REMIT HYDRO LIMITED
GHUNSA KHOLA HYDROELECTRIC PROJECT (GKHEP) (77.5 MW)

BIDDING DOCUMENT
FOR
CONSTRUCTION

OF

LOT NO. 1 – CIVIL AND HYDROMECHANICAL WORKS

(Under EPC Contract)

INTERNATIONAL COMPETITIVE BIDDING (ICB)

[Single Stage Two Envelope Bidding Procedure]

VOLUME 5 of 5

Employer's Concept Drawings

January 2026

Invitation for Bids No.: **GKHEP/ICB-081/82/EPC-1**
Employer: **Remit Hydro Limited**
Country: **Nepal**

Remit Hydro Limited
Ghunsa Khola Hydroelectric Project
Citizen Investment Trust Building, New Baneshwor
Kathmandu
NEPAL

Tel.: +977-1- 4581780
e-mail: procurement@remithydro.org.np

REMIT HYDRO
रेमित हाइड्रो लिमिटेड

PREFACE

This volume is part of the Tender Documents for Lot 1 – Civil and Hydro-mechanical Works of Ghunsa Khola Hydroelectric Project under EPC contract. The complete set of Tender Documents consists of the following volumes.

Volume 1	**Bidding Procedures** **Section I - Instructions to Bidders (ITB)** **Section II - Bid Data Sheet (BDS)** **Section III - Evaluation and Qualification Criteria (EQC)** **Section IV - Bidding Forms (BDF)** **Section V - Eligible Countries**
Volume 2	EMPLOYER'S REQUIREMENTS Section I – Scope of Works Section II – General Technical Requirements Section III – Standard Technical Requirements Section IV – Particular Technical Requirements Section V – Activity Schedule (ACS)
Volume 3	Conditions of Contract Section I - General Conditions of Contract (GCC) Section II - Special Conditions of Contract (SCC) Section III - Annexures Section IV - Contract Forms (COF)
Volume 4	Basic Project Report Part A: General Information 1 – Introduction 2 – Key Features of the project 3 – Power and Energy Studies 4 – Salient Features of Employer's Concept Design Part B: Project Description 5 – Topographic Survey and mapping 6 – Hydrology and Meteorology 7 – Sedimentology 8 – Geology and Geotechnics 9 – Seismicity
Volume 5	**Employer's Concept Drawings**

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HYDROELECTRIC PROJECT
BID DOCUMENTS
LOT 1: CIVIL & HYDRO-MECHANICAL WORKS
VOLUME IV: DRAWINGS: PART 1: TENDER DRAWINGS

TABLE OF CONTENTS

S.N.	Dwg. No.	Drawing Title
1.		**General Drawings**
1.1	GK-GN-01	Symbols
1.2	GK-GN-02	Notes & Abbreviations
2.		**Project Location**
2.1	GK-PA-01	Project Location Map
2.2	GK-PA-02	Project Area Map
3.		**Hydrology**
3.1	GK-HY-01	Catchment Area Map
3.2	GK-HY-02	River Cross Section at Intake Gauging Station
3.3	GK-HY-03	River Cross Section at Powerhouse Gauging Station
1	GK-GE-L-01	Geological Map of Project Area
2	GK-GE-S-02	Geological Map of Headworks Area
3	GK-GE-L-03	Geological Section along Weir Axis
4	GK-GE-S-04	Geological Profile along Headrace Tunnel
5	GK-GE-L-05	Geological Map of Powerhouse Area
6	GK-GE-S-06	Geological Section along Main Access Tunnel
7	GK-GE-S-07	Geological Section Along Tailrace Tunnel
4.		**Project Layout**
4.1	GK-PL-L-01	General Layout Plan
4.2	GK-PL-S-02	Longitudinal Profile along Project Components
5.		**Headworks**
5.1	GK-HW-L-01	General Arrangement
5.2	GK-HW-C-02	Diversion Weir Plan
5.3	GK-HW-C-03	Undersluice Plan at El. 1948.50
5.4	GK-HW-C-04	Diversion Weir Cross Section
5.5	GK-HW-C-05	Spillway Weir Longitudinal Section
5.6	GK-HW-C-06	Undersluice Longitudinal Section
5.7	GK-HW-C-07	Diversion Tunnel Plan & Profile
5.8	GK-HW-C-08	Diversion Tunnel Inlet Portal Details
5.9	GK-HW-C-09	Diversion Tunnel Outlet Portal Details
5.10	GK-HW-C-10	Diversion Tunnel Excavation & Rock Support Details
5.11	GK-HW-C-11	Diversion Tunnel Concrete Plug Plan & Profile
5.12	GK-HW-C-12	Diversion Tunnel Concrete Plug Sections
5.13	GK-HW-C-13	Coffer Dam Plan & Section
5.14	GK-HW-C-14	River Intake Elevations & Section
5.15	GK-HW-C-15	River Intake Plans
5.16	GK-HW-C-16	Gravel Trap Plan & Sectional Details
5.17	GK-HW-C-17	Bed Load Sluicers Details
5.18	GK-HW-C-18	Intake Gate Chamber Details
5.19	GK-HW-C-19	Connecting Tunnel Plan & Sectional Details
5.20	GK-HW-C-20	Connecting Tunnel Excavation & Rock Support Details
5.21	GK-HW-C-21	Desilting Chamber General Arrangement
5.22	GK-HW-C-22	Desilting Chamber Plan & Sections
5.23	GK-HW-C-23	Desilting Chamber Sectional Details
5.24	GK-HW-C-24	Desilting Chamber Excavation & Rock Support Details
5.25	GK-HW-C-25	Flushing Conduit Plan & Profile
5.26	GK-HW-C-26	Flushing Conduit Sectional Details
5.27	GK-HW-C-27	Silt Flushing Chamber Details
5.28	GK-HW-C-28	Flushing Conduit Excavation & Rock Support Details
5.29	GK-HW-C-29	Gate Cum Ventilation Tunnel Plan & Sectional Details
5.30	GK-HW-C-30	Gate Cum Ventilation Tunnel Gate Chamber Details
5.31	GK-HW-C-31	Gate Cum Ventilation Tunnel Excavation & Rock Support Details
5.32	GK-HW-C-32	Control Building Plan, Elevation & Sections
5.33	GK-HW-C-33	Control Building Plan
6.		**Water Conveyance System**
6.1	GK-WC-C-01	Link Tunnel Plan & Sections
6.2	GK-WC-L-02	Headrace Tunnel Layout Plan
6.3	GK-WC-C-03	Headrace Tunnel Sections
6.4	GK-WC-C-04	Headrace Tunnel Excavation & Rock Support Details
6.5	GK-WC-C-05	Headrace Tunnel Typical Support Details
6.6	GK-WC-C-06	Headrace Tunnel Grouting Details
6.7	GK-WC-C-07	Adit-1 Plan & Sectional Details
6.8	GK-WC-C-08	Adit-2 Plan & Sectional Details
6.9	GK-WC-C-09	Adit-3 Plan & Sectional Details
6.10	GK-WC-C-10	Adit Tunnel Excavation & Rock Support Details
6.11	GK-WC-C-12	Adit-1 Tunnel Concrete Plug Details
6.12	GK-WC-C-13	Adit-2 Tunnel Concrete Plug Details
6.13	GK-WC-C-15	Adit-3 Tunnel Concrete Plug Details
6.14	GK-WC-L-16	Rock Trap & Surge Shaft Layout Plan
6.15	GK-WC-C-17	Rock Trap Plan & Sections
6.16	GK-WC-C-18	Surge Shaft Plan & Sectional Details
6.17	GK-WC-C-19	Surge Shaft Details
6.18	GK-WC-L-20	Valve Chamber Plan & Sectional Details
6.19	GK-WC-C-21	Valve Chamber Excavation & Rock Support Details
6.20	GK-WC-C-22	Pressure Shaft Layout Plan
6.21	GK-WC-C-23	Pressure Shaft Excavation & Rock Support Details
6.22	GK-WC-C-24	Longitudinal Profile along Pressure Shaft (1/3 to 3/3)
6.23	GK-WC-C-25	Pressure Shaft Trifurcation Details
6.24	GK-WC-L-26	Adit-5 Plan & Sectional Details
7.		**Power Station**
7.1	GK-PS-L-01	General Layout Plan
7.2	GK-PS-C-02	Powerhouse Plan At EL. 1525.40
7.3	GK-PS-C-03	Powerhouse Longitudinal Section
7.4	GK-PS-C-04	Powerhouse Cross Section

REMIT HYDRO

GHUNSA KHOLA HYDROELECTRIC PROJECT
BID DOCUMENTS
LOT 1: CIVIL & HYDRO-MECHANICAL WORKS
VOLUME IV: DRAWINGS: PART 1: TENDER DRAWINGS

TABLE OF CONTENTS

S.N	Dwg. No.	Drawing Title
7.5	GK-PS-C-05	Powerhouse & Transformer Carvern Sectional Plan at EL. 1520.85 & EL. 1516.50
7.6	GK-PS-C-06	Powerhouse & Transformer Carvern Sectional Plan at EL. 1513.00 & EL. 1515.00
7.7	GK-PS-C-07	Powerhouse & Transformer Carvern Control Room Plans
7.8	GK-PS-C-08	Powerhouse & Transformer Carvern Control Room Plans
7.9	GK-PS-C-09	Powerhouse & Transformer Carvern Control Room Section
7.10	GK-PS-C-10	Powerhouse & Transformer Carvern Gis Floor Details
7.11	GK-PS-C-11	Powerhouse & Transformer Carvern Excavation & Rock Support Details
7.12	GK-PS-C-12	Cable Cum Ventilation Tunnel Plan & Sectional Details
7.13	GK-PS-C-13	Cable Cum Ventilation Tunnel Excavation & Support Details (6.0MØ)
7.14	GK-PS-C-14	Cable Cum Ventilation Tunnel Excavation & Support Details (4.5MØ)
7.15	GK-PS-C-15	Main Access Tunnel Plan & Sectional Details
7.16	GK-PS-C-16	Main Access Tunnel Excavation & Support Details
7.17	GK-PS-C-17	ADIT 6 & ADIT 6A Plan & Sectional Details
7.18	GK-PS-C-18	Tailrace Tunnel Plan & Sectional Details
7.19	GK-PS-C-19	Tailrace Tunnel Excavation & Support Details
8.		**Infrastructure Planning**
8.1	GK-IP-L-01	Camp, Road, Borrow & Spoil Disposal Area
9.		**Project Access Road**
9.1	GK-GN-01	Miscellaneous Construction & Side Ditch
9.2	GK-GN-02	Cross Sections & Sub-drain
9.3	GK-GN-03	Wall Details
9.4	GK-GN-04	RCC Pipe Culvert
9.5	GK-GN-05	Causeway
9.6	GK-AR-H-01	Road to Headworks: Plan & Profile (0+000-0+600)
9.7	GK-AR-H-02	Road to Headworks: Plan & Profile (0+600-1+200)
9.8	GK-AR-H-03	Road to Headworks: Plan & Profile (1+200-1+800)
9.9	GK-AR-H-04	Road to Headworks: Plan & Profile (1+800-2+400)
9.10	GK-AR-H-05	Road to Headworks: Plan & Profile (2+400-3+000)
9.11	GK-AR-H-06	Road to Headworks: Plan & Profile (3+000-3+600)
9.12	GK-AR-H-07	Road to Headworks: Plan & Profile (3+600-4+200)
9.13	GK-AR-H-08	Road to Headworks: Plan & Profile (4+200-4+800)
9.14	GK-AR-H-09	Road to Headworks: Plan & Profile (4+800-5+400)
9.15	GK-AR-H-9	Road to Headworks: Plan & Profile (5+400-6+000)
9.16	GK-AR-H-11	Road to Headworks: Plan & Profile (6+000-6+550)
9.17	GK-AR-H-12	Road to Headworks: Typical Cross Sections
9.18	GK-AR-S-01	Road To Surge Shaft:Plan & Profile (CH.0+000-0+600)
9.19	GK-AR-S-02	Road To Surge Shaft:Plan & Profile (CH.0+600-1+200)
9.20	GK-AR-S-03	Road To Surge Shaft:Plan & Profile (CH.1+200-1+800)
9.21	GK-AR-S-04	Road To Surge Shaft:Plan & Profile (CH.1+800-2+400)
9.22	GK-AR-S-05	Road To Surge Shaft:Plan & Profile (CH.2+400-3+000)
9.23	GK-AR-S-06	Road To Surge Shaft:Plan & Profile (CH.3+000-3+600)
9.24	GK-AR-S-07	Road To Surge Shaft:Plan & Profile (CH.3+600-4+200)
9.25	GK-AR-S-08	Road To Surge Shaft:Plan & Profile (CH.4+200-4+800)
9.26	GK-AR-S-09	Road To Surge Shaft Plan & Profile (CH.4+800-5+010)
9.27	GK-AR-S-10	Road To Surge Shaft: Typical Cross Sections
9.28	GK-AR-A-01	Road to Adit-2: Plan & Profile (CH. 0+000-0+600)
10.		**Bridges**
10.1	GK-GN-01	Bridge Typical Details
10.2	GK-TB-L-01	General Arrangement of Tamor Bridge
10.3	GK-TB-S-02	Bottom Tie Plan Details of Tamor Bridge
10.4	GK-TB-S-03	Top Tie Plan Sections of Tamor Bridge
10.5	GK-TB-S-04	Elevations & Sections of Tamor Bridge
10.6	GK-TB-S-05	Abutment Plan & Sections of Tamor Bridge
10.7	GK-TB-S-06	Right Bank Wing Wall Details of Tamor Bridge
10.8	GK-GB-L-01	General Arrangement of Ghunsa Bridge
10.9	GK-GB-S-02	Bottom Tie Plan Details of Ghunsa Bridge
10.10	GK-GB-S-03	Top Tie Plan Details of Ghunsa Bridge
10.11	GK-GB-S-04	Elevation & Sections of Ghunsa Bridge
10.12	GK-GB-S-05	Right Abutment Plan & Sections of Ghunsa Bridge
10.13	GK-GB-S-06	Left Abutment Plan & Sections of Ghunsa Bridge
10.14	GK-GB-S-07	Right Bank Wing Wall Details of Ghunsa Bridge
10.15	GK-HB-L-01	Plan & Section of Headworks Bridge
10.16	GK-HB-S-02	Section & Details of Headworks Bridge
11.		**Hydro Mechanical**
11.1	GK-HM-C-01	Diversion Weir Under Sluice Bulk Head Gate Details
11.2	GK-HM-C-02	Diversion Weir Under Sluice Radial Gate Details
11.3	GK-HM-C-03	Diversion Weir Trash Removal Gate Details
11.4	GK-HM-C-04	River Intake Trash Rack Details
11.5	GK-HM-C-05	River Intake Maintenance Gate Details
11.6	GK-HM-C-06	River Intake Service Gate Details
11.7	GK-HM-C-07	Desilting Chamber Gate Details
11.8	GK-HM-C-08	Flushing Conduit Silt Flushing Gate Details
11.9	GK-HM-C-09	Tailrace Tunnel Gate Details
11.10	GK-HM-C-10	Adit-1 Adit Bulkhead Door
11.11	GK-HM-C-11	Adit-4 Adit Bulkhead Door
11.12	GK-HM-C-12	Pressure Shaft-Steel Liner Longitudinal Profile 1/3
11.13	GK-HM-C-13	Pressure Shaft-Steel Liner Longitudinal Profile 2/3
11.14	GK-HM-C-14	Pressure Shaft-Steel Liner Longitudinal Profile 3/3

REMIT HYDRO

1. General Drawings

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

SYMBOLS

UNLESS OTHERWISE SPECIFIED, THE FOLLOWING SYMBOLS ARE USED:

A. GENERAL	
ORIGINAL GROUND LEVEL	OGL
RIVER BED LEVEL	RBL
CONTOUR	1900
SECTION BREAK	
CENTER LINE, AXIS LINE	
VISIBLE LINE, OUTLINE, DIMENSION LINE, ETC.	
HIDDEN LINE	

B. NATURAL & BUILT FEATURES	
INTERNATIONAL BOUNDARY	
PROVINCIAL BOUNDARY	
CATCHMENT BOUNDARY	
NATIONAL PARK/ CONSERVATION AREA/ WILDLIFE RESERVE	
MOUNTAIN PEAK	
RIVER	
KHOLSI/ STREAM	
MAJOR HIGHWAY	H07
FEEDER ROAD	F040
EARTHEN ROAD	
UNDER CONSTRUCTION ROAD	
PROJECT ACCESS ROAD	
MOTORABLE BRIDGE	
EXISTING TRAIL	
PEDESTRIAN BRIDGE	
AIRPORT	
CITY/ TOWN	

C. GEOLOGY	
GEOLOGICAL BOUNDARY	GB
LITHOLOGICAL BOUNDARY	
FOLIATION (DIP DIR./ AMT.)	038/39
JOINTS (DIP DIR./ AMT.)	160/75
JOINT SET (SCHEMATIC)	J1
SHEAR ZONE	
MAJOR WEAK ZONE	
RIVER BORNE MATERIAL (RBM)	
SLIDE DEBRIS	
COLLUVIUM	
ROCK BLOCKS MIXED WITH COLLUVIUM	
GARNETIFEROUS BANDED GNEISS (GBG) [LAMATAR UNIT]	
INTERBEDDED MARBLE AND GNEISSES	
QUARTZITE	
QUARTZ BIOTITE GNEISS (GQM) WITH INTERBEDS OF QUARTZITE & MARBLE	
WEAK ZONE	
BLACK CARBONACEOUS MATERIAL	
DRILL HOLE (FEASIBILITY STUDY)	DH-1
DRILL HOLE (PRESENT STUDY)	NDH-4
DRILL HOLE (SECTION)	
GEOPHYSICAL SURVEY LINE	ERT-3

D. CIVIL ENGINEERING	
ROCK SURFACE	
EARTH SURFACE	
EXCAVATION SLOPE	
EMBANKMENT SLOPE	
PLAIN CEMENT CONCRETE	
REINFORCED CEMENT CONCRETE	
SECOND STAGE REINFORCED CEMENT CONCRETE	
ABRASION RESISTANT CONCRETE	
PLUM CONCRETE	
REINFORCEMENT BAR	
BAR BENT AWAY FROM VIEWER	
BAR BENT TOWARDS VIEWER	
SLOPE IN STRUCTURE	
CUT-OUT	
PVC WATER STOP	
RANDOM RUBBLE MASONRY	
GABION BOX	
PCC BLOCKS	
ROCK BOLT	
COMPACTED BACKFILL (PLAN)	
COMPACTED BACKFILL (SECTION)	
ROCK FILL	
CONCRETE BACKFILL (M10)	
WATER LEVEL	

E. ELECTRICAL ENGINEERING	
ISOLATING LINK (IL)	
ISOLATOR (IS)	
EARTH SWITCH (ES)	
LIGHTING ARRESTER (LA)	
GROUND CONNECTION	
CB (220 kV)	
CONTROLLED RECTIFIER (THYRISTOR)	
CABLE TERMINATION	
CAPACITIVE DIVERTER	
LINE TRAP	
CURRENT TRANSFORMER	
DRAWOUT INDUCTION VT	
FIXED INDUCTION IVT	
POWER TRANSFORMER	
GENERATOR	G
MOTOR OPERATED	
LINE MATCHING UNIT	LMU
GIS/GIB TERMINATION	
GIS/AIR TERMINATION	
HIGH SPEED EARTH SWITCH	
BUS DUCT	
24 kV VCR	
DRAWOUT MEDIUM VOLTAGE VACUUM CIRCUT BREAKER	

E. ELECTRICAL ENGINEERING	
MOULDED CASE CIRCUIT BREAKER	
DRAWOUT AIR CIRCUIT BREAKER	
DRAWOUT INDUCTION VT	
FIXED INDUCTION VT	
AUXILIARY TRANSFORMER	
ELECTRICAL INTERLOCK	E
BUS DUCT	
GIB	
CABLE	
VOLTAGE TRANSFORMER	
VOLTAGE SENSING RELAY	27
MOTORISED MCCB	M
FUSE	
INDUCTION IVT	
DIESEL GENERATOR	
TRANSFORMER	
INDICATING LIGHTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

GENERAL DRAWINGS
SYMBOLS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-4215046; FAX:01-4215046

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

DESIGNED BY:	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-GN-01
SCALE: NTS	

NOTES:

GENERAL

1. THESE DRAWINGS ARE THE EMPLOYER'S CONCEPT DRAWINGS AND ARE NOT INTENDED FOR CONSTRUCTION
2. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS & ELEVATION IN METERS.
3. CONTRACTOR TO CARRYOUT DETAILED DESIGN AND PREPARE SEPARATE DRAWINGS FOR CONSTRUCTION.

EXCAVATION AND FOUNDATION

1. EXCAVATIONS TO BE PERFORMED TO THE LINES AND LEVELS SHOWN ON THE DRAWINGS, UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER.
2. WHERE NOT INDICATED ON DRAWINGS, SURFACE EXCAVATIONS IN ROCK AND SOIL TO BE PERFORMED AT SLOPES INDICATED IN TABLE BELOW:

MATERIAL	PERMANENT	TEMPORARY
A. FRESH ROCK	1 : 0.25	1 : 0.20
B. WEATHERED ROCK	1 : 0.50	1 : 0.30
C. GENERAL SOIL	1 : 1.00	1 : 0.70/ 1:0.5

. NOTE: BERMS OF 1.5 - 2.0 M IN WIDTH ARE TO BE PROVIDED AT EVERY 10.0 M HEIGHT.

STRUCTURAL

UNLESS OTHERWISE SPECIFIED IN THE DRAWINGS, THE FOLLOWING SHALL APPLY:

A. MATERIALS

1. GRADE OF STRUCTURAL CONCRETE : M25 (AS PER IS 456:2000)
2. GRADE OF LEVELING CONCRETE :M10 (AS PER IS 456: 2000)
3. GRADE OF REINFORCING STEEL : FE 500 (AS PER IS 1786: 2008)
4. AGGREGATES : AS PER DRAWINGS & SPECIFICATIONS

TENDER DRAWINGS
(NOT INTENDED FOR CONSTRUCTION)

ABBREVIATIONS

UNLESS OTHERWISE SPECIFIED, THE FOLLOWING ABBREVIATIONS ARE USED:

CLASSIFICATION	ABBREVIATIONS	EXAMPLES AND NOTES
I. MEASUREMENT		
MILLIMETER	MM	
METER	M	
KILOMETER	KM	
SQUARE METER	M^2	
CUBIC METER	M^3	
II. COMMON		
DRAWING NUMBER	DWG. NO.	
DIAMETER OF PIPES, HOLES, ROUND OPENING	D	1.000 D (1000 MM IN DIAMETER)
DIAMETER OF ROUND BARS, BOLTS	Ø	16Ø (16MM IN DIAMETER)
RADIUS OF CURVE	R	30.000R (30,000 MM IN RADIUS)
LENGTH	L	L=1000 (1000 MM IN LENGTH)
CENTER TO CENTER	C/C	
CENTER LINE	℄	
ELEVATION ABOVE MEAN SEA LEVEL	EL.	EL. 1525.00
LEVEL	LVL.	
SLOPE (V:H)	1:2	1:2 (1VERTICAL 2 HORIZONTAL)
REPETITION AT SAME SPACING	@	16Ø @ 200 (16Ø BARS AT 200 MM SPACING)
THICKNESS	THK.	
ANGLE (DEGREE, MINUTE, SECOND)	°_'_"	58°45'15"
NUMBER	NOS.	
WITH (WITHOUT)	W / (W / O)	W / COVER (WITH COVER)
ORIGINAL GROUND LEVEL	OGL	
MINIMUM	MIN	1000 MIN (1000 MM AT THE MINIMUM)
MAXIMUM	MAX	1000 MAX (1000 MM AT THE MAXIMUM)
ALTERNATE	ALT	
VARIABLE	VAR	
TYPICAL	TYP	
NOT TO SCALE	NTS	
III. CIVIL ENGINEERING		
EAST LONGITUDE	E	100°E (100 DEGREE EAST)
NORTH LATITUDE	N	100°N (100 DEGREE NORTH)
FULL SUPPLY LEVEL	FSL	
MINIMUM SUPPLY LEVEL	MSL	
MID WATER LEVEL	MWL	
UPSURGING WATER LEVEL	USWL	
DOWNSURGING WATER LEVEL	DSWL	
POLYVINYL CHLORIDE	PVC	
HIGH DENSITY POLYTHENE	HDP	
CONTRACTION JOINT	CJ	
PLAIN CEMENT CONCRETE	PCC	
ABRASION RESISTANT CONCRETE	ARC	
REINFORCEMENT CEMENT CONCRETE	RCC	
BEGINNING POINT	B.P.	
END POINT	E.P.	
INTERSECTION POINT	I.P.	
JUNCTION POINT	J.P.	

CLASSIFICATION	ABBREVIATIONS
III. ELECTRICAL ENGINEERING	
UNIT AUXILIARY BOARD	UAB
MAIN VOLTAGE SWITCH BOARD	MVSB
UNIT AUXILIARY TRANSFORMER	UAT
SERVICE AUXILIARY TRANSFORMER	SAT
DYNAMIC BREAKING CUBICLE	DBC
NORMALLY CLOSED	NC
NORMALLY OPEN	NO
VOLTAGE SELECTOR SWITCH	VSS
MULTI FUNCTION METER	MFM
OPERATOR WORKSTATION	OWS
ENGINEER WORKSTATION	EWS
LARGE VIDEO SCREEN	LVS
LARGE VIDEO SCREEN WORKSTATION	LVSWS
HISTORIAN WORKSTATION	HWS
CLOSED CIRCUIT TELEVISION	CCTV
VOICE OVER INTERNET PROTOCOL	VoIP
FIBER OPTIC	FO
LOCAL AREA NETWORK	LAN
UNIT CONTROL BOARD	UCB
COMMON CONTROL BOARD	CCB
INTER RANGE INSTRUMENTATION GROUP	IRIG
GLOBAL POSITIONING SYSTEM	GPS
HUMAN MACHINE INTERFACE	HMI
CENTRAL PROCESSING UNIT	CPU
GAS INSULATED SWITCHGEAR	GIS
OPTICAL LINE TERMINATION EQUIPMENT	OLTE
ENERGY MONITORING SYSTEM	EMS
INTAKE CONTROL BOARD	ICB
VALVE CONTROL BOARD	VCB
PENSTOCK PROTECTION VALVE	PPV
OIL PRESSURE UNIT	OPU
PENSTOCK RUPTURING PROTECTION FLOW METER	PRPFM
KILO VOLT	KV
KILO AMPHERE	KA
VOLT	V
AMPHERE	A
MEGA VOLT AMPHERE	MVA
VOLT AMPHERE	VA
HERTZ	HZ
POWER FACTOR	PF
CURRENT TRANSFORMER	CT
DIRECT CURRENT	DC
ALTERNATING CURRENT	AC
AUTOMATIC VOLTAGE REGULATOR	AVR

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

GENERAL DRAWINGS
NOTES & ABBREVIATIONS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-4215046; FAX:01-4215046

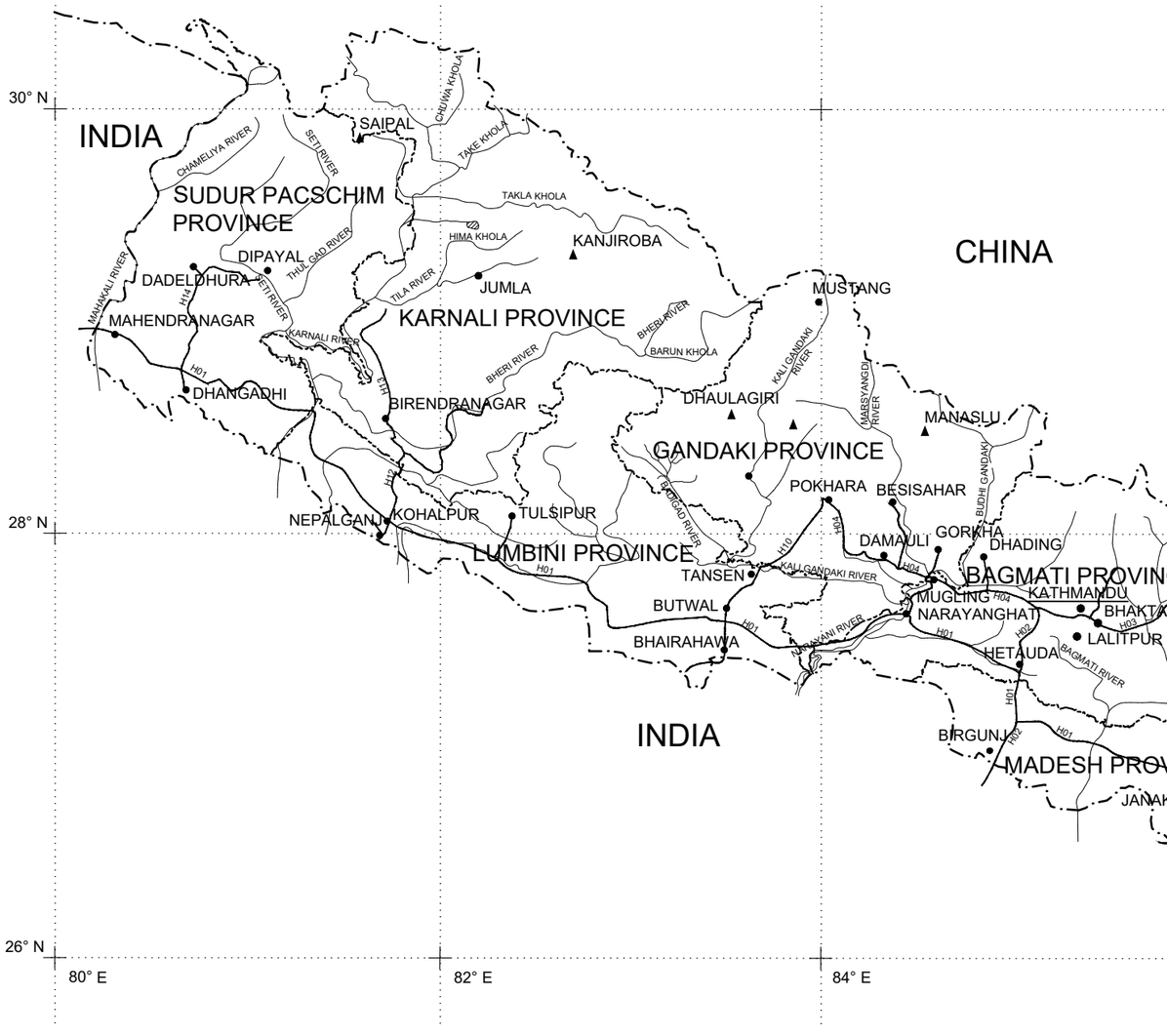
DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

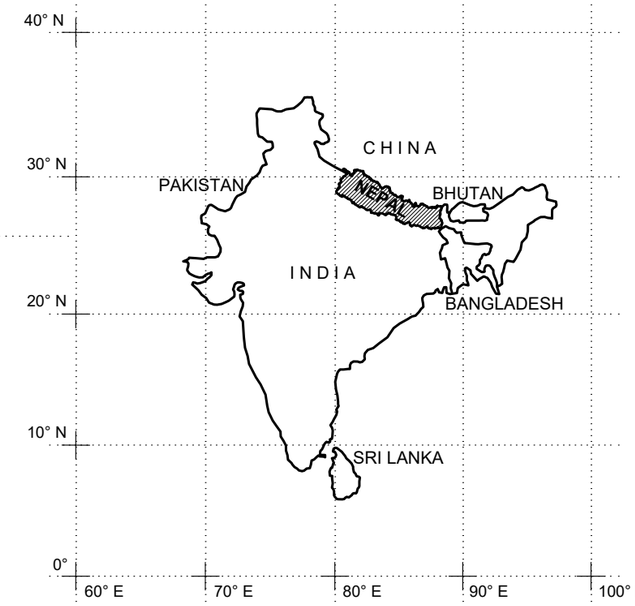
DESIGNED BY:	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-GN-02
SCALE: NTS	

2. Project Location

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

NORTH





KEY PLAN

PROJECT AREA

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

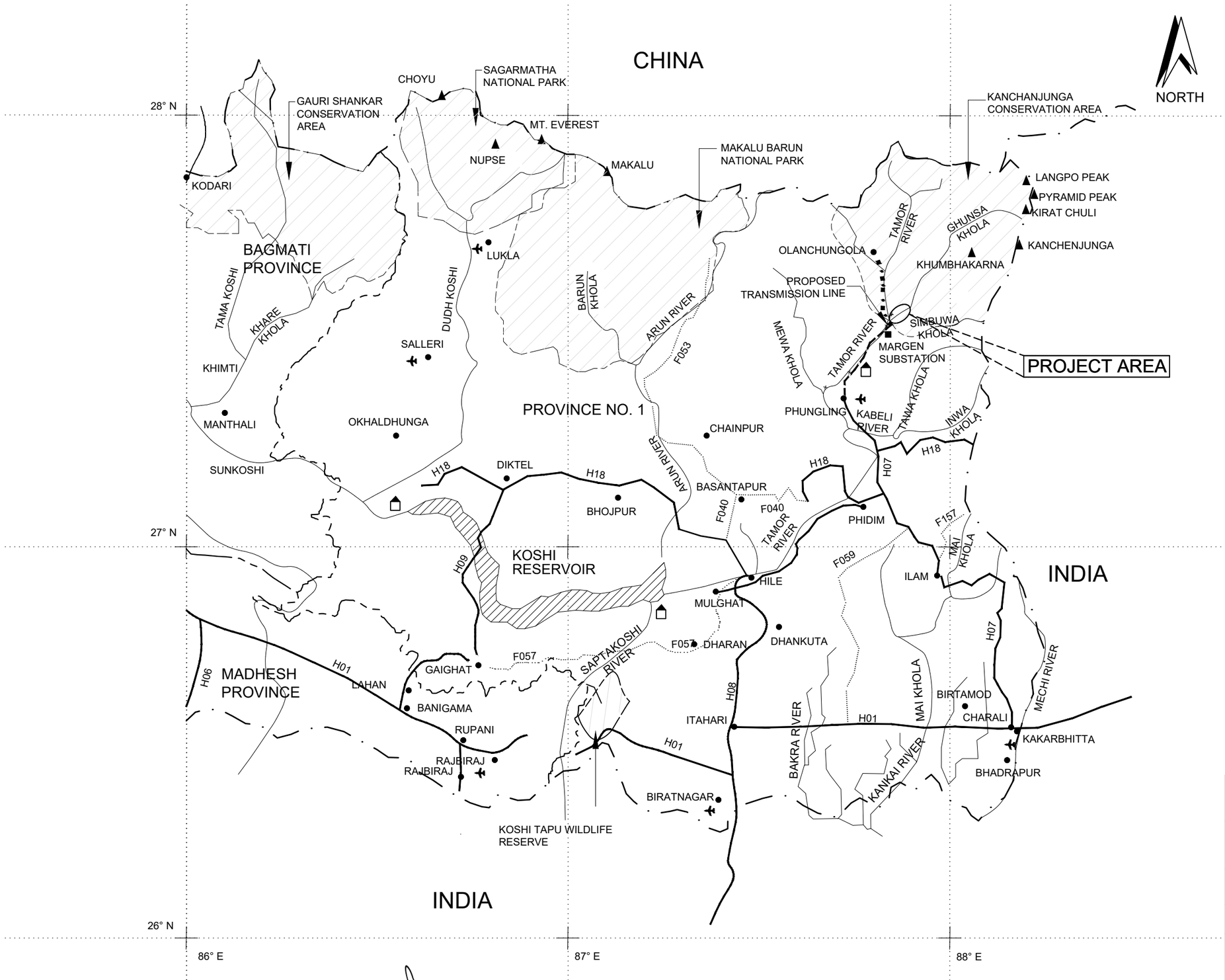
PROJECT LOCATION
COUNTRY MAP

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

DESIGNED BY:	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: MARCH 2022	DWG. NO GK-PA-01
SCALE: NTS	



REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

PROJECT LOCATION
PROJECT AREA MAP

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY:	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: MARCH 2022	DWG. NO GK-PA-02
SCALE: NTS	

3. Hydrology

87° 50' 00" E
87° 55' 00" E
88° 00' 00" E
88° 05' 00" E
88° 10' 00" E

27° 55' 00" N
27° 50' 00" N
27° 45' 00" N
27° 40' 00" N
27° 35' 00" N

NORTH

CHINA
INDIA

LANGPO PEAK
PYRAMID PEAK
KIRAT PEAK
KANCHENJUNGA
KHUMBAKARNA

5000
4000
3000
2000

KANCHENJUNGA GLACIER
GHUNSA KHOLA
NUPCHU KHOLA
NAPHINDA KHOLA
NAPHIMBA KHOLA
YAMMA SAMBA KHOLA
YAMTARI KHOLA
CHHUDAYANKA KHOLA
BAKIM KHOLA
HOSYOMA KHOLA
RIYA SAMBA KHOLA
SAKECHUN KHOLA
SYAJUNMA KHOLA
SAEKAN KHOLA
SUMBUN KHOLA
SELELE KHOLA
JOR KHOLA

INTAKE SITE
EL. 1947.00

CATCHMENT AREA AT INTAKE

3000 0 3000 6000 9000 12000 15000M
SCALE A : 1:300000

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

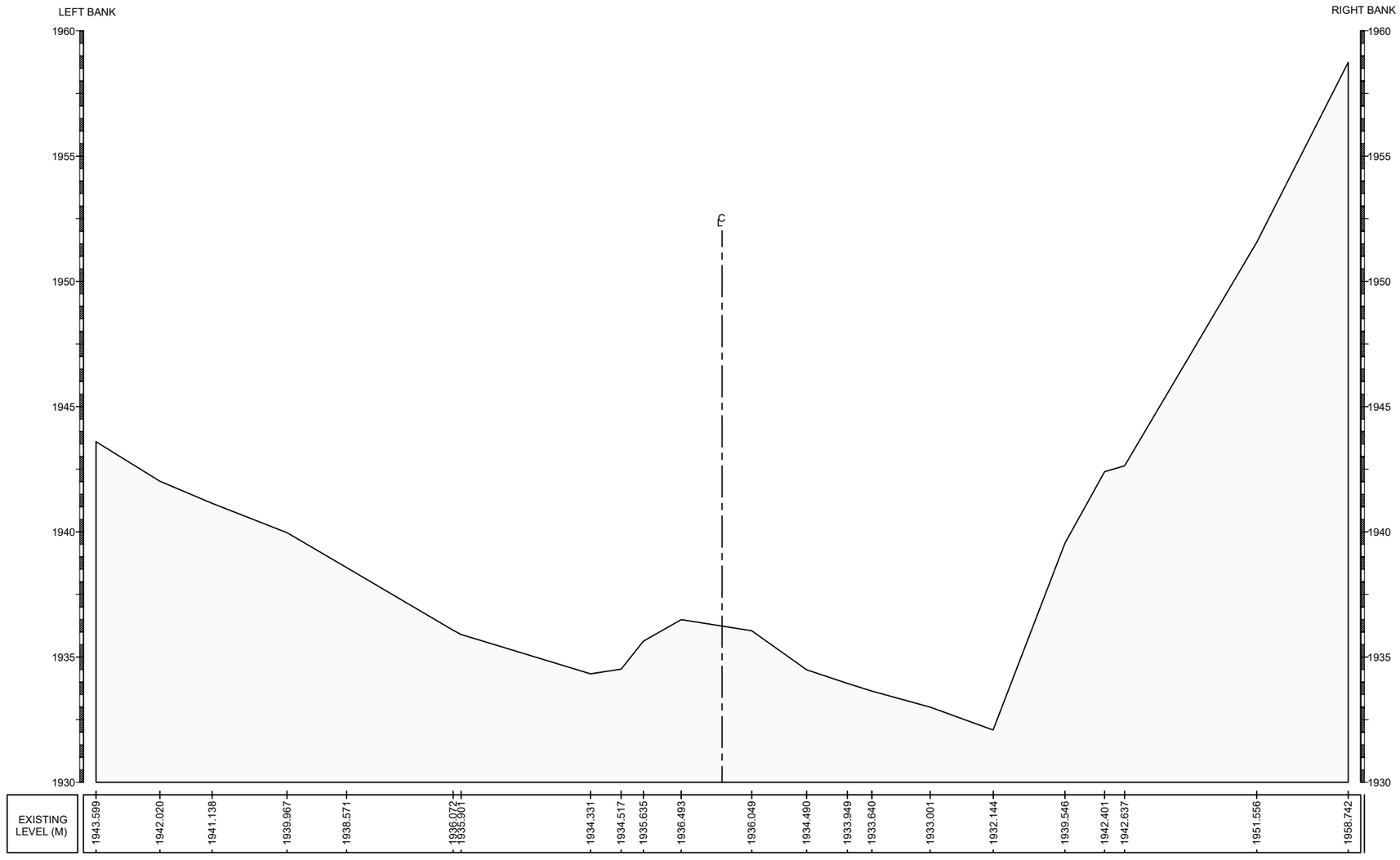
HYDROLOGY
CATCHMENT AREA MAP

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

DESIGNED BY:	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: MARCH 2022	DWG. NO GK-HY-01
SCALE: NTS	



RIVER CROSS SECTION AT INTAKE GAUGING STATION

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

2 0 2 4 6 8 10M
SCALE : 1:200

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

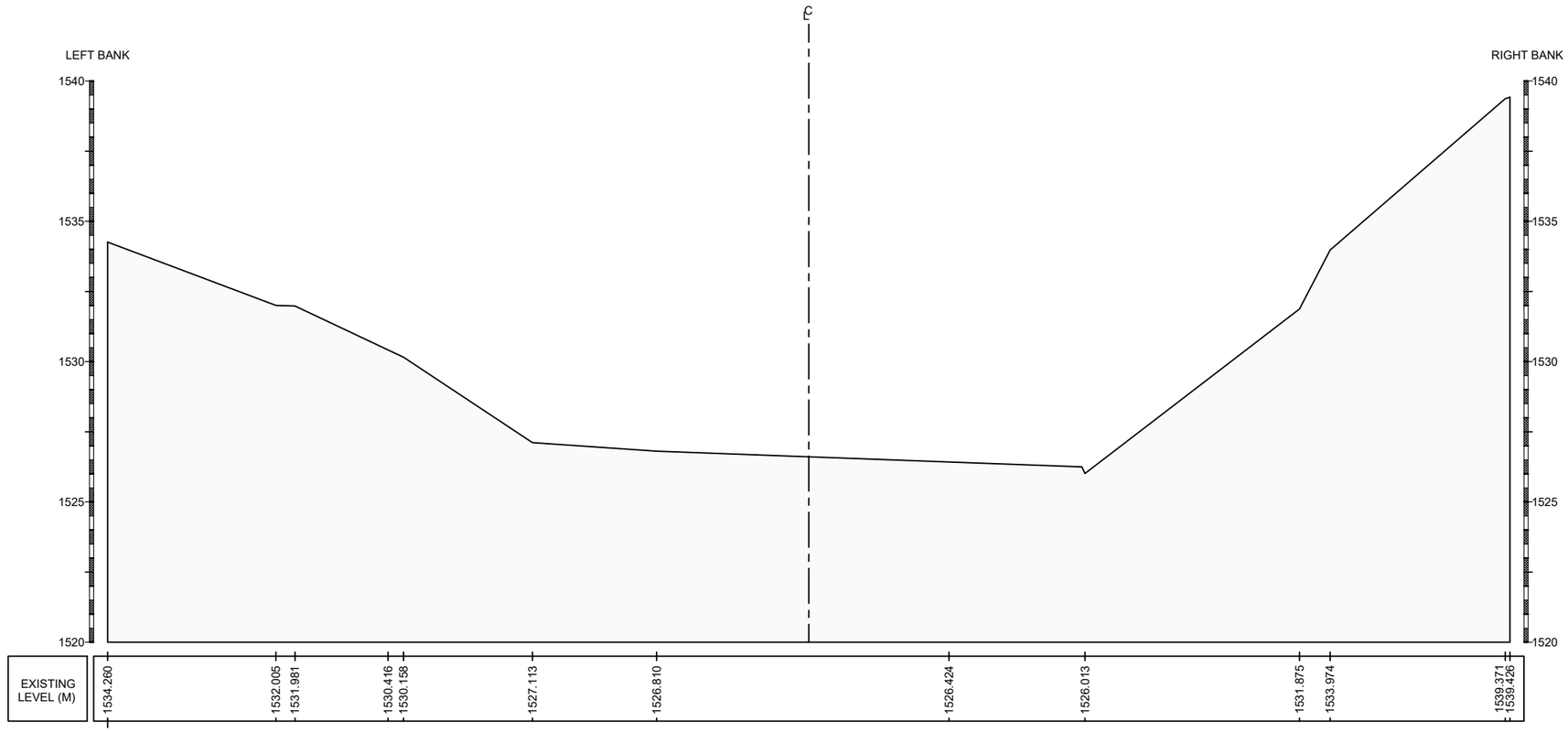
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HYDROLOGY
RIVER CROSS SECTION
AT INTAKE GAUGING STATION

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-4215046; FAX:01-4215046

SURVEYED BY: DEEPAK PAUDEL	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: P. BAJRACHARYA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HY-02
SCALE: NTS	



RIVER CROSS SECTION AT POWERHOUSE GAUGING STATION

2 0 2 4 6 8 10M
SCALE : 1:200

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HYDROLOGY
RIVER CROSS SECTION AT POWERHOUSE GAUGING STATION

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-4215046; FAX:01-4215046

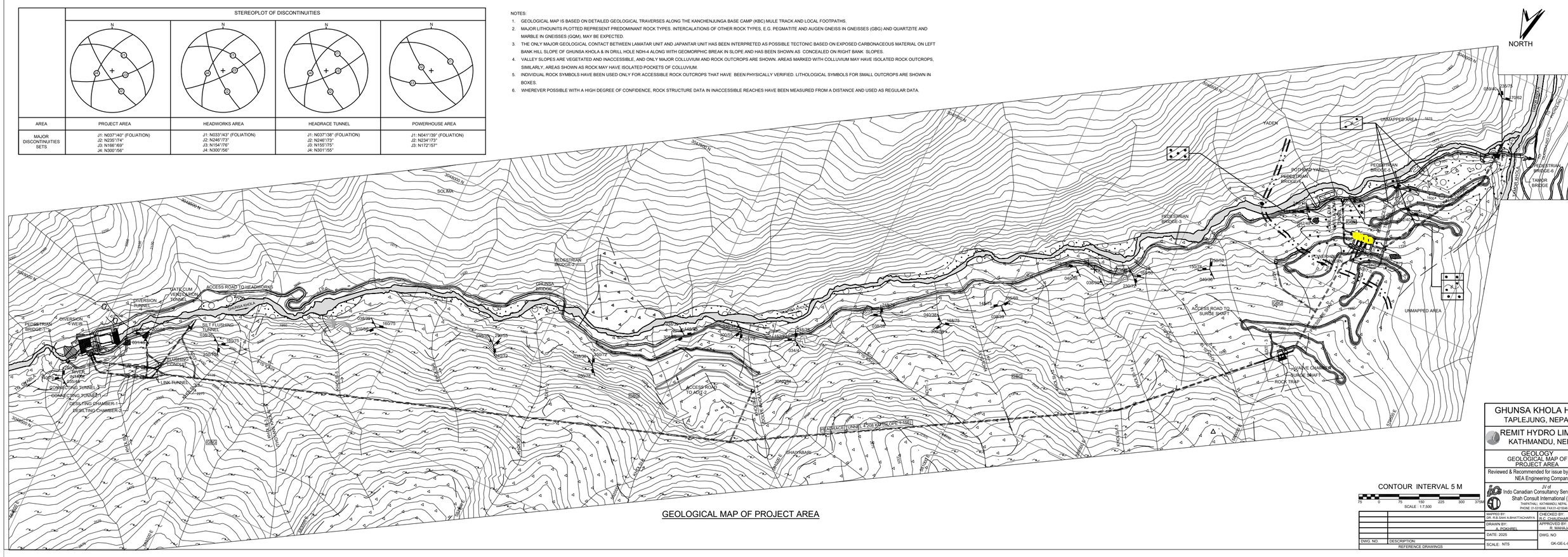
SURVEYED BY: DEEPAK PAUDEL	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: P. BAJRACHARYA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HY-03
SCALE: NTS	

4. Project Layout

	STEREOPLOT OF DISCONTINUITIES			
AREA	PROJECT AREA	HEADWORKS AREA	HEADRACE TUNNEL	POWERHOUSE AREA
MAJOR DISCONTINUITIES SETS	J1: N037°/40° (FOLIATION) J2: N235°/74° J3: N166°/69° J4: N300°/56°	J1: N033°/43° (FOLIATION) J2: N246°/73° J3: N154°/76° J4: N300°/56°	J1: N037°/38° (FOLIATION) J2: N246°/73° J3: N155°/75° J4: N301°/55°	J1: N041°/39° (FOLIATION) J2: N234°/73° J3: N172°/57°

NOTES:

1. GEOLOGICAL MAP IS BASED ON DETAILED GEOLOGICAL TRAVERSES ALONG THE KANCHENJUNGA BASE CAMP (KBC) MULE TRACK AND LOCAL FOOTPATHS.
2. MAJOR LITHOUNITS PLOTTED REPRESENT PREDOMINANT ROCK TYPES. INTERCALATIONS OF OTHER ROCK TYPES, E.G. PEGMATITE AND AUGEN GNEISS IN GNEISSES (GBG) AND QUARTZITE AND MARBLE IN GNEISSES (GQM), MAY BE EXPECTED.
3. THE ONLY MAJOR GEOLOGICAL CONTACT BETWEEN LAMATAR UNIT AND JAPANTAR UNIT HAS BEEN INTERPRETED AS POSSIBLE TECTONIC BASED ON EXPOSED CARBONACEOUS MATERIAL ON LEFT BANK HILL SLOPE OF GHUNSA KHOLA & IN DRILL HOLE NDH-4 ALONG WITH GEOMORPHIC BREAK IN SLOPE AND HAS BEEN SHOWN AS CONCEALED ON RIGHT BANK SLOPES.
4. VALLEY SLOPES ARE VEGETATED AND INACCESSIBLE, AND ONLY MAJOR COLLUVIUM AND ROCK OUTCROPS ARE SHOWN. AREAS MARKED WITH COLLUVIUM MAY HAVE ISOLATED ROCK OUTCROPS, SIMILARLY, AREAS SHOWN AS ROCK MAY HAVE ISOLATED POCKETS OF COLLUVIUM.
5. INDIVIDUAL ROCK SYMBOLS HAVE BEEN USED ONLY FOR ACCESSIBLE ROCK OUTCROPS THAT HAVE BEEN PHYSICALLY VERIFIED. LITHOLOGICAL SYMBOLS FOR SMALL OUTCROPS ARE SHOWN IN BOXES.
6. WHEREVER POSSIBLE WITH A HIGH DEGREE OF CONFIDENCE, ROCK STRUCTURE DATA IN INACCESSIBLE REACHES HAVE BEEN MEASURED FROM A DISTANCE AND USED AS REGULAR DATA.



GEOLOGICAL MAP OF PROJECT AREA

CONTOUR INTERVAL 5 M

SCALE : 1:7,500

DWG. NO.	DESCRIPTION
	REFERENCE DRAWINGS

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

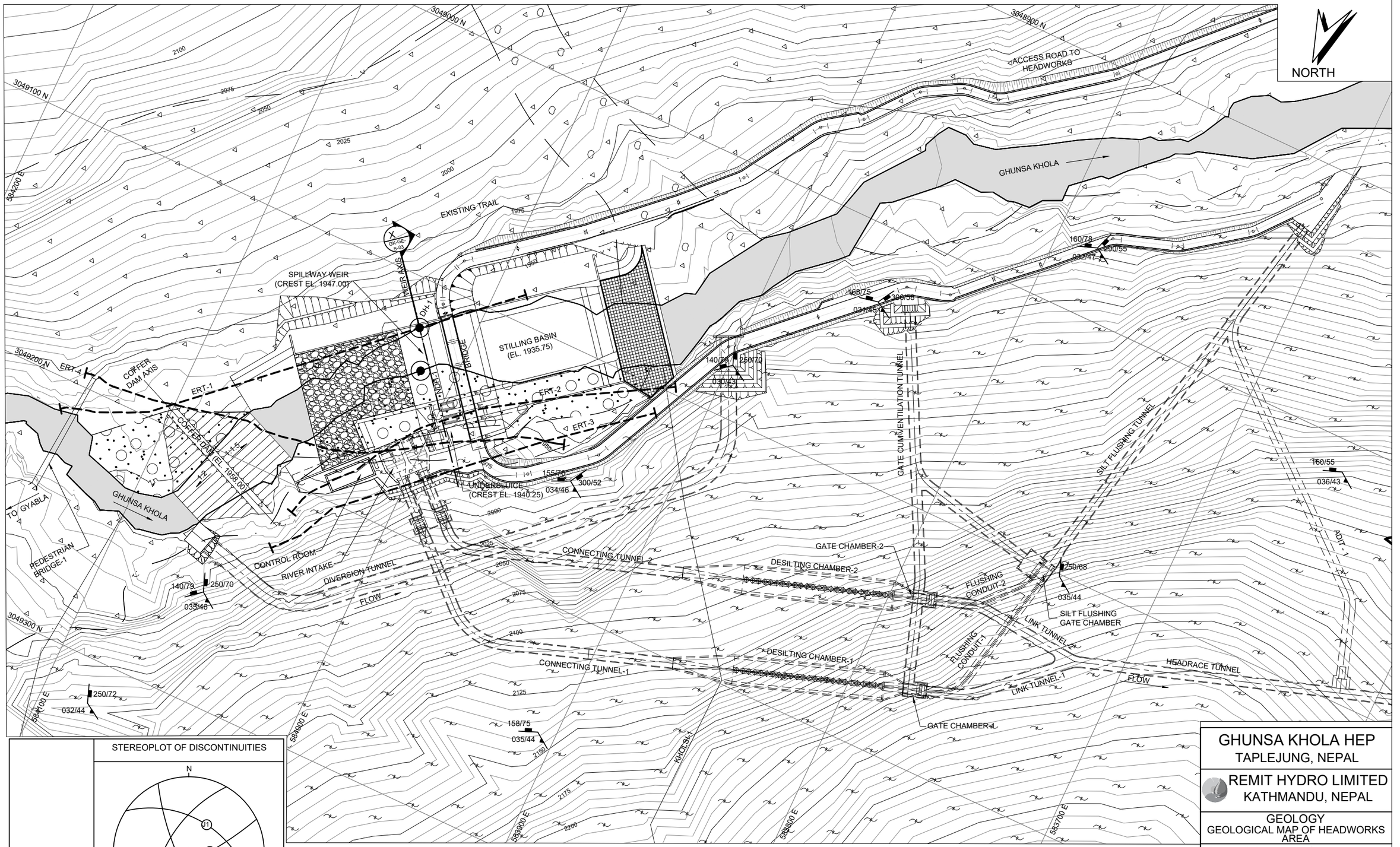
GEOLOGY
GEOLOGICAL MAP OF PROJECT AREA

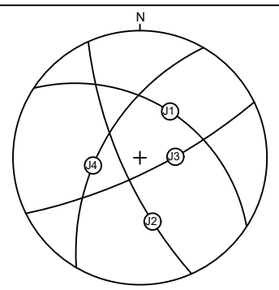
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5215566, FAX:01-4215046

MAPPED BY: DR. B.B.SHIY A.BHATTACHARYA	CHECKED BY: R.C. CHAUDHARY/ Y. DEVA
DRAWN BY: A. ROKDIBEL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO
SCALE: NTS	GK-GE-L-01

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



	STEREOPLOT OF DISCONTINUITIES
MAJOR DISCONTINUITIES SETS	 J1: N033°/43° (FOLIATION) J2: N246°/73° J3: N154°/76° J4: N300°/56°

GEOLOGICAL MAP OF HEADWORKS AREA

NOTES:

1. MAJOR PLOTTED LITHOUNITS REPRESENT PREDOMINANT ROCK TYPES. INTERCALATIONS OF OTHER ROCK TYPES, e.g. PEGMATITES AND AUGEN GNEISSES IN GARNETIFEROUS BANDED GNEISSES (GBG), MAY BE EXPECTED.
2. WHEREVER POSSIBLE WITH A HIGH DEGREE OF CONFIDENCE, ROCK STRUCTURE DATA IN INACCESSIBLE REACHES HAVE BEEN MEASURED FROM A DISTANCE AND USED AS REGULAR DATA. VERY [illegible] EXPOSED ROCK, PARTICULARLY GNEISSES, IN VALLEY SLOPES/ ESCARPM[illegible] AGITATED SPOT [illegible] STRUCTURE MEASUREMENTS.

