site

FOR REFERENCE ONLY

No	District	Tank	DSD	GND	GPS Coordinates
1	Mullaitivu	Muththuiyankattu	Oddusuddan	Mul / 55	Lat: 9.20345, Lon: 80.62431

Table 2: Location details of the site

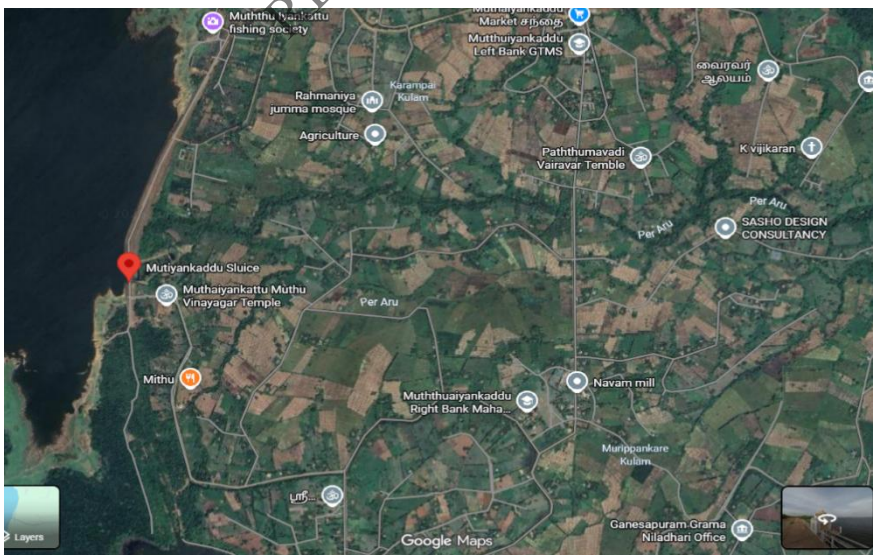


Figure 1: Location of the proposed site



Figure 2: Muththuiyankaddu spill before Ditwah

2.3. Present condition of the proposed site.

The existing condition of the spillway and its associated downstream protection works has deteriorated significantly due to the destructive effects of impounded water and the highly turbulent flow during Ditwah Cyclone flood event. The entire spill cushion has been completely washed away, resulting in the total loss of the energy dissipation structure designed to reduce the velocity and erosive force of spillway discharges. Consequently, the downstream channel, gated spillway structure, and bridge have been left highly vulnerable to severe scour, erosion, and structural instability during future flood events. The retaining walls on both sides of the spillway have also been completely destroyed, while the training bunds on both sides have been extensively washed off, leaving the spillway vulnerable to further erosion and lateral flow instability.

In addition, a section of the earth bund adjacent to the spillway has been eroded and washed away, compromising the structural integrity of the embankment in the vicinity of the spill structure. The drop structures located on both sides downstream of the spillway have likewise been completely destroyed. As a result, the entire downstream reach of the spillway and its associated hydraulic structures has suffered severe damage, exposing the area to continued erosion, undermining of existing structures, and increasing the risk of further deterioration during future flood events. The current condition has significantly reduced the effectiveness, safety, and long-term stability of the spillway system, necessitating comprehensive rehabilitation.

As an interim measure to minimize further deterioration and maintain the functionality of the spillway, the Northern Provincial Irrigation Department has undertaken several temporary protection works. These include earth filling to reinstate the eroded channel banks, reconstruction of the damaged spill cushion using sandbags, and the installation of temporary concrete and gabion box protection works to stabilize the downstream channel. While these emergency interventions have helped reduce the immediate risk of erosion and structural failure, they are temporary in nature and do not provide a sustainable long-term solution. Permanent rehabilitation of the spillway and its associated protection structures is therefore essential to ensure safe flood passage and reliable operation of the irrigation system.

The following photographs clearly illustrate the existing condition of the spillway and its associated structures before and after the implementation of temporary remedial

REFERENCE ONLY

measures. They highlight the extent of damage sustained by the spill cushion, retaining walls, training bunds, downstream protection works, and adjacent embankment, as well as the emergency stabilization measures undertaken to minimize further erosion and safeguard the structure until permanent rehabilitation is carried out.


REFERENCE ONLY

Figure 3: Remedial works done to the structures

3. Project scope of works and outcomes

3.1. Details of the proposed scope of works

No	Intervention	Description
01	Renovation of RB side Training bund	Demolition of existing remaining slots. Removal and Disposal of debris Site leveling and preparation Earth works and compaction (Cement+ Sand) mass Concrete works Turfing
02	Renovation at spill cushion	Removal of collapsed and damaged rubble Rubble piling Earth works and compaction
03	Renovation of RB side Gate cushion	Dewatering Base preparation / removing loose soils

		Mass concreting and compaction Packing rubble into gabion boxes Laying geosynthetics sheet for gabion box Earth works and compaction Chemical anchoring
04	Repair of 2nd drop	Placing gabion filled with rubble
05	Repair of bund gravel road	Debris clearing and disposal Tack coating Asphalt concreting Trimming and compacting Placing gravel and compacting
06	Construction of LB side retaining wall and training bund (Gate basin to 1st drop)	Demolition of existing remains of retaining wall. Removal and Disposal of debris Earth excavation for foundation and back filling Mass concreting and compacting Earth works for training bund Rubble packing and laying geosysntheic sheets Turfing
07	Construction of LB side retaining wall and training bund (1st drop to 2nd drop)	Demolition of existing remains of retaining wall. Removal and Disposal of debris Earth excavation for foundation and back filling Mass concreting and compacting Earth works for training bund Rubble packing and laying geosysntheic sheets Turfing
08	Renovation of LB side cushion and chute block	Removal of existing gabion box Excavation for foundation and back filling Mass concreting and compacting Chemical anchoring Removal of Sand bags and gabion boxes used for temporary works.

REFERENCE ONLY

Table 3: Scope of works

3.2. Expected Project Outcomes

- Restoration of the structural integrity and hydraulic performance of the spillway, including the spill cushion, retaining walls, training bunds, drop structures, and adjacent embankment.
- Improved energy dissipation and downstream channel stability, significantly reducing erosion, scour, and the risk of structural damage during flood events.
- Enhanced safety, flood-handling capacity, and long-term resilience of the reservoir and associated irrigation infrastructure.
- Replacement of temporary protection works with permanent engineering solutions, reducing recurrent maintenance requirements and associated costs.
- Reliable and sustainable operation of the irrigation system, ensuring uninterrupted water delivery to the command area and supporting agricultural productivity and farmers' livelihoods.

4. Environmental and Social Impact Assessment

4.1. Purpose

The purpose of this combined Environmental and Social Screening Report (ESSR) and the Environmental and Social Management Plan (ESMP) is to:

- Identify and assess potential environmental and social impacts associated with the proposed rehabilitation activities;
- Define appropriate mitigation and management measures to avoid, minimize, or offset adverse environmental and social impacts;
- Ensure compliance with applicable national regulations and the World Bank Environmental and Social Standards (ESS1, ESS2, ESS4, ESS5 and other relevant standards);
- Establish Occupational Health and Safety (OHS) measures to safeguard workers and nearby communities by addressing risks related to construction activities, working at heights (particularly in elevated canal sections), operation of machinery, and exposure to hazardous conditions;
- Develop and implement Emergency Preparedness and Response procedures to effectively manage potential incidents such as structural failures, flooding events, accidents, and other unforeseen emergencies during the rehabilitation works; and
- Provide a structured framework for implementation, monitoring, and reporting of environmental, social, health, and safety (ESHS) safeguards throughout the project life cycle.

The implementation of the proposed rehabilitation interventions is expected to restore efficient water conveyance, enhance climate resilience of the irrigation infrastructure, and support the sustainable livelihoods of farming communities in the project area.

REFERENCE ONLY

4.2. Legal Framework and World Bank's Safeguards Policies

This ESMP has been prepared in compliance with the national regulations as well as the World Bank's safeguards policies and is in accordance with the ESMF prepared for the overall IWWRMP.

4.3. National Laws, Regulations and Policies

The Constitution of the Democratic Socialist Republic of Sri Lanka under Chapter VI Directive Principles of State policy and Fundamental duties in section 27-14 and in section 28-f proclaim "The state shall protect, preserve and improve the environment for the benefit of the community", "The duty and obligation of every person in Sri Lanka to protect nature and conserve its riches" thus showing the commitment by the state and obligations of the citizens.

The overall environmental and non-land related social concerns are addressed by the National Environmental Act No. 47 of 1980 (and subsequent amendments by act no 56 of 1988 and act no 53 of 2000). Besides, there are several other sectoral legislative enactments that are in place as elaborated in the ESMF prepared for the overall IWWRMP. Table 04 indicates the applicability of these legislation to the context of the sub project under discussion.

No.	Permit/Clearance	Yes	No	TBD	Remarks
1	National Environmental Act		√		

No.	Permit/Clearance	Yes	No	TBD	Remarks
	(Amendment) Act, Certified on 18th August, 2000				
2	Soil Conservation Act		√		
3	Fauna and flora protection ordinance		√		
4	Irrigation (Amendment) Act (No. 48 of 1968)	√			Clearance has been received.
5	Archaeological Ordinance No. 9 of 1940, Acts No.2 of 1955, No. 22 of 1955, No.2 of 1998 and No. 12 of 2005	√			According to the internet searches the site is within the buffer zone (200 - 500 m) therefor, Clearance or NOC is necessary. However, NPC-ID points out that the said site is located at 1.3 km away.
6	Mines & Minerals Act No. 33 of 1992		√		Earth from tank bed and Purchase from licensed supplier
7	Land Acquisition Act, 1950 Land Acquisition Regulations, 2008 National Involuntary Resettlement Policy (RP), 2001		√		Project activities do not include any interventions that will require additional land-acquisition.

Table 4: Applicability of National Laws and Policies

REFERENCE ONLY

4.4. World Bank's Safeguards Policies

Projects and programs funded by IBRD resources need to comply with and satisfy the requirements of the World Bank's operational policies, in addition to conformity with national environmental regulations. The World Bank's safeguards policies triggered under the overall IWWRMP include: OP/BP/GP 4.01: Environmental Assessment, OP/BP 4.04: Natural Habitats, OP/BP 4.36: Forests, OP/BP 4.11: Indigenous people, 4.10: Physical Cultural Resources, OP/BP 4.12: Involuntary Resettlement and OP/BP 4.37: Safety of Dams. However, the relevant policies applicable to the sub project under discussion is shown in Table 5 below.

Safeguard Policies Triggered by the Project	YES	NO	Explanation
Environmental Assessment (OP/BP/GP 4.01) ESS 1 & 2	X		The EESR and ESMP is prepared to comply this policy
Natural Habitats (OP/BP 4.04) ESS 6		X	Not relevant
Forests (OP/BP 4.36) ESS 6		X	Not relevant
Indigeneous Peoples (OP/BP 4.10) ESS 7		X	No such communities are found.
Physical Cultural Resources (OP 4.11) ESS 8	X		According to internet searches, Mutiyankattuwa Wewa Monastic

			Ruins & Buddhist Ruins within 200 to 500 meters. However, NPC-ID reports the site is located well beyond the buffer zone.
Involuntary Resettlement (OP/BP 4.12) ESS 5		X	
Safety of Dams (OP/BP 4.37) ESS 4	X		DSRP clearance available

Table 5: Applicability of WB Safeguard Policies Triggered by the Project

In addition to applicable OP's presented above, the World Bank Group's General Environmental Health and Safety Guidelines, Guidelines on Managing the Risks of Adverse Impacts on Communities from Temporary Project Induced Labor Influx, and Good Practice Note on GBV for low-risk projects, as recommended by the WB's GBV task force, are also applicable for this project and will be followed when relevant.

5. Environment and Social Screening

The Environmental and Social Screening for the sub-projects was undertaken jointly by the PMU safeguard team to ensure a consistent and participatory assessment process. The screening was completed through comprehensive field inspections covering all proposed intervention sites, enabling direct observation of existing environmental and social conditions. In addition, the process was strengthened through both formal and informal consultations with officials of the implementing agency and Farmer Organization (FO) leaders. These consultations provided valuable local insights on site conditions, community concerns, and potential impacts, thereby supporting a more informed and context-specific assessment outcome.

REFERENCE ONLY

A structured environmental and social screening checklist was used to assess the potential impacts of the proposed rehabilitation activities. The results and findings of the screening assessment are attached as **Annexure 01**.

5.1. Preparation of Environmental and Social Management Plan (ESMP)

The proposed rehabilitation interventions are confined entirely within land owned and managed by the Northern Provincial Irrigation Department. All structures identified for rehabilitation are located in close proximity to the downstream section of the spillway and involve the restoration of existing damaged infrastructure within the established project footprint. Consequently, the proposed activities will not require any land acquisition, physical or economic displacement, or involuntary resettlement. Therefore, no adverse impacts related to land acquisition or resettlement are anticipated.

Although the project is expected to generate significant positive benefits through improved irrigation water management, flood control and enhanced agricultural productivity, the implementation of civil works may result in temporary environmental and social impacts during the pre-construction, construction, and operational phases. Potential environmental impacts associated with the proposed rehabilitation works include dust generation, noise and vibration from construction activities, soil erosion and sedimentation resulting from earthworks and excavation, improper management and disposal of construction debris and other waste materials, temporary disturbances to drainage patterns

and downstream water management during spill events, and occupational health and safety risks to workers. These impacts are expected to be temporary, site-specific, and manageable through the implementation of appropriate mitigation measures outlined in the Environmental and Social Management Plan (ESMP). The bridge crossing the spillway is used primarily by maintenance personnel, other officials of the Irrigation Department, and a limited number of authorized users. During the construction period, access across the bridge will be temporarily restricted to the public to ensure the safety of workers and the public and to facilitate the efficient execution of the rehabilitation works.

The project sites are not located within forested areas, wildlife reserves or their designated buffer or reserved zones. Furthermore, no environmentally sensitive ecosystems such as wetlands, critical habitats, or conservation areas have been identified in or around the project locations. However, according to the Internet searches, the Mutiyankattuwa Wewa Monastic Ruins, an archaeological and Buddhist heritage site, is located within a 200–500 m radius of the spillway (Source: Internet).

There are two partially dead trees located within the spillway cushion area, where the proposed rehabilitation works will be carried out. As these trees are situated within the construction footprint and may obstruct the planned works, they will need to be removed prior to the commencement of construction activities.

Findings indicate that most identified construction-related impacts are site-specific, localized, and can be effectively managed through standard mitigation measures. The key issues identified are discussed below, while a summary of the primary environmental and social impacts is presented in the tables that follow. These are supported by the Environmental and Social Screening Checklist (Annexure 1), the Environmental and Social Management Plan (ESMP) (Table 07), and the Emergency Preparedness Plan (ERP) (Annex 09).

REFERENCE ONLY

Accordingly, an Environmental and Social Management Plan (ESMP) has been prepared for the proposed intervention within the defined scope. This ESMP serves as the site-specific environmental and social safeguard instrument to ensure that potential adverse impacts are avoided, minimized, or effectively mitigated through the implementation of appropriate mitigation measures. It also provides a framework for implementing the proposed activities in an environmentally sound and socially responsible manner throughout the project life cycle, while ensuring compliance with applicable environmental and social safeguard requirements.

5.2. Key anticipated Environmental and safety issues and Management

5.2.1. The safety and management of Mutiyankattuwa Wewa Monastic Ruins, an archaeological and Buddhist heritage site.

According to information obtained through internet searches, the proposed rehabilitation site is located approximately 200–500 m southwest of the spillway structure and the main embankment. The project footprint lies adjacent to the boundary of a protected archaeological monument reportedly declared under the Sri Lanka Government Gazette Extraordinary No. 1919 dated 12 June 2015. However, the relevant Gazette notification is not available and, therefore, could not be independently verified during the preparation of this ESMP. In contrast, the Northern Provincial Council Irrigation Department (NPC-ID) reports that the monument is located well beyond the archaeological buffer zone and

approximately 1.3 km from the intervention site. Therefore, a joint field verification with the relevant stakeholders shall be undertaken to verify the NPC-ID's claim. Meanwhile, the PMU has officially communicated with the NPC-ID, requesting that a Clearance or No Objection Certificate (NOC) be obtained from the Department of Archaeology prior to the commencement of any construction works. All conditions, restrictions, and requirements stipulated in the Clearance/NOC shall be strictly complied with throughout the construction period.

In addition, all archaeological protection and chance-find procedure specified in the Environmental and Social Management Plan (ESMP) shall be implemented. In the event of any inconsistency or conflict between the ESMP provisions and the conditions stipulated by the Department of Archaeology, the requirements and directions issued by the Department of Archaeology shall prevail and be fully implemented.

5.2.2. Noise and vibration

Since the proposed rehabilitation site is located in close proximity to a protected archaeological site, construction-induced vibrations may adversely affect nearby monuments and other heritage structures. Therefore, all reasonable measures shall be taken to minimize vibration-generating activities, including impact hammering, operation of vibratory compactors, movement of heavy vehicles, and unloading of heavy construction materials. Construction methods and equipment that generate lower vibration levels shall be adopted wherever practicable, and activities with the potential to cause significant vibration shall be carefully planned, monitored, and controlled to prevent any damage to the archaeological monuments.

REFERENCE ONLY

5.2.3. Tree Removal

Two trees, one partially alive and another dead, are located within the spill cushion area and are currently proposed for removal. However, based on observations made by the PMU, the trees are situated slightly away from the cushion base foot print and partially alive one may be retained without affecting the proposed rehabilitation works. Therefore, partially alive tree shall be preserved wherever technically feasible. Prior to any removal, the Contractor, in consultation with the Engineer, shall assess whether the trees can be safely retained without compromising the rehabilitation works or the structural integrity and safety of the spillway. If removal is unavoidable, all necessary approvals shall be obtained from the relevant authorities.





Figure 4: Two trees identified to remove

5.2.4 Soil Erosion Management

Site preparation activities may result in soil erosion and the transport of sediments into the adjacent canal network, particularly during rainfall or spill events. Appropriate soil erosion and sediment control measures shall therefore be implemented throughout the construction period. These measures may include limiting the extent of exposed soil, providing temporary drainage and sediment barriers, stabilizing disturbed areas, and promptly reinstating exposed surfaces upon completion of the works.

REFERENCE ONLY

5.2.5 Construction Waste Management

The proposed project activities are expected to generate construction debris from the demolition of existing structures and excavation works carried out for foundation preparation. Therefore, all demolition and excavation waste shall be collected and removed promptly upon generation and transported to approved disposal locations designated by the Engineer. Disposal of such materials shall be undertaken in accordance with applicable environmental regulations, site-specific waste management procedures, and the requirements specified in the Environmental and Social Management Plan (ESMP).

5.2.6 Other Waste Management

Given the site's immediate proximity to water body and canals, rigorous waste management protocols are mandatory to mitigate environmental degradation. The unauthorized disposal of polythene, plastic waste, and food refuse into adjacent areas is strictly prohibited, these materials pose a lethal threat to local fauna through ingestion and result in significant habitat degradation. To ensure environmental compliance and site hygiene, all anthropogenic waste generated must be systematically segregated, collected, and transported to an Engineer-approved disposal facility.

5.2.7 Managing of Occupational Safety and Health

All the proposed work includes activities that may pose potential physical and biological risks to workers. The Contractor will conduct detailed field-level risk assessments, including measures for wildlife safety, emergency response, and worker protection, for each work activity/component and prepare activity-specific safe work plans. These assessments and plans will be continuously reviewed and updated in line with the progress of the works, as

per standard construction safety management practice. The approved plan shall be strictly implemented throughout the construction period.

6. Socio-Economic Profile of the Muthiyankaddu Tank

6.1. Landownership Patterns

The legal ownership of the Muthiyankaddu Tank and the canal buffer zones lie with the Provincial Irrigation Department. The catchment area of this tank has not encroached, and all the households are either titleholders or tenants.

6.2. Demographic characteristic

Demographic characteristics shall be described related to the 12 GNDs in Oddusudan DSD where the project affected community is settled under the Muththiyankaddu command area. Table 6 summarize the total population living in the area.

DSD	GND	Population		Male	Female
		Families	Members		
Oddusudan	Muththuaiyankaddukulam (MUL /55)	399	1260	366	624
	Muthuvinayagapuram (MUL /60)	300	923	452	471
	Thaddayarmalai (MUL/ 63)	270	819	409	410
	Oddusuddan (MUL /61)	412	1219	579	640
	Kanagarathinapuram (MUL /56)	137	449	218	231
	Katchilaimadu (MUL /59)	334	1020	501	519
	Ganeshapuram (MUL /64)	89	257	129	128
	Vithyapuram (MUL /65)	328	1054	519	535
	Pandaravanni (MUL/ 58)	160	491	257	234
	Peraru (MUL/57)	118	380	204	176
	Puliyankulam (MUL/67)	20	48	23	25
	Karuvelankandal(MUL/66)	133	390	195	195
Total		**2700**	**8310**	**3852**	**4188**

REFERENCE ONLY

Table 6: Population based on gender in the project area

Source Data: Resource Profile Oddusuddan DSD / District Profile 2025

The project area comprises 8,310 persons across 2,700 households distributed unevenly across 12 GN divisions, with 55% concentrated in four primary settlements (Muththuaiyankaddukulam, Oddusuddan, Vithyapuram, Katchilaimadu) and the remainder dispersed in smaller communities.

The female-biased population (53.7%, with significant female concentration indicating female-headed households) and average household size of 3.08 persons require differentiated engagement strategies: large-scale public consultations in population-dense

areas, targeted outreach to dispersed settlements, and gender-sensitive mechanisms ensuring minimum 20% women's representation in the Grievance Redress Committee.

6.3. Socio-Cultural Context

DSD	GND	Sinhala	SL Tamil	Moors	Buddhist	Hindu	Roman Catholic	Christian	Islam
Oddusudan	Muthuiyankaddukulam	4	1220	33	4	1116	1	54	37
	Kanagaradnapuram		406	43		390		16	43
	Peraru		380			365	9	6	
	Pandarawanni		491			436	26	29	
	Katchilaimadu		1020			988		32	
	Muththuvinayagapuram	1	922		1	907		15	
	Oddusuddan	6	1213		6	949	7	257	
	Thaddyamalai		819			707	35	107	4
	Kanesapuram		257			238	19		
	Viththiyapuram		1054			1000		54	
	Karuvelankandal		385	5		379		6	5
	Puliyankulam		391			522		25	
Total		**11**	**8558**	**81**	**11**	**7997**	**97**	**601**	**89**

Table 7: Population distribution based on ethnicity and religion in the project area

Source Data: Resource Profile Oddusudan DSD / District Profile 2025

REFERENCE ONLY

The proposed rehabilitation works at the Muththiyankaddu Tank (bund and spillway) in the Oddussudan Divisional Secretariat Division are situated within a predominantly homogeneous community characterized by low ethnic and religious diversity. This socio-demographic context presents both strengths and considerations for project implementation. with more than 95% of the population comprising Sri Lankan Tamils and predominantly adhering to Hinduism, the project area reflects a cohesive social structure supported by well-established community institutions and a stable population largely dependent on shared irrigation resources. This homogeneity significantly reduces the likelihood of ethnic or religious conflicts and provides a strong institutional and social foundation for effective project planning and implementation.

6.4. Cultivation Patterns

S/N	Season	Details Cultivation		Total
		Paddy (ha/ac)	OFC (ha/ac)	
1	Maha	5680.5	431.5	6112.0
2	Yala	5485.0	953.0	6439.5
			Total	**12,551.5**

Table 8: Details of Cultivation 2026

(Source: FGD with DIE Staff, Muththiyankaddu)

Agricultural activities are closely aligned with Sri Lanka's two main cultivation seasons:

- Maha Season: Approximately 5680.5 Paddy (ha/ac) & 431.5 OFC (ha/ac) are cultivated
- Yala Season: Approximately 5485 Paddy (ha/ac) & 953 OFC (ha/ac) are cultivated

Irrigation Criticality: With approximately 90% of cultivation dependent on tank irrigation, any water availability reduction poses severe livelihood threats. Project must ensure zero service interruption during rehabilitation.
Crop Diversification: Yala season's 121% increase in OFC cultivation indicates farmers actively pursue higher-value crops when irrigation permits. Rehabilitation will enable expanded dry season cultivation and income enhancement. Productivity Potential: Current cultivated area of 12,551.5 Acres.

6.5. Farmer Organizations and Livelihood Dependence on the Proposed Intervention

The proposed rehabilitation works are closely linked to the functioning of local farmer organizations and their livelihoods, as these communities depend heavily on the canal system for irrigation and agricultural production.

REFERENCE ONLY

Name of FO		GNDs	Number of Members in FO	Number of Farmer Families in FO
1	RB Tank 1	Muththuvinayakapuram	127	145
2	RB Tank 2	Muththuvinayakapuram	135	140
3	RB Tank 3	Katchchilaimadu	110	125
4	Peraru	Peraru		135
5	Pandaravanni	Pandaravanni	190	140
6	Katchilamadu	Katchchilaimadu		
7	RB Track 5 Puliyankulam	Puliyankulam	65	122
8	RB Track 5 Girls Farm	Puliyankulam	25	11
9	RB Track 6 & 7	Karuvelankandal	100	120
10	Thaddayamalai	Thaddayamalai	140	125
11	Ganeshapuram	Ganesapuram	73	73
12	Viththiyapuram	Viththiyapuram	60	30
13	LB Track 1	Muththaiyankaddukulam	160	200
14	LB Track 2	Kanakaratnapuram	137	128
15	LB Track 3	Mannakandal	125	115
16	Mannakandal	Mannakandal	150	70
17	Jeewanagar	Muththaiyankaddukulam	142	142
18	90 Acre Lift Irrigation	Muththaiyankaddukulam		

Table 9 - Details of the Farmer organizations

The local economy is predominantly agriculture-based, with farming serving as the principal source of income for the majority of households. Paddy cultivation is the dominant agricultural activity, supplemented by the cultivation of Other Field Crops (OFCs). The Muththayankattu Irrigation Scheme encompasses 1,650 farmer families, organized into 18 Farmer Organizations.

Table 9 summarizes total number of members, families included under each FO, and these details were obtained by contacting the office bearers of each FO during the consultation session had with presence of IE of the Muthiyankattu scheme.

At present the cultivation pattern is determined by the community as per the amount of rainfall available in the area. Although the system is prepared for the OFCs, due to lack of drainage water conveyance system in the downstream area of the Muthiyankattu scheme, if sufficient water is available, farmers tend to do paddy cultivation. When the rainfall becomes lower, farmers move to OFCs such as Groundnuts, Cowpea, Maize corn, Green Grams, B-Onions and seasonal vegetable varieties, chillies, tomato etc. Farmers prefer to cultivate OFCs due to a higher return on investment in a shorter period compared to paddy cultivation, as well as it will save more water for a higher extent of lands.

Muththiyankaddu Tank (bund and spillway) will result in the restoration of the tank bund to its original design profile, with enhanced structural stability. The placement of riprap on the water-side slope will provide effective protection against erosion and wave action, thereby increasing the durability of the bund and reducing the risk of breaches during monsoon periods. Overall, these interventions will enhance irrigation efficiency, improve agricultural productivity, strengthen resilience to flood events, and support sustainable water management in the project area.

REFERENCE ONLY

6.6. Sources of Livelihood in the Project Area

The primary source of livelihood in the project area is agriculture, including crop cultivation and livestock rearing, which accounts for approximately 50% of the total population. Farming activities are highly dependent on the irrigation system, making water availability a critical factor for sustaining livelihoods.

The second largest employment category, representing about 30% of the population, consists of individuals engaged in both skilled and unskilled wage labor. These include construction work, casual labor, and other informal sector activities that provide supplementary income to households.

During the last Ditwah flood event, the residential area was affected due to flood impacts, causing inconvenience and risks to nearby households. In addition, agricultural lands in Vasanthapuram village were fully affected, resulting in damage to cultivated areas and disruption to farming activities. The flood impacts significantly affected local livelihoods, particularly communities dependent on irrigation-based agriculture.

The remaining population is engaged in formal employment, particularly in the government sector, including professions such as teaching, administrative services, and other public sector occupations. A smaller proportion is also involved in small-scale businesses and self-employment activities.

6.7. Vulnerable Social Groups in the Project Area

The level of poverty in the Oddusudan Divisional Secretariat Division (DSD) remains relatively high, largely due to the lack of stable and permanent livelihood opportunities. This situation is further aggravated by the deteriorated condition of the existing irrigation infrastructure, which limits agricultural productivity and income stability.

According to 2025 records from the Oddusudan DSD, several vulnerable groups have been identified within the project area. These include approximately 1,277 widowed individuals, 782 female-headed households, 663 persons with disabilities, and 482 orphans. In addition, around 686 households are registered as beneficiaries under the Samurdhi social welfare program.

These vulnerable groups are particularly at risk due to limited access to resources, reduced income-generating opportunities, and higher dependency on social assistance. Therefore, special attention is required to ensure that project interventions are inclusive and provide equitable benefits, while minimizing any adverse social impacts on these communities.

6.8. Proposed Rehabilitation of Muththiyankaddu Tank Spillway and Bund and Social Benefits

The proposed rehabilitation of the Muththiyankaddu Tank spillway and bund aims to restore the structural integrity and operational reliability of the irrigation system, which has been significantly affected by prolonged exposure to hydraulic pressure, erosion, and extreme flood events. The existing spillway infrastructure has experienced severe deterioration, including damage to the spill cushion, retaining walls, training bunds, downstream drop structures, and channel protection works. These deficiencies have reduced flood conveyance capacity, increased erosion and seepage risks, and affected the reliability of irrigation water supply to farming communities.

REFERENCE ONLY

The rehabilitation project will involve the reconstruction and strengthening of damaged spillway components, improvement of energy dissipation structures, restoration of training bunds, stabilization of downstream channels, implementation of seepage control measures, and restoration of the spillway's full hydraulic capacity. These interventions will enhance flood management capacity, improve structural stability, reduce water losses, and ensure the safe and sustainable operation of the Muththiyankaddu Tank irrigation scheme.

From a social and livelihood perspective, the project will provide significant benefits to communities dependent on agriculture and irrigation-based livelihoods. The current condition of the spillway and associated structures has resulted in uncertainty in water availability, reduced irrigation efficiency, increased flood risks, and impacts on agricultural productivity and cropping intensity. By restoring the functionality of the irrigation system, the project will ensure more reliable seasonal water distribution and improve access to irrigation services for local farmers.

Furthermore, improved flood protection and downstream stabilization measures will reduce risks to agricultural lands, community assets, and public infrastructure, thereby enhancing community resilience to future climate-related events. Seepage control and improved water management will contribute to efficient water utilization, increased agricultural productivity, and improved farm incomes. The replacement of temporary protection measures with durable engineering solutions will minimize maintenance interruptions and ensure long-term operational sustainability.

Overall, the rehabilitation of the Muththiyankaddu Tank spillway and bund will strengthen dam safety, enhance irrigation reliability, support sustainable agricultural development, and improve livelihood security among local communities. The project will contribute to increased community resilience, economic stability, and long-term rural development in the project area.

6.9. Livelihood Mitigation Measures for Muththiyankaddu Tank Spillway and Bund Rehabilitation

The local economy in the Muththiyankaddu Tank command area is predominantly dependent on agriculture, with paddy cultivation and Other Field Crops (OFCs) serving as the main livelihood activities. The irrigation scheme supports a large farming community organized through Farmer Organizations. Since the proposed rehabilitation works involve spillway reconstruction, bund strengthening, downstream protection improvements, and associated hydraulic works, temporary impacts may occur due to construction activities, access restrictions, and possible changes in irrigation water management.

The construction period is planned from July to November, which generally falls outside the major cultivation season, thereby minimizing potential impacts on agricultural activities. However, appropriate livelihood mitigation measures will be implemented to avoid or reduce any temporary disruption and ensure continued support to farming communities.

REFERENCE ONLY

6.9.1. Minimizing Temporary Impacts on Irrigation Water Availability

The Muththiyankaddu Tank rehabilitation project recognizes the importance of reliable irrigation water supply for agriculture-based livelihoods in the project area. Since the proposed construction activities will be implemented during the July–November (Off Season) period, the work schedule will be planned to minimize impacts on major cultivation activities. Coordination will be maintained with the Irrigation Department and Farmer Organizations to ensure appropriate water management arrangements and maintain essential water availability where required during the rehabilitation period.

6.9.2. Coordination with Agricultural Seasons and Cultivation Planning

The construction activities will be aligned with the Maha and Yala cultivation calendars to avoid significant disruption to paddy and Other Field Crops (OFC) cultivation. Farmers will be informed in advance about construction schedules, possible impacts, and expected water availability conditions to support effective cultivation planning.

6.9.3. Support for Potential Agricultural Income Losses

Where temporary impacts on cultivation opportunities cannot be avoided, suitable livelihood support measures will be considered in consultation with affected farmers.

6.9.4. Improvement of Irrigation Reliability and Agricultural Productivity

The rehabilitation of the spillway and bund will restore reliable water conveyance capacity, improve flood management, reduce water losses, and ensure a more stable irrigation supply. These improvements will support increased cropping intensity, enhance agricultural

productivity, and reduce uncertainties associated with seasonal water availability for farming communities.

6.9.5.Maintaining Access to Irrigation Facilities and Agricultural Areas

During the construction period, access to irrigation facilities, agricultural lands, and operational areas of the Muththiyankaddu Tank scheme will be maintained to ensure uninterrupted farming activities and routine irrigation management. The existing access road and bund roads associated with the irrigation system are not used for public transportation; therefore, construction-related traffic management will focus on maintaining safe access for farmers, irrigation staff, contractors, and project personnel.
Continuous consultation will be maintained with the 18 Farmer Organizations, Irrigation Department, and other relevant stakeholders throughout the construction period. Farmers will be regularly informed about project progress, construction schedules, potential impacts, and mitigation measures. This participatory approach will ensure effective communication and community involvement throughout project implementation.

6.9.6. Local Employment Opportunities During Construction

The project will promote local economic benefits by providing priority for local labor recruitment, including farmers and vulnerable community members, for suitable construction activities. Potential employment opportunities will include earthwork, bund rehabilitation, vegetation clearing, material handling, and protection works, thereby providing temporary income opportunities for local households.

6.9.7. Support for Vulnerable Farming Households

Special attention will be given to vulnerable households, including small-scale farmers and families highly dependent on irrigation-based agriculture. Such households will be identified through community consultations

REFERENCE ONLY

6.9.8. Protection and Restoration of Agricultural Resources

Construction areas will be clearly identified and managed to avoid unnecessary impacts on cultivated lands, irrigation channels, and community resources. Any temporary disturbance caused by construction activities will be minimized, and affected areas will be restored to their original condition after completion of the works.

6.9.9. Reduction of Flood Risks and Enhancement of Community Resilience

The strengthening of spillway structures, training bunds, downstream protection works, and energy dissipation facilities will improve flood management capacity and reduce risks to agricultural lands, public infrastructure, and community livelihoods. These improvements will enhance the resilience of local communities against future extreme rainfall and flood events.

6.9.10. Strengthening Post-Rehabilitation Water Management

After completion of rehabilitation works, Farmer Organizations will be supported to strengthen participatory water management practices. This will include efficient irrigation

scheduling, equitable water distribution among farmers, routine maintenance of irrigation structures, and improved coordination between farmers and irrigation authorities.

6.9.11. Long-Term Improvement of Agricultural Livelihoods

The improved performance of the Muththiyankaddu Tank spillway and irrigation system will support sustainable paddy and OFC cultivation, increase agricultural productivity, enhance farm income, and strengthen livelihood security among farming households. The project will contribute to long-term rural development by ensuring reliable irrigation services, improved agricultural resilience, and sustainable management of water resources.

The rehabilitation of the Muththiyankaddu Tank spillway and bund is expected to generate significant long-term livelihood benefits by restoring irrigation reliability, improving flood protection, and strengthening agricultural productivity. Although temporary impacts may occur during the construction period, these will be minimized through careful scheduling of activities during the July–November on-major cultivation period, advance consultation with Farmer Organizations, seasonal planning, maintenance of agricultural access, and provision of appropriate livelihood support measures where required.

Continuous engagement with farming communities, Irrigation Department officials, and relevant stakeholders will ensure that rehabilitation activities are implemented in a socially responsible manner while maximizing benefits to local agricultural livelihoods. The improved irrigation reliability and enhanced structural safety of the tank will contribute to increased cropping opportunities, improved farm incomes, and greater resilience of local communities to future climate-related risks.

REFERENCE ONLY

6.9.12. Grievance Redress Mechanism (GRM)

- A formal grievance redress mechanism will be established to allow farmers and community members to report issues during project implementation.
- All complaints will be properly recorded, reviewed, and addressed in a timely manner, ensuring transparency, accountability, and responsiveness.

Overall, these measures will ensure that potential livelihood disruptions are minimized while enhancing the long-term sustainability and resilience of agricultural activities in the project area.

7. Public Consultation and Disclosure

7.1. Introduction

The key information related to the Muthiyankattu downstream canal rehabilitation work and related information was collected by consulting the Irrigation department officials including the engineers in the Project Management Unit (PMU) of IWWRMP and the NPC-ID Irrigation Engineers in the site level. The list of consultation is attached as Annex 2.

The key focus group discussions were held with the representatives of the 18 Farmers Organizations under the Muthiyankattu irrigation scheme to understand their stand on the rehabilitation requirements and other issues that were not surfaced during the official consultations.

7.2. Matters Discussed

A pre-construction public consultation and disclosure meeting for the Muththiyankaddu Tank Spillway and Bund Rehabilitation Project was conducted on 23.06.2026 with the participation of representatives from the Project Management Unit (PMU), farmer community leaders, Farmer Organizations (FOs), and Northern Province Irrigation Department (NPC-ID) officials.

The consultation was conducted to provide project-related information to affected stakeholders, ensure transparency, disclose environmental and social safeguard requirements, and obtain feedback from the community prior to commencement of construction activities.

The meeting focused on the proposed rehabilitation plan, scope of work, construction arrangements, potential temporary disturbances, social safeguard requirements, grievance mechanisms, and expected benefits of the project.

7.3. Disclosure of Project Information

During the consultation, the PMU and NPC-ID officials explained the nature and extent of the proposed rehabilitation works, including:

- Reconstruction and improvement of the spillway structure.
- Rehabilitation of the spill cushion and energy dissipation arrangements.
- Strengthening of spill training bunds.
- Reconstruction of damaged retaining walls.
- Improvement of downstream protection works.
- Implementation of seepage control measures.

The expected construction commencement date, project duration, implementation arrangements, and possible temporary disturbances during the construction period were explained to farmers and community representatives.

Information was disseminated through multiple communication methods, including:

- Farmer Organization meetings.
- Community consultations.
- Notice boards.
- Verbal communication by NPC-ID field officers.
- Meetings with community leaders and relevant government officials.

The consultation process ensured that stakeholders had adequate opportunity to understand the project scope and provide feedback.

REFERENCE ONLY

7.4. Land Ownership Verification and Social Safeguard Assessment

During the project preparation stage, land ownership verification, livelihood impact assessment, resettlement screening, and vulnerable group identification were undertaken.

The assessment confirmed that:

- The proposed rehabilitation work area is entirely owned and managed by the Northern Province Irrigation Department (NPC-ID).
- No private land acquisition is required for project implementation.
- No physical displacement or involuntary resettlement will occur.
- No livelihood restoration measures related to land acquisition are required.

These findings were verified through land ownership records, government certification, and community-level consultations conducted in the project area.

7.5. Disclosure of Social and Environmental Safeguards

The PMU provided an overview of the applicable social and environmental safeguard requirements and emphasized that these measures would be implemented throughout the project cycle.

Stakeholders were informed about:

- Environmental and Social Management Plan (ESMP) requirements.
- Contractor responsibilities for environmental and social compliance.
- Community health and safety measures.
- Construction-related risk management.
- Grievance Redress Mechanism (GRM) procedures.

Environmental safeguard measures and monitoring arrangements were disclosed through ESMP-related consultation meetings to ensure stakeholder awareness and participation.

7.6. Grievance Redress Mechanism (GRM) Disclosure

The Grievance Redress Mechanism was explained to all participants during the consultation. Stakeholders were informed that grievances, suggestions, or concerns related to project implementation could be submitted through the established GRM system.
GRM contact details and procedures were communicated through:

- Notice boards.
- Announcement letters.
- Community meetings.
- Direct communication with NPC-ID and PMU officers.

REFERENCE ONLY

7.7. Discussion on Flood Impacts and Existing Spillway Damage

During the consultation, farmers shared information regarding the damage caused by the extreme flood event associated with Cyclone Ditwah.
Farmers were informed that exceptionally heavy rainfall generated unprecedented flood inflows into the reservoir. Rainfall records indicated 342 mm at Muththiyankaddu and 365 mm on 28 November, resulting in extremely high flood discharge through the spillway.

The major damages caused by the flood event were explained as follows:

- The left-bank spill training bund between the first and second drop structures was breached.
- The training bund between the second and third drop structures was partially breached.
- Severe scour erosion occurred downstream of the stilling basin due to the hydraulic jump forming beyond the existing concrete spill cushion.
- High-velocity flood flows caused erosion along the spillway channel.
- Rubble protection was displaced in several locations.
- Overtopping occurred at sections of the retaining wall.
- The gravel layer on the bund crest was eroded.

The need for rehabilitation to restore safe flood discharge capacity and improve long-term irrigation system reliability was discussed with the community.

7.8. Community Concerns and Feedback

During discussions with farmers and community representatives, stakeholders confirmed that:

- Economic and cultural activities would not be adversely affected by the project.
- Existing livelihood activities would remain unaffected.
- No loss of livelihood sources was anticipated.
- No land acquisition or involuntary resettlement would occur.
- No environmental or social issues were identified at the consultation stage.
- No access-related challenges were anticipated during rehabilitation activities.

Farmers confirmed their understanding of the proposed project activities, construction arrangements, and safeguard requirements.
The PMU clarified that temporary construction-related impacts would be managed through regular consultations, contractor supervision, traffic management arrangements, and implementation of ESMP mitigation measures.

7.9. Project Benefits Discussed with the Community

The expected social and livelihood benefits of the rehabilitation project were explained during farmer meetings and community discussions.

The project is expected to contribute to:

- Improved reliability of irrigation water supply.
- Increased agricultural productivity.
- Reduced flood risks to downstream communities and agricultural lands.
- Improved water distribution efficiency.
- Reduced seepage and water losses.
- Enhanced resilience of farming communities against climate-related extreme events.

REFERENCE ONLY

Farmers expressed their support for the proposed rehabilitation works and recognized the importance of restoring the spillway system.

7.10. Conclusion

The public consultation and disclosure process confirmed strong stakeholder acceptance and support for the Muththiyankaddu Tank Spillway and Bund Rehabilitation Project.

The consultation ensured that farmers, community leaders, and relevant stakeholders received adequate information regarding project objectives, construction arrangements, safeguard requirements, grievance mechanisms, and expected benefits.

No objections, land-related disputes, or resettlement issues were reported during the consultation. Land verification confirmed that the project area is owned by NPC-ID, and no private land acquisition is required.

The PMU will continue stakeholder engagement throughout the project implementation period through regular consultations, GRM monitoring, and disclosure of relevant project information. The project will be implemented in accordance with

environmental and social safeguard requirements to ensure sustainable benefits for the farming community and surrounding areas.

8. Emergency Preparedness Plan (EPP)

A common Emergency Preparedness Plan (EPP) is provided for reference. The contractor shall prepare a site-specific EPP based on this outline. The objective of the EPP is to establish a structured response system to manage emergencies related to dam operations, head works structures, and canal networks, with the aim of minimizing risks to life, property, and the environment.

Potential Emergency situations

- Sudden uncontrolled water release due to structural failure (Head works / canal breach / bund failure) - Refer Annex 9.1
- Wildlife attack - Refer Annex 9.2

9. Institutional arrangements for the implementation of ESMP and Reporting

The implementation of the Environmental and Social Management Plan (ESMP) is led by the Project Management Unit (PMU), which holds overall responsibility for ensuring compliance with environmental and social safeguards, integrating mitigation measures into project planning, and reporting to the World Bank. Within the PMU, the Environmental Officer oversees environmental aspects, while the Social Officer manages social safeguards, community engagement, grievance redress, and labor compliance. The Implementing Agency (IA) serves as the primary link between the PMU and the contractor, reviewing implementation plans, monitoring compliance during project execution, and coordinating reporting and corrective actions. To ensure ground-level compliance, the contractor is required to appoint a suitably qualified, full-time Environmental, Social, and Safety (ESS) Officer. This officer is responsible for daily on-site implementation, maintaining occupational and community safety, managing grievances, and conducting regular inspections and staff training.

REFERENCE ONLY

Technical guidance is provided by Environmental and Social Specialists, who advise the PMU, IA, and contractor on best practices and risk mitigation while supporting capacity building. The reporting structure follows a clear hierarchy: the contractor's ESS Officer prepares monthly reports using PMU-provided monitoring tools and submits them through the IA. These monthly reports are reviewed by the PMU's Environmental and Social Officers, who then prepare quarterly reports for the Deputy Project Director (DPD). Finally, the specialists consolidate these findings into biannual reports for submission to the World Bank. This organized arrangement ensures effective coordination and accountability at every level, guaranteeing the proper implementation of all environmental, social, and safety measures.

a) Important Documents Should Maintain at the Work Site

- Environment and Social Management Plan (ESMP)
- Tree Removal Guideline
- Risk assessment and Health and Safety plan
- Emergency Preparedness Plan

- Signed Code of Conducts (Annex 4)
- Log Book
- Complain / Grievances Record Book
- Accident Record Book
- Borrow Material Licenses

b) Budget

Most of the mitigation measures outlined in the ESMP are considered incidental to the construction activities and are therefore deemed to be included within the contractor's scope of work and contract rates. However, the costs identified in the ESMP shall be treated as specific mitigation costs, which must be adequately accounted for, budgeted, and implemented to ensure effective compliance with environmental and social safeguard requirements.

Description	Cost (Rs.)
Environmental, Social and Safety Officer for 12 months (Rs. 100,000.00 x 12)	1,200,000.00
General mitigation works (including safety measures, signage, operational expenses for the GRM etc.)	500,000.00
Total	**1,700,000.00**

REFERENCE ONLY

10. Grievance Redress Mechanism (GRM)

Large-scale development projects can significantly impact local communities. These impacts may include social and environmental challenges, as well as issues related to entitlement to resettlement benefits. Concerns may also arise from construction activities such as site clearing, excavation, compaction, and blasting. While good planning, project implementation, and effective community consultation can address many of these issues, some grievances may remain unresolved at the local level. To handle such cases effectively and avoid reliance on time-consuming and costly legal processes, establishing a formal Grievance Redress Mechanism (GRM) is recommended.

10.1. Objectives of the GRM

The primary goal of the GRM is to minimize, mitigate, or compensate for adverse project impacts on the environment and affected communities. It aims to:

- Resolve grievances through mutual understanding and consensus among relevant stakeholders.
- Ensure compliance with the Safeguard Policy of the World Bank.
- Provide a structured process for addressing grievances related to the project.

10.2. Proposed Grievance Redress Mechanism

- The GRM is structured as a three-tier system operating at the following levels:
- Local Level (Grama Niladhari Level)
- Divisional Level (Divisional Secretary Level)
- National Level (Ministry Level)

Each level has a Grievance Redress Committee (GRC) composed of relevant stakeholders to address grievances at the appropriate scale.

- **Grama Niladhari (GN) Level GRC**

This is the first level of grievance resolution, focused on resolving issues at the site level. The committee is composed of both government and community representatives to address grievances amicably.

Position	Role
Grama Niladhari of the area	Chairman
Representative from the PMU Site Office	Secretary
Technical officer (NPC-ID) from each project area	Member
Representative of the Contractor	Member
Representative of a local NGO/CBO	Member
Community or religious leader	Member

- **Divisional Secretary (DS) Level GRC**

This committee handles grievances unresolved at the GN level. It provides administrative support and reviews appeals from the GN-level committee.

REFERENCE ONLY

Position	Role
Divisional Secretary or representative	Chairman
Representative from the PMU Head Office	Secretary
Irrigation Engineer (NPC-ID) from each project area	Member
Grama Niladhari of the area	Member
Representative from a local NGO/CBO	Member
Respected religious leader or community leader	Member

- **National Level GRC**

The national-level GRC is located within the Ministry of Irrigation and addresses appeals from lower-level committees. It also provides overall guidance and supervision of the GRM.

Position	Role
Additional Secretary, Ministry of Irrigation	Chairman
Project Director of the PMU	Secretary
Representative of the NPC-ID	Member
Representative of the Construction Firm (if necessary)	Member
District Secretary or nominee	Member
Divisional Secretary or nominee	Member
Representative from a national NGO/CBO	Member

- **Issues Addressed by the GRM**

The GRM will address a range of issues, including:

- Eligibility for resettlement or livelihood support benefits.
- Construction-related grievances such as dust, noise, and vibration.
- Loss of access or damage to public and private property.

- Disruption caused by storage of construction materials.

• Awareness and Communication

To ensure the effectiveness of the GRM, its procedures must be clearly communicated to all stakeholders. Awareness efforts should include:

- Explaining the scope and phases of the project.
- Outlining GRM procedures and eligibility criteria.
- Providing contact details and submission methods (phone, email, postal).
- Displaying information in public spaces like government offices and community centers.

• GRM Implementation Steps

The following steps outline the GRM process:

- Assign focal points.
- Receive and register complaints.
- Screen and refer complaints to appropriate bodies.
- Coordinate with other GRMs/agencies as needed.
- Assess the complaint.
- Formulate a response.
- Select a resolution approach.
- Implement the resolution.
- Track, document, and evaluate the outcomes.

REFERENCE ONLY

• Coordination with Other Agencies

Effective GRM implementation requires coordination with various stakeholders, including affected parties, implementing agencies, and funding bodies. A central body should be designated to:

- Facilitate case referrals.
- Track and monitor grievance resolutions.
- Maintain a centralized database.
- Provide feedback and progress reports.
- Conduct capacity-building programs for GRM members.
- Liaise with media to ensure transparency.

By following these structured procedures and ensuring stakeholder awareness, the GRM can effectively resolve grievances and foster trust among affected communities and project implementer.

11. References

1. Environmental and Social Screening Report (ESSR) & Environmental and Social Management Plan (ESMP) of Rehabilitation of Muththuiyankattu Tank Downstream Infrastructure
2. Resource Data, Irrigation Office, Muththuiyankattu DIE Office, Oddusuddan
3. Resource Profile, Divisional Secretary Offices, Oddusuddan
4. Geological Survey and Mines Bureau, Sri Lanka.
5. Fauna and Flora Protection Ordinance (Amended) Act No 49 of 1993, Sri Lanka.
6. Forest Ordinance, (AMENDMENT) Act, No. 65 of 2009, Sri Lanka.

7. National Environmental (Amendment) Act, Certified on 18th August 2000, Sri Lanka.
8. Soil Conservation (Amendment)Act No. 24 of 1996, Sri Lanka.
9. Coast Conservation Act No 57 of 1981, Sri Lanka.
10. Local Authority Act No.23 of 1992, Sri Lanka.
11. Irrigation (Amendment) Act (No. 48 of 1968), Sri Lanka.
12. Archaeological Sites of National Importance Act No 16 of 1990, Sri Lanka.
13. Agrarian Development Act No. 46 of 2000 (Section 32), Sri Lanka.
14. Mines & Minerals Act No. 33 of 1992, Sri Lanka.
15. Felling of Trees Control Act No. 9 of 1951 as amended through Act No. 30 of 1953, Sri Lanka.
16. Land Acquisition Act, 1950 Land Acquisition Regulations, 2008 National Involuntary Resettlement Policy, 2001, Sri Lanka.

REFERENCE ONLY

12. Environmental and Social Management Plan (Table 07)

	Activities and Associated Impacts	Protection and preventive measures	Mitigation cost	Responsibility	
				Implementation	Monitoring
Design Stage / Planning stage					
1	**Construction foot print and construction window**	▪ To minimize environmental and social impacts, both the permanent and temporary footprints, as well as the construction window, will be kept as small as possible. ▪ Parallel workflows will be scheduled to keep the construction window as short as possible.	Design Cost	IA	IA/PMU
2	**Identification of safe stock piling areas, burrowing pits, vehicle parking etc.**	▪ Stockpiling and vehicle parking sites will be identified before and located within the temporary footprint, specifically chosen to ensure safety. ▪ All temporary construction facilities, including stockpiling areas, material storage yards, labour camps, and equipment parking areas, shall be located outside the archaeological buffer zone and, wherever practicable, on the side opposite the protected monument. ▪ Haulage routes for the transport of construction materials shall be planned, as far as practicable, to avoid the archaeological buffer zone and minimize disturbance to protected heritage features. Routes shall also be selected and managed to prevent traffic congestion, collisions, and obstruction to public access.	Design Cost	IA	IA/PMU
3	**Disposal sites are identified**	▪ In compliance with prevailing laws, disposal sites for demolition waste (concrete and spoil) and construction waste must be identified and certified by the Engineer to ensure safe waste management.	Design Cost	IA	IA/PMU
4	**The correct estimate of filling materials and supply management.**	▪ Fill material estimates will be calculated with high precision to prevent over-extraction and minimize surplus waste. ▪ Supply chains will be scheduled to ensure just-in-time delivery and meet project requirements.	Design Cost	IA	IA/PMU

PREFERENCE ONLY

	Activities and Associated Impacts	Protection and preventive measures	Mitigation cost	Responsibility	
				Implementation	Monitoring
Pre-Construction/Site preparation phase					
1	**Site Access Closure**	▪ A clearly visible public notice board in all three languages shall be maintained at the site entrance, displaying project specifics, implementing agency details, cost, time period, funding agency, contractor details and emergency contact numbers, alongside mandatory safety signage to prevent unauthorized access. ▪ The site boundary shall be secured with soft or hard barricades to prevent unauthorized entry by people or animals.	Engineering Cost	IA the Site in collaboration with the IA/PMU	IA/PMU
2	**Tree Removal**	▪ Existing trees shall be retained wherever technically feasible. The Contractor shall review the final construction layout and methods to minimize the need for tree removal. ▪ Work areas shall be confined to the approved construction footprint, and unnecessary clearing of vegetation shall be strictly prohibited. ▪ No tree shall be removed without the prior written approval of the Engineer and the Project Management Unit (PMU). ▪ The Contractor shall submit a tree removal request identifying the species, diameter, condition (alive/dead), location, justification for removal, and proposed compensatory planting measures.	Engineering Cost	Contractor	IA/PMU
3	**Material Sourcing**	▪ The contractor shall ensure that all construction materials are identified and verified in collaboration with the IA's Site Engineer. ▪ Quarry and earth materials must be sourced from licensed operators. ▪ If the contractor operates their own site, they must obtain all necessary permits and licenses. The contractor will ensure that the burrow area is rehabilitated on completion	Engineering Cost	Contractor	IA/PMU

REFERENCE ONLY

	Activities and Associated Impacts	Protection and preventive measures	Mitigation cost	Responsibility	
				Implementation	Monitoring
		of burrowing for the given civil works. ■ The contractor must maintain and provide all licenses and environmental clearances for sourced materials—including soil, fine, and coarse aggregates—for inspection by implementing agencies. ■ Sourcing materials from protected areas, designated natural sites, or tank beds is strictly prohibited. ■ The Contractor shall submit to the Engineer, on a quarterly basis, a written report detailing the status of all prerequisite licenses, including copies, registration numbers, and all other relevant documentation.			
4	**Work Site Management**	■ Material and equipment storage areas must be pre-identified by the Contractor, approved by the Engineer, and demarcated as per the site plan. At a minimum, these areas must be fenced and covered ■ The Contractor shall ensure all parking and maintenance of vehicles and equipment are restricted to the work site or areas approved by the Engineer ■ The Contractor must ensure all company and hired drivers and operators are instructed to use only the designated areas for parking and storage. ■ Good housekeeping shall be maintained throughout the construction site. The Contractor is responsible for ensuring that all work areas are kept tidy, materials are properly stored, waste is regularly removed, and access routes are kept clear at all times.	Engineering Cost	Contractor	IA/PMU
5	**Labor Training and Code of Conduct**	■ All personnel, including laborers, shall strictly adhere to a Code of Conduct that mandates professional behavior, respect for local communities, environmental protection, and adherence to safety protocols. ■ The Contractor shall conduct induction training for all staff	Engineering Cost	Contractor	IA/PMU

REFERENCE ONLY

	Activities and Associated Impacts	Protection and preventive measures	Mitigation cost	Responsibility	
				Implementation	Monitoring
		and establish a system for regular training and awareness programs for all laborers, in accordance with the ESMP. Training topics shall include the project Code of Conduct, GBV awareness, environmental management, and site safety protocols. ■ No staff shall be permitted to commence work unless they have undergone EHS induction. ■ The Contractor must ensure that no person under the legal minimum age is employed on the project, maintaining a strict verification protocols.			
6	**Information Disclosure among Stakeholders**	■ A copy of the ESMP and all other relevant reports shall be maintained at the project office at all the time. ■ The Contractor shall maintain a log of all grievances/complaints, including the actions taken for their resolution. ■ Provide nearby communities with basic project information, including scope of work, schedule, and potential impacts and share contact details for inquiries and complaints.	Engineering Cost	Contractor/IA/ IA/PMU	IA/PMU
Construction/Intervention Phase					
1	**Disposal of Debris and Spoil**	■ The contractor shall reuse or recycle all suitable materials, either directly or through third-party vendors. Use all debris, leftover spoil, and excess earth to refill burrow areas as directed by the engineer. ■ Dispose of all debris, leftover earth, and waste material only at sites approved by the engineer. If private land is used for disposal, written consent from the landowner must be obtained. Always consider the surrounding paddy fields. Ad-hoc dumping in one area can cause rapid pollution in the canal segments/downstream tanks in the area.	Engineering Cost	Contractor	IA/PMU

REFERENCE ONLY

	Activities and Associated Impacts	Protection and preventive measures	Mitigation cost	Responsibility	
				Implementation	Monitoring
		▪ The disposal site shall be monitored frequently for waterway blockages, stagnant water, or public nuisance. Immediate corrective action shall be taken to alleviate these risks.			
2	**Transport and Storage of construction materials**	▪ The contractor shall prevent truck overloading and ensure all materials are covered with tarpaulin during transit. To minimize public nuisance, air pollution, and dust, haulage should avoid peak traffic hours on busy roads. ▪ Avoid unnecessary stockpiling except where required for operational efficiency. ▪ All materials must be stored in designated areas specifically designed for that purpose, either within an enclosure or fully covered.	Engineering Cost	Contractor	IA/PMU
3	**Emission of Dust during construction.**	▪ Store all materials potential to emit dust shall be kept in closed area or covered. ▪ Exercise caution when unpacking cement and other powdery materials to minimize dust and prevent spillage to avoid air borne particles. ▪ The Contractor shall carry out dust suppression by wetting down active work areas and unpaved access roads whenever conditions lead to airborne particles.	Engineering Cost	Contractor	IA/PMU
4	**Prevention of soil erosion during site preparation**	▪ The demolition and re-construction of the causeway will take place in the canal bed; hence isolating the construction site with coffer dams will be necessary in order not to pollute the stream water quality. ▪ Works must be scheduled to coincide with the dry weather spell. If there is dry weather stream flow, water diversion may be required with an in-stream sediment pond to allow for sediment to get trapped without passing to fields downstream (using sand bags)	Engineering Cost	Contractor	IA/PMU

REFERENCE ONLY

	Activities and Associated Impacts	Protection and preventive measures	Mitigation cost	Responsibility	
				Implementation	Monitoring
		▪ Avoid stockpiling disposed material such as removed earth from rehabilitation works in the riparian zone other than temporarily and remove within 24 hours to ensure material will not get washed in to the canals. ▪ Plan the site preparation, back filling, compaction and initial construction during dry spell of the year. ▪ Remove and dispose all debris and earth as soon as possible to avoid accumulation at the site. ▪ Use suitable silt traps to avoid siltation into water ways where necessary.			
5	**Prevention of damage to vegetation /riparian vegetation**	▪ The Contractor shall ensure that no materials, equipment, excavated spoil, or other stockpiles are placed within the riparian zone or other vegetated areas. All construction activities and work areas shall be strictly confined to the minimum footprint required for the works to avoid unnecessary disturbance to surrounding vegetation. ▪ The Contractor shall ensure that riparian and other natural vegetation is not damaged beyond the immediate construction footprint, including the land connecting both ends of the work site.			
6	**Machinery Operation**	▪ Only skilled and qualified personnel may operate machinery, equipment, or processing plants.	Engineering Cost	Contractor	IA/PMU
7	**Noise and vibration from vehicles, machinery, equipment and construction activities.**	▪ All equipment and machinery will be operated at noise levels that do not exceed the permissible level of 75 dB[1] (during construction) for the day time. ▪ All equipment shall be serviced and maintained regularly. ▪ Idling of temporary trucks or other equipment will not be permitted during periods of loading / unloading or when they are not in active use.	Engineering Cost	Contractor	IA/PMU

REFERENCE ONLY

[1] dB-Decibels

	Activities and Associated Impacts	Protection and preventive measures	Mitigation cost	Responsibility	
				Implementation	Monitoring
		▪ Contractor will submit the list of high noise/vibration generating machinery & equipment to the engineer for approval. ▪ As a minimum, the Contractor shall carry out visual monitoring of the archaeological structures during vibration-generating activities to identify any signs of cracking or damage. Any complaints related to vibration or damage shall be attended to immediately and resolved promptly. ▪ Maintenance of vehicles, equipment and machinery will be regular and up to the satisfaction of the Engineer to keep noise levels at the minimum.			
7	**Vehicular emission**	▪ Use fuel efficient vehicles ▪ Limit engine idling			
8	**Contamination of Soil and Water with Fuel and Lubricants**	▪ The contractor shall service, exchange oil or refuel the vehicle or machinery at the area designated for that purpose. ▪ Equip the service center with spill kits. All used oils and contaminated rags must be stored and disposed of separately in compliance with local environmental regulations.	Engineering Cost	Contractor	IA/PMU
9	**Preventing siltation into water bodies**	▪ Implement appropriate soil erosion and sediment control measures, such as silt fences, earth bund, temporary drainage channels, and prompt stabilization of exposed soil surfaces, to prevent sediment discharge into water bodies and canal systems. ▪ The storage of spoil, earth, or debris in the vicinity of waterways is strictly prohibited to prevent runoff. ▪ Compact all fills, back fills, and slopes immediately to the specified density and establish ground cover or mulch to	Engineering Cost	Contractor	IA/PMU

REFERENCE ONLY

	Activities and Associated Impacts	Protection and preventive measures	Mitigation cost	Responsibility	
				Implementation	Monitoring
		prevent erosion. ■ Avoid direct pumping into waterways during dewatering. Always use silt traps or sieves to ensure only sediment-free water is discharged.			
10	**Prevention of mosquito breeding site**	■ The Contractor shall take all necessary measures to prevent the formation of stagnant water and eliminate potential mosquito breeding grounds at all times within the site and its surrounding areas. ■ The Contractor shall ensure that all depressions, excavations, and other potential water-holding areas within the work site are properly drained or backfilled with suitable material to prevent the formation of stagnant water and vector breeding.	Engineering Cost	Contractor	IA/PMU
11	**Public Safety**	■ Adequate warning signs, safety notices, and directional boards shall be displayed in visible locations and in local languages to alert the public of potential hazards. ■ The Contractor shall take all necessary precautions to ensure the safety of the farmers in and around the construction site at all times. ■ The contractor will obtain a Third-party insurance to compensate any damages, injuries caused to the public or laborers during the construction period. ■ All construction vehicles will be operated by experienced and trained operators under supervision. ■ Material loading and unloading will be done only within the project site.	Engineering Cost	Contractor	IA/PMU
11	**Safety of Workers & prevention of accidents**	■ Contractor will comply with the requirements for safety of the workers as per the ILO Convention No. 62 and Safety & Health Regulations of the Factory Ordinance of Sri Lanka to the extent that those are applicable to this contract.	Engineering Cost	Contractor	IA/PMU

REFERENCE ONLY

	Activities and Associated Impacts	Protection and preventive measures	Mitigation cost	Responsibility	
				Implementation	Monitoring
		■ The Contractor shall take all necessary measures to prevent accidents and ensure the safety of workers, visitors, and the public at all times ■ The Contractor shall carry out a site-specific risk assessment prior to commencement of work and implement appropriate control measures. A comprehensive Health and Safety Plan shall be prepared and strictly followed. ■ The risk assessment and Health and Safety Plan shall, as a minimum, address but not be limited to the following aspects: Operation in water environments, deep excavations, wildlife-related risks, use of heavy machinery, loading and unloading activities, and transportation of labor. The Contractor shall identify all associated hazards and implement appropriate control measures to ensure the safety of workers and the public. ■ All workers shall be provided with adequate PPE such as helmets, safety shoes, gloves, reflective vests, goggles, waders and harnesses where required. Use of PPE shall be strictly enforced. ■ The site shall be kept clean and free from debris, obstructions, and waste materials to avoid slips, trips, and falls. ■ The contractor will obtain a Third-party insurance to compensate any damages, injuries caused to laborers during the construction period. ■ The contractor shall Implement measures to prevent heat stroke and dehydration during the hot sunny days. Mandatory provision of **safe, clean drinking water accessible at all times must be available in the site.** ■ **A temporary workers' shelter** shall be constructed near the site to provide a rest area for the workers			

REFERENCE ONLY

	Activities and Associated Impacts	Protection and preventive measures	Mitigation cost	Responsibility	
				Implementation	Monitoring
		▪ First Aid and Emergency Response: In the event of an incident (such as a snake bite, insect attack, or any other) designated sentinel person trained in first aid and emergency response should be kept ready on site ▪ Immediate Hospitalization Protocol: readily available facilities must be established on site for immediate hospitalization, ensuring rapid access to the necessary medical facilities. ▪ Elephant & crocodile Sentinel: A dedicated sentinel (or lookout person) with local knowledge of elephant behavior and movement patterns must be hired. This person's sole responsibility is to monitor for approaching elephants and crocodiles and alert the workers. ▪ Early Warning System: The sentinel should be equipped with a communication device (e.g., a horn, whistle, or mobile phone) to provide a clear and immediate warning to all on-site personnel. ▪ Emergency Supplies: A supply of firecrackers should be obtained from the DWC regional office under the recommendation of the ID. These are to be used only in emergency situations to deter elephants and should be deployed by trained personnel. ▪ **No Harm Principle:** Under no circumstances shall any elephant be harmed, injured, or killed as a result of project activities. All personnel must be briefed on this non-negotiable principle			
12	**Handling of environmental and social issues during construction**	▪ The Contractor shall appoint a qualified Environmental, Social, and Safety Officer upon award of the contract. The Officer shall serve as the primary point of contact for all environmental and social matters during the pre-construction and construction phases. He/She shall be			

REFERENCE ONLY

	Activities and Associated Impacts	Protection and preventive measures	Mitigation cost	Responsibility	
				Implementation	Monitoring
		responsible for overseeing and ensuring the effective implementation of the Environmental and Social Management Plan (ESMP). ▪ The Environmental, Social, and Safety Officer shall be responsible for completing the monthly monitoring checklist and submitting reports to the Project Management Unit (PMU) on a monthly basis. The Officer shall also establish, maintain, and report on the Grievance Redress Mechanism (GRM), and ensure that all relevant guidelines, documents, copies of permits, logbooks, and registers are properly maintained and readily available at the site office.			
13	**Management of chance find of Archaeological Property**	Annex 7 - Chance find Procedure - Archaeological Properties	Engineering Cost	Contractor	IA/PMU
14	**Chance find of important Flora/Fauna**	Annex 8 - Chance find Procedure - important Fauna and Flora	Engineering Cost	Contractor	IA/PMU
15	**Site Closure and Demobilization**	▪ The contractor will remove all excess material, equipment, vehicles from the project site prior to completing demobilization from the site. ▪ Coffer dams, if erected need to be completely removed and associated debris has to be cleared from the site. ▪ All temporary site offices, if any, will be dismantled and removed from the site. ▪ If the parking site has been dilapidated in any way as per the evaluation of the engineer, the contractor will reinstate it to the original condition prior to demobilization.	Engineering Cost	Contractor	IA/PMU
16	**Prevention of issues (e.g. GBV) related to labor influx**	▪ The Contractor shall avoid or minimize labor influx where feasible to reduce social and environmental impacts associated with increased workforce.	Engineering Cost	Contractor	IA/PMU

REFERENCE ONLY

	Activities and Associated Impacts	Protection and preventive measures	Mitigation cost	Responsibility	
				Implementation	Monitoring
		▪ The Contractor shall implement robust measures to prevent sexual harassment and gender-based violence (GBV) at the worksite. ▪ Workers shall receive regular awareness and training programs on unacceptable conduct, workplace behavior, and relevant national laws pertaining to GBV ▪ A Worker Code of Conduct addressing GBV, harassment, and other unacceptable behavior shall form part of the employment contract. ▪ Sanctions for non-compliance, including warnings, suspension, or termination, shall be enforced consistently. ▪ The Contractor shall cooperate with law enforcement and relevant authorities in cases of GBV or other unlawful conduct. ▪ The Contractor shall establish and maintain a separate GRM/GBV mechanism for workforce complaints, distinct from the Project's GRM/GBV system. ▪ The GRM shall ensure confidentiality, impartiality, and timely resolution of complaints.			
Post Construction/Operation and Maintenance Phase					
1	**Flood management infrastructure**	▪ Routine desilting and cleaning of sediment traps, waste traps, and silt traps, where present, shall be included in the site Operations and Maintenance (O&M) plan.. ▪ Regular removal of aquatic invasive plant species shall be carried out to maintain smooth water flow and prevent blockages in waste traps and related structures.	Operational Cost	Facility Operator	IA, CEA
2	**Income generation for beneficiaries during construction periods**	▪ Labor and other project-related services shall be prioritized for local communities. Required training will be provided to ensure that local participants earn sufficient income. Special	Operational cost	Contractor	IA, PMU

REFERENCE ONLY

	Activities and Associated Impacts	Protection and preventive measures	Mitigation cost	Responsibility	
				Implementation	Monitoring
		emphasis will be given to female community members to promote gender equality and inclusiveness in employment opportunities and associated project services			
3	**Provide adequate support for social organizations of the community**	To maintain community goodwill and ensure uninterrupted construction activities, it is recommended to provide targeted beneficiary services to local organizations through the project's Corporate Social Responsibility (CSR) budget	Operational cost	Contractor	IA,PMU
4	**Controlling pollution sources to the irrigation canals**	Identify all sources of pollution discharging into the canals. Determine and implement feasible measures to prevent or mitigate pollution entering the canals.	Operational cost	MASL	IA, PMU

REFERENCE ONLY

13. Annexes

Annex 1 - Environmental and Social Screening Checklist

	Screening question	Yes	No	Significance of the effect	Remarks
Project Design					
	General				
1	Will the sub project include any physical construction work?	√		Moderate	Improvements of existing structures. Refer the scope of works
2	Does the project include upgrading or rehabilitation of existing physical facilities?	√		Moderate	-DO-
Rehabilitation of dam head works and rip rap associated irrigation infrastructure					
3	Will improvements to tank bund including the head works and rip rap structures require the water level in the reservoir to be artificially drawn down?	√		Low	All rehabilitation works are located downstream of the reservoir and will be carried out during the prevailing dry season to minimize the risk of water-related disruptions. In the event of unexpected heavy rainfall and reservoir spilling, construction activities will be temporarily suspended until safe working conditions are restored. Reservoir draw down is not anticipated during the implementation of the works.
4(i)	If yes, can this lead to any alteration of water flows in surface as well as groundwater sources, especially in the dry season?				Not applicable
4(ii)	Will the water draw down affect the ecology of the tank and other important wetlands that depend on the main lake and canal system to maintain water level?				Not applicable
5	Will repairs to irrigation canals/ structures		√		No any disruptions to the issuance of water

REFERENCE ONLY

	require temporary suspension of water issuance in order to facilitate civil works? Can this lead to diminishing of other downstream water uses that can result in social issues such as community bathing, drinking water supplies, irrigation of home gardens etc.				
6	Will civil works lead to diminishing of other downstream water uses as a result of water quality impairment?		√		No quality issues.
7	Will there be changes to original design levels of the head works that will result in inundation of new land in the catchment		√		
8	Will the rehabilitated scheme serve new areas of paddy under its command?		√		
Additional supplementary facilities					
9	Will there be construction of new irrigation or drainage canals or widening of existing canals?		√		
9(i)	If yes, will new/modified canal trace/alignments interfere with existing land uses (habitats, home gardens) in a negative way?				Not Applicable
9(ii)	If yes, will the trace interfere with other sensitive infrastructure such as roads, pedestrian paths, schools and temples?				Not Applicable
Project Construction					

REFERENCE ONLY

10	Will construction and operation of the Project involve actions which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)		√		
11	Will construction of the project cause soil erosion within the site due to steep grade or soil content?	√		Low	Recommendations in the ESMP
12	Will the Project involve dredging and disposal of dredge material as well as other solid wastes during construction?	√		Low	Only a small-scale excavation for foundation. Recommendations in the ESMP
13	Will the Project release pollutants or any hazardous, toxic or noxious substances to air?	√		Low	Recommendations in the ESMP
14	Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation?	√		Moderate	Recommendations in the ESMP
15	Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater?	√		Low	Recommendations in the ESMP
16	Will the project cause localized flooding and poor drainage during construction?		√		
17	Are there any areas or features of high landscape or scenic value on or around the location which could be affected by construction activity?		√		
18	Are there any other areas on or around the		√		

REFERENCE ONLY

	location which are important or sensitive for reasons of their ecology e.g. wetlands, watercourses or other water bodies, the coastal zone, mountains, forests which could be affected by the project?				
19	Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, migration, which could be affected by the project?	√		Low	One archaeological site found, Recommendations in the ESMP
20	Will any part of the project's construction activities be located in a previously undeveloped area where there will be loss of greenfield land?		√		
Land related impacts					
21	Will the sub-project require acquisition of land and or other assets?		√		Rehabilitation of existing structures.
22	Is land for material mobilization or transport for the civil work available within the identified work site / Right of way?	√			
23	Is the site chosen for this work free from any encumbrances (e.g. squatters, encroaches)?	√			
24	If the land parcel is to be acquired, is the actual plot size and ownership status known? If so, how much?				Not applicable
25	Is the project likely to cause partially or fully		√		

REFERENCE ONLY

	damage to, or loss of housing, shops, or other resource use?				
26	Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the project?		√		
Livelihoods Related Impacts					
27	Are there any non-titled people (squatters) who are living/ or doing business who may be partially or fully affected because of the civil works?		√		
28	Will there be damage to agricultural lands, standing crops, trees, etc.?	√			Two partially dead trees are to be removed
29	Will there be any permanent or temporary loss of income and livelihoods as a result of the civil works? If so, for what period?		√		
29(i)	Have these people/ businesses who may suffer temporary loss of incomes or livelihoods been surveyed and identified for payment of any financial assistance?				Not applicable
29(ii)	Are there any vulnerable households affected?		√		
29(iii)	Will people permanently or temporarily lose access to facilities, services, or natural resources?		√		
Impacts on community resources, public services, cultural/historical sites, etc					
30	Are there any areas on or around the		√		

REFERENCE ONLY

	location which are densely populated or built-up, which could be affected by the project?				
31	Are there any areas or features of historic or cultural importance on or around the location which could be affected by the project?		√		
32	Are there any areas on or around the location which are occupied by sensitive land uses e.g. hospitals, schools, places of worship, community facilities, which could be affected by the project		√		
33	Are there any areas on or around the location which are already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected by the project?		√		Not as per the information available and site observations.
34	Will the project cause the removal of trees in the locality?	√			Two trees are to be removed
35	Are there existing land uses or socio-economic activities on or around the location which could be affected by the project?		√		
35(i)	Are there bathing spots that will be unusable during the construction period?		√		
35(ii)	Is there subsistence fishing taking that will get disturbed due to tank bund and		√		

REFERENCE ONLY

	structure rehabilitation				
35(iii)	Are there any home gardening and other industrial, agricultural activities that will get disturbed due to construction activity		√		
35(iv)	Are there drinking water supply sources located in the project are that may be rendered unusable during construction period?		√		
35(v)	Are there tourism activities taking place in the project area that will get disturbed by construction activity?		√		
Construction related impacts (labor influx, community health and safety, etc.)					
36	Will there be any risks and vulnerabilities to public safety due to physical hazards during construction of the Project?	√		Low	There will be to some extent with operation of heavy machinery in the project area and with material haulage along transport routes. However, this is not a major issue and can be avoided by adopting safety regulations at construction sites.
37	Are there local village roads that will become unsafe due to contractor's usage	√		Low	Recommendations in the ESMP
38	Are there any transport routes on or around the location which are susceptible to congestion or which cause social and environmental problems, which could be affected due to construction work?	√		Low	Haulage roads shall be affected but it is temporary and manageable.
39	Will the project require significant number of workers (skilled and unskilled)	√		Moderate	Contractor needs to hire local labour for the construction works (mainly for unskilled labour). This will support to livelihood of the community of the area.
39(i)	Will the project attract significant number of migrant workers to the area?		√		All kind of work force are available locally

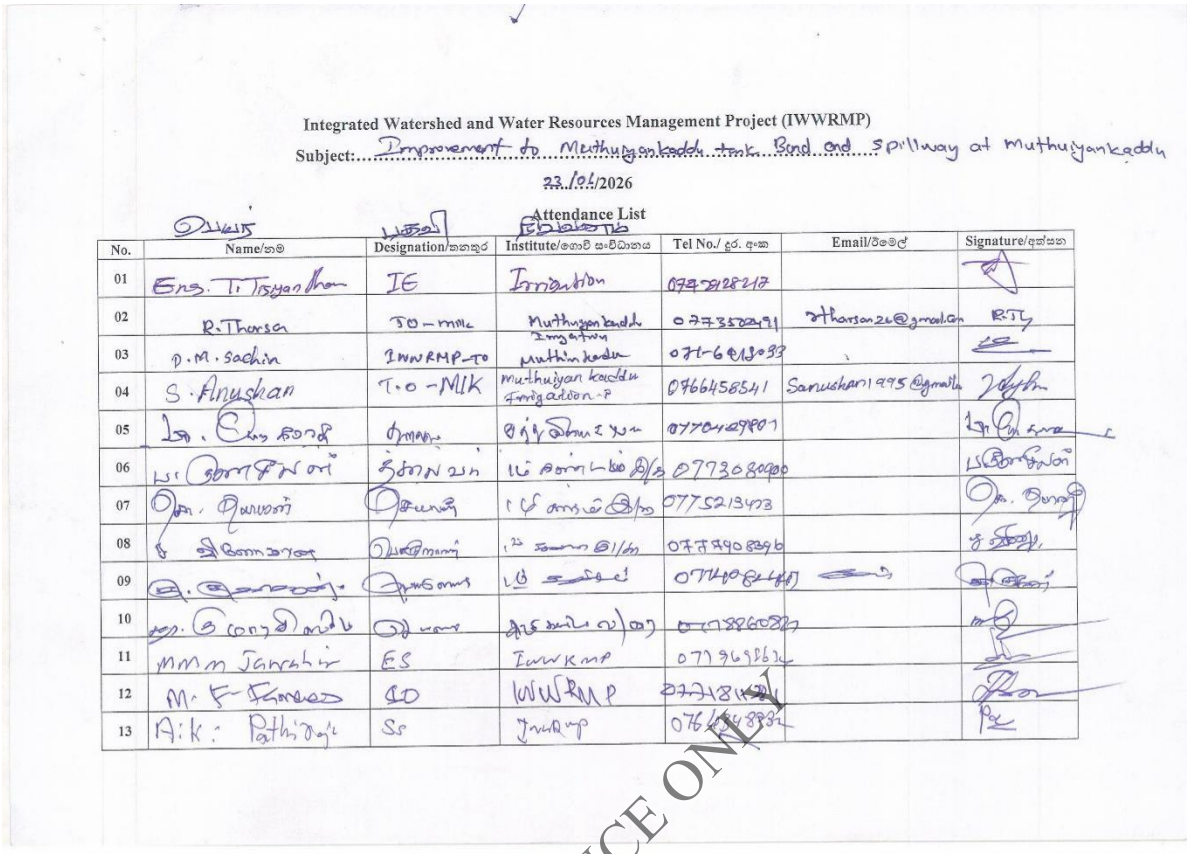
REFERENCE ONLY

40	Will construction activity lead to burrowing of earth, gravel and sand? And/or quarrying for rock?	√		Low	Earth materials from tank bed and others are purchased from licensed suppliers.
41	Will the project increase the risk of introduction of alien invasive species to the locality		√		
Operational Impacts					
42	Will the project lead to stagnant water and drainage problems causing increased mosquito breeding	√		Low	Chances are there and Recommendations in the ESMP
43	Will the project involve removal and disposal of aquatic invasive species?		√		
44	Will the project involve regular maintenance dredging of the canal network		√		
45	Will the scheme after rehabilitation serve a larger command area?		√		Only structural improvements

Significance of impact = Low, Moderate, High

REFERENCE ONLY

Annex 2: Attendance Sheet of Meeting



Integrated Watershed and Water Resources Management Project (IWWRMP)

Subject: Improvement to Muthuiyankaddu tank Bund and Spillway at Muthuiyankaddu

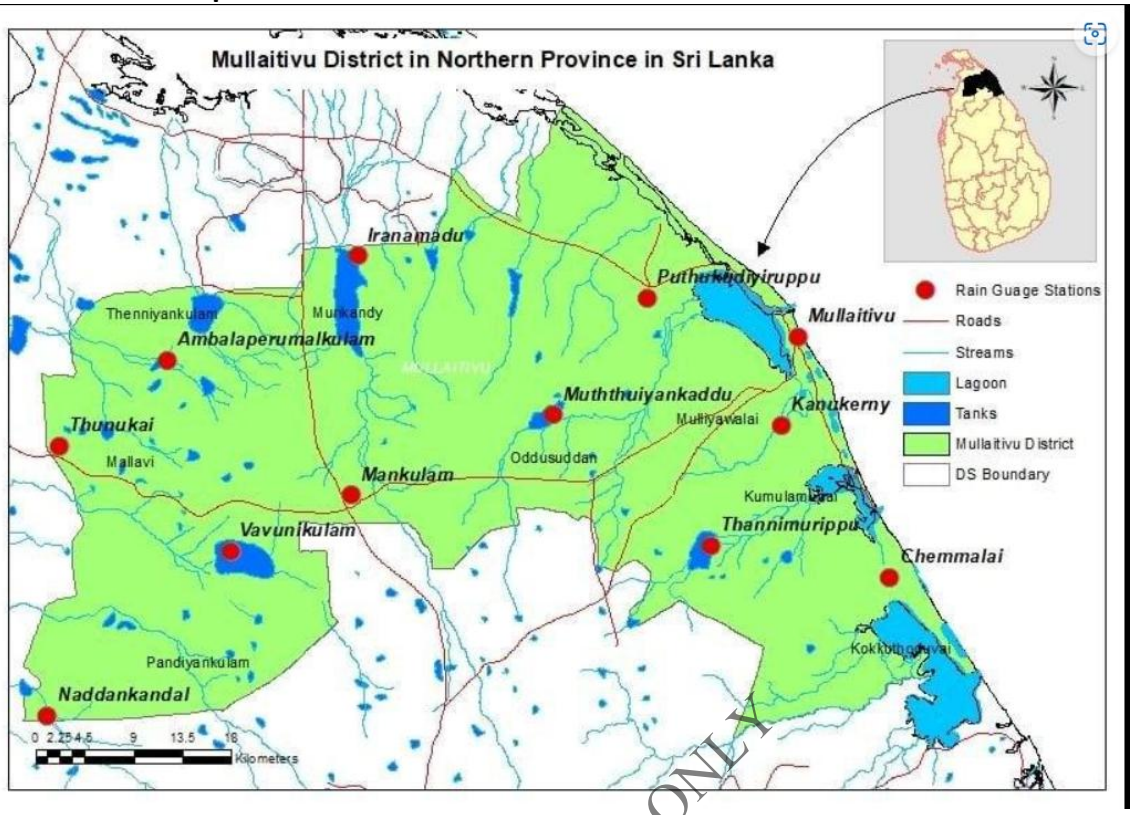
23/01/2026

Attendance List

No.	Name/නම	Designation/තනතුර	Institute/ආයතන සංවිධානය	Tel No./ දුර. අංක	Email/ඊමේල්	Signature/අත්සන
01	Eng. T. Tharsan	IE	Irrigation	0787828217		
02	R. Tharsa	TO-mnlc	Muthuiyankaddu Irrigation	0773582491	rtharsan26@gmail.com	RTh
03	P.M. Sachin	IWWRMP-TO	Muthiankaddu	071-6813033		
04	S. Anushan	T.O-MIK	Muthuiyan kaddu Irrigation-P	0766458541	Sanushan1995@gmail.com	
05	[illegible]	[illegible]	[illegible]	0770429801		
06	[illegible]	[illegible]	[illegible]	0773080900		
07	[illegible]	[illegible]	[illegible]	0775213473		
08	[illegible]	[illegible]	[illegible]	0779908396		
09	[illegible]	[illegible]	[illegible]	0774[illegible]		
10	[illegible]	[illegible]	[illegible]	[illegible]		
11	MMM Jansha	ES	IWWRMP	0779698[illegible]		
12	M. F. Fazeer	SO	WWRMP	0771818[illegible]		
13	A.K. Pathmaja	SS	IWRMP	0764[illegible]		

REFERENCE ONLY

Annex 3: Site Map



REFERENCE ONLY

Annex 4: Code of Conduct (Prevention of Gender-Based Violence) – Contractors

Section No: 10 of the bidding document Part II Code of Conduct (Prevention of Gender-Based Violence) – Contractors.

Introduction

The following Code of Conduct (CoC) was developed for the World Bank (WB) funded Integrated Watershed and Water Resource Management Project (IWWRMP). Two codes will be presented; one for contractors and their staff and the next for community groups and their members when they are involved in social audits committee activities and other community activities for the project. CSIAP requests all contractors and community members involved in the project activities to agree/ sign the code of conduct and the project will even display openly in a common place to create awareness.

Construction, particularly of major infrastructure projects, can be a high-risk environment for Gender-Based Violence and Harassments (GBVH) affecting community members, workers, and service users. GBVH risks can intensify within local communities when there are large influxes of male workers from outside the area. Such workers often come without their families and have large disposable incomes relative to the local community, and can pose a risk in terms of sexual harassment, violence, and exploitative transactional relationships. These risks are higher when workers come into close contact with the local community, for example, on access routes or when living together in a remote area.

REFERENCE ONLY

During the construction phase, workers are also vulnerable to various forms of harassment, exploitation, and abuse, aggravated by traditionally male working environments. Further, a land equation that occurs during the construction phase also increases the risks of GBVH. An individual who decides resettlement and compensation can abuse this power to sexually exploit vulnerable community members, such as those in a female-headed household.

Addressing GBVH in the construction phase can have the following benefits: Improves workers' physical and emotional well-being and strengthens occupational health and safety. Avoids reputational damage, financial risks, and legal liabilities for companies, investors, and construction contractors. Builds relationships and social license to operate in communities. This can result from regular dialogue to understand and track project GBVH risks as well as the effective use of measures to prevent and respond to GBVH.

SIMP is essential for addressing GBV risks during implementation. Contractually, the contractor must follow the SIMP, which is why the SIMP must build upon the findings and proposed measures identified in the project's screening and SIMP. Public disclosure and consultations on the ESIMP – particularly with regards to GBV risk mitigation are beneficial (but not mandatory) as it ensures that local communities are aware of the specific actions proposed to address the risk. Ideally, the works contract should require the contractor to participate in the consultation at its own expense, since that is related to the project works.

General

- The contractor and all employees should follow the relevant national and project rules and regulations.
- The contractor shall ensure that interactions with local community members are done with respect and non-discrimination.
- Demeaning, threatening, harassing, abusive, culturally inappropriate, or sexually provocative language and behavior are prohibited among all company employees, associates, and representatives, including subcontractors and suppliers.
- The contractor will follow all reasonable work instructions (including regarding environmental and social norms).
- The contractor will protect and ensure proper use of the property (for example, prohibit theft, carelessness, or waste).

Contractor and its Staff's Gender-Based Violence and Child Protection Code of Conduct

The contractor is obligated to create and maintain an environment that prevents Gender-Based Violence (GBV) and Child Abuse/ Exploitations (CAE) issues, and where the unacceptability of GBV and actions against children are communicated to all those engaged in the project. To prevent GBV and CAE, the following core principles and minimum standards of behavior will apply to all employees without exception:

- GBV or CAE constitutes acts of gross misconduct and is, therefore, grounds for sanctions, penalties, and or termination of employment. All forms of GBV and CAE including grooming are unacceptable be it on the worksite, the work site surroundings, or at the worker's camp. Prosecution of those who commit GBV or CAE will be pursued.
- Treat women, children (persons under the age of 18), and men with respect regardless of race, color, language, religion, political or other opinions, national ethnic or social origin, property, disability, birth, or another status.
- Do not use language or behavior towards women, children, and men that are inappropriate, harassing, abusive, sexually provocative, demeaning, or culturally inappropriate.
- Sexual activity with children under 18 including through digital media is prohibited. Mistaken belief regarding the age of a child and consent from the child is not a defense.
- Sexual favors or other forms of humiliating, degrading, or exploitative behavior are prohibited.
- Sexual interactions between contractors and consultant's employees at any level and members of the communities surrounding the workplace that are not agreed to with full consent by all parties involved in the sexual act are prohibited. This includes relationships involving the withholding/ promise of actual provision of a benefit (monetary or non-monetary) to community members in exchange for sex such sexual activity is considered non-consensual within the scope of this code.

REFERENCE ONLY

- All staff, volunteers, consultants, and sub-contractors are highly encouraged to report suspected or actual GBV and or CAE by a fellow worker, whether in the same contracting firms or not. Reports must be made following Standard Reporting Procedures.
- All employees are required to attend induction training courses before commencing work on-site to ensure they are familiar with the GBV and CAE Code of Conduct.
- All employees must attend a mandatory training course once a month for the duration of the contract starting from the first induction training before the commencement of work to reinforce their understanding of the institutional GBV and CAE Code of Conduct.
- All employees will be required to sign an induvial Code of Conduct confirming their agreement to support GBV and CAE activities.
- Take all practical steps to implement the contractor's environmental and social management plan.
- Not participate in sexual contact or activity with children including grooming or contact through digital media. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense or excuse.
- Not engage in sexual harassment, for instance, making unwelcome sexual advances, requests for sexual factors, and other verbal or physical conduct, of a sexual nature, including subtle acts of such behavior (ex: looking somebody up and down, kissing, howling, or smacking sounds hanging around somebody, whistling, and catcalls, giving personal gifts, making comments about somebody's sex life, etc.).
- Acts of GBV constitute gross misconduct and are therefore grounds for sanctions, which may include penalties and/or termination of employment and, if appropriate, referral to the Police for further action.
- All forms of GBV, are unacceptable, regardless of whether they take place on the work site, in the work site surroundings, at worker's camps, or within the local community.
- In addition to contractor sanctions, legal prosecution of those who commit acts of GBV will be pursued if appropriate.
- All employees, including volunteers and sub-contractors, are highly encouraged to report suspected or actual acts of GBV by a fellow worker, whether in the same company or not. Reports must be made following the project's GBV Allegation Procedures.
- the contractor is required to report and act to address suspected or actual acts of GBV as they have a responsibility to uphold contractor commitments and hold their direct reports responsible.

REFERENCE ONLY

Occupational Health and Safety (OHS)

- The contractor should ensure that the project's OHS Management Plan is effectively implemented by the contractor's staff, as well as suppliers.

- Wear personnel protective equipment (PPE) at all times when at the work site or engaged in project-related activities.
- The contractor will ensure that all person's on-site wear prescribed and appropriate personal protective equipment, preventing avoidable accidents, and reporting conditions or practices that pose a safety hazard or threaten the environment.
- Adhere to a zero-alcohol policy during work activities and refrain from the use of narcotics or other substances which can impair faculties at all times.
- The contractor will ensure that adequate sanitation facilities are available on-site and at any worker accommodations provided to those working on the project.
- The contractor will not hire children under the age of 18 for construction work, or allow them on the work site, due to the hazardous nature of construction sites.

I do hereby acknowledge that I have read the foregoing Code of Conduct, do agree to comply with the standards contained therein, and understand my roles and responsibilities to prevent and respond to GBV and CAE. I understand that any action inconsistent with this Code of Conduct or failure to take action by this Code of Conduct may result in disciplinary action.

For the Contractor

Signed by:…….

Name of the Contractor/ employee:……

Designation:……

Date:……

REFERENCE ONLY

Annex 5: Code of Conduct (Prevention of Gender-Based Violence) –Tamil

தனிப்பட்ட நடத்தை விதிகள்

நுளுர்ளு மற்றும் ழுர்ளு தரநிலைகளை செயல்படுத்துதல் மற்றும் பாலின அடிப்படையிலான வன்முறையைத் தடுப்பது தொடர்பானது

..... எனும் பெயருடைய நான், சுற்றுச்சூழல், சமூக, சுகாதாரம் மற்றும் பாதுகாப்பு (ESHS) தரநிலைகளை கடைபிடிப்பது, திட்டத்தின் தொழில்சார் சுகாதாரம் மற்றும் பாதுகாப்பு (OHS) தேவைகளைப் பின்பற்றுவது மற்றும் பாலின அடிப்படையிலான வன்முறையைத் தடுப்பது (GBV) முக்கியம் என்பதை ஒப்புக்கொள்கிறேன். சுற்றுச்சூழல், சமூக, சுகாதாரம் மற்றும் பாதுகாப்பு (ESHS) மற்றும் தொழில்சார் சுகாதாரம் மற்றும் பாதுகாப்பு (OHS) தரநிலைகளைப் பின்பற்றத் தவறாகும். அல்லது புடீஏனை உருவாக்கும் நடவடிக்கைகளில் ஈடுபடத்துவது தவறு எனவும், அது வேலைத் தளம், பணித் தளச் சூழல், தொழிலாளர்கள் முகாம்கள் அல்லது சுற்றியுள்ள சமூகங்கள்— மோசமான தவறான நடத்தை என்று கருதுகிறது. பொருளாதாரத் தடைகள், அபராதங்கள் அல்லது வேலை வாய்ப்பை நிறுத்துவதற்கான காரணங்கள் புடீஏ செய்தவர்கள் மீது காவல் துறையினர் வழக்குத் தொடரலாம்.

திட்டத்தில் பணிபுரியும் போது நான் கீழ்வரும் விடயங்களுக்கு ஒப்புக்கொள்கிறேன்:

1. பொலீஸ் பின்னணி சரிபார்ப்புக்கு ஒப்புதல்.

2. எனது பணியமர்த்தி கோரியபடி ESHS, OHS மற்றும் GBV தொடர்பான பயிற்சி வகுப்புகளில் கலந்துகொண்டு செயலில் பங்கேற்கவும்.

3. பணியிடத்தில் அல்லது திட்டம் தொடர்பான நடவடிக்கைகளில் ஈடுபடும் போது எல்லா நேரங்களிலும் எனது தனிப்பட்ட பாதுகாப்பு உபகரணங்களை (PPE) அணிவேன்.

4. ஒப்பந்ததாரரின் சுற்றுச்சூழல் மற்றும் சமூக மேலாண்மை திட்டத்தை (நுளுஆ) செயல்படுத்த அனைத்து நடைமுறை நடவடிக்கைகளையும் எடுக்கவும்.

5. தொழில்சார் சுகாதாரம் மற்றும் பாதுகாப்பு (OHS) முகாமைத்துவ திட்டத்தை செயல்படுத்தவும்.

6. வேலை நடவடிக்கைகளின் போது மதுபான அருந்துதல் இல்லையென்ற (பூஜ்ஜிய ஆல்கஹால்) கொள்கையை கடைபிடிக்கவும், மற்றும் எல்லா நேரங்களிலும் பீடங்களை பாதிக்கக்கூடிய போதைப் பொருட்கள் அல்லது பிற பொருட்களைப் பயன்படுத்துவதைத் தவிர்க்கவும்.

7. இனம், நிறம், மொழி, மதம், அரசியல் அல்லது பிற கருத்து, தேசிய, இன அல்லது சமூக தோற்றம், சொத்து, இயலாமை, பிறப்பு அல்லது பிற நிலை ஆகியவற்றைப் பொருட்படுத்தாமல் பெண்கள், குழந்தைகள் (18 வயதுக்குட்பட்டவர்கள்) மற்றும் ஆண்களை என மரியாதையுடன் நடத்துங்கள்.

8. பெண்கள், குழந்தைகள் அல்லது ஆண்களிடம் தகாத, துன்புறுத்தல், துஸ்பிரயோகம், பாலியல் தூண்டுதல், இழிவுபடுத்தும் அல்லது கலாச்சார ரீதியாக பொருத்தமற்ற மொழி அல்லது நடத்தையைப் பயன்படுத்த வேண்டாம்.

9. திட்டப் பயனாளிகள் மற்றும் சுற்றியுள்ள சமூகங்களின் உறுப்பினர்களை பாலியல் தொடர்பான அல்லது துஸ்பிரயோகம் செய்யக்கூடாது.

REFERENCE ONLY

10.பணிபுரியும் பணியாளர்கள் மற்றும் பணியாளர்களை பாலியல் துன்புறுத்தலிகளில் ஈடுபடக்கூடாது (உதாரணமாக, விரும்பத்தகாத பாலியல் முன்னேற்றங்கள், பாலியல் உதவிக்கான கோரிக்கைகள் மற்றும் பாலியல் இயல்புடைய வாய்மொழி அல்லது உடல் நடத்தை ஆகியவை தடைசெய்யப்பட்டுள்ளது. ஒருவரை மேலும் கீழும் பார்ப்பது முத்தமிடுதல், அலறல் அல்லது நொறுக்கும் ஒலிகள் யாரையோ சுற்றித் தொங்குவது விசில் மற்றும் கேட்கால்ஸ் சில சந்தர்ப்பங்களில், தனிப்பட்ட பரிசுகளை வழங்குதல்.

11. பாலியல் உதவிகளில் ஈடுபடாதது உதாரணமாக, சாதகமான சிகிச்சை (உதாரணமாக. பதவி உயர்வு), சாதகமற்ற சிகிச்சையின் அச்சுறுத்தல்கள் (உதாரணமாக. வேலை இழப்பு) அல்லது பொருளாகவோ பணமாகவோ பணம் செலுத்துதல், பாலியல் செயல்களைச் சார்ந்து—அல்லது (பிற அவமானப்படுத்துதல், இழிவான அல்லது சுரண்டல் நடத்தை)

12. எந்த வகையிலும் விபச்சாரத்தை எந்த நேரத்திலும் பயன்படுத்த வேண்டாம்.