CONTOUR INTERVAL 5 M

15 0 15 30 45 60 75M

SCALE : 1:1,500

GK-GE-S-03	GEOLOGICALSECTION ALONG WEIR AXIS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

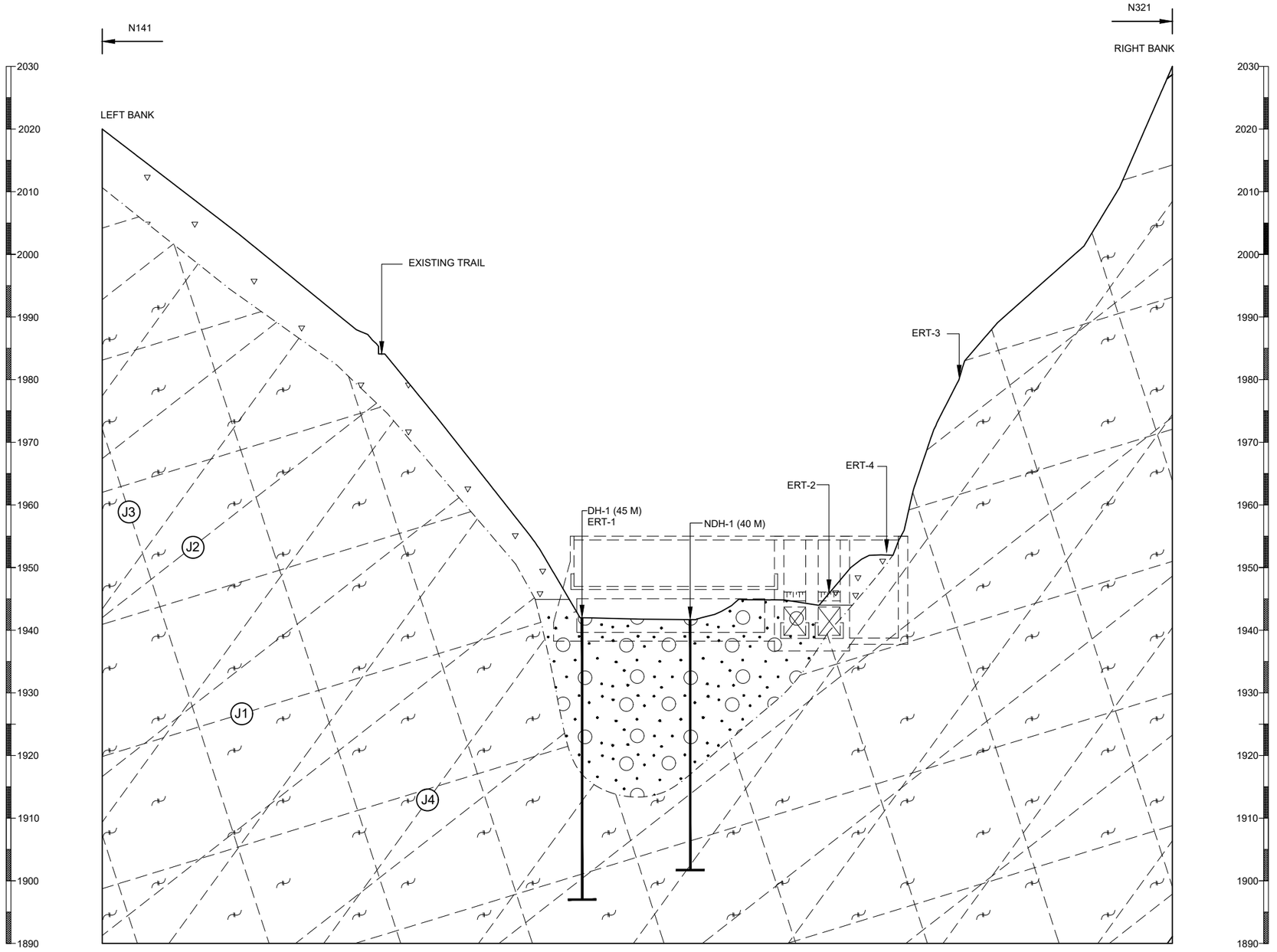
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

GEOLOGY
GEOLOGICAL MAP OF HEADWORKS AREA

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

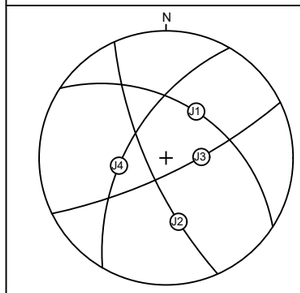
MAPPED BY: DR.R.B. SAH/A. BHATTACHARYA	CHECKED BY: R.C. CHAUDHARY/Y. DEVA
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-GE-L-02
SCALE: NTS	



GEOLOGICAL SECTION ALONG WEIR AXIS

SECTION X (GK-GE-L-02)

STEREOPLOT OF DISCONTINUITIES



MAJOR DISCONTINUITIES SETS	J1: N033°/43° (FOLIATION) J2: N246°/73° J3: N154°/76° J4: N300°/56°

NOTES:

1. GEOLOGICAL SECTION IS BASED ON GEOLOGICAL MAP OF HEADWORKS AREA.
2. PLOTTED JOINTS ARE SCHEMATIC AND NOT AS PER THEIR ACTUAL SPACING.

7.5 0 7.5 15 22.5 30 37.5M

SCALE: 1:750

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GK-GE-L-02	GEOLOGICAL MAP OF HEADWORKS AREA
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

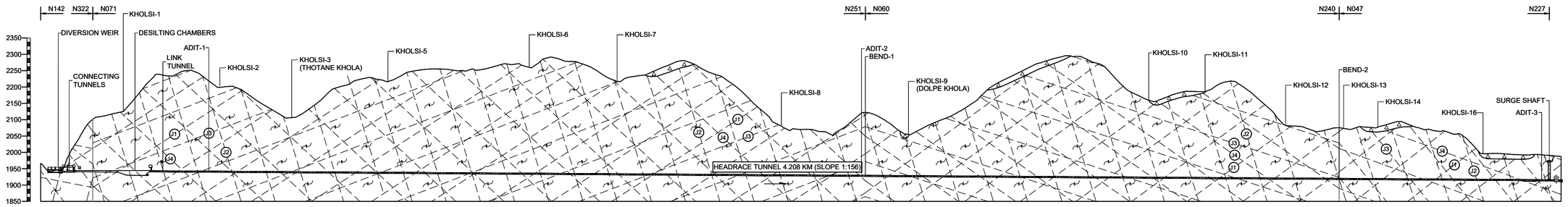
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

GEOLOGY
GEOLOGICAL SECTION ALONG WEIR AXIS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

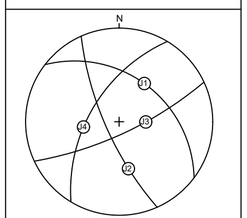
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

MAPPED BY: DR.R.B. SAH/A. BHATTACHARYA	CHECKED BY: R.C. CHAUDHARY/Y. DEVA
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-GE-S-03
SCALE: NTS	



CHAINAGE (KM)	0+000.00	0+200.00	0+400.00	0+600.00	0+800.00	1+000.00	1+200.00	1+400.00	1+600.00	1+800.00	2+000.00	2+200.00	2+400.00	2+600.00	2+800.00	3+000.00	3+200.00	3+400.00	3+600.00	3+800.00	4+000.00	4+208.00
ROCK CLASS		CLASS II-III (GOOD TO FAIR)	CLASS III-V (FAIR TO V. POOR)	CLASS II-III (GOOD TO FAIR)							CLASS III-V (FAIR TO V. POOR)	CLASS II-III (GOOD TO FAIR)	IV-VI	CLASS II-III (GOOD TO FAIR)							CLASS III-V (FAIR TO V. POOR)	
PROBABLE SEEPAGE		LOW TO MEDIUM	MEDIUM TO HIGH	LOW TO MEDIUM							MEDIUM TO HIGH	LOW TO MEDIUM	MEDIUM TO HIGH	LOW TO MEDIUM							LOW TO MEDIUM	

GEOLOGICAL PROFILE ALONG HEADRACE TUNNEL

	STEREOPLOT OF DISCONTINUITIES
	
MAJOR DISCONTINUITIES SETS	J1: N037°/38° (FOLIATION) J2: N246°/73° J3: N155°/75° J4: N301°/55°

ROCK CLASS

CLASS	CATEGORY	'Q'-VALUE
I	VERY GOOD	40-100
II	GOOD	10-40
III	FAIR	4-10
IV	POOR	1-4
V	VERY GOOD	0.1-1
VI	EXTREMELY POOR	0.01-0.1

SEEPAGE

LOW (L):	<25 L/MIN.
MEDIUM (M):	<25-125 L/MIN.
HIGH (H):	>125 L/MIN.

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

NOTES:

1. GEOLOGICAL SECTION IS BASED ON GEOLOGICAL MAP OF PROJECT AREA.
2. GEOLOGICAL SECTION HAS BEEN SIMPLIFIED AND ONLY MAJOR LITHOUNIT GARNETIFERROUS BANDED GNEISS (GBG) HAS BEEN SHOWN.
3. THICKNESS OF COLLUVIUM ALONG HEADRACE TUNNEL ALIGNMENT IS TENTATIVE.
4. ROCK CLASS SHOWN ARE BASED ON SURFACE STUDIES AND HENCE ARE ONLY REPRESENTATIVE. POCKETS OF INFERIOR ROCK CLASSES (V & VI) ARE EXPECTED IN ROCK CLASS OF POOR TO GOOD QUALITY.
5. PLOTTED JOINTS ARE SCHEMATIC AND NOT AS PER THEIR ACTUAL SPACING.

100 0 100 200 300 400 500M
SCALE : 1:10,000

DWG. NO.	DESCRIPTION: REFERENCE DRAWINGS

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

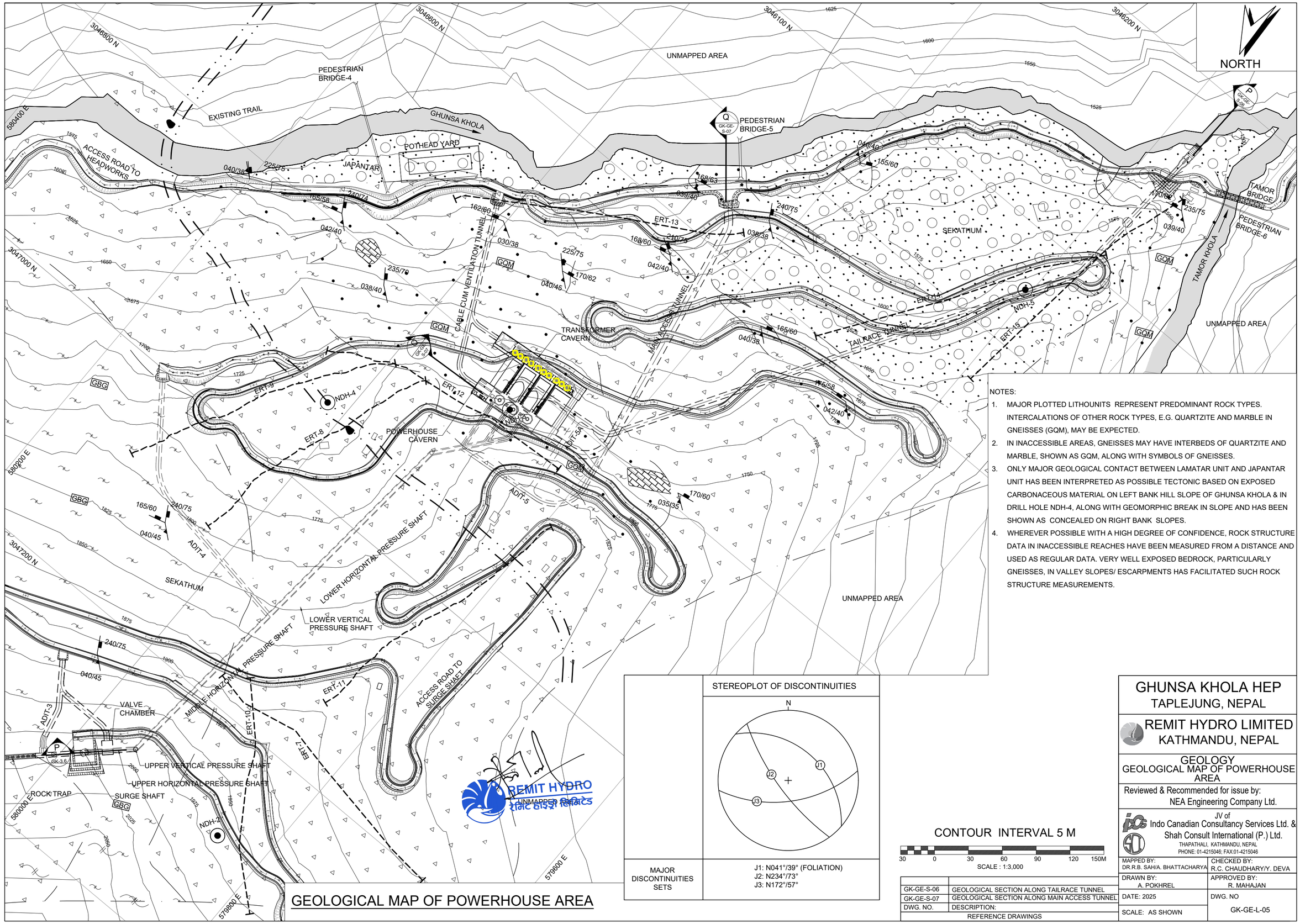
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

GEOLOGY
GEOLOGICAL PROFILE ALONG HEADRACE TUNNEL

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046, FAX:01-5315046

MAPPED BY: DR.R.B. SAH/ A. BHATTACHARYA	CHECKED BY: R.C. CHAUDHARY/Y. DEVA
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO
SCALE: NTS	GK-GE-S-04



GEOLOGICAL MAP OF POWERHOUSE AREA

NOTES:

1. MAJOR PLOTTED LITHOUNITS REPRESENT PREDOMINANT ROCK TYPES. INTERCALATIONS OF OTHER ROCK TYPES, E.G. QUARTZITE AND MARBLE IN GNEISSES (GQM), MAY BE EXPECTED.
2. IN INACCESSIBLE AREAS, GNEISSES MAY HAVE INTERBEDS OF QUARTZITE AND MARBLE, SHOWN AS GQM, ALONG WITH SYMBOLS OF GNEISSES.
3. ONLY MAJOR GEOLOGICAL CONTACT BETWEEN LAMATAR UNIT AND JAPANTAR UNIT HAS BEEN INTERPRETED AS POSSIBLE TECTONIC BASED ON EXPOSED CARBONACEOUS MATERIAL ON LEFT BANK HILL SLOPE OF GHUNSA KHOLA & IN DRILL HOLE NDH-4, ALONG WITH GEOMORPHIC BREAK IN SLOPE AND HAS BEEN SHOWN AS CONCEALED ON RIGHT BANK SLOPES.
4. WHEREVER POSSIBLE WITH A HIGH DEGREE OF CONFIDENCE, ROCK STRUCTURE DATA IN INACCESSIBLE REACHES HAVE BEEN MEASURED FROM A DISTANCE AND USED AS REGULAR DATA. VERY WELL EXPOSED BEDROCK, PARTICULARLY GNEISSES, IN VALLEY SLOPES/ ESCARPMENTS HAS FACILITATED SUCH ROCK STRUCTURE MEASUREMENTS.

STEREOPLOT OF DISCONTINUITIES	
MAJOR DISCONTINUITIES SETS	J1: N041°/39° (FOLIATION) J2: N234°/73° J3: N172°/57°

CONTOUR INTERVAL 5 M

30 0 30 60 90 120 150M

SCALE : 1:3,000

GK-GE-S-06	GEOLOGICAL SECTION ALONG TAILRACE TUNNEL
GK-GE-S-07	GEOLOGICAL SECTION ALONG MAIN ACCESS TUNNEL
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

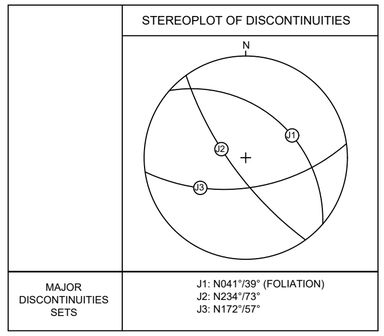
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

GEOLOGY
GEOLOGICAL MAP OF POWERHOUSE AREA

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-4215046; FAX:01-4215046

MAPPED BY: DR.R.B. SAH/A. BHATTACHARYA	CHECKED BY: R.C. CHAUDHARY/Y. DEVA
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-GE-L-05
SCALE: AS SHOWN	



MAJOR DISCONTINUITIES SETS	J1: N041°/39° (FOLIATION) J2: N234°/73° J3: N172°/57°

NOTES:

1. GEOLOGICAL SECTION IS BASED ON GEOLOGICAL MAP OF POWERHOUSE AREA.
2. PLOTTED JOINTS ARE SCHEMATIC AND NOT AS PER THEIR ACTUAL SPACING.

CHAINAGE (KM)	0+000.00, 0+200.00, 0+400.00, 0+600.00, 0+800.00, 1+000.00, 1+200.00, 1+400.00, 1+600.00, 1+800.00, 2+000.00, 2+200.00, 2+400.00, 2+600.00, 2+800.00, 3+000.00, 3+100.00
ROCK CLASS	CLASS II-III (GOOD TO FAIR)
PROBABLE SEEPAGE	LOW

20 0 20 40 60 80 100M
SCALE: 1:2,000

GEOLOGICAL PROFILE ALONG MAIN ACCESS TUNNEL

SECTION Q (GK-GE-L-05)

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GK-GE-L-05	GEOLOGICAL MAP OF POWERHOUSE AREA
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

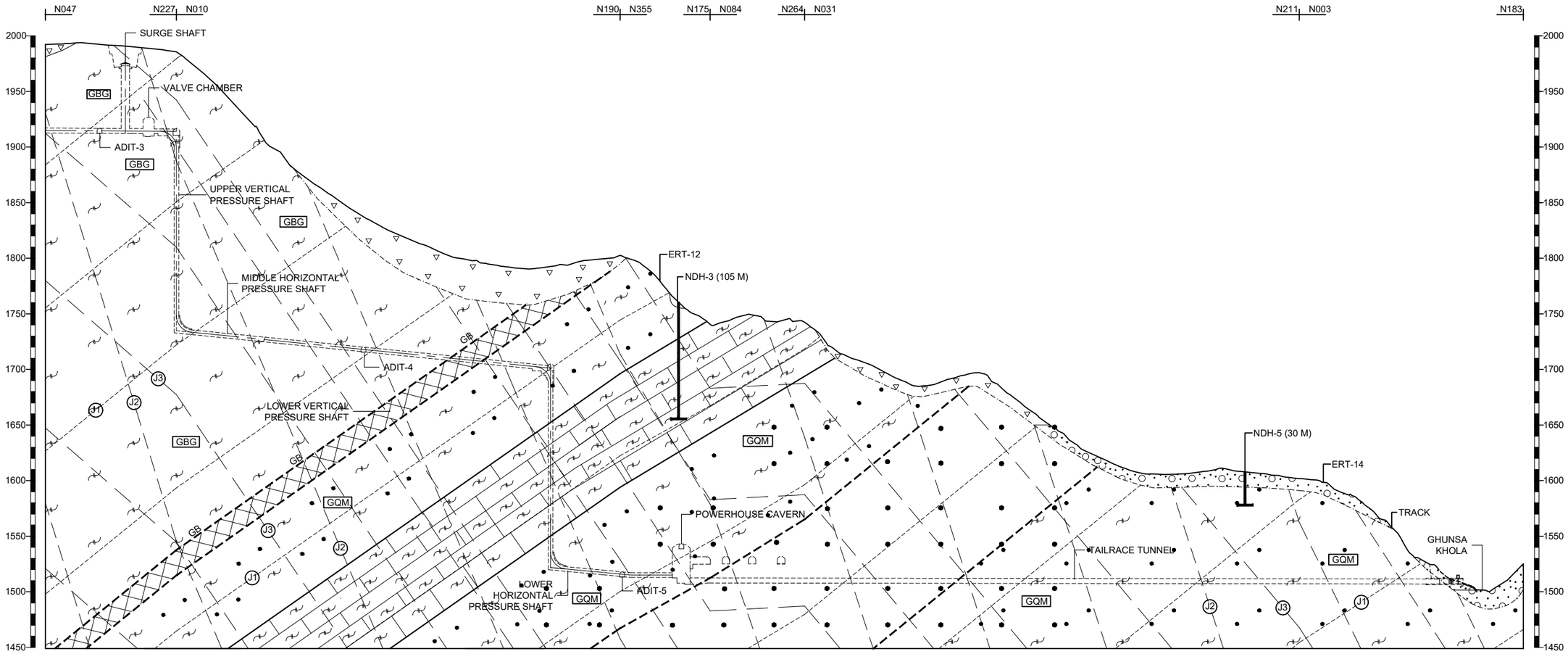
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

GEOLOGY
GEOLOGICAL SECTION ALONG MAIN ACCESS TUNNEL

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

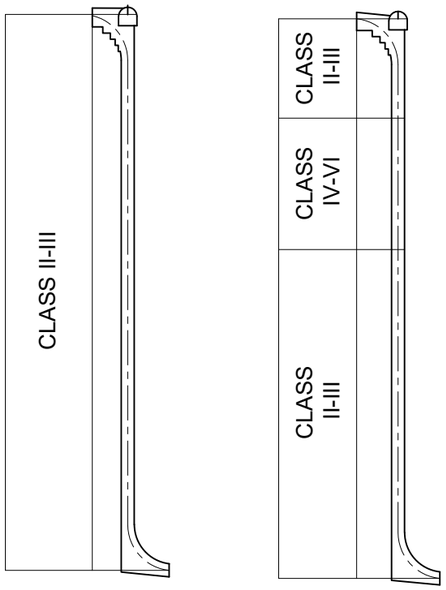
MAPPED BY: DR.R.B. SAH/A. BHATTACHARYA	CHECKED BY: R.C. CHAUDHARY/Y. DEVA
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-GE-S-06
SCALE: NTS	



GEOLOGICAL PROFILE ALONG TAILRACE TUNNEL

SECTION Q (GK-GE-L-05)

SCALE A

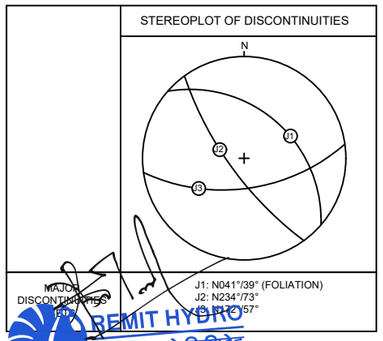


UPPER VERTICAL PRESSURE SHAFT

SCALE B

LOWER VERTICAL PRESSURE SHAFT

SCALE B



NOTES:

1. SECTION IS BASED ON THE GEOLOGICAL MAP OF POWERHOUSE AREA.
2. OVERBURDEN THICKNESS IS BASED ON RESULTS OF DRILL HOLES.
3. WEAK ZONE IS MARKED ON BASIS OF ERT RESULTS IN THE NEARBY AREA & PRESENCE OF BLACK CARBONACEOUS MATERIAL ON HILL SLOPE, LEFT BANK OF GHUNSA KHOLA & DRILL HOLE NDH-4
4. PLOTTED JOINTS ARE SCHEMATIC AND NOT AS PER THEIR ACTUAL SPACING.

40 0 40 80 120 160 200M
SCALE-A: 1:4,000

20 0 20 40 60 80 100M
SCALE-A: 1:2,000

GK-GE-L-05	GEOLOGICAL MAP OF POWERHOUSE AREA
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

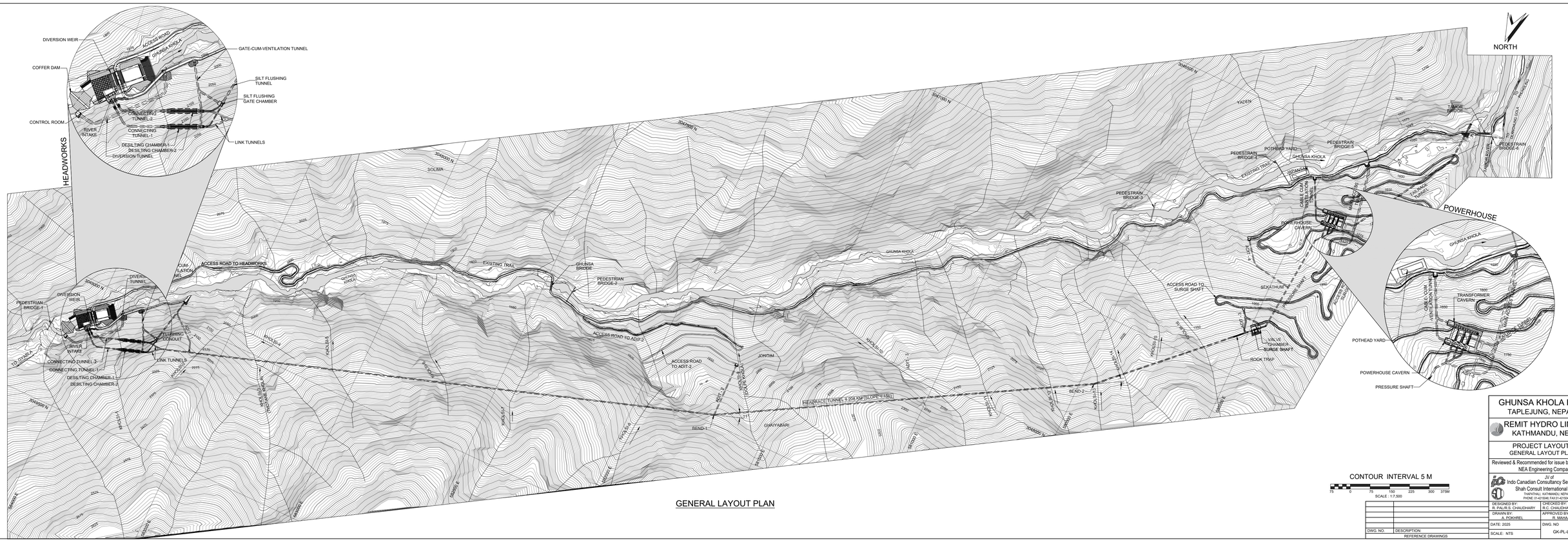
GEOLOGY
GEOLOGICAL SECTION ALONG TAILRACE TUNNEL

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

MAPPED BY: DR.R.B. SAH/A. BHATTACHARYA	CHECKED BY: R.C. CHAUDHARY/Y. DEVA
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-GE-S-07
SCALE: NTS	

4. Project Layout



GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

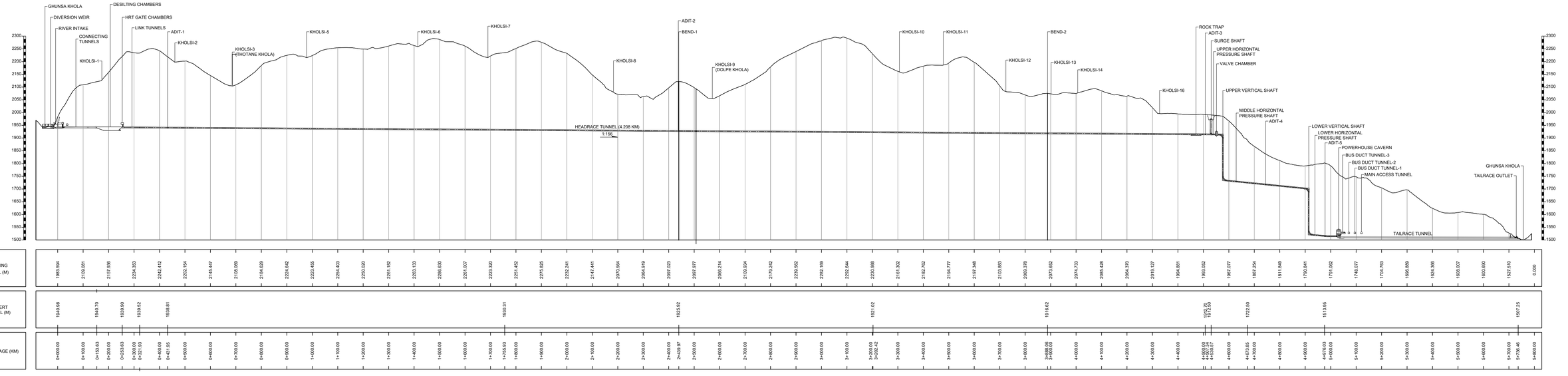
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

PROJECT LAYOUT
GENERAL LAYOUT PLAN

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE:-01-4225046, FAX:01-4225046

		DESIGNED BY: R. PAUR,S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
		DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
		DATE: 2025	DWG. NO GK-PL-L-01
DWG. NO.	DESCRIPTION:	SCALE: NTS	
REFERENCE DRAWINGS			



GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

PROJECT LAYOUT
LONGITUNIAL PROFILE ALONG PROJECT COMPONENTS

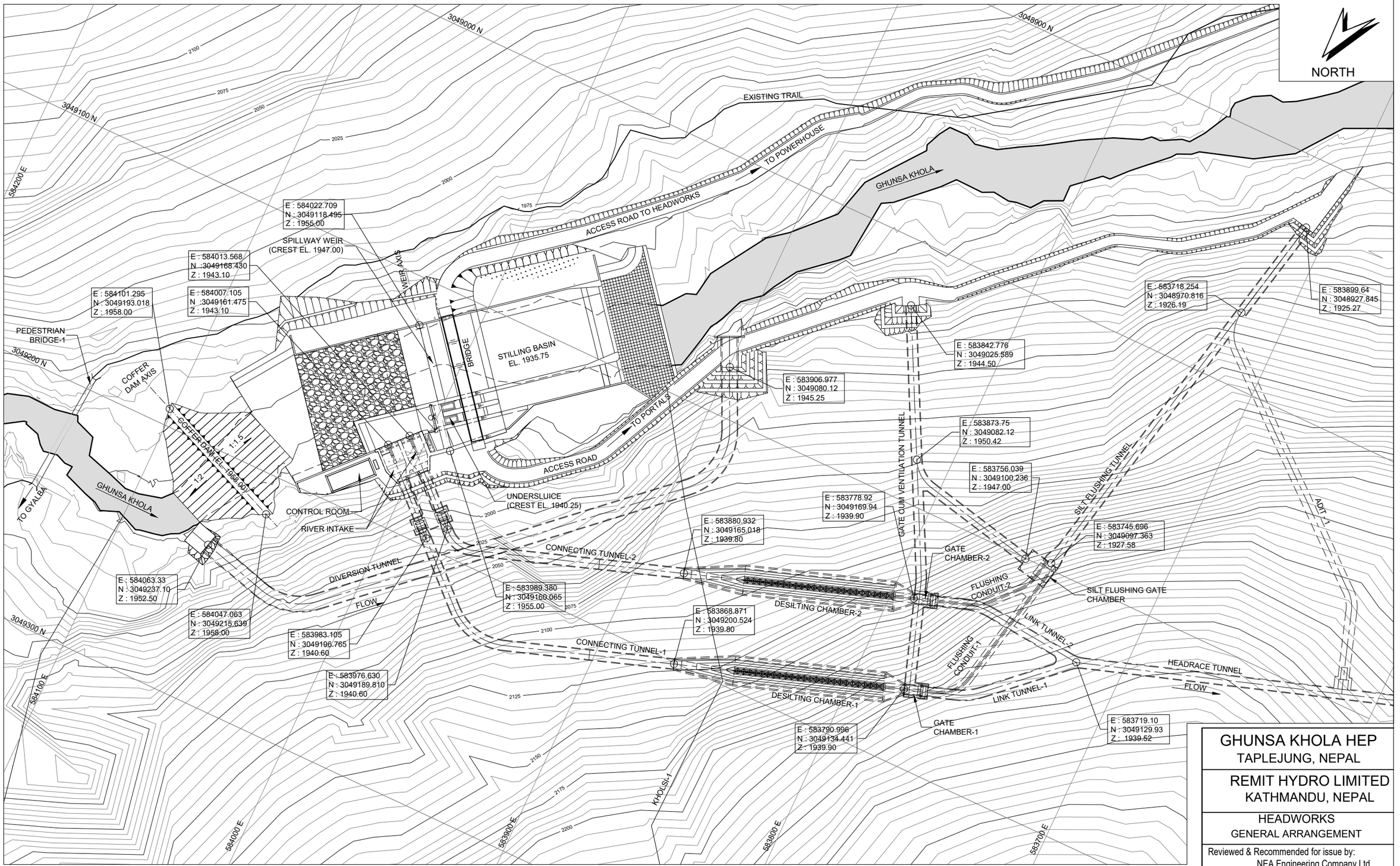
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE:-01-4225046, FAX:01-4225046

HORIZONTAL : 1:8,000
VERTICAL : 1:8,000

		DESIGNED BY: R. PAUR,S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
		DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
		DATE: 2025	DWG. NO GK-PL-S-02
DWG. NO.	DESCRIPTION:	SCALE: NTS	
REFERENCE DRAWINGS			

5. Headworks



GENERAL ARRANGEMENT

CONTOUR INTERVAL 5 M

15 0 15 30 45 60 75M

SCALE : 1:1,500

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HEADWORKS
GENERAL ARRANGEMENT

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-L-01
SCALE: NTS	

NORTH

3049100 N
3049050 N
3049150 N
3049200 N
EXISTING TRAIL
1975
ACCESS ROAD TO POWERHOUSE
E : 584022.709
N : 3049118.495
Z : 1955.00
A GK-HW-C -04
EL. 1964.00
EL. 1957.00
EL. 1954.75
WEIR AXIS
EL. 1947.25
GABION WALL EL. 1955.00
28460
8600
65°
6500
52820
EL. 1955.00
129880
24405
52505
EL. 1947.50
600
10500
R10860
18000
2600
9365
PCC CURTAIN WALL
C.J.
1950
B GK-HW-C -05
125Ø PVC DRAIN PIPE @4000 C/C BW FILLED WITH GRADED FILTER
26190
43390
9430
2990
5545
13095
2745
32000
39030
4820
2235
4945
1500
20000
1500
BRIDGE
SPILLWAY WEIR 1:1.5
1:3
EL. 1947.00
EL. 1955.00
42500
STILLING BASIN EL. 1935.75
1:2
EL. 1938.25
28000
34100
P. C. C. BLOCKS 1500x1500x1200 WITH 75 WIDE GAP FILLED WITH AGGREGATE
GHUNSA KHOLA
ROCK PROTECTION UP TO EL. 1944.00
RADIAL GATE
STOP LOG
48890
1:1.5
17135
16755
9500
EL. 1944.00
EL. 1946.00
EL. 1948.50
EL. 1946.50
EL. 1947.00
EL. 1955.00
UPSTREAM APRON
1:20.3
1:1.33
TRASH REMOVAL GATE
3900
500
5850
600
16380
10210
1:4
UNDERSLUICE
EL. 1946.50
1500
3500
2000
3500
1500
STILLING BASIN EL. 1935.75
1:2
51000
1500
20000
3500
9600
12325
14225
1500
2620
21000
RIVER INTAKE-1
RIVER INTAKE-2
C.J.
31720
600
3000
EL. 1942.75
GRAVEL FLUSHING CHANNEL 1:42
EL. 1947.50
600
EL. 1947.25
4450
2100
6600
EL. 1955.00
EL. 1954.75
CONTROL ROOM
18500
4800
EL. 1955.00
EL. 1955.00
EL. 1954.75
E : 583989.380
N : 3049160.065
Z : 1955.00
584050 E
DISEL GENERATOR
COFFER DAM AXIS
EL. 1970.00
1975
2000
INTAKE GATE CHAMBER EL. 1955.00
TUNNEL-1
TUNNEL-2
584000 E
583950 E
ACCESS ROAD TO PORTALS

CONTOUR INTERVAL 1 M

5 0 5 10 15 20 25M
SCALE : 1:500

GK-HW-C-05	SPILWAY WEIR LONGITUDINAL SECTION
GK-HW-C-04	DIVERSION WEIR CROSS SECTION
GK-HW-C-03	UNDERSLUICE PLAN AT EL. 1948.50
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

REMIT HYDRO
रेमित हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

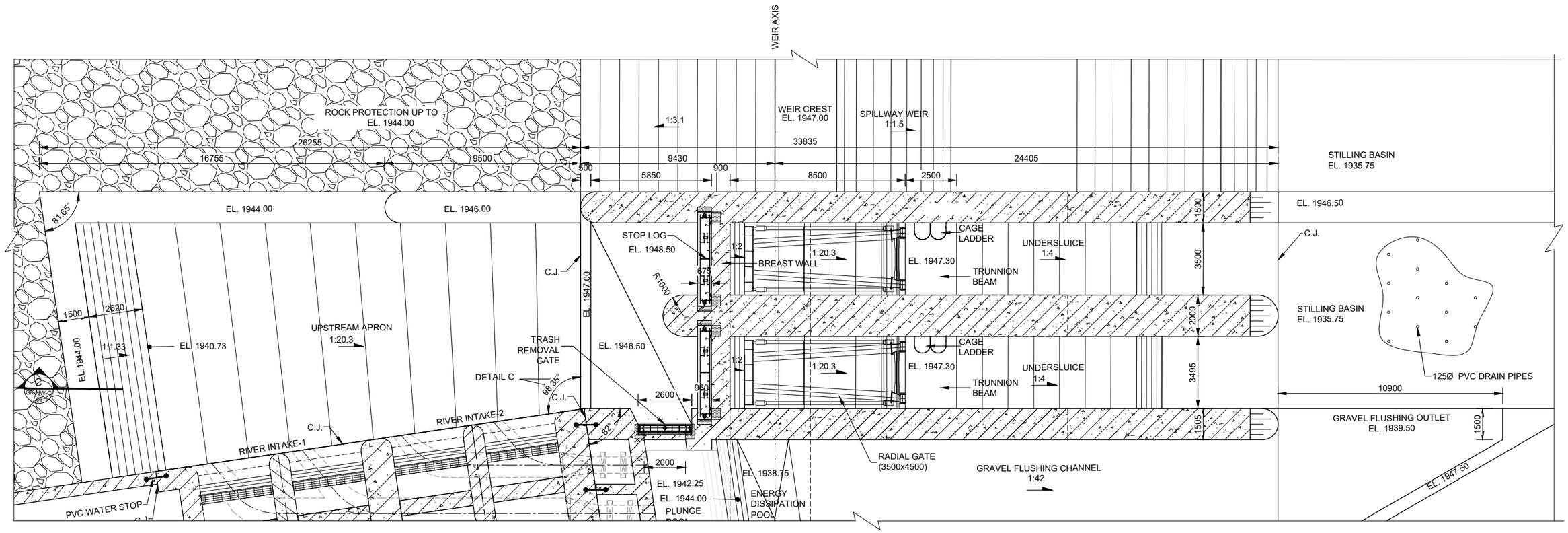
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HEADWORKS
DIVERSION WEIR
PLAN

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

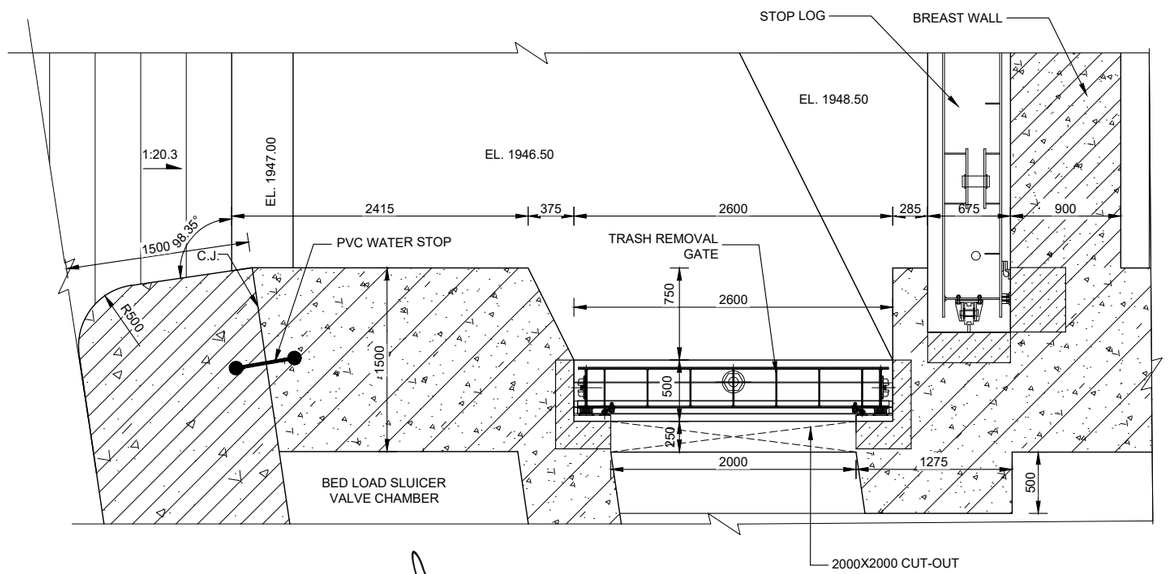
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-02
SCALE: NTS	



UNDERSLUICE PLAN AT EL. 1948.50

SCALE A



DETAIL C

SCALE B

SCALE A : 1:200

SCALE B : 1:50

REMIT HYDRO रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

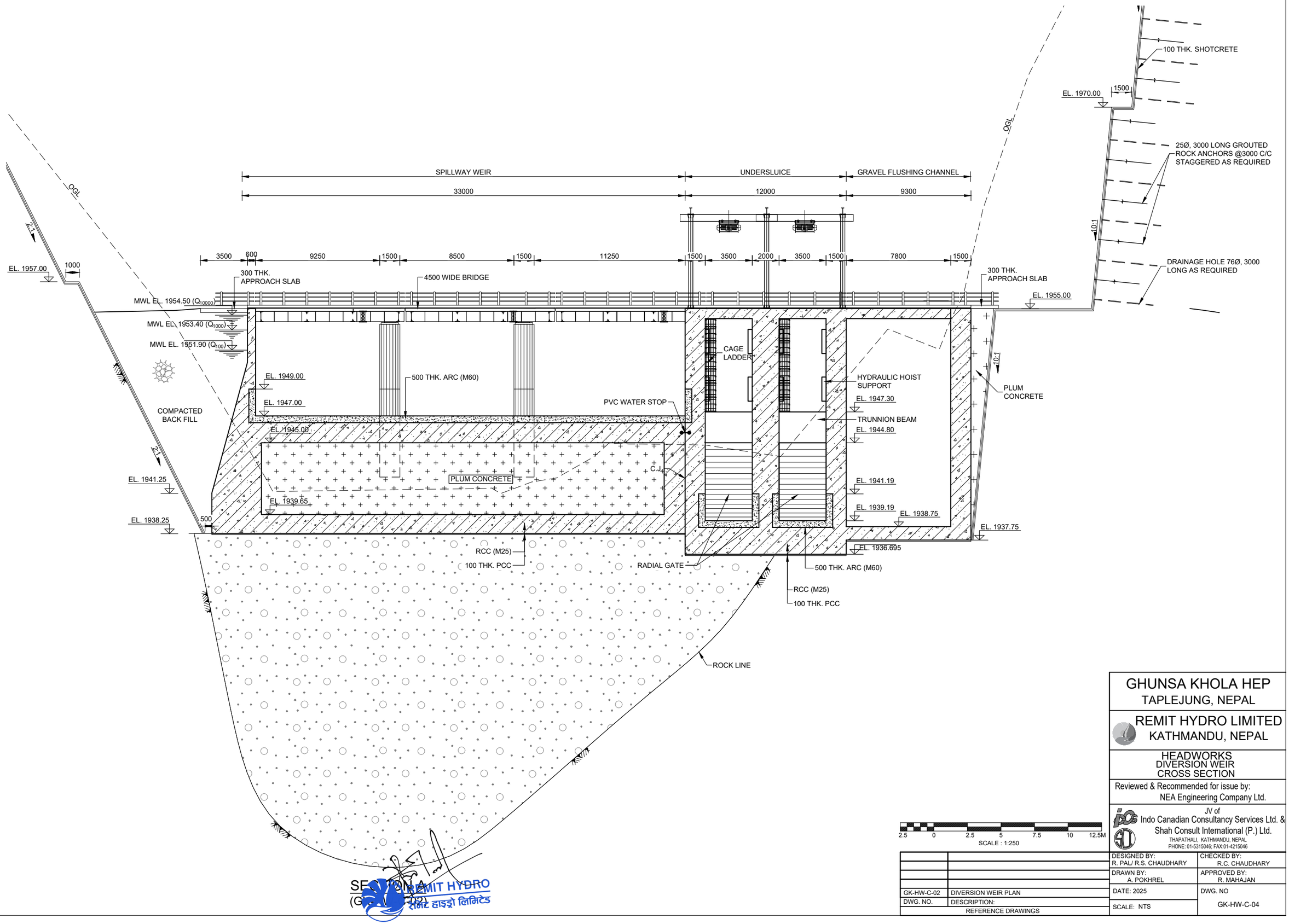
HEADWORKS
UNDERSLUICE
PLAN AT EL. 1948.50

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

GK-HW-C-02	DIVERSION WEIR PLAN
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-03
SCALE: NTS	



SECTION A-A
(GK-HW-C-02)

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

2.5 0 2.5 5 7.5 10 12.5M
SCALE : 1:250

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

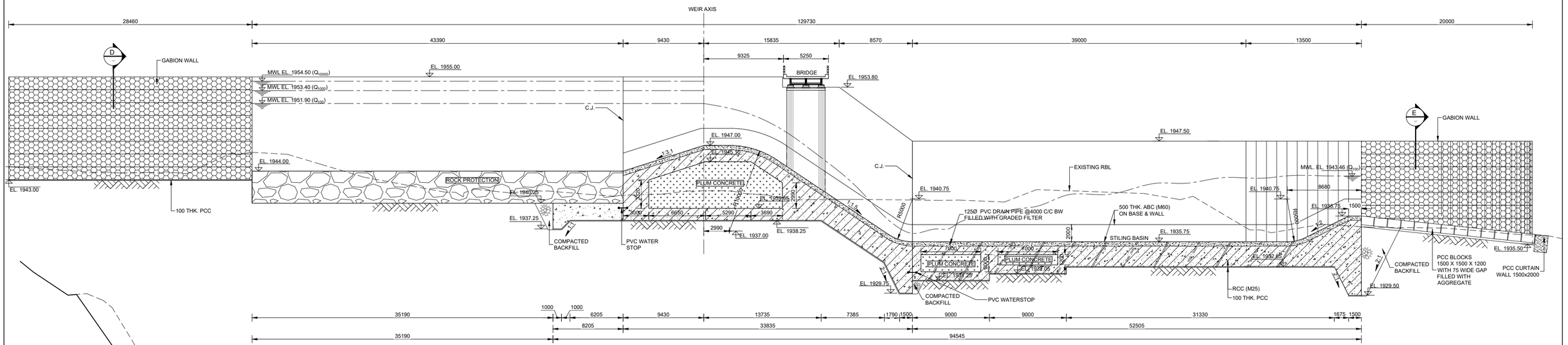
HEADWORKS
DIVERSION WEIR
CROSS SECTION

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

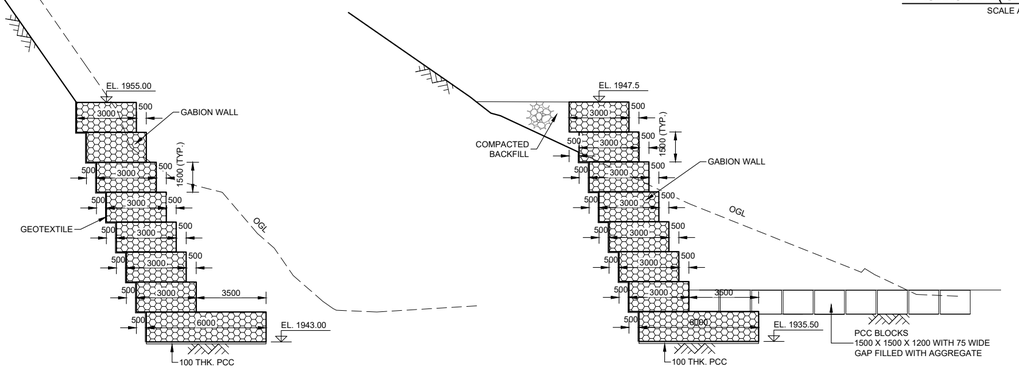
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

GK-HW-C-02	DIVERSION WEIR PLAN
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-04
SCALE: NTS	



SECTION B (GK-HW-C-02)
SCALE A



SECTION D
SCALE B

SECTION E
SCALE B

SCALE A : 1:300

SCALE B : 1:200

GK-HW-C-02	DIVERSION WEIR PLAN
DWG. NO.	DESCRIPTION:

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-05
SCALE: NTS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

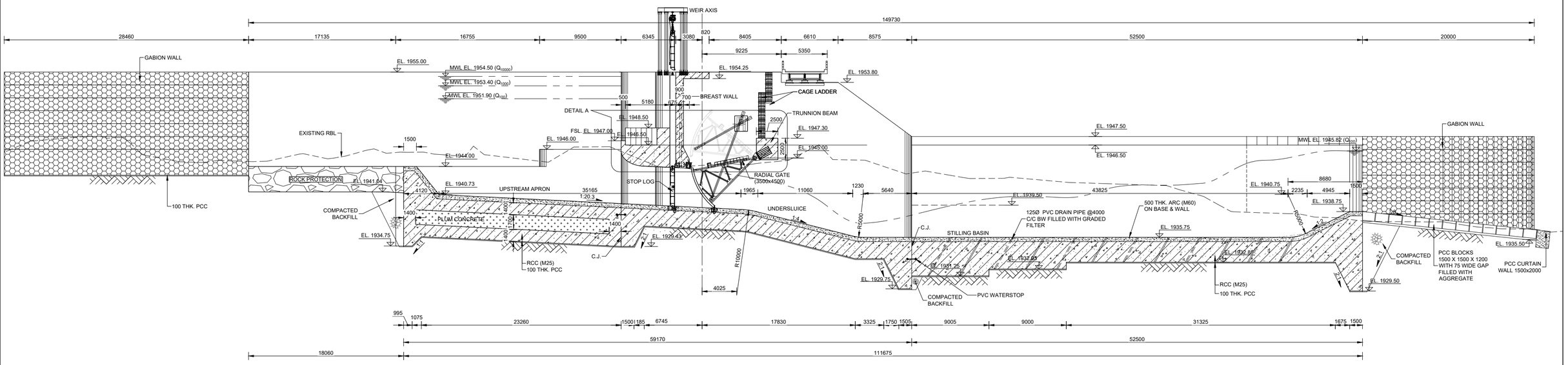
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HEADWORKS
SPILLWAY WEIR
LONGITUDINAL SECTION

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

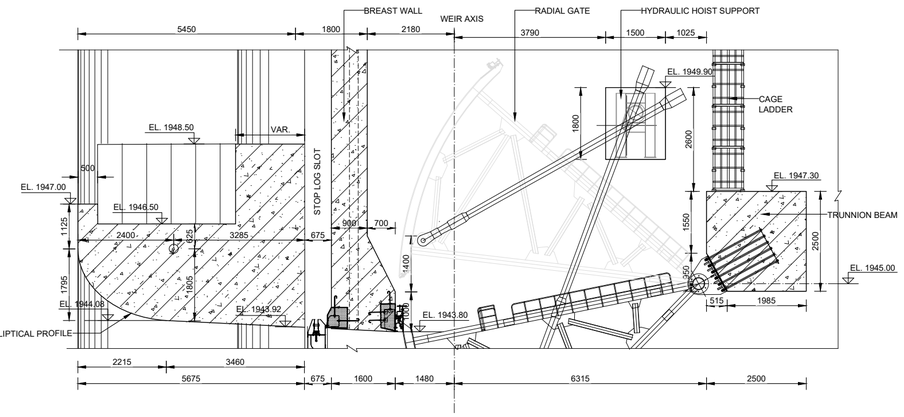
JV of
Indo Canadian Consultancy Services Ltd. & Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-4215046; FAX:01-4215046

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



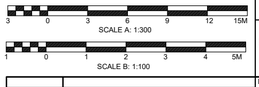
UNDERSLUICE LONGITUDINAL SECTION C

SCALE A



DETAIL A

SCALE B



GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HEADWORKS
UNDERSLUICE
LONGITUDINAL SECTION

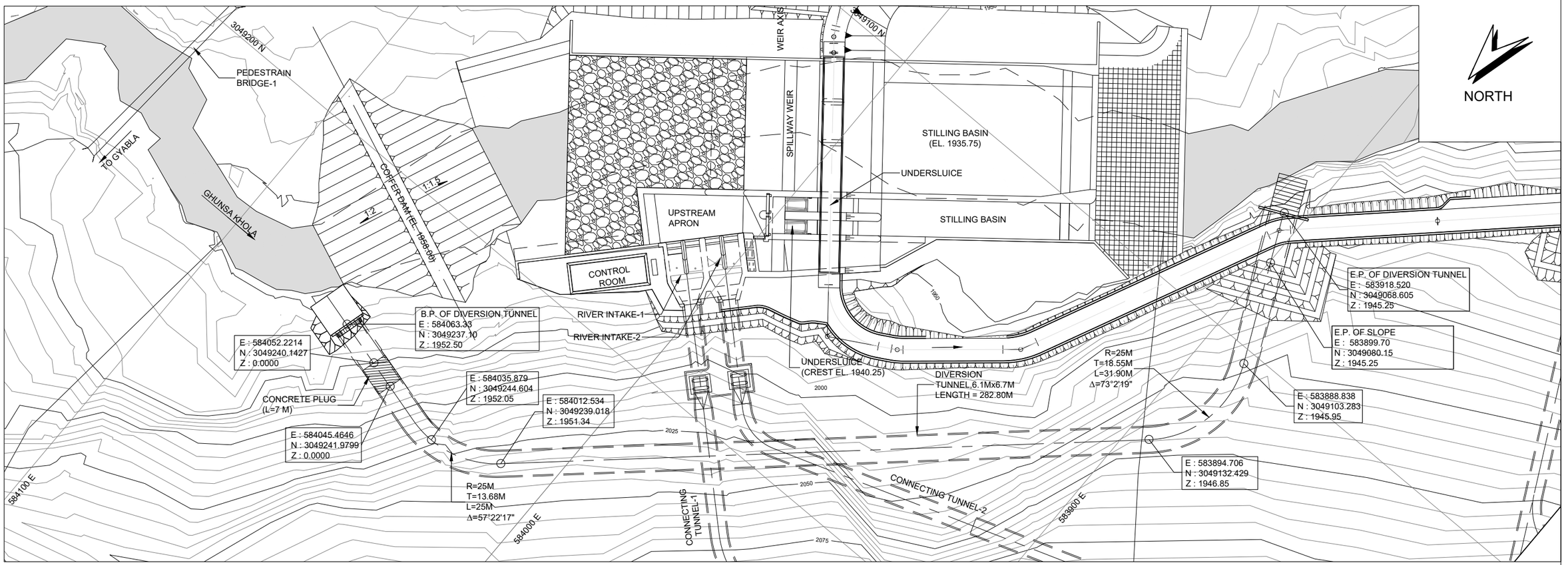
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-4215046, FAX:01-4215046

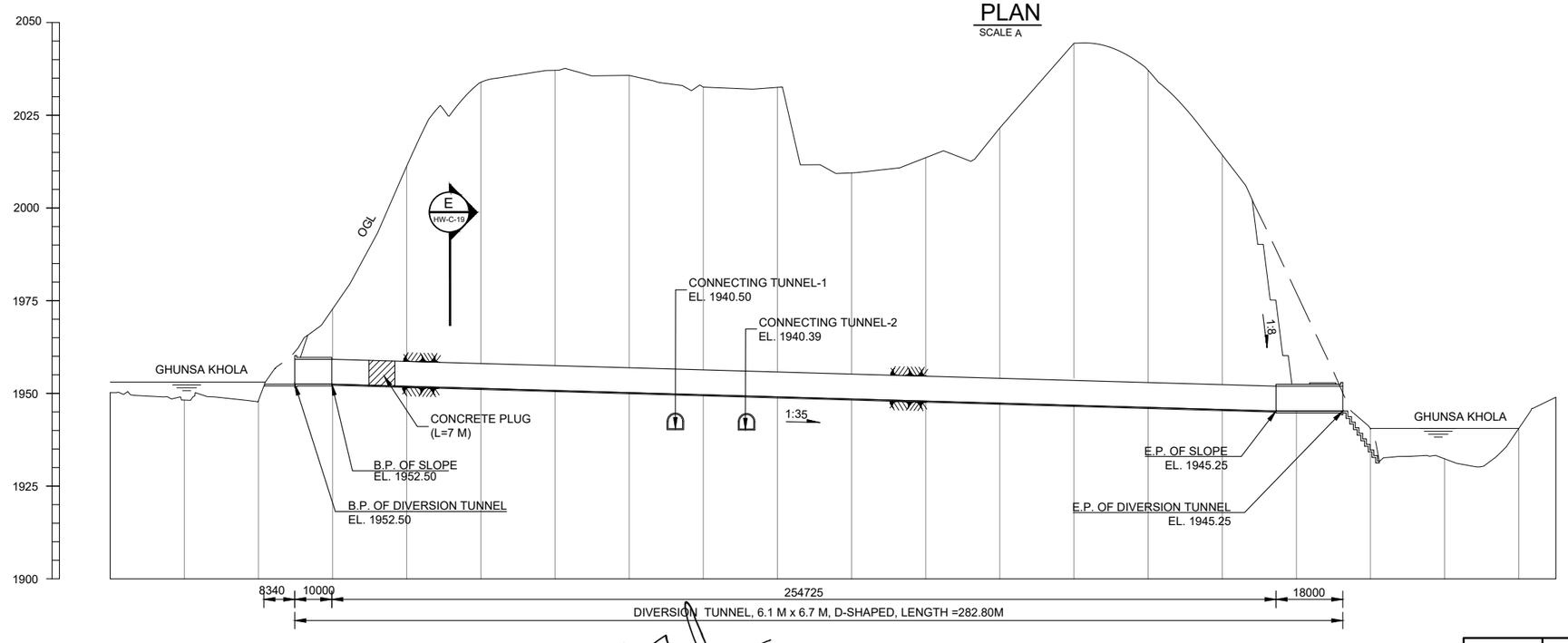
GK-HW-C-02	DIVERSION WEIR PLAN
DWG. NO.	DESCRIPTION:

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-06
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



PLAN
SCALE A



LONGITUDINAL PROFILE
ALONG TUNNEL
SCALE B

10 0 10 20 30 40 50M
SCALE A : 1:1,000

15 0 15 30 45 60 75M
SCALE B : 1:1,500

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

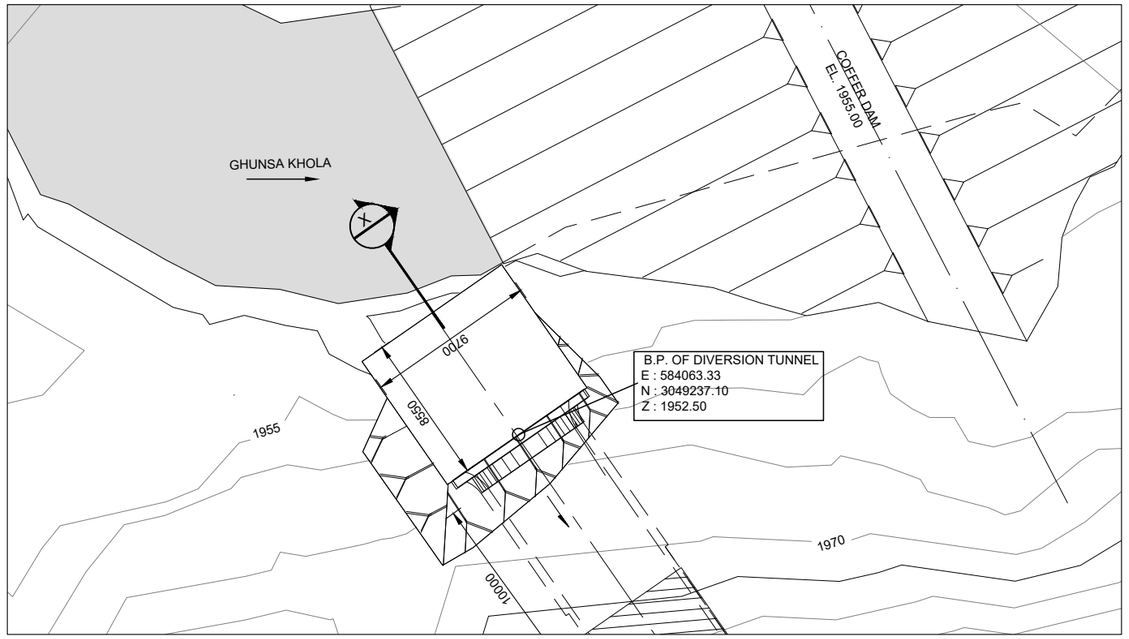
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HEADWORKS
DIVERSION TUNNEL
PLAN & PROFILE

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

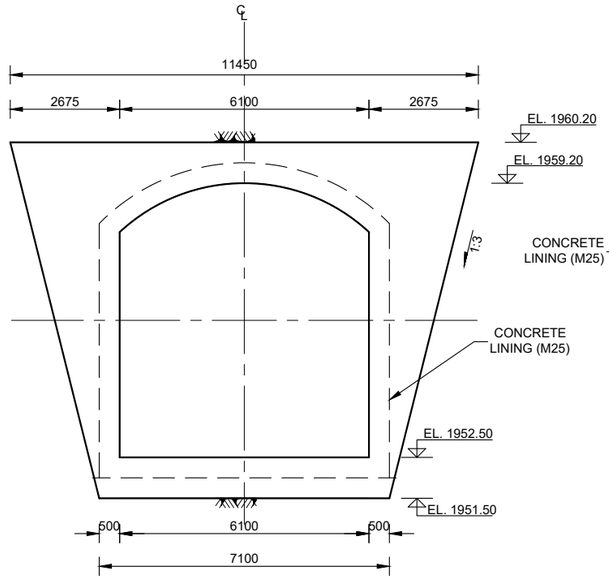
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-07
SCALE: NTS	

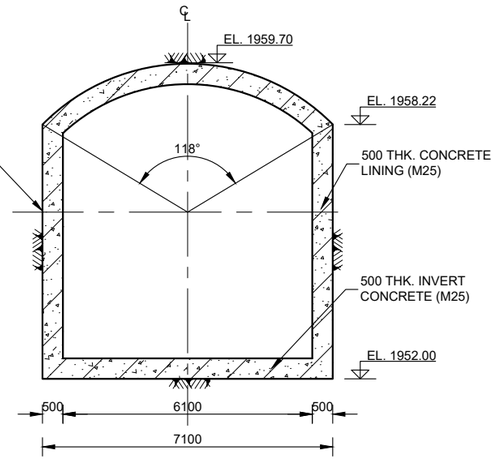


PLAN

SCALE:A

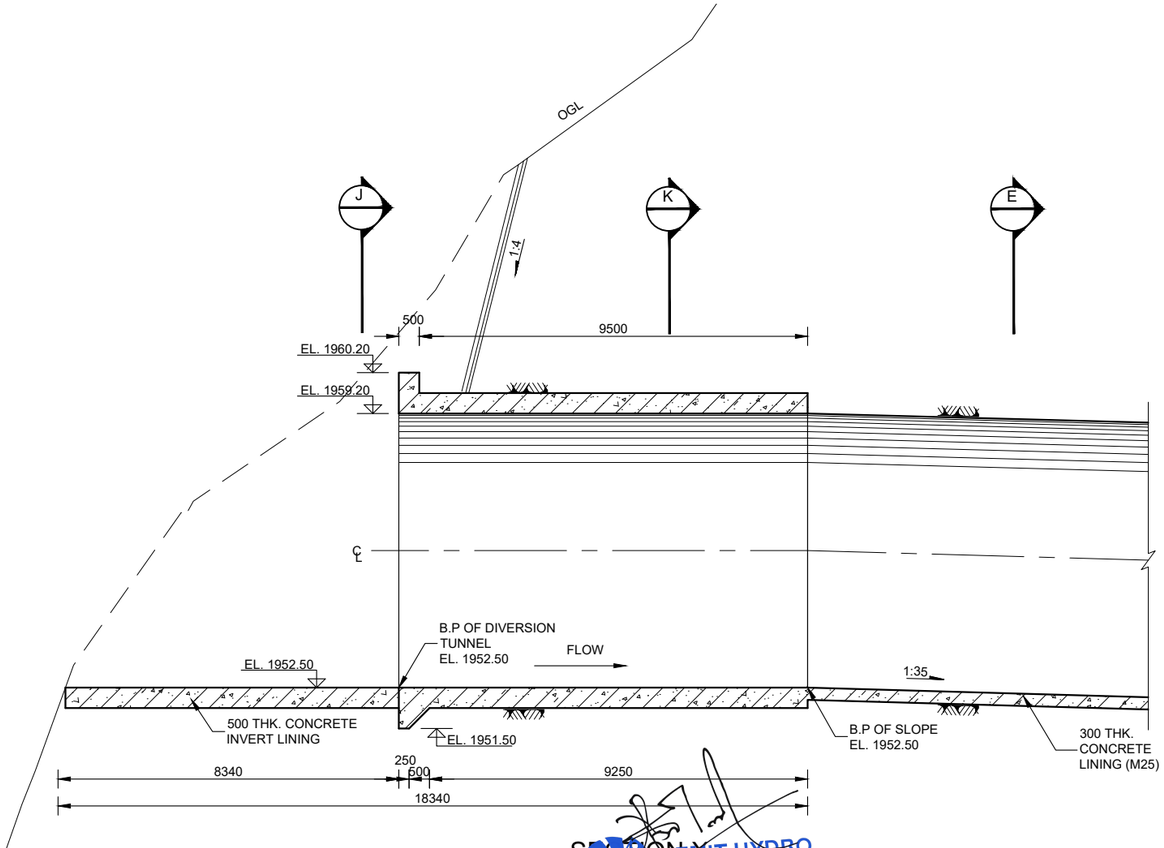


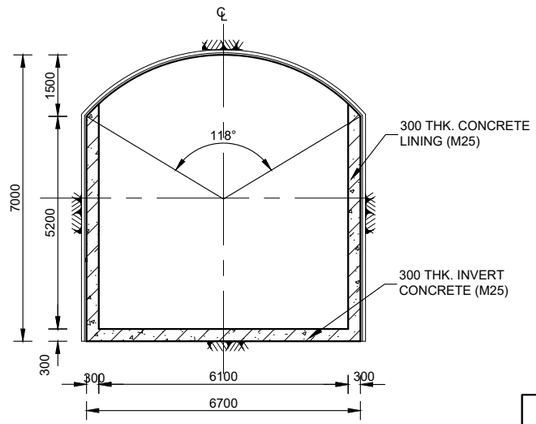
ELEVATION J



SECTION K

SCALE C





SECTION E

SCALE C

3.5 0 3.5 7 10.5 14 17.5M

SCALE A : 1:350

2.5 0 2.5 5 7.5 10 12.5M

SCALE B : 1:250

2 0 2 4 6 8 10M

SCALE C : 1:200

GK-HW-C-07	DIVERSION TUNNEL PLAN & PROFILE
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED

KATHMANDU, NEPAL

HEADWORKS

DIVERSION TUNNEL

INLET PORTAL DETAILS

Reviewed & Recommended for issue by:

NEA Engineering Company Ltd.