13. 18 வயதிற்குக் குறைவான குழந்தைகளுடன் எந்தவொரு பாலியல் தொடர்பிலும் அல்லது செயல்பாடுகளிலும் ஈடுபடுவது முற்றிலும் தடைசெய்யப்பட்டுள்ளது. இதில், அவர்களை முன்கூட்டியே மனப்பூர்வமாக தயார்படுத்துதல் (பசழழஅபை) மற்றும் டிஜிட்டல் ஊடகங்கள் வழியாக தொடர்பு கொள்வதும் அடங்கும். குழந்தையின் வயதைப் பற்றிய தவறான புரிதல் தற்காப்பாக ஏற்கப்படாது. அதேபோல், குழந்தையிடமிருந்து பெறப்படும் சம்மதமும் சாக்காகவோ அல்லது தற்காப்பாகவோ கருதப்படாது.

14.அனைத்து தொடர்புடைய தரப்பினரிடமும் முழுமையான சம்மதம் [1] இல்லையெனில், சுற்றியுள்ள சமூக உறுப்பினர்களுடன் எந்தவொரு பாலியல் தொடர்பிலும் ஈடுபடமாட்டேன். பணம் அல்லது பிற நன்மைகள் (பணமோ அல்லது பணமற்றதோ) வழங்குதல், வழங்குவதாக வாக்குறுதி அளித்தல், அல்லது அவற்றை தடுத்து வைத்து பாலியல் உறவு பெற முயற்சிக்கும் எந்தவொரு உறவும் (விபச்சாரம் உட்பட) இதில் அடங்கும்.இவ்வாறான அனைத்து செயல்பாடுகளும் இந்த நெறிமுறையின் படி "சம்மதமற்றவை" எனக் கருதப்படும்

[1] சம்மதம் (Consent) என்பது ஒரு தனிநபரின் சுதந்திரமான, தன்னார்வமான, மற்றும் தகவலறிந்த தேர்வின் அடிப்படையில் வழங்கப்படும் ஒப்புதல் அல்லது ஏற்றுக்கொள்ளுதலாகும். அச்சுறுத்தல், வலுக்கட்டாயம், அல்லது பிற கட்டாயப்படுத்தும் முறைகள் (எ.கா., கடத்தல், மோசடி, ஏமாற்றம், தவறான தகவல் வழங்கல்) மூலம் பெறப்படும் ஒப்புதல் சரியான அனுமதியாக கருதப்படாது.

United Nations Convention on the Rights of the Child உடன்படிக்கையின் படி, World Bank கருதுவதாவது, 18 வயதிற்குக் குறைவான குழந்தைகள் வழங்கும் எந்தவொரு ஒப்புதலும் செல்லுபடியாகாது. அந்த நாட்டின் சட்டப்படி குறைந்த வயது வரம்பு இருந்தாலும் கூட, இது பொருந்தும்.

மேலும், குழந்தையின் வயதைப் பற்றிய தவறான நம்பிக்கை அல்லது குழந்தையிடமிருந்து பெறப்பட்ட ஒப்புதல் பாதுகாப்பு காரணமாக ஏற்கப்படாது.

15. எனது நிறுவனத்தால் பணியமர்த்தப்பட்டாலும் இல்லாவிட்டாலும், அல்லது இந்த நடத்தை விதிகளை மீறினால், புசுஆ அல்லது எனது மேலாளரிடம் ஏதேனும் சந்தேகத்திற்குரிய அல்லது உண்மையான புடீஏ பற்றி சக ஊழியர் மூலம் புகாரளிக்கவும்.

18 வயதுக்குட்பட்ட குழந்தைகளைப் பொறுத்தவரை:

16. கட்டுமான தளத்தில் குழந்தைகள் இருப்பதாலோ அல்லது அபாயகரமான செயல்களில் ஈடுபட்டாலோ எனது மேலாளரின் கவனத்திற்கு கொண்டு வாருங்கள்.

17. குழந்தைகளின் அருகாமையில் பணிபுரியும் போது, முடிந்தவரை, மற்றொரு பெரியவர் இருப்பதை உறுதிசெய்யவும்.

REFERENCE ONLY

18. எனது குடும்பத்துடன் தொடர்பில்லாத துணையில்லாத குழந்தைகளை எனது வீட்டிற்கு அழைக்க வேண்டாம், அவர்கள் உடனடியாக காயம் அல்லது உடல் ஆபத்தில் இருந்தால் தவிர.

19. கணினிகள், மொபைல் போன்கள், வீடியோ மற்றும் டிஜிட்டல் கேமராக்கள் அல்லது குழந்தைகளை சுரண்டுவதற்கு அல்லது துன்புறுத்துவதற்கு அல்லது குழந்தைகளின் ஆபாசத்தை அணுகுவதற் பயன்படுத்த வேண்டாம்.

20. குழந்தைகளின் உடல் ரீதியான தண்டனை அல்லது ஒழுக்கத்தை தவிர்க்கவும்.

21. தேசியச் சட்டம் அதிக வயதைக் குறிப்பிடும் வரை அல்லது அவர்களுக்குக் காயம் ஏற்படும் அபாயத்தை ஏற்படுத்தாத வரையில், குறைந்தபட்ச வயது 14க்குக் குறைவான வீட்டு அல்லது பிற தொழிலாளர்களுக்கு குழந்தைகளை வேலைக்கு அமர்த்துவதைத் தவிர்க்கவும்.

22. குழந்தைத் தொழிலாளர் தொடர்பான தொழிலாளர் சட்டங்கள் மற்றும் குழந்தைத் தொழிலாளர் மற்றும் குறைந்தபட்ச வயது தொடர்பான உலக வங்கியின் பாதுகாப்புக் கொள்கைகள் உட்பட அனைத்து தொடர்புடைய உள்ளூர் சட்டங்களுக்கும் இணங்குதல்.

வேலை தொடர்பான நோக்கங்களுக்காக குழந்தைகளின் படங்களைப் பயன்படுத்துதல்.

வேலை தொடர்பான நோக்கங்களுக்காக ஒரு குழந்தையை புகைப்படம் எடுக்கும்போது அல்லது படமெடுக்கும்போது, நான் கண்டிப்பாக:

23. ஒரு குழந்தையை புகைப்படம் எடுப்பதற்கு அல்லது படமெடுக்கும் முன், மதிப்பீடு செய்து, உள்ளூர் மரபுகள் அல்லது தனிப்பட்ட படங்களை மீண்டும் உருவாக்குவதற்கான கட்டுப்பாடுகளுக்கு இணங்க முயற்சிக்கவும்.

24. ஒரு குழந்தையை புகைப்படம் எடுப்பதற்கு அல்லது படமெடுக்கும் முன், குழந்தை மற்றும் குழந்தையின் பெற்றோர் அல்லது பாதுகாவலரிடமிருந்து தகவலறிந்த சம்மதத்தைப் பெறவும். இதன் ஒரு பகுதியாக புகைப்படம் அல்லது படம் எவ்வாறு பயன்படுத்தப்படும் என்பதை நான் விளக்க வேண்டும்.

REFERENCE ONLY

25. புகைப்படங்கள், திரைப்படங்கள், வீடியோக்கள் மற்றும் டிவிடிகள் குழந்தைகளை கண்ணியமான மற்றும் மரியாதைக்குரிய மனிதராக இருப்பதை உறுதிசெய்யவும்.

26. படங்கள் சூழல் மற்றும் உண்மைகளின் நேர்மையான பிரதிநிதித்துவம் என்பதை உறுதி செய்யவும்.

27. இலத்திரனியல் முறையில் படங்களை அனுப்பும் போது கோப்பு லேபிள்கள் குழந்தையைப் பற்றிய அடையாளம் காணும் தகவலை வெளிப்படுத்தவில்லை என்பதை உறுதிப்படுத்தவும்.

தடைகள்

இந்த தனிப்பட்ட நடத்தை விதிகளை நான் மீறினால், எனது முதலாளி ஒழுங்கு நடவடிக்கை எடுப்பார், அதில் பின்வருவன அடங்கும் என்பதை நான் புரிந்துகொள்கிறேன்:

1. அதிகாரப்பூர்வமற்ற எச்சரிக்கை

2. முறையான எச்சரிக்கை

3. கூடுதல் பயிற்சி.

4. ஒரு வார சம்பளம் வரை இழப்பு.

5. வேலைநிறுத்தம் (சம்பளம் செலுத்தாமல்), குறைந்தபட்சம் 1 மாதம் முதல் அதிகபட்சம் 6 மாதங்கள் வரை.

6. வேலை நிறுத்தம்.

7. உத்திரவாதமிருந்தால் பொலிஸில் புகார் செய்யுங்கள்.

சுற்றுச்சூழல், சமூக, சுகாதாரம் மற்றும் பாதுகாப்பு தரநிலைகள் பூர்த்தி செய்யப்படுவதை உறுதி செய்வது எனது பொறுப்பு என்பதை நான் புரிந்துகொள்கிறேன். நான் தொழில்சார் சுகாதாரம் மற்றும் பாதுகாப்பு மேலாண்மை திட்டத்தை கடைபிடிப்பேன். புடீஏ எனக் கருதக்கூடிய செயல்கள் அல்லது நடத்தைகளைத் தவிர்ப்பேன். அத்தகைய செயல்கள் இந்த தனிப்பட்ட நடத்தை விதிகளை மீறுவதாகும். நான் மேற்கூறிய தனிப்பட்ட நடத்தை விதிகளைப் படித்துள்ளேன் என்பதை ஒப்புக்கொள்கிறேன், அதில் உள்ள தரங்களுக்கு இணங்க ஒப்புக்கொள்கிறேன் மற்றும் ESHS, OHS, GBV சிக்கல்களைத் தடுப்பதற்கும் அதற்குப் பதிலளிப்பதற்கும் எனது பொறுப்புகள் மற்றும் பொறுப்புகளைப் புரிந்துகொள்கிறேன். இந்தத் தனிப்பட்ட நடத்தை விதிகளுக்கு முரணான எந்தச் செயலும் அல்லது இந்த தனிநபர் நடத்தை விதியின்படி கட்டாயப்படுத்தப்பட்ட செயலில் ஈடுபடத் தவறினால், ஒழுக்காற்று நடவடிக்கை எடுக்கப்படலாம் மற்றும் எனது தற்போதைய வேலையில் பாதிப்பு ஏற்படலாம் என்பதை நான் புரிந்துகொள்கிறேன்.

கையொப்பம்: .....

அச்சிடப்பட்ட பெயர்: .....

தலைப்பு: .....

திகதி:.....

REFERENCE ONLY

Annex 6: Grievance Redress Mechanism (Tamil)

மனக்குறைத் தீர்த்தல் பொறிமுறை. (GRM)

பெரிய அளவிலான அபிவிருத்தித் திட்டங்கள் மக்களைப் பல்வேறுபட்ட வழிகளிலும் பாதிக்கலாம். எழும் கோரிக்கைகள் சமூக, சூழல் பிரச்சனைகளுடன், தொடர்பானதும் மற்றும் அவற்றை சீர் செய்வதற்கான நலன்களுக்கான உரிமை தொடர்பான கோரிக்கைகள் ஆகியவை ஆகும். அவைகள் வேலைத் தளத்தை சுத்தம் செய்தல், அகழ்வாராய்ச்சி மற்றும் வெடித்தல் போன்றனக் கட்டுமான நடவடிக்கைகள் தொடர்பான குறைகளாக இருக்கலாம். சிறந்த திட்டமிடல் மற்றும் சிறந்த திட்டச் செயலாக்கம் என்பவற்றின் மூலம் இந்த பிரச்சினைகளைத் ஓரளவிற்குத் தீர்க்க முடியும். அத்துடன், எல்லாவற்றிற்கும் மேலாகத் இந்த திட்டத்தால் பாதிக்கப்படும் சமுதாயத்துடன், எமது முழுமையான மற்றும் நேர்மையான பங்கேற்பையும் உரிய ஆலோசனையையும் வழங்குவோம் என்ற உறுதியையும் வழங்குவதன் மூலம் தீர்க்க முடியும். இதனை சமூக மற்றும் திட்ட ஊழியர்களிடையே உள்ள முறையான பிணைப்பு , வெளிப்படைத்தன்மை மற்றும் கண்காணிப்பு மூலம் ஆதவளிக்கலாம். எவ்வாறு இருந்த போதிலும் கூட இந்த அளவில் (அதாவது வேலைத்தள அளவில்) தீர்க்க முடியாத மற்றும் இனங்காணப்படாத சில முறைப்பாடுகள் மற்றும் குறைகள் இருப்பதையூம் கிட்டத்தட்ட தவிர்க்க முடியாதது. ஆகவே இந்தக் கவலைகளைத் தீர்ப்பதற்கு, நேரத்தைச் செலவழிக்கும், அதிக செலவு கூடிய முறையான சட்ட நடைமுறைகளுக்கு செல்ல விடுவதற்குப் பதிலாக, முறையான குறை தீர்க்கும் பொறிமுறை (GRM) நிறுவனங்களுக்கும் அமைக்கப்பட வேண்டும் என்று உறுதியாகப் பரிந்துரைக்கின்றது.

REFERENCE ONLY

மனக்குறைத் தீர்த்தல் பொறிமுறையின் GRM நோக்கமானது செயற்திட்டத்தால் பாதிக்கப்பட்ட தனிநபர்கள் /சமுதாயங்கள் செயற்திட்டம் நடைபெறும் மட்டத்திலேயே, தொடர்புடைய தரப்பினருடன் பரஸ்பரப் புரிந்துணர்வு மற்றும் ஒருமித்த செயல்முறையின் மூலம் அவர்களின் பிரச்சனைகளைத் தீர்க்க உதவுவதாகும். இது பொதுமக்களிடமிருந்து வரும் திருப்தியற்ற முறையீடுகளைத் தீர்ப்பதற்கான முறையான சட்ட வழிகளுக்கு மேலதிகமானதாகும்.

செயற்திட்டத்திற்கான முன்மொழியப்பட்ட மூன்று அடுக்கு பிரச்சினைகளைத் நிவர்த்தி செய்யும் பொறிமுறையானது, உள்ளூர் மட்டத்திலும் (பிரதேச மட்டம்), பிராந்திய மட்டத்திலும் (மாவட்ட அளவில்), மற்றும் மேல்முறையீடு செய்வதற்கும், உயர்மட்ட அரசாங்க அர்ப்பணிப்பு, கொள்கை ஆதரவு மற்றும் செயல்முறைக்கான ஒருங்கிணைப்பு உள்ளடங்கலாக தேசிய மட்டத்திலும் செயல்படும், (ஒரு மூன்று மட்ட GRM). முன்மொழியப்பட்ட **மனக்குறைத் தீர்த்தல் பொறிமுறையானது** கீழ்க்கண்டவாறு நியமிக்கப்பட்ட மனக்குறைதீர்ப்புக் குழுக்கள் (GRC) மூலம் செயல்படுத்தப்படுகிறது.

மனக்குறைத் தீர்த்தல் குழுவின் அமைப்பு (GRC) - கிராம அலுவலர் மட்டம்

இது மிகவும் அடிப்படையான, முதல் நிலைக் குழுவாகும், இது வேலைத்தள மட்டத்தில் செயல்படும், பெரும்பாலும் GN பிரிவு (கிராம அலுவலர்) மட்டத்தில்

ஒரு குழுவாக இருக்கும். இக்குழு திட்டப் பகுதியில் நேரடியாக வசிக்கும் நபர்களின் குறைகளைத் தீர்க்க முயற்சிக்கும். குழுவின் முன்மொழியப்பட்ட அமைப்பில், ஒருமித்த கருத்தை அடைவதை நோக்கமாகக் கொண்ட ஒரு செயல்முறையின் மூலம் குறைகளை இணக்கமான முறையில் தீர்க்க முயற்சிக்கும் அரசு மற்றும் சமூகப் பிரதிநிதிகளின் உள்ளடங்களாக இருக்கும்.

பிரதேசத்தின் கிராம உத்தியோகத்தர்	தவிசாளர்
உள்ளூர் PMU வேலைதள அலுவலகத்தின் பிரதிநிதி	செயலாளர்
அமுலாக்கும் முகவரின் பிரநிதி (பொருத்தமானதாக)	உறுப்பினர்
ஒப்பந்ததாரரின் பிரதிநிதி (தேவைப்பட்டால்)	உறுப்பினர்
உள்ளூர் சமூக அமைப்பின் பிரதிநிதி (NGO/CBO)	உறுப்பினர்
சமூகத்தின் பிரதிநிதி அல்லது உள்ளூர் சமயத் தலைவர்	உறுப்பினர்

REFERENCE ONLY

மனக்குறைத் தீர்த்தல் குழுவின் அமைப்பு (GRC) - பிரதேச செயலாளர் மட்டம்

இந்தக் குழு கிராம அலுவலர் மட்டக் குழுவால் தீர்க்க முடியாத புகார்கள் மற்றும் பிணக்குகளைத் தீர்க்கும் என எதிர்பார்க்கப்படுகிறது. கீழ் மட்டக் (GN மட்டம்) குழுக்களில் இருந்து வரும் மேன்முறையீட்டு வழக்குகளை விசாரிப்பதுடன், இந்தக் குழு தேசிய மட்டத்திலான குழுவிற்கு வேண்டிய, தகவல் மற்றும் நிர்வாக உதவிகளை வழங்குகிறது. இந்தக் குழு GN மட்டக் குழுக்களிடமிருந்து வரும் முடிவுகளை 15 வேலை நாட்களுக்குள் மதிப்பாய்வு செய்து, அதன் முடிவை உரிமைகோருபவர்களுக்கும், GN மட்டக் குழுவிற்கும் ஐந்து வேலை நாட்களுக்குள் பின்தொடர் நடவடிக்கைகளுக்காகத் தெரிவிக்கும். இக்குழு பின்வரும் உறுப்பினர்களைக் கொண்டுள்ளது:

பிரதேசத்தின் பிரதேச செயலாளர் அல்லது பிரதேச செயலாளரால் பரிந்துரைக்கப்பட்ட பிரதிநிதி	தவிசாளர்
PMU தலைமை அலுவலகத்தின் பிரதிநிதி	செயலாளர்
மனக்குறை பதிவாகியுள்ள பிரதேசத்தின் கிராம உத்தியோகத்தர்	உறுப்பினர்
பிரதேசத்தின் NGO மற்றும் CBO போன்றவற்றின் பிரதிநிதிகள்	உறுப்பினர்
பிரதேசத்தின் மரியாதைக்குரிய சமயத் தலைவர் ஒருவர் அல்லது சமய குருமார்கள் அல்லது சமூகத் தலைவர்	உறுப்பினர்

மனக்குறைத் தீர்த்தல் குழுவின் அமைப்பு (GRC)*)* - தேசிய மட்டம்

இந்த **மனக்குறைத் தீர்த்தல் குழு** GRC நீர்ப்பாசன அமைச்சில் அமைந்திருக்க வேண்டும், மற்றும் அமைச்சின் மேலதிகச் செயலாளர் அல்லது நியமிக்கப்பட்ட பிரதிநிதியின் தலைமையில் இக்குழு இருக்க வேண்டும். திட்ட இயக்குனர் குழுவின் செயலாளராகப் பணியாற்றுவார். குறைதீர்க்கும் முறையை வழிகாட்டுதல் மற்றும் மேற்பார்வை செய்வதுடன், கீழ்மட்டக் குழுக்களின் முடிவுகளில் திருப்தியடையாத நபர்களிடமிருந்து வரும் முறையீடுகளை இந்தக் குழு மதிப்பாய்வு செய்யும். குழு பின்வரும் உறுப்பினர்களைக் கொண்டிருக்கும்:

மேலதிக செயலாளர் / MMAI&RD	தவிசாளர்
செயற்திட்ட பணிப்பாளர் (PMU இன்)	செயலாளர்
அமுலாக்கும் முகவரின் பிரதிநிதி	உறுப்பினர்
கட்டுமான நிறுவனத்தின் பிரதிநிதி (தேவைப்பட்டால்)	உறுப்பினர்
மாவட்டத்தின் மாவட்டச் செயலாளர் அல்லது மாவட்ட செயலாளரால் பரிந்துரைக்கப்பட்ட பிரதிநிதி	உறுப்பினர்
பிரதேசத்தின் பிரதேச செயலாளர் அல்லது பிரதேச செயலாளரால் பரிந்துரைக்கப்பட்ட பிரதிநிதி	உறுப்பினர்
ஒரு சமூக அமைப்பின் பிரதிநிதிகள் (தேவைப்பட்டால்) (ஒரு தேசிய அளவிலான NGO/CBO துறையில் செயல்படும் மற்றும் திட்டப் பகுதியில் செயல்படும்)	உறுப்பினர்

REFERENCE ONLY

தேசிய அளவிலான மனக்குறைத் தீர்த்தல் குழு (GRC), கீழ்மட்டத்தில் தீர்க்க முடியாத ஒரு பாதிக்கப்பட்ட நபரால் மேற்கொள்ளப்படும் முறைப்பாடு அல்லது மனக்குறை எழுப்பப்படும் போது மட்டுமே கூட்டப்படும்.

GRC இன் வெவ்வேறு மட்டங்களில் எழக்கூடிய சில சிக்கல்கள் பின்வருமாறு:

- பணமில்லாத நலன்களுக்கான உரிமை அல்லது தகுதி
- கட்டுமாணத் தளத்தில் தூசு, சத்தம் மற்றும் அதிர்வுத் தொல்லைகள் காணப்படுகின்றமை.
- அணுகுவதற்கு இயலாமை.
- பொது மற்றும் தனியார் சொத்துக்களுக்கு ஏற்படும் சேதங்கள் (குறிப்பாக அதிர்வு மற்றும் விபத்துக்களால் ஏற்படும் சேதம்)
- மத வழிபாட்டு தலங்கள், சிலைகள் அல்லது மதம் தொடர்பான விருட்சங்கள் ஆகியவற்றை அகற்றுதல்.
- வீதிகளை மூடுவதனால் பொது மக்களுக்கு ஏற்படும் சிரமங்கள்.
- சமுதாய நடவடிக்கைகளுக்கு இடையூறு ஏற்படும் விதமாக கட்டுமாணப் பொருட்களை களஞ்சியப்படுத்தல்.

உலக வங்கியின் குறை தீர்க்கும் சேவையின் (GRS) ஆய்வுக் குழு:

மேலதிகமாக, செயற்திட்டத்தால் தாங்கள் மோசமாக பாதிக்கப்படுவதாக நம்பும் சமூதாயங்கள் மற்றும் தனிநபர்கள் உலக வங்கியின் குறைதீர்ப்புசேவையின் (GRS) ஆய்வுக் குழுவிடம் முறைப்பாடுகளை சமர்ப்பிக்கலாம். உலக வங்கியின் கொள்கைகள் மற்றும் நடைமுறைகளுக்கு இணங்காததன் விளைவாக, தீங்கு ஏற்பட்டதா? அல்லது ஏற்படுமா? என்பதை இந்த குழு வழக்குகளை உடனடியாக மதிப்பாய்வு செய்து, தீர்மானிக்கிறது. முறைப்பாடுகளை எந்த நேரத்திலும் சமர்ப்பிக்கப்படலாம், மேலும் மனக்குறைகள் நேரடியாக உலக வங்கியின் கவனத்திற்குக் கொண்டு வரப்பட்ட பிறகு, வங்கி நிர்வாகம் பதிலளிக்க ஒரு வாய்ப்பு உள்ளது. உலக வங்கியின் GRS இல் முறைப்பாடுகளை எவ்வாறு சமர்ப்பிப்பது? என்பது பற்றிய தகவலுக்கு, http://www.worldbank.org/GRS ஐப் பார்வையிடவும். உலக வங்கி ஆய்வுக் குழுவிடம் புகார்களை எவ்வாறு சமர்ப்பிப்பது என்பது பற்றிய தகவலுக்கு, இங்கு செல்க: www.inspectionpanel.org

- **மனக்குறைத் தீர்த்தல்** GRM பயனுள்ளதாக இருக்க, நடைமுறைகளை விளக்கி விளம்பரப்படுத்துவது அவசியம். அந்தந்தப் பகுதிகளில் உள்ள பொது மக்கள், அரச உத்தியோகத்தர்கள், சமூக அமைப்புகள், ஒப்பந்ததாரர்கள் மற்றும் பிரதேச செயலாளர்கள் **மனக்குறைத் தீர்த்த லுக்**கான நடைமுறைகள் பற்றி அறிந்திருக்க வேண்டும்.

- செயற்திட்டத்தால் பாதிக்கப்பட்ட மக்கள், அரசு நிறுவனங்கள் மற்றும் சிவில் சமூக அமைப்புகள் உட்பட தொடர்புடைய பங்குதாரர் குழுக்களுக்கு **மனக்குறைத் தீர்த்தல்** GRM விளக்கப்பட வேண்டும். நடைமுறைகள் மற்றும் அவர்களின் தீர்வுகளுக்கான தெரிவுகள் பற்றி மக்கள் அறிந்திருந்தால், **மனக்குறைத் தீர்த்தல்** GRM மிகவும் நிர்வகிக்கக்கூடியதாக இருப்பதுடன், மோதல்கள் மற்றும் வழக்குகளையும் தவிர்க்க உதவும். நட்டஈட்டுப் பலன்களுக்கான தகுதி அளவுகோல்கள் பற்றிய தெளிவான விளக்கங்களை வழங்குவது இன்றியமையாததாக இருக்கும், அத்துடன் இது செயற்திட்டப் பகுதியில் வசிக்கும் மக்களுக்குத் முற்கூட்டியே தெரிவிக்கப்பட வேண்டும்.

REFERENCE ONLY

தகவல் தொடர்பு திட்டம் பின்வரும் கூறுகளை உள்ளடக்கியதாக இருக்க வேண்டும்:

- செயற்திட்டத்தின் நோக்கம், திட்டமிடப்பட்ட கட்டுமாணப் கட்டங்கள் போன்றவை.
- **மனக்குறைத் தீர்த்தல்** GRM, அதன் நோக்கம் மற்றும் நடைமுறைகள்
- **மனக்குறைத் தீர்த்தல்** GRM இன் கீழ் பரிசீலிக்கக்கூடிய மற்றும் பரிசீலிக்க முடியாத குறைகளின் வகைகள்
- **மனக்குறைத் தீர்த்தலினை** GRM அணுகுவதற்கான தகுதி
- **மனக்குறைத் தீர்த்தல்** GRM மற்றும் தொடர்புகளுக்கான அறிக்கையிடல் நடைமுறைகள்: எ.கா. தொலைபேசி, அஞ்சல் மற்றும் மின்னஞ்சல் முகவரிகள் மற்றும் **மனக்குறைத் தீர்த்தலி**ன் இணையதளங்கள் மற்றும்

புகாரில் சேர்க்கப்பட வேண்டிய தகவல்களின் விபரங்கள்

- குறை **தீர்த்தல்** செயல்முறையைத் தொடங்கி முடிப்பதற்கான நடைமுறைகள் மற்றும் கால அளவுகள்; குறைகளைக் கையாள்வதில் **மனக்குறைத் தீர்த்தலி**ன் எல்லைகள் மற்றும் வரம்புகள்; மற்றும் திட்டத்தை செயல்படுத்துபவர் மற்றும் நிதியளிப்பு நிறுவனம் போன்ற பல்வேறு முகவர்களின் தொழிற்பாடுகள்.
- தொடர்புடைய பங்குதாரர்களுக்கு தகவல்களைத் தொடர்புகொள்வதற்கு பல்வேறு முறைகளை பின்பற்றலாம். இந்த முறைகளில் அரசாங்க அலுவலகங்கள், திட்ட அலுவலகங்கள், சமூக மையங்கள், மருத்துவமனைகள் மற்றும் அப்பகுதியின் சுகாதார சிகிச்சை நிலையங்கள் போன்ற பொது இடங்களில் சுவரொட்டிகளை காட்சிப்படுத்தலாம்.
- **மனக்குறைத் தீர்த்தலி**ன் GRC முதல் மற்றும் இரண்டாம் மாற்றங்களின் முடிவுகளுக்கு எதிராக மேன்முறையீடு செய்வதற்கான நடைமுறைகள்

விழிப்புணர்வு நிகழ்ச்சி பின்வருவனவற்றை உள்ளடக்கியதாக இருக்க வேண்டும்:

- **மனக்குறைத் தீர்த்தல்** GRC உறுப்பினர்கள் மற்றும் அதன்அமைவிடங்கள்.
- புகார் அல்லது குறையைப் புகாரளிக்கும் முறைகள்.
- **மனக்குறைத்** GRC கூட்டங்களில் பங்கேற்கும் முறைகள்.
- முறைப்பாடுத் தீர்ப்பதற்கான படிமுறைகள் மற்றும் காலக்கெடு.
- முறைப்பாட்டை ஆதரிக்க தேவையான ஆவணங்கள் மற்றும் பிற சான்றுகள்.

REFERENCE ONLY

இந்த தகவலை ஒரு எளிய சிற்றேட்டில் வழங்கலாம், இது GRM

மனக்குறைத் தீர்த்த லுக்கான அடிப்படை ஆதார ஆவணமாக இருக்கும். **மனக்குறைத் தீர்த்தலு**க்கான GRM மற்றும் GRC குழுக்கள் கள் மற்றும் அவற்றின் நோக்கம் மற்றும் வேலை நடைமுறைகள் பற்றிய தெளிவான தகவல்களை சிங்களம், தமிழ் மற்றும் ஆங்கிலத்தில் வழங்கும் எளிய துண்டுப்பிரசுரமாக இது இருக்கும். தவறான புரிதல்கள் அல்லது தெளிவின்மைகளைத் தடுக்கும் நோக்கில், நோக்கங்களையும் நடைமுறைகளையும் தெளிவுபடுத்தும் நோக்கத்துடன் இந்தச் சிற்றேடு இருக்கும். இருப்பினும், பொதுக் கூட்டங்களில் செயல்முறை பற்றிய விளக்கம், எளிதாக அணுகக்கூடிய ஆன்-லைன் தகவல் மற்றும் சமூக ஊடகங்களின் பயன்பாடு உள்ளிட்ட பிற விபரங்களுடன் இவ்வாவணம் தயாரிக்கப்பட வேண்டும்.

செயற்திட்ட கண்காணிப்பு அமைப்பின் ஒரு பகுதியாக **மனக்குறைத் தீர்த்தல்** GRM சேர்க்கப்பட வேண்டும். அனைத்து புகார்களும் கணினியில் பதிவு செய்யப்பட்டு கண்காணிக்கப்பட வேண்டும். பின்வரும் சிக்கல்களை உள்ளடக்கிய GRM இன் காலாண்டு மற்றும் வருடாந்திர சாராம்சங்கள் இந்த அமைப்பு PMU க்கு வழங்க வேண்டும்:

- எத்தனை புகார்கள் எழுந்துள்ளன?
- எவ்வகையான புகார்கள் எழுந்துள்ளன?
- புகார்களின் நிலை என்ன (நிராகரிக்கப்பட்டது அல்லது தகுதியற்றது, மதிப்பாய்வு செய்யப்படுகிறது, ஒப்புக்கொள்ளப்பட்ட நடவடிக்கை செயல்படுத்தப்படும் அல்லது தீர்க்கப்படும்)?
- பிரச்சனைகளை தீர்க்க எவ்வளவு காலம் எடுத்தது?
- எத்தனை பேர் மனக்குறை தீர்க்கும் நடைமுறையைப் பயன்படுத்தியுள்ளனர்?
- கிடைக்கப்பெற்ற பெறுபேறுகள் யாவை?

ஒரு மதிப்பீட்டு அமைப்பு **மனக்குறைத் தீர்த்தல்**(GRM)இன் ஒட்டுமொத்த செயல்திறன் மற்றும் தாக்கத்தை மதிப்பிட வேண்டும். மதிப்பீடுகள் ஆண்டுக்கு இருமுறை மேற்கொள்ளப்பட வேண்டும், மேலும் முடிவுகள் GRM இன் செயல்திறனை மேம்படுத்த பங்களிக்க வேண்டும் மற்றும் திட்ட நிர்வாகத்திற்கு மதிப்புமிக்க கருத்துக்களையும் வழங்க வேண்டும். அத்தகைய மதிப்பீடுகளில் பின்வரும் கேள்விகள் கவனிக்கப்படலாம்:

- **மனக்குறைத் தீர்த்தல்** (GRM) ஆனது கூறப்பட்ட இலக்குகள், குறிக்கோள்கள் மற்றும் கொள்கைகளை நிறைவேற்றுவதில் பயனுள்ளதாக உள்ளதா?
- **மனக்குறைத் தீர்த்தல்** (GRM) ஆனது நோக்கத்தில் குறிப்பிடப்பட்டுள்ள மனக்குறைகளுக்கு பதிலளிக்கும் திறன் கொண்டதா?
- **மனக்குறைத் தீர்த்தல்** (GRM)ஆனது போதுமான மற்றும் பலதரப்பட்ட தீர்மான அணுகுமுறைகளுடன் பொருத்தப்பட்டிருக்கிறதா?
- **மனக்குறைத் தீர்த்தல்** GRM இன் தீர்மான அணுகுமுறைகளை மேம்படுத்துவதற்கான நடவடிக்கைகளை மேற்கொண்டுள்ளதா, எ.கா., திறன் மேம்பாடு, ஆலோசனை, தொழில்நுட்ப வல்லுனர்களுடன், முதலியன.
- ஒட்டுமொத்த செயற்திட்ட நிர்வாகத்தில் **மனக்குறைத் தீர்த்தல்** GRM திறம்பட ஒருங்கிணைக்கப்பட்டதா?

செயற்திட்ட உருவாக்கக் கட்டத்தின் போது GRC தேசிய அளவில் மட்டுமே செயல்படும்.எவ்வாறாயினும், திட்ட அமுலாக்கம் தொடங்கும் போது, பிரதேச மற்றும் மாவட்ட அளவிலான GRC களும் செயல்படும்.

REFERENCE ONLY

Annex 7: Chance find Procedure - Archaeological Properties

Objective:
To ensure the protection of fossils, coins, artefacts, structures, or other items of geological or archaeological interest discovered during construction works in compliance with Sri Lankan law.

Step-by-Step Actions

1. Upon discovery of any fossils, coins, artifacts, structures, or items of archaeological/geological interest, the Contractor shall immediately stop all work within a 100 m radius of the find.
2. The Contractor shall take all necessary precautions to prevent workers or any other persons from removing, damaging, or interfering with the find.
3. Barricades, signage, or other temporary measures shall be used to safeguard the site until further instructions are received.
4. The Contractor shall inform the Engineer immediately of the discovery.
5. The Engineer will, in turn, notify the relevant authorities, including the Department of Archaeology, as required.
6. The Contractor shall strictly follow the instructions of the Engineer and competent authorities regarding the handling, documentation, and preservation of the find.
7. Work shall not resume in the affected area until clearance is given.
8. If directed, the Contractor shall obtain advice and assistance from the Department of Archaeology on appropriate conservation or stabilization measures prior to recommencement of construction activities.
9. All chance finds shall be documented in a log, including location, description, photographs, and actions taken.
10. Copies of reports shall be submitted to the PMU and maintained at the site office.
11. Construction may only resume after written clearance is obtained from the competent authority or Engineer following proper conservation or relocation of the findings.

REFERENCE ONLY

Annex 8: Chance finds Procedure - important Fauna and Flora

Objective:
To ensure the protection of any rare, endangered, or ecologically significant plants and animals encountered during construction activities.

Step-by-Step Actions

1. Upon discovery of any important or protected flora or fauna, the Contractor shall immediately stop work in the immediate vicinity of the find to prevent harm or disturbance.
2. The area around the find shall be clearly marked and, if necessary, temporarily fenced to prevent accidental damage.
3. Workers and machinery shall be kept at a safe distance until instructions are received.
4. The Contractor shall inform the Engineer immediately of the discovery.
5. The Engineer will coordinate with relevant authorities such as the Department of Wildlife Conservation (DWC) or Forest Department for fauna, and relevant botanical authorities for flora.
6. The Contractor shall strictly follow guidance from the Engineer and competent authorities regarding handling, relocation, or protection of the flora/fauna.
7. No removal, relocation, or interference shall occur without prior written approval from the competent authority.
8. For fauna, if immediate relocation or rescue is required, only trained personnel from the DWC or authorized agencies shall handle the animal.
9. For flora, measures such as shading, watering, or transplantation may be implemented as advised by botanical experts.
10. All finds shall be recorded in a logbook, including species identification, location, condition, actions taken, and photographs if possible.
11. Reports shall be submitted to the PMU and maintained at the site office.
12. Construction may only continue in the affected area after clearance from the competent authority, ensuring the species is protected or safely relocated

REFERENCE ONLY

Annex 9: Emergency Preparedness Plan

Annex 9.1 Sudden uncontrolled water release due to structural failure

Objective
To ensure the safety of people, protect property, and reduce disruption in case of flooding.

Risk Assessment

- Identify areas prone to flooding (low-lying areas, near rivers or canals).
- Check previous flood history and local weather warnings.

Early Warning System

- Monitor local weather forecasts and flood alerts from authorities.
- Use SMS, community radios, or social media to warn residents.
- Designate a person or team responsible for issuing alerts.

Preparedness Measures

- Keep important documents, valuables, and emergency kits in waterproof bags.
- Maintain sandbags or barriers for flood protection.
- Prepare evacuation routes and shelters.
- Identify vulnerable people (elderly, disabled) and plan extra assistance.

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Emergency Kit

- Drinking water and non-perishable food
- First aid kit and medications
- Flashlights and batteries
- Clothing and blankets
- Mobile phone and charger

Evacuation Plan

- Know the nearest safe locations or higher ground.
- Predefine evacuation routes and transportation means.
- Assign a meeting point for family/community members.

Response Actions

- Follow official instructions immediately.
- Switch off electricity and gas if safe to do so.
- Avoid walking or driving through floodwater.
- Assist vulnerable neighbors if possible.

Recovery and Communication

- Once the flood recedes, return only when authorities confirm it is safe.
- Report damages to authorities for assistance.
- Stay updated on health advisories (waterborne diseases).

Annex 9.2 Wildlife attack

Objective

To protect life, minimize injuries, and ensure prompt response during a wildlife attack (e.g., snakes, elephants, leopards, or other wild animals).

Risk Assessment

Identify wildlife species present in the area.
Mark high-risk zones such as water sources, dense vegetation, or known animal paths.
Record previous sightings or attacks.

Early Warning and Prevention

Post warning signs in high-risk areas.
Avoid working alone in dense or risky areas.
Make noise while moving to alert animals.
Store food securely to avoid attracting wildlife.
Maintain clean camp and work areas to minimize encounters.

REFERENCE ONLY

Personal Protective Measures

- Wear sturdy boots, long pants, and gloves.
- Carry a whistle, torch, and first aid kit.
- Keep snakebite kits and emergency contact numbers handy.

Emergency Response

- **During an Attack**

Stay calm and do not run (may trigger chase).
Slowly back away from the animal if possible.
For snakes: immobilize bitten limb and keep it below heart level; do **not** try to suck venom.
For large animals (elephants, bears): seek shelter behind a tree, rock, or vehicle.

- **Immediate Actions**

Alert nearby team members.
Call local wildlife authorities or medical emergency services.
Provide first aid as required (e.g., pressure bandage for snakebite).

- **Evacuation**

Move the injured person to the nearest safe location or medical facility.
Use designated safe paths and vehicles if available.

- **Training and Awareness**

Conduct wildlife awareness sessions for workers. Train staff in basic first aid, snakebite response, and animal encounter protocols.

- **Recovery and Reporting**

Report the incident to authorities for documentation and guidance.
Review the incident to update risk assessments and preventive measures.

REFERENCE ONLY

Annex 10: (Meeting with Farmers)

S/N	Date/Venue	Participation			Types of Participants	Consultation Method	Matters Discussed
		M	F	T			
1	**23.06.2026**	15	5	20	PMU, Farmers Community lLeaders, F.O, NPC-ID	Meeting	- Introduction and Proposed Plan Discussion: The meeting began with a discussion on the proposed plan for Muththiyankaddu Tank Spillway & Bund Rehabilitation Project **Pre-Construction Consultation** • commencement date and duration, and the nature and extent of expected temporary disturbances were clearly explained. The Grievance Redress Mechanism (GRM), including relevant contact points, was also disclosed to ensure that community members could raise any concerns. The consultations involved farmers, community leaders, Grama Niladhari (GN) officials, and staff of the NPC-ID. As a result of these engagements, unanimous community support was obtained for the project. No objections or land-related disputes were reported, and stakeholders demonstrated a clear understanding of the project scope. Information was effectively communicated through multiple channels, including notice boards, farmer organization meetings, and verbal communication by NPC- ID field officers.

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						Land ownership verification, livelihood impact assessment, resettlement needs identification, and vulnerable group identification were carried out during the project planning stage. The findings confirmed that Proposed work area no private land acquisition is required, as all land is owned by NPC-ID. Accordingly, no resettlement or involuntary displacement of people will occur under the project. These conclusions were established through land registry verification, district certification, and community surveys conducted in the project area. The focus was on the details under the Bill of Quantities (BOQ) related to these improvements. -Discussion on Social Safeguards and Policies: The PMU (Project Management Unit) provided an overview of the social safeguards and the related policies, emphasizing their importance throughout the construction process, from start to finish. During the project planning stage, key information regarding the rehabilitation of Improvement of Muthuiyankaddu Tank Spillway was communicated to stakeholders through multiple methods. The nature and scope of the rehabilitation works were shared with all community members using notice boards, farmer meetings, and verbal communication. Details on the expected construction duration and phasing schedule were provided to farmers and residents along the canal through briefings conducted by NPC-ID field officers. Information on the Grievance Redress Mechanism (GRM),

REFERENCE ONLY

						including contact details for submitting complaints or grievances, was disseminated to all stakeholders via notice boards, announcement letters, and meetings. Traffic management arrangements during the construction period were communicated to road users, farmers, and residents through notice boards and community meetings. Public safety precautions related to construction activities were explained to all community members through verbal briefings and notice boards. The consultation process will be conducted throughout the project lifecycle in three phases. During the pre-construction phase, which takes place before project commencement, activities will include Grievance Redress Mechanism (GRM) disclosure, information dissemination, social safeguard assessment, and baseline data collection. This phase will involve a one-time consultation with relevant stakeholders. During the construction phase, which covers the entire implementation period, fortnightly consultations will be conducted with farmer representatives and community leaders. These engagements will focus on reviewing complaints and providing responses, addressing access-related issues, and managing any emerging concerns. Consultations during this phase will be held every 15 days. In the post-construction phase, after project completion, a final consultation will be conducted to collect community feedback, verify restoration of access, and resolve any outstanding concerns. This phase will also include

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						documentation of lessons learned and assessment of project impacts, and will be carried out as a one-time final consultation. In addition, the expected improvements in livelihoods and water management were discussed with beneficiaries during community meetings and farmer forums. Environmental safeguards and monitoring arrangements outlined in the ESMP were disclosed to interested stakeholders through dedicated ESMP disclosure meetings.
						Farmers were informed that during the Cyclone Dithwa flood event, exceptionally heavy rainfall generated unprecedented flood inflows into the reservoir, and rainfall records indicate 342 mm at Muthuiyankaddu and 365 mm at Nainamadu on 28 November, resulting in extremely high flood discharge through the spillway. • The extreme flood caused extensive damage to the spillway system. The left-bank spill training bund between the first and second drops was breached, while the training bund between the second and third drops was partially breached. • Severe scour erosion occurred downstream of the stilling basin due to the hydraulic jump forming beyond the existing concrete cushion. • High-velocity flood flow also caused erosion along the spillway channel, displacement of rubble protection, overtopping of the retaining wall, and erosion of the gravel layer on the bund crest.

REFERENCE ONLY

						-The importance of social and environmental safeguard policies was emphasized, ensuring that these policies would be strictly followed throughout the project. Farmer Concerns and Discussions: During the discussion with farmers, it was confirmed that: Economic and cultural activities will not be affected. Livelihood activities will not be impacted. Sources of livelihood will remain unaffected. During the consultation process, the project objectives, construction timeline, safety precautions, traffic management arrangements, and environmental mitigation measures were clearly explained to the community. The information was adequately received by stakeholders, and their questions were addressed satisfactorily during the discussions. As a result, community acceptance of the project increased, and overall support for the proposed works was further strengthened.
						There will be no land acquisition or involuntary resettlement. Environmental, social, and access-related concerns were addressed: No environmental or social issues have been reported. Farmers confirmed that there are no access-related challenges during the rehabilitation work. -Farmer Request and PMU Response:

REFERENCE ONLY

						-Conclusion: During the project planning stage, comprehensive information was disclosed to ensure transparency and stakeholder awareness. The nature and scope of rehabilitation work for the Improvement of Muthuiyankaddu Tank Spillway were communicated to all community members through notice boards, farmer meetings, and verbal communication. The expected construction timeline and phasing schedule were shared with farmers and residents along the canal through briefings conducted by Northern Irrigation Staff. Grievance Redress Mechanism (GRM) contact details were also disclosed to all stakeholders through notice boards, announcement letters, and meetings. Information on traffic management arrangements during construction was communicated to road users, farmers, and residents through notice boards and community meetings. Public safety precautions were explained to all community members through verbal briefings and notice boards. Expected project benefits, including improvements in livelihoods and water management, were discussed with beneficiaries during community meetings and farmer forums. Environmental safeguards and monitoring arrangements were disclosed through ESMP disclosure meetings. The consultation process confirmed strong community acceptance of the project, with unanimous support and no objections reported. Land ownership verification confirmed

REFERENCE ONLY

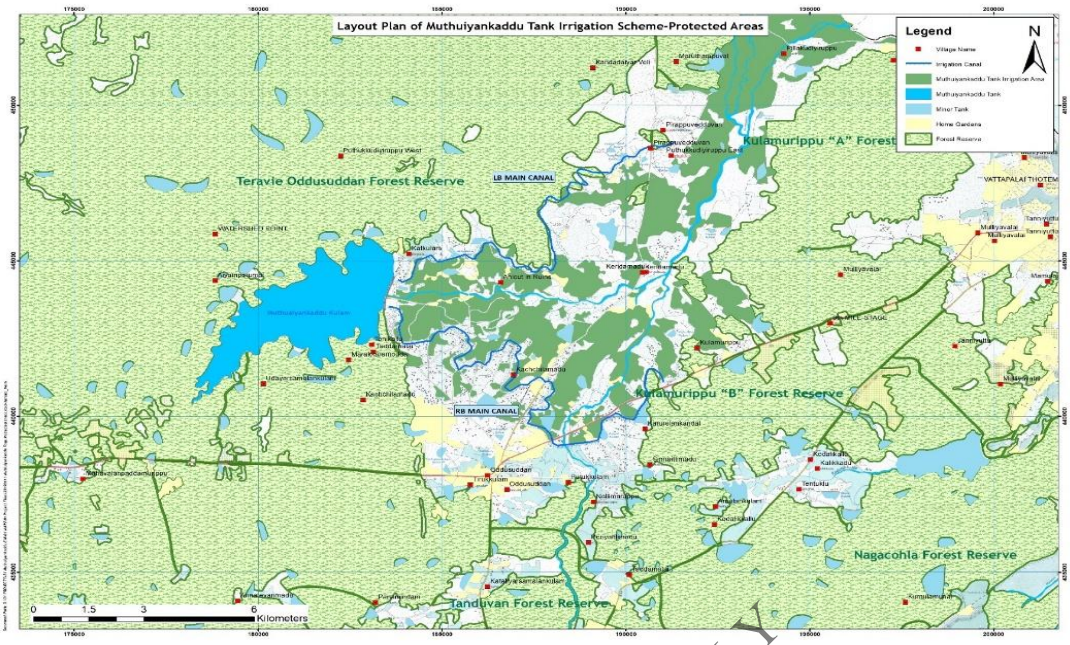
					that the entire project area belongs to the Northern Irrigation Department, and no private land acquisition is required. Accordingly, no resettlement or involuntary displacement will occur under the project. A fully operational three-tier Grievance Redress Mechanism (GN, DS, and National levels) has been established to ensure accessibility, transparency, and accountability in grievance handling. The consultations further indicated strong community engagement, with active participation from farmers, community leaders, and relevant stakeholders. Information access was considered adequate due to multiple communication channels used during the engagement process. Overall, the planning stage consultations demonstrated broad stakeholder support, high awareness, and strong acceptance of the proposed project. Mitigation measures were also identified and incorporated to address potential concerns. Temporary disruptions during construction will be managed through fortnightly community consultations conducted by the Project Management Unit and Grievance Redress Committee, with monitoring support from Divisional Secretariat officials. Access issues will be addressed through a traffic management plan and alternative route provisions implemented by the contractor and NPC-ID Authority, supported by daily site inspections. Information gaps will be minimized through continuous information disclosure by NPC- ID Officers, supported by monthly community feedback. Grievance escalation delays will be prevented through a structured three-tier GRM with defined

REFERENCE ONLY

							timelines monitored continuously by relevant authorities. Concerns of vulnerable groups will be addressed through targeted grievance tracking and quarterly safeguard reviews conducted by the Project Management Unit Social Safeguard Officer. The meeting concluded with an agreement to follow up on the discussed points and ensure that the project proceeds with due consideration to the social, environmental, and economic aspects outlined. The PMU will continue monitoring the progress and address any issues that arise during the project implementation.

REFERENCE ONLY

Annex 11: Land use map for the project area associated with the Muththaiyankattu irrigation scheme



REFERENCE ONLY

Annex 12: Meeting Photo & visit Photo



Integrated Watershed and Water Resources Management Project (IWWRMP)

Standard Procedure for Ensuring Occupational Health and Safety When working in Wildlife Area

REFERENCE ONLY



Content

1. Purpose
2. Common hazards may occur when working in Wildlife areas
3. Planning for Occupational Health and Safety (OHS).
4. Safe Operating Procedure
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5. Common actions to be followed
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   6.4 Precautions against crocodiles attacks
7. General conditions of workers
8. Personal Protective Equipment needed

REFERENCE ONLY

1. Purpose

Workers who are working in wildlife or forest areas can be exposed to wildlife threats. Therefore, persons working in these areas need to strictly follow the guidelines and regulations given by the relevant authority. To fulfill this requirement, contractors and workers will have to follow the occupational health and safety guideline covered in this document during their working period in the wildlife/ forest areas.

2. Common hazards that may occur when working in Wildlife areas

1. Infectious diseases transmission from mosquito or small animal bites.
2. Swelling, mild or severe allergic reactions from stinging insects.
3. Swelling, mild or severe allergic reactions or death from snake bites.
4. Serious injury or death from contact with large mammals or reptiles.

3. Planning for Occupational Health and Safety (OHS).

1. Review identified area, its nature, jurisdiction, conservation status and relevant authority.
2. Plan to get relevant authorization and get clear idea about given conditions and required OHS measures.
3. Purchasing of relevant safety equipment. (Example – Personal Protective Equipment)
4. Provide necessary trainings to staff. (Example – First Aid, emergency protocols)
5. Appoint a person to supervise OHS.

REFERENCE ONLY

4. Safe Operating Procedure

4.1 General procedures

4.1.1 Obtain conditional approval from authorized agency (Example – Department of Wildlife Conservation / Forest Department).

4.1.2 Understand the given conditions and take action to aware all workers (including drivers and supporting staff) on the given conditions.

4.1.3 Obtain the service of 01 or 02 officers from relevant authorized agency and always accompany them to relevant sites and work under their supervision and guidance.

4.1.4 If any risks or danger is anticipated, felt or identified in the area of work, immediately take action to inform authorized persons and get their direction.

1.2 Common preparedness

4.2.1 Be aware of working area and current conditions and history. (Example –elephant attacks / crocodile attacks)

4.2.2 Always carry a mobile phone or some communication system. (In some protected areas of Sri Lanka, there is no mobile phone coverage).

4.2.3 Select suitable vehicles, at least two vehicles should be mobilized (good condition,4 wheel, toolbox, tore ropes and winch, etc.). Persons will not engage in any activities alone.

4.2.4 Always bring a first aid box/ stretcher.

4.2.5 Be aware of nearest hospital and nearest route.

4.2.6 Be equipped with enough clean drinking water for workers.

5. Common protocol to follow

REFERENCE ONLY

1. Be aware of your surroundings, and note any wild or suspicious acting animals in your working area.
2. Identify and be aware about wild animal active times and try to avoid those times.
3. Avoid reaching or stepping into or over hidden areas that may contain wildlife.
4. Be aware of signs that indicate above or below ground animal nests. Also take appropriate action to prevent contaminations of these areas.
5. Avoid direct contact with birds, bats, or other animal droppings.
6. Avoid direct contact with animal blood. If contact cannot be prevented, wear rubber gloves and dispose properly.
7. Do not feed any wild animal.
8. Do not capture / harm wild life or plant species and do not collect anything from protected area. (Example fallen animal horns, bones, tusks (ivory), etc.).
9. Set fire under (if necessary) should do under supervision of wildlife officers and after use take action to completely extinguish it.
10. Allocate one person to be on guard/vigilance while other workers are at work

6.Precautional actions

6.1 Precautions against bees/ wasp stings/bites

6.1.1 Awareness about working areas and presence of bee hives or wasp nests.

6.1.2 Do not wear perfumes, colognes, scented soaps or powders.

6.1.3 Tuck pants into your socks or working boots.

6.1.4 Wear safety hats with face protecting net.

6.1.5 Do not make more noise than necessary when working.

6.1.6 Establish safety cage with enough space. (If possible)

6.1.7 Provide safety kit for workers

6.1.8 If you decided to remove bee/ wasp nest from working site, the authorized agency (example Department of Wildlife Conservation -DWLC) should be informed and their concurrence and assistance should be sought prior to implementation.

6.1.9 Always consult and take a service from qualified pest-removal expert. (Example – Bee conservation Society of Sri Lanka)

REFERENCE ONLY

6.2 Precautions against large mammal attacks

6.2.1 Be aware of working site, access routes etc.

6.2.2 Be aware on animal movement routes, times, nature of the animals etc.

6.2.3 Try to avoid contact with wild animals. (Example – use an alternative route)

6.2.4 Request wildlife officers to bring/provide safety equipment (Example - Thunder-flashes).

6.3 Precautions for prevention of snake bites

6.3.1 Be vigilant and aware of working area.

6.3.2 Always wear safety boots.

6.3.3 Do not put hands or legs into hidden holes, anthills or any hidden spots.

6.3.4 Do not touch dead or live snakes.

6.4 Precautions for prevention of crocodile attacks

6.4.1 Be vigilant and aware of working area on crocodile signs (Example – foot prints, scats, hiding holes etc.) and if those signs are available immediately inform to authorized officials and get their advises.

6.4.2 Do not put your hands or legs in to crocodile hiding holes / do not enter into crocodile hiding holes.

6.4.3 Do not enter into unsafe water.

6.4.4 If you need to work in open waters, establish protective cages.

6.4.5 Observe the working area thoroughly before entering in to open waters or protective cages.

7. General Conditions of workers

1. Workers should be in good health condition.
2. Should agree to follow given conditions and safety measures given from time to time and unexpected conditions.
3. Do not consume alcohol while working.
4. Always pay attention to surroundings.
5. Always stay as a group.
6. Do not litter.
7. Aware of all Do's and Don'ts. (contractor and supervision officers are responsible for this).
8. Establish temporary signboards on Do's and Don'ts at working sites.

REFERENCE ONLY

8.Personal Protective Equipment need to used

1. Insect repellant
2. Long-sleeved shirts and pants (Jungle green/ dark colour)
3. Safety boots
4. Insect spray designed for bees/wasps/hornets
5. Safety hats with face protector (specially protect from bees and wasps)
6. Life jackets/ raincoats.
7. Lifesaving equipment for working in water.
8. Re-chargeable torches / lighting equipment.

Annexure III

Integrated Watershed and Water Resources Management Project (IWWRMP)

Standard Procedure for Assessing the Requirement of Tree Removals

REFERENCE ONLY



REFERENCE ONLY

Standard Procedure for Assessing the Requirement of Tree Removals

1. Planning Stage

1.1 Consultancy teams should be appraised by the PMU to pay attention and document the requirement of tree removals at each site.

1.2 Consultancy team should discuss with officials of relevant implementing agency on proposed tree removals to identify exact requirement and alternatives explored.

1.3 Ground verification on tree removals should be done by team of IA and PMU. Officials from implementing agency and representatives from community organizations shall also participate and records with attendance list be taken. All trees identified for removal should be measured for their Diameter at Breast Height (DBH).

1.4 Special attention shall be given if any of the selected trees are considered rare, endemic, religiously, historically or culturally important, or are in roosting/ nesting sites etc. The removal of these trees should be avoided and alternatives sought. Unavoidable removals shall be supported with sufficient justification.

1.5 Proposed unavoidable tree removal identified and confirmed at ground verification should be declared and requirement explained to the public at community consultative meetings. The removal should be comprehensive justified with scientific/ engineering support. Sufficient time for community public feedback shall be provided. All suggestions provided shall be given due consideration.

REFERENCE ONLY

1.6 If public raise key concerns/questions/ protests/ alternatives, the proposed list of tree removal shall be revisited with the relevant implement agency.

1.7 Include finalized tree list in to draft ESMP (scientific justification need for each tree which has identified to be removed). All mitigations and compensatory tree planting activities shall be presented explicitly in the ESMP.

1.8 Submit draft ESMP to PMU with all required information and photos on proposed tree removals.

2. Reviewing Stage

2.1 ESMPs shall be reviewed by PMU and further discussion with consultancy team will be conducted if necessary.

2.2 Field visit will be conducted by the PMU further verify of the requirement of proposed tree removals with officials of relevant implementing agency and representatives of community organizations.

2.3 The proposed tree removal list in the ESMP will be revisited post field visit and any necessary amendments will be made if necessary in concurrence with the implementing agency.

2.4 The final stage shall be to obtain the recommendations of DSRP (SPELL OUT) on tree removals and further amend list according to the recommendations of DSRP

3. Obtaining Clearance / approvals (responsibility of Implement Agency)

3.1 The finalized tree removal list shall be shared with relevant approving officers/ agencies like Grama Niladhari, Divisional Secretariat, District Secretariat, Forest Department, State Timber Corporation, Central Environment Authority/ Provincial Environmental Authority etc. The obtaining of the clearances, where required, will be the responsibility of the implementing agency will be done prior to any removal of trees.

3.2 All clearances shall be shared with the PMU and endorsed before the tree removal activities are commenced. If any conflicts arise, the PMU will bring it to the notice of the World Bank E&S team immediately.

REFERENCE ONLY

4. Awareness program (Implementation Agency / PMU)

4.1 Awareness programs for selected contractors shall be conducted on environmental and social impact mitigation measures with special attention on tree protection/removal guidelines.

4.2 Contractors shall be strictly advised not to remove trees unless essential. They shall be instructed to follow the ESMP strictly and any deviations shall be notified to the implementing agency and the PMU in advance for necessary action.

4.3 The removal of trees will be presented at the project introductory meeting and any other community level meetings.

4.4 Continuous field inspection and monitoring shall be conducted with a more concerted focus during land preparation and tree removal period.

4.5 Public complaints shall be attended to without delay adopting the protocols in place for GRM

5. Ecosystem restoration (Contractor)

5.1 Contractor shall carry out recommendations provided in the ESMP on remedial mitigation involving planting and maintenance of suitable tree species (as identified in the ESMP).

6. Monitoring and Evaluation (PMU/ Implementing agency)

6.1 Field inspection and monitoring will be carried out at regular intervals by the implementing agency and the PMU. Photographic evidence will be recorded for al tree removal activities.

6.2 Upon completion of required tree removal activities, site shall be evaluated to ensure that no further destruction has occurred. If satisfied, final clearance to proceed will be granted by the PMU.

6.2 If not satisfied, the contractor will be directed to utilize retention fund to carry out ecosystem restoration to the satisfaction of the implementing agency and the PMU. The WB E&S team shall also be notified under such circumstances.

REFERENCE ONLY

Integrated Watershed and Water Resources Management Project (IWWRMP)

Checklist for Tree Removals.

Name of the Site …….

Date …….

No	Item/ Activity	YES	NO	Remarks
1	Tree removal has been identified in ESMP			
2	List of tree removals with justification has been included in to ESMP (approved by WB			
3	Ground verification done by PMU			
4	Ground verification done by DSRP			
5	According to no 3 &4, Amendments included in to final tree removal list			
6	Conduct final community consultancy and briefing on tree removals by IA/PMU			
7	According to no 6, Any disagree / not at			
8	If disagree, did any change in the list			
9	Obtained necessary clearance			
	GN ☐ Di.S ☐ DS ☐ FD ☐ CEA ☐ P.EA ☐ A.Dep. ☐			
10	Written inform to authorized officers/institutes			
	GN ☐ Di.S ☐ DS ☐ FD ☐ CEA ☐ P.EA ☐ A.Dep. ☐			
11	IA agreed to closely monitor of tree removals (in written)			
12	Awareness on tree removals carried out for contractor to the satisfaction of PMU.			

GN- Grama Niladhari, Di.S – Divisional Secretary, DS – District Secretary, FD – Forest Department, CEA- Central Environment Authority, P.EA- Provincial Environment Authority, A.Dep. – Archelogy Department, IA- Implementing Agency, PMU – Project management Unit. (Use "√" mark in relevant box)

REFERENCE ONLY

……. According to the checklist, proposed tree removal is in order.
Signature / Date
Environment Specialist (IWWRMP)

……..
Signature /Date
Project Director (IWWRMP)

Declaration of Implementing Agency

I hereby certify that, proposed tree removal will be done under my direct supervision and responsible to maintain and follow required condition given by authorized / approving agencies.

…….
Signature /Date
Officer In-charge/ IA

Annexure IV

Integrated Watershed and Water Resources Management Project (IWWRMP)

Ministry of Irrigation

Labor Management Plan

(Including site management and camp management measures)

REFERENCE ONLY



REFERENCE ONLY

Abbreviations

IA	-	Implementing Agency
IWWRMP	-	Integrated Watershed and Water Resources Management Project
LMP	-	Labor Management Plan
PMU	-	Project Management Unit
PHI	-	Public Health Inspector
GBV	-	Gender Based Violence

REFERENCE ONLY

Introduction

Labor Management Plan (LMP) of the Integrated Watershed and Water Resources Management Project (IWWRMP) provides basic guidance to contractors to smoothly operate project activities without creating harm to workers and communities. Selected contractors shall follow this plan including relevant national labor management laws, regulations and practices. The labor management plan consists of site management measures and camp management measures which outlines a range of mitigation measures designed to avoid or reduce undesired labor management, site management and camp management impacts during construction.

The plan has been prepared by structuring relevant major subject areas that need to be paid attention to and providing mitigation measures including details of responsible entities for implementation and frequency of monitoring to the identified risks and potential impacts.

Objectives of the plan

The objectives of the labor management Plan are:

- Avoid or reduce negative impacts on environment due to establishment of project sites.
- Establish standards on worker welfare and living conditions at the camps that provide a healthy, safe and comfortable environment.
- Avoid or reduce negative impact on community and maintain constructive relationships between local communities and workers' camps.

REFERENCE ONLY

Roles and responsibilities

- Contractor shall ensure sufficient resources are allocated on an ongoing basis to meet the requirements of this Plan.
- Contractor shall strictly adhere to national labor acts, rules and regulations pertaining to terms and conditions of employment and labor management.
- The Contractor shall pay attention to implement labor management plan monitor the progress.
- Contractor shall facilitate to PMU or IA to monitor the progress of LMP.
- Contractor shall comply to make necessary amendments to the LMP after the site inspections of PMU, IA or authorized entity.
- Contractor shall comply to ensure that all workers sign the GBV Code of Conduct (CoC), provide necessary awareness and trainings to laborers about rules and regulations, guidelines and general information time to time

No	Major field	Sub field	Mitigation and management measures	Responsibility	Monitoring frequency
1	Plan basic arrangements of worksite management	Site identification and demarcation	Contractor should identify the exact area of work site before start project activities.	Site engineer & Contractor	-
			Contractor should plan the work site to identify appropriate places for site office, labor camps, yards, stores, parking areas etc.	Site engineer & Contractor	-
			Contractor should obtain relevant approvals form IA and site engineer.	Contactor	-
			Fence or protective measure should be placed around the work site.	Contactor	-
		Control public access to work site	All public access to the work site should be prohibited or controlled to avoid risk to the public.	Contactor	Monthly
			Signboards should be displayed at all entry points which indicating "Authorized entries only" or "prohibited to public entrance".	Contactor	Monthly
			Contractor shall take action to establish a temporary security point at the entrance and assigned a person to duty for 24 hrs. for security of the site and monitor vehicle and monitoring transfer of goods into and out of camps.	Contactor	Weekly
			A register shall be maintained at the security point to register all labors/ officers/vehicles which enter / departure to/from the work site.	Contactor	Weekly
		Disclose of basic information to workers and interest groups	Contractor should established signboards at the main entry point to display detailed information of the proposed project.	Contactor	Monthly
			Safety signs should be displayed at the entrance and other necessary places at the work site.	Contactor	Monthly
			Contractor should established a notice boards at the work site and necessary information should be displayed in time to time.	Contactor	Monthly
			Contractor should establish a notice board on COVID 19 health guideline at the entrance.	Contactor	Monthly
		Establishment of site office	Contractor should established a site office according to the site plan and should maintain appropriate working condition.	Contractor/ Site engineer	-
			Necessary documents (guidelines, ESMP, copy of approvals etc.) should be placed at the site office.	Contactor	Monthly

REFERENCE ONLY

No	Major field	Sub field	Mitigation and management measures	Responsibility	Monitoring frequency
			First aid box with essential drugs should be placed at the site office.	Contactor	weekly
			Fire protection equipment should be placed at the site office.	Contactor	Monthly
			Contractor should maintain an extra stock of safety equipment at site office to issue when necessary.	Contactor	Monthly
			Hazards, explosives or any harmful chemicals should not stock in the site office.	Contactor	weekly
2	Plan work site arrangement	Readiness for emergency response	Contractor shall develop an emergency response plan that meets requirements of emergency situation.	Contractor	-
		Ensure the safety of workers	Contractor should be placed temporary fences/ barricade tapes or protective measures to identify working areas, heavy machinery operating areas and areas where having deep excavations and activities of hazardous nature for the workers.	Contractor	Every 2 weeks
			Specific area in the site should be reserved to store construction materials.	Contractor	Monthly
			Specific area /place/ rooms should be reserved for store Hazards, explosives or harmful materials or chemicals.	Contractor	Weekly
			Materials should stock pilled without exceeding approved height.	Contractor	Monthly
			Areas should be demarcated to park vehicles/ heavy machines or vehicle repairing and relevant sign boards should be displaced.	Contractor	Monthly
			All vehicles used by any contractor for the purpose of the project will have valid registration, insurance and road worthiness.	Contractor	Daily
			Fire protection equipment should be established in the work site at most essential places.	Contractor	Every 2 weeks
			The contactor shall take action to strictly follow the COVID 19 operational guideline declared by the Ministry of Health at work site.	Contractor	Once a week
			Workshops, Stores, should establish according to the approved site plan.	Contactor	-

REFERENCE ONLY

No	Major field	Sub field	Mitigation and management measures	Responsibility	Monitoring frequency
			Equipment (including power tools) should store properly, listed and assigned a person to issuing and receiving.	Contractor	Weekly
3	Establishment of Pollution Control measures	Control of Dust and emission,	Stock pilled materials should be covered with appropriate cover or sprinkling water to control dust emission.	Contractor / Site engineer	Daily
			Dust emission form earth works (when operating) should controlled by sprinkling water.	Contractor / Site engineer	Daily
			Contractor should take action to transport excavated debris to approved dumping sites and should not store at work site.	Contractor / Site engineer	Daily
		Control of noise and vibration	Contractor shall adhere to strictly follow given condition for noise limits and vibration limits. (far day and night)	Contractor / Site engineer	Daily
		Control of water pollution	Silt traps should be established in relevant places.	Contractor / Site engineer	Monthly
			Proper solid waste management mechanism should be established in the work site.	Contractor / Site engineer	Daily
			Precautions should be established to avoid oil, fuel or lubricant contamination.	Contractor / Site engineer	Daily
		Final clearance and restoration of worksite	After the completion of project activities contractor shall carefully remove all temporary buildings, huts, stocked pilled materials, temporary blocks of streams etc. form the work site and follow up the approved site restoration actions.	Contractor / Site engineer/PMU	-
4C	Labor management measures	Adhere to laws and regulations	No labor under the age of 18 will be hired for work under this contract.	Contractor	Daily
			Contractor shall strictly follow relevant national labor laws and acts related to terms and conditions of employment (i.e. related to salary payments, working hours, leave etc.) and issue employment letters/contracts to workers with details of the employment terms/conditions.	Contractor	-
			Contractor shall obtain necessary approval when increased the number of workers in labor camps	Contractor	-
			Contractor shall maintain a log of any grievances/complains and actions taken to resolve them.	Contractor	Weekly

REFERENCE ONLY

No	Major field	Sub field	Mitigation and management measures	Responsibility	Monitoring frequency
			Any complaints related to sexual harassment / gender based violence should be immediately reported to the PMU who in turn will report to World Bank for necessary guidance on the actions to be taken.	Contractor	
			Workers shall abide by camp rules which includes a disciplinary process.	Contractor	Daily
			Contractor shall limit workers interaction with community when outside the camp.	Contractor	Daily
			Contractor's personnel shall not engage in any discrimination or harassing behavior.	Contractor	Daily
		Arrangement for conduct basic awareness for workers	Contractor shall take action to develop a labor code of conduct and translated it in to local languages upon clearance from the Engineer. The code of conduct must be made available to all staff and displayed in the work site in local languages. All workers will required to sign the Code of Conduct.	Contactor	Monthly
			Contractor shall give necessary advices and instructions to all labors and drivers of the site to follow code of conducts.	Contractor/Site engineer/IA/PMU	When necessary
			Contractor shall take action to conduct labor awareness programs to educate the laborers about the code of conduct, general conduct, the Environmental and Social Management Plan, Occupational Health and Safety etc.	Contractor/Site engineer/IA/PMU	When necessary
		Labor safety and welfare facilities	Contractor shall provide sufficient safety gears to labors and need to monitor the utilization.	Contractor/ Site engineer	Daily
			Contractor shall take action to follow safety measures specially in handling of explosives, hazard chemicals, electricity etc.	Contractor/ Site engineer	Daily
			Contractor shall provide equal facilities / standards for all labor camps in the site and do not make any differences on worker's race, gender or nationality.	Contractor/ Site engineer	Daily
			Contractor, as appropriate, shall provide adequate recreation facilities for workers to reduce incentive for leaving camps during leisure time.	Contractor/ Site engineer	Monthly
			Contractor shall pay more attention and provide better quality safety equipment to the workers who are engaging with danger/ risk activities.	Contractor	Daily

REFERENCE ONLY

No	Major field	Sub field	Mitigation and management measures	Responsibility	Monitoring frequency
		Recognition of cultural, nationality, religion rights.	Contractor may provide prayer rooms and other facilities, as necessary and to the extent practicable, to satisfy the religious needs and customs of its workforce. (if necessary)	Contractor	Monthly
5	Labor Camp management	Planning of Labor camps	Labor camps shall be established according to the approved site plan.	Contractor/ Site engineer	-
		Address community grievances	PMU or IA may request that camp related activities/operations be amended to address community grievances. Contractor shall comply with these requests.	Contractor	-
			Establishment of labor camps shall be commenced only upon the written approval of the Engineer.	contractor	-
			IA/ PMU may request that camp related activities/operations be amended to address community grievances. Contractor shall comply with these requests.	Contractor	-
		Maintain health condition	Contractor shall comply with the minimum health requirements for project execution and the community Health and Safety Management Plan which set out requirements and management measures on controlling communicable diseases within camps and to outside communities.	Contractor	Daily
			Contractor shall routinely monitor the quality and supply of water and other health related facilities.	contractor	Monthly
		Maintain Living and hygienic conditions	Contractor shall be maintained necessary living accommodation and ancillary facilities in functional and hygienic manner and as approved by the Engineer.	Contractor	Monthly
			Contractor should provide separate resting and sanitary facilities for both men and women laborers.	Contractor	Monthly
			All temporary accommodation should be established and maintained in such a fashion that uncontaminated water is available for drinking, cooking and washing.	Contractor	Monthly
			Washrooms should have sufficient and proper water supply.	Contractor	Weekly
			Drinking water facility should be provided to labor camps.	Contractor	Daily
			COVID-19 health guideline shall be applied at the labor camps and throughout the work site.	Contractor	Daily

REFERENCE ONLY

No	Major field	Sub field	Mitigation and management measures	Responsibility	Monitoring frequency
			Adequate Personal protective equipment (PPE) will be provided to workers, including: Facemasks, gloves, etc., if possible, to prevent COVID-19 spread	Contractor	Daily
		Application of Waste management measures	The sewage system for the camp, if not available, shall be planned & implemented with concurrence from the Local Public Health Officer (PHI).	Contractor/ Site engineer	-
			Proper solid waste management system (waste collection method/ separation method and final disposal method) should be established at labor camps.	Contractor	Weekly
			Waste water (from kitchen, washrooms, canteen etc.) should not release into open water bodies or streams.	Contractor	Weekly
		Final clearance and camp demolishing	After the completion of project activities contractor shall carefully remove all temporary buildings, huts, labor camps, toilets form the work site. Temporary toilet pits should treat and demolish accordance to approved health guidelines. Approved site restoration actions should implement.	Contractor/IA/ PMU	-

REFERENCE ONLY

Sample Code of Conduct

Individual Code of Conduct

Implementing ESHS and OHS Standards

Preventing Gender Based Violence

I, _____, acknowledge that adhering to environmental, social, health and safety (ESHS) standards, following the project's occupational health and safety (OHS) requirements, and preventing Gender Based Violence (GBV) is important. The Company considers that failure to follow ESHS and OHS standards, or to partake in activities constituting GBV—be it on the work site, the work site surroundings, at workers' camps, or the surrounding communities—constitute acts of gross misconduct and are therefore grounds for sanctions, penalties or potential termination of employment. Prosecution by the Police of those who commit GBV may be pursued if appropriate.

REFERENCE ONLY

I agree that while working on the project I will:

1. Consent to Police background check.
2. Attend and actively partake in training courses related to ESHS, OHS, and GBV as requested by my employer.
3. Will wear my personal protective equipment (PPE) at all times when at the work site or engaged in project related activities.
4. Take all practical steps to implement the contractor's environmental and social management plan (C-ESMP).
5. Implement the OHS Management Plan.
6. Adhere to a zero-alcohol policy during work activities, and refrain from the use of narcotics or other substances which can impair faculties at all times.
7. Treat women, children (persons under the age of 18), and men with respect regardless of race, color, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status.
8. Not use language or behavior towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.
9. Not sexually exploit or abuse project beneficiaries and members of the surrounding communities.

10. Not engage in sexual harassment of work personnel and staff —for instance, making unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature is prohibited. E.g. looking somebody up and down; kissing, howling or smacking sounds; hanging around somebody; whistling and catcalls; in some instances, giving personal gifts.
11. Not engage in sexual favors —for instance, making promises of favorable treatment (e.g. promotion), threats of unfavorable treatment (e.g. loss of job) or payments in kind or in cash, dependent on sexual acts—or other forms of humiliating, degrading or exploitative behavior.
12. Not use prostitution in any form at any time.
13. Not participate in sexual contact or activity with children under the age of 18—including grooming, or contact through digital media. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense or excuse.
14. Unless there is the full consent[1] by all parties involved, I will not have sexual interactions with members of the surrounding communities. This includes relationships involving the withholding or promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex (including prostitution). Such sexual activity is considered "non-consensual" within the scope of this Code.
15. Consider reporting through the GRM or to my manager any suspected or actual GBV by a fellow worker, whether employed by my company or not, or any breaches of this Code of Conduct.

REFERENCE ONLY

With regard to children under the age of 18:

16. Bring to the attention of my manager the presence of any children on the construction site or engaged in hazardous activities.
17. Wherever possible, ensure that another adult is present when working in the proximity of children.
18. Not invite unaccompanied children unrelated to my family into my home, unless they are at immediate risk of injury or in physical danger.
19. Not use any computers, mobile phones, video and digital cameras or any other medium to exploit or harass children or to access child pornography (see also "Use of children's images for work related purposes" below).
20. Refrain from physical punishment or discipline of children.
21. Refrain from hiring children for domestic or other labor below the minimum age of 14 unless national law specifies a higher age, or which places them at significant risk of injury.
22. Comply with all relevant local legislation, including labor laws in relation to child labor and World Bank's safeguard policies on child labor and minimum age.

[1] **Consent** is defined as the informed choice underlying an individual's free and voluntary intention, acceptance or agreement to do something. No consent can be found when such acceptance or agreement is obtained using threats, force or other forms of coercion, abduction, fraud, deception, or misrepresentation. In accordance with the United Nations Convention on the Rights of the Child, the World Bank considers that consent cannot be given by children under the age of 18, even if national legislation of the country into which the Code of Conduct is introduced has a lower age. Mistaken belief regarding the age of the child and consent from the child is not a defense.

Use of children's images for work related purposes

When photographing or filming a child for work related purposes, I must:

23. Before photographing or filming a child, assess and endeavor to comply with local traditions or restrictions for reproducing personal images.
24. Before photographing or filming a child, obtain informed consent from the child and a parent or guardian of the child. As part of this I must explain how the photograph or film will be used.
25. Ensure photographs, films, videos and DVDs present children in a dignified and respectful manner and not in a vulnerable or submissive manner. Children should be adequately clothed and not in poses that could be seen as sexually suggestive.
26. Ensure images are honest representations of the context and the facts.
27. Ensure file labels do not reveal identifying information about a child when sending images electronically.

REFERENCE ONLY

Sanctions

I understand that if I breach this Individual Code of Conduct, my employer will take disciplinary action which could include:

1. Informal warning.
2. Formal warning.
3. Additional Training.
4. Loss of up to one week’s salary.
5. Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months.
6. Termination of employment.
7. Report to the Police if warranted.

I understand that it is my responsibility to ensure that the environmental, social, health and safety standards are met. That I will adhere to the occupational health and safety management plan. That I will avoid actions or behaviors that could be construed as GBV. Any such actions will be a breach this Individual Code of Conduct. I do hereby acknowledge that I have read the foregoing Individual Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to ESHS, OHS, GBV issues. I understand that any

action inconsistent with this Individual Code of Conduct or failure to act mandated by this Individual Code of Conduct may result in disciplinary action and may affect my ongoing employment.

Signature: _____

Printed Name: _____

Title: _____

Date: _____

REFERENCE ONLY

Section - 7

Form of Bid

REFERENCE ONLY

REFERENCE ONLY

Section 7 - FORM OF BID

Name of Contract: **Improvements to Muthuiyankaddu Tank bund & Spillway**

Contract No.: **LK-MOMDE-539127-CW-RFB**

To: **Project Director, Integrated Watershed & Water Resources Management Project**

Gentlemen:

1. Having examined the Standard Bidding Document - Procurement of Works – Major Contracts [ICTAD/SBD/02 - Second Edition, January 2007], Specifications, Drawings and Bills of Quantities and Addenda for the execution of the above-named Works, we the undersigned, offer to execute and complete such Works and remedy any defect therein in conformity with the aforesaid Conditions of Contract, Specifications, Drawings, Bills of Quantities and addenda for the sum of Sri Lankan Rupees ..... (LKR .....) or such other sums as may be ascertained in accordance with the said Conditions.

2. We acknowledge that the Contract Data forms part of our Bid.

3. We undertake, if our Bid is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Engineer's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Contract Data.

REFERENCE ONLY

4. We agree to abide by this Bid until the date specified in ITB Clause 16 …… *[insert date]*, and it shall remain binding upon us and may be accepted at any time before that date.

5. Unless and until a formal Agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding Contract between us.

6. We understand that you are not bound to accept the lowest or any bid you may receive.

7. We declare that civil work contracts *have/ have not been* suspended or terminated and/or performance security called by an employer for reasons related to the non-compliance of any environmental, or social, (including sexual exploitation and abuse (SEA) and gender based violence (GBV)), or health or safety requirements or safeguard in the past five years.
   (Note: If suspended, terminated or Performance Security is called give details)

Year	Suspended or terminated portion of contract	Contract Identification	Total Contract Amount (current value, currency, exchange rate and US$ equivalent)
[insert year]	*[insert amount and percentage]*	Contract Identification: *[indicate complete contract name/ number, and any other identification]* Name of Employer: *[insert full name]* Address of Employer: *[insert street/city/country]* Reason(s) for suspension or termination: *[indicate main reason(s) e.g. for GBV/ SEA breaches]*	*[insert amount]*
...	...	*[list all applicable contracts]*	...
Performance Security called by an employer(s) for reasons related to ESHS performance			
Year		**Contract Identification**	**Total Contract Amount (current value, currency, exchange rate and US$ equivalent)**
[insert year]		Contract Identification: *[indicate complete contract name/ number, and any other identification]* Name of Employer: *[insert full name]* Address of Employer: *[insert street/city/country]* Reason(s) for calling of performance security: *[indicate main reason(s) e.g. for GBV/ SEA breaches]*	*[insert amount]*

REFERENCE ONLY

8. We certify/confirm that we comply with the eligibility requirements as per ITB Clause 3 of the bidding documents.

Dated this ……... day of……..20……...…

Signature …….. in the capacity of ……...…….….

duly authorized to sign bids for and on behalf of ……..

[in block capitals or typed]

Address: ……..…

Witness: ……..…….

Section – 8

Bill of Quantities

REFERENCE ONLY

REFERENCE ONLY

Schedules

Preamble to the Bill of Quantities
Description of Items and Measurement Methods
Bill of Quantities

Preamble to the Bill of Quantities

1.1 The Bill of Quantities shall be read in conjunction with all parts of this entire Bidding Document; the Instructions to Bidders, General and Particular Conditions of Contract, Technical Specifications, Drawings, and supplementary information.

1.2 The Bill of Quantities includes lump sum items, unit price items and provisional sum items. The lump sum price quoted will be deemed to be full compensation for completion of work items and paid in full when the work is completed. The quantities given in the Bill of Quantities for the unit price items are estimated and provisional, and are given to provide a common basis for bidding. They are not intended to be the maximum or minimum quantities for payment. The unit prices will be considered full compensation for those work items. The basis of payment will be the actual quantities of work carried out under the provisions of the Contract, measured and valued at the applicable rates and prices in the priced Bill of Quantities.

1.3 The rates and prices bid in the priced Bill of Quantities shall, except as otherwise provided under the Contract, include all construction plant, equipment, labour, supervision, materials, transport, erection, maintenance, testing, insurance, overheads, profit, taxes, and duties, together with all general risks, liabilities, and obligations set out or implied in the Contract.

1.4 A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.

1.5 The rates and prices entered in the Bill of Quantities shall be full compensation for completed work and shall have taken full account of all requirements and obligations, covered by all parts of the contract, including but not limited to, the following, unless expressly stated otherwise:

a. All setting out and survey works including Pre and Post Construction Surveys.
b. All additional site surveys and investigations, preparation of field amendment drawings, shop drawings and As-Built drawings.
c. Mobilization and Demobilization of labour, all construction plant and equipment.
d. Establishment, Maintenance and Removal of all temporary facilities (Contractor's and Engineer's) including offices, workshops, houses, labour camps construction and storage yards, Laboratory facilities and Equipment, Transport for staff and labour etc.
e. Labour and all costs in connection therewith, including but not limited to social charges or fringe benefits.
f. The supply of material and goods, storage and costs in connection therewith including delivery to site and handling material within the site/sites.
g. Taking delivery of materials and goods supplied by others, unloading, storage, handling materials within site, and costs in connection therewith.
h. Construction Plant & Equipment and all costs in connection therewith.
i. Fixing, erecting and installing or placing of materials and goods in position, including usual auxiliary material etc.
j. Temporary Works.

REFERENCE ONLY

k. Complying with any limitations and constraints on the use of the site/sites including coordinating with other Contractor's, with regard to site access, security etc., maintenance of access to households and other users, maintenance of existing roads, waterways etc.

l. Dealing with the existing flow of water from any source including irrigation flow requirement, rainfall and surface runoff, groundwater, wave action and the like. This includes all and any dewatering operations necessary for the execution of the Works as well as coffer damming if required.

m. General obligations, liabilities and risks involved in the execution of the Works set forth or reasonably implied in the documents on which the tender is based.

n. Overheads and profit.

o. Waste of material.

p. Attendance and transport for surveys including provision of boats and survey instruments, sampling and testing carried out by the Engineer.

q. Performing all sampling and testing which are required to be carried out by the Contractor, and supplying results of such tests.

r. Providing required material delivery certificates.

s. Coordination with Regulatory Institutes & all stake holders.

t. Disposal of all waste material.

u. Complying with all requirements in Specifications and Conditions of Contract where separate items have not been provided.

REFERENCE ONLY

1.6 Where Bill of Quantities items describe the replacement of existing equipment or components, including mechanical and electrical equipment, the equipment removed remains the property of the Employer, unless stated otherwise in the contract documents. The rates entered shall include for delivery of such equipment to the Employer or for disposal if so directed by the Employer.

1.7 The whole cost of complying with the provisions of the Contract (excluding VAT) shall be included in the Items provided in the priced Bill of Quantities, and where no Items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.

1.8 General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering prices against each item in the priced Bill of Quantities.

1.9 Provisional Sums included and so designated in the Bill of Quantities shall be expended in whole or in part or not at all at the direction and discretion of the Engineer and in accordance with the Conditions of Contract. Where the expenditure against a Provisional Sum is made in the form of a Variation, the payment for the work will be made in accordance with Clause 37 of the Conditions of Contract.

1.10 The method and unit of measurement of completed work for payment shall be in accordance with the method described in the specifications for each item or in the Bill of Quantities. For Lump Sum items, measurements for Interim Payment Certificates shall be based on percentage completion of such item of work or milestone as per the Contractor’s proposed schedule of monthly payments, as approved by the Engineer.

Descriptions of Items and Measurement Methods

INTRODUCTION

The descriptions of the different items in the Bills of Quantities and the method adopted for measurements are indicated in the following paragraphs.

The quantities shall be computed using dimensions from the drawings based on the pre-construction surveys or as varied by the Engineer, except where clearly stated otherwise under the following individual items. No allowance shall be made for settlement, bulking, shrinkage, or waste.

1 Bill No A - Preliminaries

A.1 Insurances and Securities

Sub Item A.1.1 Provisional Sum for Providing a Performance Security and Advance Payment Security

The item provides for the provision of Performance Security as specified in Clause 4.2 of the Conditions of Contract.

Payments for the item will be certified based on the actual invoice given by the bank including 5% overhead when the Performance Security and Advance Payment Security in the specified format has been provided and accepted by the Employer.

REFERENCE ONLY

Sub Item A.1.2 Provisional Sum for Insurance of works, Machinery & Equipment, Plant, Materials, third party persons & property and Employer's personal & property at site and Insurance against accidents and injury to contractor's personal as per the contract as per contract

The sub items provide for the provision of the different types of insurances as specified in Clause 18 of the Conditions of Contract.

Payment for each type of insurance will be certified when the respective insurance policies from acceptable insurance companies together with full payment of the premium including 5% overhead has been submitted to and accepted by the Employer.

A.2 Engineer's Facilities

Sub Item A.2.1 Provisional Sum for constructing maintaining, dismantling and removal on completion of the Works, temporary building for Engineer's office in conformity with the plans provided for Engineer's requirements, including necessary furniture and fittings, furnishing, electricity, water and sanitary facilities (list facilities required) minimum floor area - 22.00m^2

The sub item provides for the provision for Construction of Engineer's site office, sanitary facilities, installation and supplying of electricity & water facilities of Project Manager's offices for the duration of the Contract as a Provisional sum item. The Engineer shall order the supply of items or the work items to be carried out under this provisional sum item. All items procured or established

under this sub item shall remain the property of the Employer and shall be handed over to the Employer at the end of the Contract.

Sub Item A.2.2 Allow lump sum for providing and maintenance, rental, consumption charges etc. for telephone and facsimile facilities, electrical computer with internet facilities, photocopy & printing facilities, for the Engineer's site office for their use in connection with the Works as directed.

The sub items provide for providing and maintenance, rental, consumption charges etc. for telephone and facsimile facilities, electrical computer with internet facilities, photocopy & printing facilities, for the Engineer's site office for their use in connection with the Works as directed.

Payments for the item will be certified based on the actual invoice given by the contractor and will be paid on the completion of work and accepted by the Engineer.

Sub Item A.2.3 Allow lump sum for Hiring of Double cab with fuel and driver

The sub items provide for the Hiring of Double cab with fuel and driver for inspection work and attend meeting in other district (Engine Capacity 2500cc, 4WD, mileage less than 300,000km, should be Brand New or register after 01-01-2013) running shall be 06 days per week and 12 hours per day. Air conditioner with rear A/C vent minimum seating including driver shall be five (Wet Lease basis with driver). The maximum allowable mileage under this provision is 30,000 km.

Payments for the item will be certified based on the submission of running chart certified by the respective staff and approved by the Engineer. Payment will be received against actual progress.

REFERENCE ONLY

A.3 Contractors Requirements

Sub Item A.3.1 Allow lump sum for constructing maintaining, dismantling and removal on completion of the Works, a temporary site office

The sub items provide for constructing maintaining, dismantling and removal on completion of the Works, a temporary site office of adequate size including staff rest room and toilets and other facilities for the Contractor's site management staff in accordance with the plans prepared by the Contractor and concurred by the Engineer.

50 % of the L.sum under this item will be certified on establishment of all planned facilities balance of 25% for maintenance and the balance of 25% for when they have been removed and site cleaned on completion of the work. All items established under this item will remain the property of the Contractor.

Payments for maintenance under this item shall be included in the monthly payment certificates from the time the facilities have been established until completion

A.4 Health and Safety

Sub Item A.4.1 Allow lump sum for providing and maintaining health, safety & Environment

The sub item is provided on a lump sum basis to ensure the Standard Procedure on Occupational Health and Safety When working as per the regulations and guidelines given in the contract agreement

Payments will be certified on compliance and acceptance of Engineer and the submission of necessary report and documents as per agreement and regulations.

A.5 Miscellaneous

Sub Item A.5.1 Allow lump sum for Fabricating, installing and maintaining a project name board,

The sub item is provided for Fabricating, installing and maintaining a project name board,(size 1500mmx1200mm) made out of 26 gauge Zn-Al sheet 50mm G.I Pipe post (2Nos)with fixed with the help of 25mm box bar frame with & necessary bold & nuts and reverts rate including lettering in digital print affixing on Zn-Al sheet with the help of 25x25 Aluminum "L" bar with required details, fixing firmly in ground on concrete base with minimum 1500mm (bottom level of the board) above the ground level, as per dwg.

Payments will be certified upon the successful erection of the Notice Board approved by the engineer.

REFERENCE ONLY

A.6 Setting Out

Sub Item A.6.1 Allow lump sum for setting out of works

The sub item provides for setting out of works in accordance with drawings and other written information given by the Engineer.

Payments under this item will be certified once the all setting out have been completed and accepted by the Engineer at site

A.7 Quality, Standards and Progress

Sub Item A.7.1 Allow lump sum Providing of progress reports

The sub item is provided as lump sum basis for Provision of monthly progress reports including photographic records and other schedules included in the ICTAD publication - Guidelines for effective Construction Management. (ICTAD/CM/01), relevant to contract administration as directed by Engineer.

Payments will be certified on submission and acceptance of the required progress reports. Payment will be received against actual progress.

Sub Item A.7.2 Provisional sum for all cost in connection with testing of Materials, Goods etc

The sub item is provided as a provisional sum item for the reimbursement of preparing samples for testing, making arrangements for testing of materials, goods etc. in addition to the specification, obtaining test reports and submitting the same to the Engineer on his request. (all other stipulated test are including in the rate)

Payments under this item will be certified on production of the relevant documents of proof of payment and approved by the Engineer.

Sub Item A.7.3 Allow Provisional Sum for carryout soil testing such as borehole investigation to determine soil stratigraphy, shear test & permeability test and any other tests directed by Engineer

The sub item is provided as a provisional sum item for the reimbursement of bore hole testing, making arrangements for testing of materials, goods etc.

Payments under this item will be certified on production of the relevant documents of proof of payment

REFERENCE ONLY

Sub Item A.7.5 Allow lump sum for providing of 4 sets of (hard copies and soft copies) as-built drawing of all services, O & M manual (hard copies and soft copies) for Engineer's approval.

The sub item is provided on a lump sum basis for the submission of As-Built Drawings, Quality Assurance reports and O & M Manual etc. as specified in the Contract and requested by the Engineer.

Payments will be certified on submission and acceptance of the required drawings and documents.

D.14 Available sand, including transportation, placing as sand filling in the eroded portion of the 1st drop area and compacting with watering method, complete as directed by the engineer

Prior to commencement of this item of work, the Contractor shall submit a detailed breakdown of the Provisional Sum, including the proposed types and quantities of machinery, equipment, labour and applicable rates, for the approval of the Engineer.

Payment shall be made based on the actual machinery utilized and the actual number of labourers engaged for carrying out this particular item of work, as recorded and certified by the Engineer.

The Contractor shall maintain daily records of the machinery deployed, hours worked, and labour employed for this item. Such records shall be verified and certified by the Engineer prior to payment.

The approved Provisional Sum breakdown shall form the basis for payment, and payment shall be made only for the actual work resources utilized and certified by the Engineer.

G.13 Providing, drilling, fixing and grouting reinforcement dowels for anchoring the RC retaining wall foundation into rock, including drilling holes of the required diameter and depth, cleaning the holes, supplying and fixing high-yield deformed reinforcement bars, grouting with approved non-shrink cementitious grout or epoxy grout, and completing all associated works in accordance with the drawings, specifications and the Engineer's instructions.

Prior to commencement, the Contractor shall submit a breakdown of the Provisional Sum covering machinery, labour, reinforcement, drilling and grouting, for approval by the Engineer.

Payment shall be made based on the actual machinery hours, labour employed, drilling, reinforcement dowels installed and grouting work completed, as verified and certified by the Engineer.

Daily records of machinery, labour and materials used shall be maintained and certified by the Engineer. Payment shall be limited to the actual approved and completed work.

G.14 Providing, constructing, maintaining and removing temporary earth training bunds, sandbag bunds and other temporary flood protection measures as directed by the Engineer for diverting and controlling spill flows during construction.

REFERENCE ONLY

The work shall include supply of suitable earth, sandbags, filling, placing, compaction, reshaping, maintenance during the construction period, emergency strengthening during flood events, removal after completion of the permanent works, disposal of surplus material, and reinstatement of the affected areas, complete in accordance with the drawings, specifications and the Engineer's instructions.

Prior to commencement, the Contractor shall submit a breakdown of the Provisional Sum, including machinery, labour, materials and applicable rates, for approval by the Engineer.

Payment shall be made based on the actual machinery hours, labour employed and materials used for constructing, maintaining, strengthening and removing the temporary flood protection measures, as verified and certified by the Engineer.

Daily records shall be maintained and certified by the Engineer. Payment shall be limited to the actual approved and completed works.

For items other than above items, payment shall be made based on the actual quantities of work completed and measured from the approved as-built drawings, duly verified and certified by the Engineer, at the respective unit rates quoted in the BOQ.

REFERENCE ONLY

Bill of Quantities

Improvements to Muthuiyankaddu Tank Bund and spillway at Muthuiyankaddu Scheme in Muthuiyankaddu Division Mullaitivu Range Under IWWRMP(CERC) -2026	
	A - NOTES
	All temporary works shall be dismantled and cleared away from the site on completion of the work.
	Mechanical plant and equipment which emits obnoxious liquids, gases etc., will not be allowed to be used on the site, without the prior approval from the Employer and the Engineer.
	The Engineer has the final decision as and when he deems it necessary for the Contractor to take precautions, maintain or repair such plant and equipment or order their removal from the site.
	The contractor shall be responsible for any loss or damage to the works, existing structures, adjoining structures and unfixed materials.
	The Contractor shall be responsible for necessary lighting, watchman and other suitable measures during construction until handing over.
	Contractor shall be responsible for erection, shifting and maintaining of necessary protective netting, fencing, hording, screens at site and other precautions to the required standard and satisfaction of the Engineer.
	The Contractor shall forthwith and as a condition precedent to the commencement of any works under this contract, take out an insurance policy from a company or companies approved by the Engineer in writing on all risk insurance policy or policies indemnifying the contractor, the Engineer's and the Employer's staff at the site from all liabilities including claims by any and every workman employed in and for the performance of this contract for payment of the Workmen's Compensation Legislation and from all costs and expenses incidental or consequential thereto.
	Extent of work :-
	The extent of work as provided for in this Bill of Quantities consists of:- Preliminaries, construction of culvert and retaining wall
	Specifications:-
	All items of work are to be strictly as shown in drawings and in accordance with and read in conjunction with the Sri Lanka specification for Irrigation and Land Drainage. (CIDA Publications.)
	Drawings :-
	The following drawings listed hereunder and any other detail drawings referred to throughout this Bill of Quantities will form part of the contract documents.
	Inspection of site
	Tenderers are requested to visit the site and acquaint themselves with all existing conditions and with the nature and extent of work to be done under this contract.

REFERENCE ONLY

	The bidder is advised to visit the site of the proposed work, as it is his responsibility to ascertain the Conditions, governing access to the site, the external working space, storage area,etc
	Existing roads & culverts cannot take the passage of heavy vehicle or such in adequate areas to be strengthen by the successful bidder, before make use
	Any existing services, roads, culverts and approaches damaged during the construction to be reinstated without any charge to the employer.
	As no extras will be allowed on the plea of want of information due to neglect on their part in this regard.
	River Sand & granite metal to be used for all concrete works
	Method of Measurement :-
	This Bill of Quantities has been prepared generally in accordance with the principles of the Civil Engineering Standard Method of Measurement Sri Lanka (CESMM-SL: 1ST EDITION, JANUARY 2017)
	Rates for all items shall be inclusive of the following :-
	(a) All supply of materials labour, plant, scaffolding, waste, incidental materials, Fixing media, Cartage, Hoisting, Fitting and fixing complete.
	(b) Providing holes, chasings etc. as directed for electrical installation and all other services and making good the same as and when such installations are provided.
	c) Providing samples, Specimens etc. for such items of work as required.
	d) All overheads / preliminary expenses and profits except where otherwise stated.
	e) Testing of all materials.
	f) The rates and prices entered in the Bill of Quantities shall be full compensation for completed work and shall have taken full account of all requirements and obligations, covered by all parts of the contract, including but not limited to, the following, unless expressly stated otherwise: a. All setting out and survey works including Pre and Post Construction Surveys. b. To be maintained the Centre line of the bund during the construction period. It can't be changed time to time. c. Submission of all additional site surveys and investigations, preparation of field amendment drawings, shop drawings and As-Built drawings. d. Transport for surveyor including provision of survey instruments. e. Performing all sampling and testing which are required to be carried out by the Contractor, and supplying results of such tests. f. The degree of compaction should be minimum 98% and the compacted volume will be taken for measurement.
	Measurements :-
	Tenderers are to note that the measurements are taken absolutely nett, unless otherwise stated and they must, therefore, allow in their prices for all straight cutting, lap length and waste etc. throughout even though not specifically mentioned.
	The all measurement should be joint measurement.
	Discrepancies :-
	Any discrepancies in Drawings, Specifications, Bills of Quantities or any other documents shall be brought to the notice of the employer before bidding.