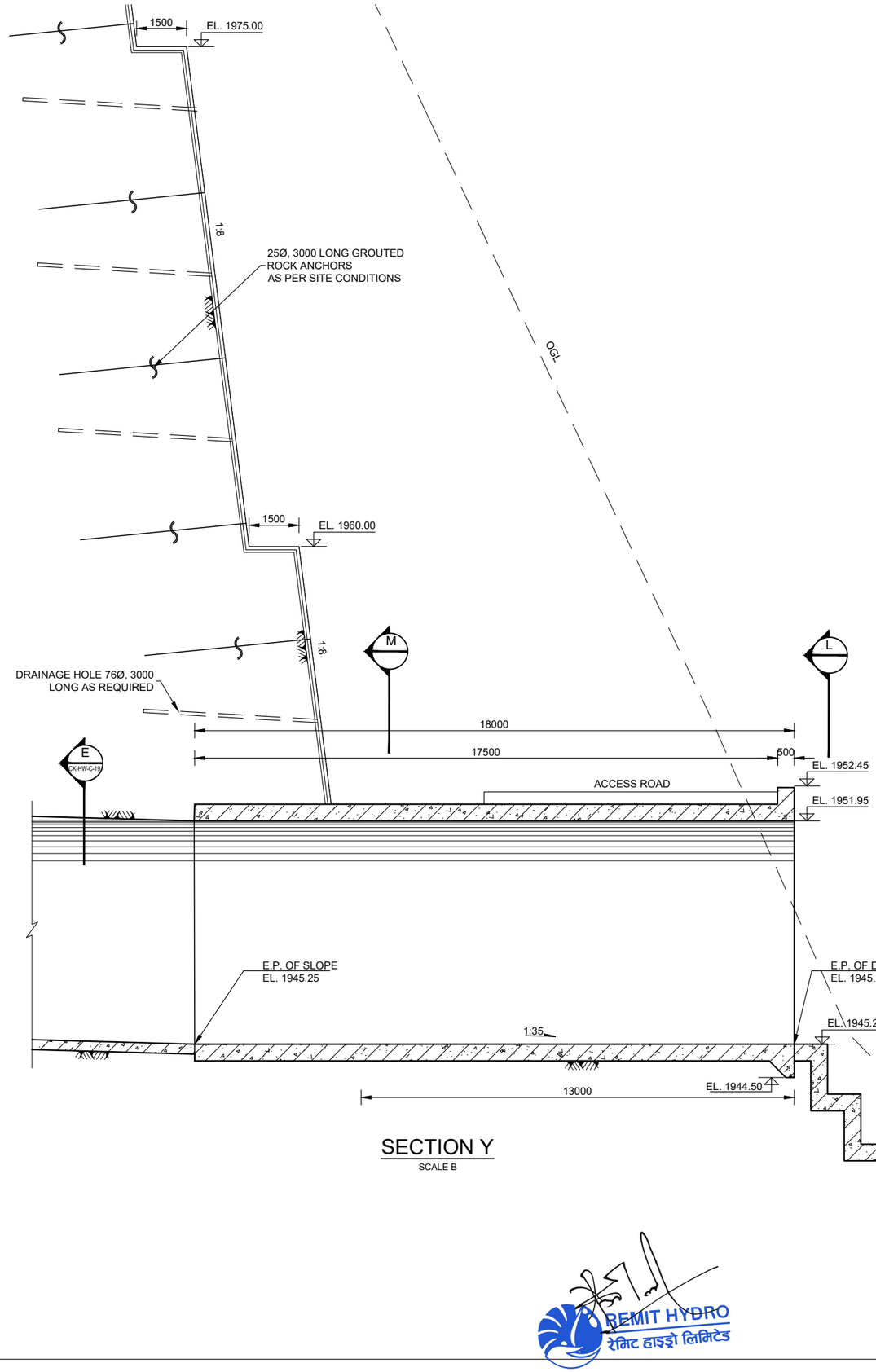
JV of

Indo Canadian Consultancy Services Ltd. &

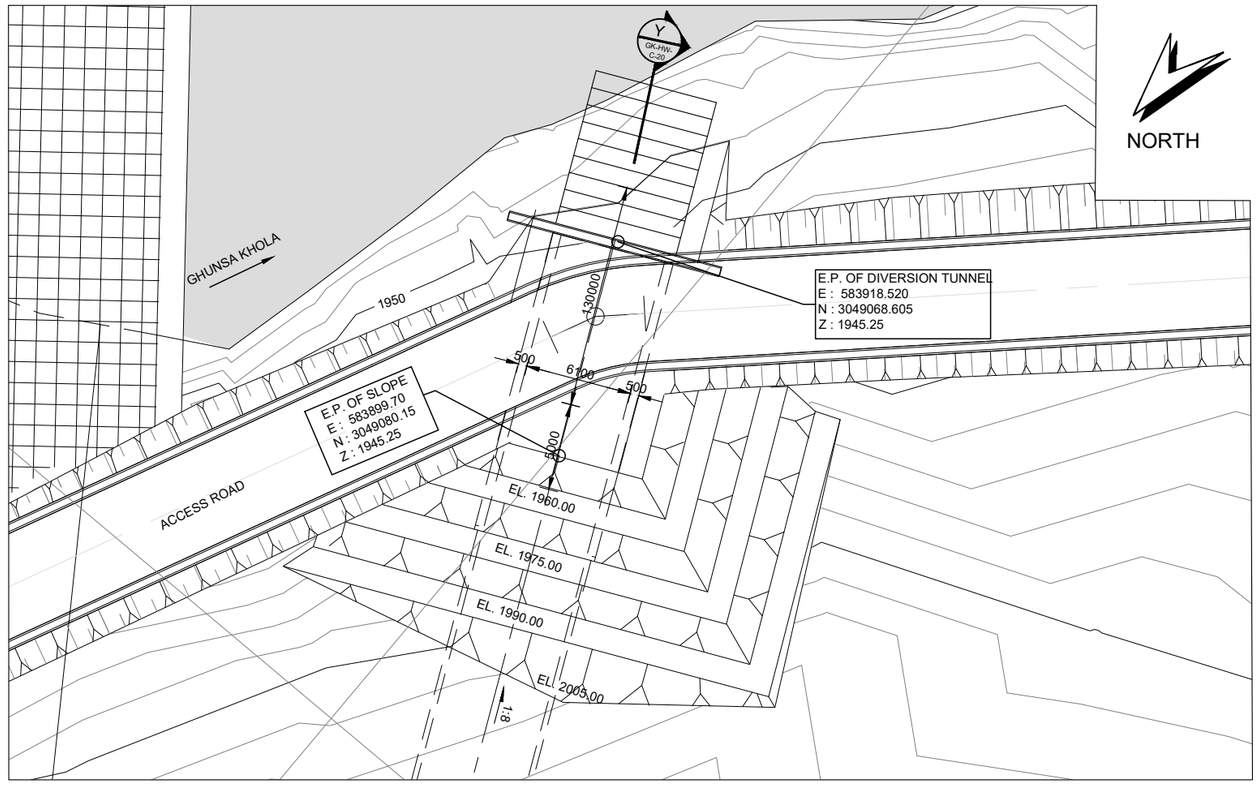
Shah Consult International (P.) Ltd.

THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

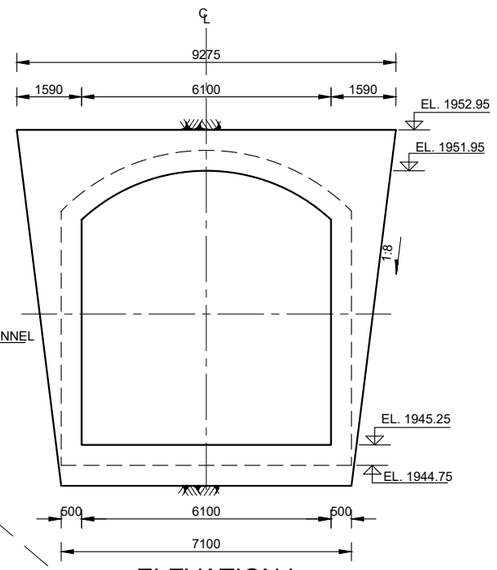
DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-08
SCALE: NTS	



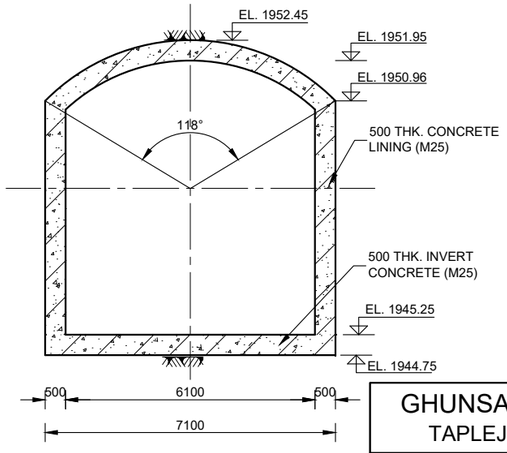
SECTION Y
SCALE B



PLAN
SCALE:A



ELEVATION L
SCALE B



SECTION M
SCALE B

3.5 0 3.5 7 10.5 14 17.5M
SCALE A : 1:350

1.5 0 1.5 3 4.5 6 7.5M
SCALE B : 1:150

GK-HW-C-08	DIVERSION TUNNEL INTEL PORTAL DETAILS
GK-HW-C-07	DIVERSION TUNNEL PLAN & PROFILE
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

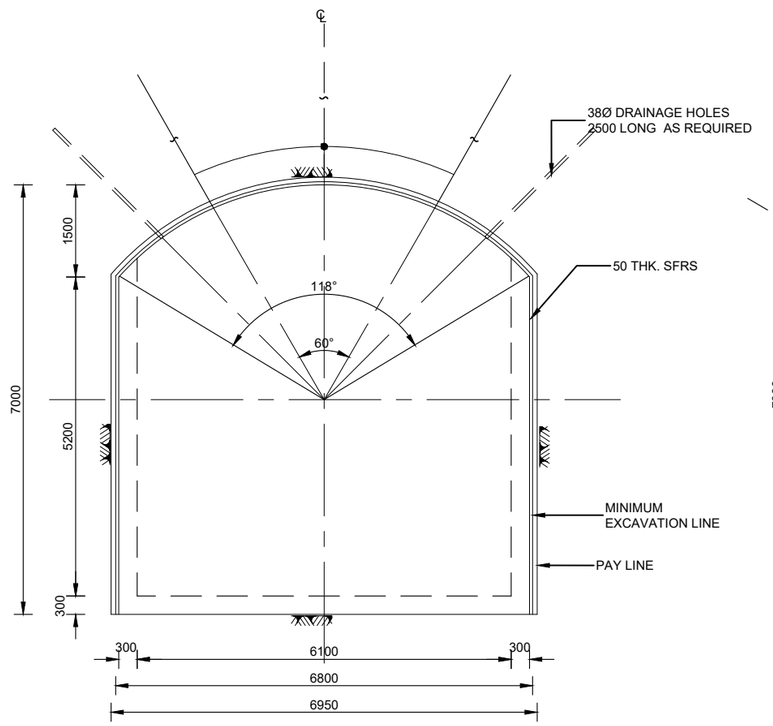
HEADWORKS
DIVERSION TUNNEL
OUTLET PORTAL DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

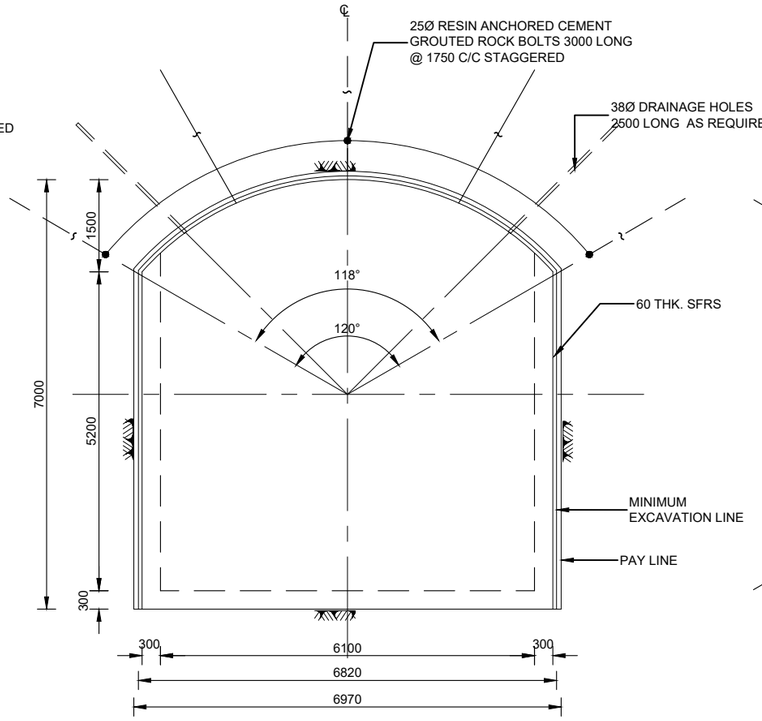
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-09
SCALE: NTS	

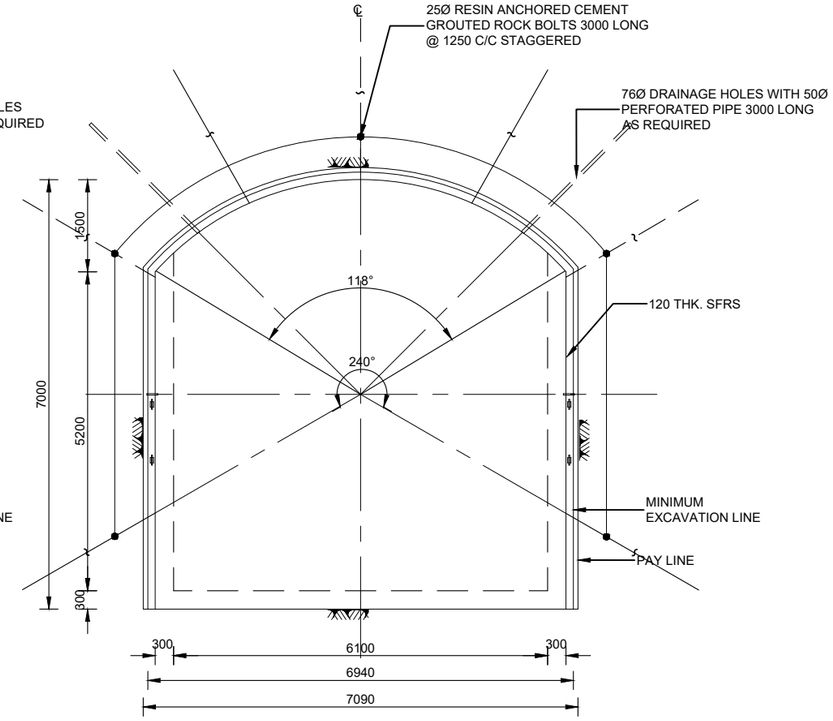
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



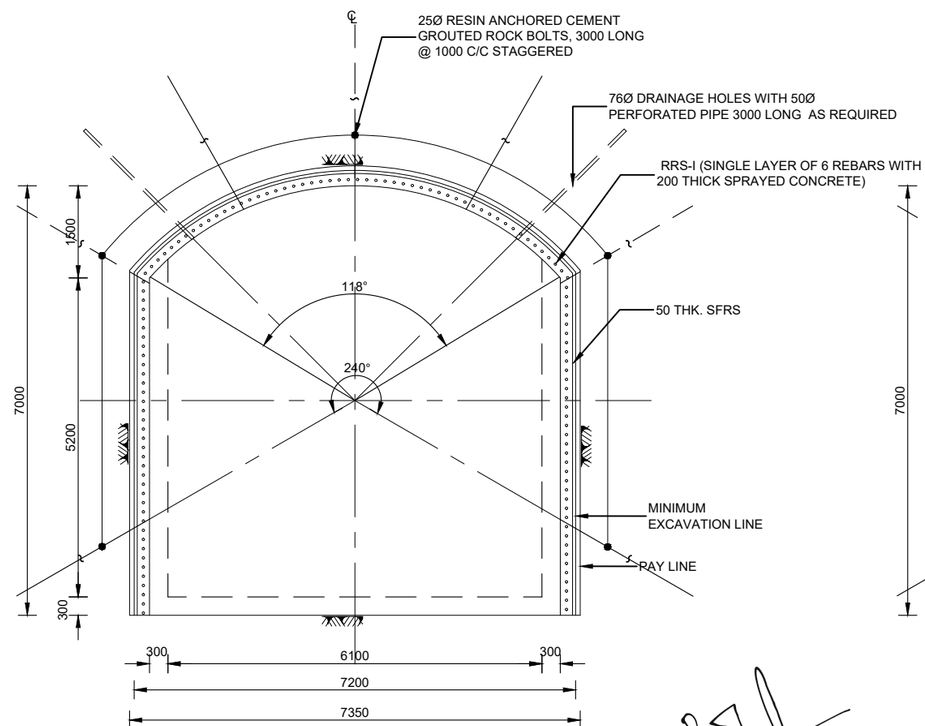
SUPPORT CATEGORY R1
(Q>4.0)



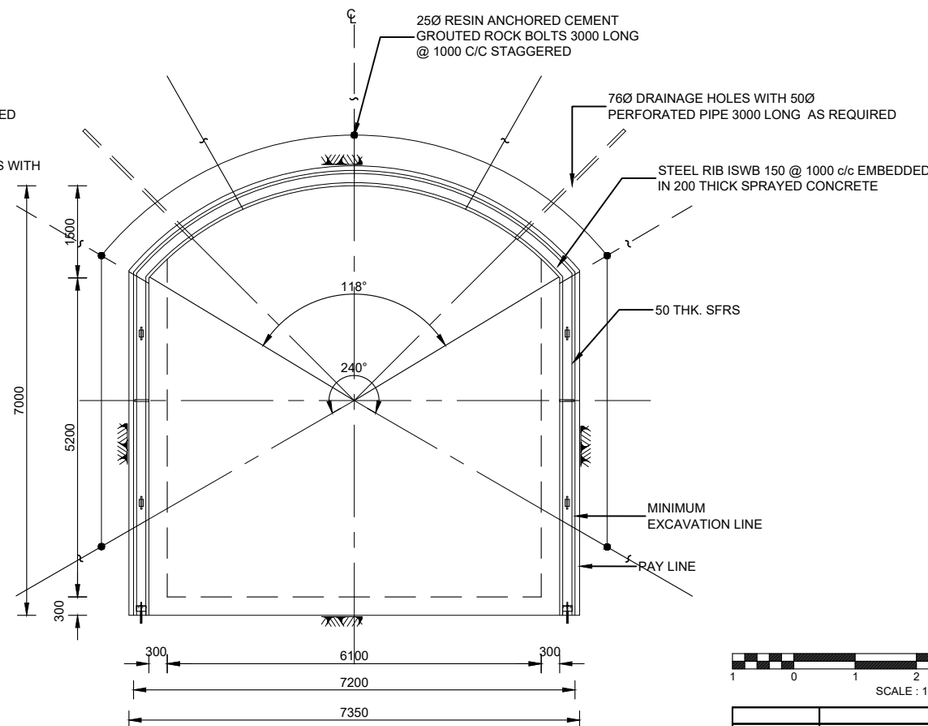
SUPPORT CATEGORY R3
(1<Q<4.0)



SUPPORT CATEGORY R5
(0.1 < Q < 1)



SUPPORT CATEGORY R7 (OPTION-I)
(Q < 0.1)



SUPPORT CATEGORY R7 (OPTION-II)
(Q < 0.1)

ROCK MASS CLASSIFICATION & SUPPORT CATEGORY DETAILS

SUPPORT CATEGORY	Q-VALUE	ROCK CLASS
R_1	>4	I TO III
R_3	1.0 - 4.0	IV
R_5	0.1 - 1.0	V
R_7	< 0.1	VI

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

1 0 1 2 3 4 5M
SCALE : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

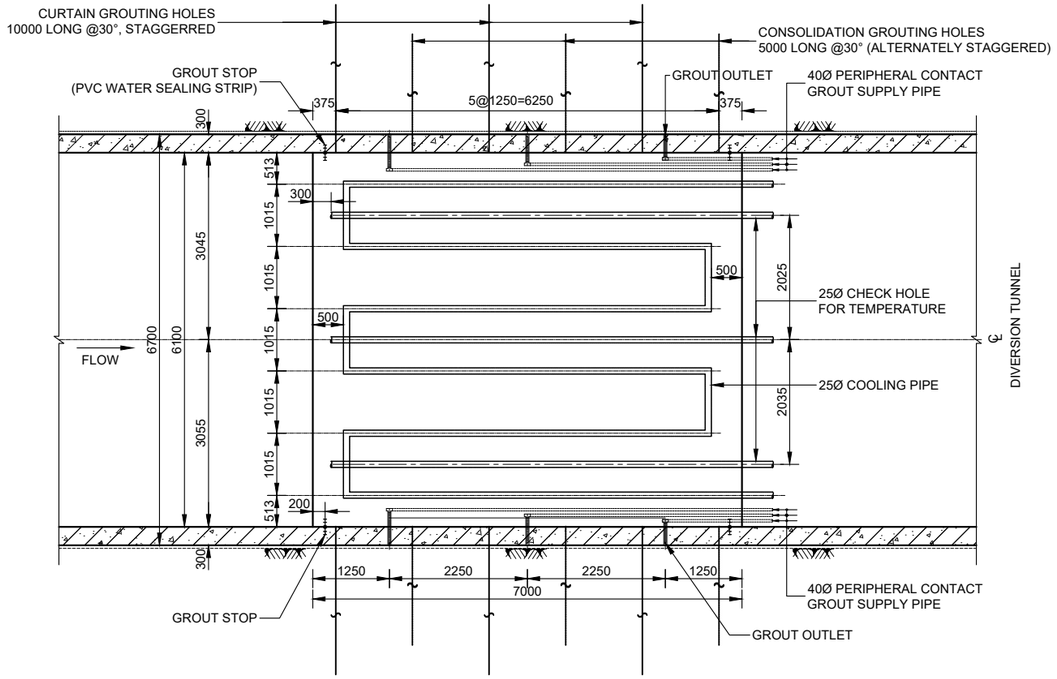
HEADWORKS
DIVERSION TUNNEL
EXCAVATION & ROCK SUPPORT DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

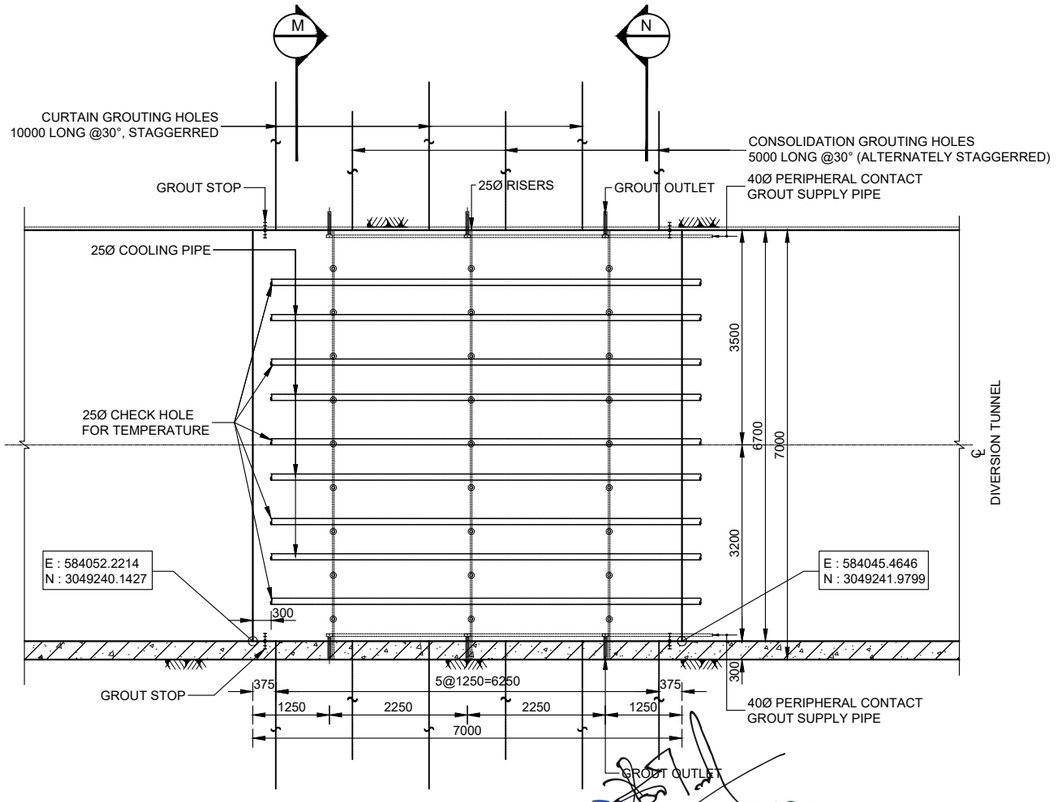
GK-HW-C-12	COFFER DAM PLAN & SECTIONS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: DR. S. SHAH	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-10
SCALE: NTS	



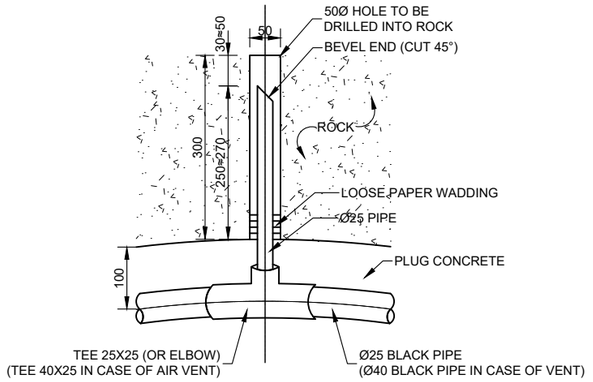
PLAN

SCALE A



PROFILE

SCALE:A

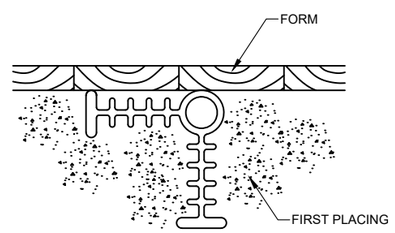


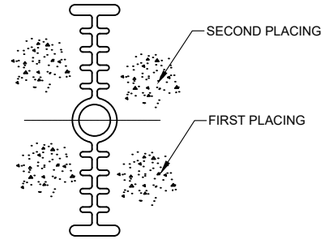
CONTACT GROUT OUTLET OR AIRVENT DETAIL

NONE SCALE

NOTE :

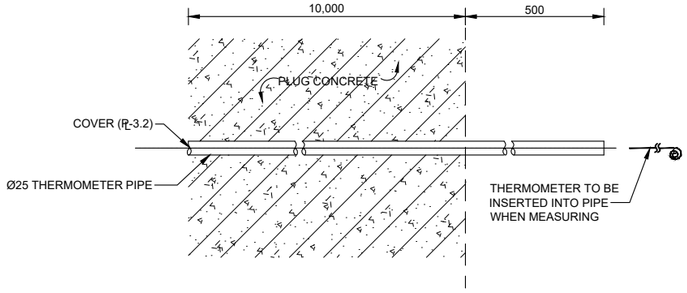
1. PRIOR TO PLACING PLUG CONCRETE, LINING CONCRETE SHALL BE ROUGHENED BY CHIPPING.
2. PIPE COOLING OF CONCRETE SHALL BE COMMENCED DURING SECOND-LIFT PLACING. TEMPERATURE DROP OF CONCRETE SHALL BE RESTRICTED WITHIN 0.5°C/DAY.
3. PERIPHERAL GROUTING SHALL BE MADE AFTER PLUG CONCRETE HAS BEEN COOLED TO 10°C.
4. GROUTING PRESSURE OF CONTACT GROUT SHALL BE 6kg/cm OF VENT OUTLET.
5. DENSITY OF GROUT MIX AND PROCEDURE OF GROUTING FOR PERIPHERAL CONTACT GROUT SHALL FOLLOW THE ENGINEER'S DIRECTION.
6. ALL EMBEDDED PIPES SHALL BE GROUTED WITH CEMENT MORTAR AFTER COMPLETION OF THEIR PURPOSE.





P.V.C WATER SEALING STRIP

NONE SCALE



THERMOMETER PIPE DETAIL

NONE SCALE

1 0 1 2 3 4 5M

SCALE A : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HEADWORKS
DIVERSION TUNNEL
CONCRETE PLUG PLAN, PROFILE & DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

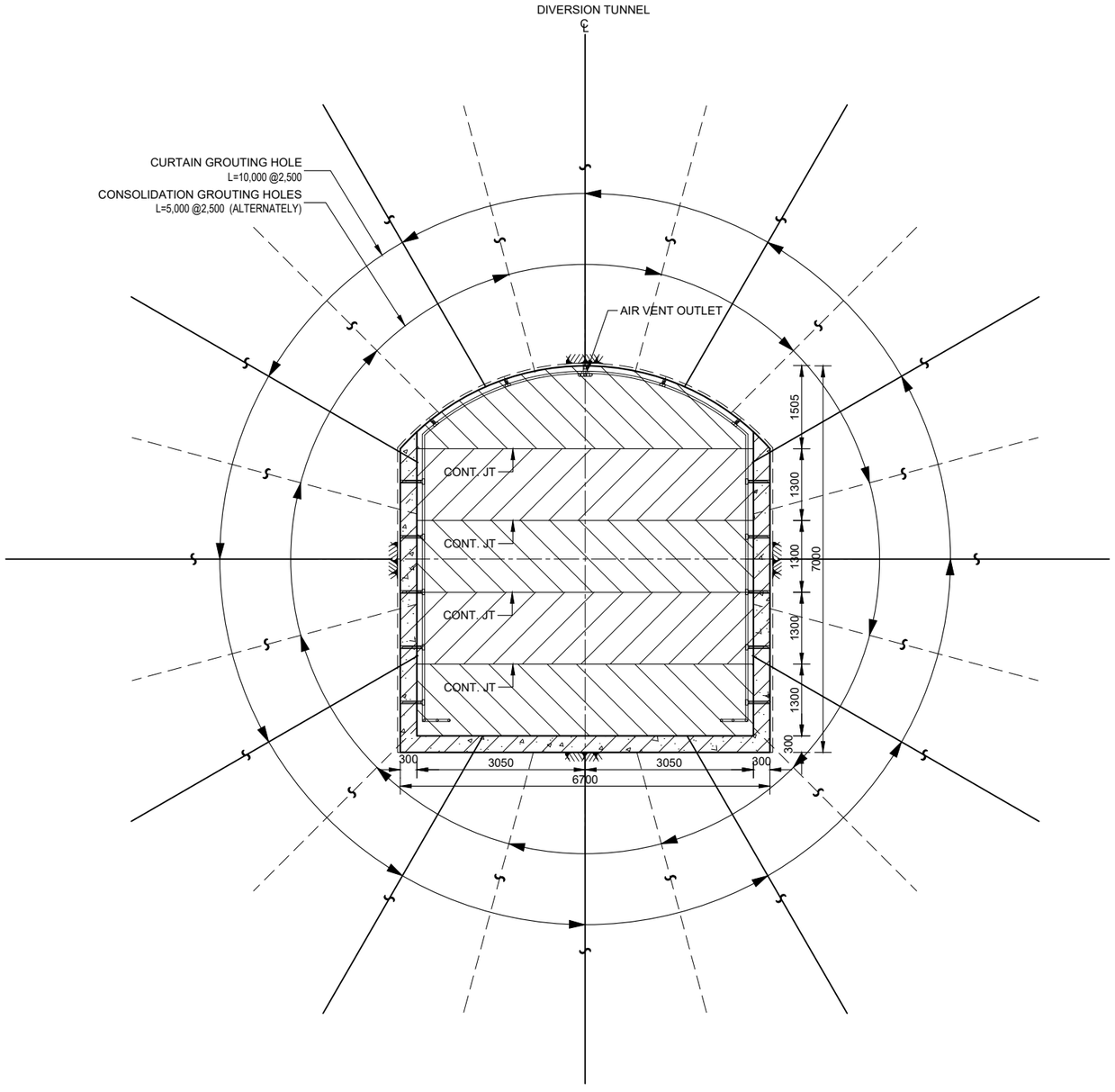
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

GK-HW-C-07	DIVERSION TUNNEL PLAN & SECTIONS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

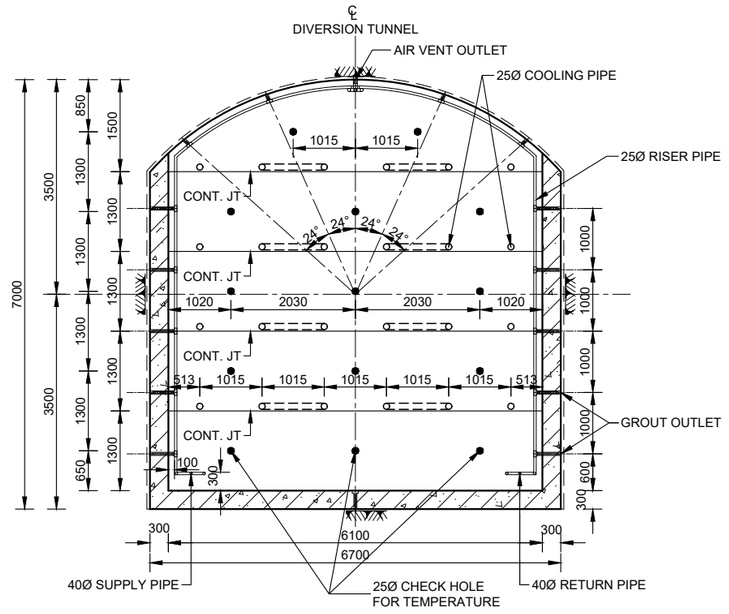
DESIGNED BY: N. SHRESTHA	CHECKED BY: DR. S. SHAH
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-11
SCALE: NTS	

REMIT HYDRO
रेमित हाइड्रो लिमिटेड

NOTE :
1. PRIOR TO PLACING PLUG CONCRETE, LINING CONCRETE SHALL BE ROUGHENED BY CHIPPING.
2. PIPE COOLING OF CONCRETE SHALL BE COMMENCED DURING SECOND-LIFT PLACING. TEMPERATURE DROP OF CONCRETE SHALL BE RESTRICTED WITHIN 0.5°C/DAY.
3. PERIPHERAL GROUTING SHALL BE MADE AFTER PLUG CONCRETE HAS BEEN COOLED TO 10°C.
4. GROUTING PRESSURE OF CONTACT GROUT SHALL BE 6kg/cm OF VENT OUTLET.
5. DENSITY OF GROUT MIX AND PROCEDURE OF GROUTING FOR PERIPHERAL CONTACT GROUT SHALL FOLLOW THE ENGINEER'S DIRECTION.
6. ALL EMBEDDED PIPES SHALL BE GROUTED WITH CEMENT MORTAR AFTER COMPLETION OF THEIR PURPOSE.



SECTION M
SCALE:A



SECTION N
SCALE A

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

1 0 1 2 3 4 5M
SCALE A : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

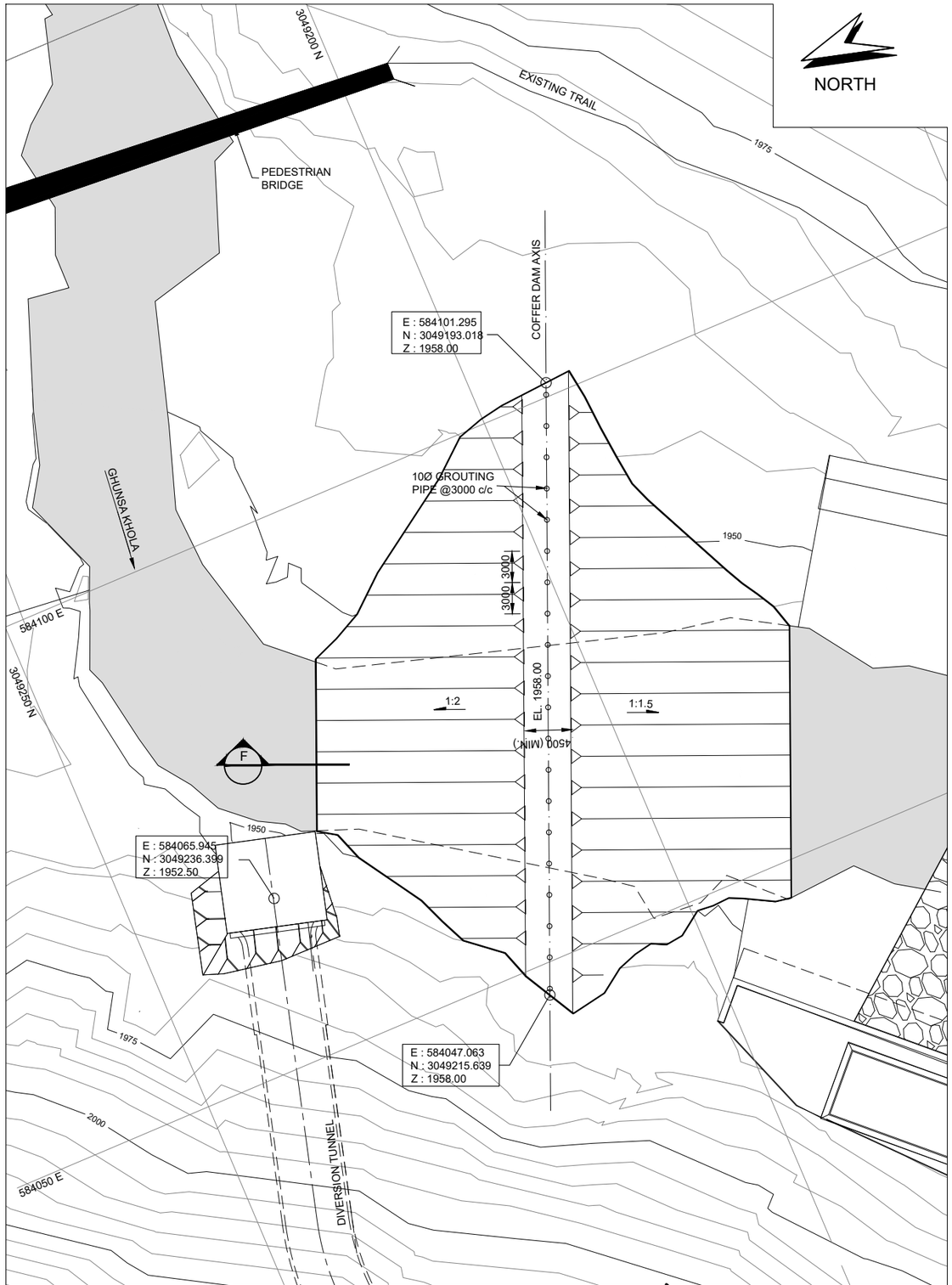
HEADWORKS
DIVERSION TUNNEL
CONCRETE PLUG SECTIONS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

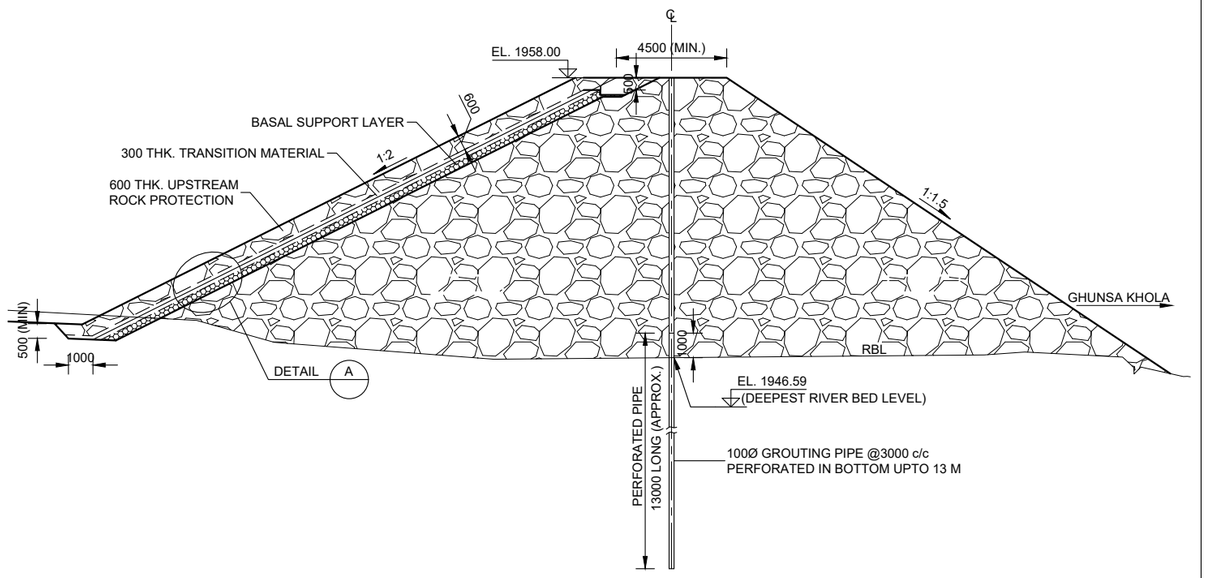
GK-HW-C-11	CONCRETE PLUG PLAN, PROFILE & DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: N. SHRESTHA	CHECKED BY: DR. S. SHAH
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-12
SCALE: NTS	



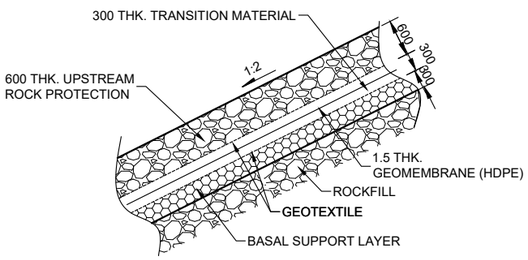
PLAN

SCALE A



CROSS SECTION F

SCALE B



DETAIL A

SCALE C

CONTOUR INTERVAL 1 M

5 0 5 10 15 20 25M

SCALE A : 1:500

2.5 0 2.5 5 7.5 10 12.5M

SCALE B : 1:250

1 0 1 2 3 4 5M

SCALE C : 1:100

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

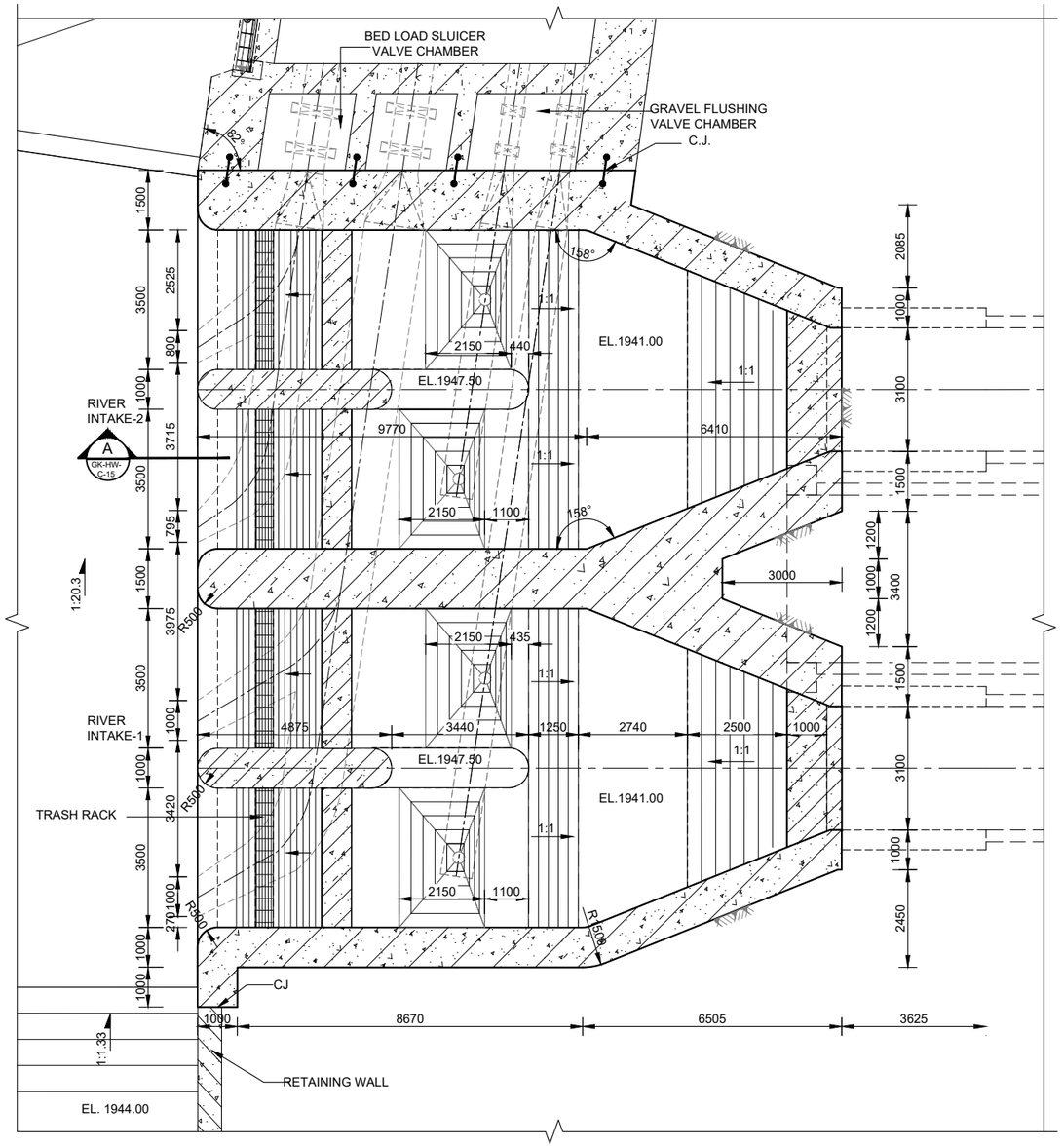
HEADWORKS
COFFER DAM
PLAN & SECTION

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

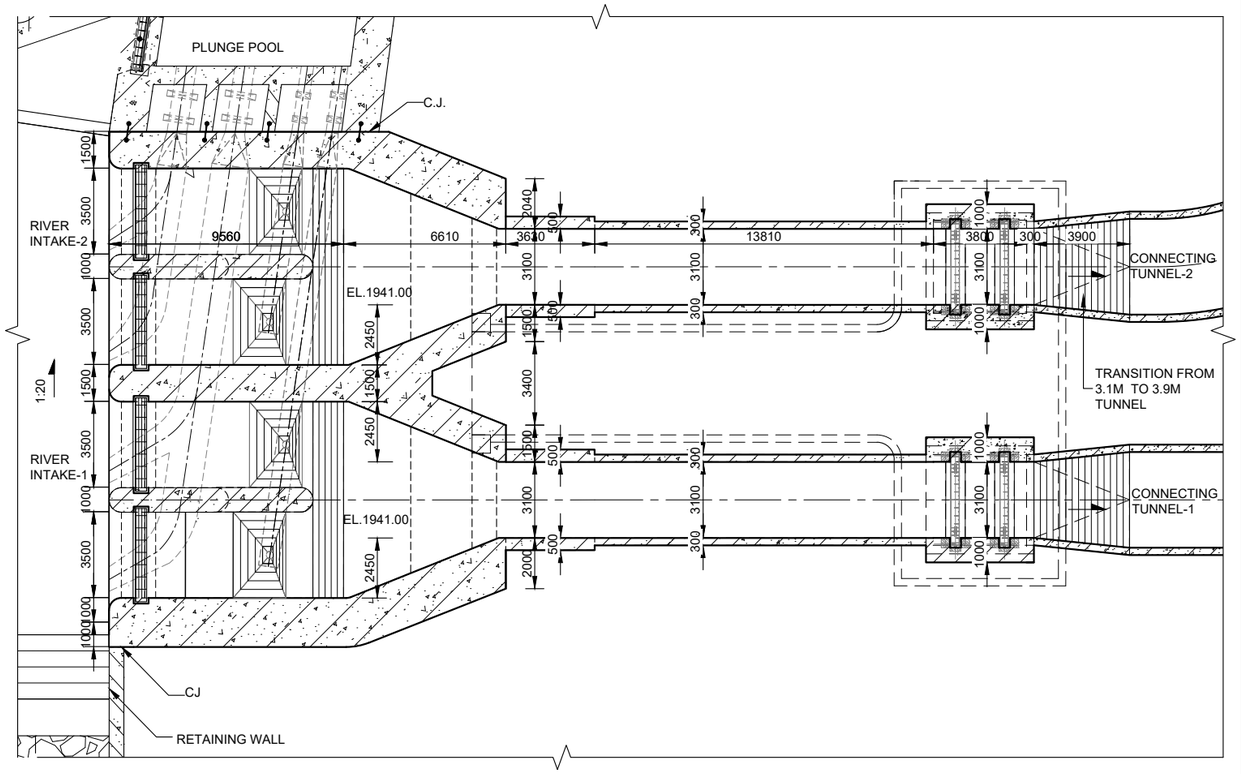
DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-13
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



SECTIONAL PLAN P (GK-HW-C-14)

SCALE B



SECTIONAL PLAN Q (GK-HW-C-14)

SCALE A

2.5 0 2.5 5 7.5 10 12.5M

SCALE-A : 1:250

1.5 0 1.5 3 4.5 6 7.5M

SCALE B: 1:150

GK-HW-C-15	RIVER INTAKE ELEVATION & SECTION
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED

KATHMANDU, NEPAL

HEADWORKS
RIVER INTAKE
PLANS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-14
SCALE: NTS	

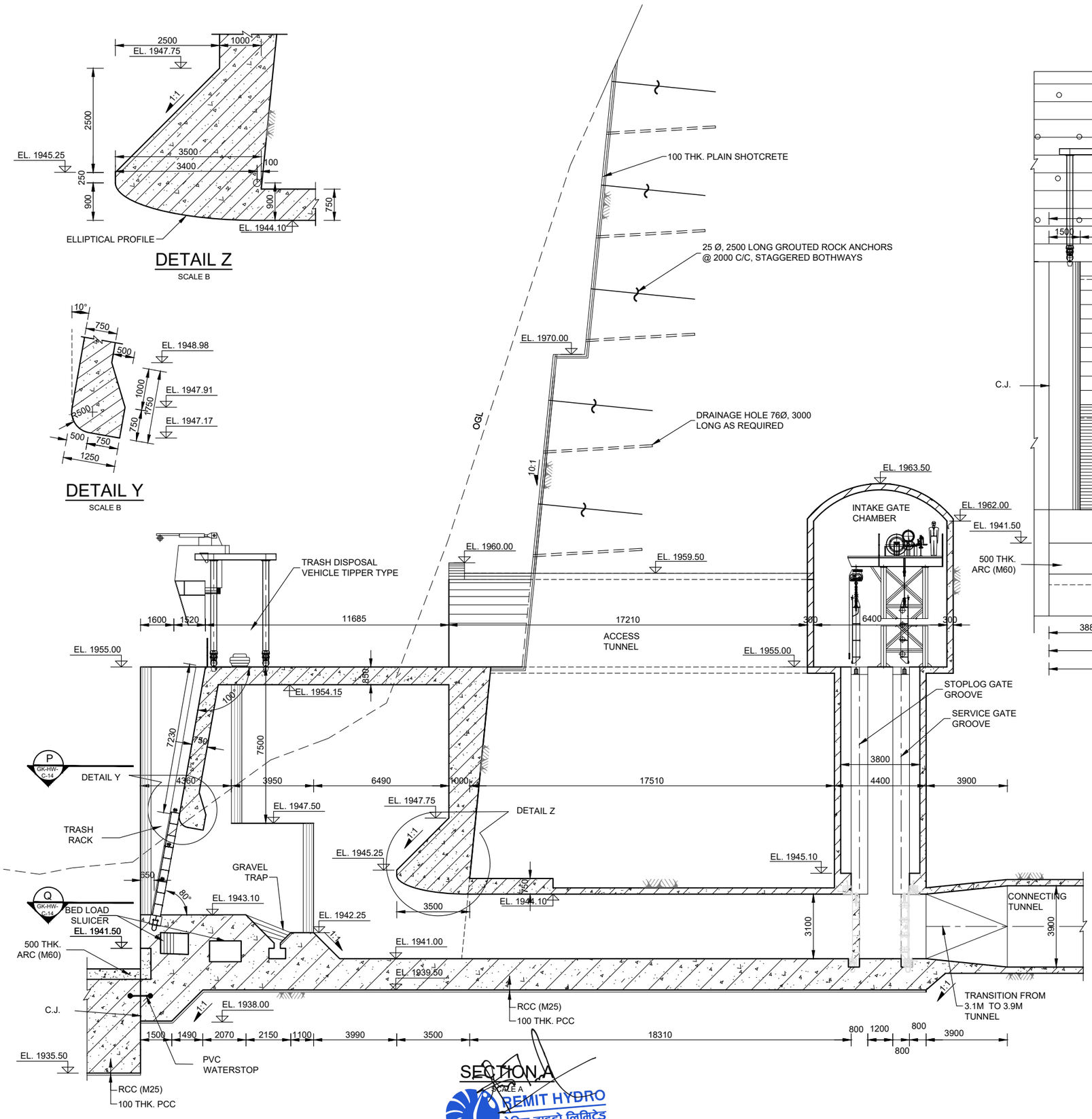
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

DETAIL Z

SCALE B

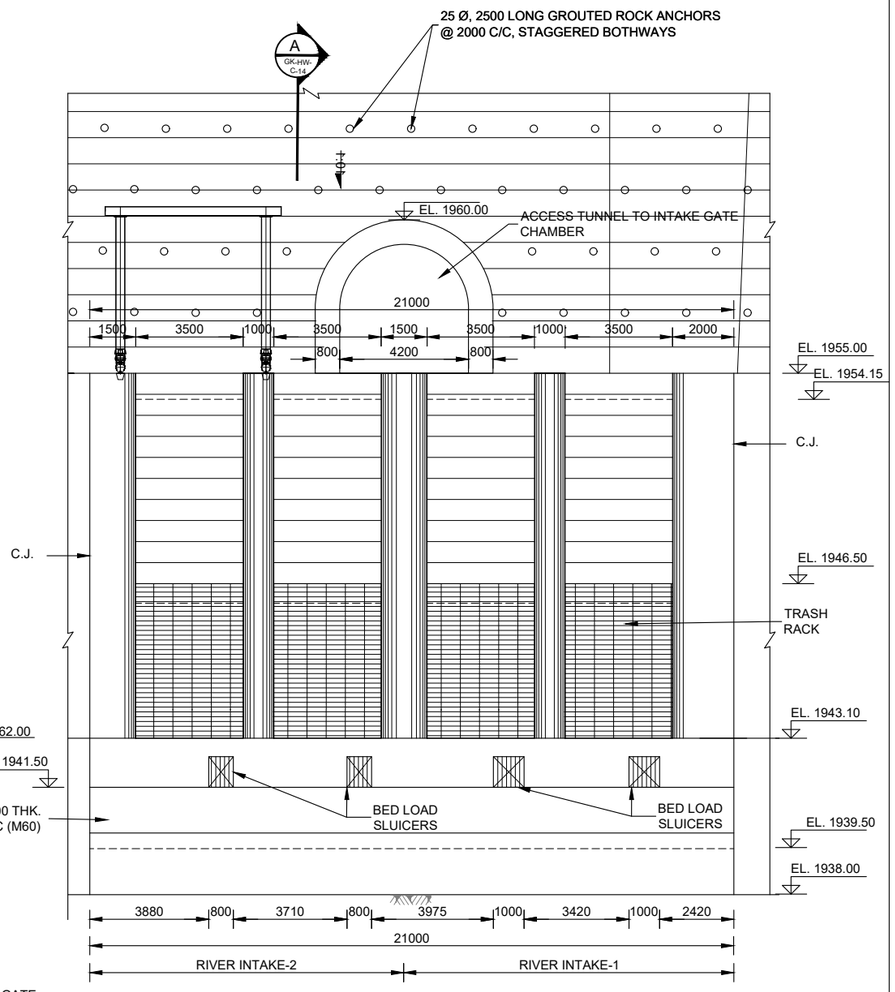
DETAIL Y

SCALE B



SECTION A

SCALE A



ELEVATION

SCALE A

2 0 2 4 6 8 10M

SCALE A : 1:200

1 0 1 2 3 4 5M

SCALE B: 1:100

GK-HW-C-14	RIVER INTAKE PLANS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED

KATHMANDU, NEPAL

HEADWORKS

RIVER INTAKE

ELEVATION & SECTION

Reviewed & Recommended for issue by:

NEA Engineering Company Ltd.