REFERENCE ONLY

	Payments :-
	Payments shall be made on actual quantity of work carried out at the site as per contract. The quantities set out in the Bill of Quantities are provisional and Cover the approximate scope of the work, which is anticipated to be performed by the Contractor. The actual quantities used for final measurement purposes will be determined by the Engineer by measurement of the work completed by the Contractor.
	The attention of the tenderer is drawn to the requirements of the contract, the specifications and any other particulars of the tender. It is the tenderers responsibility to see that his prices include for complying with all the requirements of the conditions of contract and any other documents whether specifically referred to in the Bill of Quantities or not.
	The attention of the tenderer is drawn to the use of the CIDA conditions of contract, the specifications and any other particulars of tender.
	It is the tenderers responsibility to see that his prices include for complying with all the requirements of the conditions of contract and other documents.
	The tenderer is advised to visit the site of the proposed work and is the responsibility of the tenderer to as certain the condition covering the access to the site, the extent of working space area etc.
	In the Execution of Specialized work under provisional sum the applicable attendance fee factor shall be minimum 6%
	No work in any trade shall be carried out in such a manner as to cause any nuisance to adjacent owners or the public

REFERENCE ONLY

REFERENCE ONLY

Bill of Quantities

SUMMARY

Item No.	Description	Amount (LKR)
Bill No A	Preliminaries	
Bill No B	Renovation of RB side Training bund at Mik Spill Way	
Bill No C	Renovation of Spill cushion at mik	
Bill No D	Renovation of RB side Gate cushion at mik	
Bill No E	Repair of 2nd drop	
Bill No F	Repair of bund gravel road CH 0+000-1+425,1+555-1+790 and bridge CH 1+425-1+555	
Bill No G	Construction of LB side Retaining Wall and training bund (Gate basin to 1st drop)	
Bill No H	Construction of LB side Retaining Wall and tanning bund (1st drop to 2nd drop)	
Bill No I	Renovation of LB side Gate cushion and chute block at mik	
A	**Sub Total 1 - Summary of Bills A to I**	
B	Deduct: Provisional Sums	7,891,048.00
C	**Sub Total 2 (A-B)**	
D	Discount (if Any)	
E	**Sub Total 3 (C-D+B)**	
F	Physical Contingencies - (**10%** of E)	
G	**Sub Total 4 (E+F)**	
H	Price Contingencies - (**7%** of E)	
I	**TOTAL BID PRICE, CARRIED TO LETTER OF BID (G+H)**	
Total Bid Price (Amount in words)		
J	VAT- **18%** of Bid Price - (**18%** of I)	
GRAND TOTAL INCLUDING VAT (I+J)		
K	Provisional Sum – Total for Day works	
Sub Total 5 (Bid Price with Day Works) (J+K) *[Will be considered only for Evaluation Purpose]*		

REFERENCE ONLY

Signature of Bidder: -……...

	Preliminaries		
	The Engineer / Consultant may modify or amended any item, or add new item/s, or delete inappropriate item/s, depending the nature of the proposed work		
	Any other preliminary items not listed below but deemed to be included in the bid rates, as no extras would be made.		
	Mode of Payment are as below		
	Mode of Payment	**Category**	
	Reimbursement of actual cost on submission of the relevant documents acceptable to the Engineer plus **5%** of the actual cost of obtaining the insurance policies and Securities	**A**	
	To be paid on Signing of the formal Contract Agreement	**B**	
	60% on Completion of temporary buildings or structures. 30% in equal installments over the contract period and balance 10% on dismantling and removal on completion	**C**	
	Paid on Satisfactorily completion of the item	**D**	
	In equal installments over the contract period	**E**	
	Mode of payment to be mutually agreed between Contractor and the Employer at the Commencement of contract in relation to the programme of work	**F**	
	On the Completion of works	**G**	

REFERENCE ONLY

SI.No	Description of Work	Unit	Qty	Rate (LKR)	Amount (LKR)	Rate in Words
A	**Preliminaries**					
A.1	**Insurances and Securities**	**Unit**	**Mode of Payment**		**Amount**	
A.1.1	Provisional Sum for Providing a Performance Security and Advance Payment Security	P.Sum	A		2,268,024.00	
A.1.2	Provisional Sum for Insurance of works, Machinery & Equipment, Plant, Materials, third party persons & property and Employer's personal & property at site and Insurance against accidents and injury to contractor's personal as per the contracts per contract	P.Sum	A		2,268,024.00	
A.2	**Engineer's Facilities**					
A.2.1	Provisional sum for constructing maintaining, dismantling and removal on completion of the Works, temporary building for Engineer's office in conformity with the plans provided for Engineer's requirements, including necessary furniture and fittings, furnishing, electricity, water and sanitary facilities (list facilities required)	P.Sum	C		300,000.00	
A.2.2	Allow lump sum for providing and maintenance, rental, consumption charges etc. for telephone and facsimile facilities, electrical computer with internet facilities, photocopy & printing facilities, for the Engineer's site office for their use in connection with the Works as directed.	L.Sum	G			

REFERENCE ONLY

SI.No	Description of Work	Unit	Qty	Rate (LKR)	Amount (LKR)	Rate in Words
A.2.3	Allow lump sum for Hiring of Double cab with fuel and driver for inspection work and attend meeting in other district (Engine Capacity 2500cc, 4WD, mileage less than 300,000km, should be Brand New or register after 01-01-2013) running shall be minimum 2500km per month, 06 days per week and 12 hours per day. Air conditioner with rear A/C vent minimum seating including driver shall be five (Wet Lease basis with driver). The maximum allowable mileage under this provision is 30,000 km.	L.Sum	H			
A.3	**Contractors Requirements**					
A.3.1	Allow lump sum for constructing maintaining, dismantling and removal on completion of the Works, a temporary site office of adequate size including staff rest room and toilets and other facilities for the Contractor's site management staff in accordance with the plans prepared by the Contractor and concurred by the Engineer.	L.Sum	C			
A.4	**Health and Safety**					
A.4.1	Allow lump sum for providing and maintaining health, safety & Environment & displaying necessary sign boards and traffic control arrangements throughout the period of construction as directed by the Engineer.	L.Sum	E			

REFERENCE ONLY

SI.No	Description of Work	Unit	Qty	Rate (LKR)	Amount (LKR)	Rate in Words
A.5	**Miscellaneous**					
A.5.1	Fabricating, installing and maintaining a project name board,(size 1500mmx1200mm) made out of 26 gauge Zn-Al sheet 50mm G.I Pipe post (2Nos)with fixed with the help of 25mm box bar frame with & necessary bold & nuts and reverts rate including lettering in digital print affixing on Zn-Al sheet with the help of 25x25 Aluminum "L" bar with required details, fixing firmly in ground on concrete base with minimum 1500mm (bottom level of the board) above the ground level, as per dwg.	L.Sum	C			
A.6	**Setting Out**					
	Allow lump sum for setting out of works in accordance with drawings and other written information given by the Engineer.	L.Sum	F			
A.7	**Quality, Standards and Progress**					
A.7.1	Providing of progress reports including photographic records and other schedules included in the CIDA publication Guidelines for Effective Construction Management, relevant to contract administration as directed by the Engineer	Month	6.00			
A.7.2	Provisional sum for all cost in connection with preparing samples for testing, making arrangements for testing of Materials, Goods etc, in addition to the specification, obtaining test reports and submitting the same to the Engineer on his request.(all other stipulated test are include in the rate)	P.Sum	G		250,000.00	
A.7.3	Provisional sum for carryout soil testing such as borehole investigation to determine soil stratigraphy, shear test & permeability test and any other tests directed by Engineer	P.Sum	G		200,000.00	

REFERENCE ONLY

SI.No	Description of Work	Unit	Qty	Rate (LKR)	Amount (LKR)	Rate in Words
A.7.5	Allow lump sum for providing of 4 sets of (hard copies and soft copies) as-built drawing of all services, O & M manual (hard copies and soft copies) for Engineer's approval.	L.Sum	D			
	Sub Total A (Carry out to Bill Summary)					
B	**Renovation of Rb side Training bund at mik spill way** **DWG. NO :** **IWWRMP/2026/MUL/MIK/RB/TRANNING**					
B.1	Removing existing damage structure and sand bag by used machinery (120 hp Excavator)	hrs	30.00			
B.2	Borrowing earth from identified borrow areas including transport, benching & Spreading(by dozer - 100ft), placing in layers average thickness not more than 225mm as earth filling in existing bund embankment and picking roots, watering as directed, compacting by vibrating compactor	m3	2,517.00			
B.3	Supplying and placing 9" random Pitching masonry work using 300mm thickness rubble with 1:5 ct.sand motor	m3	393.00			
B.4	1:3:6(40) Ct. sand concrete using concrete mixer and compacting with porker vibratory including curing with form work	m3	75.00			
B.5	Supplying & Laying of 1:11/2:3(20mm) ct. concrete With out form work (mixing by mixture)	m3	20.40			
B.6	Furnishing and making of formwork made out 20mm thick plywood with necessary frame and supports including fixing and removing as directed.	m2	50.00			
B.7	Furnishing, cutting, bending & placing 10mm rib bar reinforcement as providing in drawing.	kg	273.00			

REFERENCE ONLY

SI.No	Description of Work	Unit	Qty	Rate (LKR)	Amount (LKR)	Rate in Words
B.8	Supplying turf sods to site preparation and dressing of surface, firmly placing and full turfing to new fill and watering and kept moist till grass root up as directed by the engineer.	m2	1,073.50			
	Sub Total B (Carry out to Bill Summary)					
C	**Renovation of spill cushion at mik**					
C.1	Removing existing collapsed rubble and pile the rubble as directed by the Engineer.	m3	1,035.00			
C.2	Placing existing Rubble from the piled rubble an average thickness of Greter than 450 mm on spill way eroded area as directed by the Engineer.(Rate includes the necessary internal transport and loading)	m3	1,035.00			
C.3	Borrowing earth from identified borrow areas including transport, Spreading, placing in layers average thickness not more than 225mm as earth filling in Scraping area and picking roots, watering as directed, compacting by vibrating compactor	m3	310.50			
C.4	1:3:6(40) Ct. sand concrete using concrete mixer and compacting with porker vibratory including curing without form work	m3	103.50			
C.5	1:1 1/2:3(20) Ct. sand concrete using concrete mixer and compacting with porker vibratory including curing	m3	621.00			
C.6	Supplying bending and placing QT Rib bar as reinforcement	kg	6,843.00			
	Sub Total C (Carry out to Bill Summary)					
D	**Renovation of Rb side Gate cushion at mik** **DWG. NO :** **IWWRMP/2026/MUL/MIK/RB/GATE CUSION**					

REFERENCE ONLY

SI.No	Description of Work	Unit	Qty	Rate (LKR)	Amount (LKR)	Rate in Words
D.1	providing and maintaining dewatering by 3" submersible pump pumping out water from working area to keep the work area dry during execution of work including operation and maintenance of pumps labour ,fuel/power and all incidental charges complete.	Hrs	50.00			
D.2	Base preparation (loose soil removing)and clearing	L/Day	30.00			
D.3	1:1 1/2:3(20) Ct. sand concrete using concrete mixer and compacting with porker vibratory including curing	m^3	146.00			
D.4	1:3:6(40) Ct. sand concrete using concrete mixer and compacting with porker vibratory including curing without form work	m^3	10.00			
D.5	Furnishing and making of formwork made out 20mm thick plywood	m^2	186.00			
D.6	Supplying bending and placing QT Rib bar as reinforcement	kg	6,707.00			
D.7	Furnishing, Lacing & Placing of PVC Coated 1.0 x 1.0 x 1.0 m Gabions boxes	Nrs	49.00			
D.8	Furnishing, Lacing & Placing of PVC Coated 2.0 x 1.0 x 1.0 m Gabions boxes	Nrs	49.00			
D.9	Furnishing, Lacing & Placing of PVC Coated 1.0 x 1.0 x 0.5 m Gabions boxes	Nrs	49.00			
D.10	Furnishing, Lacing & Placing of PVC Coated 2.0 x 1.0 x 0.5 m Gabions boxes	Nrs	49.00			
D.11	Furnishing, & Packing 225 x 150 mm random rubble in to Gabion boxes	m^3	221.00			
D.12	Furnishing, & Laying Polyfelt Geosynthetics **2.5** mm thk. sheet for gabion boxes	m^2	670.00			
D.13	supplying and packing greater than 600mm graded rubble into the required locations, including handling placing and completing all works as directed by the engineer	m^3	744.00			

REFERENCE ONLY

SI.No	Description of Work	Unit	Qty	Rate (LKR)	Amount (LKR)	Rate in Words
D.14	Available sand ,including transportation, placing as sand filling in the eroded portion of the 1st drop area and compacting with watering method ,complete as directed by the engineer	Item	Allow	P.sum	50,000.00	
D.15	Borrowing earth from identified borrow areas including transport, Spreading, placing in layers average thickness not more than 225mm as earth filling in Scraping area and picking roots, watering as directed, compacting by vibrating compactor	m3	516.00			
D.16	Supplying and fixing of 16mm dia. 0.45 m long mild steel dowels	Nos	104.00			
D.17	Chemical Anchoring without Reinforcement	Nos	104.00			
	Sub Total -D (Carry out to Bill Summary)					

REFERENCE ONLY

SI.No	Description of Work	Unit	Qty	Rate (LKR)	Amount (LKR)	Rate in Words
E	**Repair of 2nd drop**					
E.1	Furnishing, Lacing & Placing of PVC Coated 2.0 x 1.0 x 0.5 m Gabions boxes	nos	90.00			
E.2	Furnishing, & Laying Polyfelt Geosynthetics **2.5** mm thk. sheet for gabion boxes	m2	180.00			
E.3	Furnishing, & Packing 225 x 150 mm random rubble in to Gabion boxes	m3	90.00			
E.4	Earth deduction along spill tail canal and spoil to deposit	m3	12,466.00			
	Sub Total -F (Carry out to Bill Summary)					
F	**Repair of bund gravel road ch0+000-1+425,1+555-1+790 and bridge ch 1+425-1+555**					
F.1	Rendering cement, chipped from cement concrete floors and debris cleared away from site.	m2	501.00			
F.2	Tack Coat Using Emulsion (Css-1) @ The Rate Of 0.5 Ltr/Sq.m inclusive Of Brushing, Cleaning Road Surface (Manual)	m2	501.00			
F.3	Supplying Asphalt Concrete and Compaction in possion 50mm thickness	m3	501.00			
F.4	Trimming and comparing road way by machinery	m2	7,968.00			
F.5	Furnishing, transporting, placing and spreading of gravel on the road way including watering and compaction	m3	1,195.00			
	Sub Total -F (Carry out to Bill Summary)					

REFERENCE ONLY

SI.No	Description of Work	Unit	Qty	Rate (LKR)	Amount (LKR)	Rate in Words
G	**Construction of LB side Retaining Wall and training bund (Gate basin to 1st drop) DWG. NO : IWWRMP/2026/MUL/MIK/LB/TRANNING**					
G.1	Demolishing of existing damage Retaining Wall and deposited the waste as directed	M.hr	30.00			
G.2	Earth Excavation in foundation and and back filling including watering and compaction as directed by engineer	m^3	1,174.0			
G.3	1:3:6(40) Ct. sand concrete using concrete mixer and compacting with porker vibratory including curing without form work	m^3	40.0			
G.4	1:1 1/2:3(20) Ct. sand concrete compacting with porker vibratory including curing with out form work	m^3	646.0			
G.5	Supplying bending and placing QT Rib bar as reinforcement	Kg	48,775.0			
G.6	Furnishing and making of form work made out 20mm thick plywood with necessary frame and supports including fixing and removing as directed	m^2	1,510.0			
G.7	Borrowing earth from identified borrow areas including transport, Spreading, placing in layers average thickness not more than 225mm as earth filling in Scraping area and picking roots, watering as directed, compacting by vibrating compactor	m3	4,502.00			

REFERENCE ONLY

SI.No	Description of Work	Unit	Qty	Rate (LKR)	Amount (LKR)	Rate in Words
G.8	supplying and packing greater than 600mm graded rubble into the required locations, including handling placing and completing all works as directed by the engineer	m3	934.00			
G.9	Furnishing, & Laying Polyfelt Geosynthetics **2.5** mm thk. sheet for laying boulders	m2	1,656.00			
G.10	Supplying turf sods to site preparation and dressing of surface, firmly placing and full turfing to new fill and watering and kept moist till grass root up as directed by the engineer.	m2	977.00			
G.11	Furnishing, transporting, placing and spreading of gravel on the road way including watering and compaction	m3	37.00			
G.12	Providing of 50 x 100 weep holes as per type NP/IRR/WH/Type No 01	Nos	102.00			
G.13	Providing, drilling, fixing and grouting reinforcement dowels for anchoring the RC retaining wall foundation into rock, including drilling holes of the required diameter and depth, cleaning the holes, supplying and fixing high-yield deformed reinforcement bars, grouting with approved non-shrink cementitious grout or epoxy grout, and completing all associated works in accordance with the drawings, specifications and the Engineer's instructions.	Item	Allow	P.sum	500,000.00	

REFERENCE ONLY

SI.No	Description of Work	Unit	Qty	Rate (LKR)	Amount (LKR)	Rate in Words
G.14	Providing, constructing, maintaining and removing temporary earth training bunds, sandbag bunds and other temporary flood protection measures as directed by the Engineer for diverting and controlling spill flows during construction. The work shall include supply of suitable earth, sandbags, filling, placing, compaction, reshaping, maintenance during the construction period, emergency strengthening during flood events, removal after completion of the permanent works, disposal of surplus material, and reinstatement of the affected areas, complete in accordance with the drawings, specifications and the Engineer's instructions.	Item	Allow	P.sum	2,000,000.00	
	Sub Total -G (Carry out to Bill Summary)					

REFERENCE ONLY

SI.No	Description of Work	Unit	Qty	Rate (LKR)	Amount (LKR)	Rate in Words
H	**Construction of LB side Retaining Wall and tanning bund (1st drop to 2st drop) DWG. NO : IWWRMP/2026/MUL/MIK/LB/TRANNING**					
H.1	Demolishing of existing damage Retaining Wall and deposited the waste as directed	M.hr	5.00			
H.2	Earth Excavation in foundation and and back filling including watering and compaction as directed by engineer	m^3	942.00			
H.3	1:3:6(40) Ct. sand concrete using concrete mixer and compacting with porker vibratory including curing without form work	m^3	27.00			
H.4	1:1 1/2:3(20) Ct. sand concrete compacting with porker vibratory including curing with out form work	m^3	364.00			
H.5	Supplying bending and placing QT Rib bar as reinforcement	Kg	27479			
H.6	Furnishing and making of form work made out 20mm thick plywood with necessary frame and supports including fixing and removing as directed	m^2	851.00			
H.7	Borrowing earth from identified borrow areas including transport, Spreading, placing in layers average thickness not more than 225mm as earth filling in Scraping area and picking roots, watering as directed, compacting by vibrating compactor	m3	3158.00			
H.8	supplying and packing greater than 600mm graded rubble into the required locations, including handling placing and completing all works as directed by the engineer	m3	146			
H.9	Furnishing, & Laying Polyfelt Geosynthetics **2.5** mm thk. sheet for laying boulders	m3	249			

REFERENCE ONLY

SI.No	Description of Work	Unit	Qty	Rate (LKR)	Amount (LKR)	Rate in Words
H.10	Supplying turf sods to site preparation and dressing of surface, firmly placing and full turfing to new fill and watering and kept moist till grass root up as directed by the engineer.	m3	695.00			
H.11	Supplying and placing 9" random rubble pitching work using 300mm thickness rubble with 1:5 ct.sand motor	m3	16.00			
H.12	Furnishing, transporting, placing and spreading of gravel on the road way including watering and compaction	m3	45.00			
H.13	Providing of 50 x 100 weep holes as per type NP/IRR/WH/Type No 01	Nos	56.00			
	Sub Total -H (Carry out to Bill Summary)					-
I	**Renovation of Lb side Gate cushion and chute block at mik** **DWG. NO :** **IWWRMP/2026/MUL/MIK/LB/GATE CUSION**					
I.1	Removing existing Gabion box by used machinery (120 hp Excavator)	M.hr	7.00			
I.2	Earth Excavation in foundation and and back filling including watering and compaction as directed by engineer	m3	202.00			
I.3	1:3:6(40) Ct. sand concrete using concrete mixer and compacting with porker vibratory including curing without form work	m3	4.20			
I.4	1:1 1/2:3(20) Ct. sand concrete compacting with porker vibratory including curing with out form work	m3	65.00			
I.5	Supplying bending and placing QT Rib bar as reinforcement	Kg	2,109.00			

REFERENCE ONLY

SI.No	Description of Work	Unit	Qty	Rate (LKR)	Amount (LKR)	Rate in Words
I.6	Furnishing and making of form work made out 20mm thick plywood with necessary frame and supports including fixing and removing as directed	m2	110.00			
I.7	Supplying and fixing of 16mm dia. 0.45 m long mild steel dowels	Nos	1,082.00			
I.8	Chemical Anchoring without Reinforcement	Nos	1,082.00			
I.9	Removing of sand bags.	Nos	1,500.00			
	Sub Total -I (Carry out to Bill Summary)					
	Grand Total					

REFERENCE ONLY

DAYWORKS SCHEDULE

	Description	Unit	Qty.	Rate (LKR)	Amount (LKR)	Amount in Words
	Labour					
1	Skilled labour	hr	25.00			
2	Unskilled labour	hr	25.00			
3	Mason	hr	25.00			
4	Carpenter	hr	20.00			
5	Plumber, Electrician	hr	15.00			
6	Mechanic	hr	15.00			
7	Welder, Fitter	hr	15.00			
8	Steel fixer	hr	15.00			
9	Driver	hr	10.00			
	Total for Labour					
	Material					
1	Cement (50 Kg bags)	Nos	50.00			
2	Sand	m^3	20.00			
3	Mild steel reinforcement	t	0.30			
4	Tor steel reinforcement	t	0.30			
5	Mild Steel Plate	t	0.15			
6	Stainless Steel Plate	t	0.15			
7	Fabricated Steelwork	t	0.15			
8	Timber Ply Sheet 12mm	m^2	15.00			
9	Gravel	m^3	20.00			
	Total for Material					
	Equipment					
1	Backhoe/Loader 100 HP	hr	10.00			
2	Mobile crane 30T	hr	10.00			
3	Dump truck / Tipper 20T	hr	10.00			
4	Tractor/Trailer 100HP	hr	10.00			
5	Concrete Mixer 1 m^3	hr	10.00			
6	Air Compressor 3-Tool	hr	5.00			
7	Welding Set 10KVA	hr	10.00			
8	Sandblasting Equipment	hr	15.00			
9	Diesel Generator 20KVA	hr	15.00			
10	Water Pumps 50mm	hr	25.00			
11	Excavator	hr	15.00			
	Total for Equipment					

REFERENCE ONLY

Technical Proposal

Forms for personnel
Forms for equipment
Site organisation
Method statements
Mobilisation and construction schedule

REFERENCE ONLY

Forms for Personnel

Form PER – 1: Proposed Personnel

Bidders should provide the names of suitably qualified personnel to meet the specified requirements for each of the positions listed in Section III (Evaluation and Qualification Criteria). The data on their experience should be supplied using the form below for each candidate.

1.	**Title of position** **Name**
2.	**Title of position** **Name**
3.	**Title of position** **Name**
4.	**Title of position** **Name**
5.	**Title of position** **Name**
6.	**Title of position** **Name**
etc.	**Title of position** **Name**

REFERENCE ONLY

Form PER – 2: Resume of Proposed Personnel

The Bidder shall provide all the information requested below. Fields with asterix (*) shall be used for evaluation.

Position*		
Personnel information	**Name**	**Date of birth**
	Professional qualifications	
Present employment	**Name of Employer**	
	Address of Employer	
	Telephone	**Contact (manager / personnel officer)**
	Fax	**E-mail**
	Job title	**Years with present Employer**

REFERENCE ONLY

Summarize professional experience over the last five years, in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

From*	To*	Company, project , position, and relevant technical and management experience*

Forms for Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder. The Bidder shall provide all the information requested below, to the extent possible. Fields with asterisk (*) shall be used for evaluation.

Type of Equipment*		
Equipment Information	**Name of manufacturer**	**Model and power rating**
	Capacity*	**Year of manufacture***
Current Status	**Current location**	
	Details of current commitments	
Source	**Indicate source of the equipment** ☐ **Owned** ☐ **Rented** ☐ **Leased** ☐ **Specially manufactured**	

REFERENCE ONLY

The following information shall be provided only for equipment not owned by the Bidder.

Owner	**Name of owner**	
	Address of owner	
	Telephone	**Contact name and title**
	Fax	**Telex**
Agreements	**Details of rental / lease / manufacture agreements specific to the project**	

Site Organization

The Bidder shall provide a personnel chart for the proposed site organization, indicating the key positions as given in Section III (Evaluation and Qualification Criteria) and other positions, with names of personnel proposed and a description of the tasks assigned for such positions.

REFERENCE ONLY

Method Statements

The Bidder shall provide a method statement describing the methodology proposed to be adopted in the execution of the contract.

REFERENCE ONLY

Mobilization and Construction Schedule

The Bidder shall provide a detailed mobilization and construction schedule indicating the sequence of all main operations and identifying critical activities.

REFERENCE ONLY

Section 9 - Schedules

Schedule 1 – General Information

(i) If pre-qualification is done the bidders are required to include information subsequent to that submitted with the pre-qualification application.
(ii) For joint ventures, each joint venture partner shall furnish information separately.

ITB Clause reference	Description	Information *(to be filled by the Bidder)*	Remarks
4.1 (a)	**Legal Status**		*Provide certified copies of Registration*
	Written power of attorney of the signatory to the Bid	*Provide original or certified copy of the power of Attorney attested by a Notary and label as attachment to Clause 4.1(a)*	
	If a Joint Venture, names and addresses of Joint Venture Partners	1. …… 2. ……... 3. ……	*Provide a draft copy of the Joint Venture Agreement or alternatively the memorandum of understanding*
	If a Joint Venture, name of Lead Partner		
	For joint ventures, each joint venture partner shall furnish Legal Status separately		
	Name (Lead partner)		*Provide certified copies and label as attachment to Clause 4.1(a)*
	Legal status		
	Place of registration		
	Principle place of business		
	Written power of attorney of the signatory to the Bid	*Provide original or certified copy of the power of attorney attested by a Notary and label as attachment to Clause 5.1*	
	VAT Registration Number		
	Name (Partner 2)		*Provide certified copies and label as attachment to Clause 4.1 (a)*
	Legal status		
	Place of registration		
	Principle place of business		

REFERENCE ONLY

	Written power of attorney of the signatory to the Bid	*Provide original or certified copy of the power of attorney attested by a Notary and label as attachment to Clause 4.1 (a)*	
	VAT Registration Number		
	Name (Partner 3)		*Provide certified copies and label as attachment to Clause 4.1 (a)*
	Legal status		
	Place of registration		
	Principle place of business		
	Written power of attorney of the signatory to the Bid	*Provide original or certified copy of the power of attorney attested by a Notary and label as attachment to Clause 4.1 (a)*	
	VAT Registration Number		
4.2 (a)	**ICTAD Registration**		*Provide certified copies and label as attachment to Clause 4.2(a)*
	Registration number		
	Grade		
	Specialty		
	Expiry Date		

REFERENCE ONLY

Schedule 2 – Annual Turn-over Information (Construction only – Last five years)

(i) If pre-qualification is done the bidders are required to include information subsequent to that submitted with the pre-qualification application.

(ii) For joint ventures, each joint venture partner shall furnish information separately.

Year	Turn-over	Remarks
1		Attach five audit reports with in last 10 years. It shall be positive cash flow. Negative cash flow will be rejected. *(Attach audited reports and label as attachment to Clause 4.2)*
2		
3		
4		
5		

REFERENCE ONLY

Schedule 3 – Adequacy of Working Capital

If pre-qualification is done the bidders are required to include information subsequent to that submitted with the pre-qualification application

Source of credit line	Amount	Remarks
		Provide documentary evidence and label as attachment to Clause 4.2 (Letter from bank specially addressed to employer mentioning the letter shall be attached.)
Total		

Schedule 4 – Construction Experience in last ten years

(i) If pre-qualification is done the bidders are required to include information subsequent to that submitted with the pre-qualification application.

(ii) For joint ventures, each joint venture partner shall furnish information separately.

Year	Employer	Description of Works	Amount	Contractor's Responsibility (%)
		Total		

REFERENCE ONLY

- *Provide documentary evidence and label as attachment to Clause 4.2*

Schedule 5 – Major Items of Construction Equipment Proposed	
Type	**Capacity**

REFERENCE ONLY

Schedule 6 – Construction Management Staff		
A. Key Professionals		
Name	**Position**	**Task**
B. Support Staff		
Name	**Position**	**Task**

REFERENCE ONLY

Schedule 7 – Time Schedule for Key Staff														
			Months (in the form of a Bar Chart)											
Name	**Position**	**Activities**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**Number of Months**

REFERENCE ONLY

Full-time: _____ Part-time:……

Schedule 8 – Work Programme

Sheet 1 of ……

	[1st, 2nd, etc. are months from the Start Date.]											
Construction Activity	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**	**9th**	**10th**	**11th**	**12th**

REFERENCE ONLY

Schedule 9 – Input percentages for Price Adjustment Formula		
Input Name *(Include major materials below the list, together with percentages for all inputs)*	**ICTAD Reference for Indices**	**Percentage** *(percentages listed should added to 90.0)*
Total		

Nonadjustable element shall be:
All P.sum & L.sum items

REFERENCE ONLY

Schedule 10: ESHS Management Strategies and Implementation Plans

(ESHS-MSIP)

The Bidder shall submit comprehensive and concise Environmental, Social, Health and Safety Management Strategies and Implementation Plans (ESHS-MSIP) as required by ITB 13.1 A (j) and 13.1 B (d). These strategies and plans shall describe in detail the actions, materials, equipment, management processes etc. that will be implemented by the Contractor, and its subcontractors.

Code of Conduct: Environmental, Social, Health and Safety (ESHS)

The Bidder shall submit the Code of Conduct that will apply to the Contract Manger and other key personnel as required by ITB 13.1 A (j) and 13.1 B (d) and subcontractors. The Code of Conduct shall ensure compliance with the ESHS provisions of the Contract.
In addition, the Bidder shall submit an outline of how this Code of Conduct will be implemented. This will include: how it will be introduced into conditions of employment/engagement, what training will be provided, how it will be monitored and how the Contractor proposes to deal with any breaches**.**

Environmental, social, health and safety requirements

REFERENCE ONLY

The Employer should use the services of a suitably qualified environmental, social, health and safety specialist/s to prepare the specifications for ESHS working with a procurement specialist/s.

The Employer should attach or refer to the Employer's environmental, social, health and safety policies that will apply to the project. If these are not available, the Employer should use the following guidance in drafting an appropriate policy for the Works.

SUGGESTED CONTENT FOR AN ENVIRONMENTAL AND SOCIAL POLICY (STATEMENT)

The Works' policy goal, as a minimum, should be stated to integrate environmental protection, occupational and community health and safety, gender, equality, child protection, vulnerable people (including those with disabilities), sexual harassment, gender-based violence (GBV), sexual exploitation and abuse (SEA), HIV/AIDS awareness and prevention and wide stakeholder engagement in the planning processes, programs, and activities of the parties involved in the execution of the Works. The Employer is advised to consult with the World Bank to agree the issues to be included which may also address: climate adaptation, land acquisition and resettlement, indigenous people, etc. *The policy should set the frame for monitoring, continuously improving processes and activities and for reporting on the compliance with the policy.*

The policy shall include a statement that, for the purpose of the policy and/or code of conduct, the term "child" / "children" means any person(s) under the age of 18 years.

The policy should, as far as possible, be brief but specific and explicit, and measurable, to enable reporting of compliance with the policy in accordance with the Particular Conditions of the Contract Sub-Clause 4.21 and Appendix C to the General Conditions of Contract.

As a minimum, the policy is set out to the commitments to:

1. *apply good international industry practice to protect and conserve the natural environment and to minimize unavoidable impacts;*
2. *provide and maintain a healthy and safe work environment and safe systems of work;*
3. *protect the health and safety of local communities and users, with particular concern for those who are disabled, elderly, or otherwise vulnerable;*
4. *ensure that terms of employment and working conditions of all workers engaged in the Works meet the requirements of the ILO labour conventions to which the host country is a signatory;*
5. *be intolerant of, and enforce disciplinary measures for illegal activities. To be intolerant of, and enforce disciplinary measures for GBV, inhumane treatment, sexual activity with children, and sexual harassment;*
6. *incorporate a gender perspective and provide an enabling environment where women and men have equal opportunity to participate in, and benefit from, planning and development of the Works;*
7. *work co-operatively, including with end users of the Works, relevant authorities, contractors and local communities;*
8. *engage with and listen to affected persons and organizations and be responsive to their concerns, with special regard for vulnerable, disabled, and elderly people;*
9. *provide an environment that fosters the exchange of information, views, and ideas that is free of any fear of retaliation, and protects whistleblowers;*
10. *minimize the risk of HIV transmission and to mitigate the effects of HIV/AIDS associated with the execution of the Works;*

REFERENCE ONLY

The policy should be signed by the senior manager of the Employer. This is to signal the intent that it will be applied rigorously.

MINIMUM CONTENT OF ESHS REQUIREMENTS

In preparing detailed specifications for ESHS requirements, the specialists should refer to and consider:

- *project reports e.g. ESIA/ESMP*
- *consent/permit conditions*
- *required standards including World Bank Group EHS Guidelines*
- *relevant international conventions or treaties etc., national legal and/or regulatory requirements and standards (where these represent higher standards than the WBG EHS Guidelines)*
- *relevant international standards e.g. WHO Guidelines for Safe Use of Pesticides*
- *relevant sector standards e.g. EU Council Directive 91/271/EEC Concerning Urban Waste Water Treatment*
- *Grievance redress mechanism including types of grievances to be recorded and how to protect confidentiality e.g. of those reporting allegations of GBV/SEA.*
- *GBV/SEA prevention and management.*

- *The detail specification for ESHS should, to the extent possible, describe the intended outcome rather than the method of working*

The ESHS requirements should be prepared in manner that does not conflict with the relevant General Conditions of Contract and Particular Conditions of Contract, and in particular:

General Conditions of Contract	
Sub-clause 1.13	*Compliance with Laws*
Sub-clause 2.2	*Permits, Licenses and Approvals*
Sub-clause 4.1	*Contractor's General Obligations*
Sub-clause 4.4	*Subcontractors*
Sub-clause 4.8	*Safety Procedures*
Sub-clause 4.14	*Avoidance of Interference*
Sub-clause 4.18	*Protection of the Environment*
Sub-clause 4.23	*Contractor's Operations on the Site*
Sub-clause 4.24	*Fossils*
Section 6	*Staff and Labour (includes health and safety)*
Sub-clause 7.1	*Manner of Execution*
Sub-clause 11.11	*Clearance of Site*
Sub-clause 12.3	*Evaluation (reference ITB 14.2 "Items against which no rate or price is entered by the Bidder shall be deemed to be covered by the rates for other items in the Bill of Quantities and will not be paid separately by the Employer.")*

REFERENCE ONLY

MINIMUM REQUIREMENTS FOR THE BIDDER'S CODE OF CONDUCT

[A minimum requirement for the Code of Conduct should be set out by the Employer, taking into consideration the issues, impacts, and mitigation measures identified, for example, in:

- *project reports e.g. ESIA/ESMP*
- *any particular GBV/SEA requirements*
- *consent/permit conditions (regulatory authority conditions attached to any permits or approvals for the project)*
- *required standards including World Bank Group EHS Guidelines*
- *relevant international conventions, standards or treaties, etc., national legal and/or regulatory requirements and standards (where these represent higher standards than the WBG EHS Guidelines)*
- *relevant standards e.g. Workers' Accommodation: Process and Standards (IFC and EBRD)*
- *relevant sector standards e.g. workers' accommodation*
- *Grievance redress mechanisms.*

The types of issues identified could include. Risks associated with: labor influx, spread of communicable diseases, sexual harassment, gender based violence, illicit behavior and crime, and maintaining *a safe environment etc.*

[Amend the following instructions to the Bidder taking into account the above considerations.]

A satisfactory code of conduct will contain obligations on all Contractor's Personnel project staff (including sub-contractors and day workers) that are suitable to address the following issues, as a minimum. Additional obligations may be added to respond to particular concerns of the region, the location and the project sector or to specific project requirements. The code of conduct shall contain a statement that the term "child" / "children" means any person(s) under the age of 18 years.

The issues to be addressed include:

1. Compliance with applicable laws, rules, and regulations
2. Compliance with applicable health and safety requirements to protect the local community (including vulnerable and disadvantaged groups), the Employer's Personnel, and the Contractor's Personnel (including wearing prescribed personal protective equipment, preventing avoidable accidents and a duty to report conditions or practices that pose a safety hazard or threaten the environment)
3. The use of illegal substances
4. Non-Discrimination in dealing with the local community (including vulnerable and disadvantaged groups), the Employer's Personnel, and the Contractor's Personnel (for example on the basis of family status, ethnicity, race, gender, religion, language, marital status, age, disability (physical and mental), sexual orientation, gender identity, political conviction or social, civic, or health status)
5. Interactions with the local community(ies), members of the local community (ies), and any affected person(s) (for example to convey an attitude of respect, including to their culture and traditions)
6. Sexual harassment (for example to prohibit use of language or behavior, in particular towards women and/or children, that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate)
7. Violence, including sexual and/or gender based violence (for example acts that inflict physical, mental or sexual harm or suffering, threats of such acts, coercion, and deprivation of liberty
8. Exploitation including sexual exploitation and abuse (for example the prohibition of the exchange of money, employment, goods, or services for sex, including sexual favors or other forms of humiliating, degrading behavior, exploitative behavior or abuse of power)
9. Protection of children (including prohibitions against sexual activity or abuse, or otherwise unacceptable behavior towards children, limiting interactions with children, and ensuring their safety in project areas)
10. Sanitation requirements (for example, to ensure workers use specified sanitary facilities provided by their employer and not open areas)
11. Avoidance of conflicts of interest (such that benefits, contracts, or employment, or any sort of preferential treatment or favors, are not provided to any person with whom there is a financial, family, or personal connection)
12. Respecting reasonable work instructions (including regarding environmental and

REFERENCE ONLY

social norms)

13. Protection and proper use of property (for example, to prohibit theft, carelessness or waste)
14. Duty to report violations of this Code
15. Non retaliation against workers who report violations of the Code, if that report is made in good faith.

The Code of Conduct should be written in plain language and signed by each worker to indicate that they have:

- received a copy of the code;
- had the code explained to them;
- acknowledged that adherence to this Code of Conduct is a condition of employment; and
- Understood that violations of the Code can result in serious consequences, up to and including dismissal, or referral to legal authorities.

A copy of the code shall be displayed in a location easily accessible to the community and project affected people. It shall be provided in languages comprehensible to the local community, Contractor's Personnel, Employer's Personnel, and affected persons.

REFERENCE ONLY

PAYMENT FOR ESHS REQUIREMENTS

The Employer's ESHS and procurement specialists should consider how the Contractor will cost the delivery of the ESHS requirements. In the majority of cases, the payment for the delivery of ESHS requirements shall be a subsidiary obligation of the Contractor covered under the prices quoted for other Bill of Quantity items. For example, normally the cost of implementing work place safe systems of work, including the majors necessary for ensuring traffic safety, shall be covered by the Bidder's rates for the relevant works. Alternatively, provisional sums could be set aside for discrete activities for example for HIV counselling service, and, GBV/SEA awareness and sensitization or to encourage the contractor to deliver additional ESHS outcomes beyond the requirement of the Contract.

Schedule 11 - Works in Hand							
Contract	Name of the Employer	Description of work (attach a copy of letter of award)	Date of award of contract	Value of contract(Rs.)	Contract period	Whether extension of time has been granted	Percentage completion as at present

REFERENCE ONLY

REFERENCE ONLY

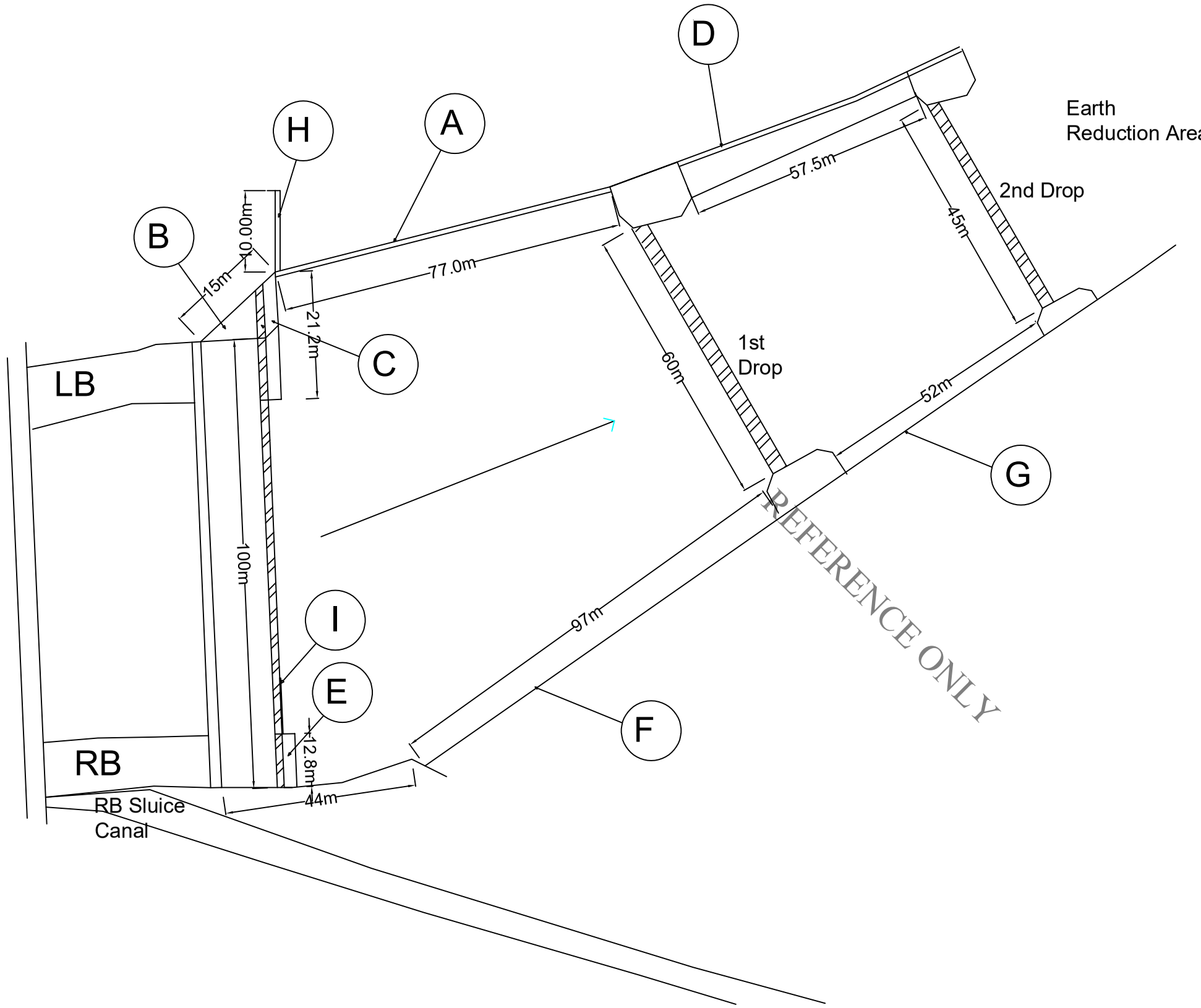
Section - 10

Drawings

S.NO.	DESCRIPTION	DRAWING NO.	SHEET NO.
01	Improvements to Spill Way Structure Plan	IWWRMP/2026/MUL/MIK/RB/ SPILL WAY/PLAN	Sheet No. 01 to 02
02	Renovation of LB Side Gate Cusion	IWWRMP/2026/MUL/MIK/LB/ GATE CUSION	Sheet No.03
03	LB Side Retaining Wall ,Gate Basin R/F Detail	IWWRMP/2026/MUL/MIK/LB/ GATE BASIN/RF	Sheet No.04
04	Renovation of RB Side Gate Cusion	IWWRMP/2026/MUL/MIK/RB/ GATE CUSION	Sheet No.05
05	RB Side Gate Basin R/F Detail	IWWRMP/2026/MUL/MIK/RB/ GATE BASIN/RF	Sheet No.06
06	Detail of Chute Block	IWWRMP/2026/MUL/MIK/ CHUTE BLOCK	Sheet No.07
07	Improvements to LB Tranning Bund Basin to 1st Drop LS	IWWRMP/2026/MUL/MIK/LB/ TRANNING/LS	Sheet No.08
08	Improvements to LB Tranning Bund Basin to 1st Drop CSS (CH 0+020 - 0+087)	IWWRMP/2026/MUL/MIK/LB/ TRANNING/CS	Sheet No. 09 to 12
09	Improvements to LB Trainning Bund 1st drop to 2nd drop (CH 0+000 to 0+085)	IWWRMP/2026/MUL/MIK/LB/ TRANNING/CS	Sheet No. 13 to 17
10	Improvements to RB Tranning Bund LS (CH 0+000 - 0+350)	IWWRMP/2026/MUL/MIK/RB/ TRANNING/LS	Sheet No.18
11	Improvements to RB Tranning Bund CSS (CH 0+000 - 0+231.5)	IWWRMP/2026/MUL/MIK/RB/ TRANNING/CS	Sheet No. 19 to 32
12	Earth Reduction in 2nd Drop LS	IWWRMP/2026/MUL/MIK/ EARTH REDU/LS	Sheet No.33
13	Earth Reduction in 2nd Drop Area (CH 0+000,0+220)	IWWRMP/2026/MUL/MIK/ EARTH REDU/CS	Sheet No. 34 to 37

REFERENCE ONLY

REFERENCE ONLY



REFERENCE ONLY

A	Retering Wall & Tr. bund LB Side
B	Extension of basin LB side
C	Extension of basin LB side
D	Retering Wall & Tr. bund LB Side
E	Extension of basin RB side
F	Rubble pitching & Tr. bund RB Side
G	Rubble pitching & Tr. bund RB Side
H	Retering Wall & Tr. bund LB Side
I	Retering Wall RB Side

PROJECT :-

IWWRMP (CERC)

FUND BY:-

WORLD BANK

IMPLEMENT AGENCY :-

MINISTRY OF IRRIGATION

EXECUTIVE AGENCY :-

IRRIGATION DEPARTMENT

NORTHERN PROVINCE

SCHEME :- **MUTHUIYANKADDU TANK**

PROJECT TITLE :-

IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.