JV of

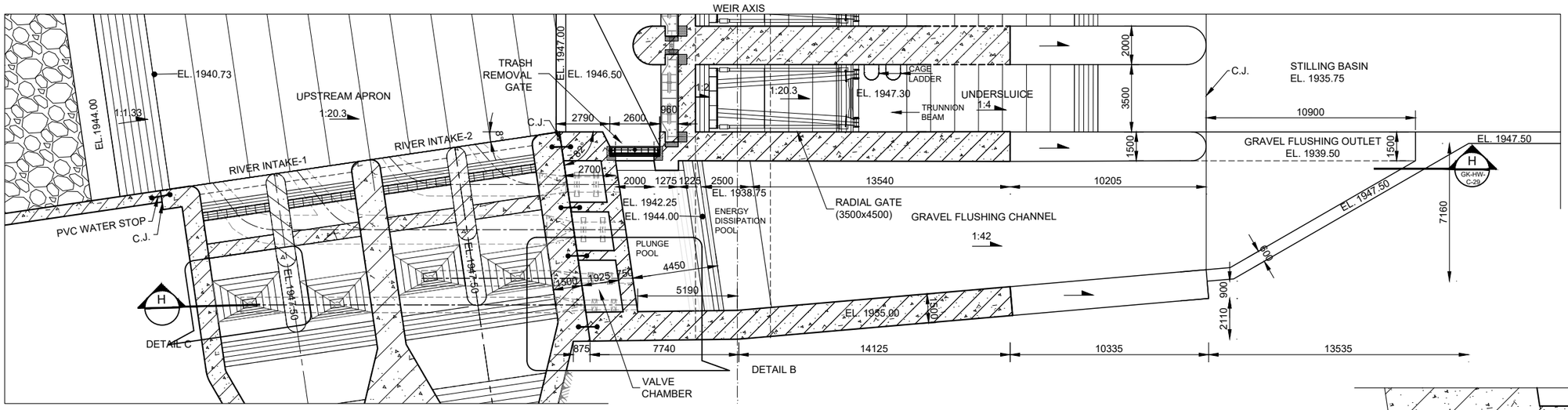
Indo Canadian Consultancy Services Ltd. &

Shah Consult International (P.) Ltd.

THAPATHALI, KATHMANDU, NEPAL

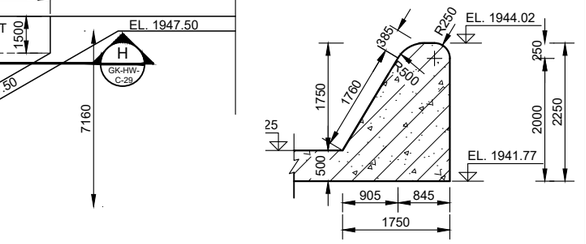
PHONE: 01-5315046; FAX:01-4215046

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-15
SCALE: NTS	



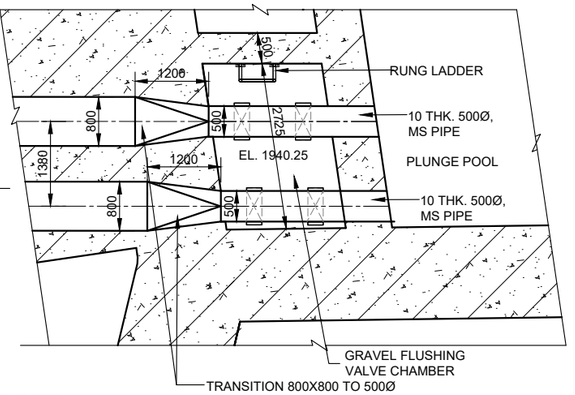
GRAVEL TRAP PLAN

SCALE A



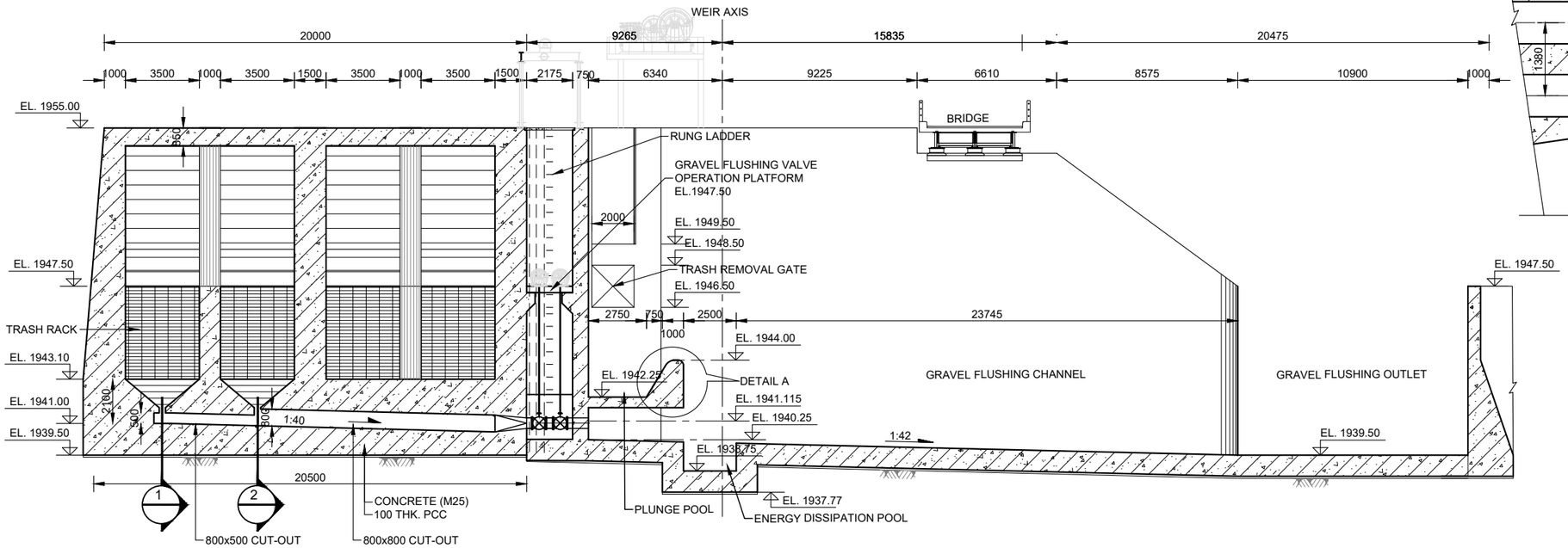
DETAIL A

SCALE B



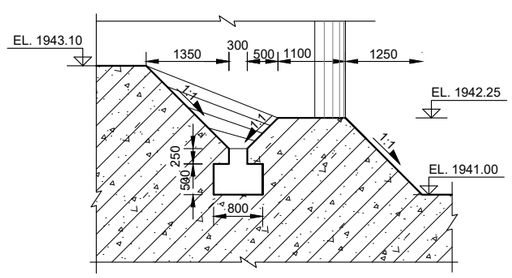
DETAIL B

SCALE B



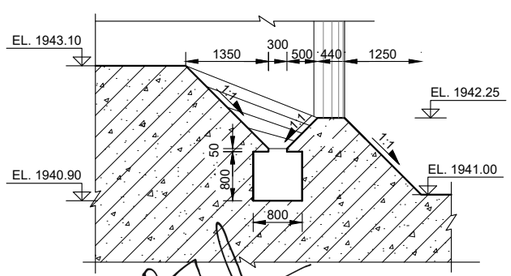
LONGITUDINAL SECTION H

SCALE A



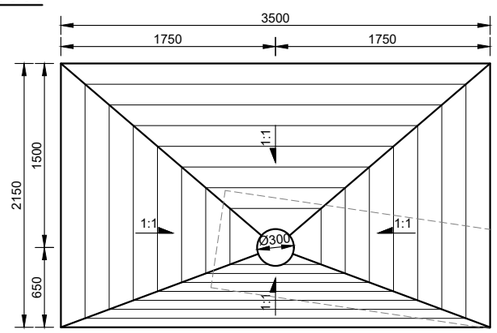
SECTION 1

SCALE B



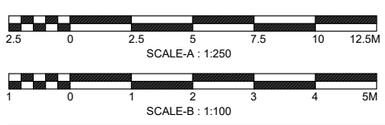
SECTION 2

SCALE B



DETAIL C

SCALE B



GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HEADWORKS
GRAVEL TRAP
PLAN & SECTIONAL DETAILS

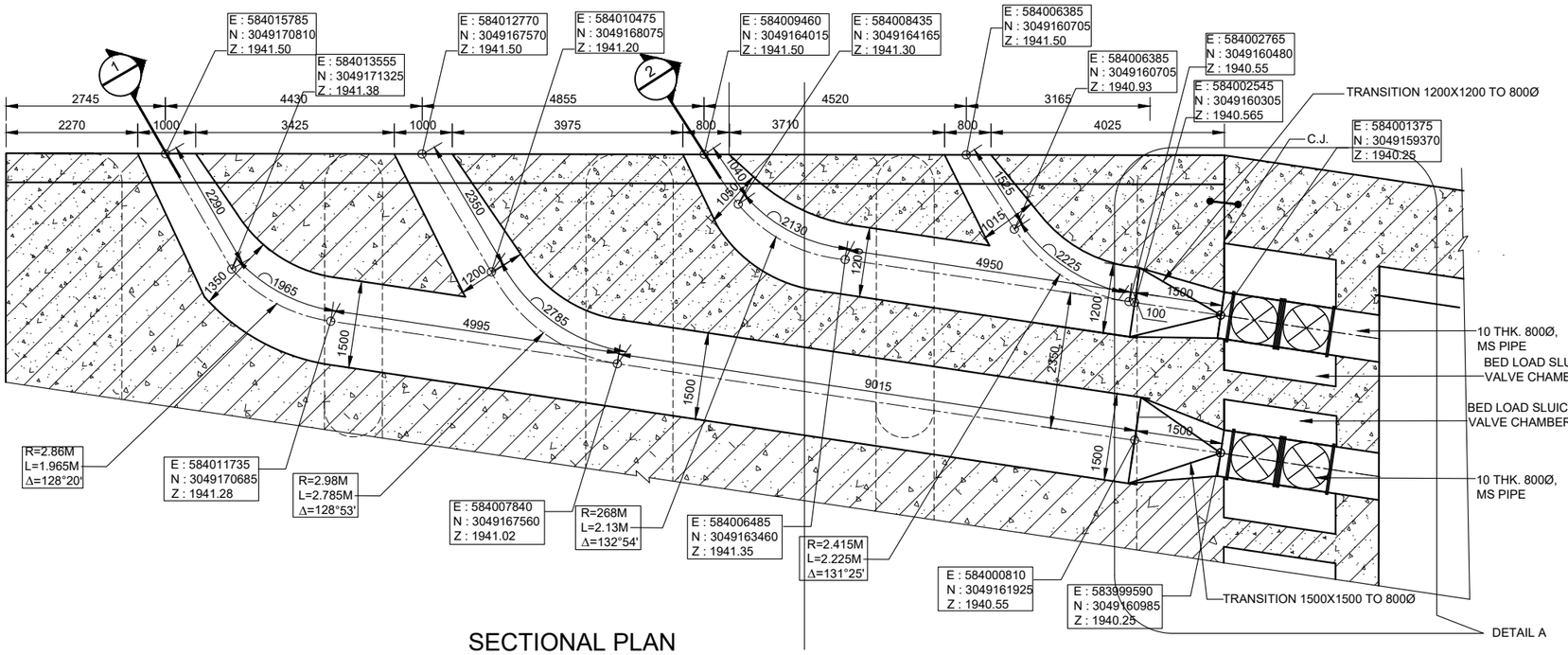
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

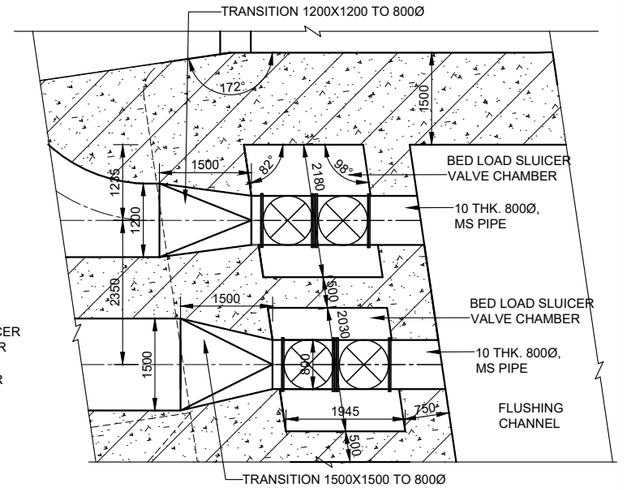
DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-16
SCALE: NTS	

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

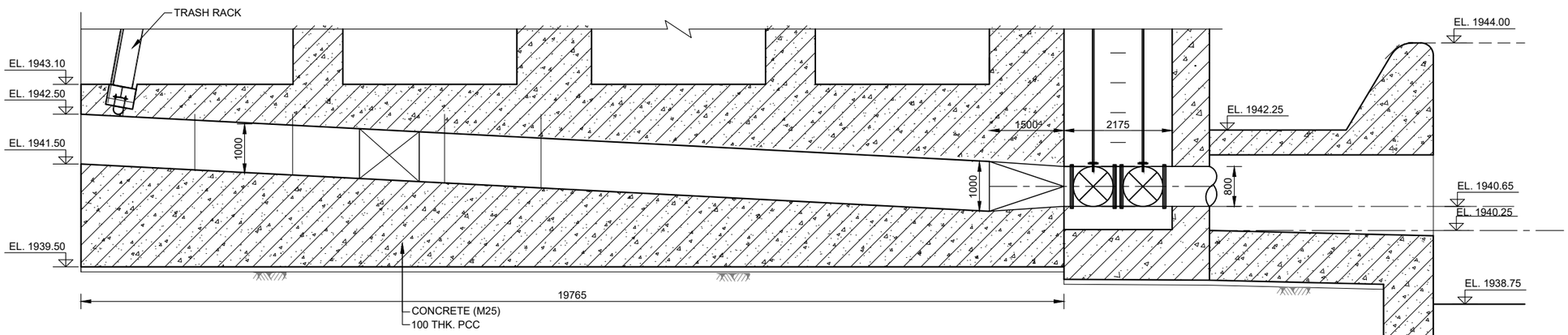


SECTIONAL PLAN

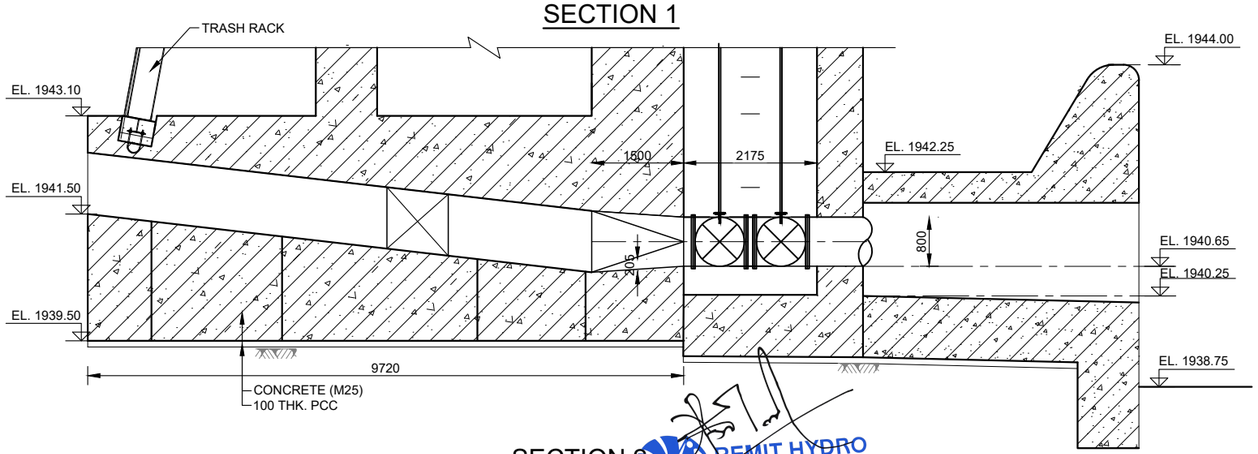


DETAIL A

SCALE B



SECTION 1



SECTION 2

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

1 0 1 2 3 4 5M

SCALE : 1:100

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

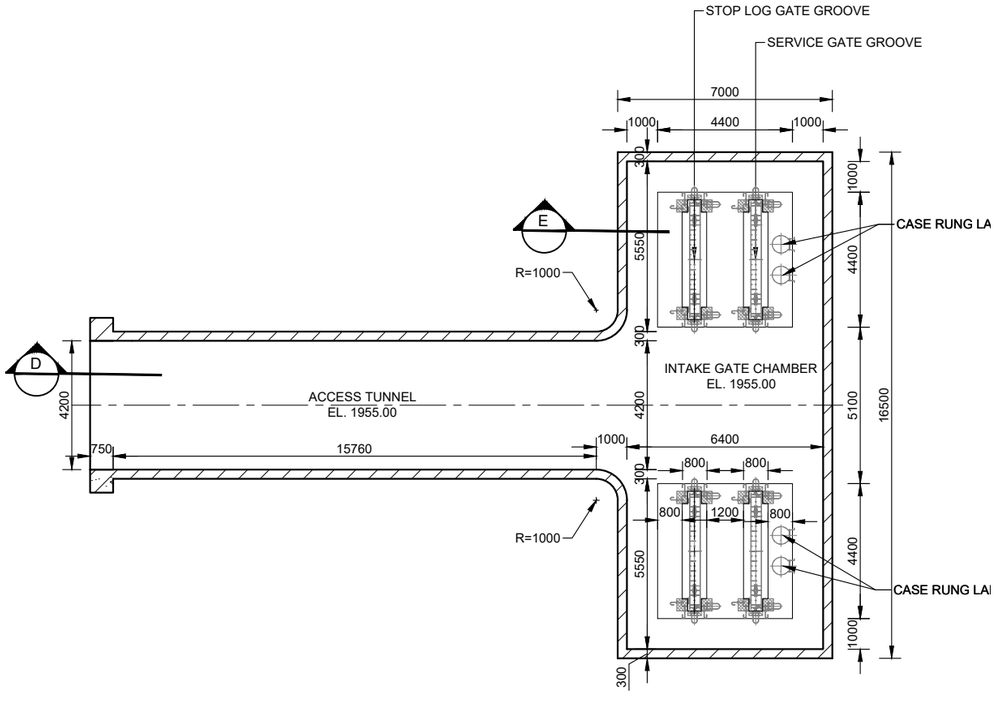
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HEADWORKS
RIVER INTAKE
BED LOAD SLUICER DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

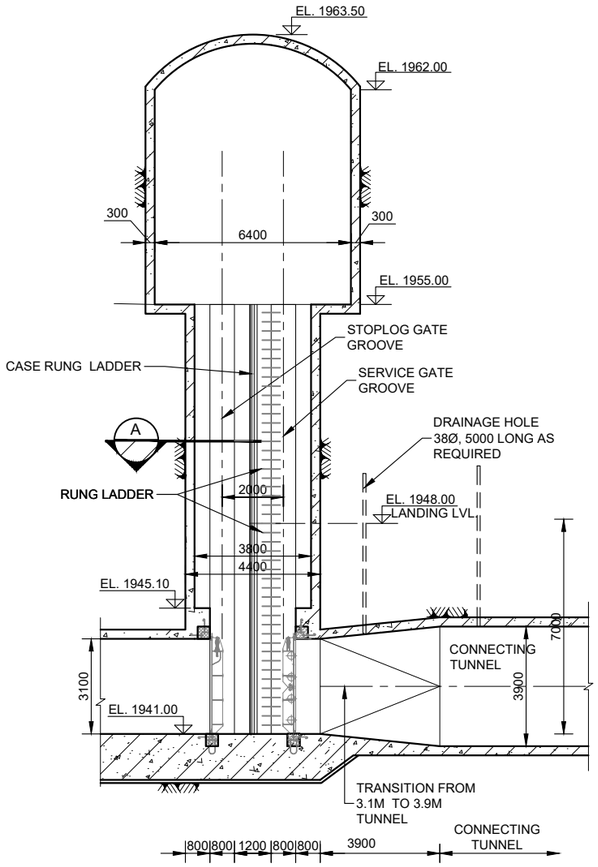
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-17
SCALE: NTS	



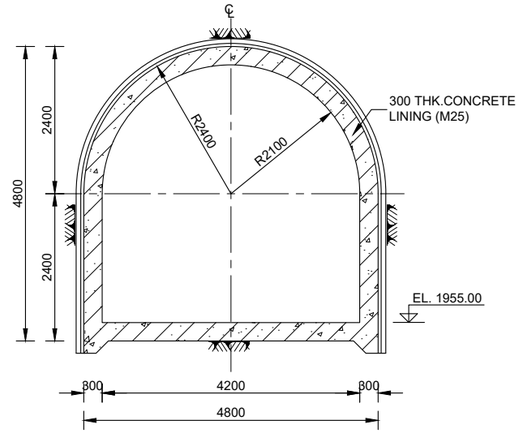
INTAKE GATE CHAMBER PLAN

SCALE A



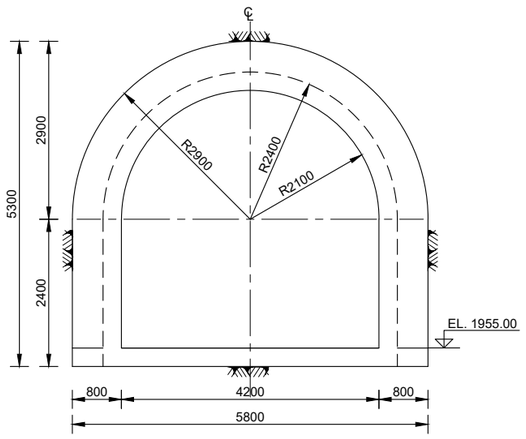
SECTION E

SCALE A



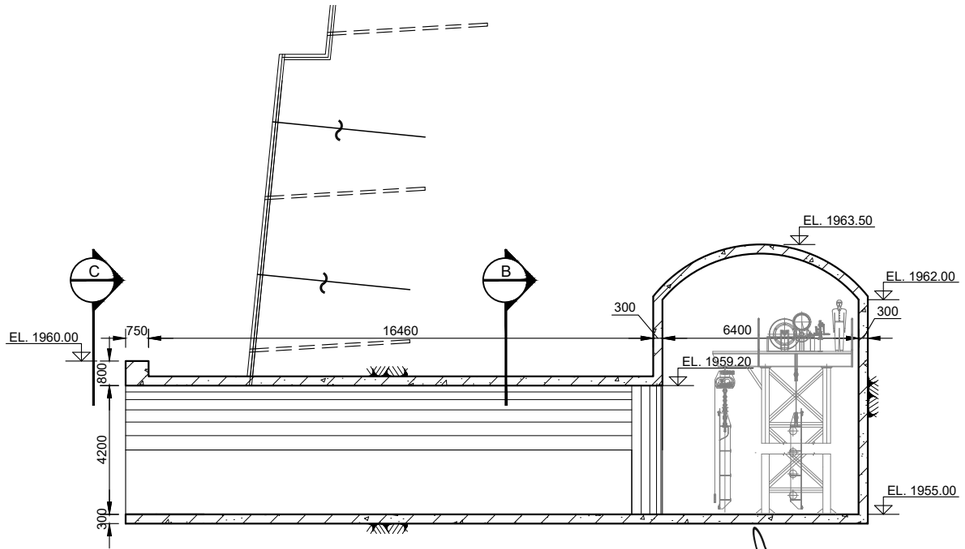
SECTION B

SCALE B



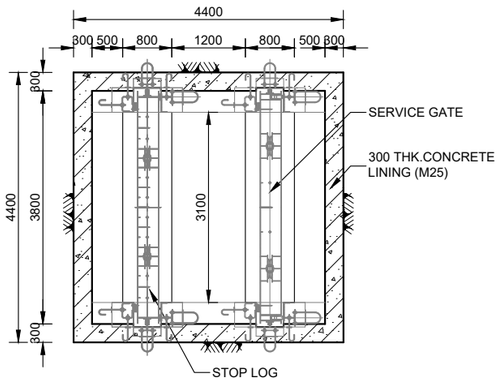
ELEVATION C

SCALE B



GATE CHAMBER SECTION D

SCALE A



SECTION A

SCALE B

2 0 2 4 6 8 10M

SCALE-A : 1:200

1 0 1 2 3 4 5M

SCALE-B : 1:100

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

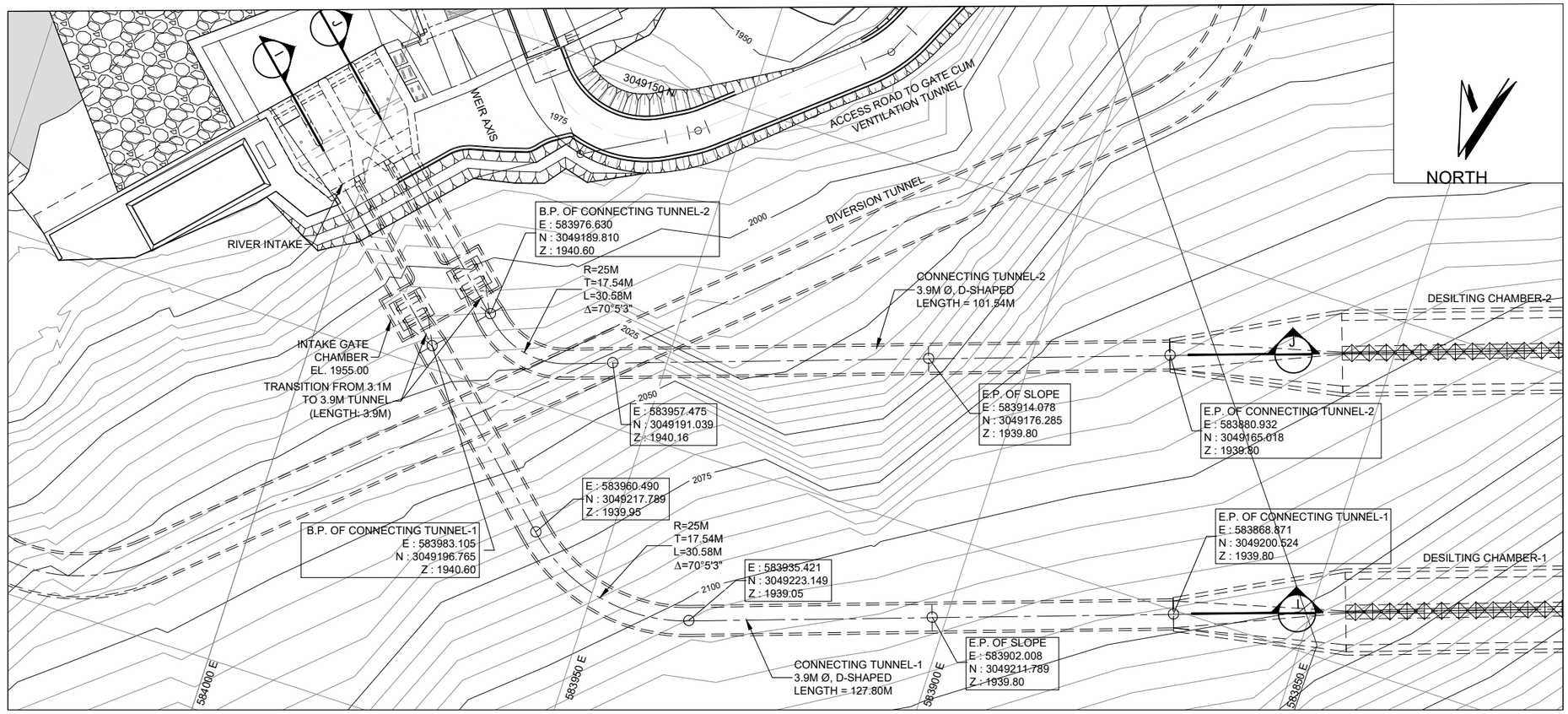
HEADWORKS
INTAKE
GATE CHAMBER DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

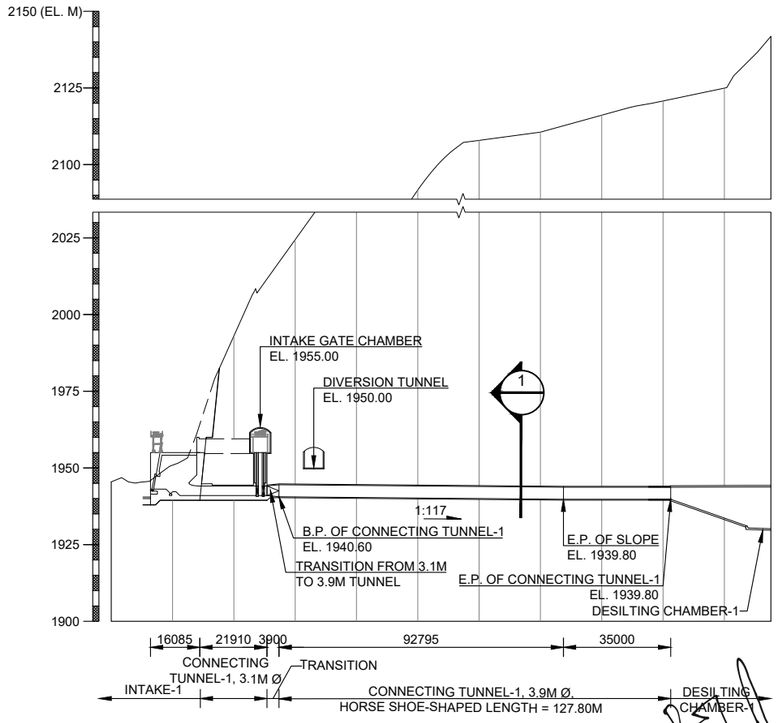
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-18
SCALE: NTS	

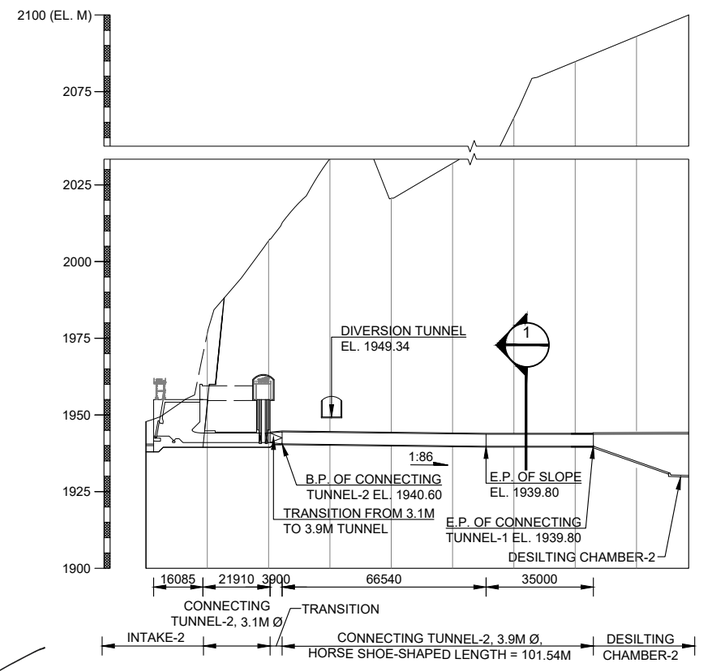
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



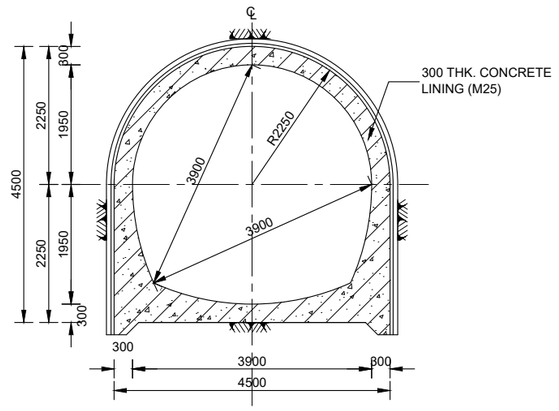
PLAN
SCALE:A



SECTION I
SCALE B



SECTION J
SCALE B



SECTION 1
SCALE:C

CONTOUR INTERVAL 5 M

10 0 10 20 30 40 50M
SCALE A : 1:1,000

20 0 20 40 60 80 100M
SCALE B : 1:2,000

1 0 1 2 3 4 5M
SCALE C : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HEADWORKS
CONNECTING TUNNEL
PLAN & SECTIONAL DETAILS

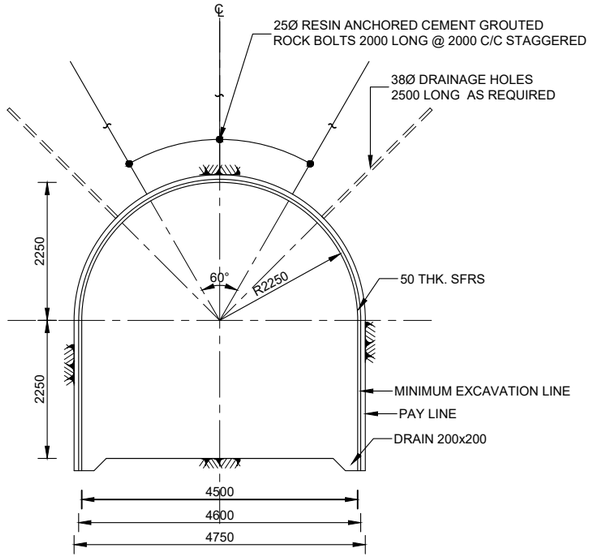
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

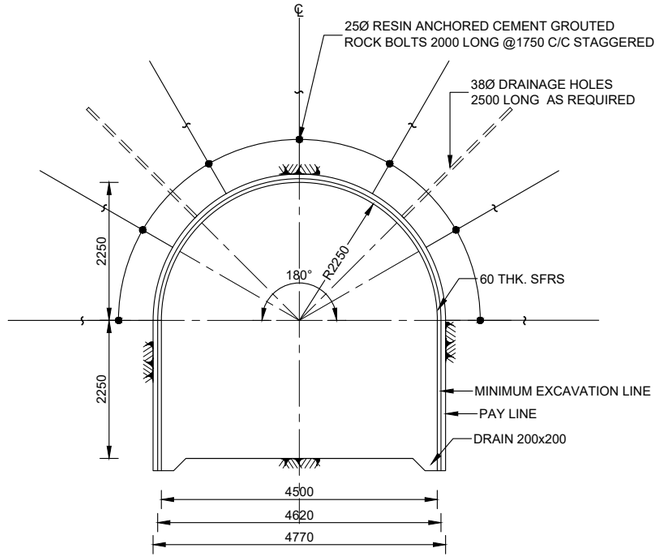
GK-HW-C-34	CONNECTING TUNNEL EXCAVATION & SUPPORT
	DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-19
SCALE: NTS	

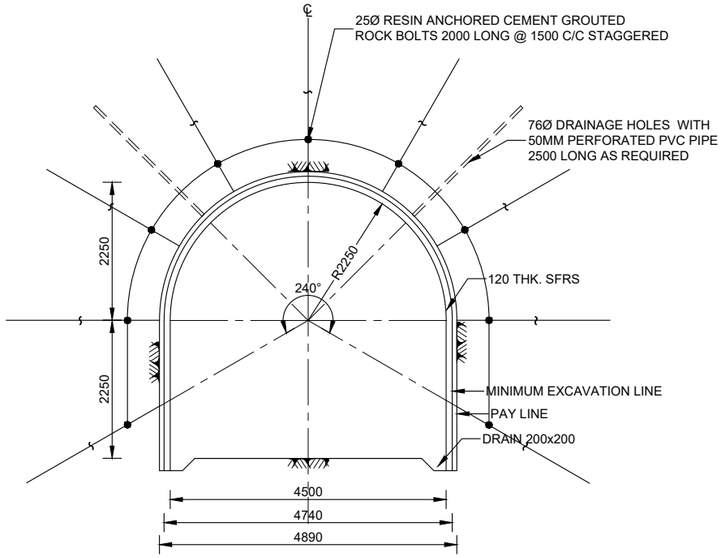
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



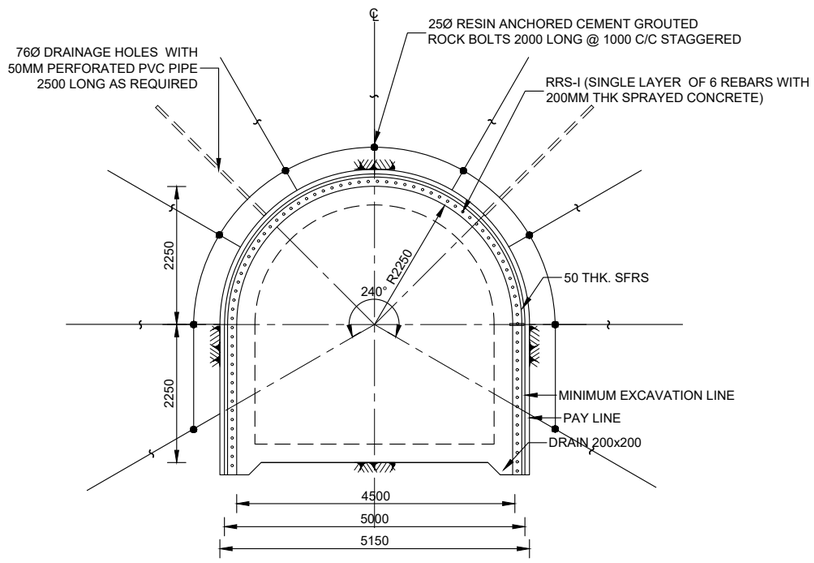
SUPPORT CATEGORY R3
(Q>4.0)



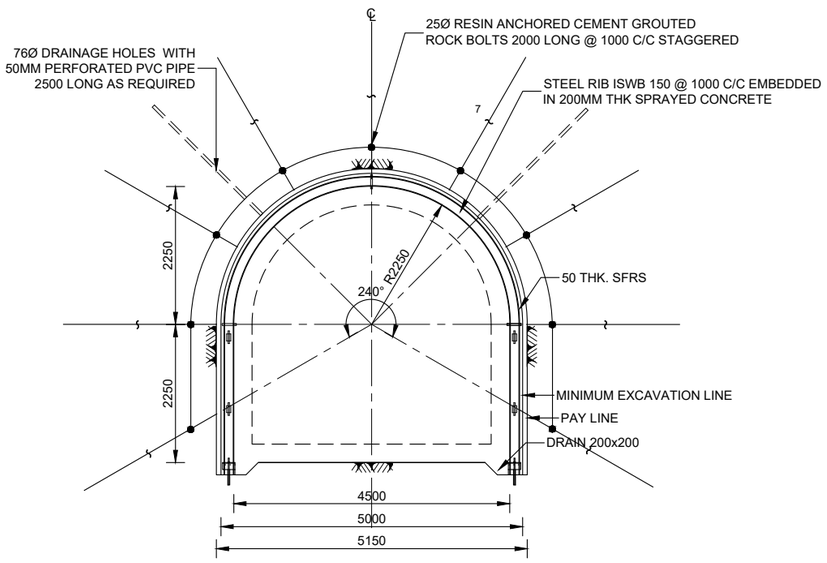
SUPPORT CATEGORY R4
(1.0 < Q < 4.0)



SUPPORT CATEGORY R5
(0.1 < Q < 1)



SUPPORT CATEGORY R6 (OPTION-I)
(Q < 0.1)



SUPPORT CATEGORY R6 (OPTION-II)
(Q < 0.1)

ROCK MASS CLASSIFICATION & SUPPORT CATEGORY DETAILS

SUPPORT CATEGORY	Q-VALUE	ROCK CLASS
R_3	>4	I TO III
R_4	1.0 - 4.0	IV
R_5	0.1 - 1.0	V
R_6	< 0.1	VI

1 0 1 2 3 4 5M
SCALE : 1:100

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

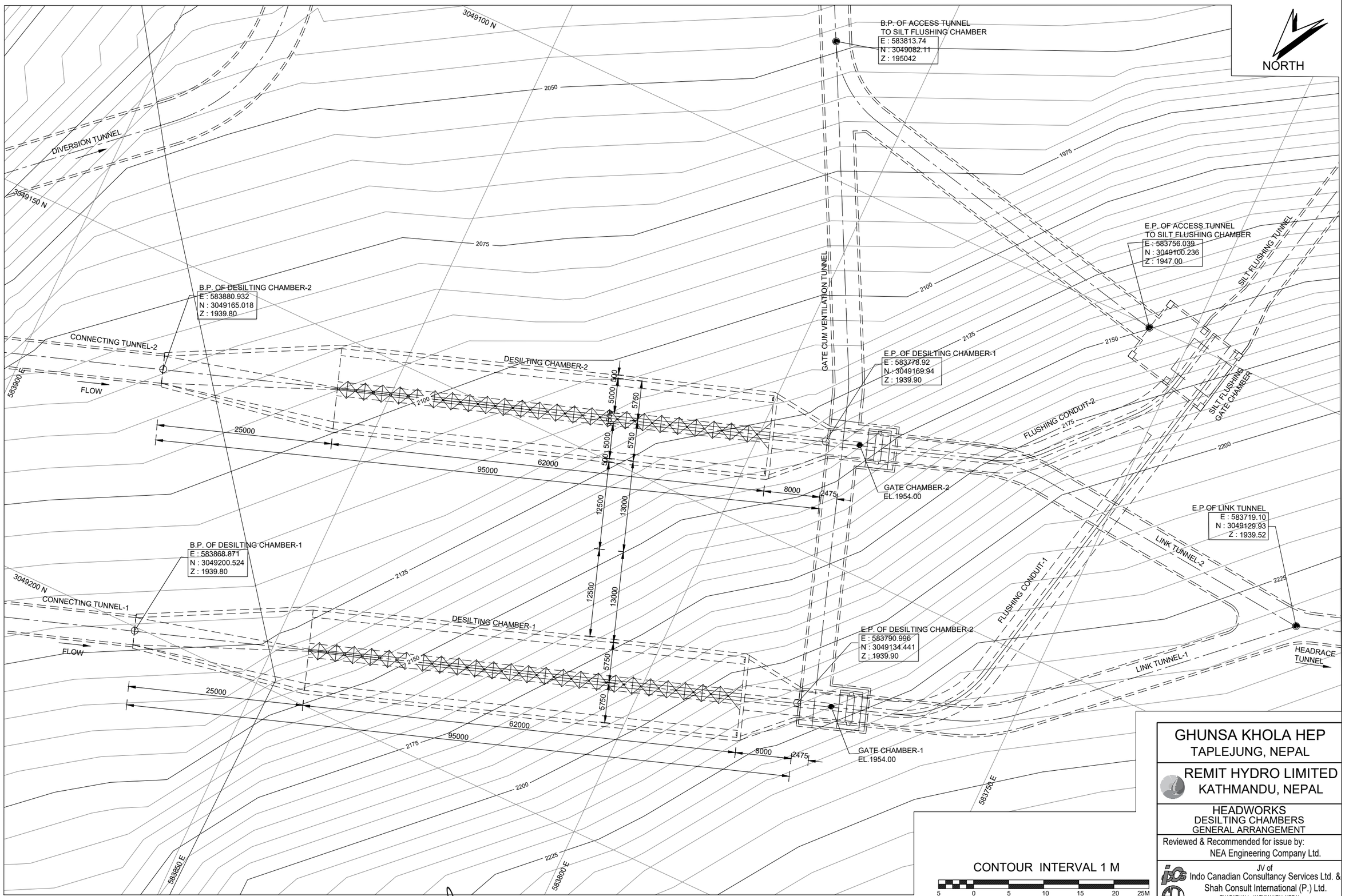
HEADWORKS
CONNECTING TUNNEL
EXCAVATION & ROCK SUPPORT DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

DESIGNED BY: DR. S. SHAH	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-20
SCALE: NTS	

REMIT HYDRO
रेमित हाइड्रो लिमिटेड



CONTOUR INTERVAL 1 M

5 0 5 10 15 20 25M

SCALE : 1:500

GENERAL ARRANGEMENT

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

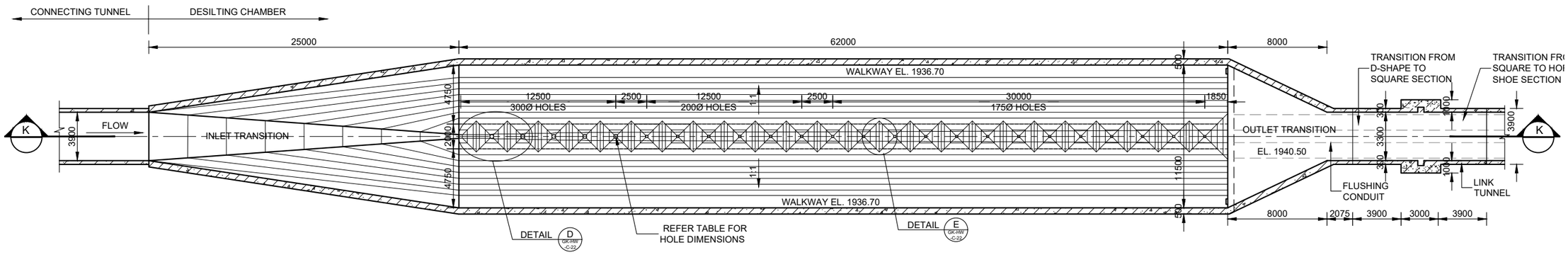
HEADWORKS
DESILTING CHAMBERS
GENERAL ARRANGEMENT

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

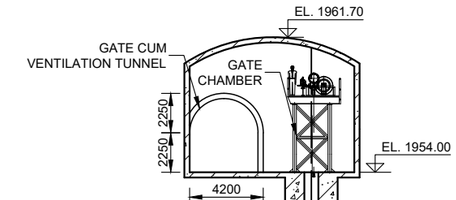
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

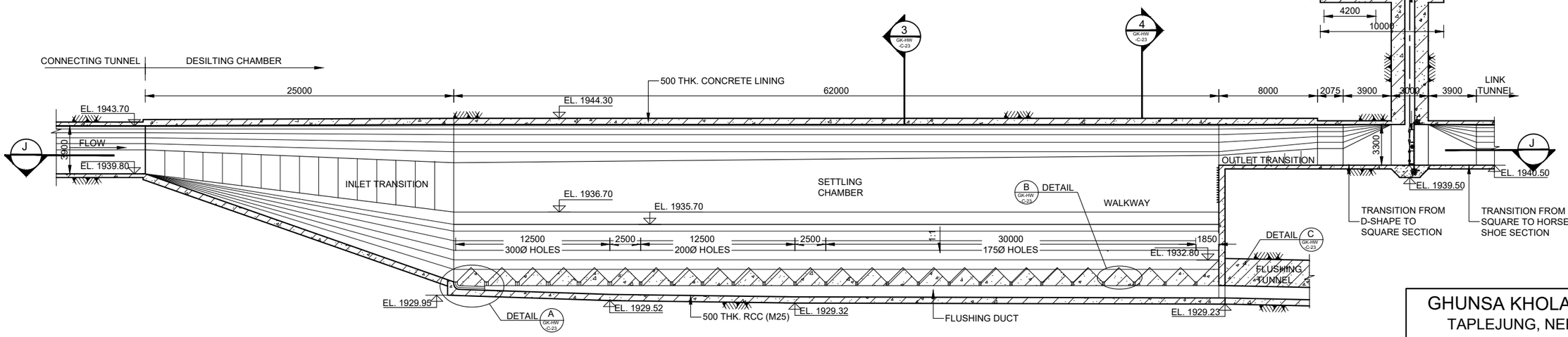
DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-21
SCALE: NTS	



SECTIONAL PLAN J





LONGITUDINAL SECTION K

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

3.5 0 3.5 7 10.5 14 17.5M
SCALE-A : 1:350

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

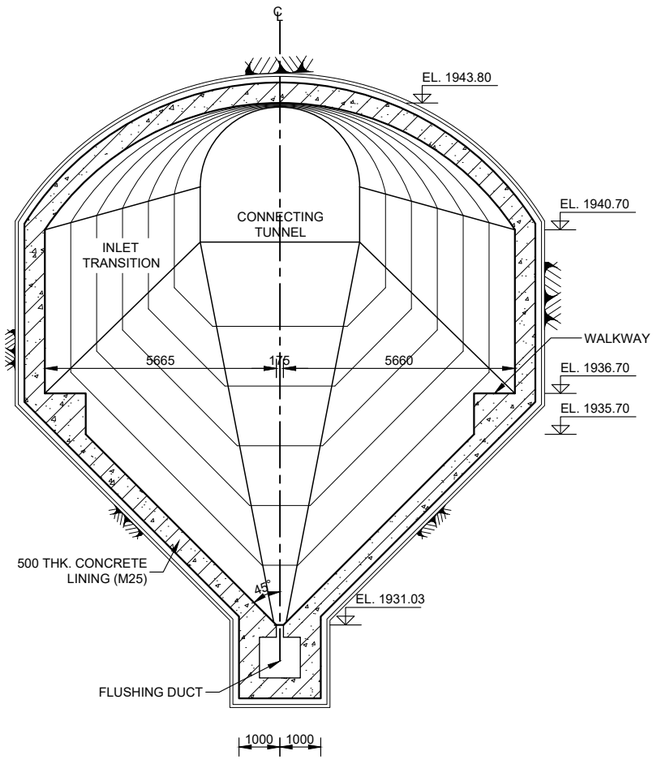
HEADWORKS
DESILTING CHAMBERS
PLAN & SECTION

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

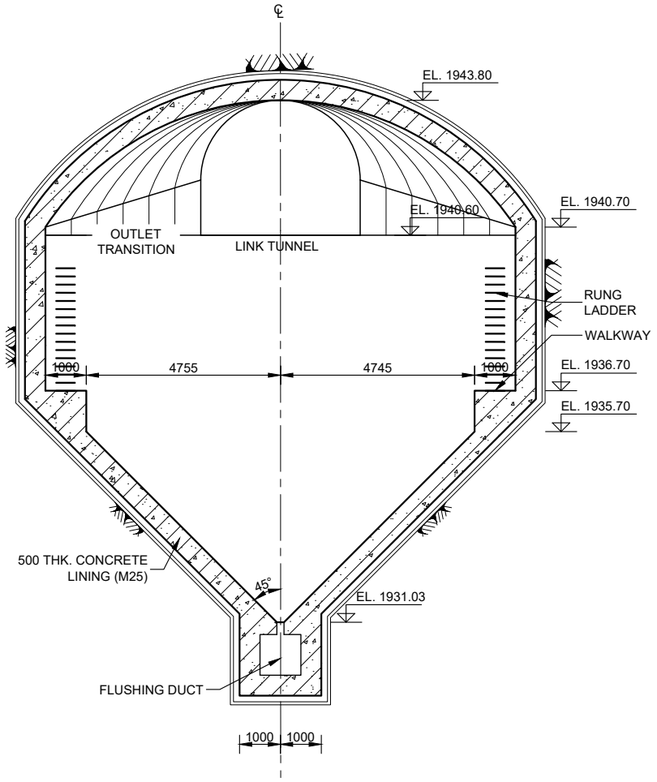
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046, FAX:01-4215046

GK-HW-C-23	DESILTING CHAMBER SECTIONAL DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-22
SCALE: NTS	



SECTION 3
SCALE A



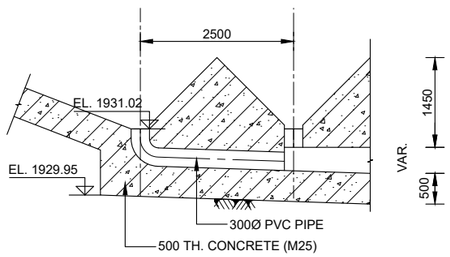
SECTION 4
SCALE A

HOLE DIMENSIONS

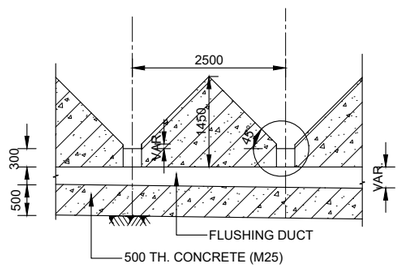
HOLES	DIAMETER	C/C SPACING	BED SLOPE
H1-H6	300	2500	1:30
H7-H12	200	2500	1:75
H13-H25	175	2500	1:400

HOLE NO.	X	Y	Z (MM)
H1	300Ø PVC PIPE		
H2	300	400	300
H3	400	500	300
H4	500	600	300
H5	600	650	300
H6	650	675	300
H7	675	690	200
H8	690	700	200
H9	700	710	200
H10	710	720	200
H11	720	730	200
H12	730	740	200
H13	740	760	175
H14	760	780	175
H15	780	800	175
H16	800	820	175
H17	820	840	175
H18	840	860	175
H19	860	880	175
H20	880	900	175
H21	900	920	175
H22	920	940	175
H23	940	960	175
H24	960	980	175
H25	980	1000	175