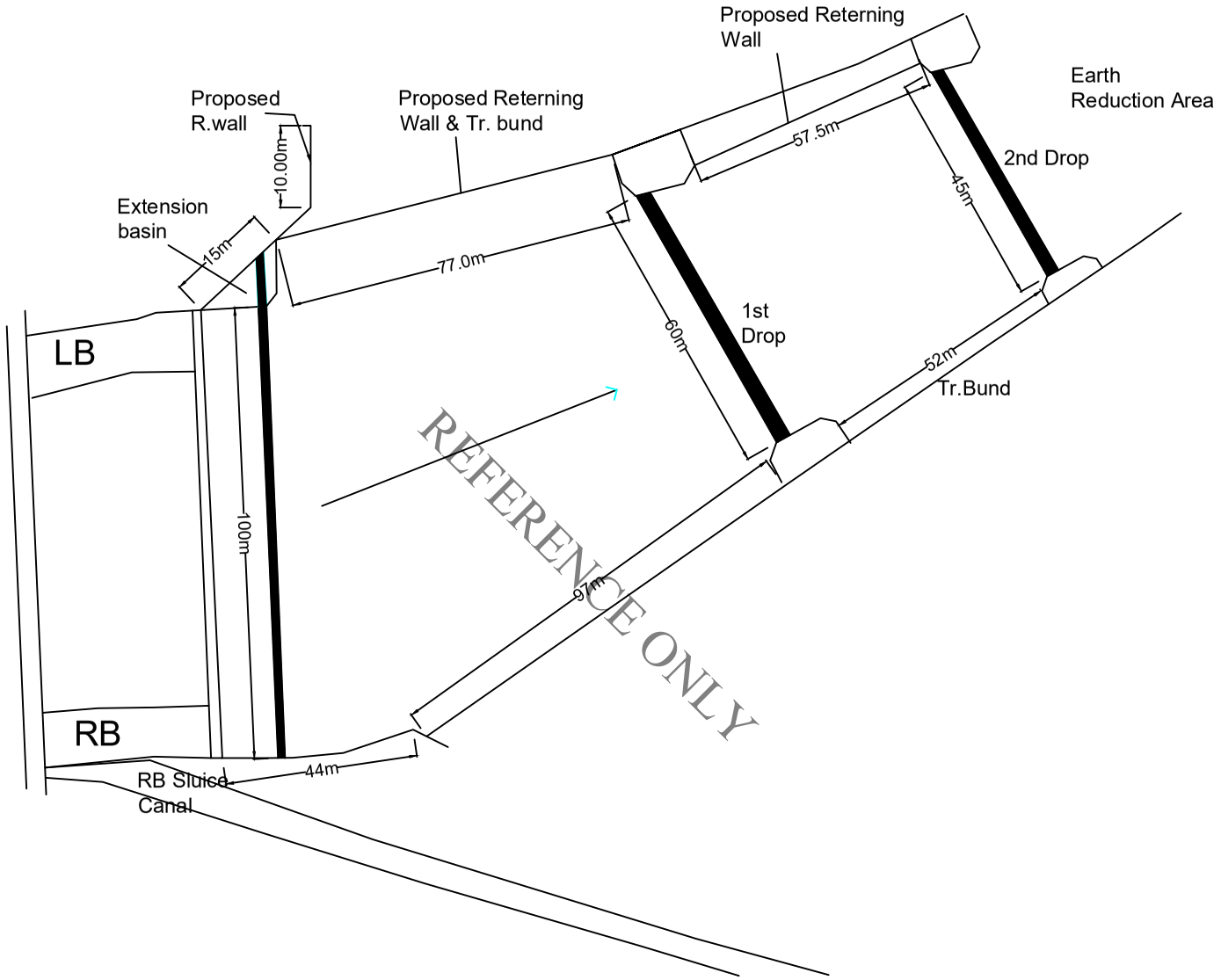
WORK DETAILS & LOCATION :-

IMPROVEMENTS TO SPILL WAY STRUCTURE PLAN

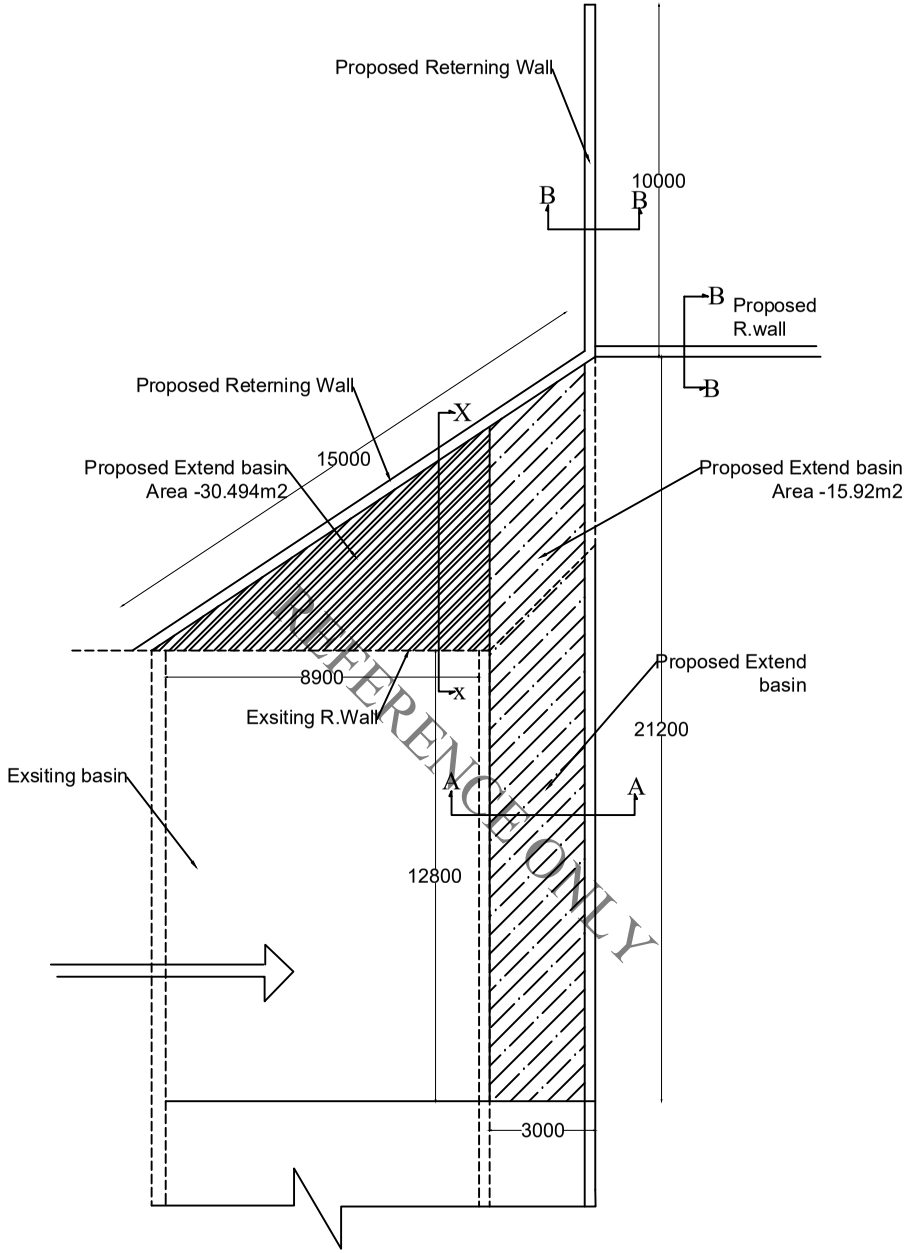
DRAWING NO :- IWWRMP/2026/MUL/MIK/RB/SPILL WAY/PLAN

SHEET NO :- 1 of 37 | **SCALE :-** As Shown | **DATE :-** 07.06.2026

AT IE's Office	AT DDI's Office
Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI

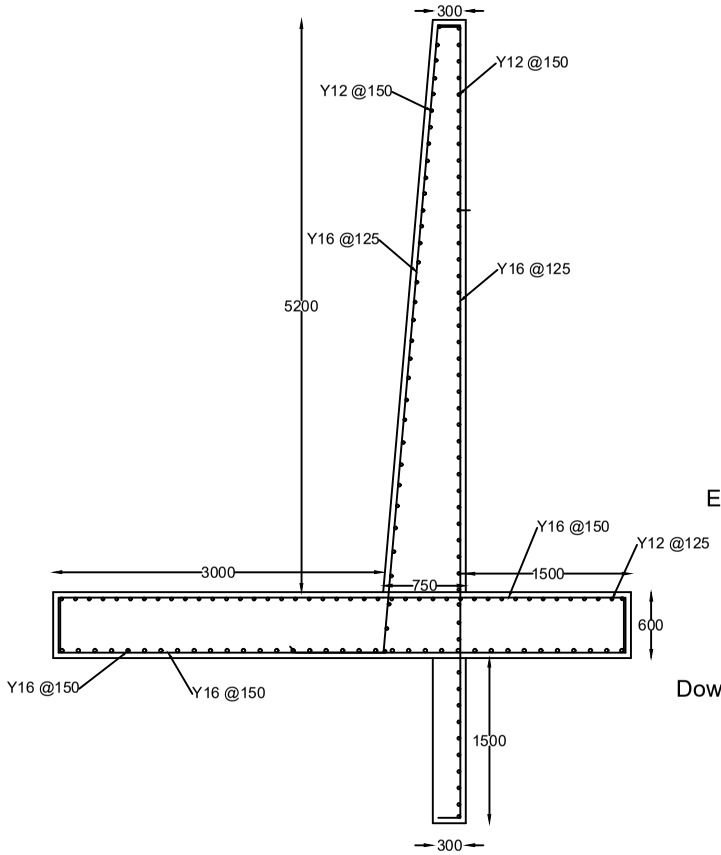


PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**WORK DETAILS & LOCATION** :- IMPROVEMENTS TO SPILL WAY STRUCTURE PLAN	Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
		DRAWING NO :- IWWRMP/2026/MUL/MIK/RB/SPILL WAY/PLAN	Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 2 of 37 / **SCALE** :- As Shown / **DATE** :- 07.06.2026		

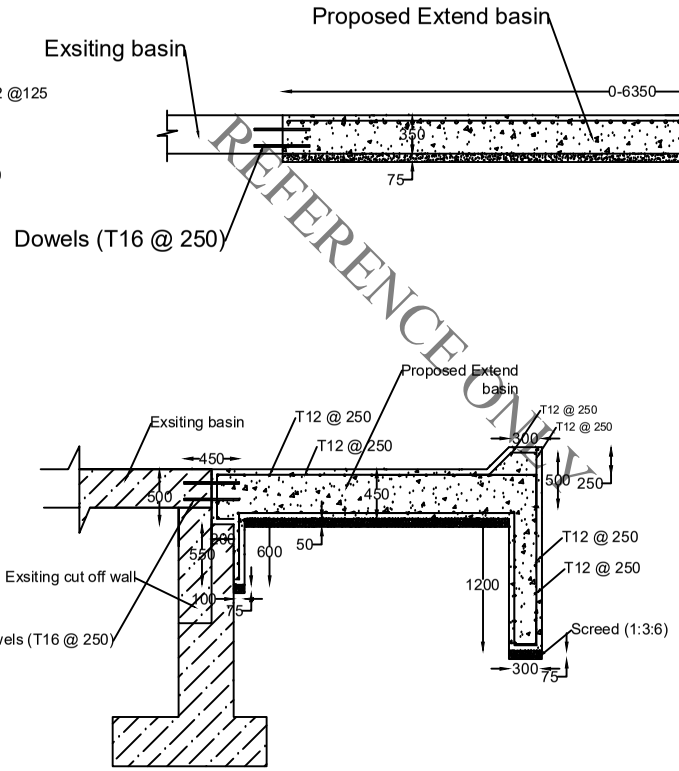


PLAN

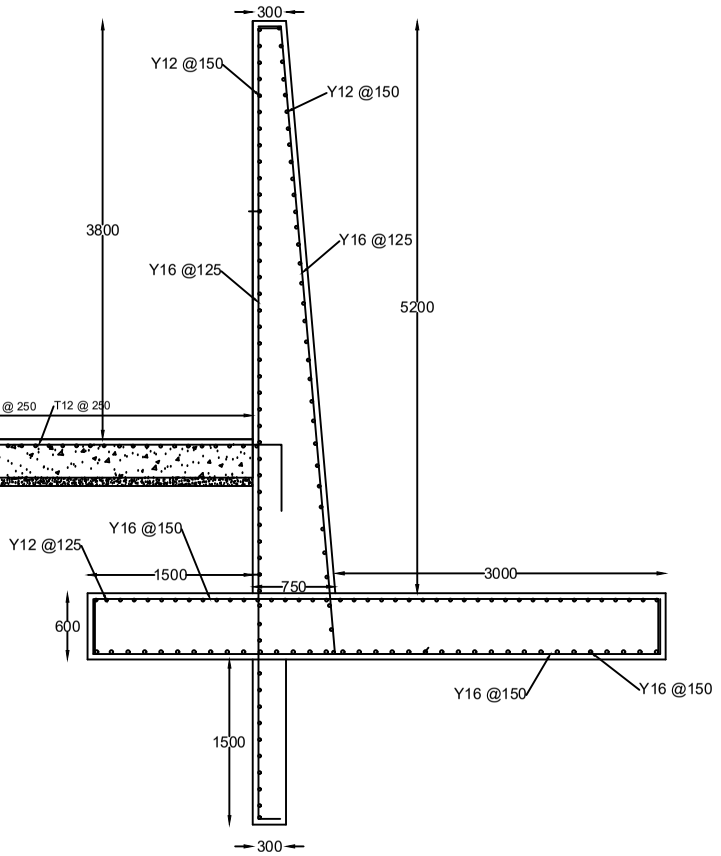
PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
		WORK DETAILS & LOCATION :- RENOVATION OF LB SIDE GATE CUSION	Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/LB/GATE CUSION	Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 3 of 37	**SCALE** :- As Shown	**DATE** :- 07.06.2026



SECTION B-B



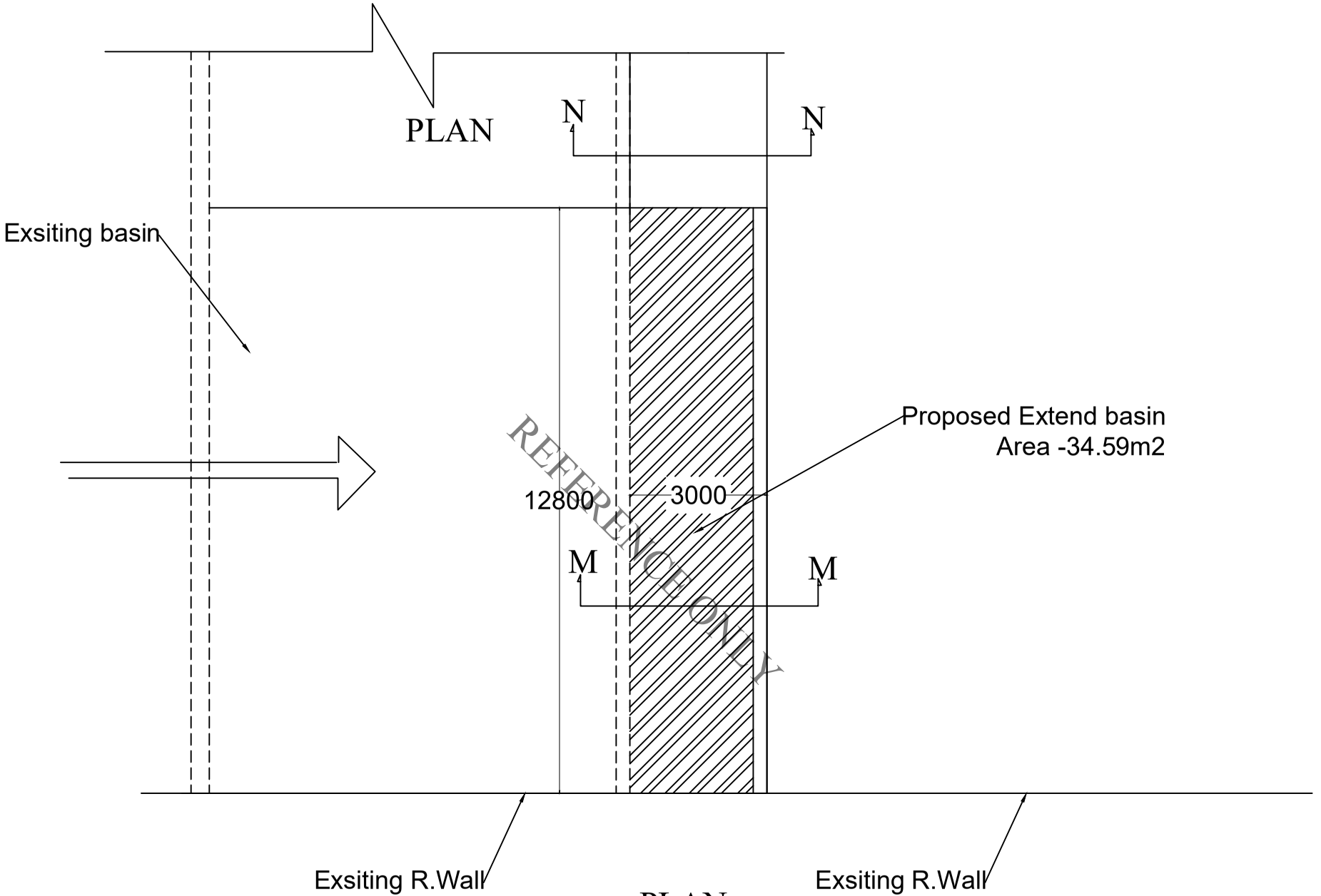
SECTION A-A



SECTION X-X

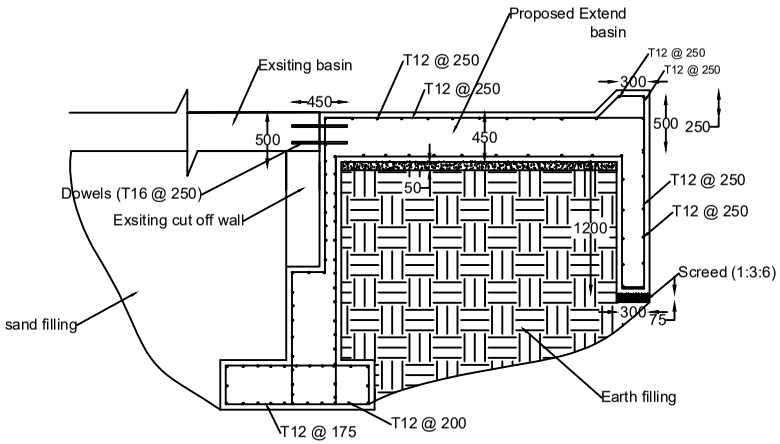
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PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
		WORK DETAILS & LOCATION :- LB SIDE RETERNING WALL ,GATE BASIN R/F DETAIL	Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/LB/GATE BASIN/RF	Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 4 of 37 **SCALE** :- As Shown **DATE** :- 07.06.2026		

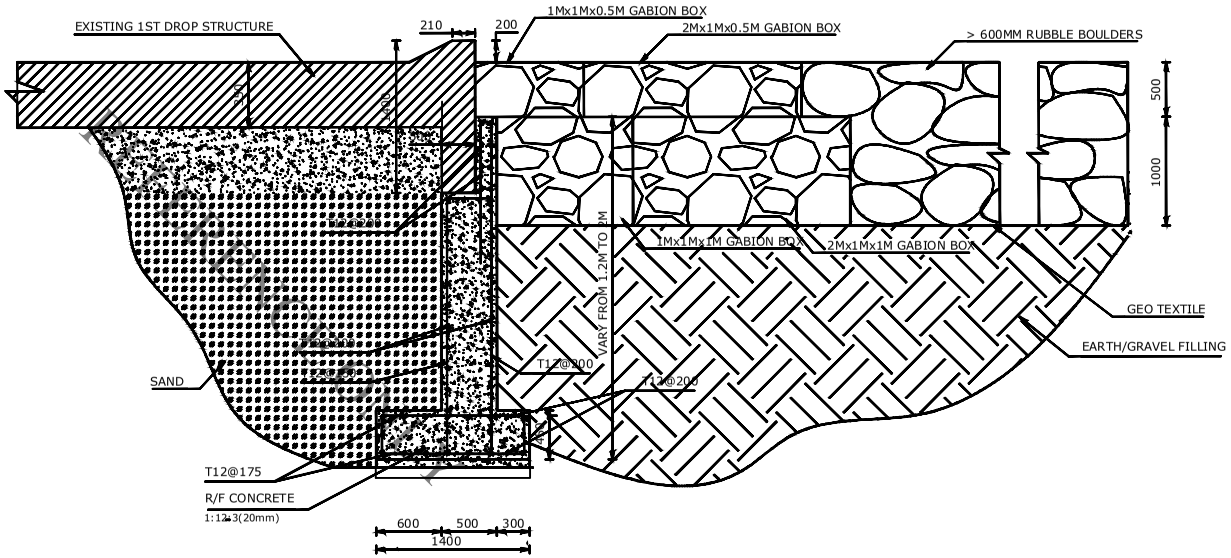


PLAN

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.		AT IE's Office	AT DDI's Office
				Surveyed & Drawn By:- R.Tharsan, T.O	Drawn Checked BY:- K.Vithusan,D'man
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**WORK DETAILS & LOCATION** :- RENOVATION OF RB SIDE GATE CUSION		Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE
		DRAWING NO :- IWWRMP/2026/MUL/MIK/RB/GATE CUSION		Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 5 of 37	**SCALE** :- As Shown	**DATE** :- 07.06.2026	

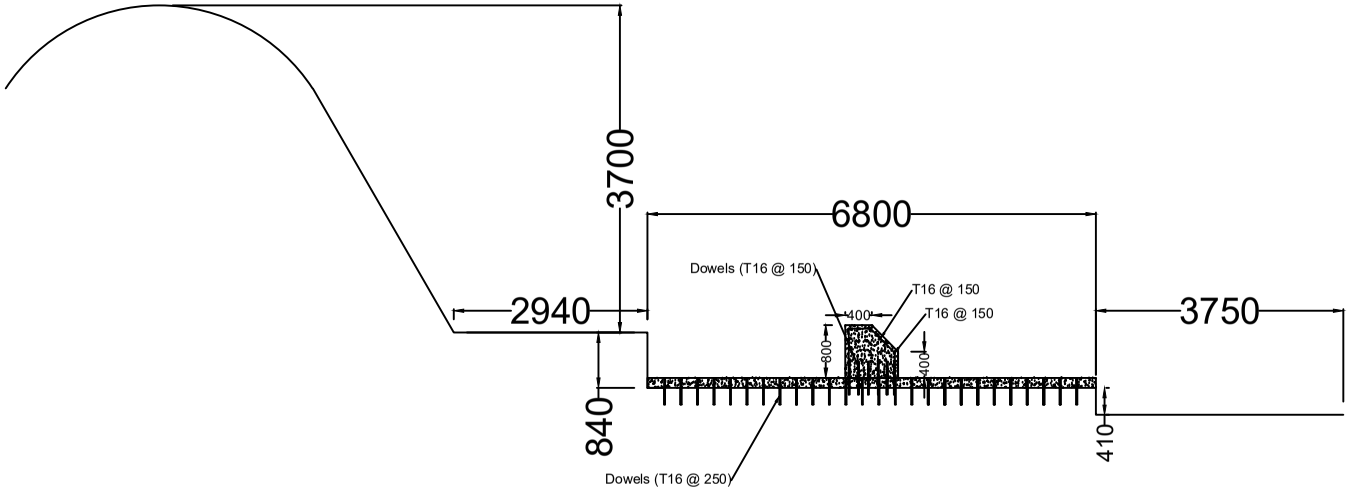


SECTION M-M

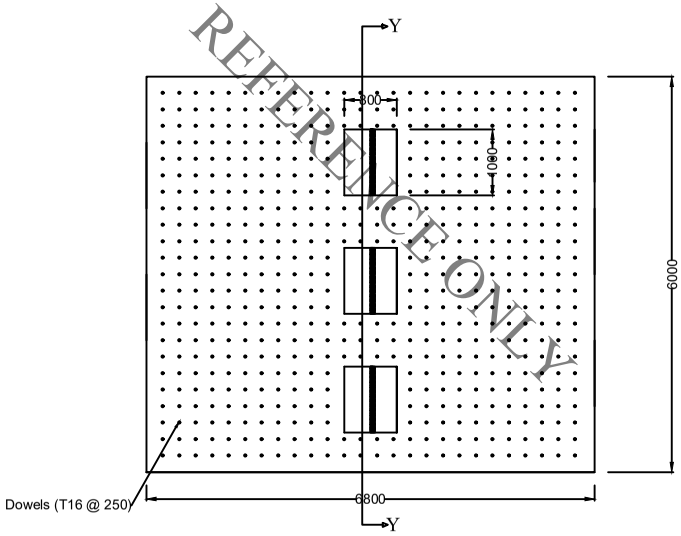


SECTION N-N

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office	
			Surveyed & Drawn By:- R.Tharsan, T.O	Drawn Checked BY:- K.Vithusan,D'man	
		WORK DETAILS & LOCATION :- RB SIDE GATE BASIN R/F DETAIL	Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE	
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/RB/GATE BASIN/RF	Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI	
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 6 of 37	**SCALE** :- As Shown	**DATE** :- 07.06.2026	



SECTION Y-Y

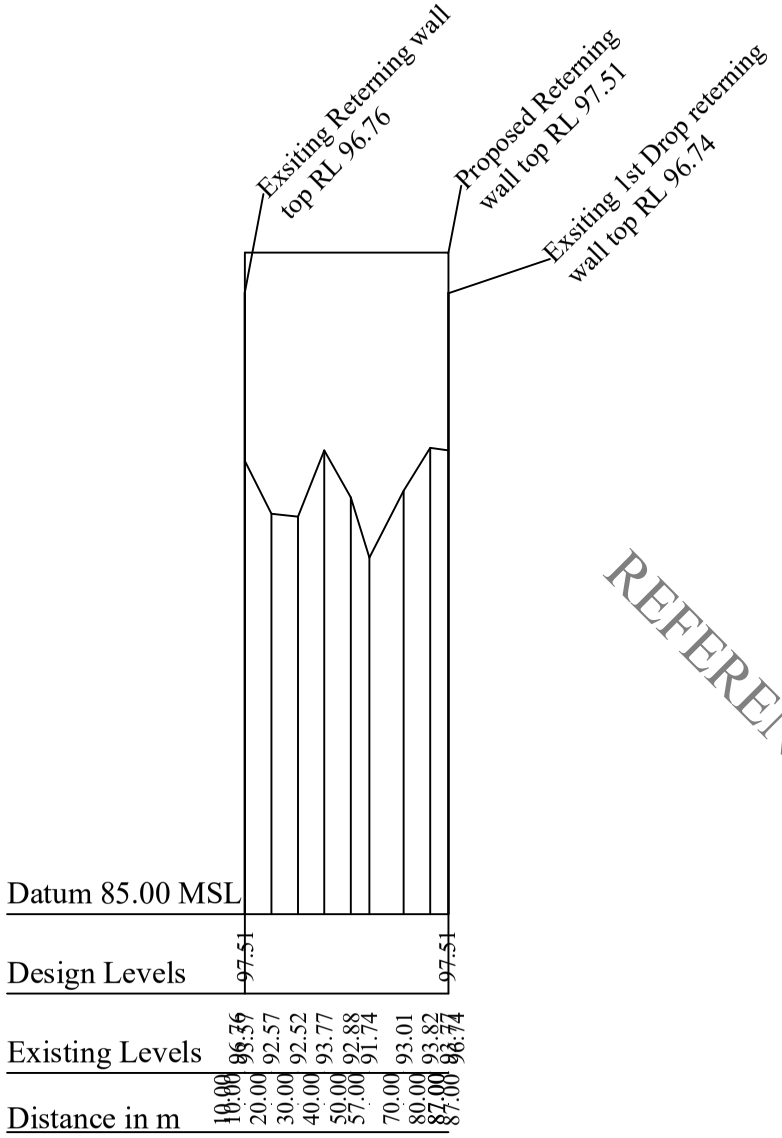


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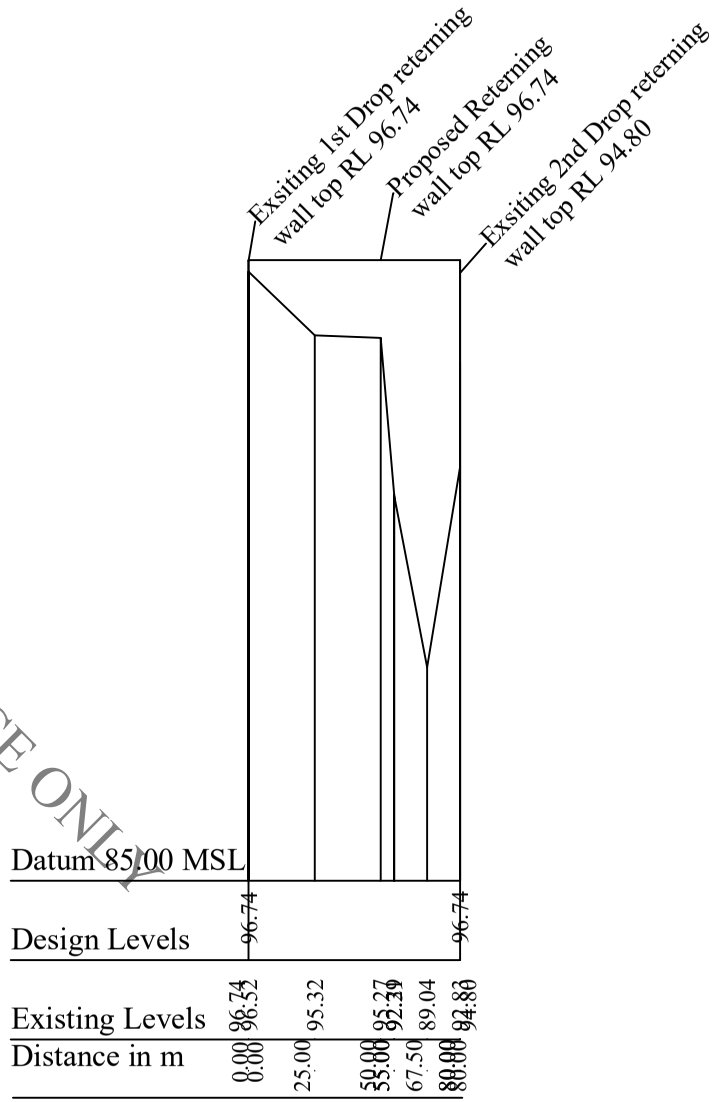
PLAN

DETAIL OF CHUTE BLOCK

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**WORK DETAILS & LOCATION** :- DETAIL OF CHUTE BLOCK	Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
		DRAWING NO :- IWWRMP/2026/MUL/MIK/CHUTE BLOCK	Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 7 of 37 / **SCALE** :- As Shown / **DATE** :- 07.06.2026		



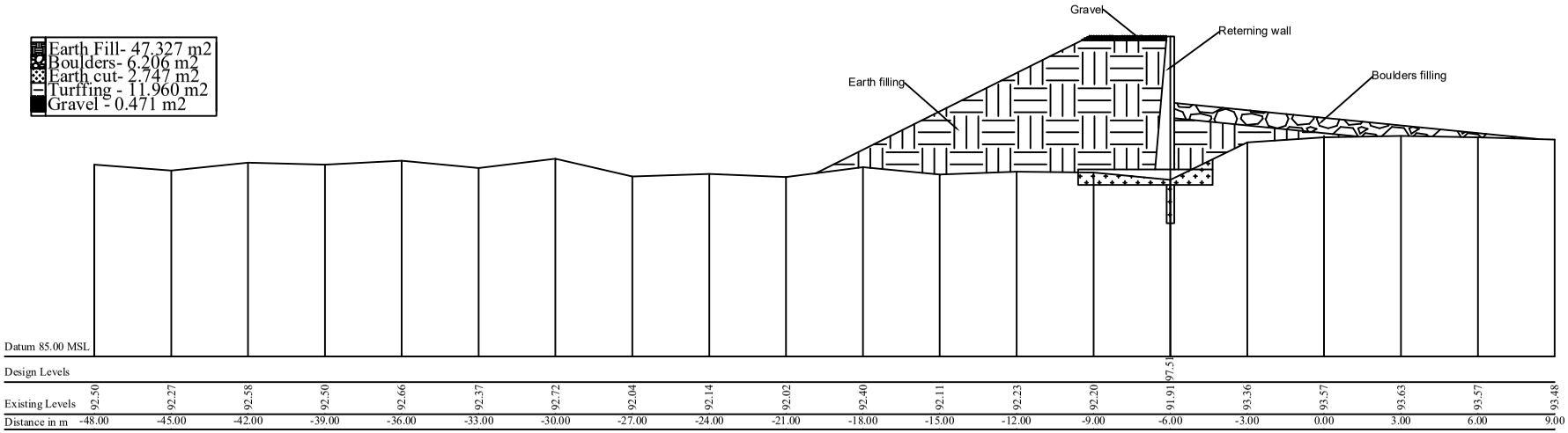
Lb side LS at Gate Basin to 1st Drop structure



LS at 1st & 2nd Drop structure

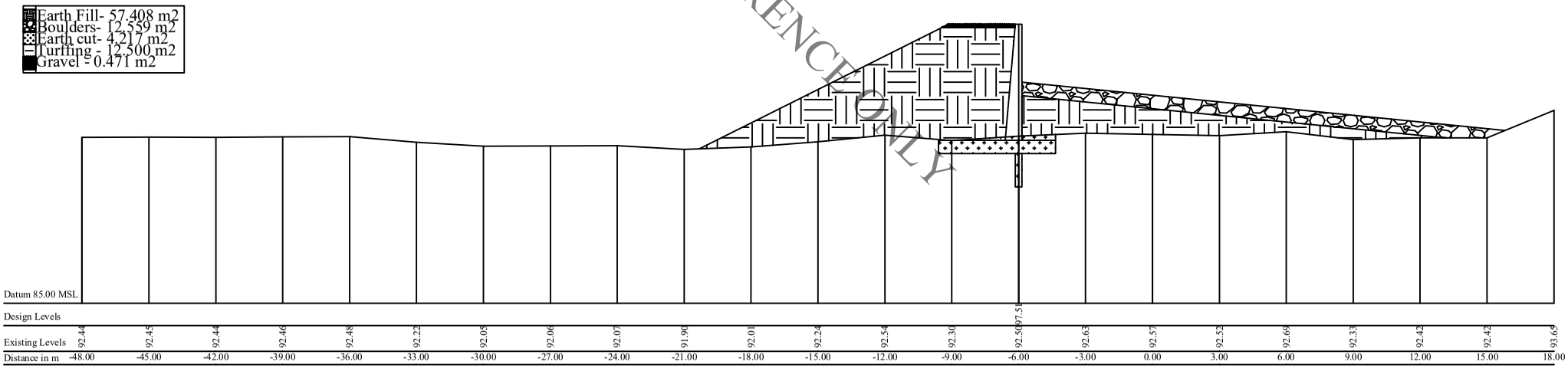
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PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- R.Tharsan, T.O	Drawn Checked BY:- K.Vithusan,D'man
		WORK DETAILS & LOCATION :- IMPROVEMENTS TO LB TRANNING BUND BASIN TO 1ST DROP LS	Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/LB/TRANNING/LS	Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 8 of 37 / **SCALE** :- As Shown / **DATE** :- 07.02.2026		



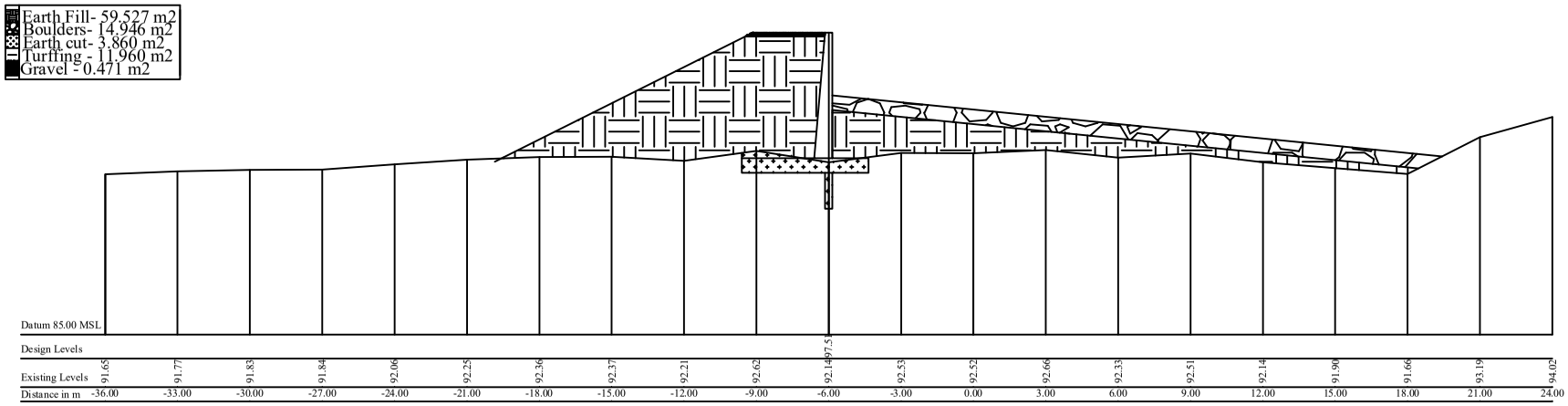
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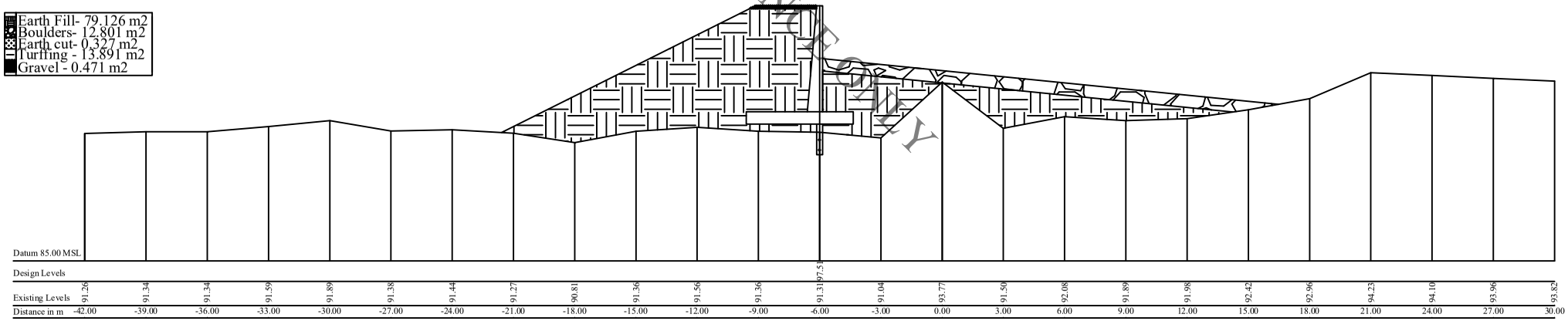
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PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- R.Tharsan, T.O	Drawn Checked BY:- K.Vithusan,D'man
		WORK DETAILS & LOCATION :- IMPROVEMENTS TO LB TRANNING BUND BASIN TO 1ST DROP CSS (CH 0+020)	Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/LB/TRANNING/CS	Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 9 of 37	**SCALE** :- As Shown	**DATE** :- 07.06.2026



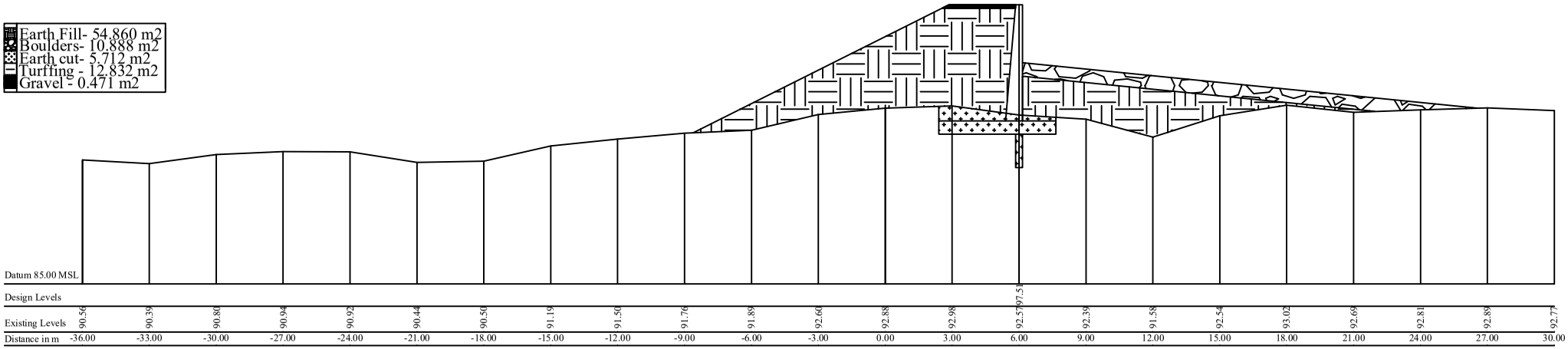
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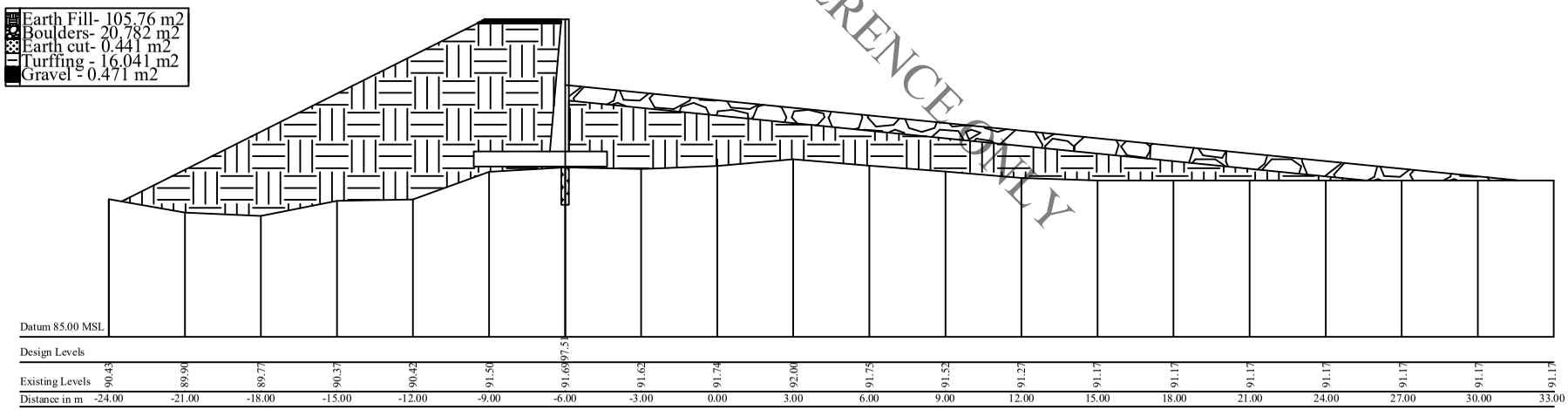
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PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.		AT IE's Office	AT DDI's Office
				Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**WORK DETAILS & LOCATION** :- IMPROVEMENTS TO LB TRANNING BUND BASIN TO 1ST DROP CSS (CH 0+030,CH 0+040)		Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
		DRAWING NO :- IWWRMP/2026/MUL/MIK/LB/TRANNING/CS		Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 10 of 37	**SCALE** :- As Shown	**DATE** :- 07.06.2026	



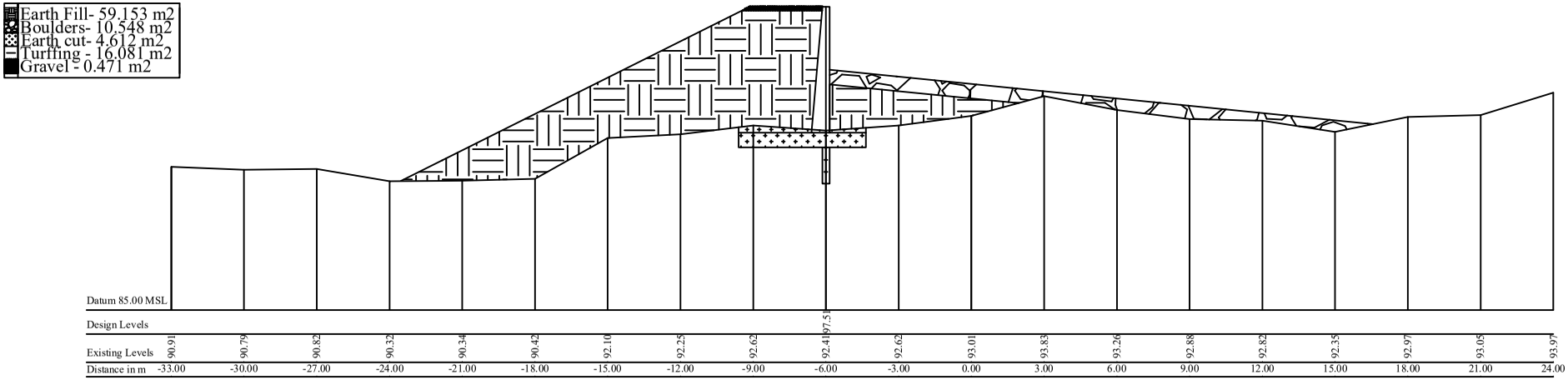
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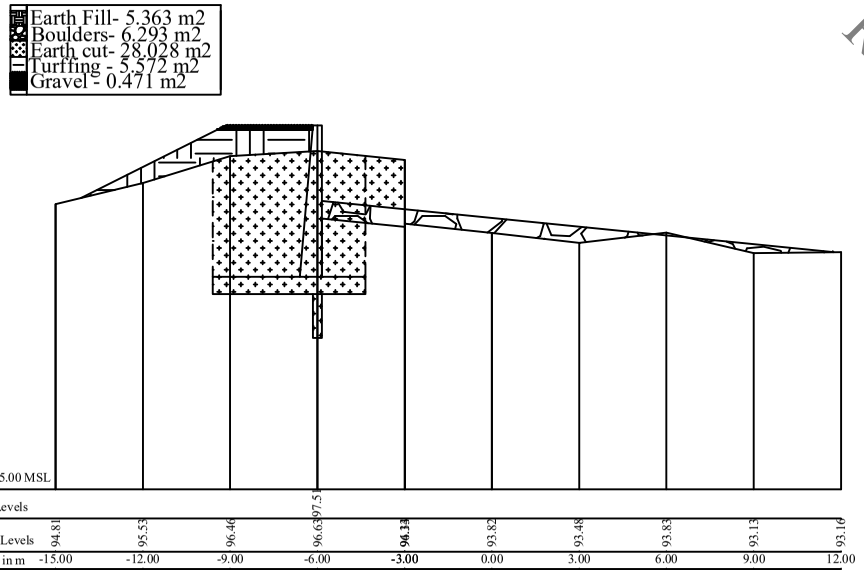


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PROJECT :- **IWWRMP (CERC)**	**IMPLEMENT AGENCY** :- **MINISTRY OF IRRIGATION**	**PROJECT TITLE** :- **IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.**		AT IE's Office	AT DDI's Office
				Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
		WORK DETAILS & LOCATION :- **IMPROVEMENTS TO LB TRANNING BUND BASIN TO 1ST DROP CSS (CH 0+050,CH 0+057)**		Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
FUND BY:- **WORLD BANK**	**EXECUTIVE AGENCY** :- **IRRIGATION DEPARTMENT NORTHERN PROVINCE**	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/LB/TRANNING/CS		Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI
	SCHEME :- **MUTHUIYANKADDU TANK**	**SHEET NO** :- 11 of 37	**SCALE** :- As Shown	**DATE** :- 07.06.2026	

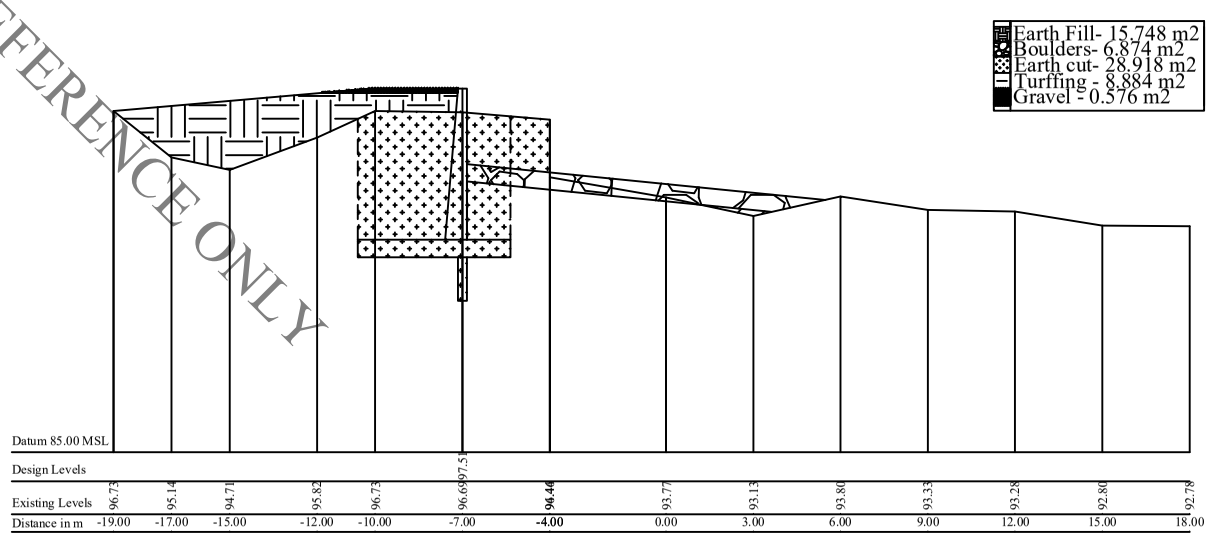


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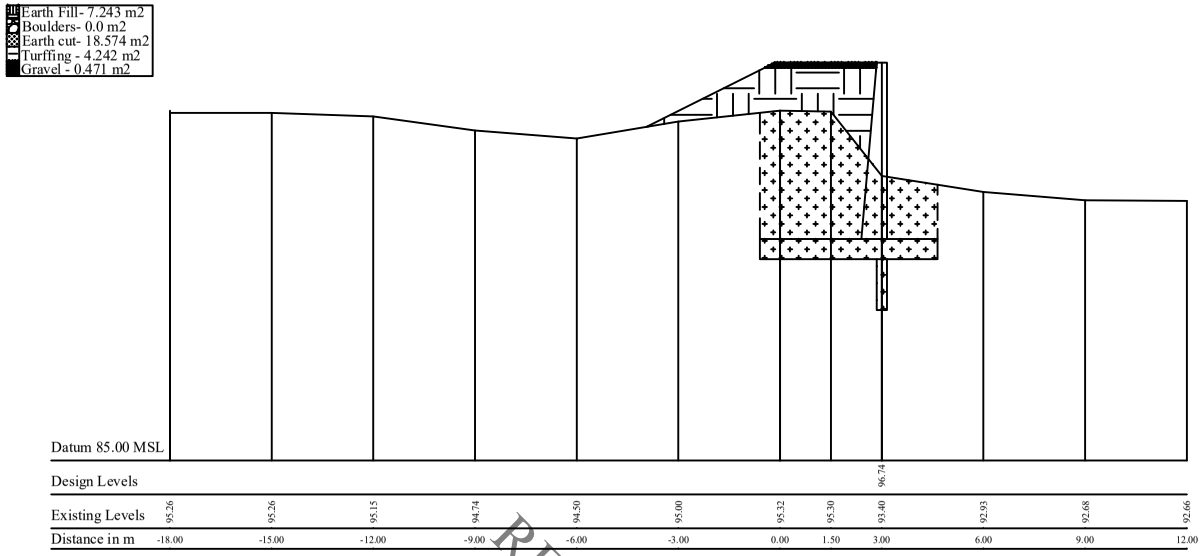
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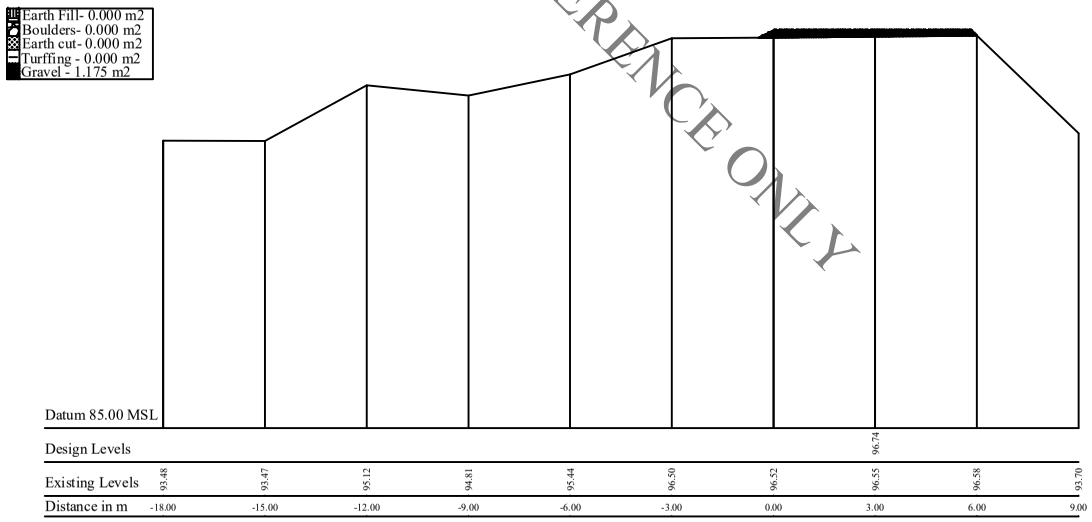
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PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.		AT IE's Office	AT DDI's Office
				Surveyed & Drawn By:- R.Tharsan, T.O	Drawn Checked BY:- K.Vithusan,D'man
		WORK DETAILS & LOCATION :- IMPROVEMENTS TO LB TRANNING BUND BSIN TO 1ST DROP CSS (CH 0+070-CH 0+087)		Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/LB/TRANNING/CS		Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 12 of 37	**SCALE** :- As Shown	**DATE** :- 07.06.2026	