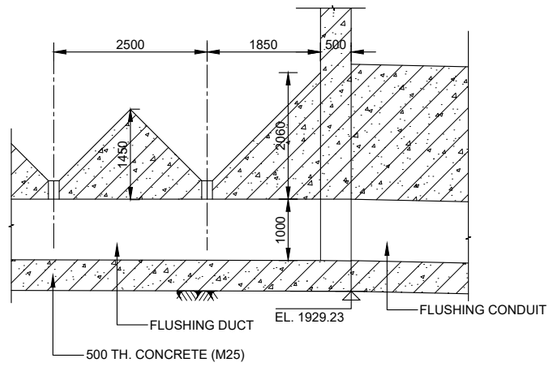
CROSS SECTION OF DESILTING CHAMBER



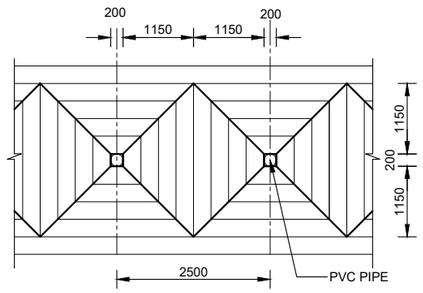
DETAIL A
SCALE B



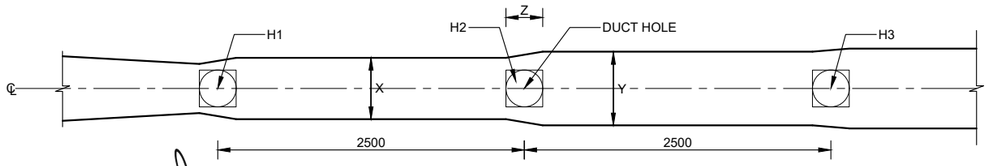
DETAIL B
SCALE B



DETAIL C
SCALE B



FLUSHING HOPPER
DETAIL E
SCALE B



FLUSHING DUCT PLAN (TYP.)
DETAIL D
SCALE C

REMIT HYDRO
रेमित हाइड्रो लिमिटेड

1.5 0 1.5 3 4.5 6 7.5M
SCALE A : 1:150

1 0 1 2 3 4 5M
SCALE B : 1:100

0.5 0 0.5 1 1.5 2 2.5M
SCALE C : 1:50

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

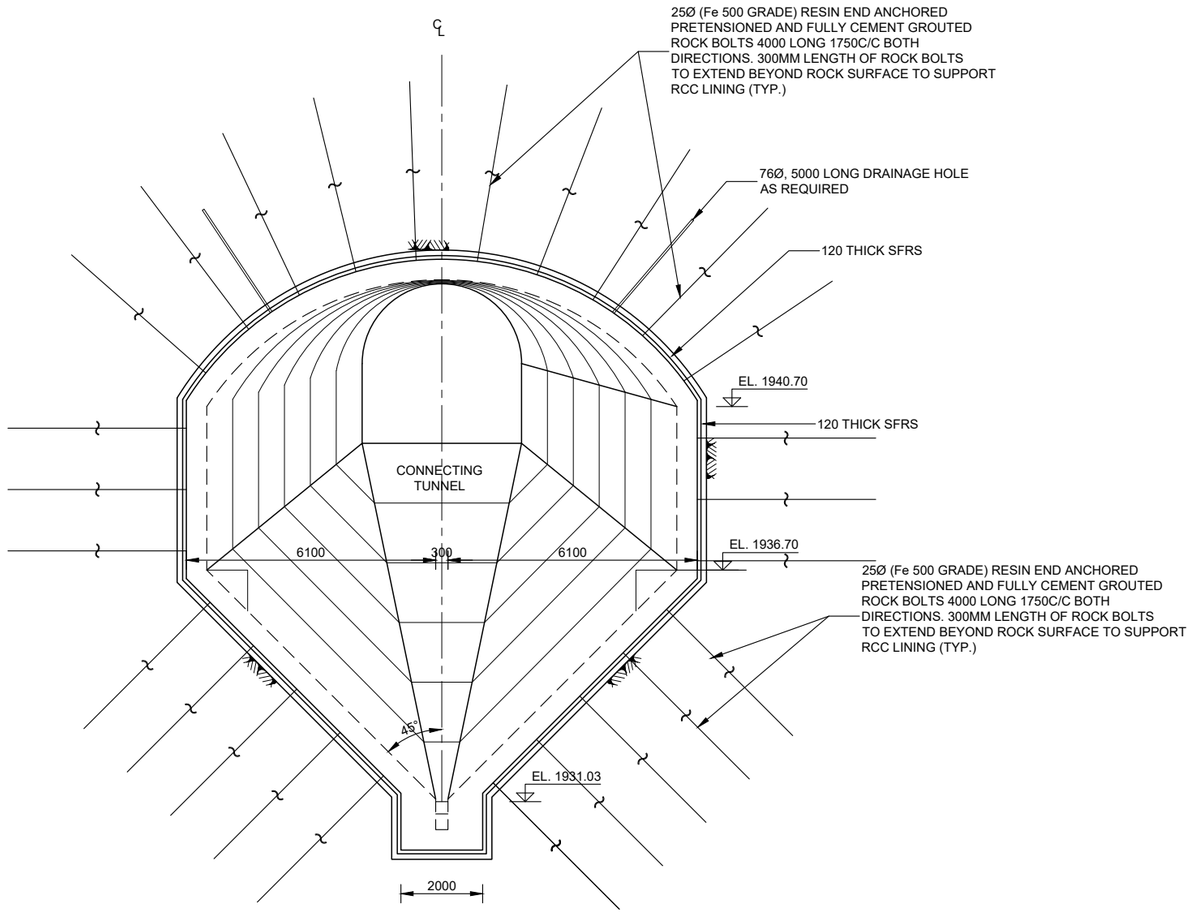
HEADWORKS
DESILTING CHAMBER
SECTONAL DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

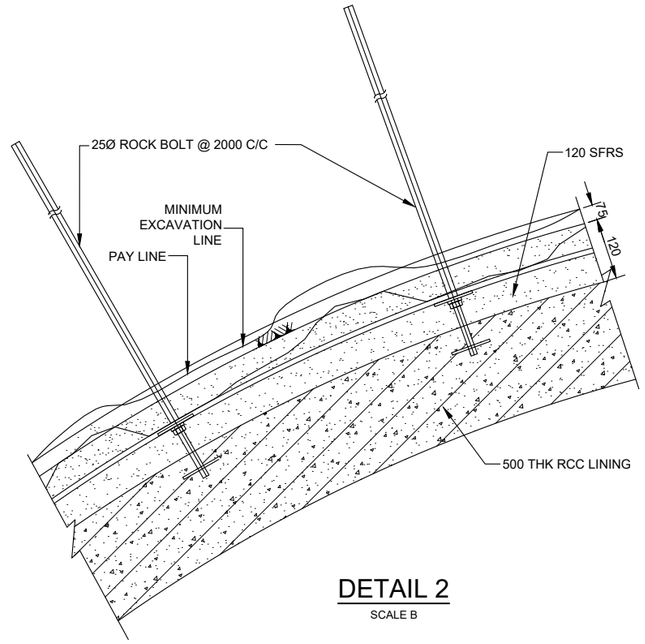
GK-HW-C-39	DESILTING CHAMBER EXCAVATION & SUPPORT DETAILS
GK-HW-C-22	DESILTING CHAMBERS PLAN & SECTIONS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-23
SCALE: NTS	



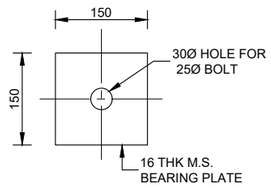
TYPICAL ROCK SUPPORT DETAILS (R4 & R5)

SCALE A



DETAIL 2

SCALE B

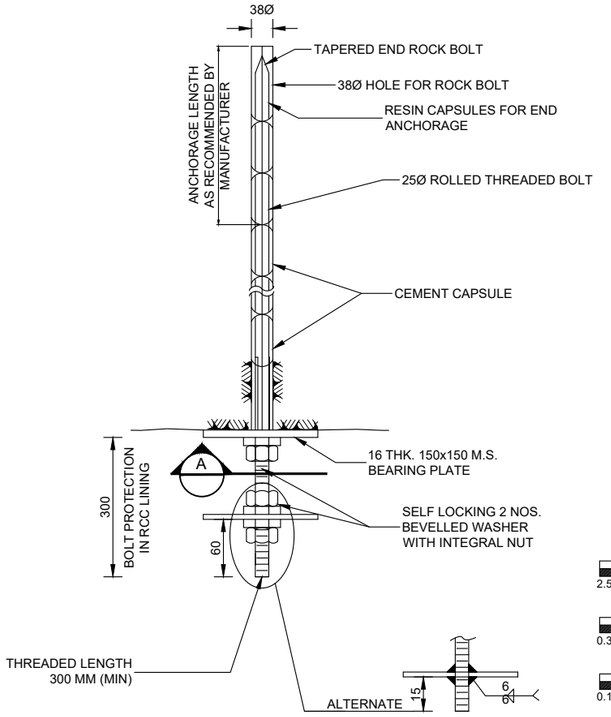


SECTION A

SCALE C

DETAIL1

SCALE B



DETAIL OF RESIN GROUTED ROCK BOLT

SCALE C

ROCK MASS CLASSIFICATION & SUPPORT CATEGORY DETAILS

SUPPORT CATEGORY	Q-VALUE	ROCK CLASS
R_2	>4.0	I
R_3	4<Q<4.0	II TO III
R_4	1<Q<4	IV
R_5	1<Q<4	IV
R_6	0.1<Q<1	V
R_7	< 0.1	VI

2.5 0 2.5 5 7.5 10 12.5M
SCALE A : 1:250

0.3 0 0.3 0.6 0.9 0.12 0.15M
SCALE B : 1:30

0.1 0 0.1 0.2 0.3 0.4 0.5M
SCALE C : 1:10

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

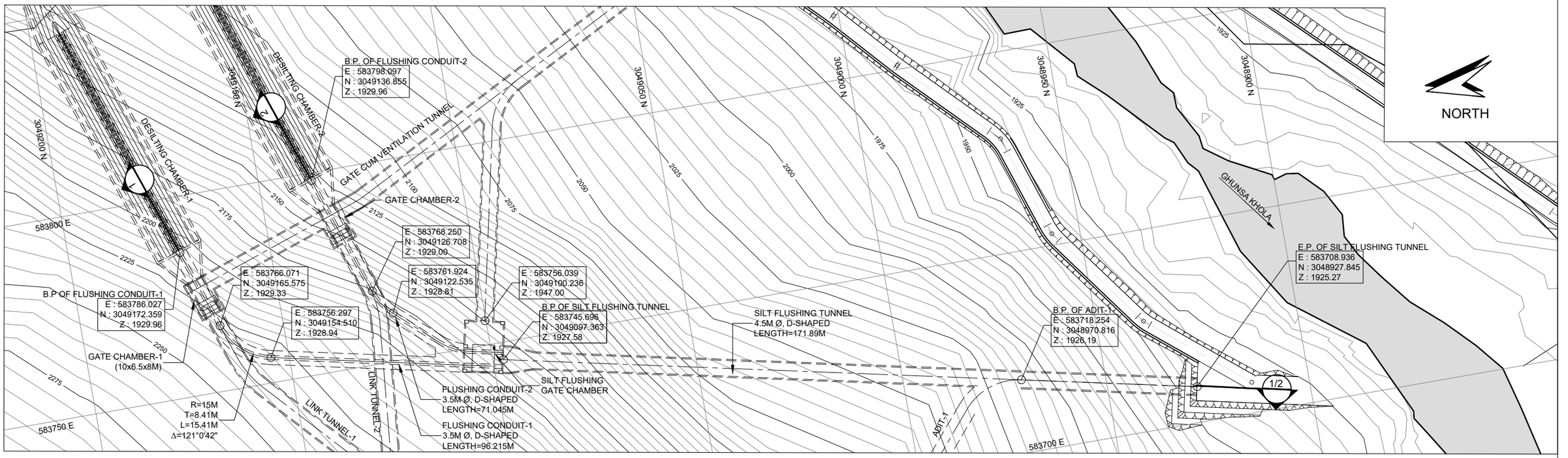
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HEADWORKS
DESILTING CHAMBER
EXCAVATION & ROCK SUPPORT DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

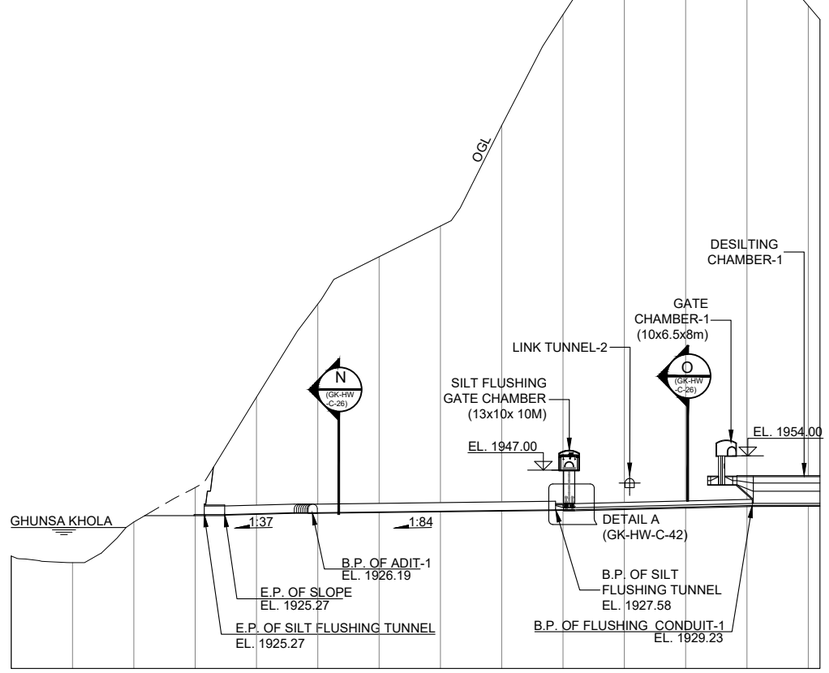
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-4215046

DESIGNED BY: DR. R.B. SAH/ A. BHATTACHARYA	CHECKED BY: DR. S. SHAH/Y. DEVA
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-24
SCALE: NTS	



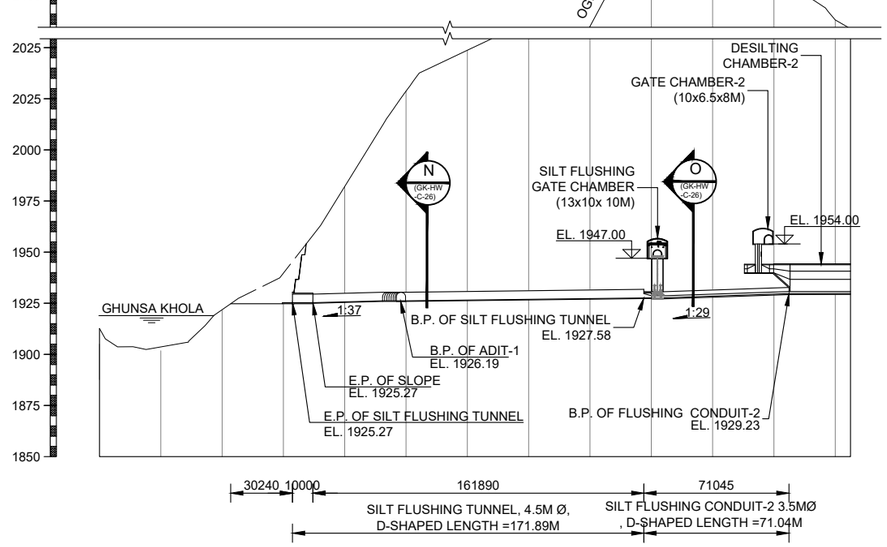
FLUSHING CONDUIT PLAN

SCALE - A



SECTION 1

SCALE B



SECTION 2

SCALE B

CONTOUR INTERVAL 5 M

10 0 10 20 30 40 50M
SCALE A : 1:1,000

30 0 30 60 90 120 150M
SCALE B : 1:3,000

REMIT HYDRO
रेमित हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

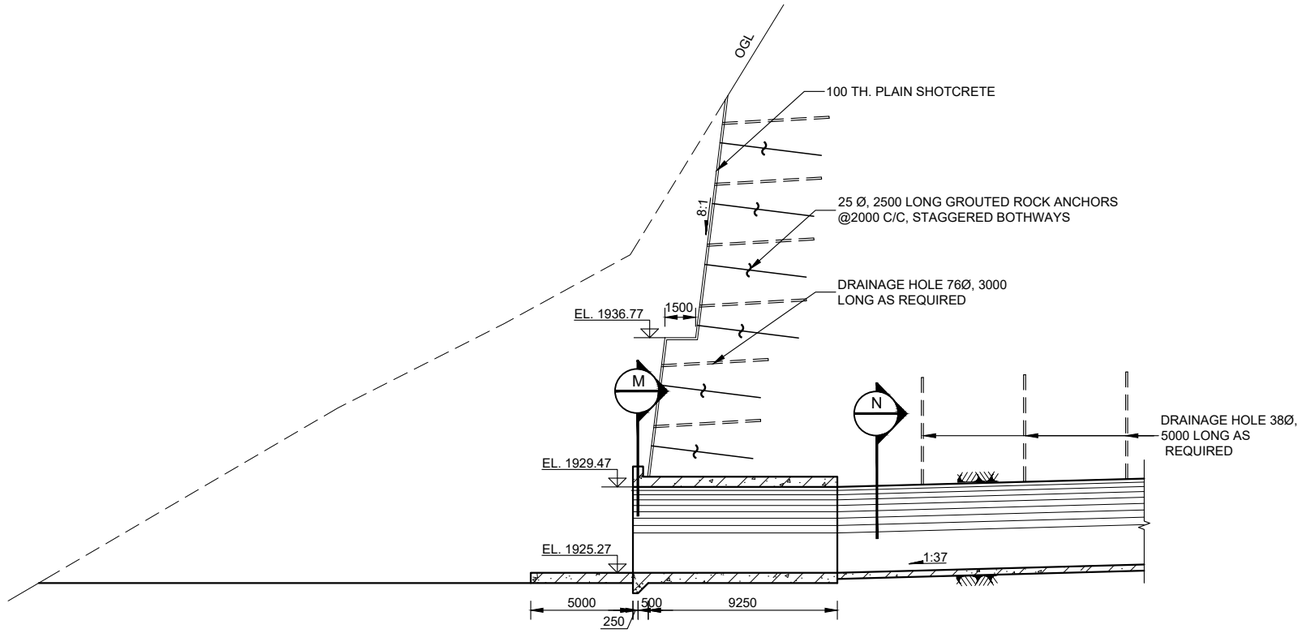
HEADWORKS
FLUSHING CONDUIT
PLAN & PROFILE

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

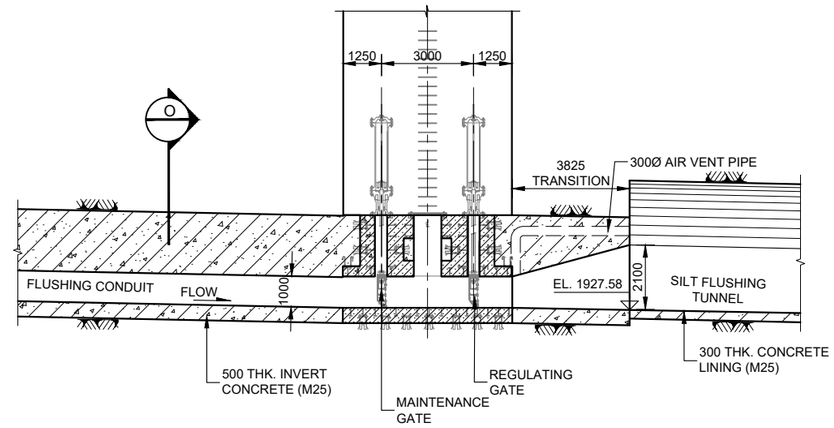
GK-HW-C-26	FLUSHING CONDUIT SECTIONAL DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-25
SCALE: NTS	



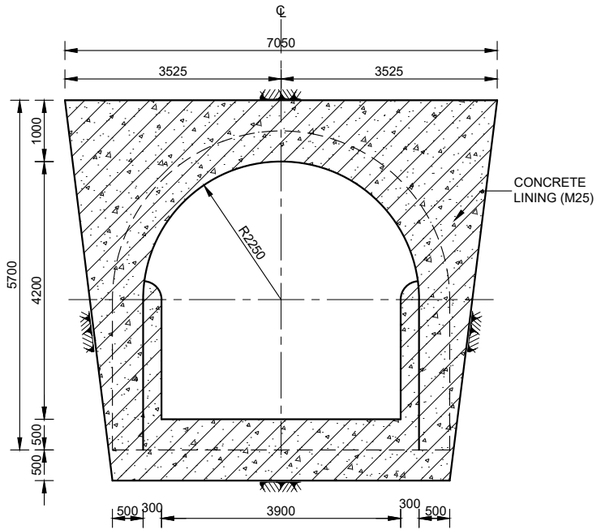
SILT FLUSHING TUNNEL PORTAL DETAILS

SCALE A



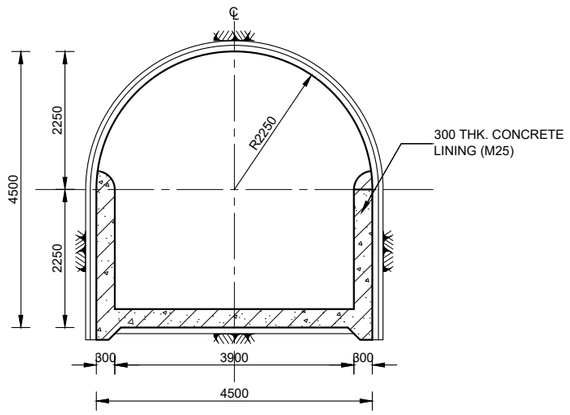
DETAIL A

SCALE-B



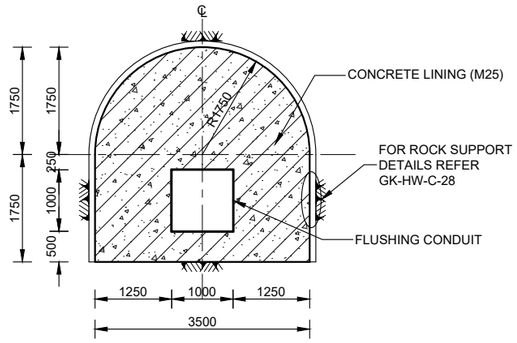
SECTION M

SCALE C



SECTION N

SCALE C



SECTION O

SCALE-C

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HEADWORKS
FLUSHING CONDUIT
SECTIONAL DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

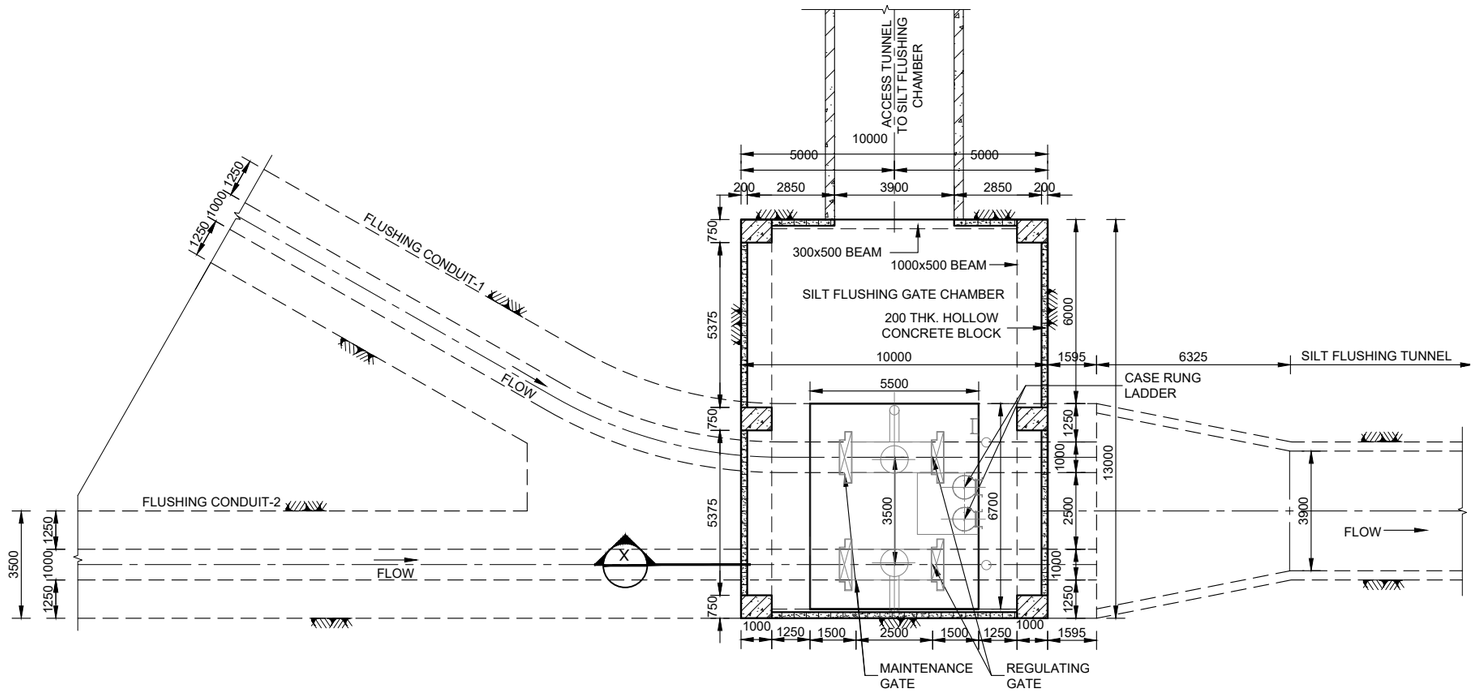
3 0 3 6 9 12 15M
SCALE A : 1:300

2 0 2 4 6 8 10M
SCALE B : 1:200

1 0 1 2 3 4 5M
SCALE C : 1:100

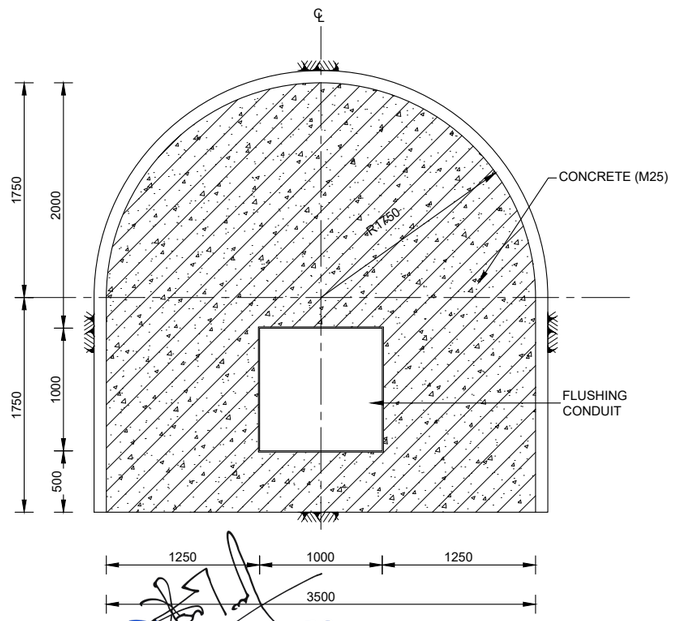
GK-HW-C-28	FLUSHING CONDUIT EXCAVATION & ROCK SUPPORT DETAILS
GK-HW-C-25	FLUSHING CONDUIT PLAN & PROFILE
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO
SCALE: NTS	GK-HW-C-26



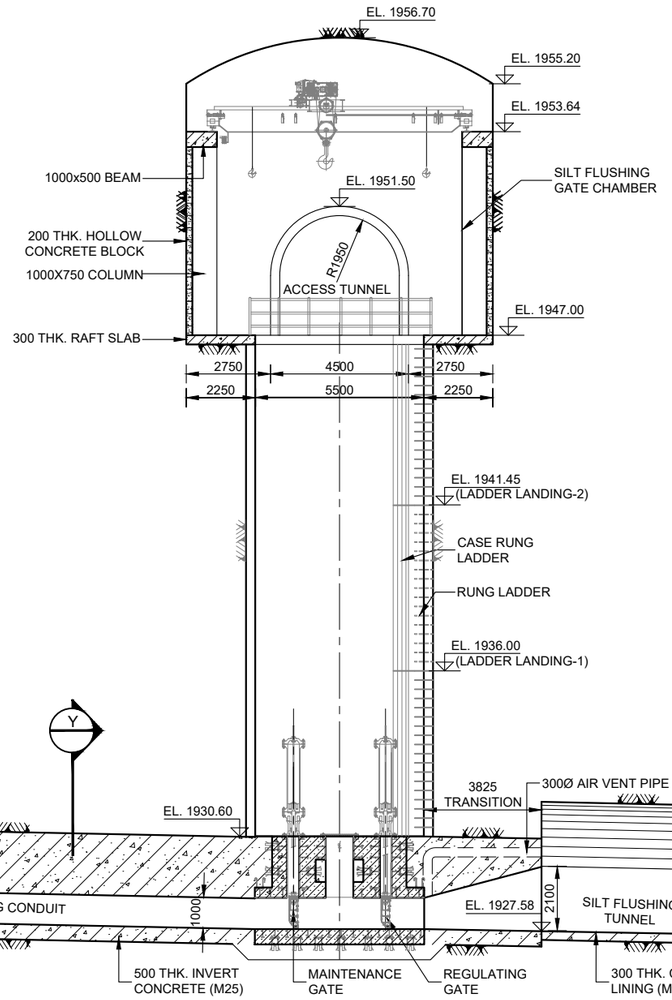
PLAN

SCALE A



SECTION Y

SCALE B



CROSS SECTION X

SCALE A

2 0 2 4 6 8 10M

SCALE A : 1:200

0.5 0 0.5 1 1.5 2 2.5M

SCALE B : 1:50

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED

KATHMANDU, NEPAL

HEADWORKS

FLUSHING CONDUIT

SILT FLUSHING CHAMBER DETAILS

Reviewed & Recommended for issue by:

NEA Engineering Company Ltd.

JV of

Indo Canadian Consultancy Services Ltd. &

Shah Consult International (P.) Ltd.

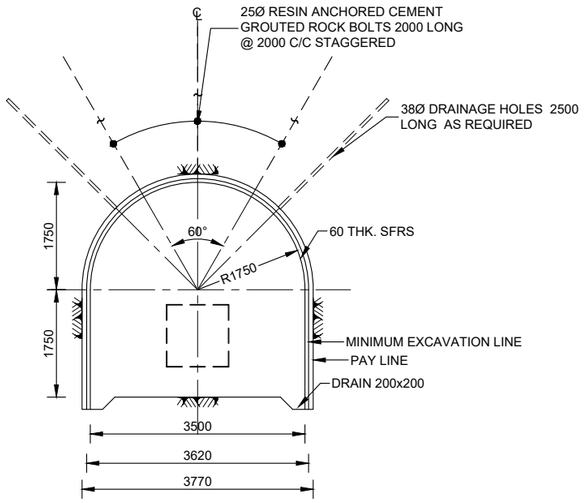
THAPATHALI, KATHMANDU, NEPAL

PHONE: 01-5315046; FAX:01-5315046

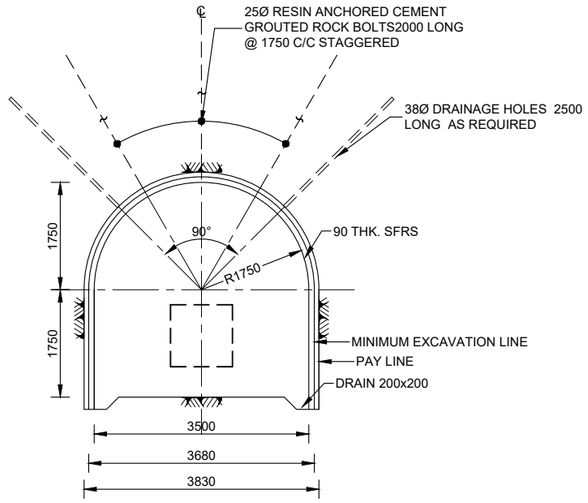
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-27
SCALE: NTS	

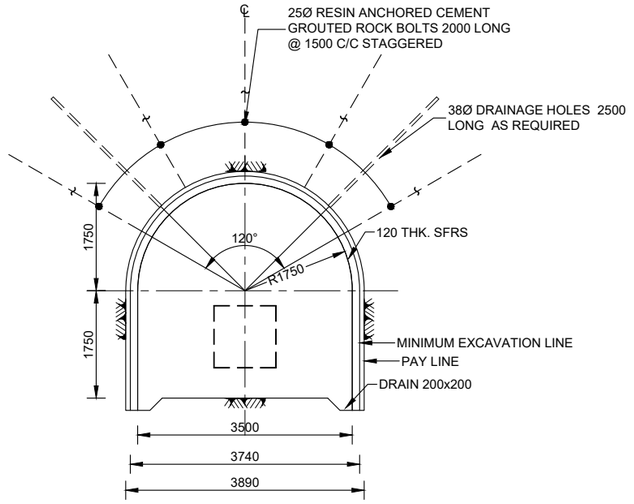
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



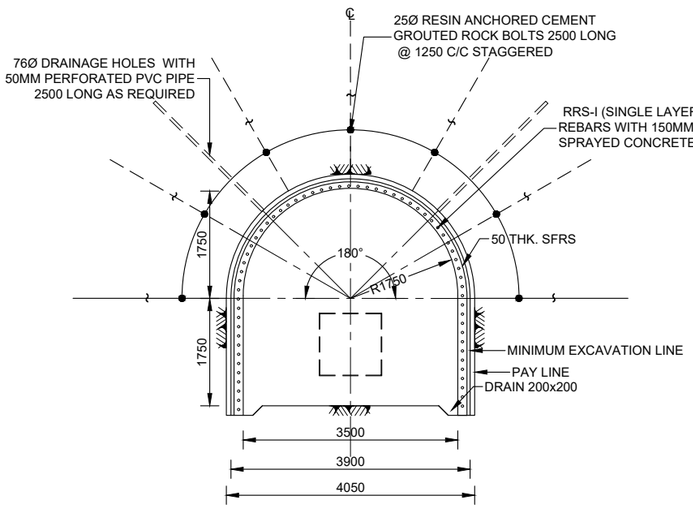
SUPPORT CATEGORY R3
(Q>4.0)



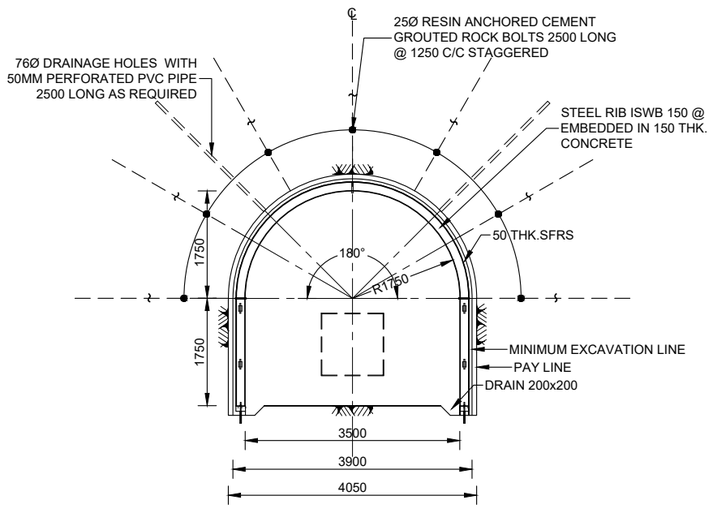
SUPPORT CATEGORY R4
(1.0 < Q < 4.0)



SUPPORT CATEGORY R5
(0.1 < Q < 1.0)



SUPPORT CATEGORY R6
(OPTION-I)
(Q < 0.1)



SUPPORT CATEGORY R6
(OPTION-II)
(Q < 0.1)

ROCK MASS CLASSIFICATION & SUPPORT CATEGORY DETAILS

SUPPORT CATEGORY	Q-VALUE	ROCK CLASS
R_3	>4	I TO III
R_4	1.0 - 4.0	IV
R_5	0.1 - 1.0	V
R_6	< 0.1	VI

FLUSHING CONDUIT- EXCAVATION & ROCK SUPPORT DETAILS

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

1 0 1 2 3 4 5M
SCALE : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

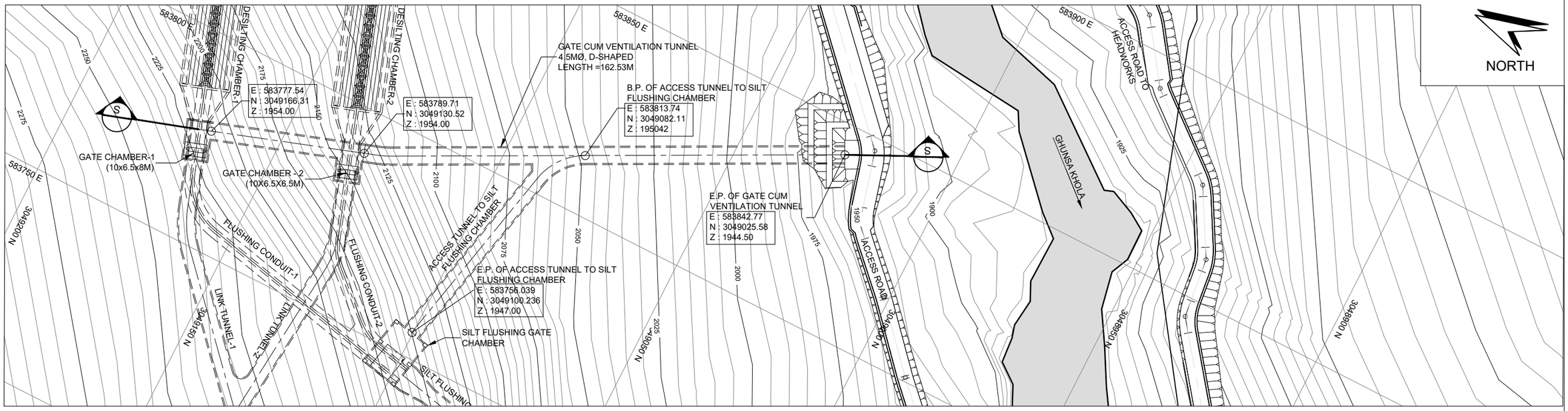
HEADWORKS
FLUSHING CONDUIT
EXCAVATION & SUPPORT DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

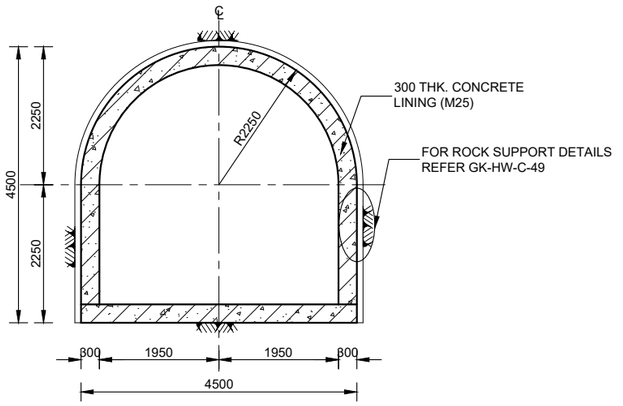
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: DR. R.B. SAH/A. BHATTAHARYA	CHECKED BY: DR. S. SHAH/Y. DEVA
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-28
SCALE: NTS	

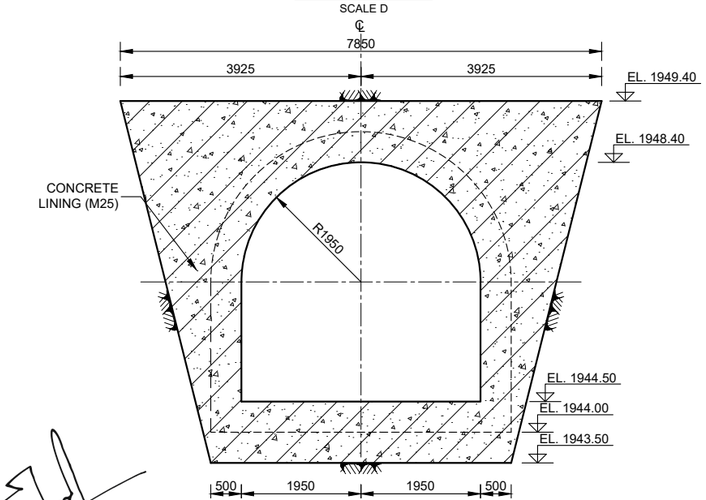
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	



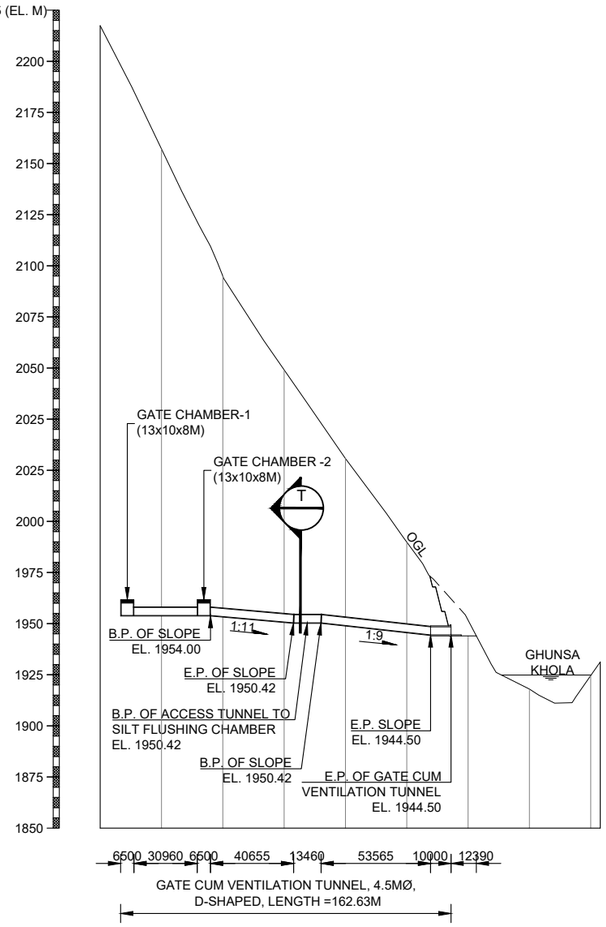
PLAN
SCALE A



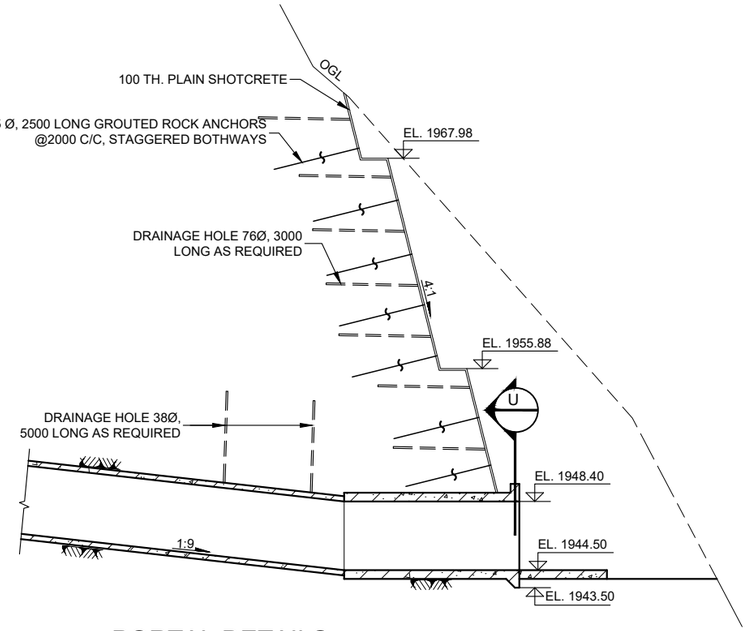
SECTION T
SCALE D



SECTION U
SCALE D



LONGITUDINAL SECTIONAL S
SCALE B



PORTAL DETAILS
SCALE C

CONTOUR INTERVAL 5 M

10 0 10 20 30 40 50M
SCALE A : 1:1,000

30 0 30 60 90 120 150M
SCALE B : 1:3,000

3.5 0 3.5 7 10.5 14 17.5M
SCALE C : 1:350

1 0 1 2 3 4 5M
SCALE D : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HEADWORKS
GATE CUM VENTILATION TUNNEL
PLAN & SECTIONAL DETAILS

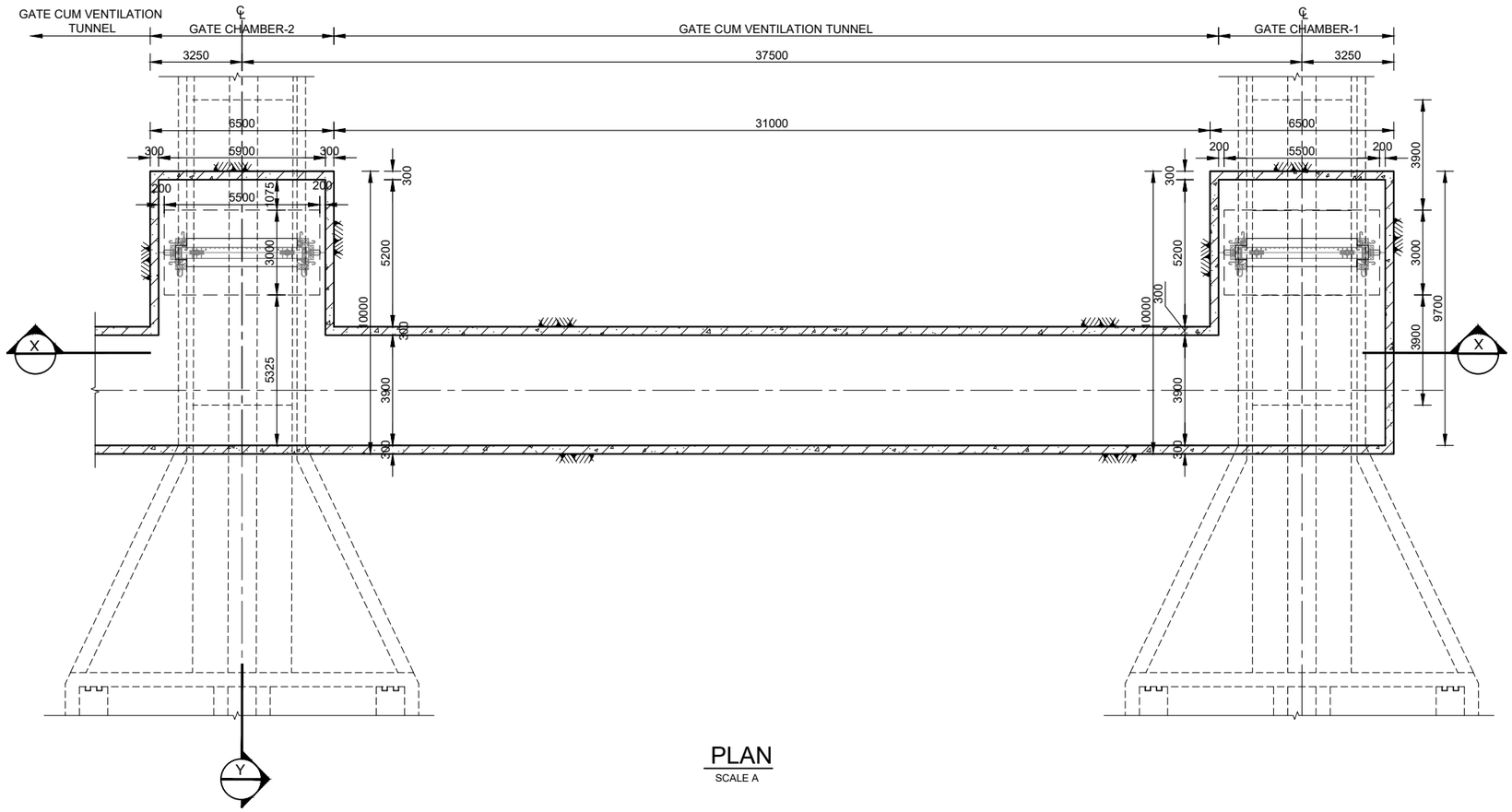
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

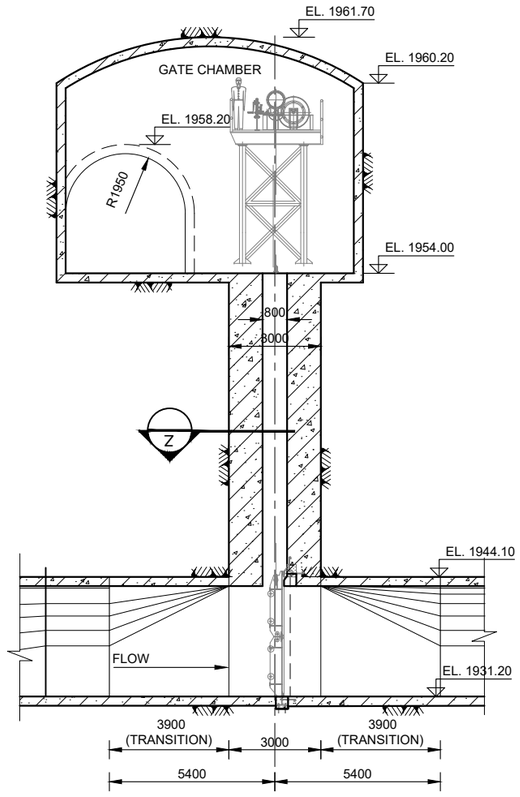
GK-HW-C-31	GATE CUM VENTILATION TUNNEL EXCAVATION &
	SUPPORT DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-29
SCALE: NTS	

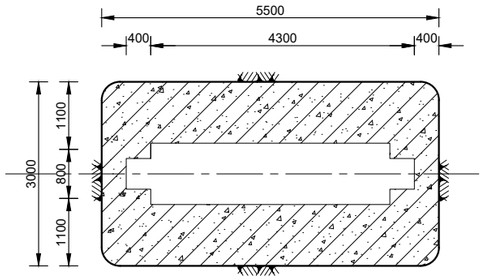
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



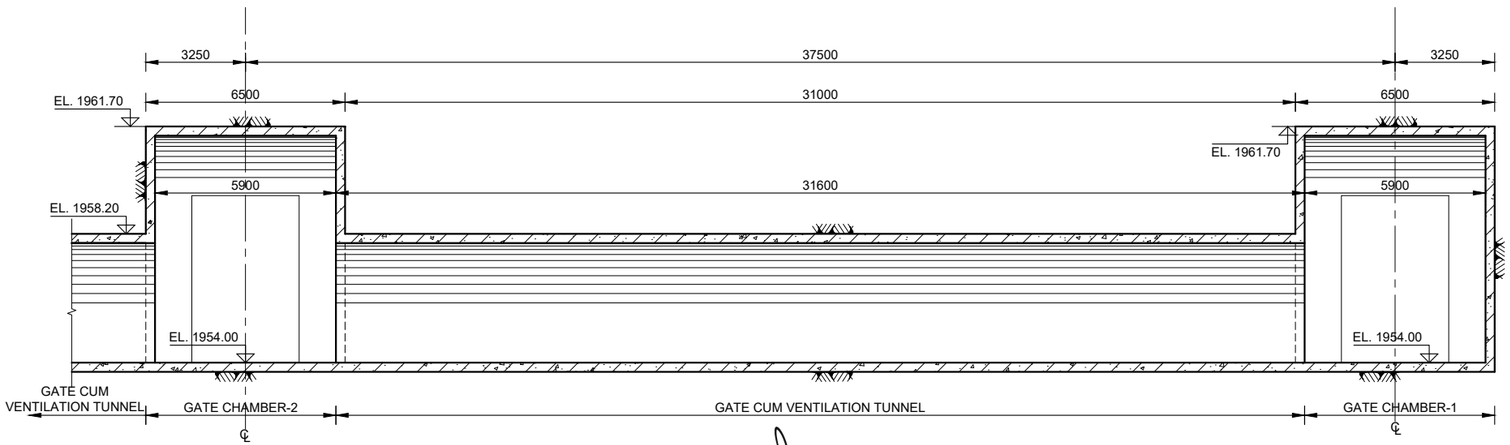
PLAN
SCALE A



CROSS SECTION Y
SCALE A



SECTION Z
SCALE B



LONGITUDINAL SECTION X
SCALE A

2 0 2 4 6 8 10M
SCALE A : 1:200

1 0 1 2 3 4 5M
SCALE B : 1:100

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

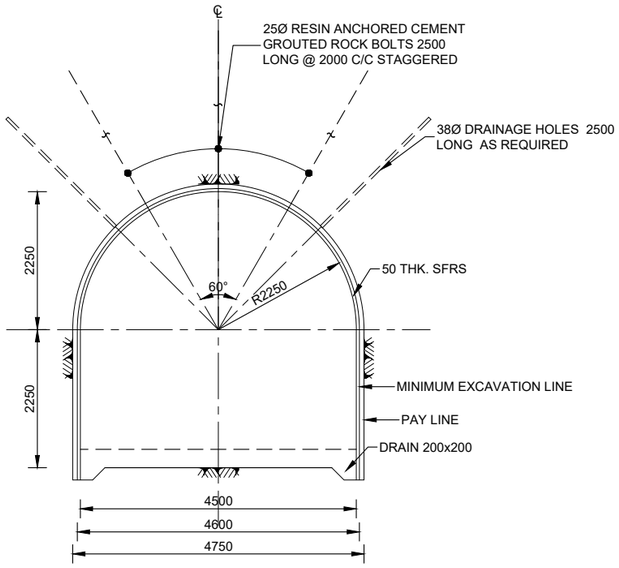
HEADWORKS
GATE CUM VENTILATION TUNNEL
GATE CHAMBER DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

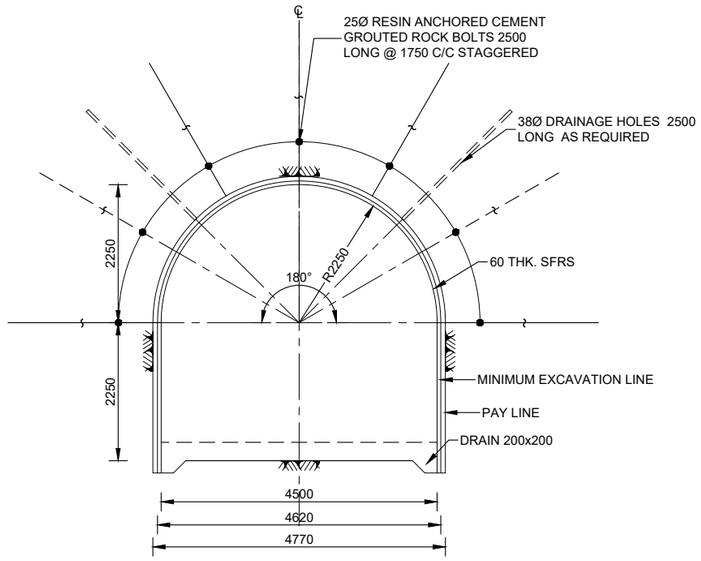
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-30
SCALE: NTS	

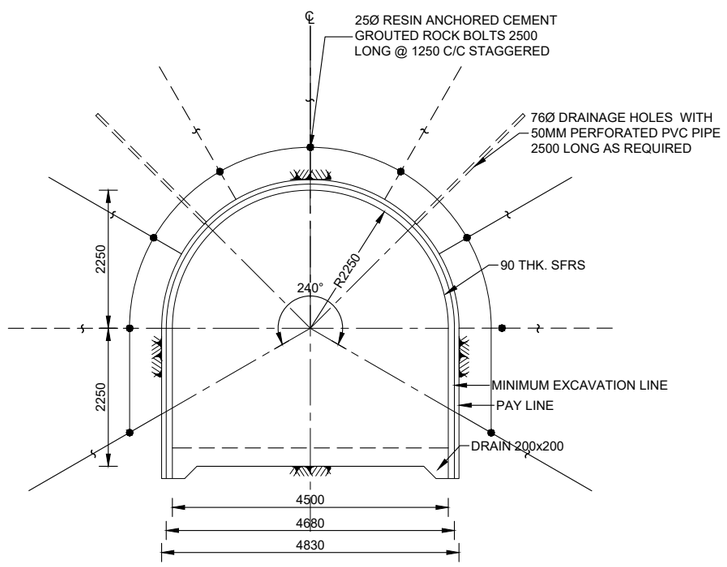
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



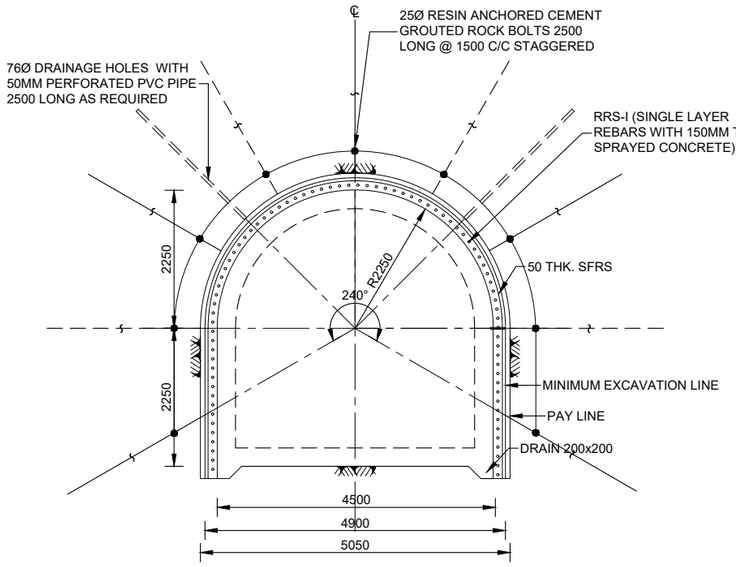
SUPPORT CATEGORY R1
(Q>4.0)



SUPPORT CATEGORY R3
(1.0 < Q < 4.0)



SUPPORT CATEGORY R4
(0.1 < Q < 1)



SUPPORT CATEGORY R6
(Q < 0.1)

ROCK MASS CLASSIFICATION & SUPPORT CATEGORY DETAILS

SUPPORT CATEGORY	Q-VALUE	ROCK CLASS
R_1	>4	I TO III
R_3	1.0 - 4.0	IV
R_4	0.1 - 1.0	V
R_6	< 0.1	VI

1 0 1 2 3 4 5M
SCALE A : 1:100

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

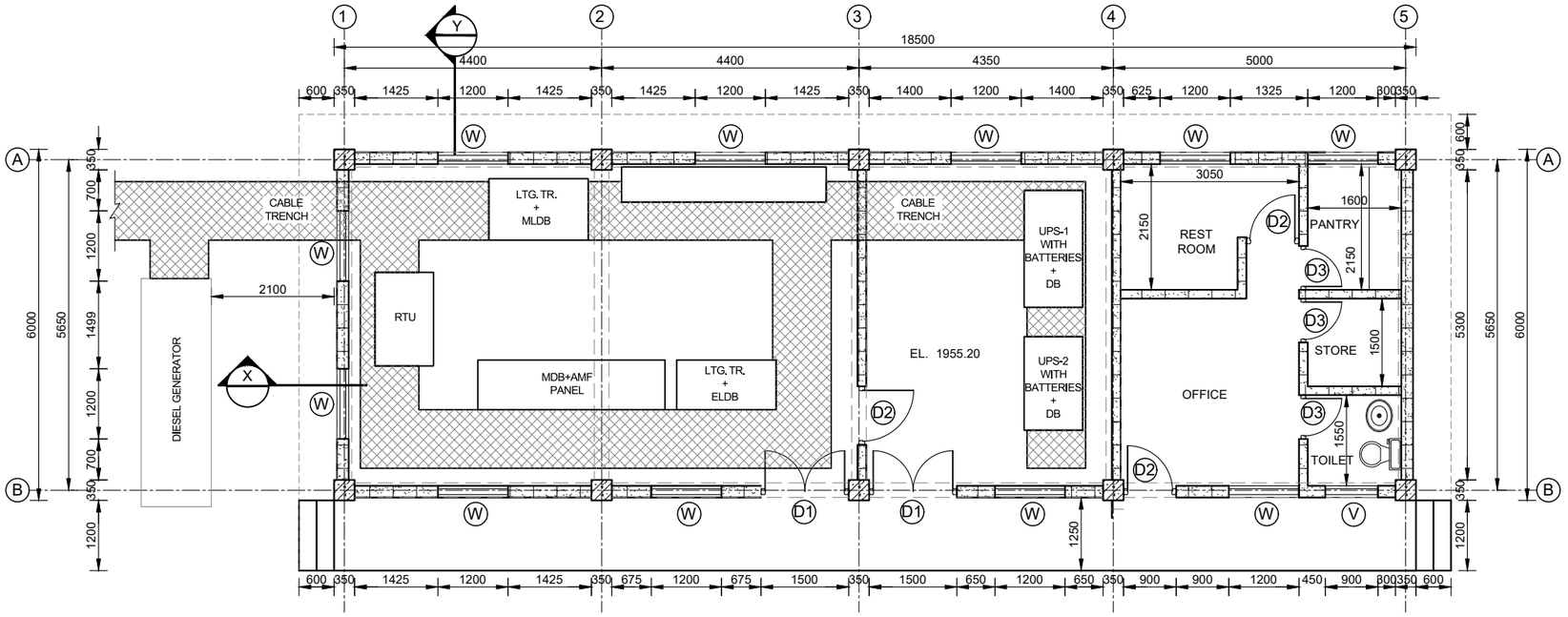
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HEADWORKS
GATE CUM VENTILATION TUNNEL
EXCAVATION & SUPPORT DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: DR. S. SHAH	CHECKED BY: DR.S. SHAH/ Y. DEVA
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-31
SCALE: NTS	

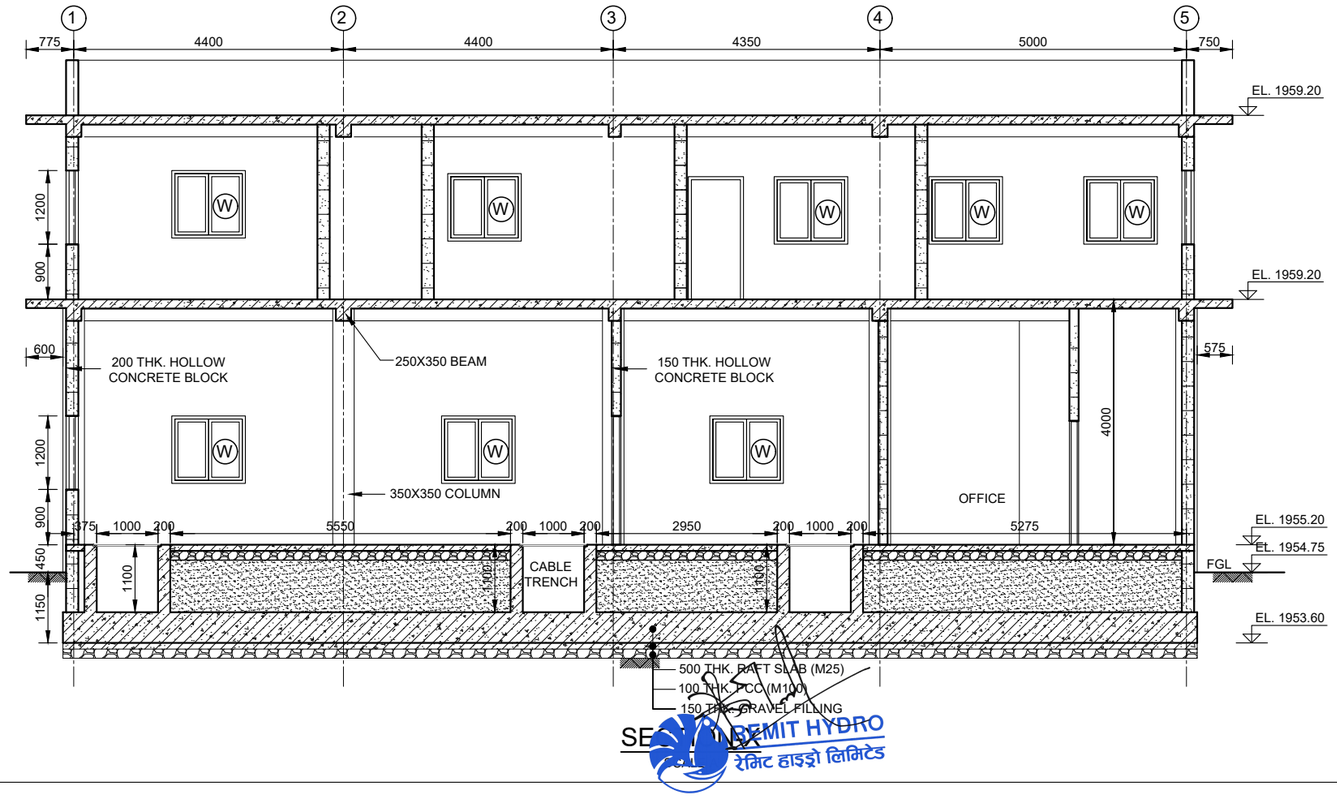


GROUND FLOOR PLAN

SCALE A

DOOR/WINDOW SCHEDULE

SN	DESCRIPTION	SIZE
1	WINDOW (W)	1200X1200
2	VENTILATION (V)	900X600
3	DOOR (D1)	1500X2100
4	DOOR (D2)	900X2100
5	DOOR (D3)	750X2100



SECTION XX

SCALE A: 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

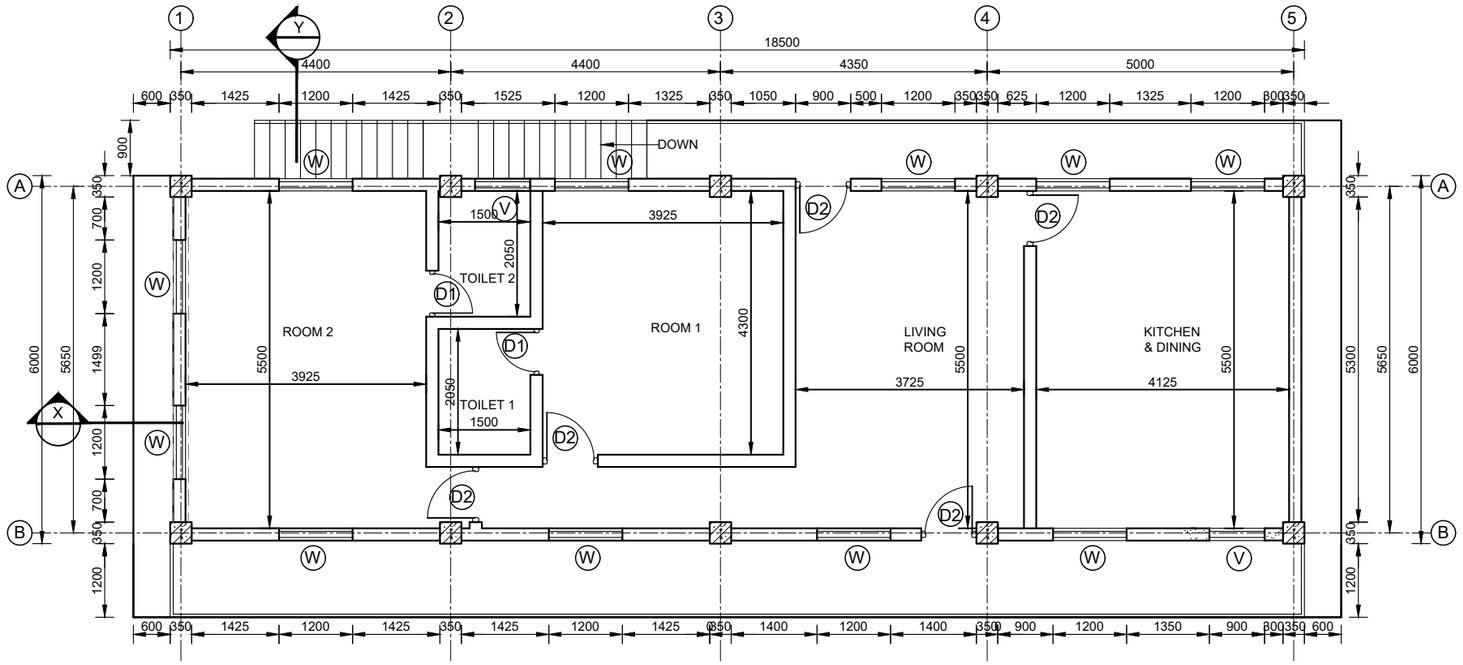
HEADWORKS
CONTROL BUILDING
PLAN, ELEVATION & SECTIONS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-32
SCALE: NTS	

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	



FIRST FLOOR PLAN

SCALE A

SECTION-Y

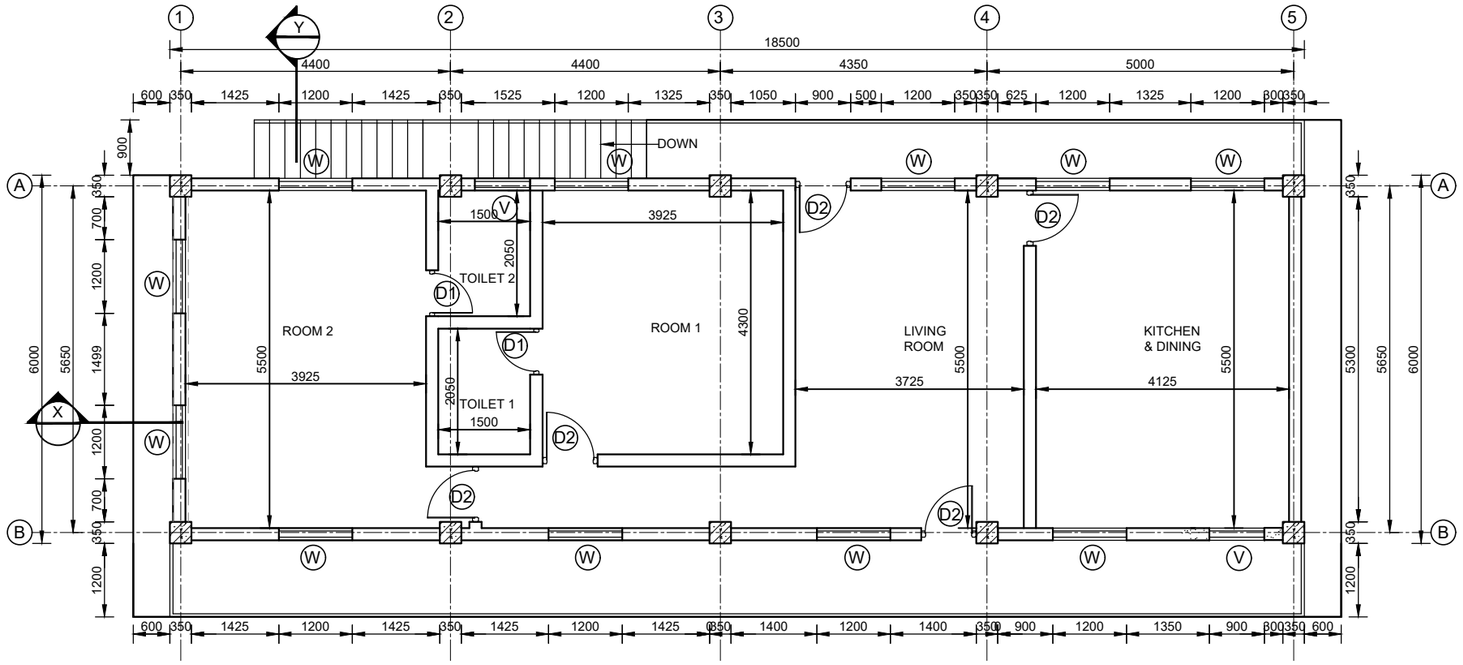
SCALE A

SCALE A: 1:100

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

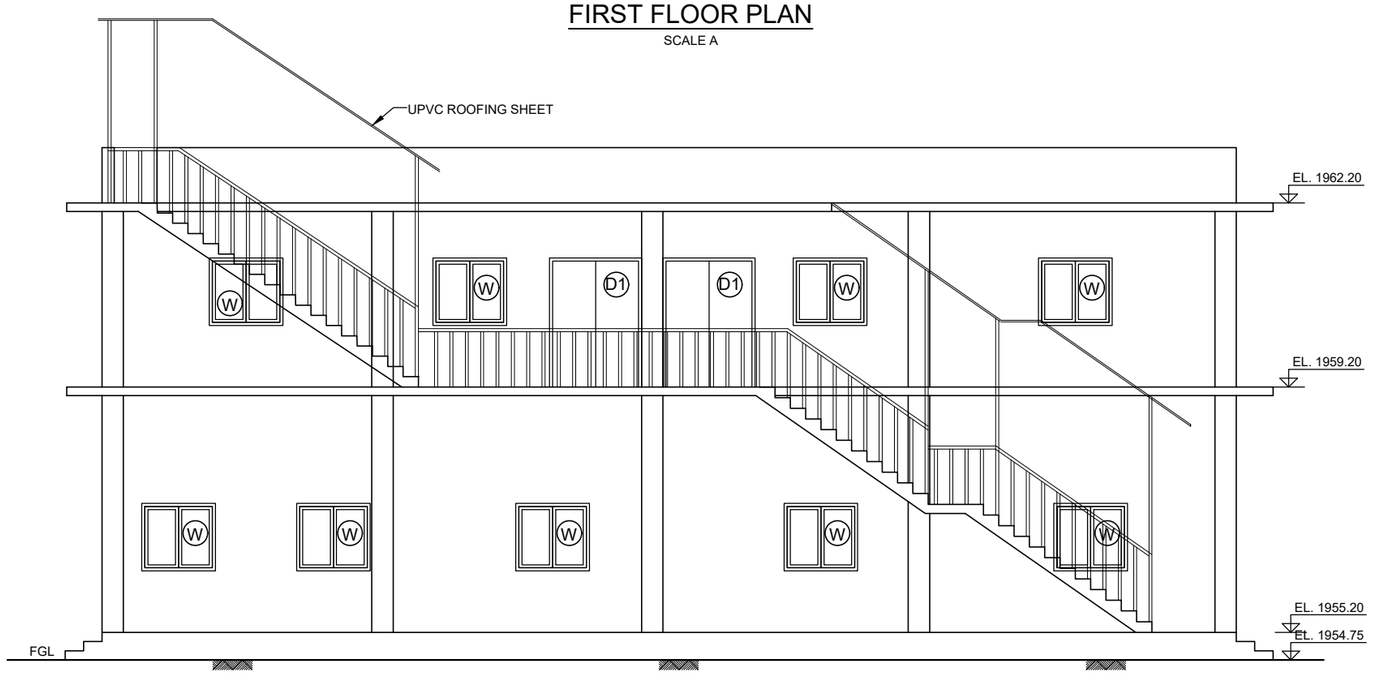
GHUNSA KHOLA HEP TAPLEJUNG, NEPAL	
REMIT HYDRO LIMITED KATHMANDU, NEPAL	
HEADWORKS CONTROL BUILDING PLAN, ELEVATION & SECTIONS	
Reviewed & Recommended for issue by: NEA Engineering Company Ltd.	
JV of Indo Canadian Consultancy Services Ltd. & Shah Consult International (P.) Ltd. THAPATHALI, KATHMANDU, NEPAL PHONE: 01-5315046; FAX:01-5315046	
DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-33
SCALE: NTS	

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS



FIRST FLOOR PLAN

SCALE A



ELEVATION

SCALE A

SCALE A: 1:100

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HEADWORKS
CONTROL BUILDING
PLAN, ELEVATION & SECTIONS

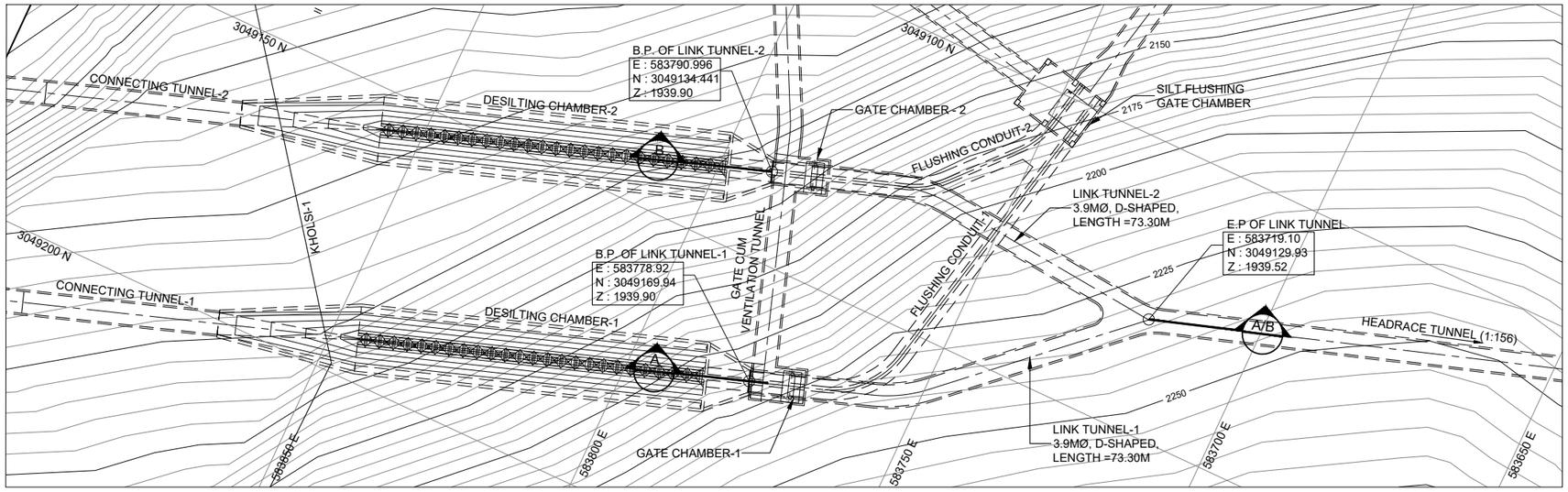
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

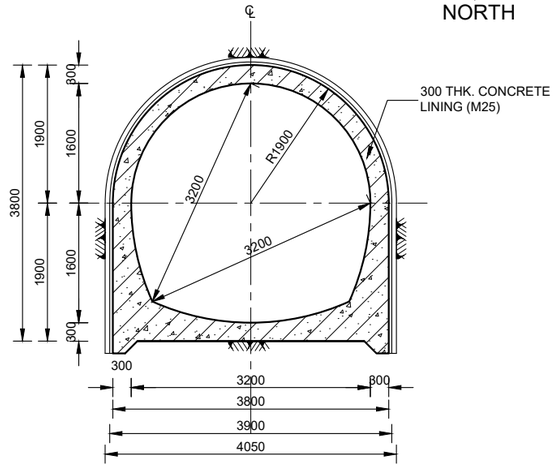
DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HW-C-33
SCALE: NTS	

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

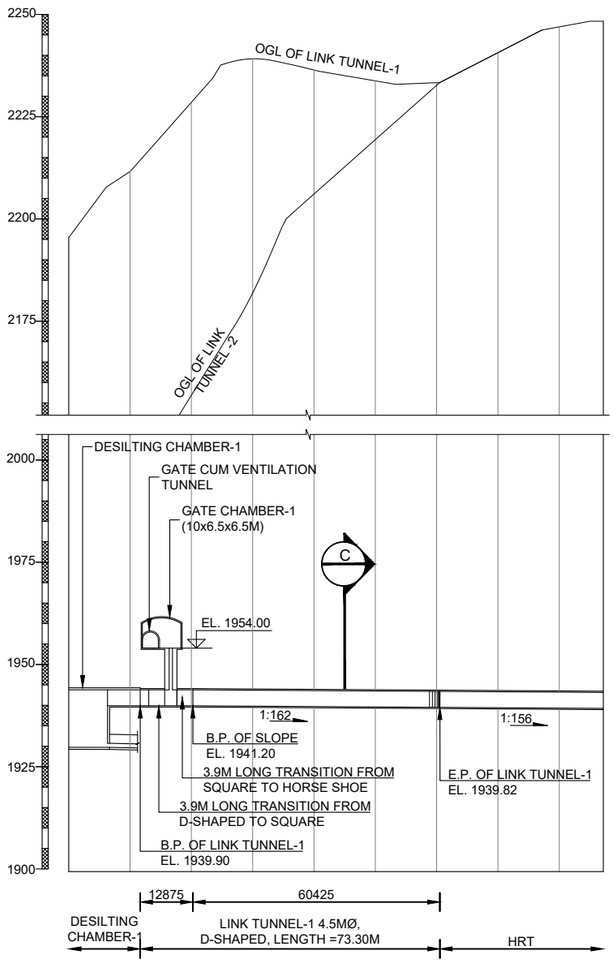
NORTH



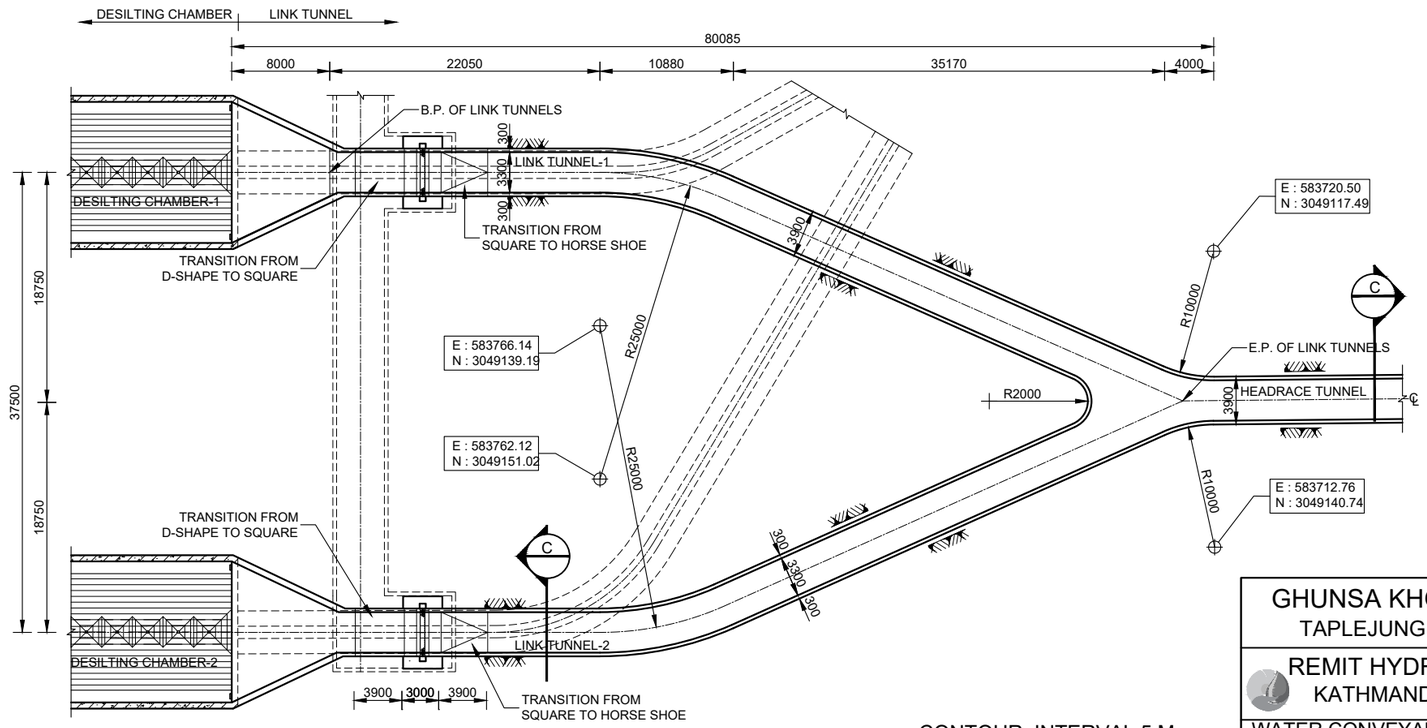
PLAN
SCALE : A



SECTION C
SCALE C



LONGITUDINAL SECTION ALONG LINK TUNNELS
SECTION A/B
SCALE B



CONTOUR INTERVAL 5 M

10 0 10 20 30 40 50M
SCALE A : 1:1000

15 0 15 30 45 60 75M
SCALE B : 1:1500

1 0 1 2 3 4 5M
SCALE C : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

WATER CONVEYANCE SYSTEM
LINK TUNNELS
PLAN & SECTIONAL DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

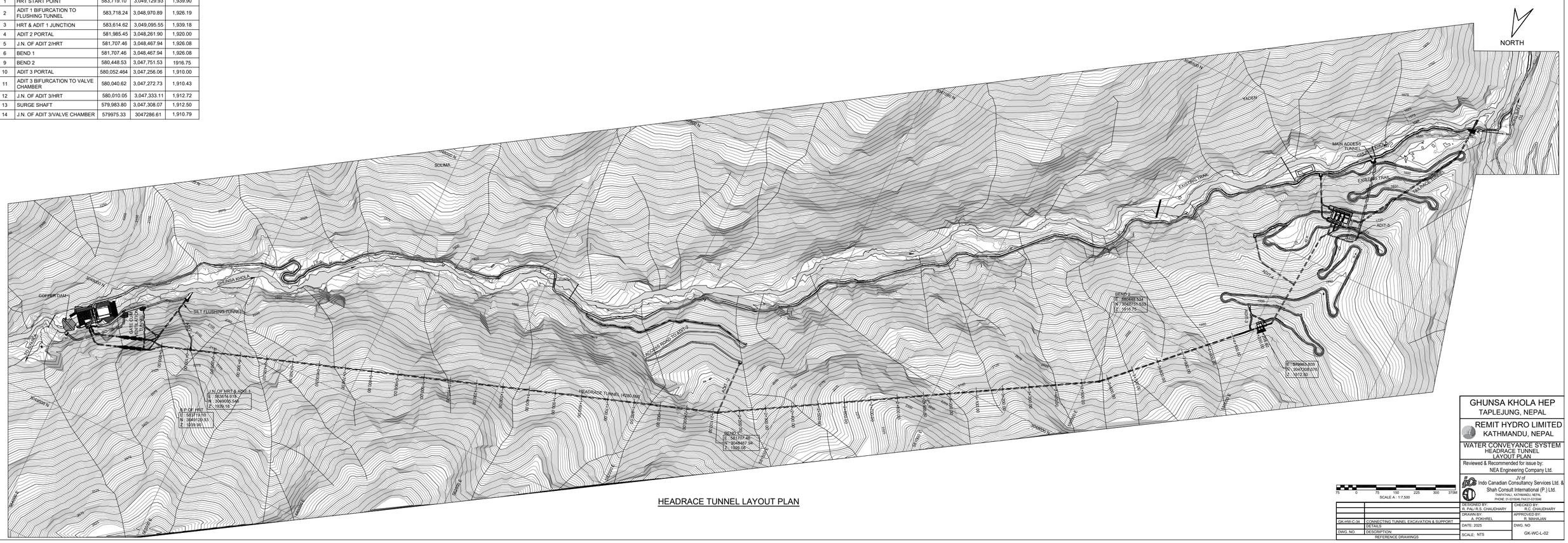
GK-WC-C-04	HEADRACE TUNNEL EXCAVATION & ROCK SUPPORT DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-01
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

6. Water Conveyance System

POINT NO.	DESCRIPTION	EASTING	NORTHING	ELEVATION
1	HRT START POINT	583,719.10	3,049,129.93	1,939.90
2	ADIT 1 BIFURCATION TO FLUSHING TUNNEL	583,718.24	3,048,970.89	1,926.19
3	HRT & ADIT 1 JUNCTION	583,614.62	3,049,095.55	1,939.18
4	ADIT 2 PORTAL	581,985.45	3,048,261.90	1,920.00
5	J.N. OF ADIT 2/HRT	581,707.46	3,048,467.94	1,926.08
6	BEND 1	581,707.46	3,048,467.94	1,926.08
9	BEND 2	580,448.53	3,047,751.53	1916.75
10	ADIT 3 PORTAL	580,052.464	3,047,256.06	1,910.00
11	ADIT 3 BIFURCATION TO VALVE CHAMBER	580,040.62	3,047,272.73	1,910.43
12	J.N. OF ADIT 3/HRT	580,010.05	3,047,333.11	1,912.72
13	SURGE SHAFT	579,983.80	3,047,308.07	1,912.50
14	J.N. OF ADIT 3/VALVE CHAMBER	579975.33	3047286.61	1,910.79



HEADRACE TUNNEL LAYOUT PLAN

		DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
		DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
GK-HW-C-34	CONNECTING TUNNEL EXCAVATION & SUPPORT DETAILS	DATE: 2025	DWG. NO GK-WC-L-02
DWG. NO.	DESCRIPTION	SCALE: NTS	
	REFERENCE DRAWINGS		

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

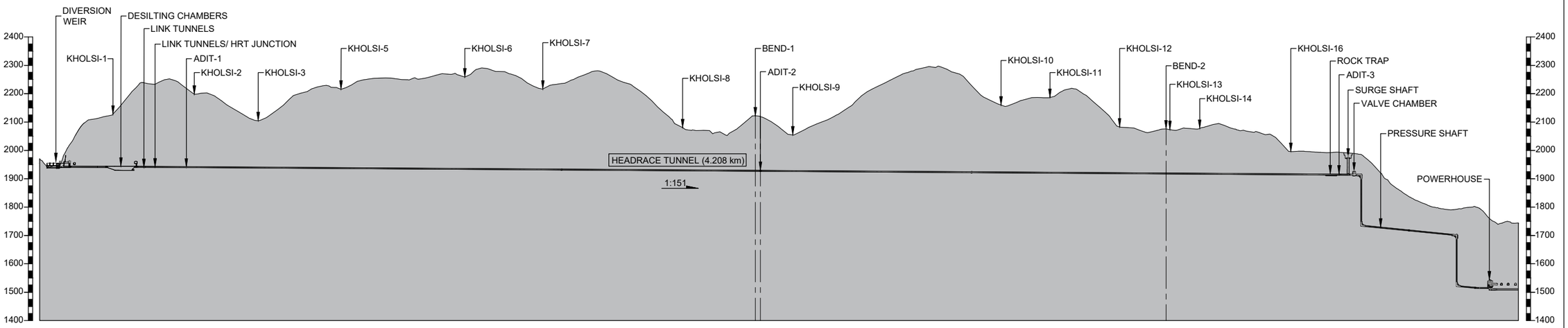
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

WATER CONVEYANCE SYSTEM
HEADRACE TUNNEL
LAYOUT PLAN

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

In of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5370048, FAX:01-5370048

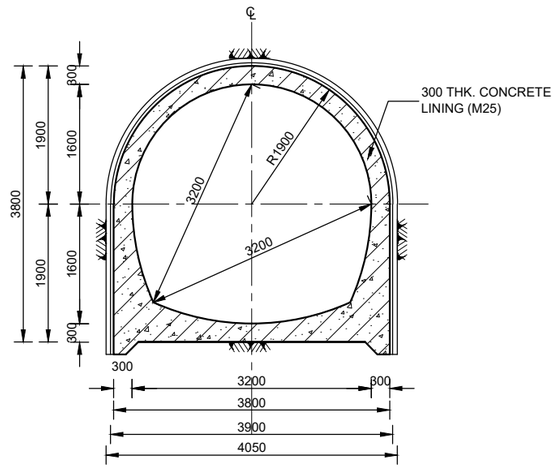
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



EXISTING LEVEL (M)	2233.340 2226.278 2195.742 2132.557 2120.403 2197.579 2228.931 2235.831 2255.262 2250.101 2267.423 2258.262 2278.695 2247.432 2231.008 2260.949 2267.249 2216.797 2129.233 2071.333 2060.514 2115.634 2082.878 2077.768 2122.365 2199.990 2250.605 2288.448 2282.292 2206.885 2155.153 2186.652 2208.885 2180.293 2083.526 2062.322 2070.341 2081.561 2077.342 2061.516 1996.398 1993.292 1991.025 1945.450 1852.442 1802.343 1794.356 1766.480 1744.005
INVERT LEVEL (M)	1939.90 (0+000) 1939.18 (0+110.01) 1926.12 (2+117.64) 1926.00 (2+185.64) 1921.02 (3+566.13) 1916.69 (3+888.06) 1912.72 (4+185.40) 1912.50 (4+208.63) 1722.81 (4+351.92) 1513.95 (4+654.10)
CHAINAGE (KM)	0+000.00 0+100.00 0+200.00 0+300.00 0+400.00 0+500.00 0+600.00 0+700.00 0+800.00 0+900.00 1+000.00 1+100.00 1+200.00 1+300.00 1+400.00 1+500.00 1+600.00 1+700.00 1+800.00 1+900.00 2+000.00 2+100.00 2+200.00 2+300.00 2+400.00 2+500.00 2+600.00 2+700.00 2+800.00 2+900.00 3+000.00 3+100.00 3+200.00 3+300.00 3+400.00 3+500.00 3+600.00 3+700.00 3+800.00 3+900.00 4+000.00 4+100.00 4+200.00 4+300.00 4+400.00 4+500.00 4+600.00 4+700.00 4+800.00

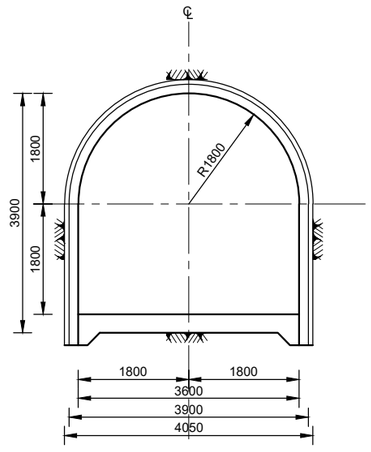
LONGITUDINAL PROFILE

SCALE A



TYPICAL CONCRETE-LINED CROSS SECTION

SCALE B



TYPICAL SHOTCRETE-LINED CROSS SECTION

SCALE B

150 0 150 300 450 600 750M

SCALE A : 1:15,000

1 0 1 2 3 4 5M

SCALE B : 1:100

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

WATER CONVEYANCE SYSTEM
HEADRACE TUNNEL SECTIONS

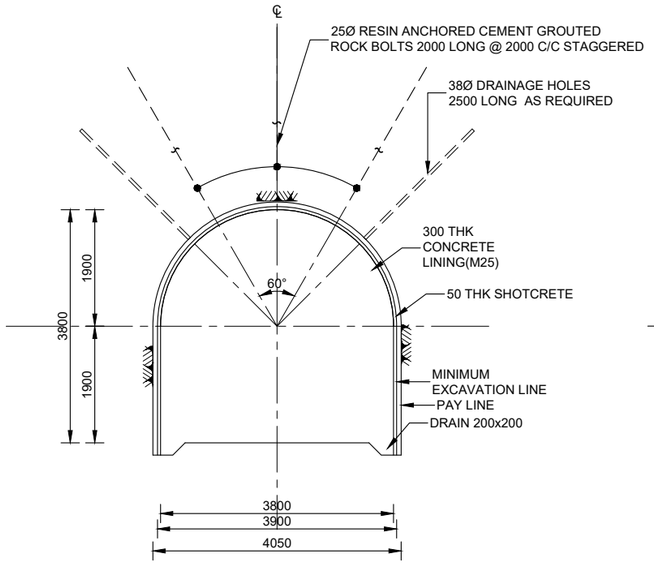
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

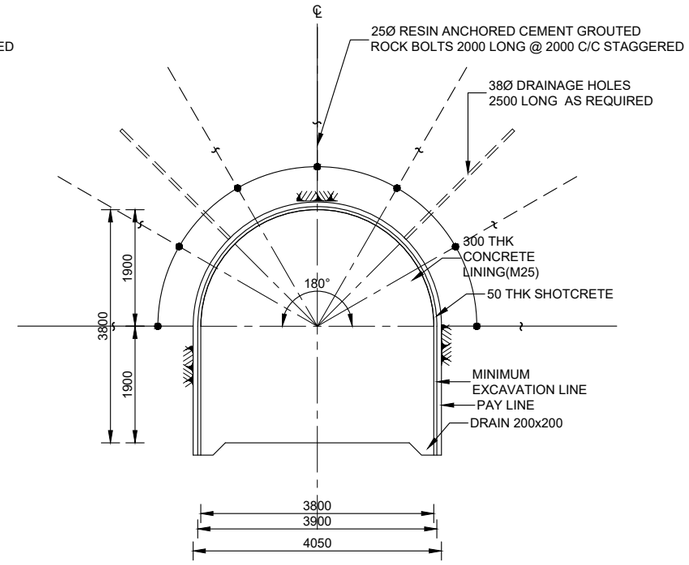
GK-WC-C-04	HEADRACE TUNNEL EXCAVATION & ROCK
	SUPPORT DETAILS
DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-03
SCALE: NTS	

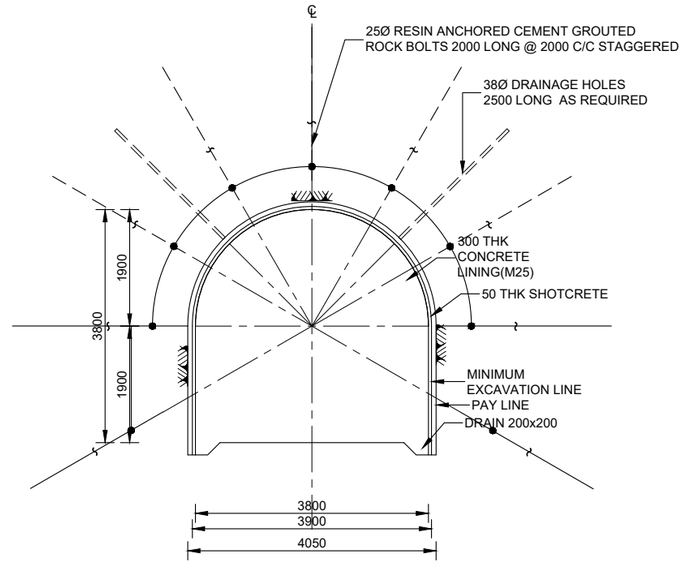
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



SUPPORT CATEGORY R1
(Q>4.0)



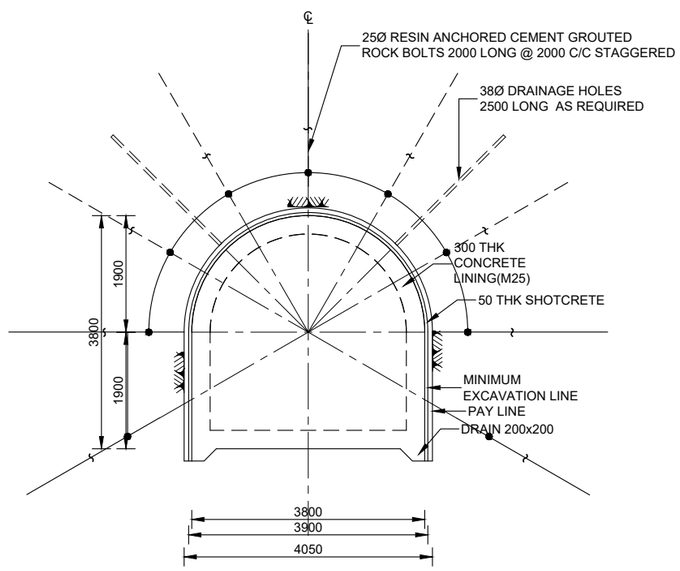
SUPPORT CATEGORY R3
(1.0 < Q < 4.0)



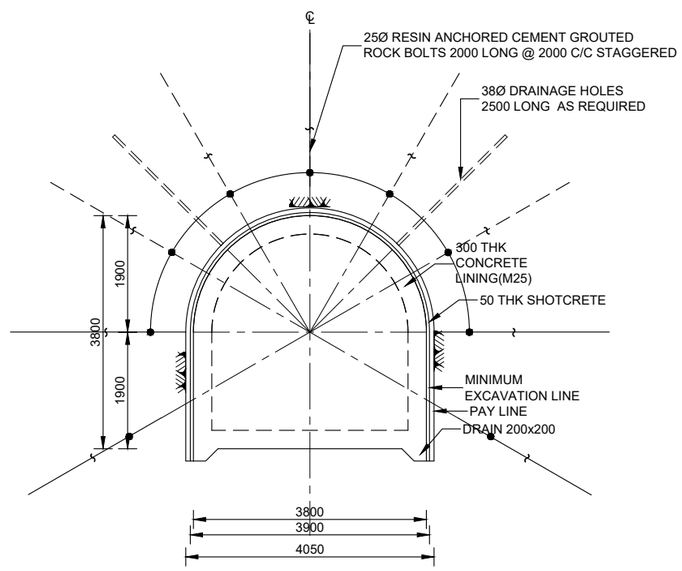
SUPPORT CATEGORY R5
(0.1 < Q < 1)

ROCK MASS CLASSIFICATION & SUPPORT CATEGORY DETAILS

SUPPORT CATEGORY	Q-VALUE	ROCK CLASS
R_1	>4	I TO III
R_3	1.0 - 4.0	IV
R_5	0.1 - 1.0	V
R_7	< 0.1	VI



SUPPORT CATEGORY R7 (OPTION-II)
(Q < 0.1)



SUPPORT CATEGORY R7 (OPTION-II)
(Q < 0.1)

LINK TUNNEL & MRT EXCAVATION & ROCK SUPPORT DETAILS

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

1 0 1 2 3 4 5M
SCALE : 1:100

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

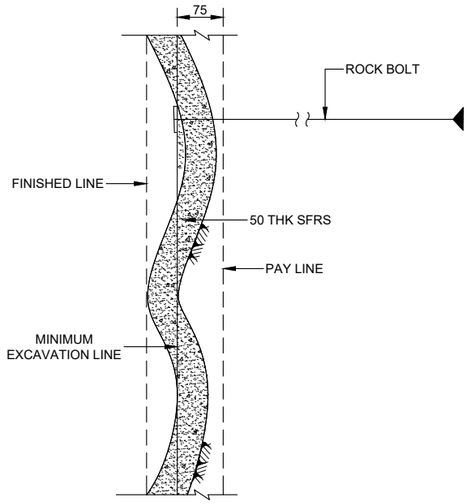
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

WATER CONVEYANCE SYSTEM
HEADRACE TUNNEL
EXCAVATION & SUPPORT DETAILS

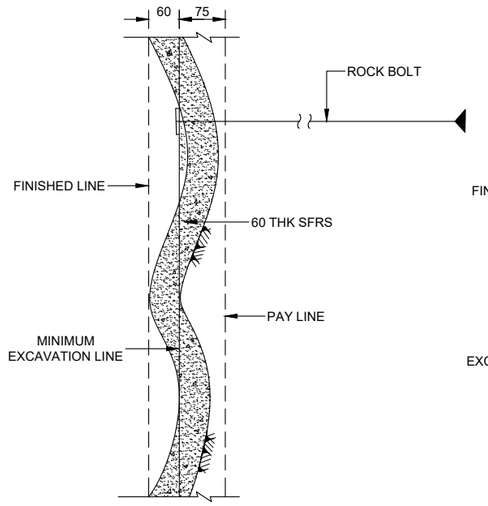
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

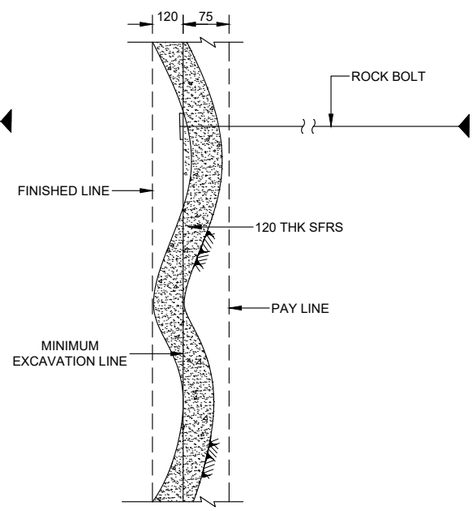
DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-04
SCALE: NTS	



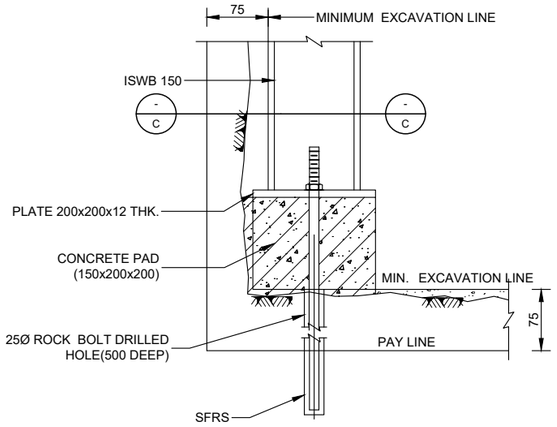
DETAIL 1
SCALE A



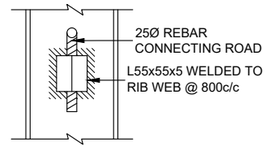
DETAIL 2
SCALE A



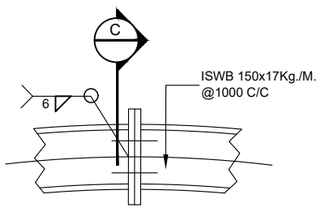
DETAIL 3
SCALE A



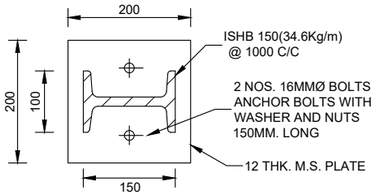
DETAIL 5
SCALE B



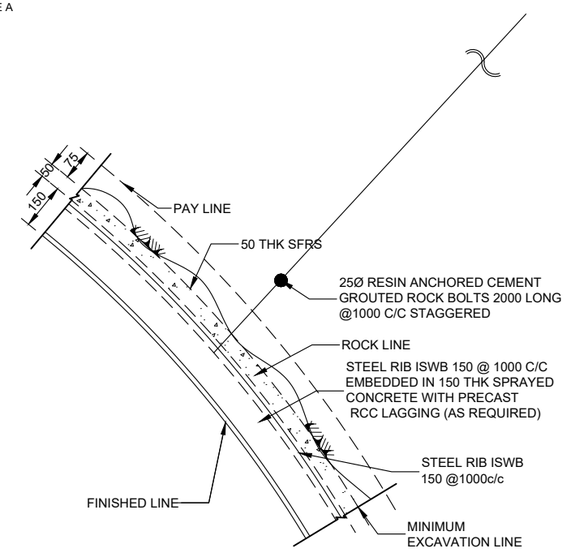
DETAIL 6
SCALE B



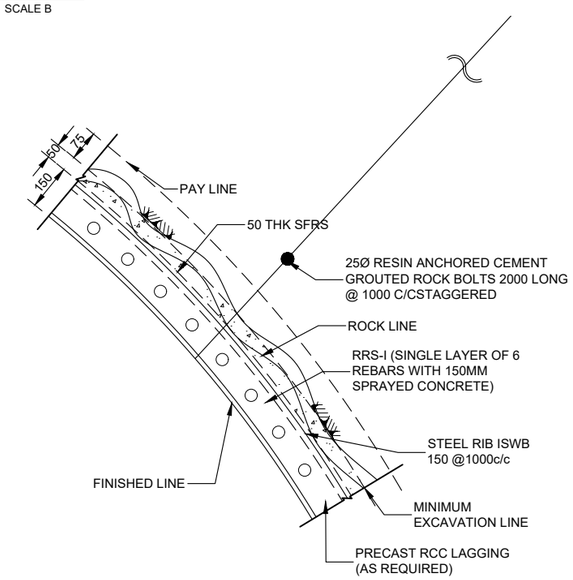
DETAIL 7
SCALE B



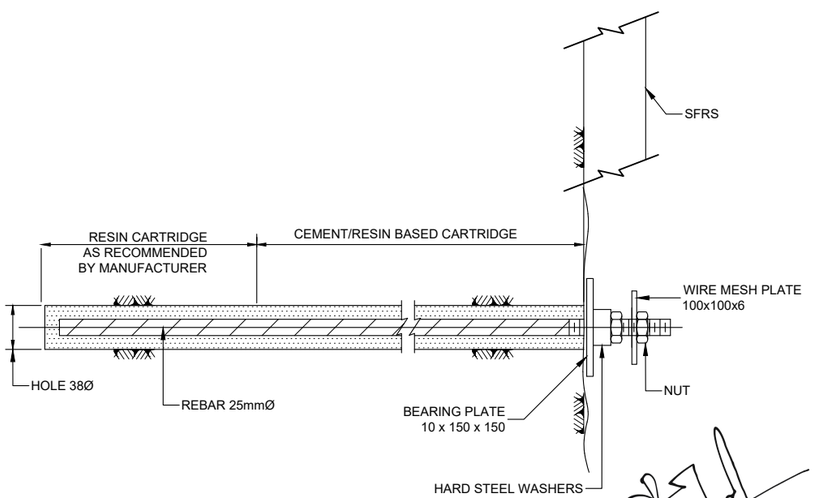
SECTION AT C
SCALE B



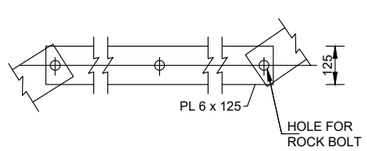
DETAIL 4 (OPTION-I)
SCALE A



DETAIL 4 (OPTION-II)
SCALE A



RESIN - GROUTED BOLTS/ANCHORS
MINIMUM YIELD STRENGTH 500 kN/MM^2 (REBAR)
SCALE B



ROCK BOLT STRAPPING
SCALE A

0.2 0 0.2 0.4 0.6 0.8 1M
SCALE A : 1:20

0.1 0 0.1 0.2 0.3 0.4 0.5M
SCALE B : 1:10

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

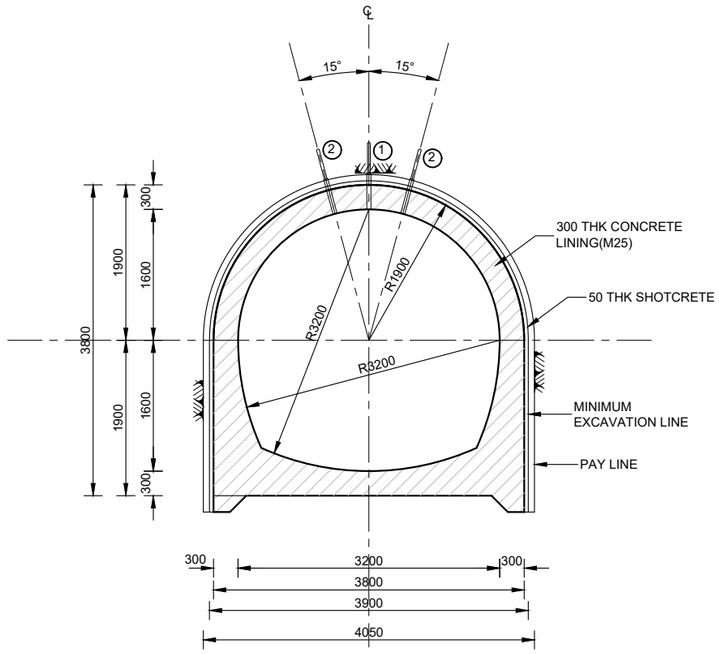
WATER CONVEYANCE SYSTEM
HEADRACE TUNNEL
TYPICAL SUPPORT DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

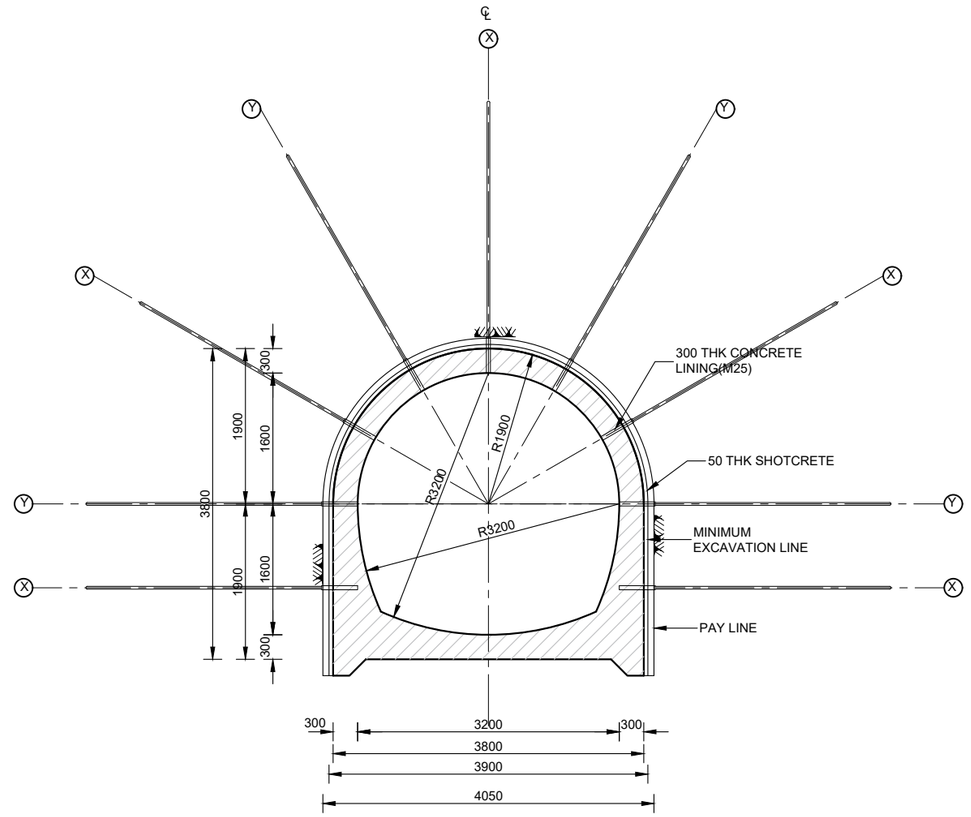
DESIGNED BY: DR. R.B. SAH/A. BHATTACHARYA	CHECKED BY: DR. S. SHAH/Y. DEVA
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-05
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



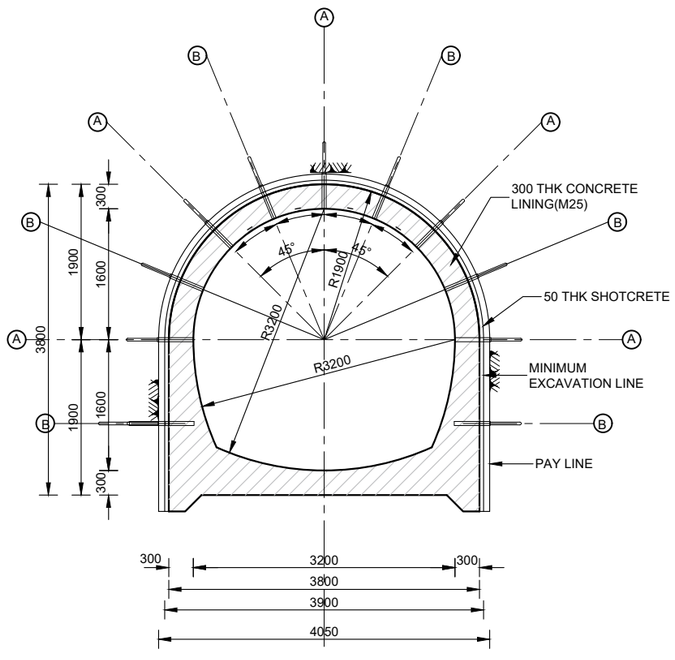
STEP 1: VOID GROUTING

HOLES 1 AND 2 ALTERNATING



STEP 3: CONSOLIDATION GROUTING

RING OF 5 HOLES X AND 4 HOLES Y ALTERNATING



STEP 2: CONTACT GROUTING

HOLES A AND B ALTERNATING

GROUTING STEPS

STEP 1: VOID GROUTING OF CONCRETE-ROCK
VOID GROUTING OF CONCRETE-ROCK ALONG TUNNEL ARCH SHALL BE EXECUTED BY 3 HOLES DRILLED THROUGH THE CONCRETE AND PENETRATING300 MM IN THE ROCK. THIS PATTERN SHALL BE EXECUTED LONGITUDINALLY AT 3000 C/C.GROUT WITH W.C. = 1:1

STEP 2: CONTACT GROUTING
CONTACT GROUTING SHALL BE EXECUTED THROUGH 7 HOLES DRILLED THROUGH CONCRETE AND PENETRATING 300 MM IN ROCK. EACH OF THE 8 HOLE RINGS SHALL BE LONGITUDINALLY SPACED AT 3000 C/C. GROUTING STARTING WITH W.C = 3:1

STEP 3: CONSOLIDATION GROUTING
CONSOLIDATION GROUTING SHALL BE EXECUTED THROUGH THE 5 HOLES DRILLED THROUGH THE CONCRETE AND PENETRATING 4 M IN ROCK. THIS PATTERN SHALL BE EPEATED AT 3000 C/C USING A ROTATION OF HOLES. GROUTING STARTING WITH W.C = 3:1

0.75 0 1.5 2.25 3 3.75 4.5M
SCALE : 1:75

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

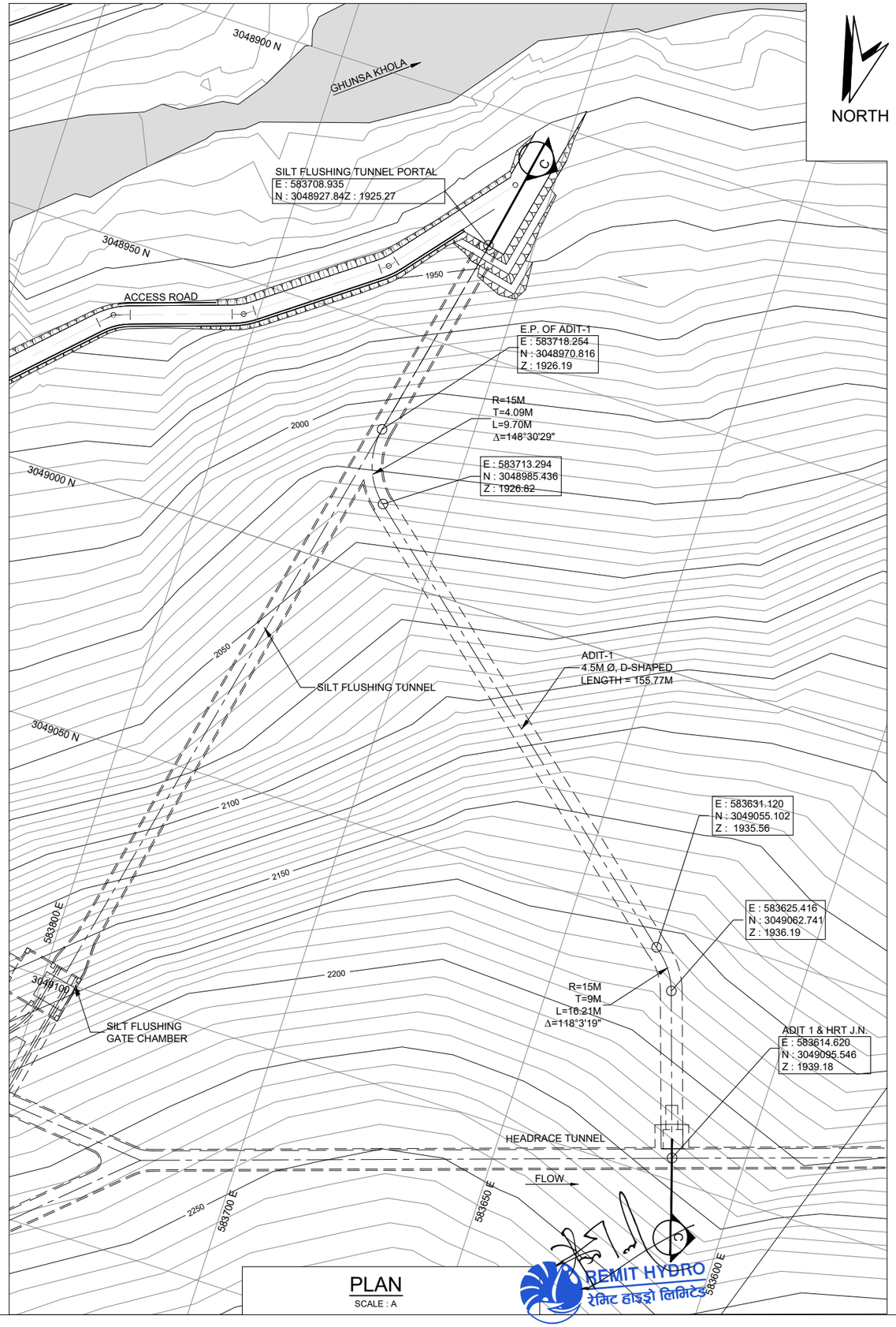
WATER CONVEYANCE SYSTEM
HEADRACE TUNNEL
GROUTING DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