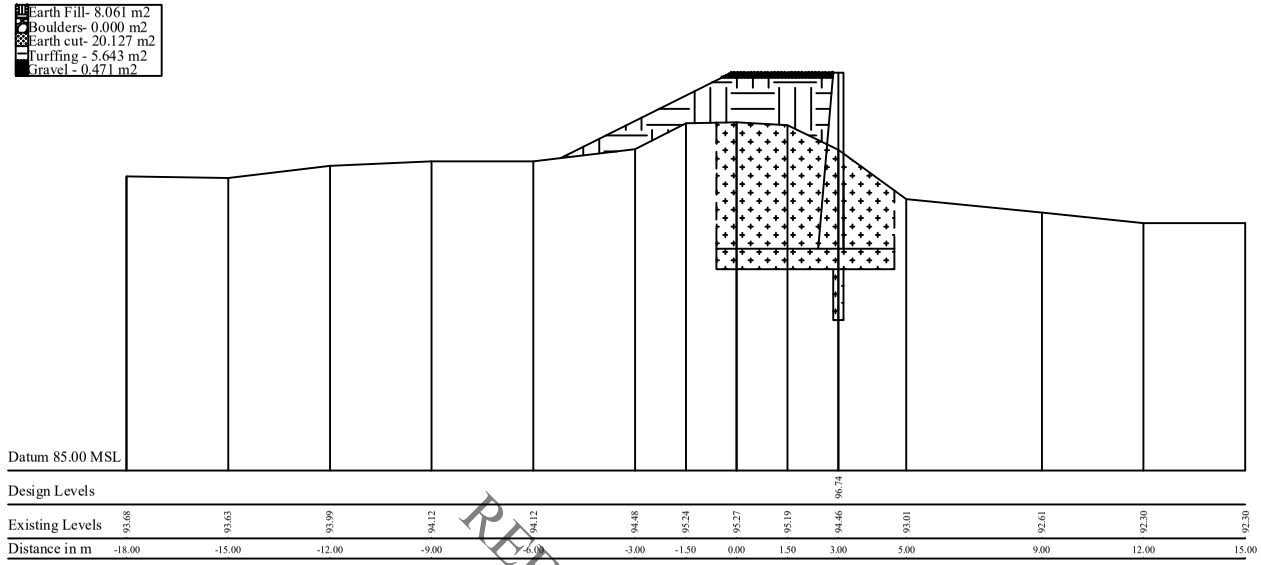
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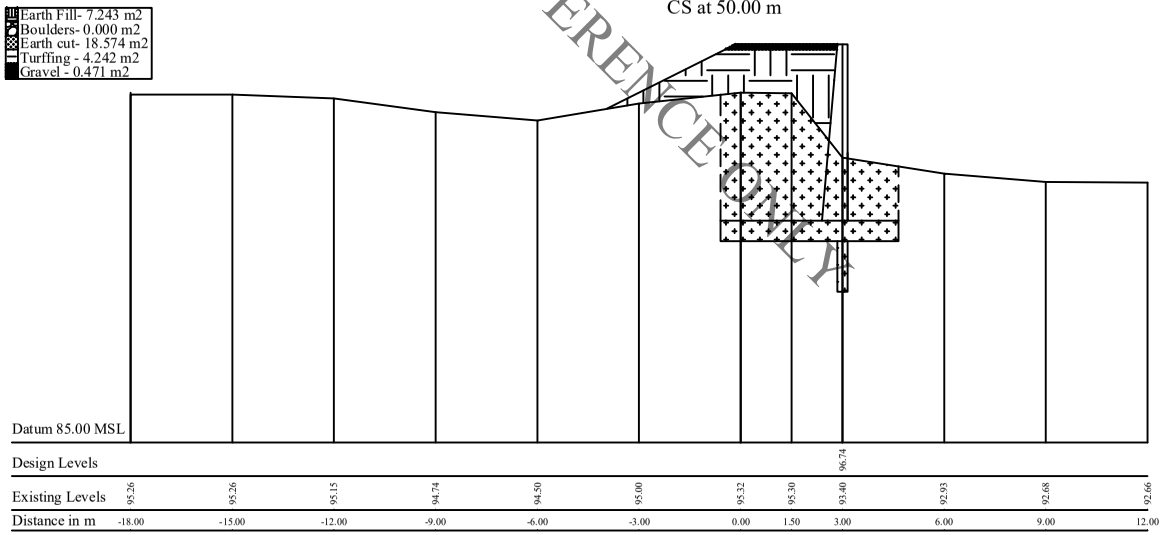


CS at 0.00 m

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- R.Tharsan, T.O	Drawn Checked BY:- K.Vithusan,D'man
		WORK DETAILS & LOCATION :- IMPROVEMENTS TO LB TRANNING BUND 1st DROP TO 2nd DROP (CH 0+000,CH 0+010)	Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/LB/TRANNING/CS	Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 13 of 37	**SCALE** :- As Shown	**DATE** :- 07.06.2026



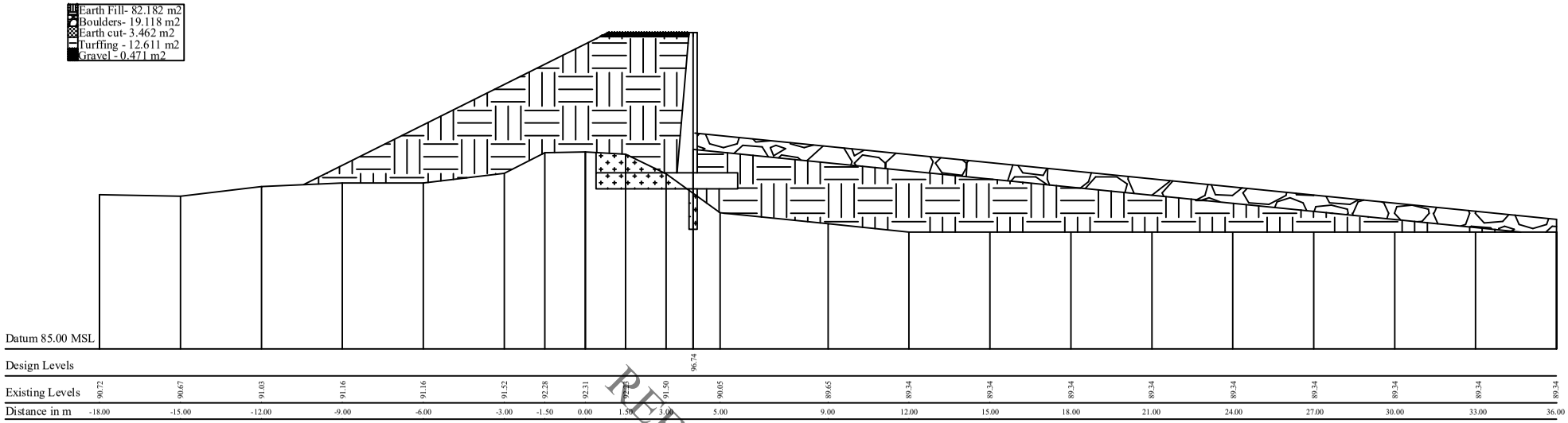
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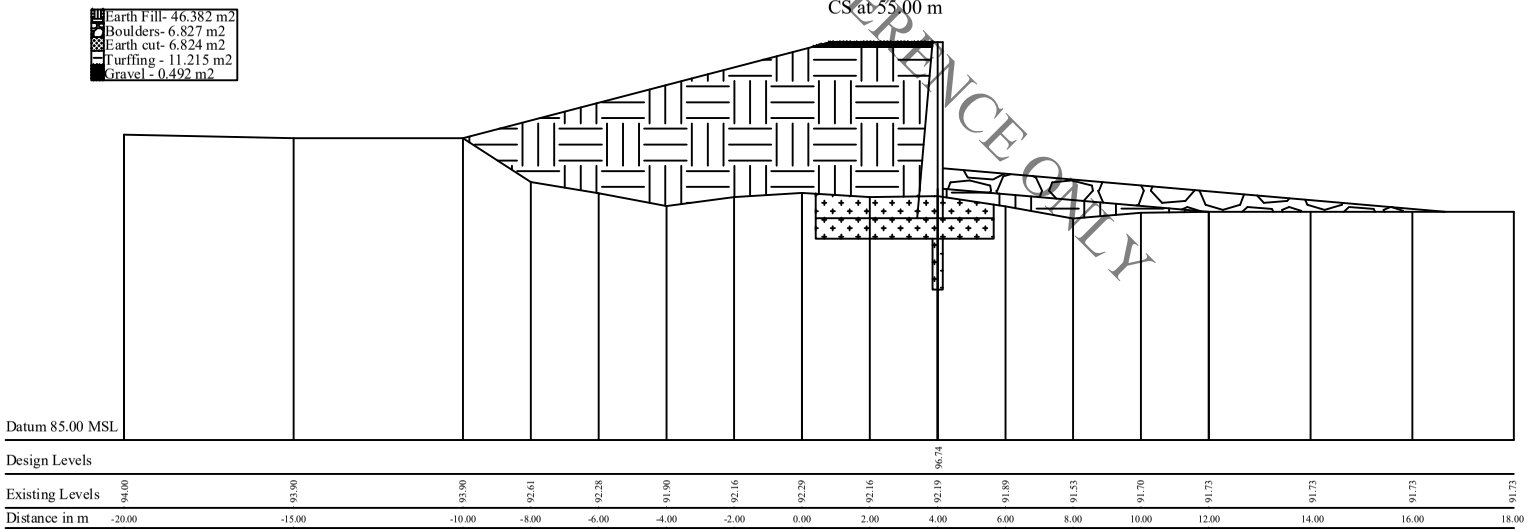
CS at 25.00 m

REFERENCE ONLY

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office: Surveyed & Drawn By:- R.Tharsan, T.O	AT DDI's Office: Drawn Checked BY:- K.Vithusan,D'man
		WORK DETAILS & LOCATION :- IMPROVEMENTS TO LB TRANNING BUND 1st DROP TO 2nd DROP (CH 0+025,CH 0+050)	Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/LB/TRANNING/CS	Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 14 of 37 / **SCALE** :- As Shown / **DATE** :- 07.06.2026		



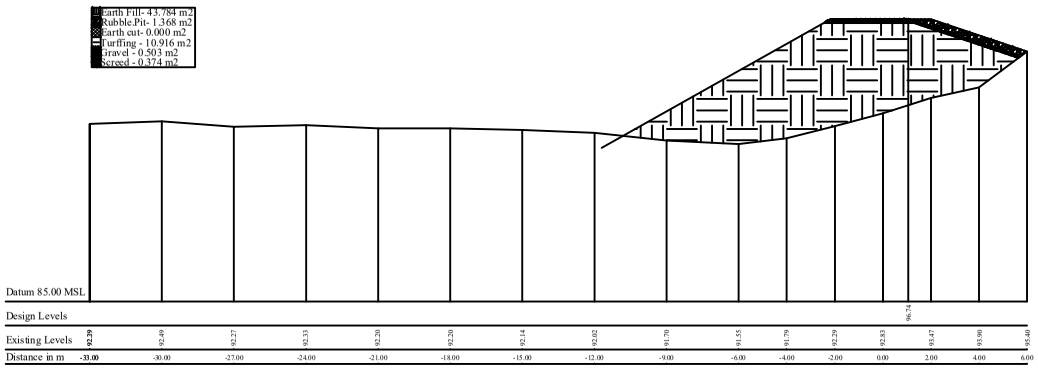
CS at 55.00 m



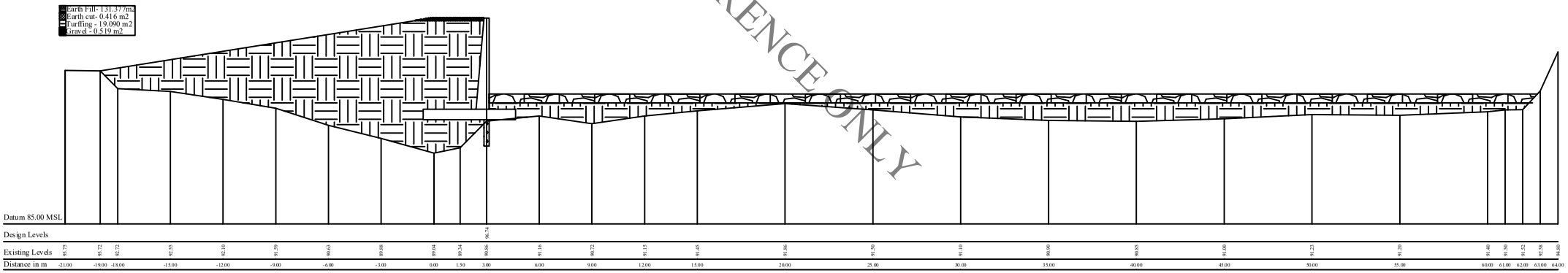
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CS at 54.00 m

PROJECT :- **IWWRMP (CERC)**	**IMPLEMENT AGENCY** :- **MINISTRY OF IRRIGATION**	**PROJECT TITLE** :- **IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.**	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
FUND BY:- **WORLD BANK**	**EXECUTIVE AGENCY** :- **IRRIGATION DEPARTMENT NORTHERN PROVINCE**	**WORK DETAILS & LOCATION** :- **IMPROVEMENTS TO LB TRANNING BUND 1st DROP TO 2nd DROP (CH 0+054,CH 0+055)**	Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
		DRAWING NO :- IWWRMP/2026/MUL/MIK/LB/TRANNING/CS	Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI
	SCHEME :- **MUTHUIYANKADDU TANK**	**SHEET NO** :- 15 of 37 / **SCALE** :- As Shown / **DATE** :- 07.06.2026		



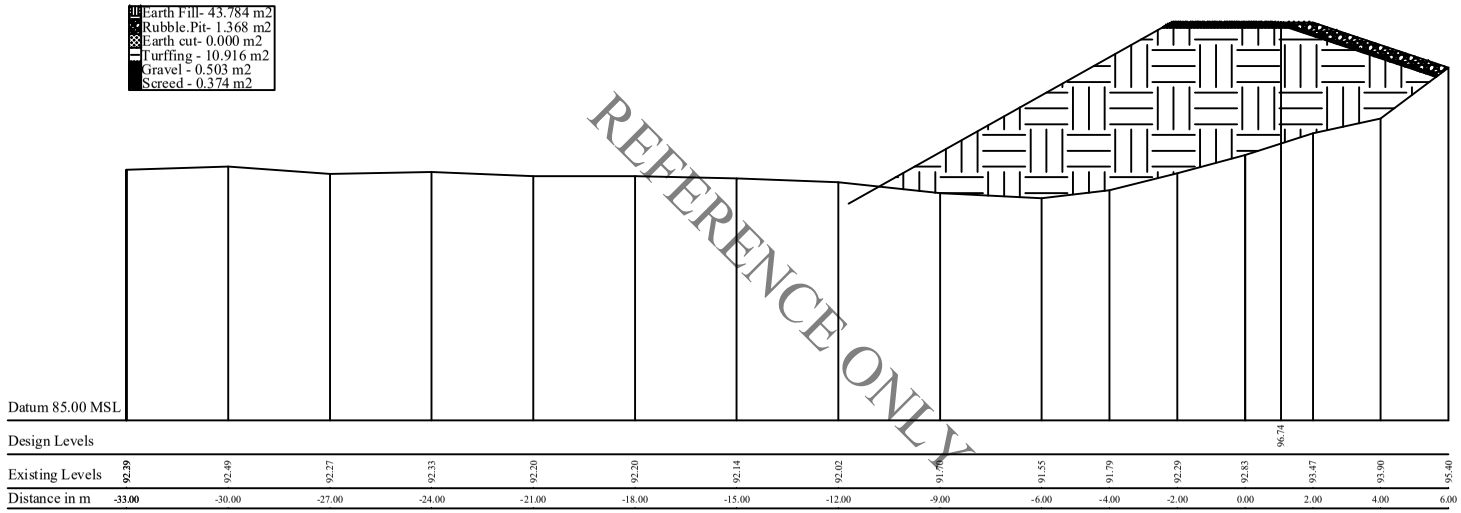
CS at 80.00 m



CS at 67.50 m

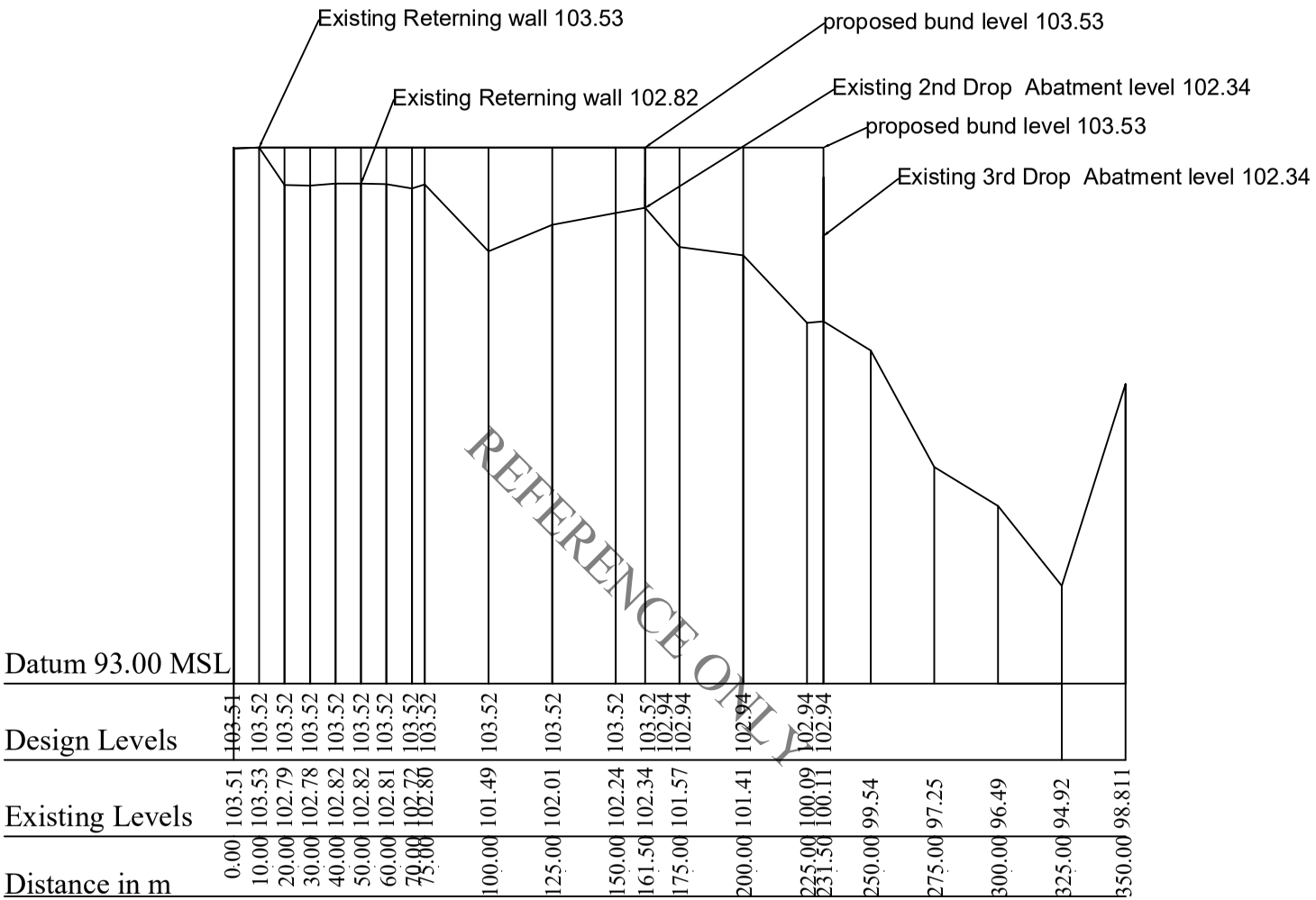
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PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
		WORK DETAILS & LOCATION :- IMPROVEMENTS TO LB TRANNING BUND 1st DROP TO 2nd DROP (CH 0+067.5,CH 0+080)	Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/LB/TRANNING/CS	Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 16 of 37	**SCALE** :- As Shown	**DATE** :- 07.06.2026



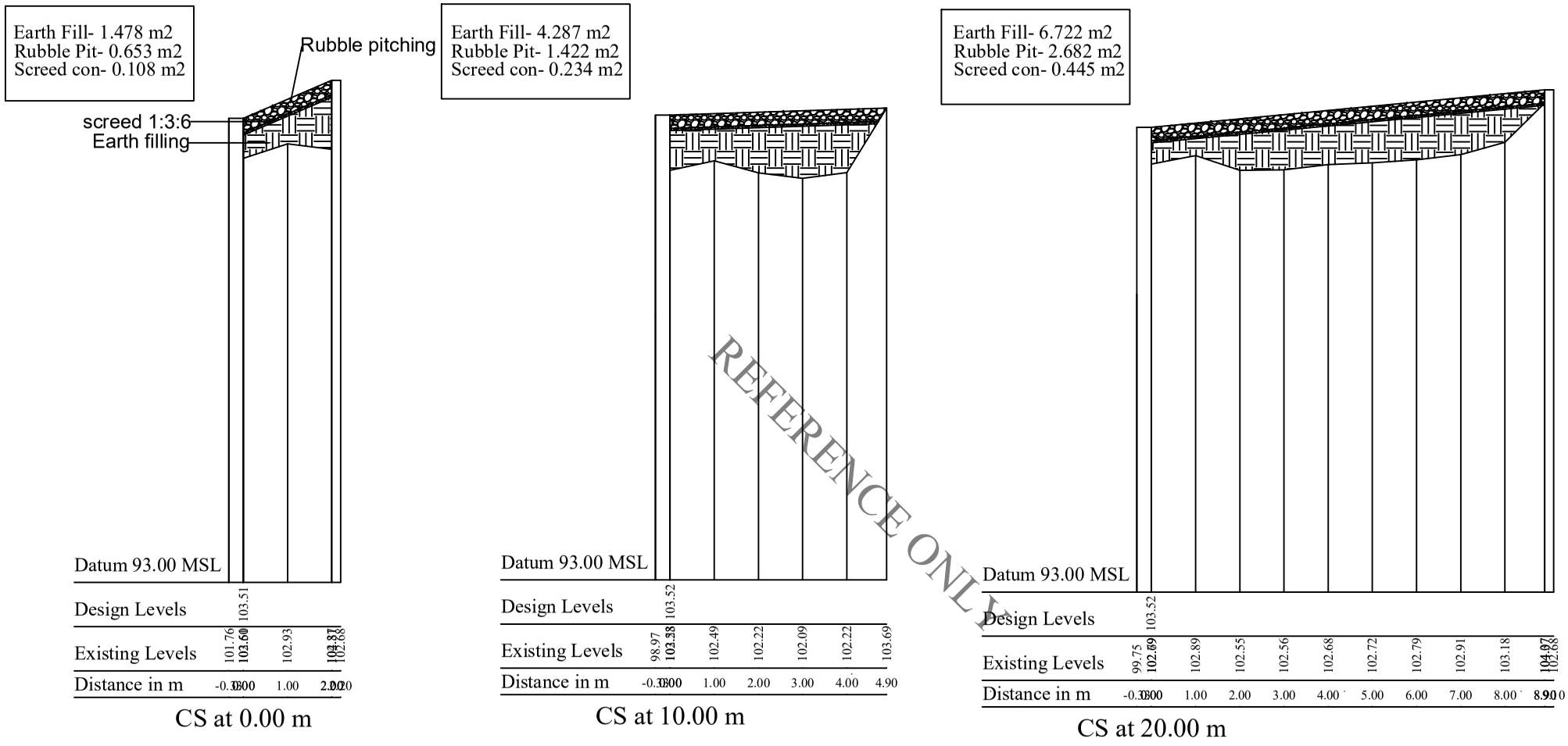
CS at 85.00 m

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**WORK DETAILS & LOCATION** :- IMPROVEMENTS TO LB TRANNING BUND 1st DROP TO 2nd DROP (CH 0+085)	Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
		DRAWING NO :- IWWRMP/2026/MUL/MIK/LB/TRANNING/CS	Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 17 of 37 / **SCALE** :- As Shown / **DATE** :- 07.06.2026		



LS at 0+000-0+350

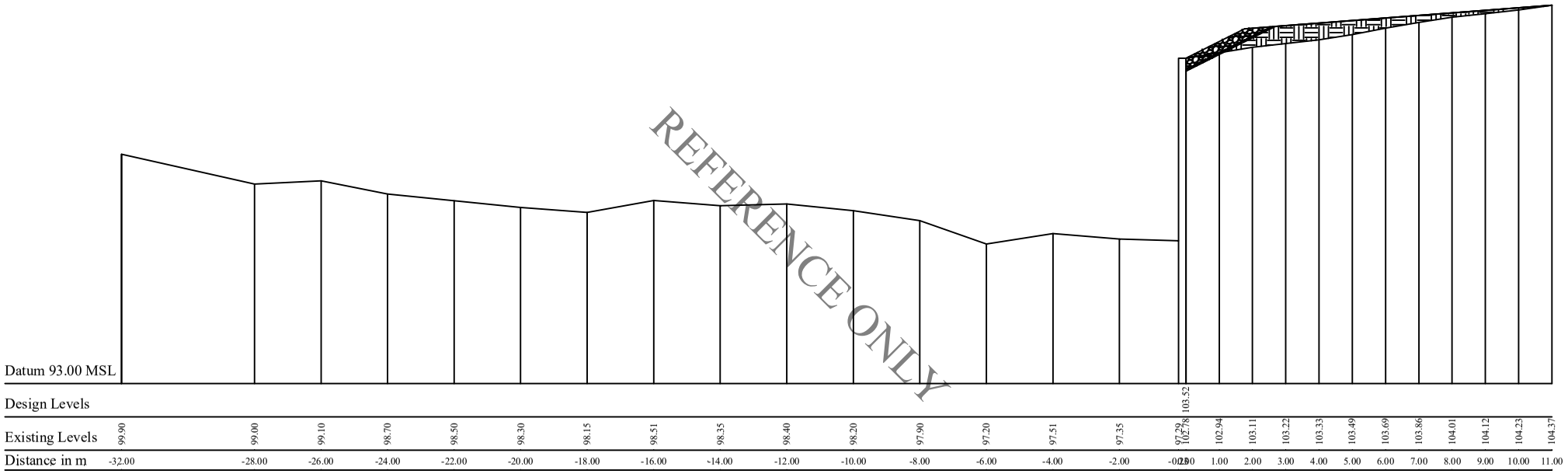
PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**WORK DETAILS & LOCATION** :- IMPROVEMENTS TO RB TRANNING BUND LS (CH 0+000-0+350)	Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
		DRAWING NO :- IWWRMP/2026/MUL/MIK/RB/TRANNING/LS	Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 18 of 37 / **SCALE** :- As Shown / **DATE** :- 07.06.2026		



REFERENCE ONLY

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- R.Tharsan, T.O	Drawn Checked BY:- K.Vithusan,D'man
		WORK DETAILS & LOCATION :- IMPROVEMENTS TO RB TRANNING BUND CSS (0+000 - 0+020)	Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/RB/TRANNING/CS	Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 19 of 37	**SCALE** :- As Shown	**DATE** :- 07.06.2026

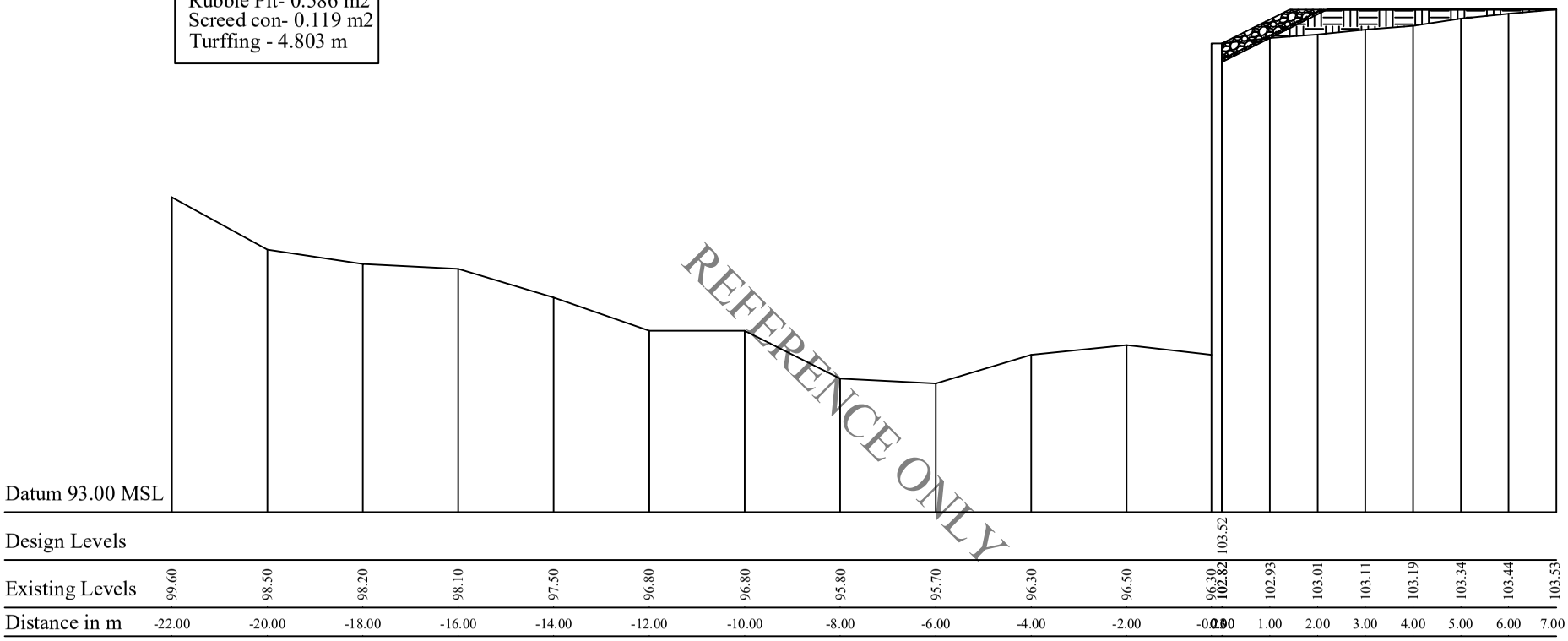
Earth Fill- 2.567 m2
Rubble Pit- 0.723 m2
Screed con- 0.146 m2
Turffing - 8.339 m2



CS at 30.00 m

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.		AT IE's Office	AT DDI's Office
				Surveyed & Drawn By:- R.Tharsan, T.O	Drawn Checked BY:- K.Vithusan,D'man
		WORK DETAILS & LOCATION :- IMPROVEMENTS TO RB TRANNING BUND CSS (CH 0+030)		Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/RB/TRANNING/CS		Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 20 of 37	**SCALE** :- As Shown	**DATE** :- 07.06.2026	

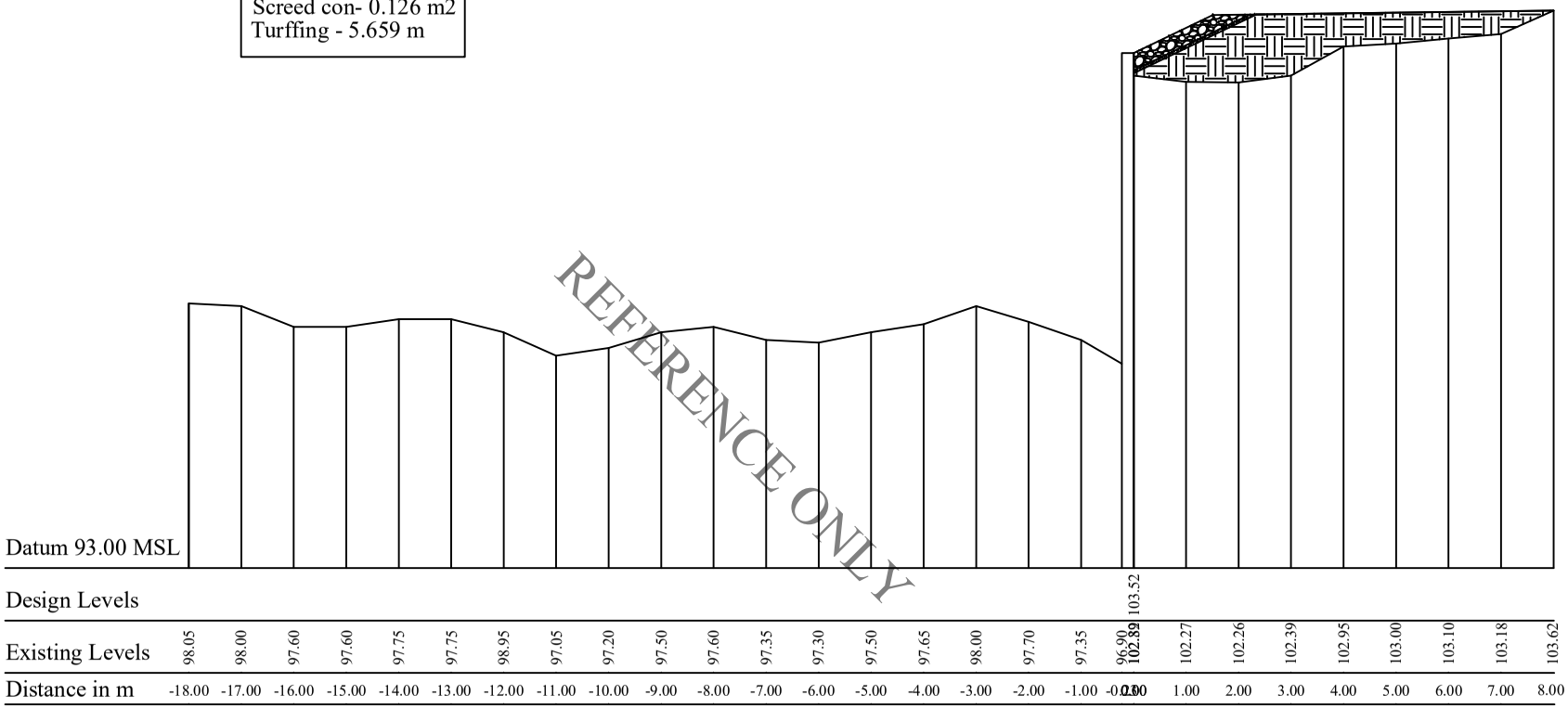
Earth Fill- 1.495 m2
Rubble Pit- 0.586 m2
Screed con- 0.119 m2
Turffing - 4.803 m



CS at 40.00 m

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION .	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- R.Tharsan, T.O	Drawn Checked BY:- K.Vithusan,D'man
		WORK DETAILS & LOCATION :- IMPROVEMENTS TO RB TRANNING BUND CSS (CH 0+040)	Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/RB/TRANNING/CS	Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 21 of 37 / **SCALE** :- As Shown / **DATE** :- 07.06.2026		

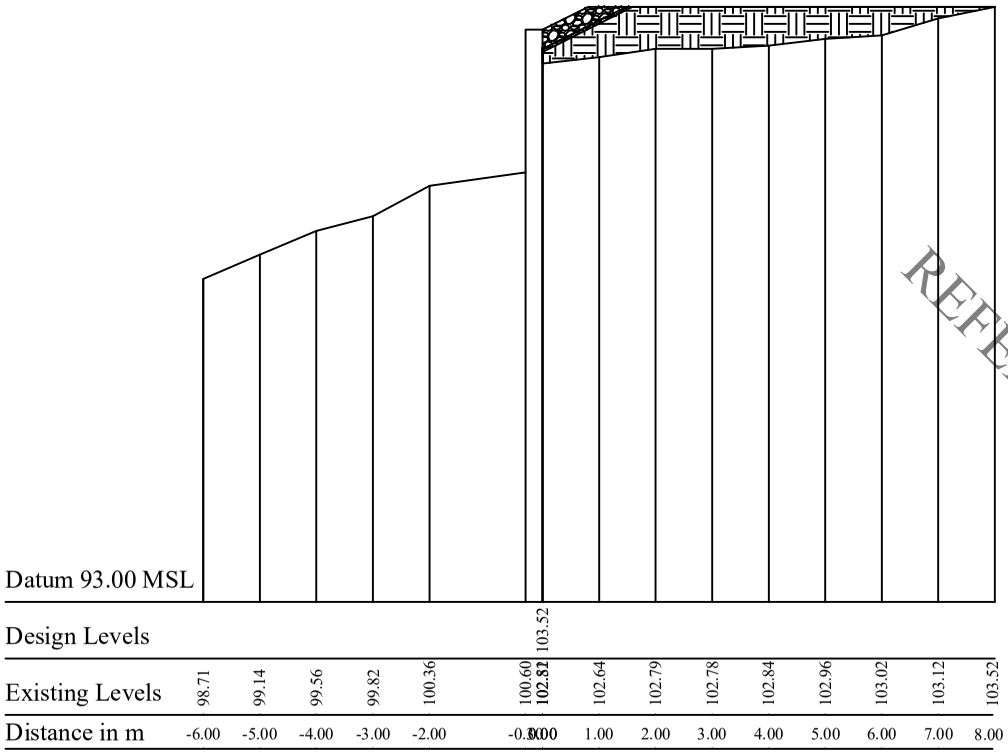
Earth Fill- 5.180 m2
Rubble Pit- 0.620 m2
Screed con- 0.126 m2
Turffing - 5.659 m



CS at 50.00 m

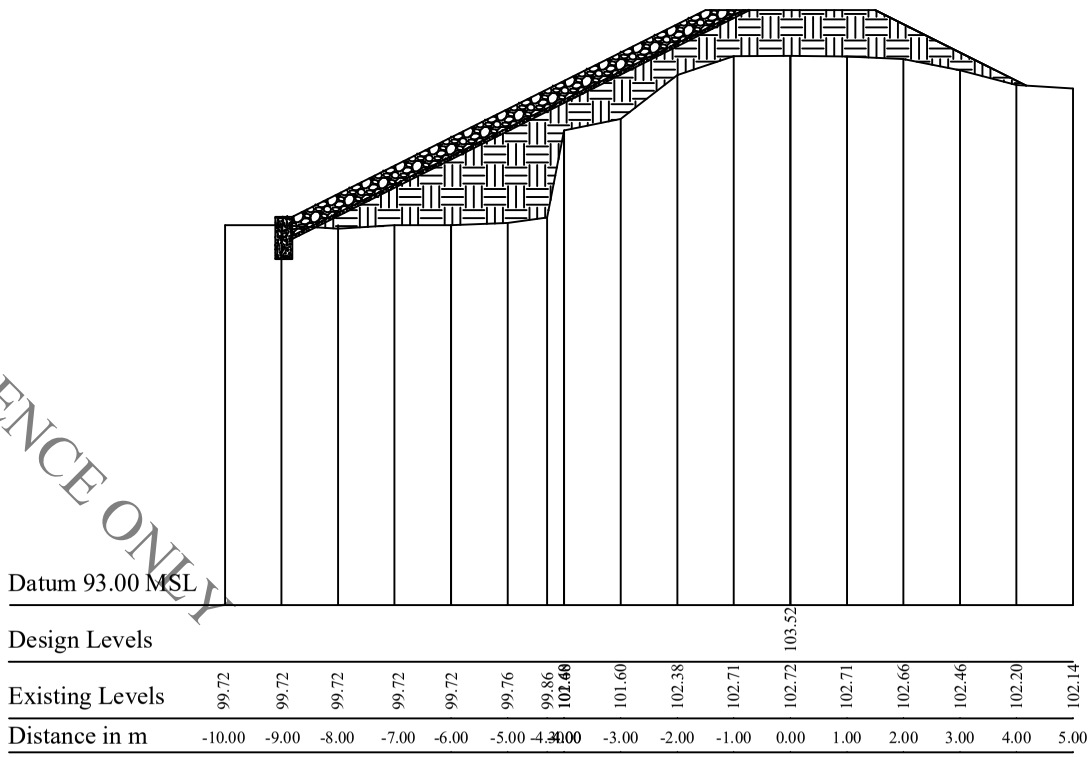
PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- R.Tharsan, T.O	Drawn Checked BY:- K.Vithusan,D'man
		WORK DETAILS & LOCATION :- IMPROVEMENTS TO RB TRANNING BUND CSS (CH 0+050)	Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/RB/TRANNING/CS	Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 22 of 37	**SCALE** :- As Shown	**DATE** :- 07.06.2026

Earth Fill- 4.203 m2
Rubble Pit- 0.384 m2
Screed con- 0.085 m2
Turffing - 6.404 m



CS at 60.00 m

Earth Fill- 9.288 m2
Rubble Pit- 2.564 m2
Screed con- 0.449 m2
1.11/2.3 con- 0.225 m2
Turffing - 2.985 m2

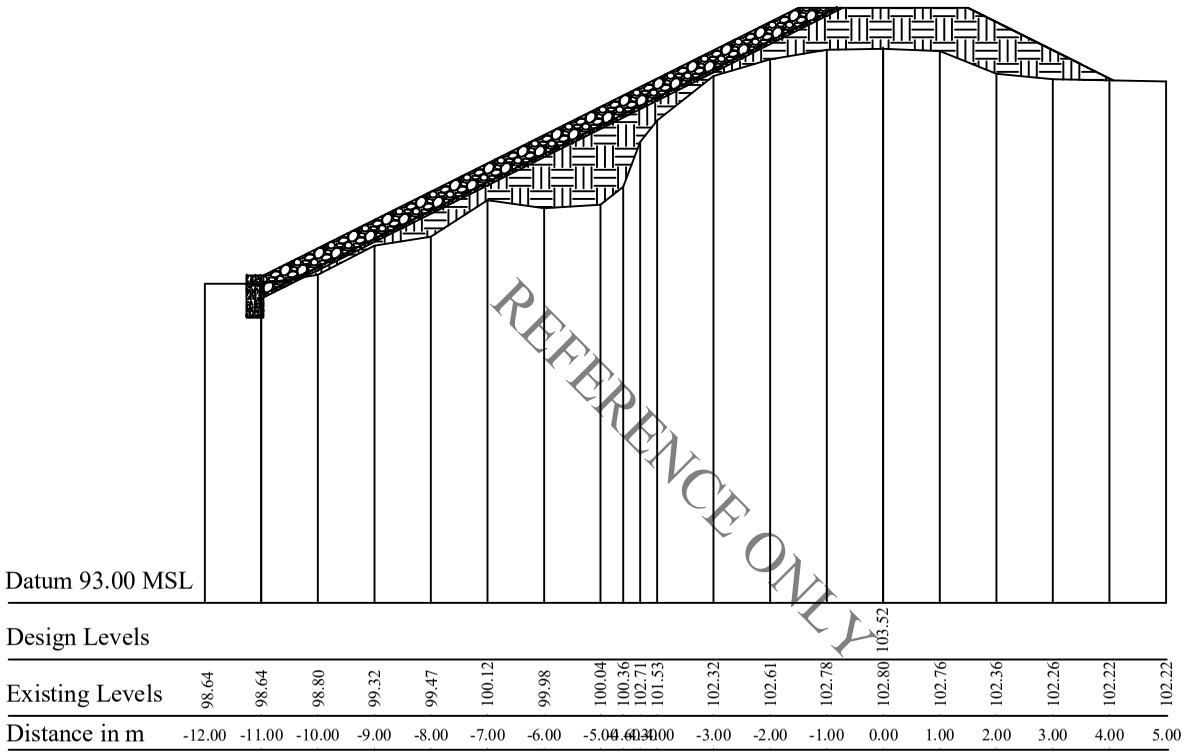


CS at 70.00 m

REFERENCE ONLY

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION.	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- R.Tharsan, T.O	Drawn Checked BY:- K.Vithusan,D'man
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**WORK DETAILS & LOCATION** :- IMPROVEMENTS TO RB TRANNING BUND CSS (CH 0+060-0+070)	Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE
		DRAWING NO :- IWWRMP/2026/MUL/MIK/RB/TRANNING/CS	Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 23 of 37 / **SCALE** :- As Shown / **DATE** :- 07.06.2026		

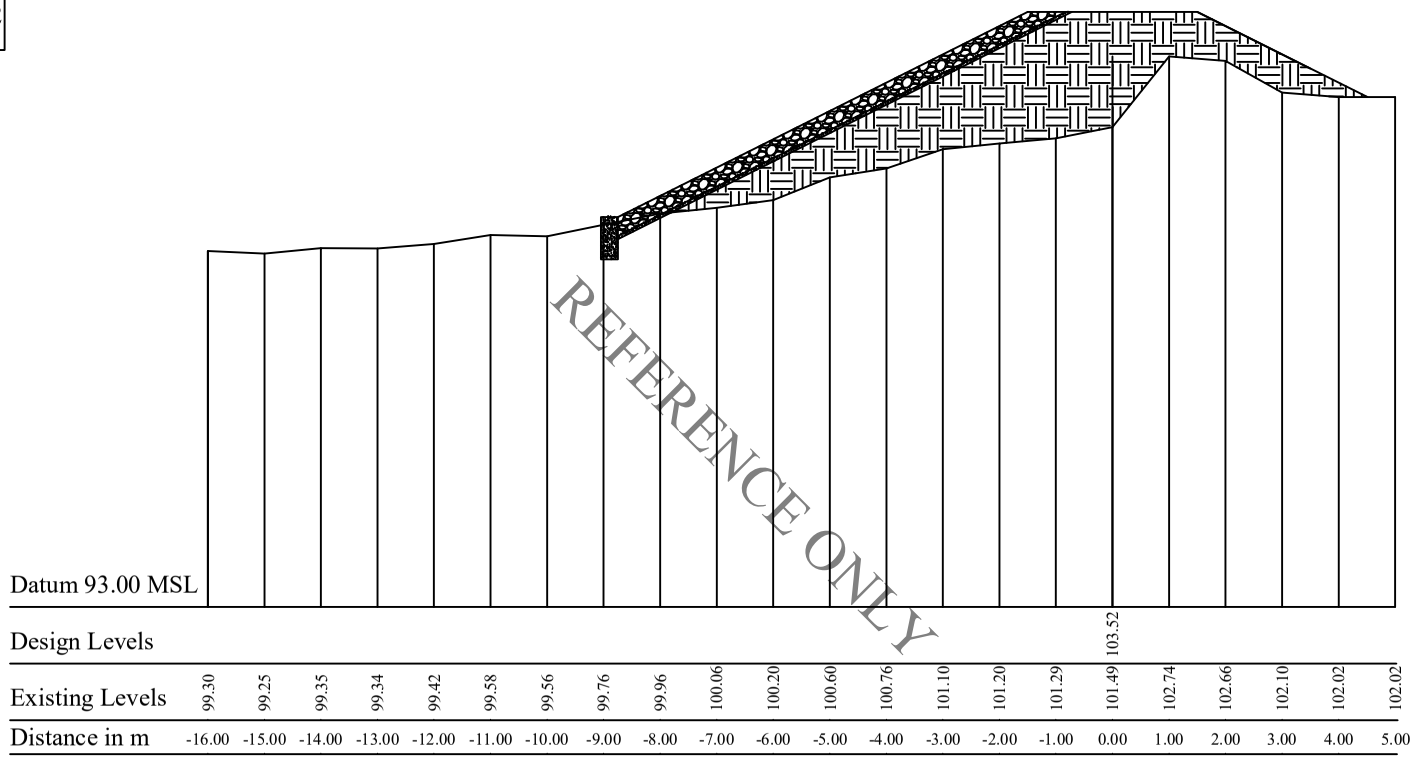
Earth Fill- 7.457 m2
Rubble Pit- 3.286 m2
Screed con- 0.569 m2
1.11/2.3 con- 0.225 m2
Turffing - 2.795 m2



CS at 75.00 m

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
		WORK DETAILS & LOCATION :- IMPROVEMENTS TO RB TRANNING BUND CSS (CH 0+075)	Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/RB/TRANNING/CS	Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 24 of 37 **SCALE** :- As Shown **DATE** :- 07.06.2026		