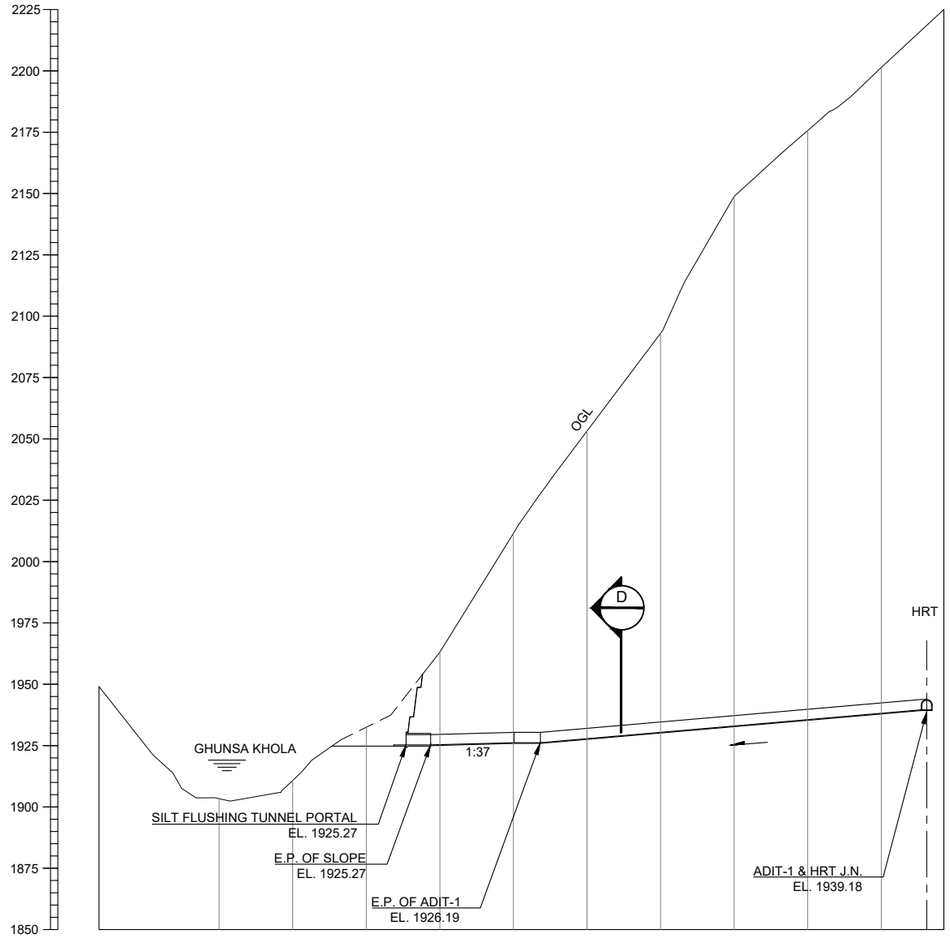
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

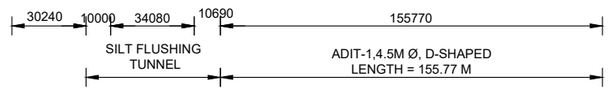
DESIGNED BY: DR. S. SHAH	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-06
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

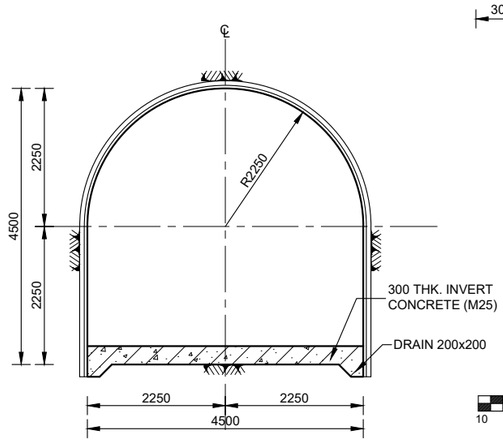


PLAN
SCALE : A



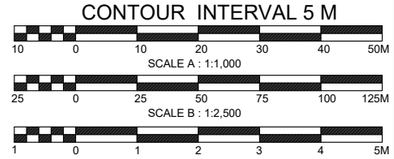


SECTION C
SCALE B



SECTION D
SCALE C

CONTOUR INTERVAL 5 M



GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

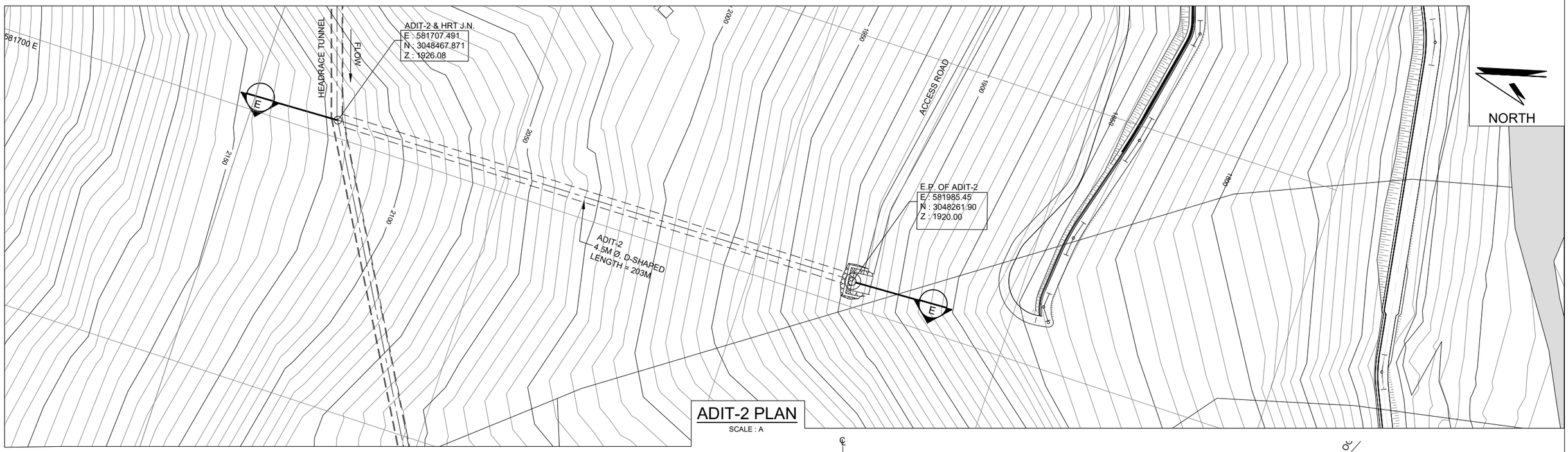
WATER CONVEYANCE SYSTEM
ADIT TUNNELS
ADIT-1 PLAN & SECTIONAL DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

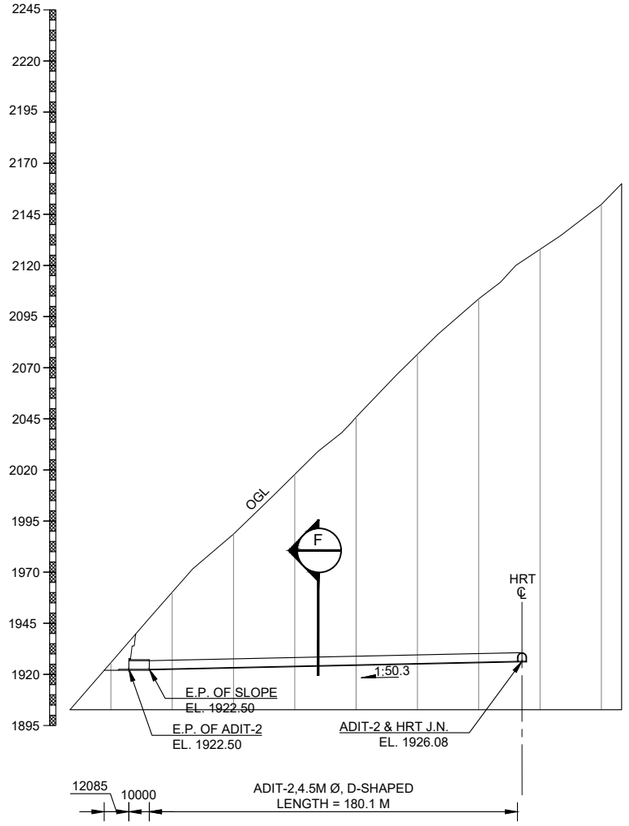
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

GK-WC-C-10	ADIT TUNNEL EXCAVATION & ROCK SUPPORT DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

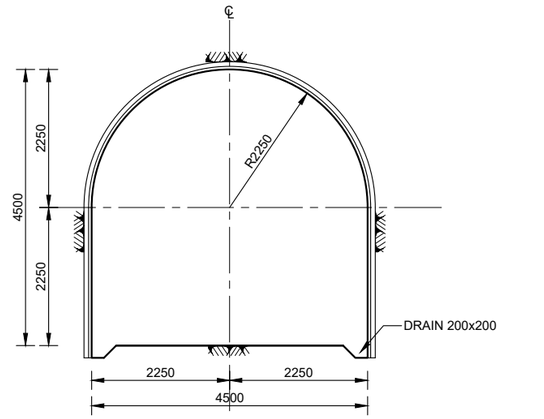
DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-07
SCALE: NTS	



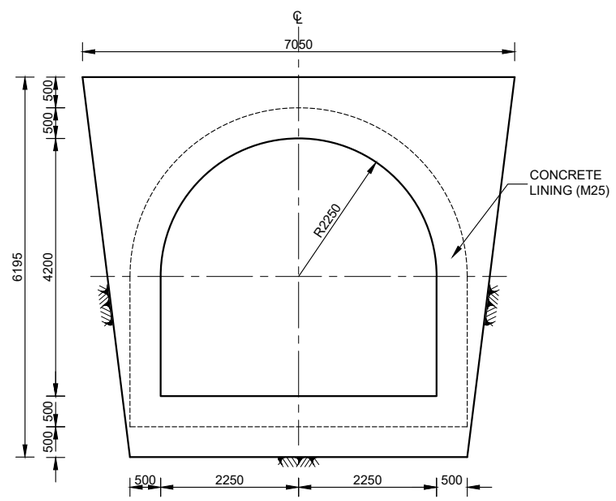
ADIT-2 PLAN
SCALE : A



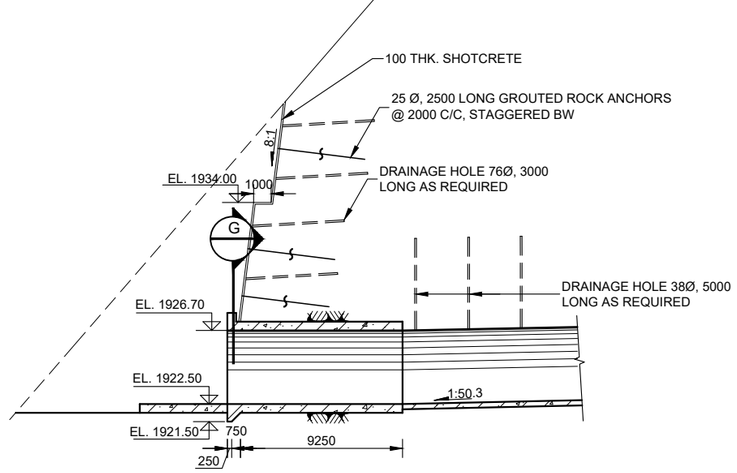
SECTION E
SCALE B



SECTION F
SCALE D



SECTION G
SCALE D



PORTAL DETAILS
SCALE C

CONTOUR INTERVAL 5 M

15 0 15 30 45 60 75M
SCALE A : 1:1,500

30 0 30 60 90 120 150M
SCALE B : 1:3,000

3.5 0 3.5 7 10.5 14 17.5M
SCALE C : 1:350

1 0 1 2 3 4 5M
SCALE D : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

WATER CONVEYANCE SYSTEM
ADIT TUNNELS
ADIT-2 PLAN & SECTIONAL DETAILS

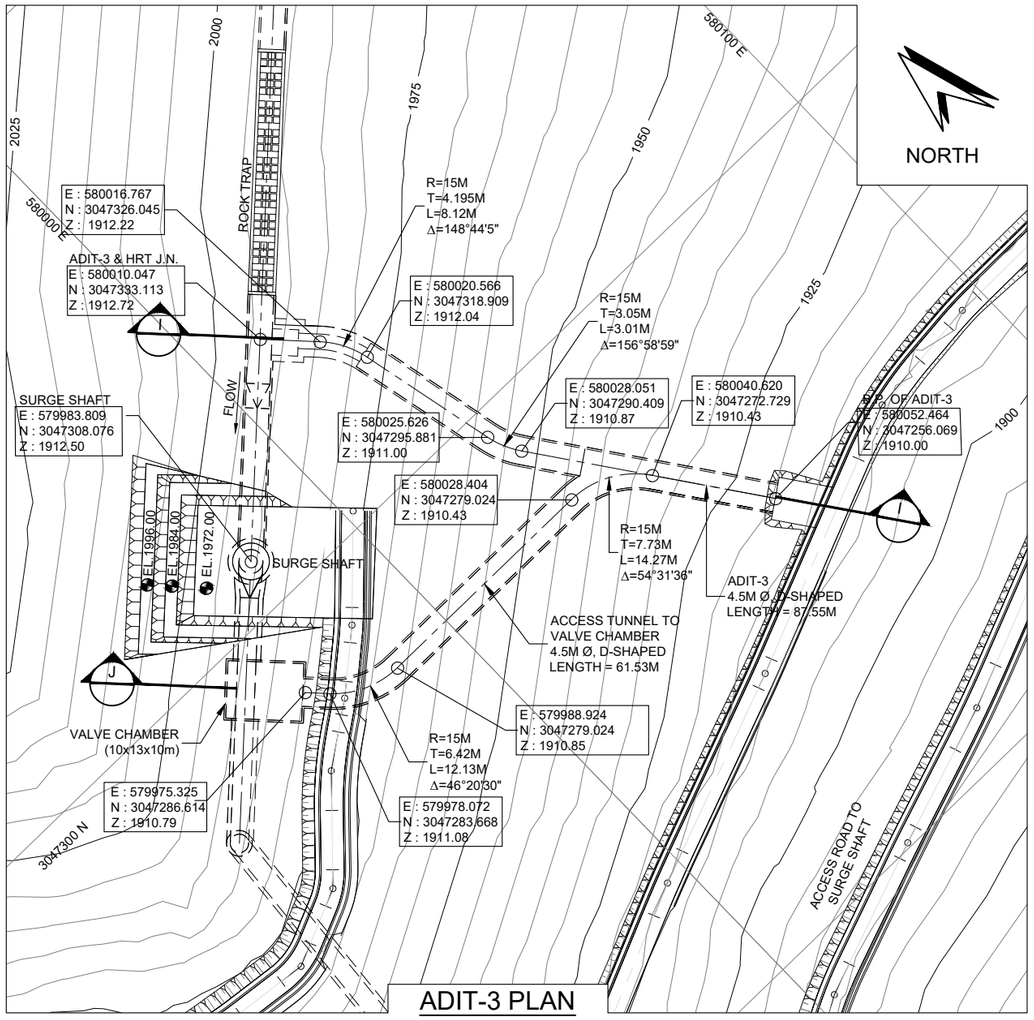
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

GK-WC-C-10	ADIT TUNNEL EXCAVATION & ROCK SUPPORT DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

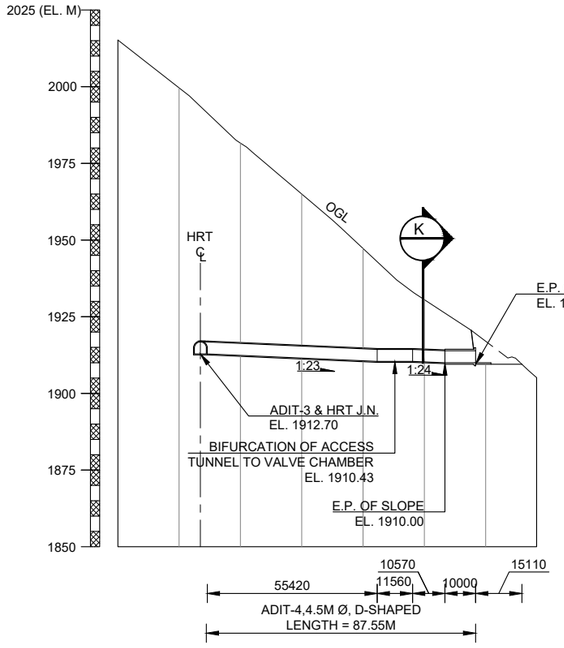
DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-08
SCALE: NTS	

REMIT HYDRO
रेमित हाइड्रो लिमिटेड



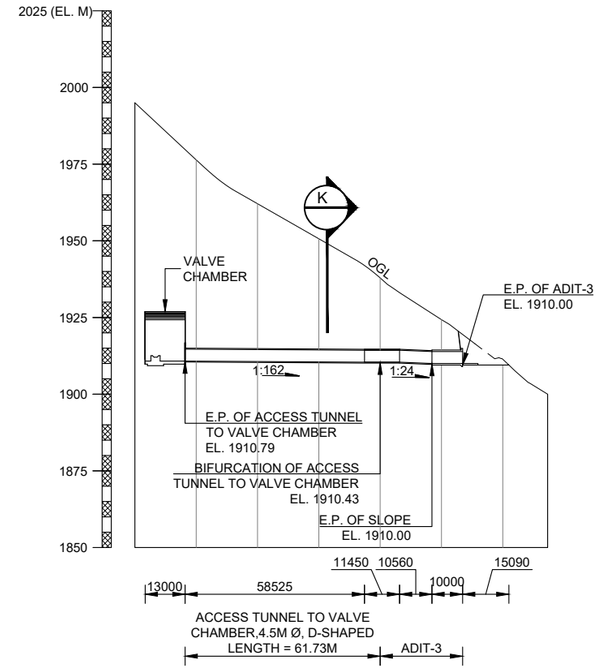
ADIT-3 PLAN

SCALE : A



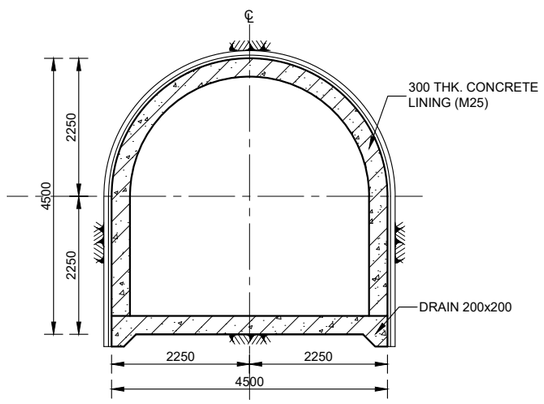
LONGITUDINAL SECTION I

SCALE B



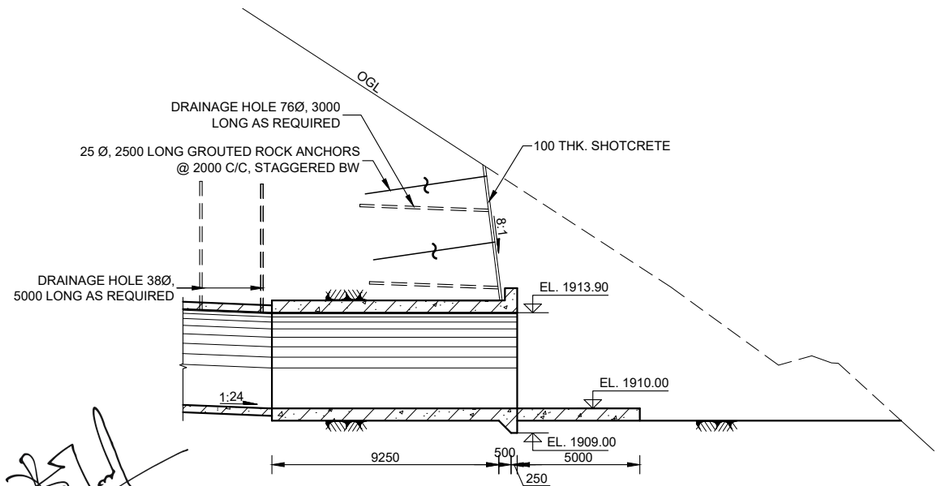
LONGITUDINAL SECTION J

SCALE B



SECTION K

SCALE D



PORTAL DETAILS

SCALE C

CONTOUR INTERVAL 5 M

10 0 10 20 30 40 50M
SCALE A : 1:1,000

20 0 20 40 60 80 100M
SCALE B : 1:2,000

2.5 0 2.5 5 7.5 10 12.5M
SCALE C : 1:250

1 0 1 2 3 4 5M
SCALE D : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

WATER CONVEYANCE SYSTEM
ADIT TUNNNELS
ADIT-3 PLAN & SECTIONAL DETAILS

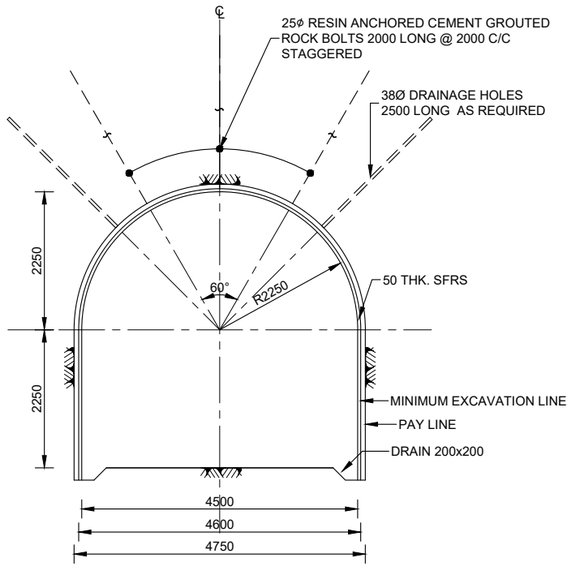
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

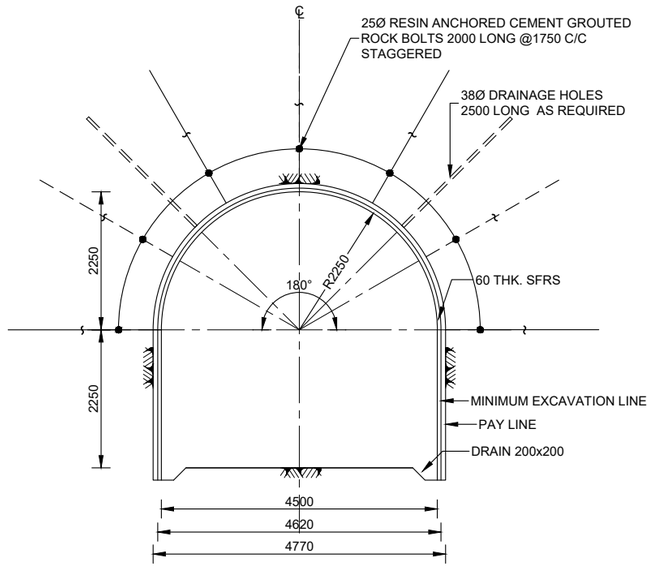
GK-WC-C-10	ADIT TUNNEL EXCAVATION & ROCK SUPPORT
	DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-09
SCALE: NTS	

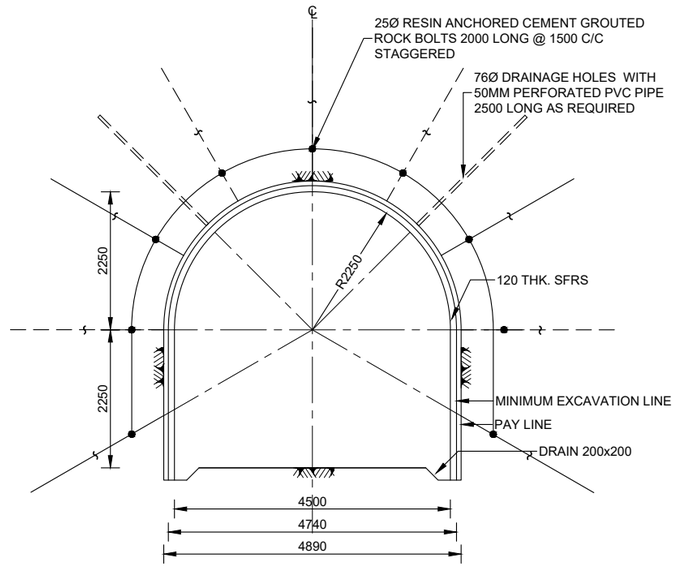
REMIT HYDRO
रेमित हाइड्रो लिमिटेड



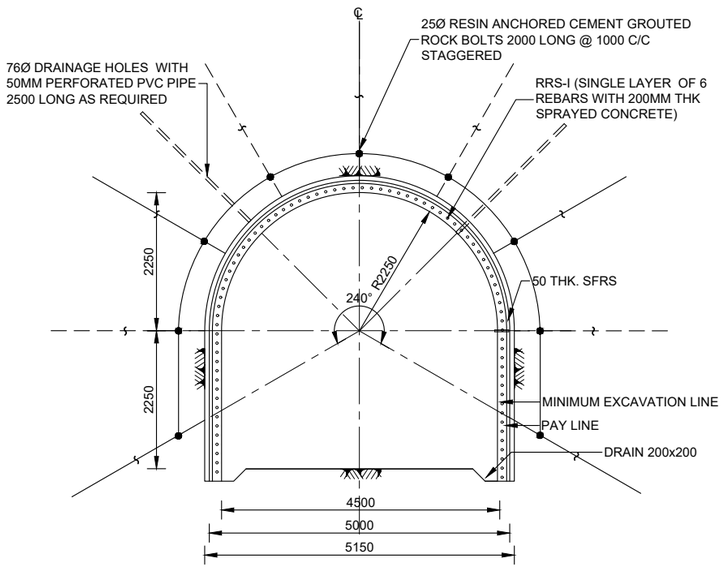
SUPPORT CATEGORY R1
(Q>4.0)



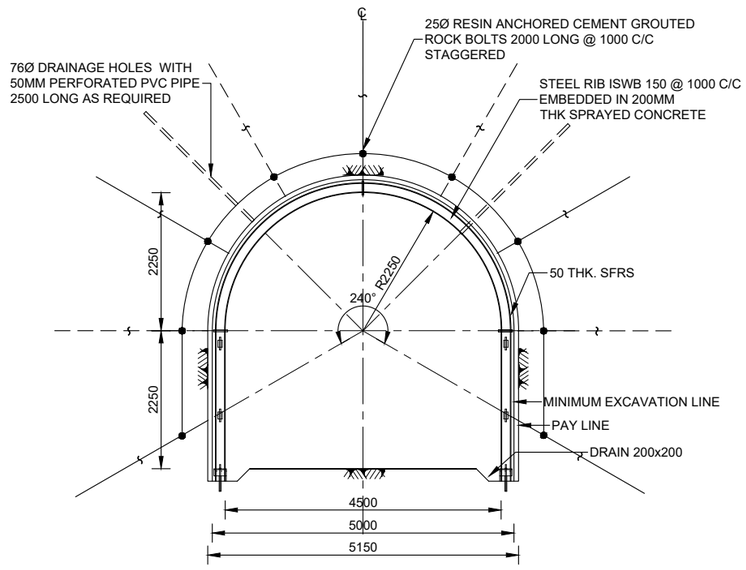
SUPPORT CATEGORY R3
(1.0 < Q < 4.0)



SUPPORT CATEGORY R5
(0.1 < Q < 1)



SUPPORT CATEGORY R7 (OPTION-I)
(Q < 0.1)



SUPPORT CATEGORY R7 (OPTION-II)
(Q < 0.1)

ROCK MASS CLASSIFICATION & SUPPORT CATEGORY DETAILS

SUPPORT CATEGORY	Q-VALUE	ROCK CLASS
R_1	>4	I TO III
R_3	1.0 - 4.0	IV
R_5	0.1 - 1.0	V
R_7	< 0.1	VI

ADIT TUNNEL EXCAVATION & ROCK SUPPORT DETAILS

1 0 1 2 3 4 5M
SCALE : 1:100

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

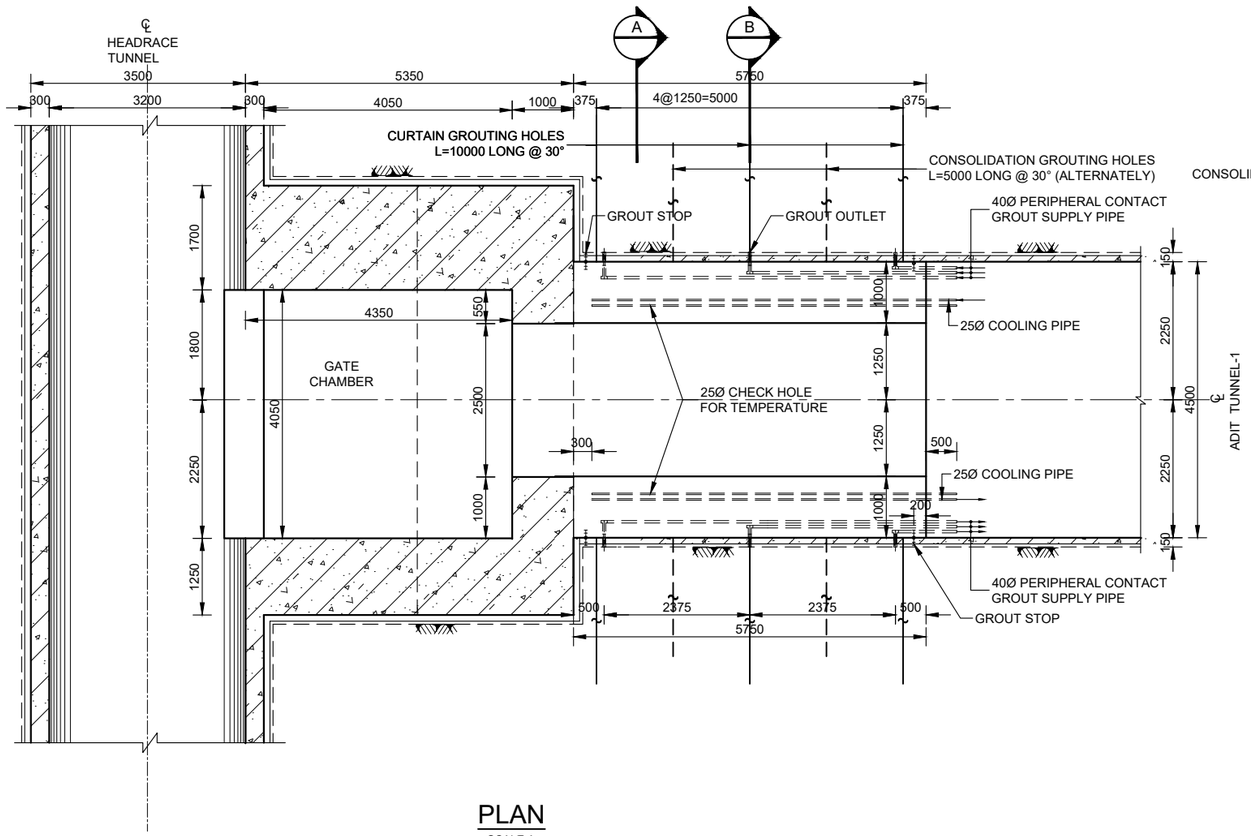
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

WATER CONVEYANCE SYSTEM
ADIT TUNNELS
EXCAVATION & ROCK SUPPORT DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

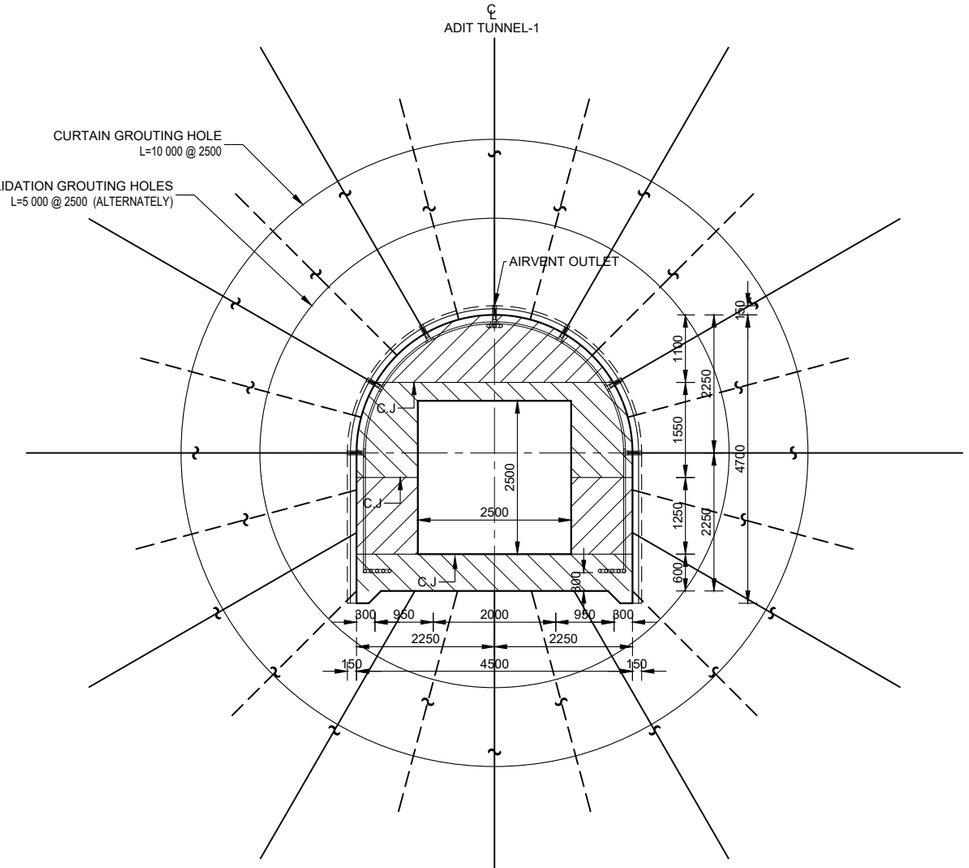
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: DR. S. SHAH	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-10
SCALE: NTS	



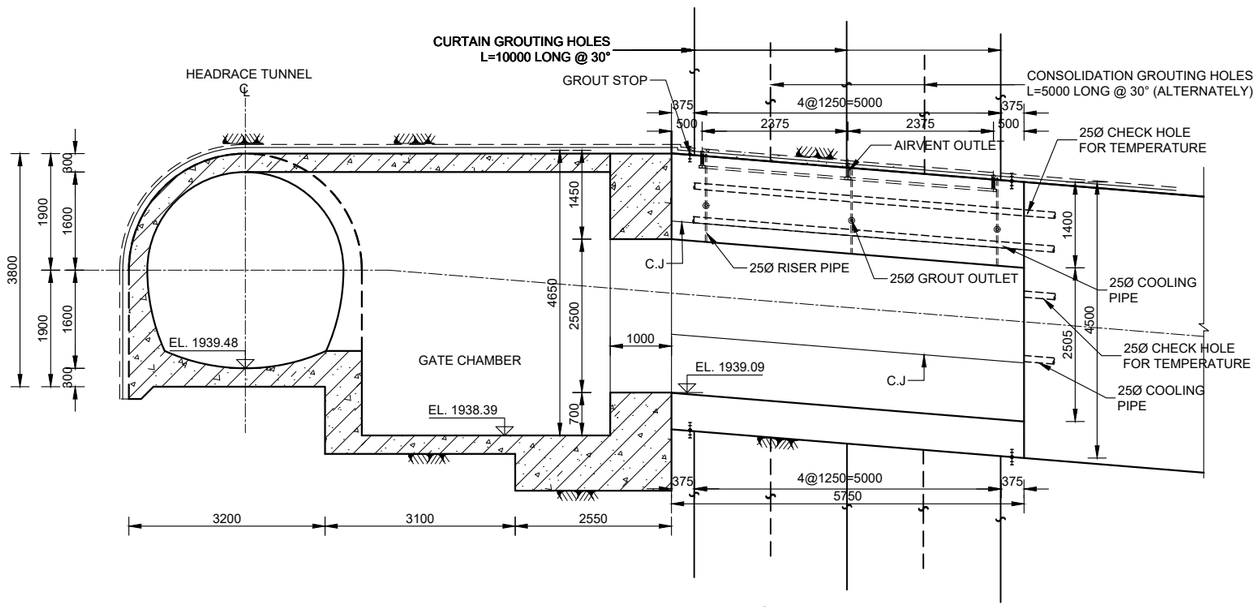
PLAN

SCALE A



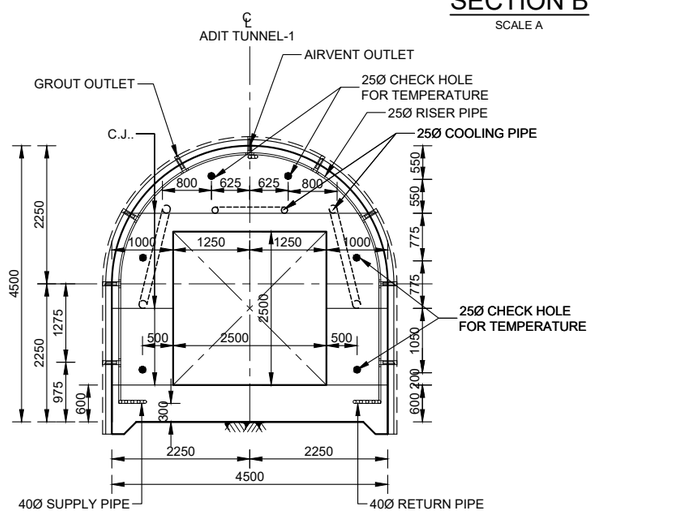
SECTION B

SCALE A



PROFILE

SCALE A



SECTION A

SCALE A

1 0 1 2 3 4 5M

SCALE-A : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

WATER CONVEYANCE SYSTEM
ADIT TUNNEL-1
CONCRETE PLUG DETAILS

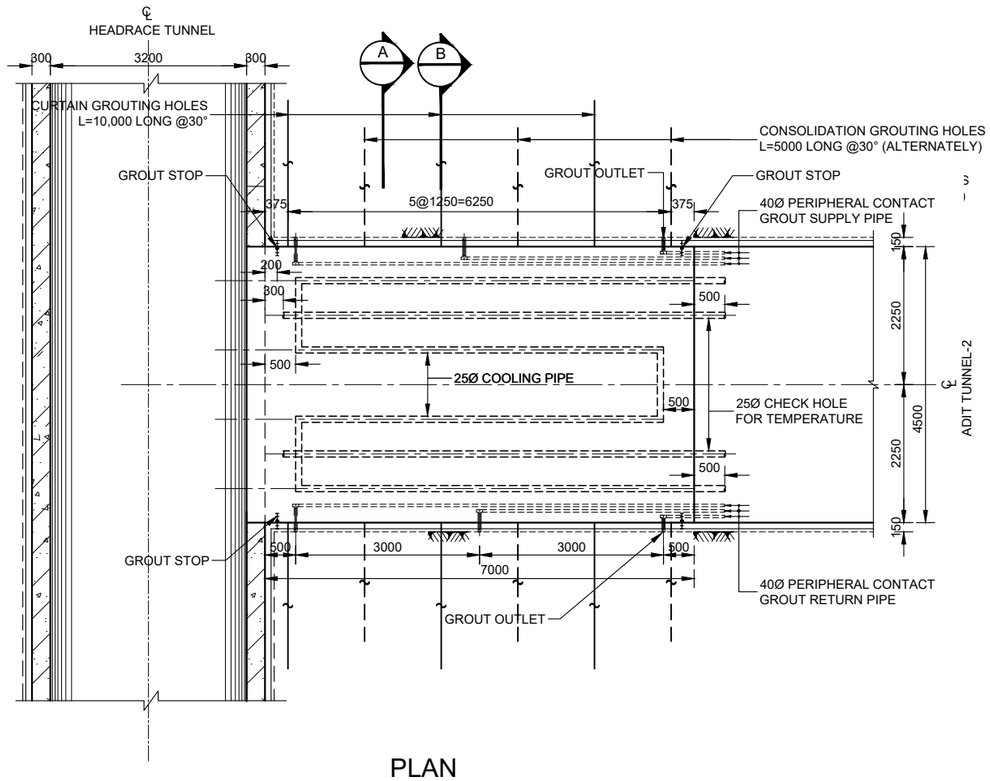
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

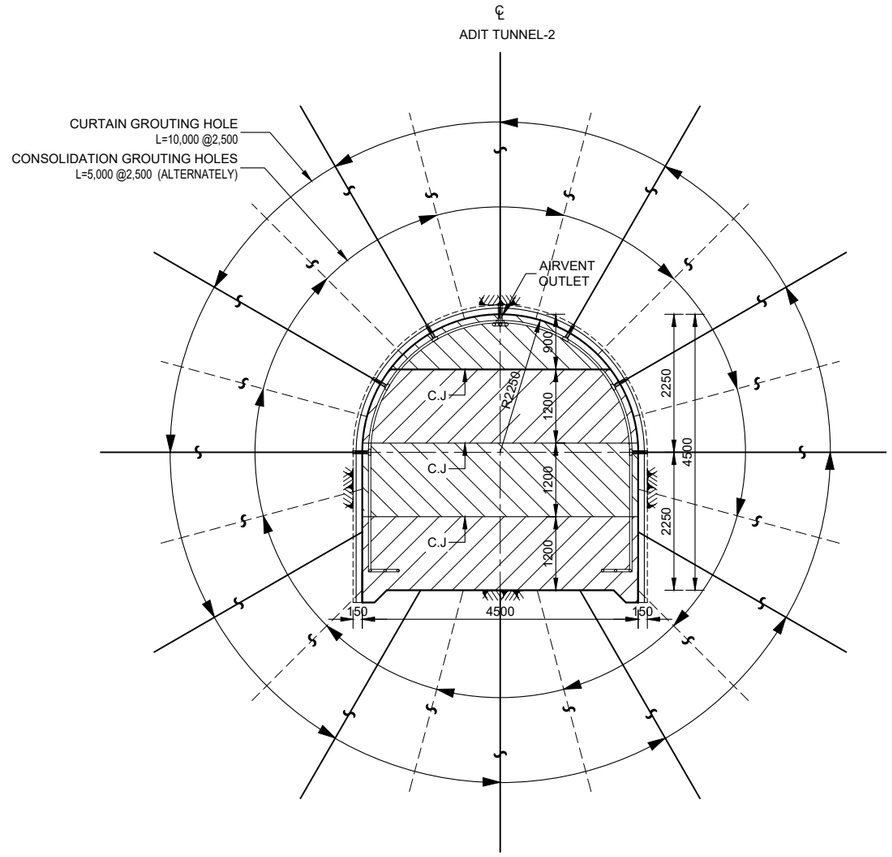
GK-HW-C-07	ADIT-1 PLAN & SECTIONAL DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: N. SHRESTHA	CHECKED BY: DR. S. SHAH
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-12
SCALE: NTS	

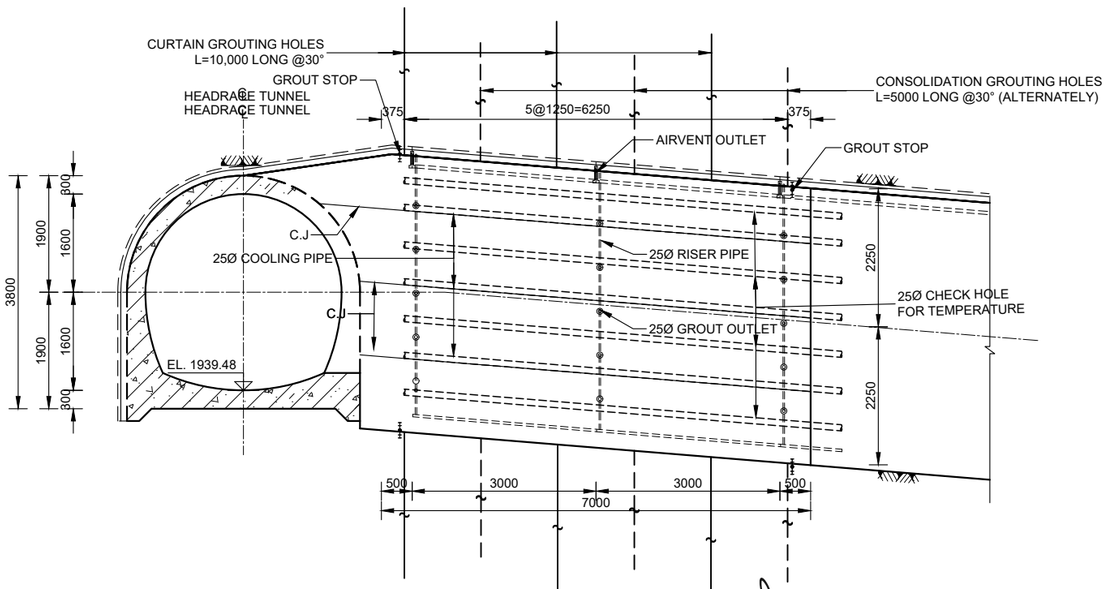
REMIT HYDRO रेमिट हाइड्रो लिमिटेड



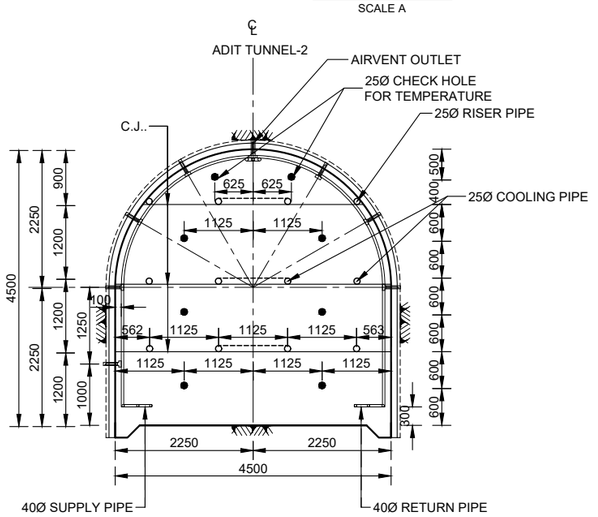
PLAN
SCALE A



SECTION B
SCALE A



PROFILE
SCALE A



SECTION A
SCALE A

1 0 1 2 3 4 5M
SCALE A : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

WATER CONVEYANCE SYSTEM
ADIT TUNNEL-2
CONCRETE PLUG DETAILS

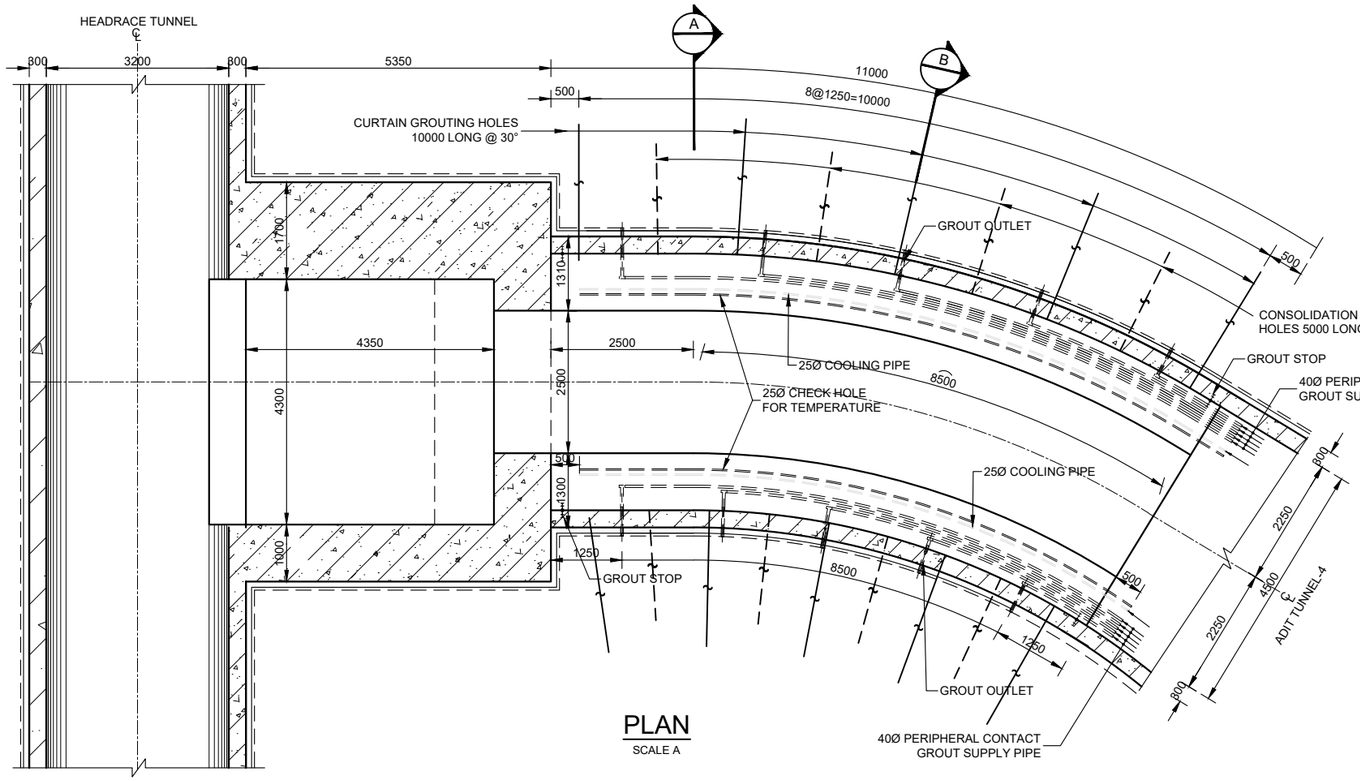
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

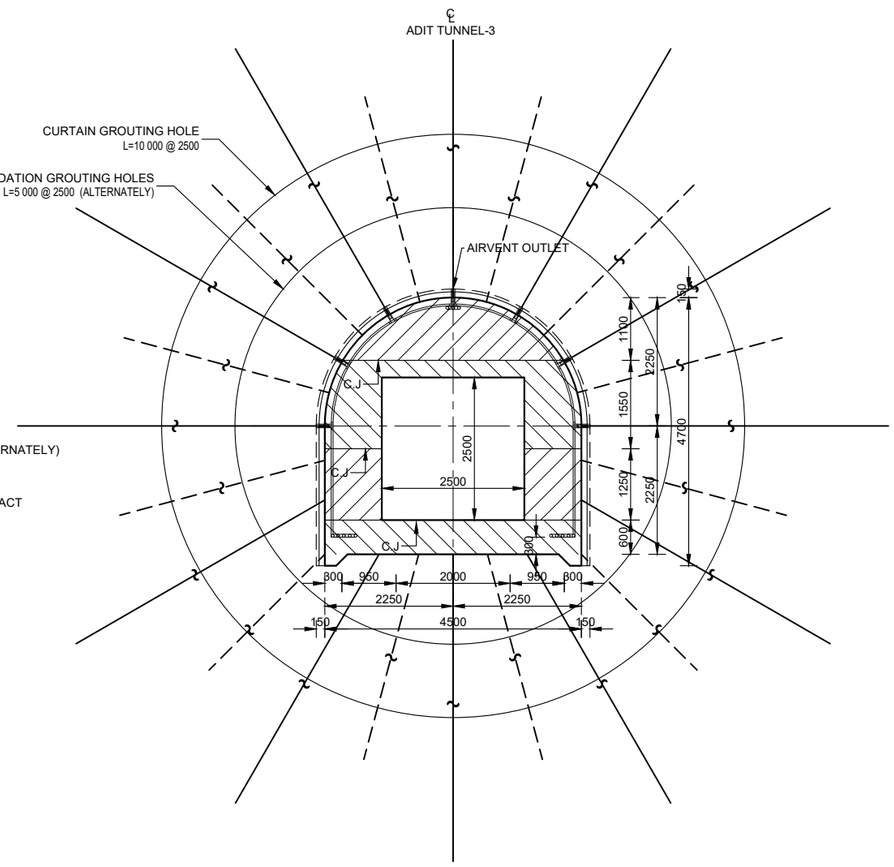
GK-WC-C-08	ADIT-2 PLAN & SECTIONAL DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: N. SHRESTHA	CHECKED BY: DR. S. SHAH
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-13
SCALE: NTS	

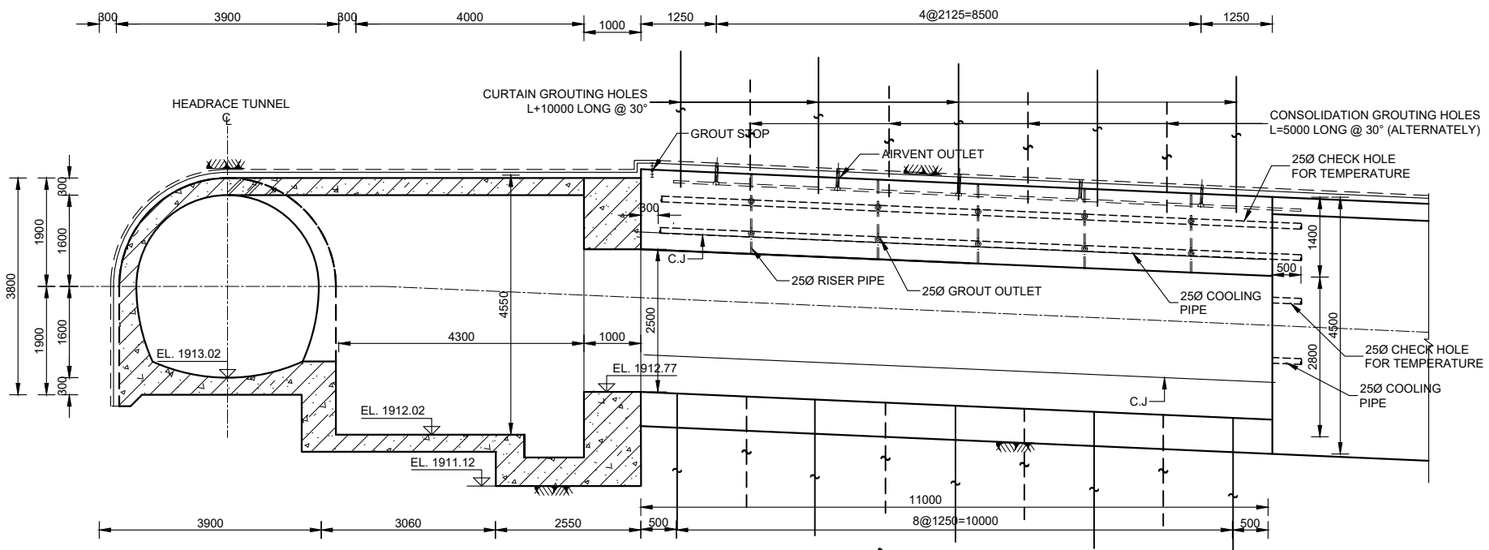
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



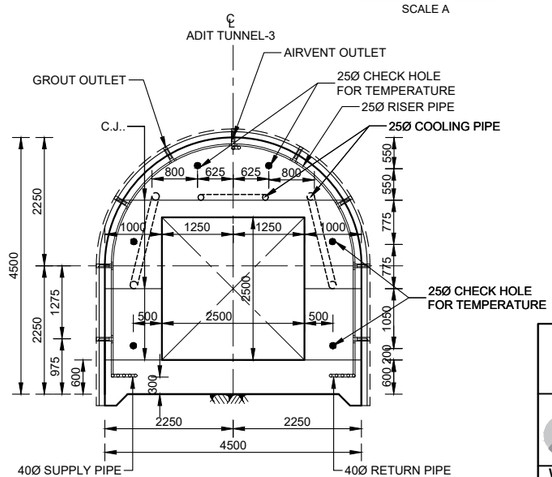
PLAN
SCALE A



SECTION B
SCALE A



PROFILE
SCALE A



SECTION A
SCALE A

1 0 1 2 3 4 5M
SCALE A : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

WATER CONVEYANCE SYSTEM
ADIT TUNNEL-3
CONCRETE PLUG DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

GK-WC-C-10	ADIT-4 PLAN & SECTIONAL DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: N. SHRESTHA	CHECKED BY: DR. S. SHAH
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-15
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

NORTH

3047350 N
579950 E
580000 E
580050 E
581000 E
3047300 N
3047250 N

HEADRACE TUNNEL FLOW

ROCK TRAP

E : 580016.767
N : 3047326.045
Z : 1912.22

ADIT-3 & HRT J.N.
E : 580010.047
N : 3047333.113
Z : 1912.72

TRANSITION

5.2MØ STEEL LINED CIRCULAR TUNNEL

SURGE SHAFT
E : 579983.809
N : 3047308.076
Z : 1912.50

EL. 1996.00
EL. 1984.00
EL. 1972.00

SURGE SHAFT
5950

VALVE CHAMBER
(10x13x10M)

E : 580020.566
N : 3047318.909
Z : 1912.04

E : 580025.626
N : 3047295.881
Z : 1911.00

E : 580028.051
N : 3047290.409
Z : 1910.87

E : 580028.404
N : 3047279.024
Z : 1910.43

E : 580040.620
N : 3047272.729
Z : 1910.43

25000Ø UPPER HORIZONTAL PRESSURE SHAFT

25000Ø UPPER VERTICAL PRESSURE SHAFT

E : 579975.325
N : 3047286.614
Z : 1910.79

E : 579978.072
N : 3047283.668
Z : 1911.08

E : 579988.924
N : 3047279.024
Z : 1910.85

ACCESS TUNNEL TO VALVE CHAMBER
4.5M Ø, D-SHAPED
LENGTH = 70M

ADIT-3
4.8M Ø, D-SHAPED
LENGTH = 88M

ACCESS ROAD TO SURGE SHAFT

25000Ø MIDDLE HORIZONTAL PRESSURE SHAFT

2025 1975 1950 1925 2000

39450 40000 43810 5000 4500 4500 5000 4000 1500 25000 50000 15050 21000 25000

CONTOUR INTERVAL 1 M

5 0 5 10 15 20 25M

SCALE : 1:500

LAYOUT PLAN

REMIT HYDRO रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

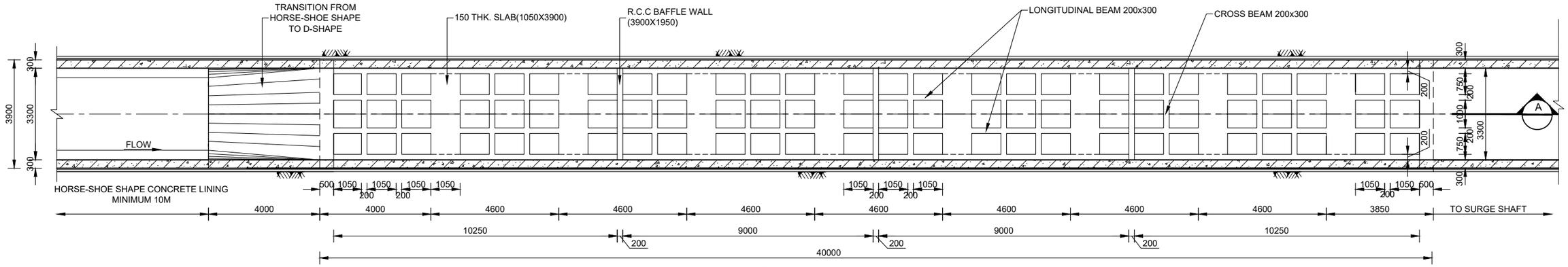
WATER CONVEYANCE SYSTEM
ROCK TRAP & SURGE SHAFT
LAYOUT PLAN