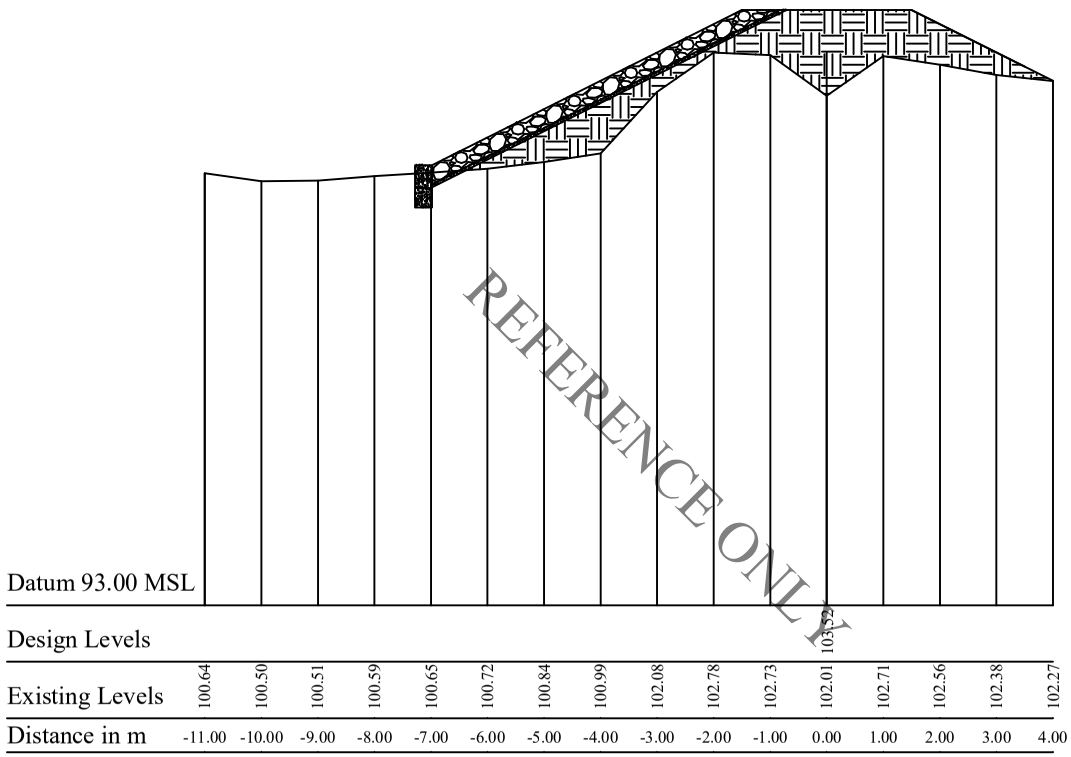
Earth Fill- 12.365 m2
Rubble Pit- 2.543 m2
Screed con- 0.445 m2
1.11/2.3 con- 0.225 m2
Turffing - 3.365 m



CS at 100.00 m

PROJECT :- **IWWRMP (CERC)**	**IMPLEMENT AGENCY** :- **MINISTRY OF IRRIGATION**	**PROJECT TITLE** :- **IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.**	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
		WORK DETAILS & LOCATION :- **IMPROVEMENTS TO RB TRANNING BUND CSS (CH 0+100)**	Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
FUND BY:- **WORLD BANK**	**EXECUTIVE AGENCY** :- **IRRIGATION DEPARTMENT NORTHERN PROVINCE**	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/RB/TRANNING/CS	Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI
	SCHEME :- **MUTHUIYANKADDU TANK**	**SHEET NO** :- 25 of 37 **SCALE** :- As Shown **DATE** :- 07.06.2026		

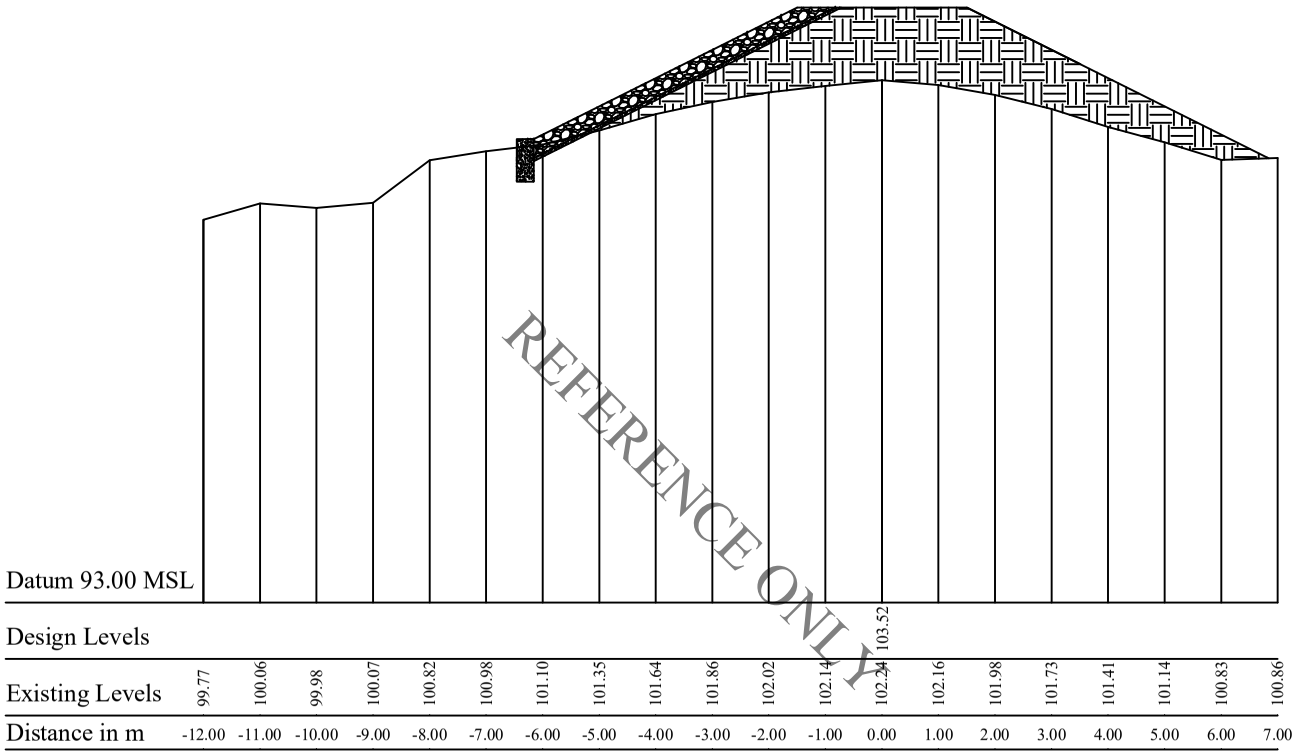
Earth Fill- 6.172 m2
Rubble Pit- 1.951 m2
Screed con- 0.342 m2
1.11/2.3 con- 0.215 m2
Turffing - 2.795 m



CS at 125.00 m

PROJECT :- **IWWRMP (CERC)**	**IMPLEMENT AGENCY** :- **MINISTRY OF IRRIGATION**	**PROJECT TITLE** :- **IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.**	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
FUND BY:- **WORLD BANK**	**EXECUTIVE AGENCY** :- **IRRIGATION DEPARTMENT NORTHERN PROVINCE**	**WORK DETAILS & LOCATION** :- **IMPROVEMENTS TO RB TRANNING BUND CSS (CH 0+125)**	Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
		DRAWING NO :- IWWRMP/2026/MUL/MIK/RB/TRANNING/CS	Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI
	SCHEME :- **MUTHUIYANKADDU TANK**	**SHEET NO** :- 26 of 37 / **SCALE** :- As Shown / **DATE** :- 07.06.2026		

Earth Fill- 9.921 m2
Rubble Pit- 1.675 m2
Screed con- 0.301 m2
1.11/2.3 con- 0.225 m2
Turffing - 5.969 m

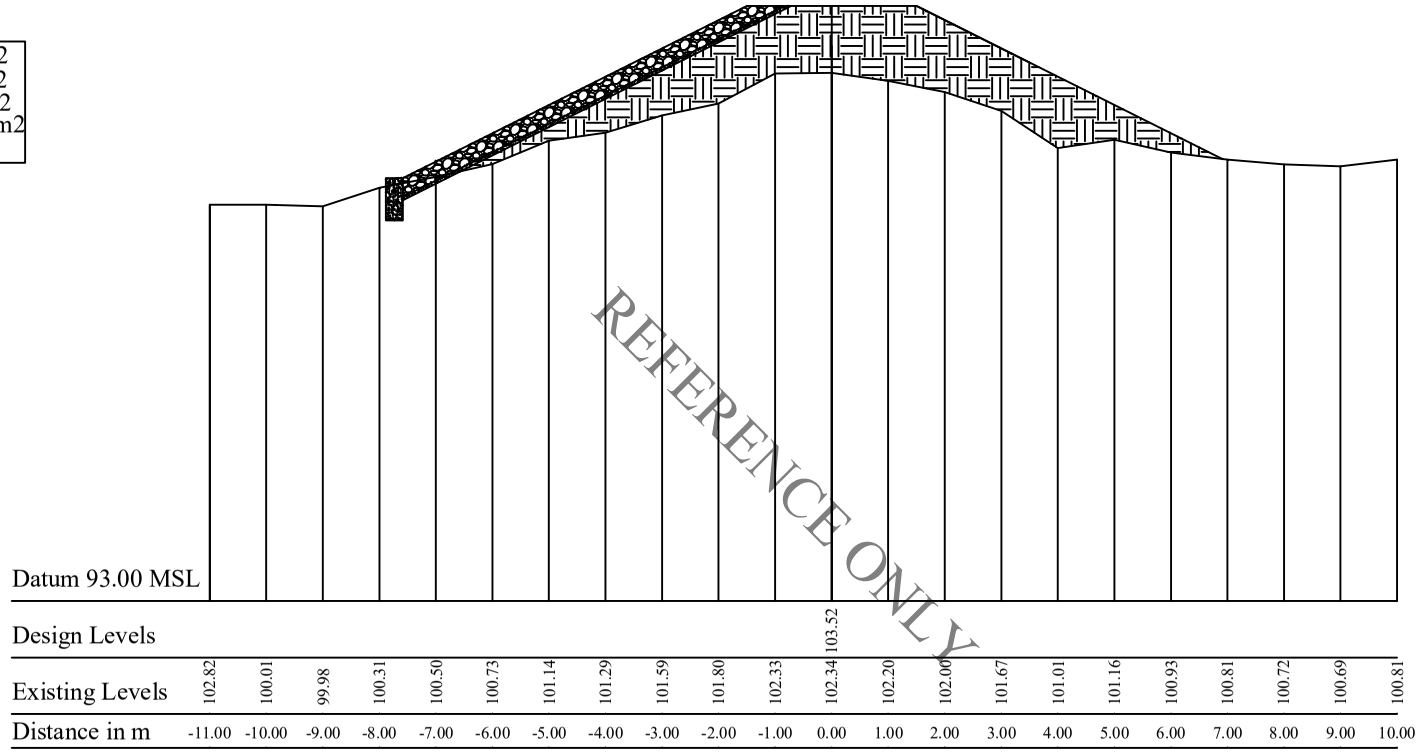


REFERENCE ONLY

CS at 150.00 m

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
		WORK DETAILS & LOCATION :- IMPROVEMENTS TO RB TRANNING BUND CSS (CH 0+150)	Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/RB/TRANNING/CS	Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 27 of 37 / **SCALE** :- As Shown / **DATE** :- 07.06.2026		

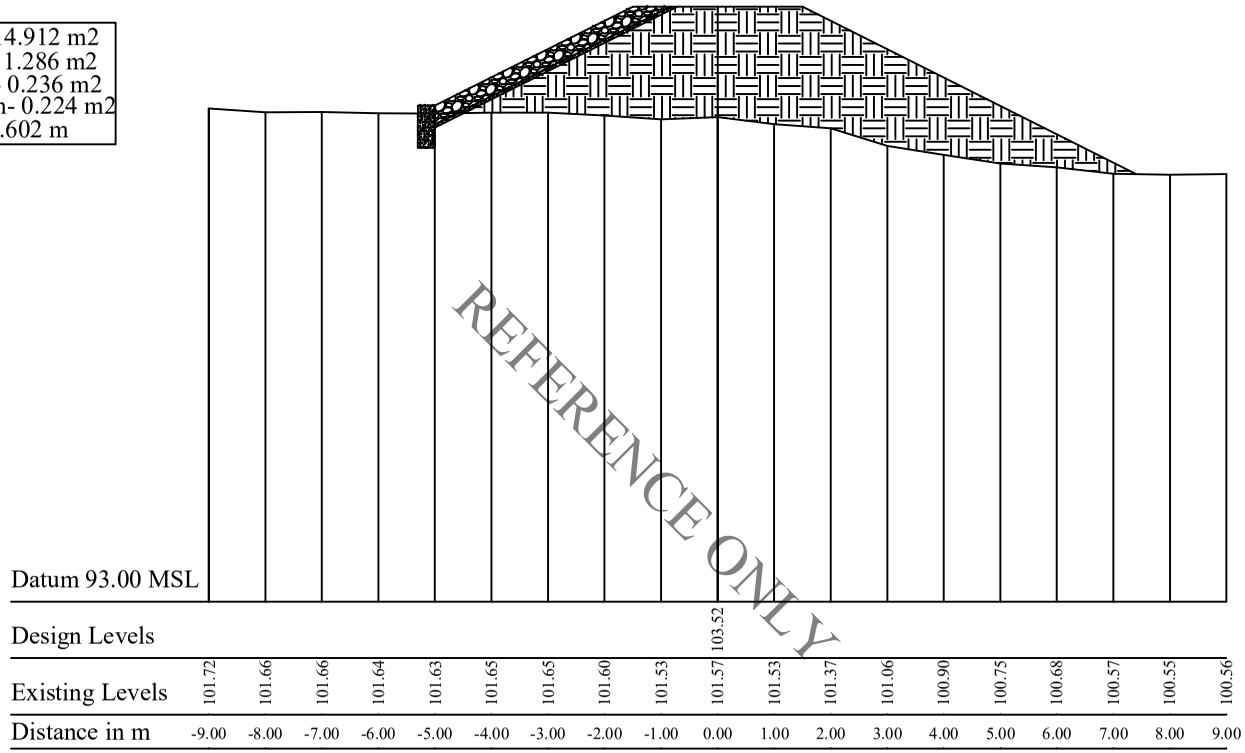
Earth Fill- 11.108 m2
Rubble Pit- 2.154 m2
Screed con- 0.380 m2
1.11/2.3 con- 0.224 m2
Turffing - 6.059 m



CS at 161.50 m

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- R.Tharsan, T.O	Drawn Checked BY:- K.Vithusan,D'man
		WORK DETAILS & LOCATION :- IMPROVEMENTS TO RB TRANNING BUND CSS (CH 0+161.5)	Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/RB/TRANNING/CS	Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 28 of 37 / **SCALE** :- As Shown / **DATE** :- 07.06.2026		

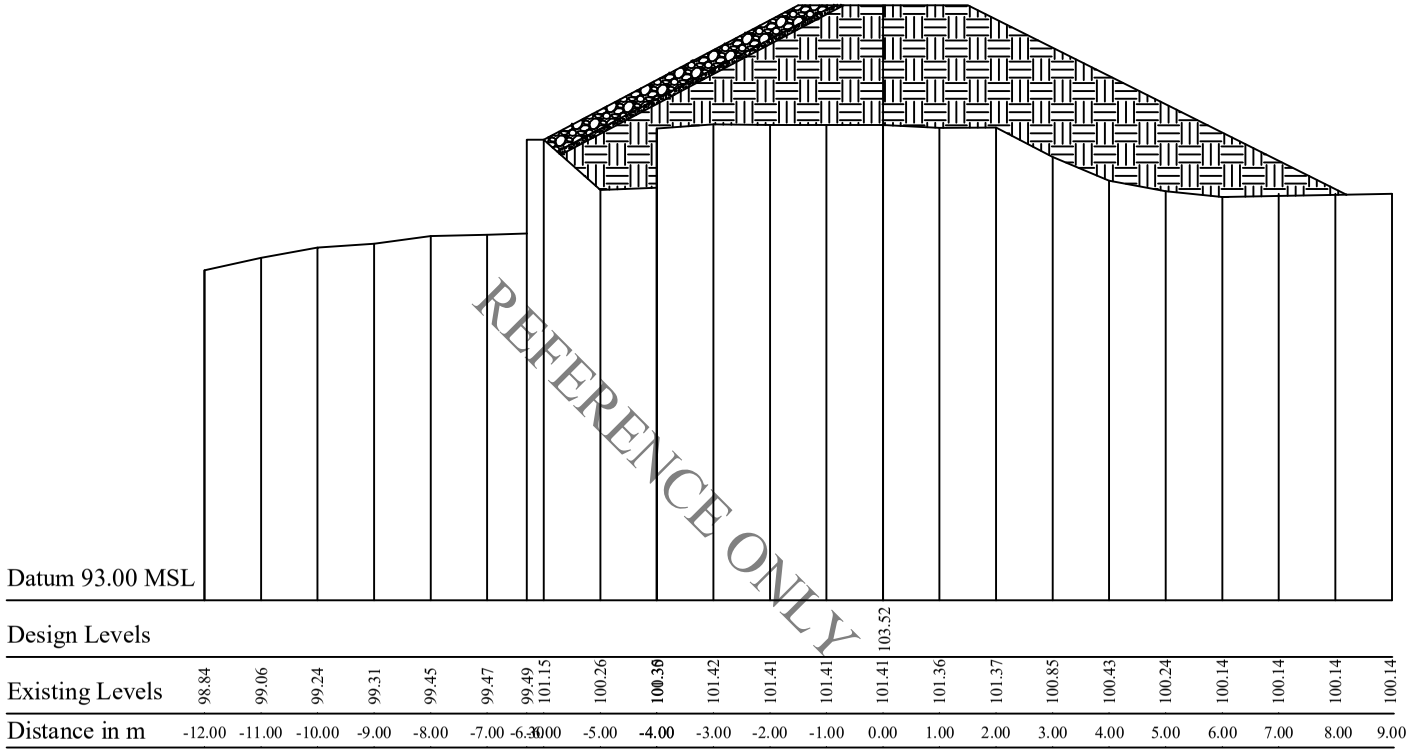
Earth Fill- 14.912 m2
Rubble Pit- 1.286 m2
Screed con- 0.236 m2
1.11/2.3 con- 0.224 m2
Turffing - 6.602 m



CS at 175.00 m

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office: Surveyed & Drawn By:- R.Tharsan, T.O; Checked By:- T.Paulraj,D'man; Design & Submitted By:- Eng.T.Tisiyanthan,IE	AT DDI's Office: Drawn Checked BY:- K.Vithusan,D'man; Reviewed By:- Eng.Divakar,IE; Approved By:- Eng.S.Vihirthan,DDI
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**WORK DETAILS & LOCATION** :- IMPROVEMENTS TO RB TRANNING BUND CSS (CH 0+175)		
	SCHEME :- MUTHUIYANKADDU TANK	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/RB/TRANNING/CS		
		SHEET NO :- 29 of 37	**SCALE** :- As Shown	**DATE** :- 07.06.2026

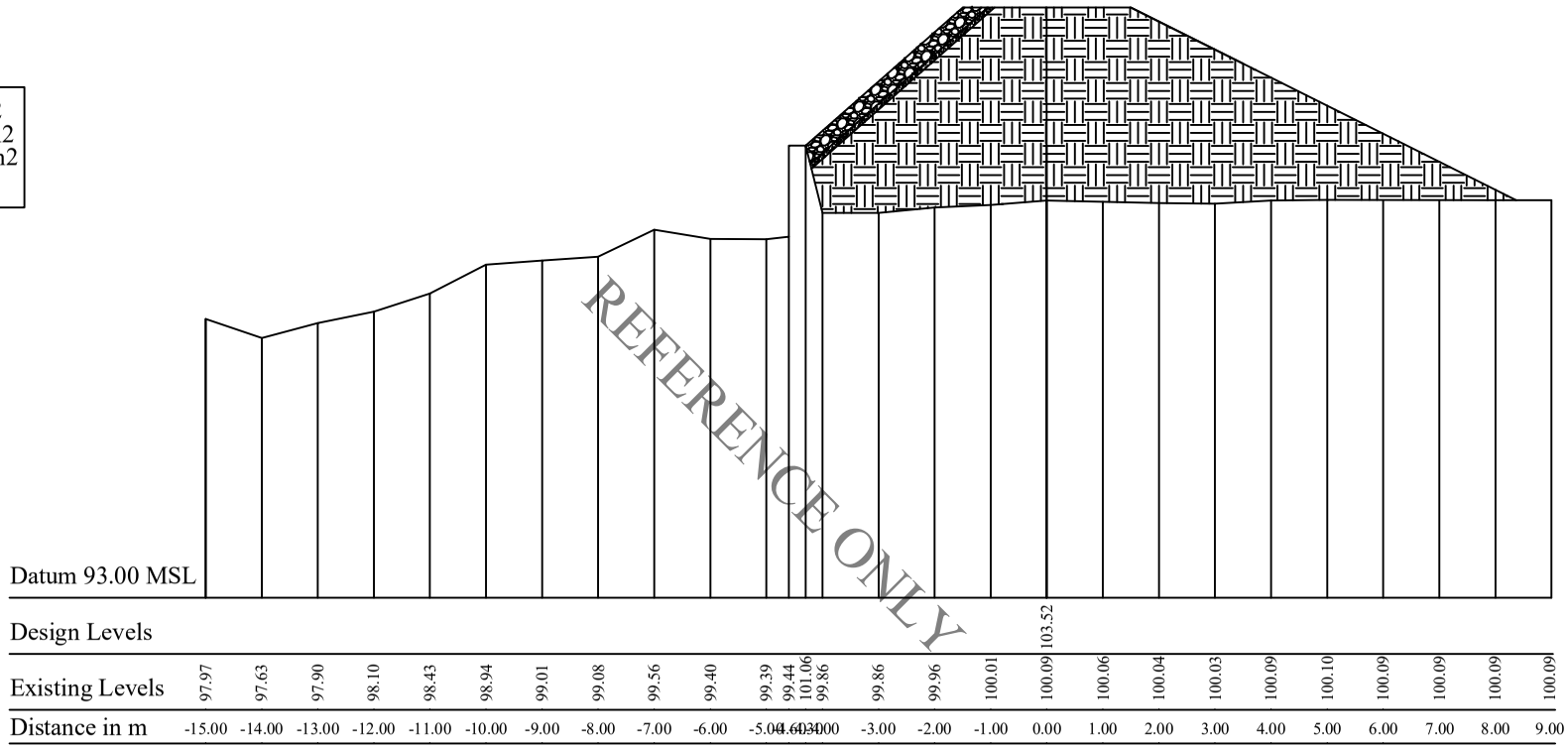
Earth Fill- 19.528 m2
Rubble Pit- 1.594 m2
Screed con- 0.420 m2
Turffing - 7.49 m



CS at 200.00 m

PROJECT :- **IWWRMP (CERC)**	**IMPLEMENT AGENCY** :- **MINISTRY OF IRRIGATION**	**PROJECT TITLE** :- **IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.**		AT IE's Office	AT DDI's Office
				Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
		WORK DETAILS & LOCATION :- **IMPROVEMENTS TO RB TRANNING BUND CSS (CH 0+200)**		Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
FUND BY:- **WORLD BANK**	**EXECUTIVE AGENCY** :- **IRRIGATION DEPARTMENT NORTHERN PROVINCE**	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/RB/TRANNING/CS		Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI
	SCHEME :- **MUTHUIYANKADDU TANK**	**SHEET NO** :- 30 of 37	**SCALE** :- As Shown	**DATE** :- 07.06.2026	

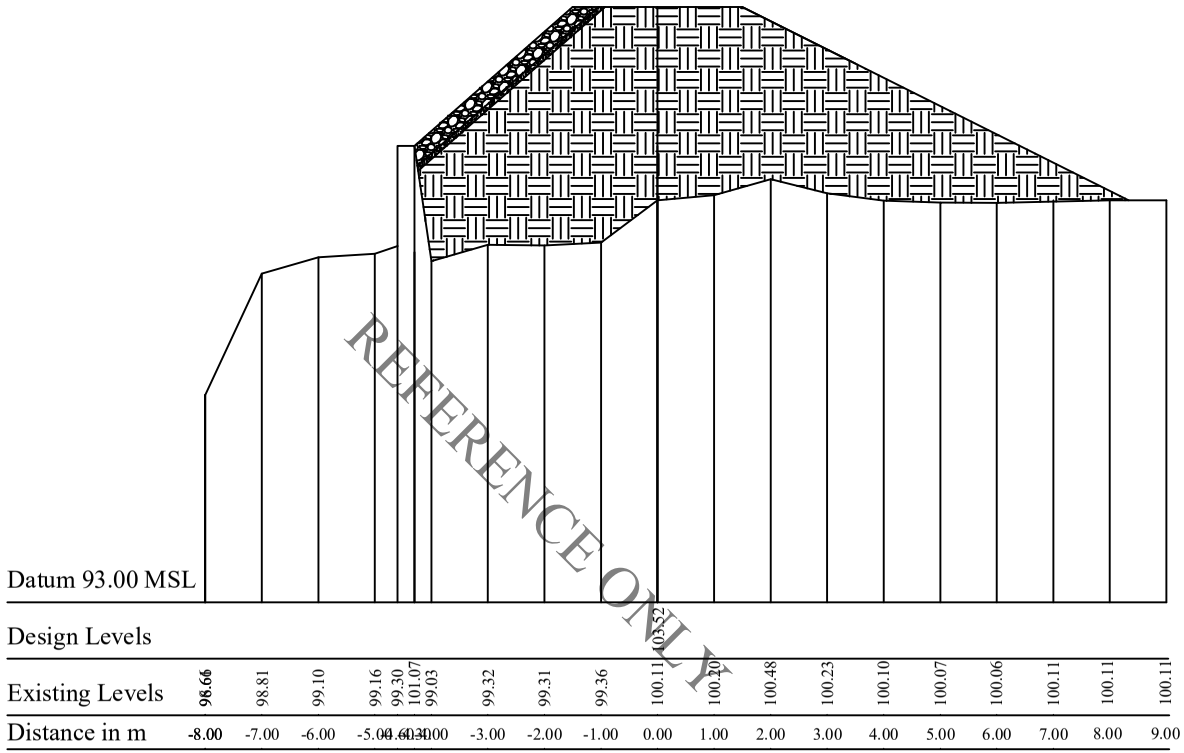
Earth Fill- 27.35 m2
Rubble Pit- 1.193 m2
Screed con- 0.321 m2
Turffing - 7.68 m



CS at 225.00 m

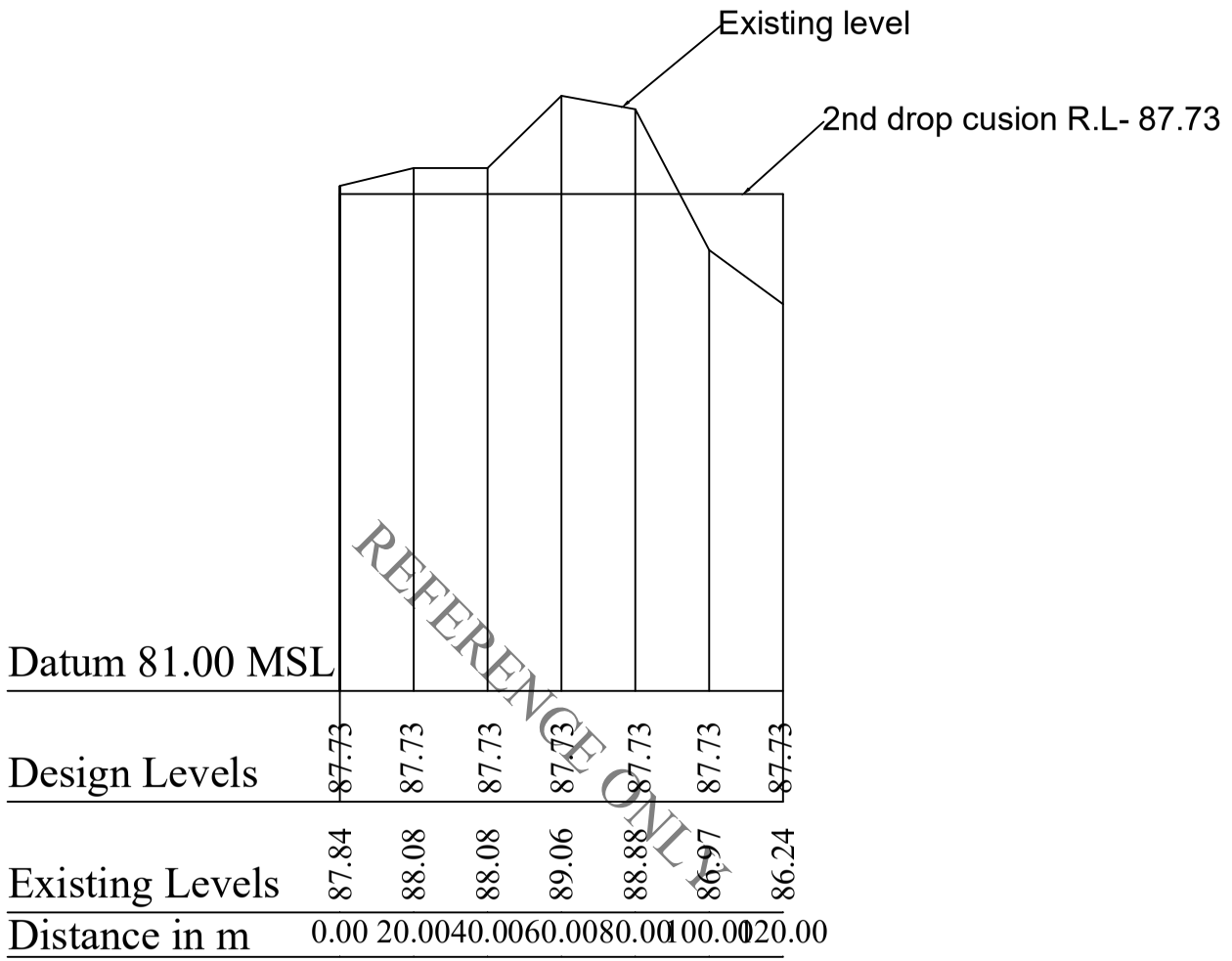
PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- R.Tharsan, T.O	Drawn Checked BY:- K.Vithusan,D'man
		WORK DETAILS & LOCATION :- IMPROVEMENTS TO RB TRANNING BUND CSS (CH 0+225)	Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/RB/TRANNING/CS	Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 31 of 37 / **SCALE** :- As Shown / **DATE** :- 07.06.2026		

Earth Fill- 28.953 m2
Rubble Pit- 1.197 m2
Screed con- 0.324 m2
Turffing - 7.630 m



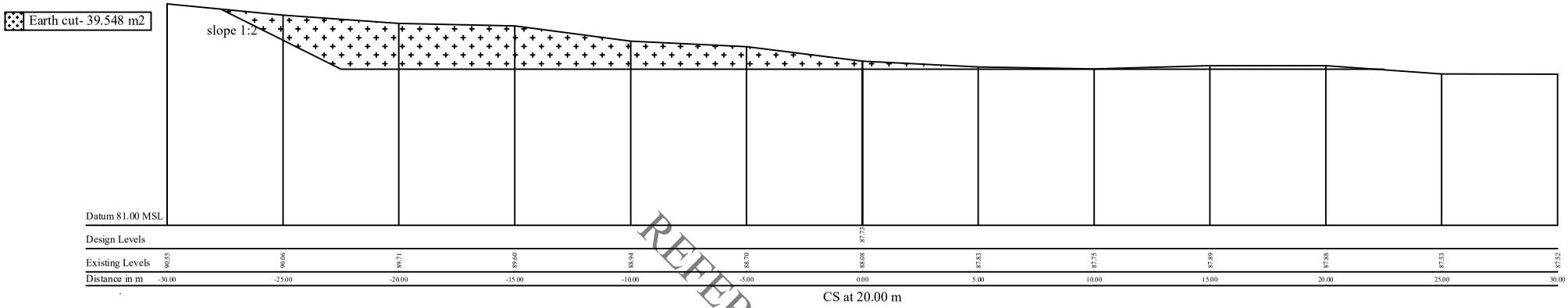
CS at 231.50 m

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- R.Tharsan, T.O	Drawn Checked BY:- K.Vithusan,D'man
		WORK DETAILS & LOCATION :- IMPROVEMENTS TO RB TRANNING BUND CSS (CH 0+231.5)	Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/RB/TRANNING/CS	Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 32 of 37 / **SCALE** :- As Shown / **DATE** :- 07.06.2026		

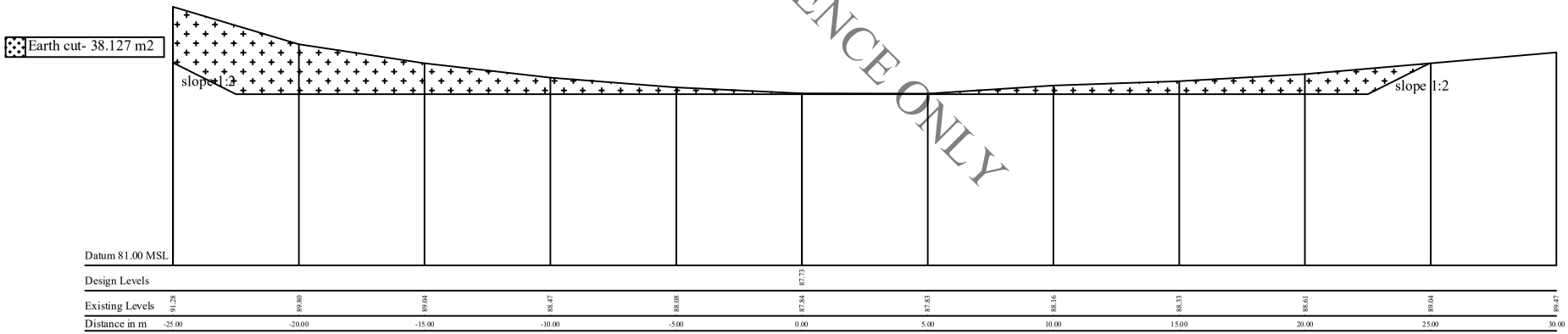


LS at 0+000-0+220 m

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- R.Tharsan, T.O	Drawn Checked BY:- K.Vithusan,D'man
		WORK DETAILS & LOCATION :- EARTH REDUCTION IN 2 ND DROP LS	Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/EARTH REDU/LS	Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 33 of 37 / **SCALE** :- As Shown / **DATE** :- 07.02.2026		



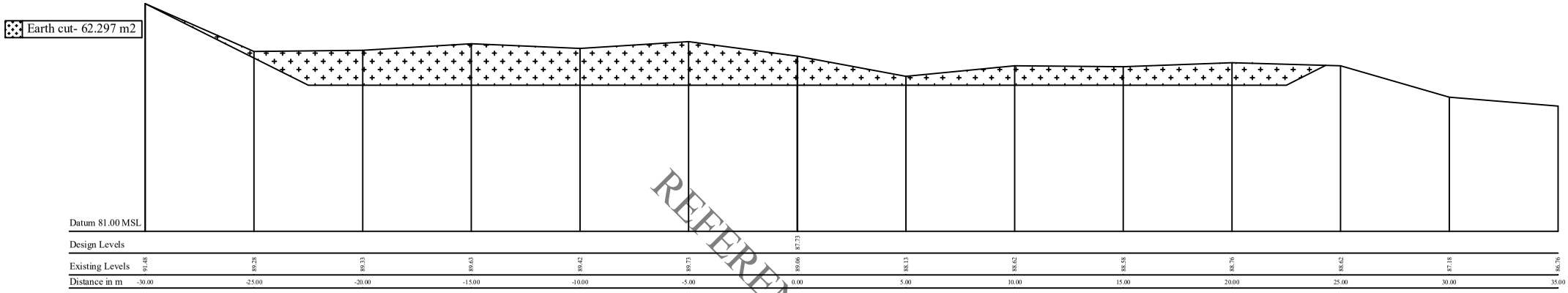
CS at 20.00 m



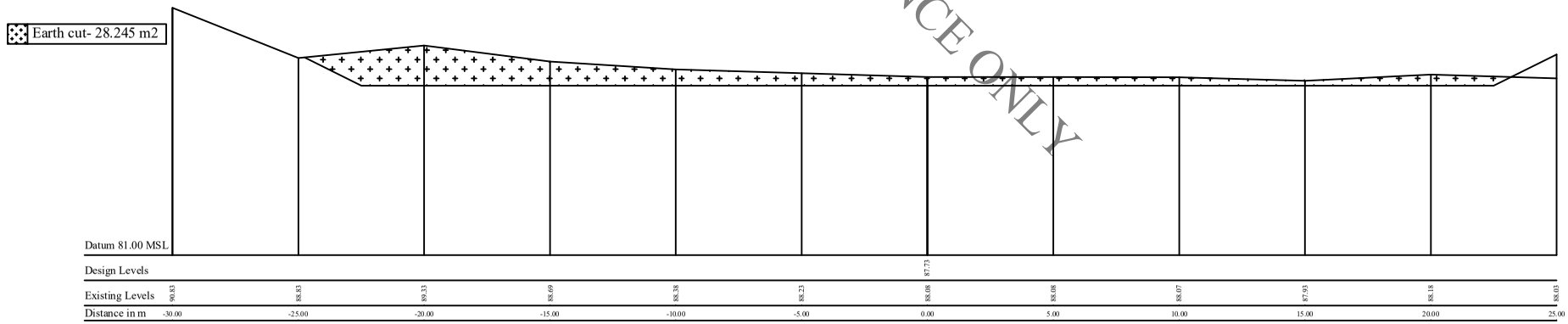
CS at 0.00 m

REFERENCE ONLY

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
		WORK DETAILS & LOCATION :- EARTH REDUCTION IN 2 ND DROP AREA (CH 0+000,0+020)	Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/EARTH REDU/CS	Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 34 of 37 / **SCALE** :- As Shown / **DATE** :- 07.06.2026		



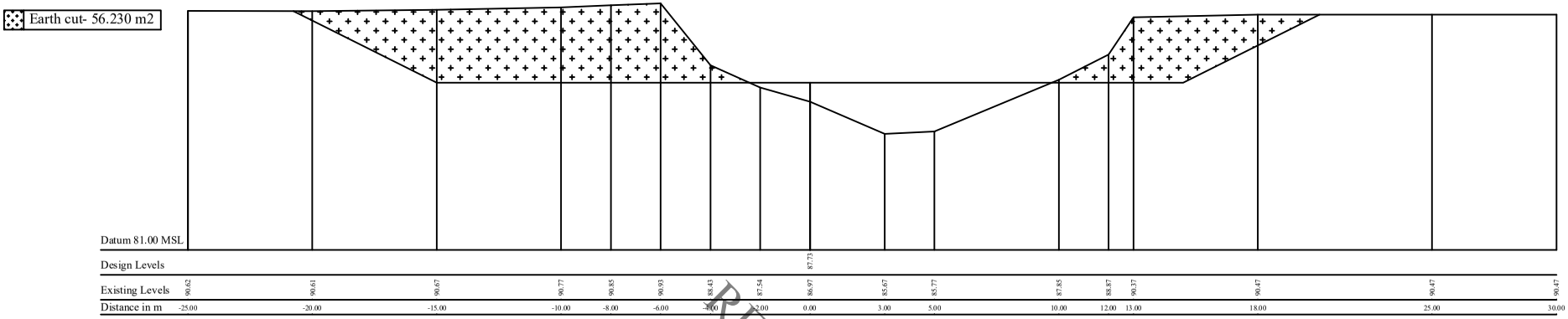
CS at 60.00 m



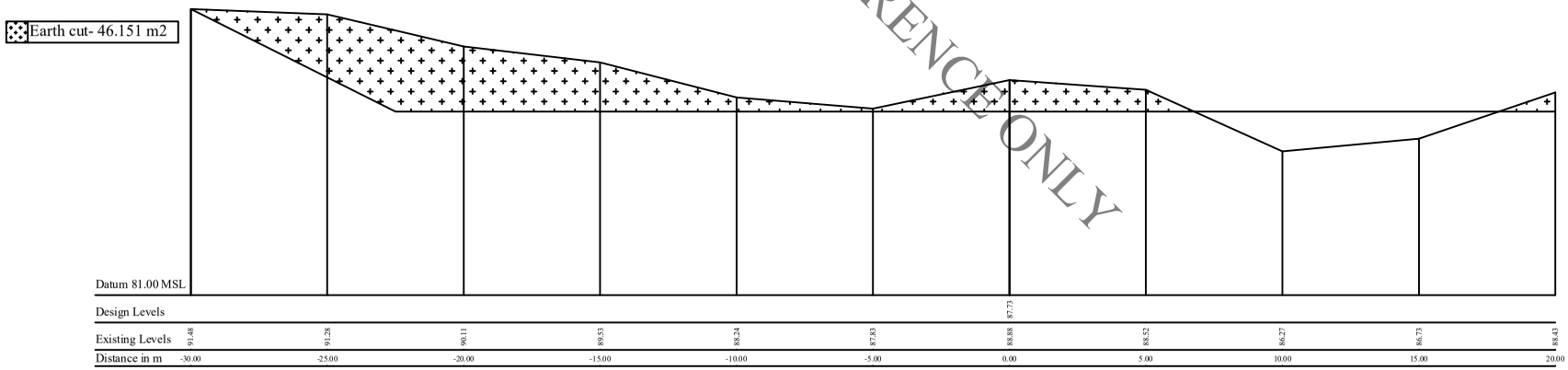
CS at 40.00 m

REFERENCE ONLY

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- R.Tharsan, T.O	Drawn Checked BY:- K.Vithusan,D'man
		WORK DETAILS & LOCATION :- EARTH REDUCTION IN 2 ND DROP AREA (CH 0+040,0+060)	Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/EARTH REDU/CS	Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 35 of 37 / **SCALE** :- As Shown / **DATE** :- 07.06.2026		



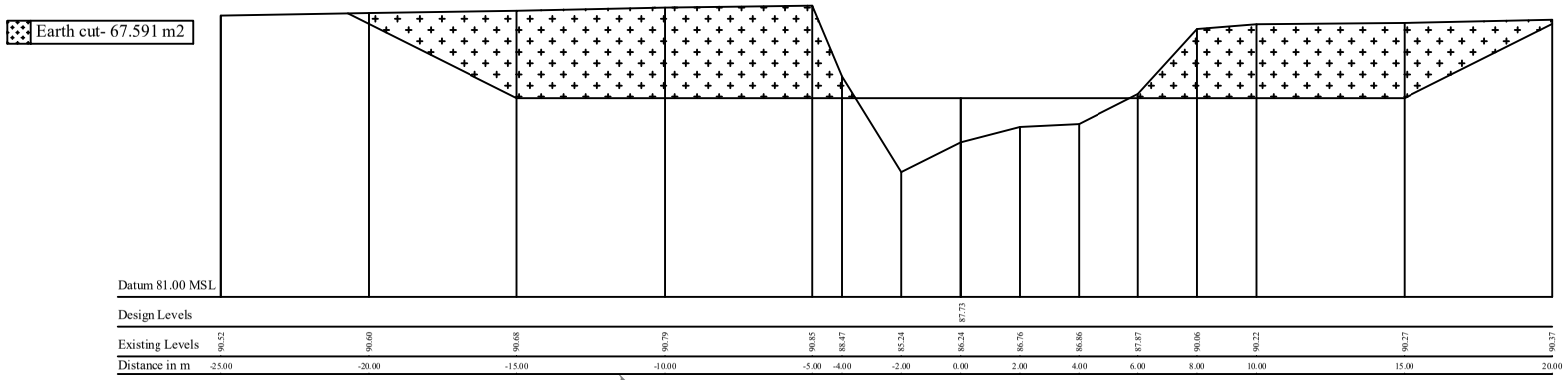
CS at 100.00 m



CS at 80.00 m

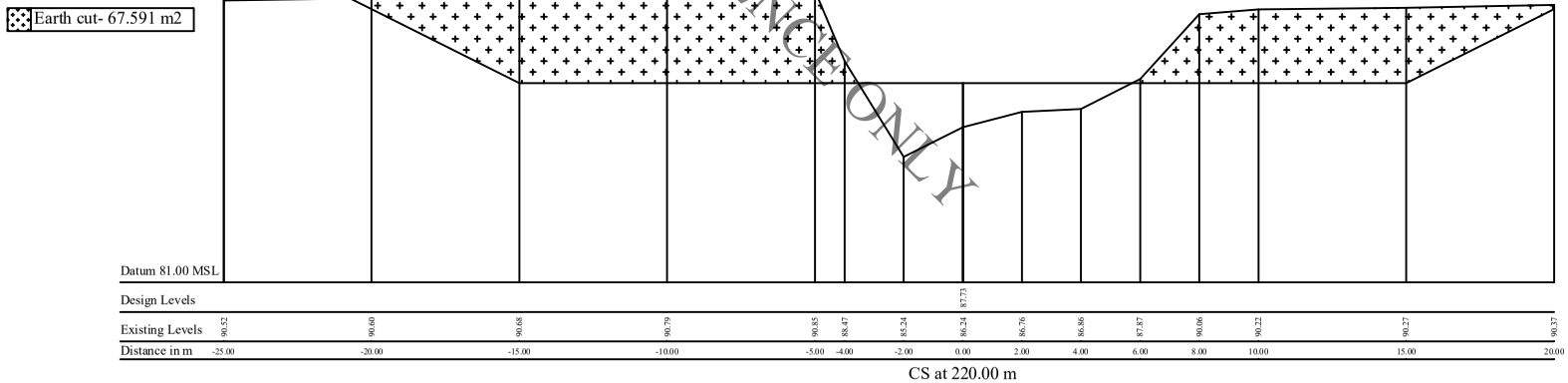
REFERENCE ONLY

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- ..... R.Tharsan, T.O	Drawn Checked BY:- ..... K.Vithusan,D'man
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**WORK DETAILS & LOCATION** :- EARTH REDUCTION IN 2 ND DROP AREA (CH 0+080,0+100)	Checked By:- ..... T.Paulraj,D'man	Reviewed By:- ..... Eng.Divakar,IE
		DRAWING NO :- IWWRMP/2026/MUL/MIK/EARTH REDU/CS	Design & Submitted By:- ..... Eng.T.Tisiyanthan,IE	Approved By:- ..... Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 36 to 37 / **SCALE** :- As Shown / **DATE** :- 07.06.2026		



CS at 120.00 m

REFERENCE ONLY



CS at 220.00 m

PROJECT :- IWWRMP (CERC)	**IMPLEMENT AGENCY** :- MINISTRY OF IRRIGATION	**PROJECT TITLE** :- IMPROVEMENTS TO MUTHUIYANKADDU TANK BUND AND SPILL WAY AT MUTHUIYANKADDU TANK UNDER MUTHIYANKADDU SCHEME.	AT IE's Office	AT DDI's Office
			Surveyed & Drawn By:- R.Tharsan, T.O	Drawn Checked BY:- K.Vithusan,D'man
		WORK DETAILS & LOCATION :- EARTH REDUCTION IN 2 ND DROP AREA (CH 0+120,0+220)	Checked By:- T.Paulraj,D'man	Reviewed By:- Eng.Divakar,IE
FUND BY:- WORLD BANK	**EXECUTIVE AGENCY** :- IRRIGATION DEPARTMENT NORTHERN PROVINCE	**DRAWING NO** :- IWWRMP/2026/MUL/MIK/EARTH REDU/CS	Design & Submitted By:- Eng.T.Tisiyanthan,IE	Approved By:- Eng.S.Vihirthan,DDI
	SCHEME :- MUTHUIYANKADDU TANK	**SHEET NO** :- 37 of 37 / **SCALE** :- As Shown / **DATE** :- 07.06.2026		

REFERENCE ONLY

Section - 11

STANDARD FORMS (BID)

REFERENCE ONLY

REFERENCE ONLY

FORM OF BID SECURITY

[this Guarantee form shall be filled in accordance with the instructions indicated in brackets]

---------- [insert issuing agency's name, and address of issuing branch or office]

Beneficiary: **Project Director**
Integrated Watershed & Water resources Management Project,
2nd Floor, Mahaweli Centre Building,
No. 96, Ananda Coomaraswamy Mawatha
Colombo 07.

Date: ---------- *[insert (by issuing agency) date]*

BID GUARANTEE No.: ---------- *[insert (by issuing agency) number]*
We have been informed that ---------- *[insert (by issuing agency) name of the Bidder]* (hereinafter called "the Bidder") has submitted to you its bid dated ---------- *[insert (by issuing agency) date]*(hereinafter called "the Bid") for the execution of '**Improvements to Muthuiyankaddu Tank bund & Spillway**' under Invitation for Bids No. **LK-MOMDE-539127-CW-RFB** ("the IFB").

REFERENCE ONLY

Furthermore, we understand that, according to your conditions, Bids must be supported by a Bid Guarantee.

At the request of the Bidder, we ---------- *[insert name of issuing agency]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of ---------- *[insert amount in figures]* ---------- *[insert amount in words]*) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

(a) has withdrawn its Bid during the period of bid validity specified; or

(b) does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB") of the IFB; or

(c) having been notified of the acceptance of its Bid by the Employer/Purchaser during the period of bid validity, (i) fails or refuses to execute the Contract Form, if required, or (ii) fails or refuses to furnish the Performance Security, in accordance with the ITB.

This Guarantee shall expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the Contract signed by the Bidder and of the Performance Security issued to you by the Bidder; or (b) if the Bidder is not the successful bidder, upon the earlier of (i) the successful bidder furnishing the performance security, otherwise it will remain in force up to ---------- *(insert date)*

Consequently, any demand for payment under this Guarantee must be received by us at the office on or before that date ----------