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

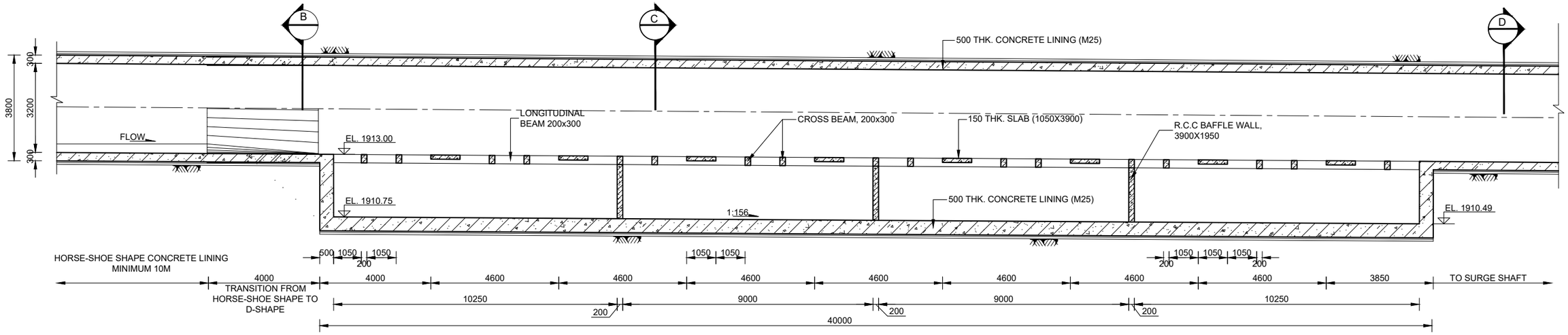
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

GK-WC-C-18	ROCK TRAP & SURGE SHAFT EXCAVATION & SUPPORT DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

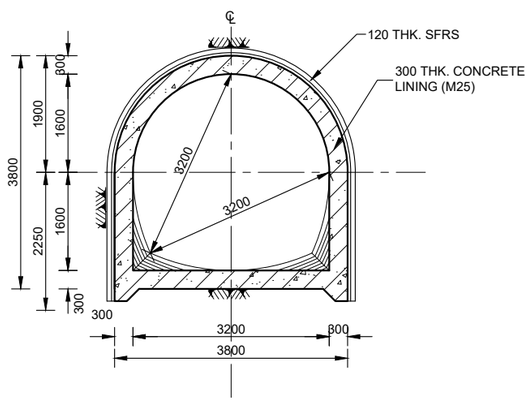
DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-L-16
SCALE: NTS	



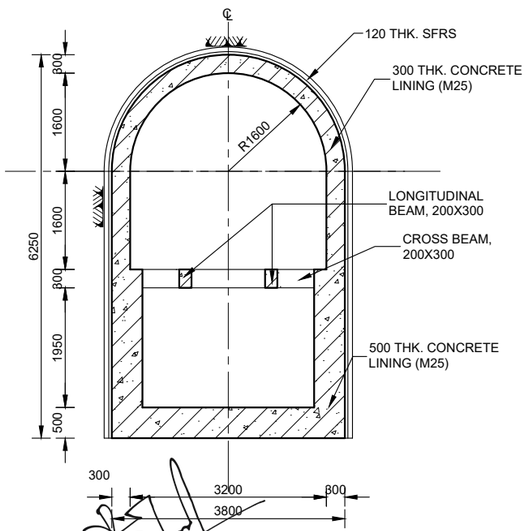
PLAN
SCALE A



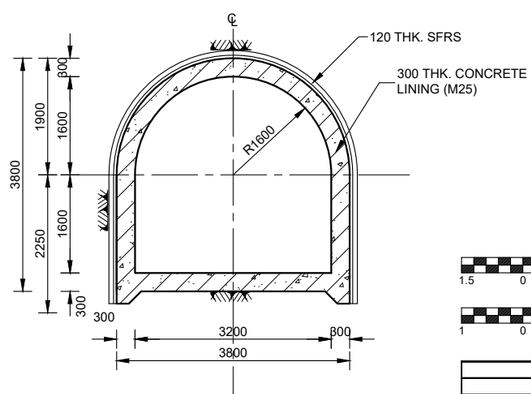
SECTION A
SCALE A



SECTION B
SCALE B



SECTION C
SCALE B



SECTION D
SCALE B

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

1.5 0 1.5 3 4.5 6 7.5M
SCALE A : 1:150

1 0 1 2 3 4 5M
SCALE B : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

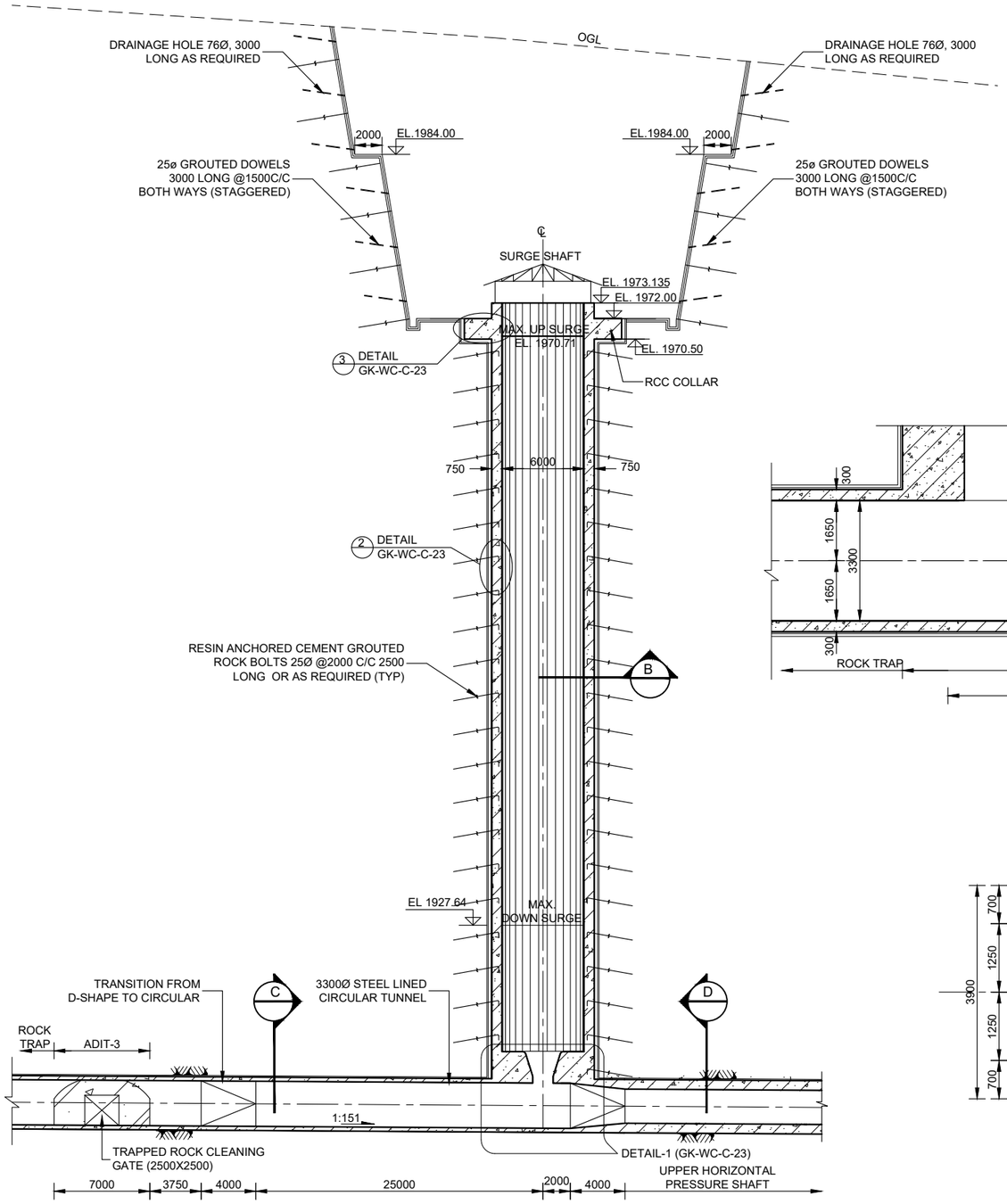
WATER CONVEYANCE SYSTEM
ROCK TRAP
PLAN & SECTIONAL DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

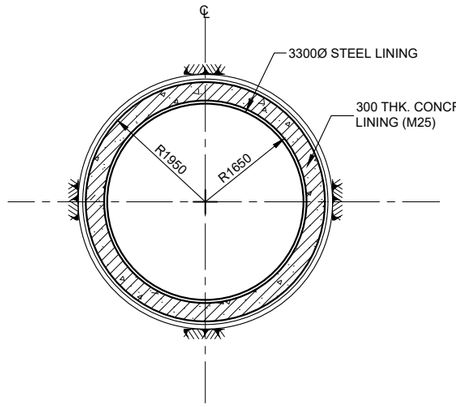
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-17
SCALE: NTS	

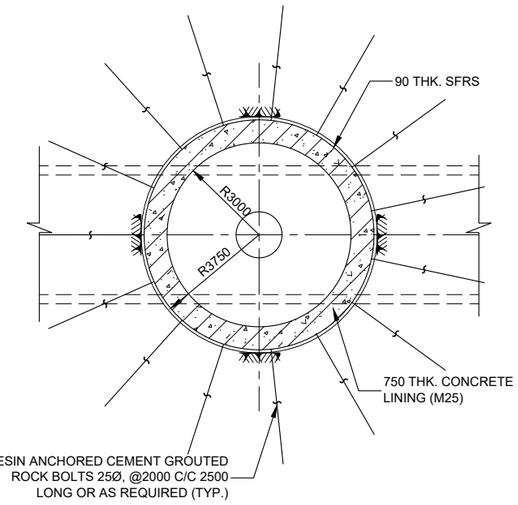
DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS



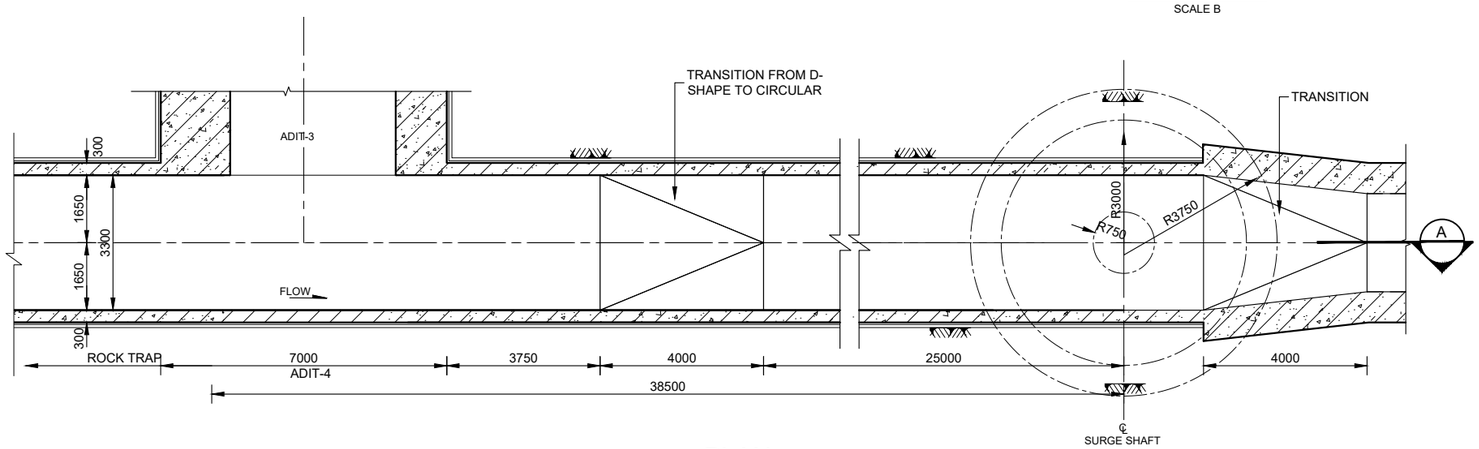
SECTION A
SCALE A



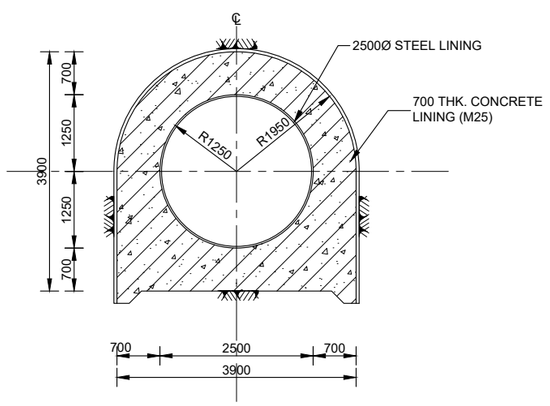
SECTION C
SCALE D



SECTION B
SCALE B



PLAN
SCALE C



SECTION D
SCALE D

4 0 4 8 12 16 20M
SCALE A : 1:400

2 0 2 4 6 8 10M
SCALE B : 1:200

1.5 0 1.5 3 4.5 6 7.5M
SCALE C : 1:150

1 0 1 2 3 4 5M
SCALE D : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

WATER CONVEYANCE SYSTEM
SURGE SHAFT
PLAN & SECTIONAL DETAILS

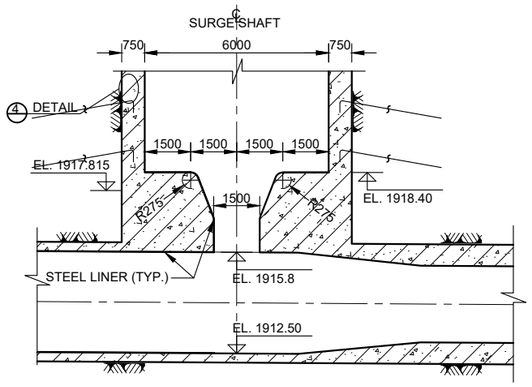
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

GK-WC-L-20	SURGE SHAFT PLAN & SECTIONAL DETAILS DETAILS
GK-WC-C-19	ROCK TRAP & SURGE SHAFT PLAN & SECTIONS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

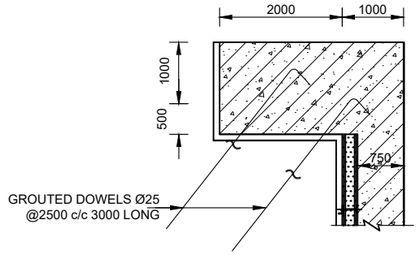
DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-18
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



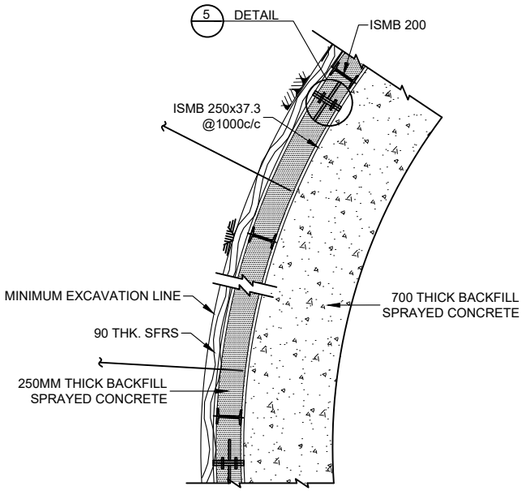
DETAIL 1
(GK-WC-C-18)

SCALE A



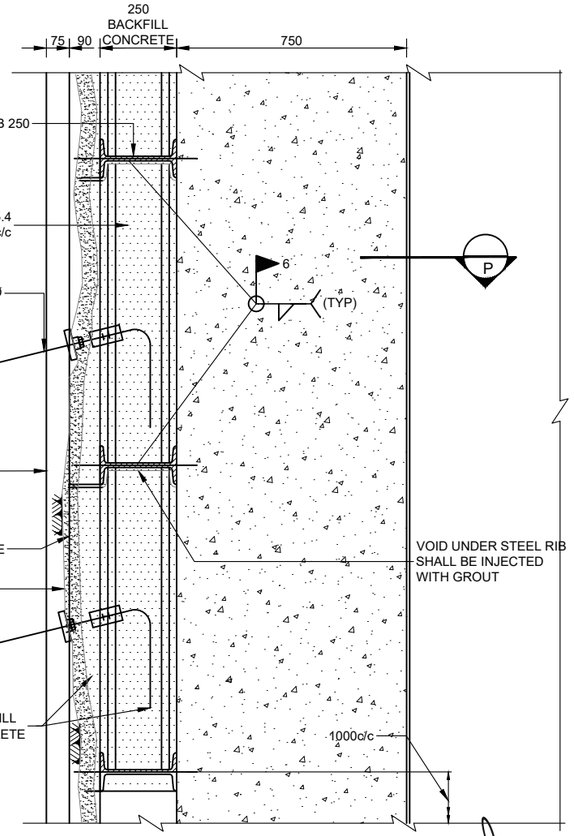
DETAIL 3
(GK-WC-C-18)

SCALE C



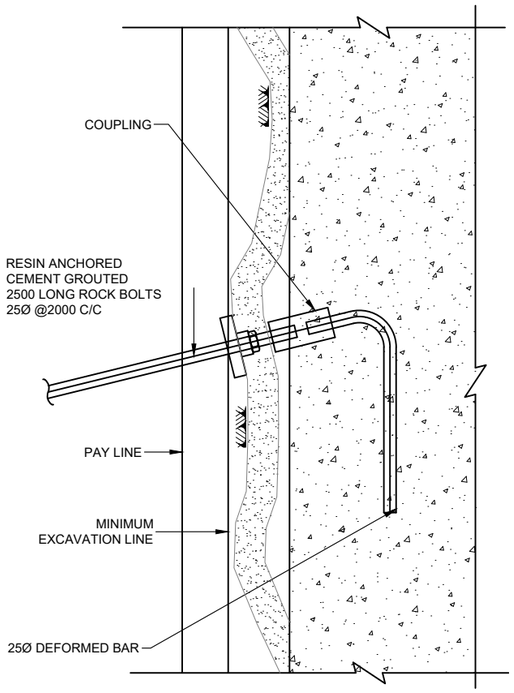
SECTION P

SCALE B



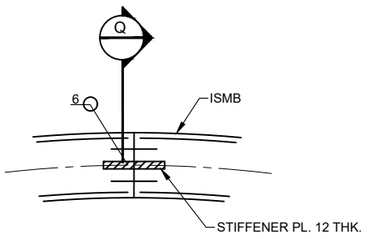
DETAIL 2
(GK-WC-C-18)

SCALE B



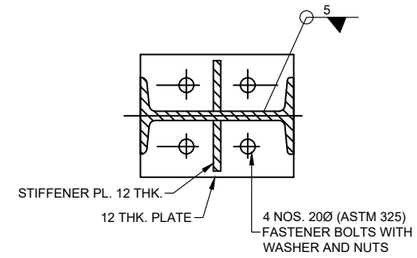
DETAIL 4

SCALE B



DETAIL 5

SCALE D



SECTION Q

SCALE D

2 0 2 4 6 8 10M
SCALE A : 1:200

1 0 1 2 3 4 5M
SCALE B : 1:100

0.2 0 0.2 0.4 0.8 0.12 0.16M
SCALE C : 1:20

0.1 0 0.1 0.2 0.3 0.4 0.5M
SCALE D : 1:10

DWG. NO.	DESCRIPTION:

REFERENCE DRAWINGS

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

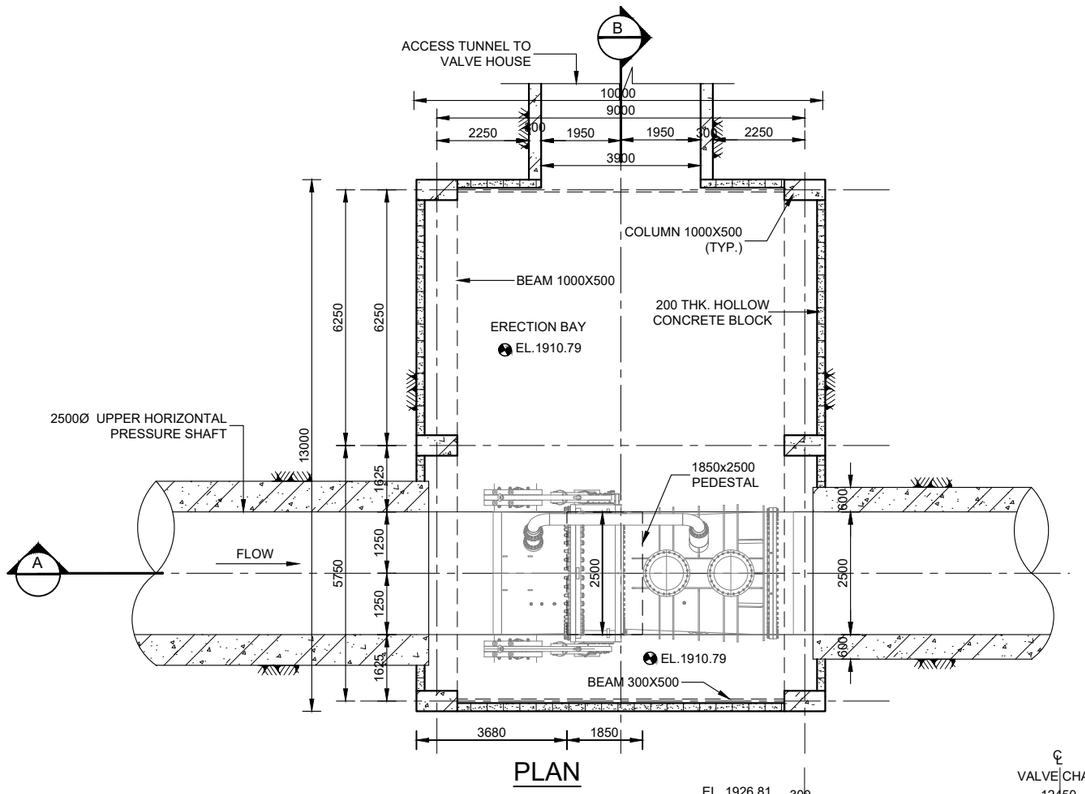
WATER CONVEYANCE SYSTEM
SURGE SHAFT DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

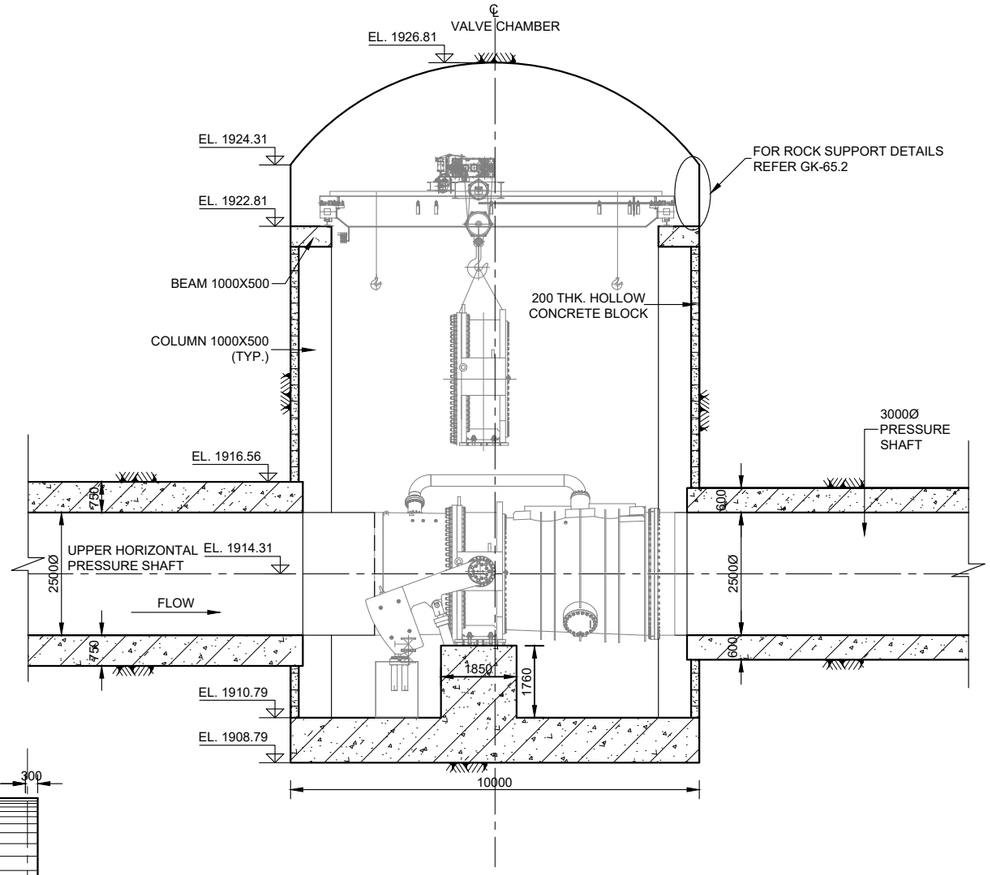
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-19
SCALE: NTS	

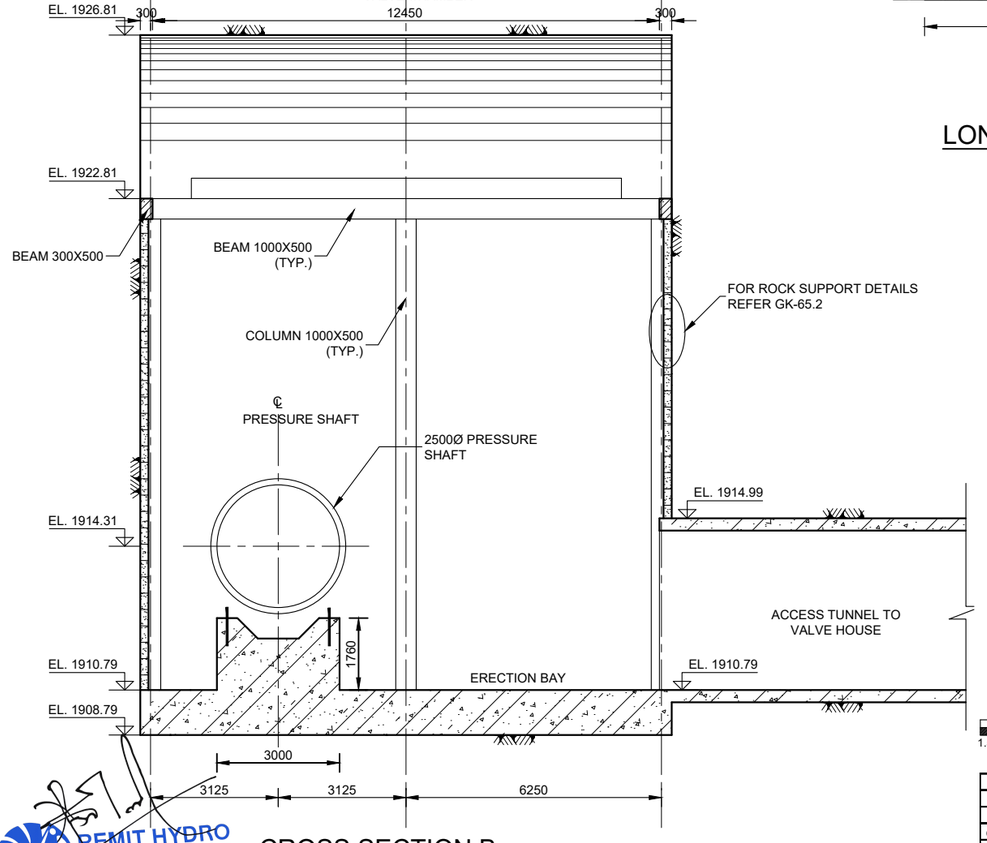
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



PLAN



LONGITUDINAL SECTION A



CROSS SECTION B

1.5 0 1.5 3 4.5 6 7.5M

SCALE : 1:150

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

WATER CONVEYANCE SYSTEM
VALVE CHAMBER
PLAN & SECTIONAL DETAILS

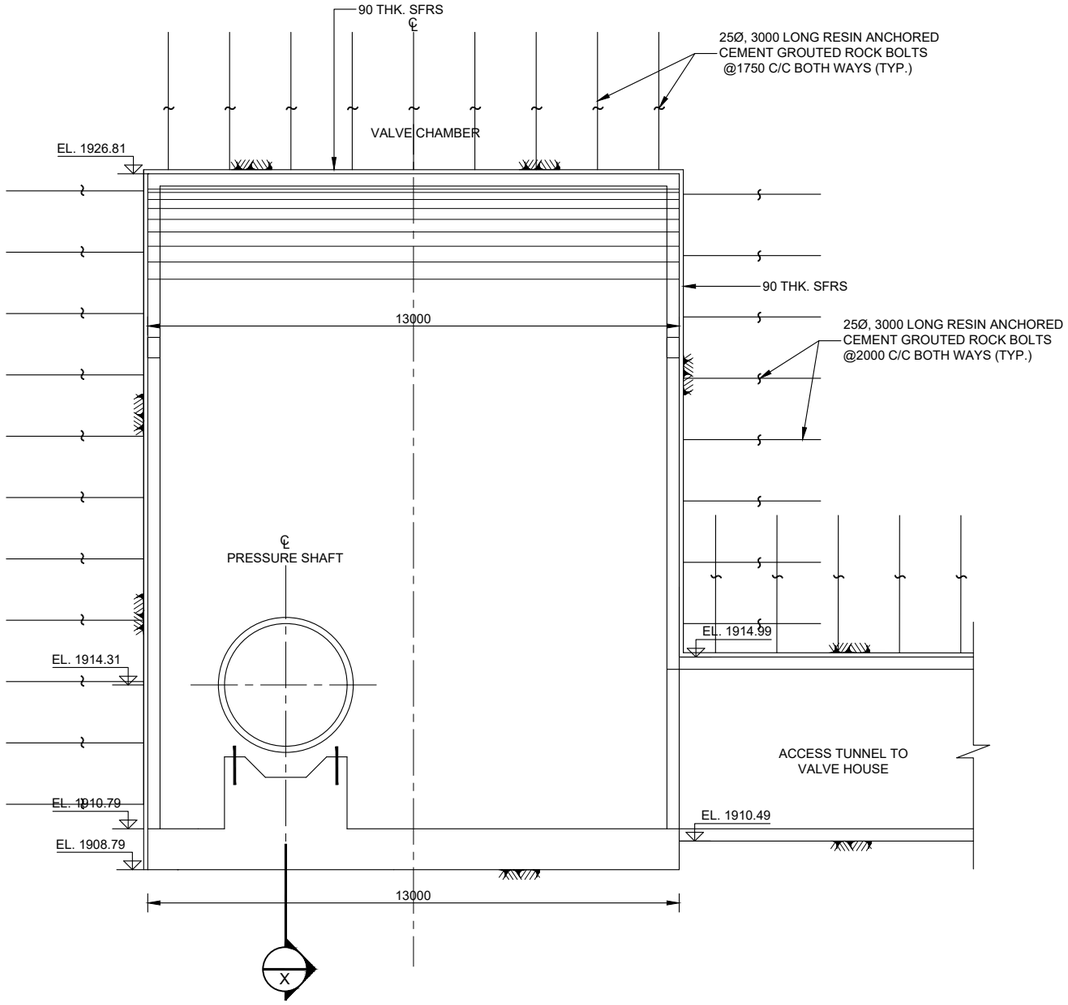
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

GK-WC-C-25	VALVE CHAMBER EXCAVATION & ROCK SUPPORT
	DETAIL
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

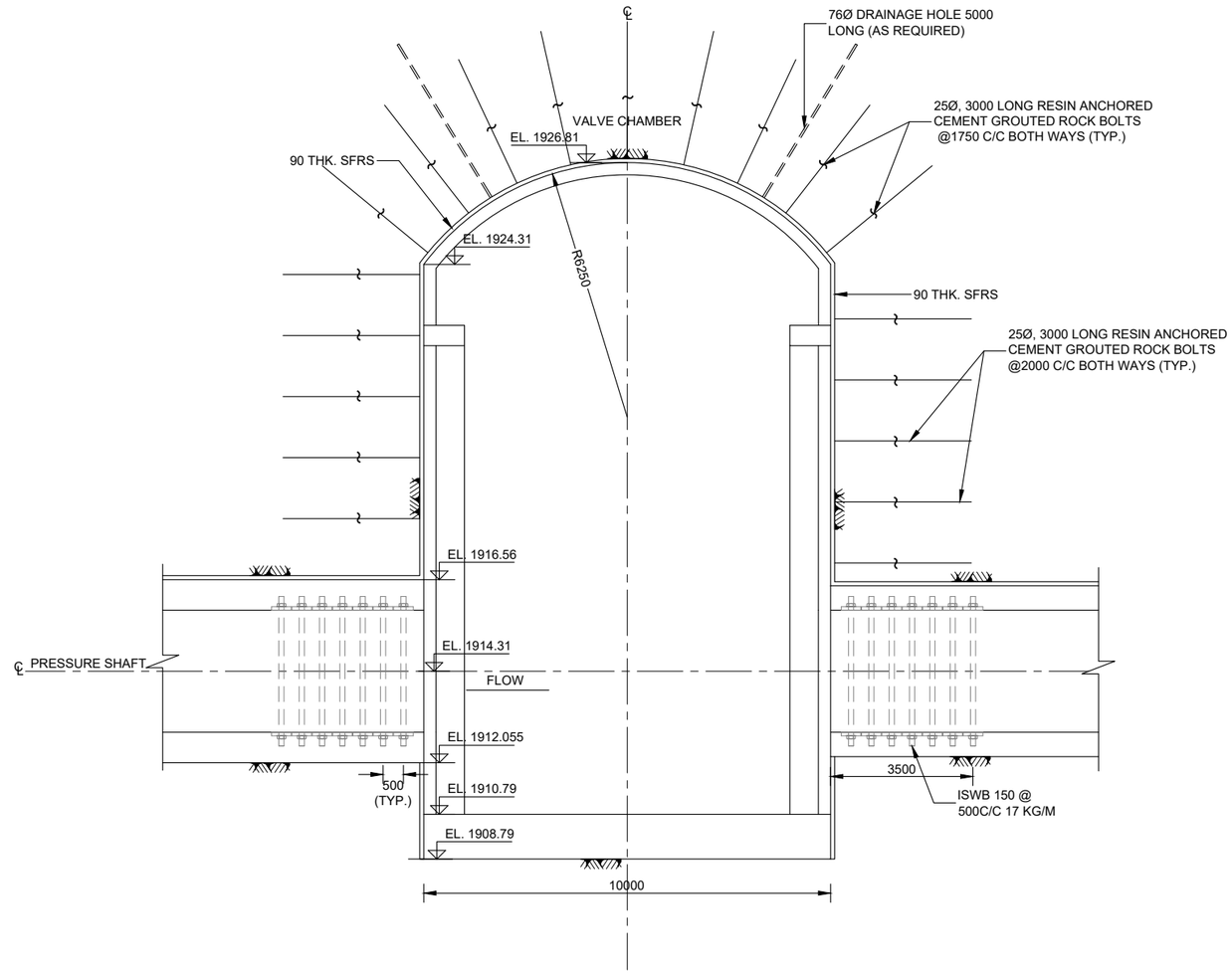
DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-20
SCALE: NTS	

REMIT HYDRO
रेमित हाइड्रो लिमिटेड



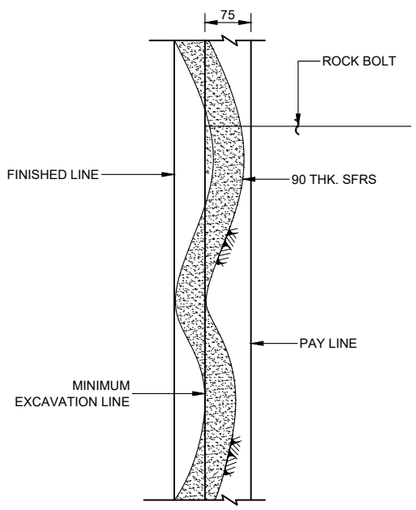
EXCAVATION & ROCK SUPPORT CATEGORY R4 AT CROSS SECTION B

SCALE A



EXCAVATION & ROCK SUPPORT CATEGORY R4 AT LONGITUDINAL SECTION X

SCALE A



TYPICAL SHOTCRETE DETAIL

SCALE B

1.5 0 1.5 3 4.5 6 7.5M
SCALE A : 1:150

0.2 0 0.2 0.4 0.6 0.8 1M
SCALE B : 1:20

GK-WC-C-24	VALVE CHAMBER PLAN & SECTIONAL DETAL
DWG. NO.	DESCRIPTION:

REFERENCE DRAWINGS

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

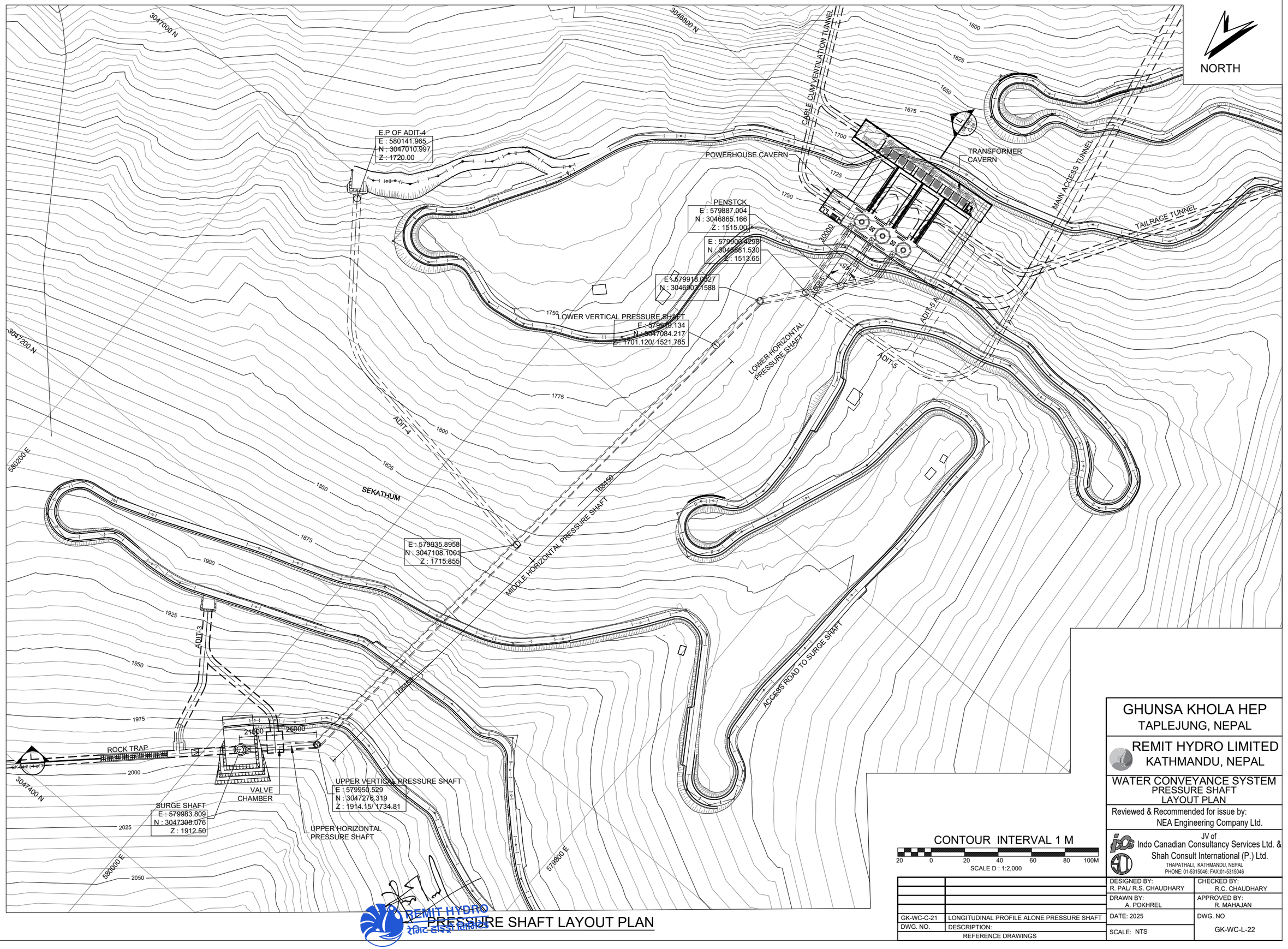
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

WATER CONVEYANCE SYSTEM
VALVE CHAMBER
EXCAVATION & ROCK SUPPORT DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: DR. S. SHAH	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-21
SCALE: NTS	



PRESSURE SHAFT LAYOUT PLAN

CONTOUR INTERVAL 1 M

20 0 20 40 60 80 100M

SCALE D : 1:2,000

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

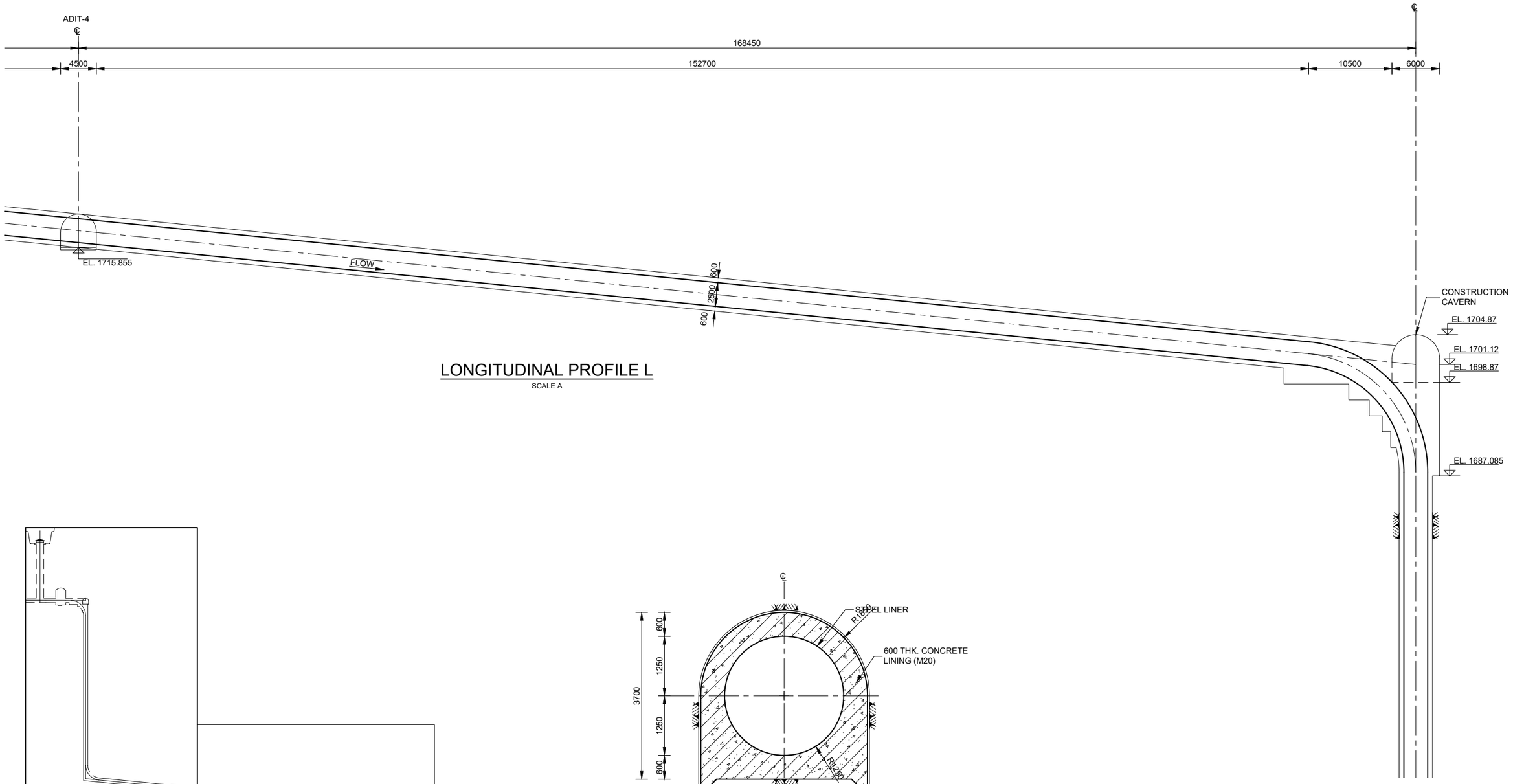
WATER CONVEYANCE SYSTEM
PRESSURE SHAFT
LAYOUT PLAN

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

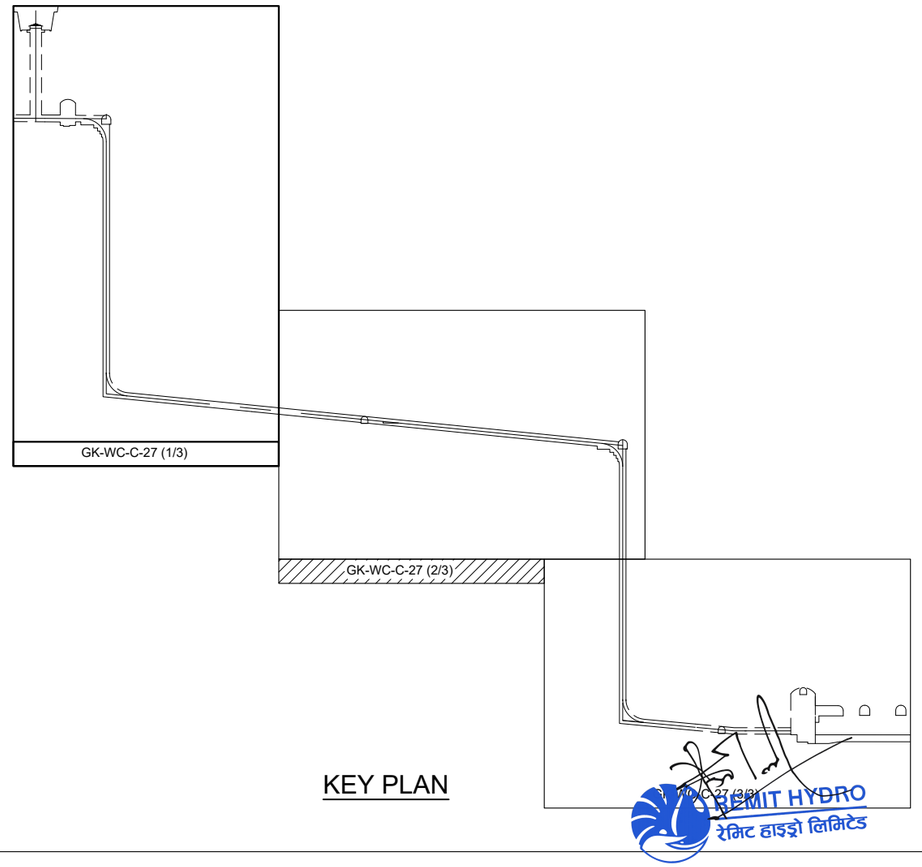
GK-WC-C-21	LONGITUDINAL PROFILE ALONE PRESSURE SHAFT
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-L-22
SCALE: NTS	

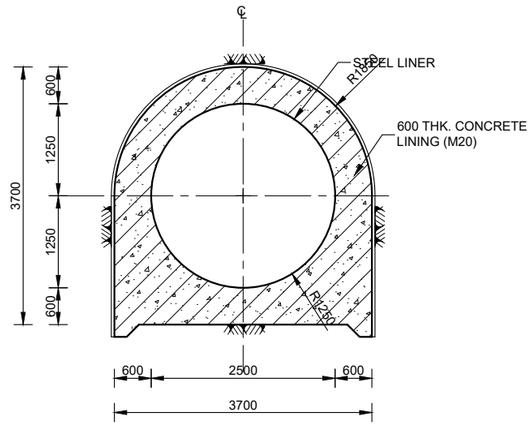


LONGITUDINAL PROFILE L

SCALE A



KEY PLAN



SECTION R

SCALE B

5 0 5 10 15 20 25M

SCALE A : 1:500

1 0 1 2 3 4 5M

SCALE B : 1:100

GK-WC-C-22	PRESSURE SHAFT EXCAVATION & ROCK SUPPORT DETAIL
GK-WC-L-20	PRESSURE SHAFT LAYOUT PLAN
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

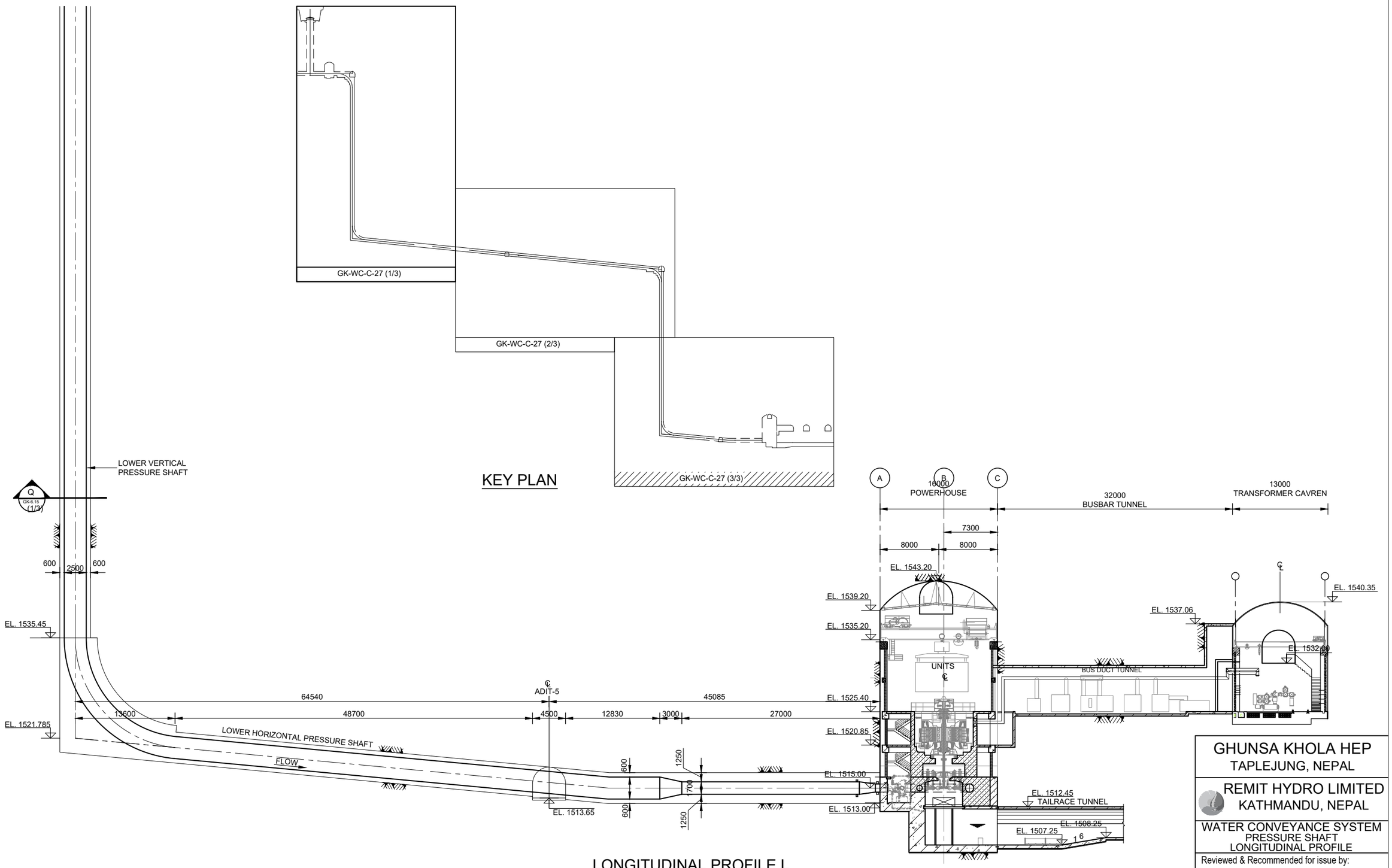
WATER CONVEYANCE SYSTEM
PRESSURE SHAFT
LONGITUDINAL PROFILE

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-23 (2/3)
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

WATER CONVEYANCE SYSTEM
PRESSURE SHAFT
LONGITUDINAL PROFILE

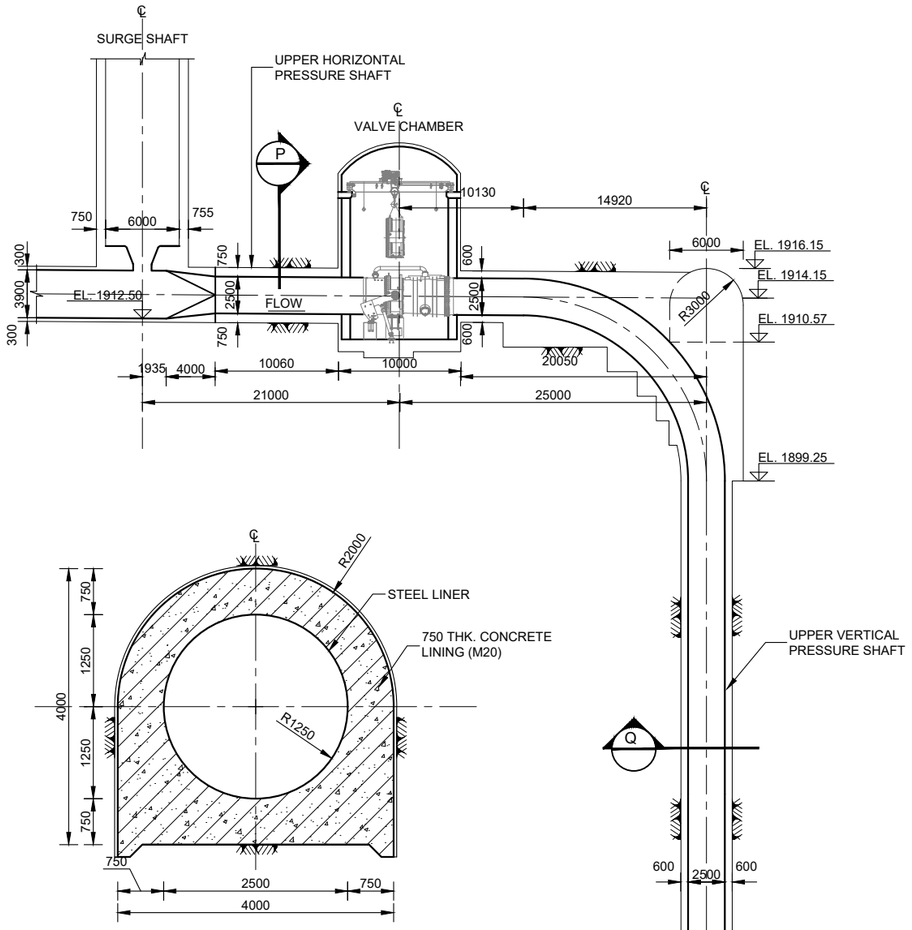
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

GK-WC-C-22	PRESSURE SHAFT EXCAVATION & ROCK SUPPORT DETAIL
GK-WC-L-20	PRESSURE SHAFT LAYOUT PLAN
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-23 (3/3)
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

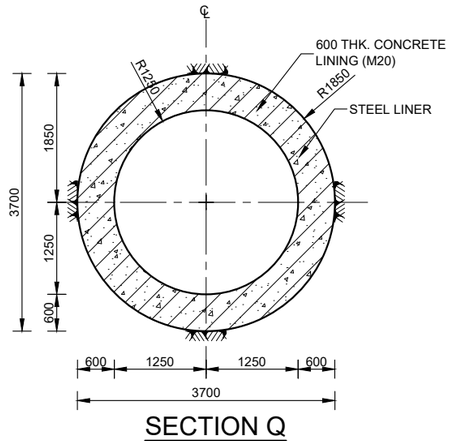


LONGITUDINAL PROFILE L

SCALE A

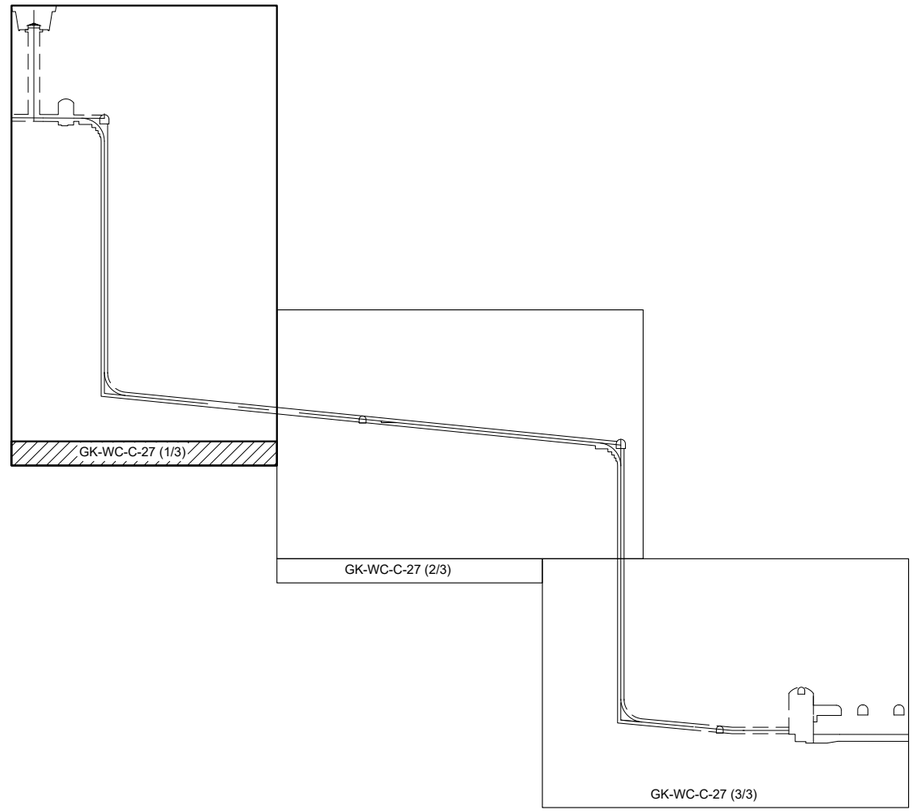
SECTION P

SCALE B



SECTION Q

SCALE B



KEY PLAN

5 0 5 10 15 20 25M

SCALE A : 1:500

1 0 1 2 3 4 5M

SCALE B : 1:100

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

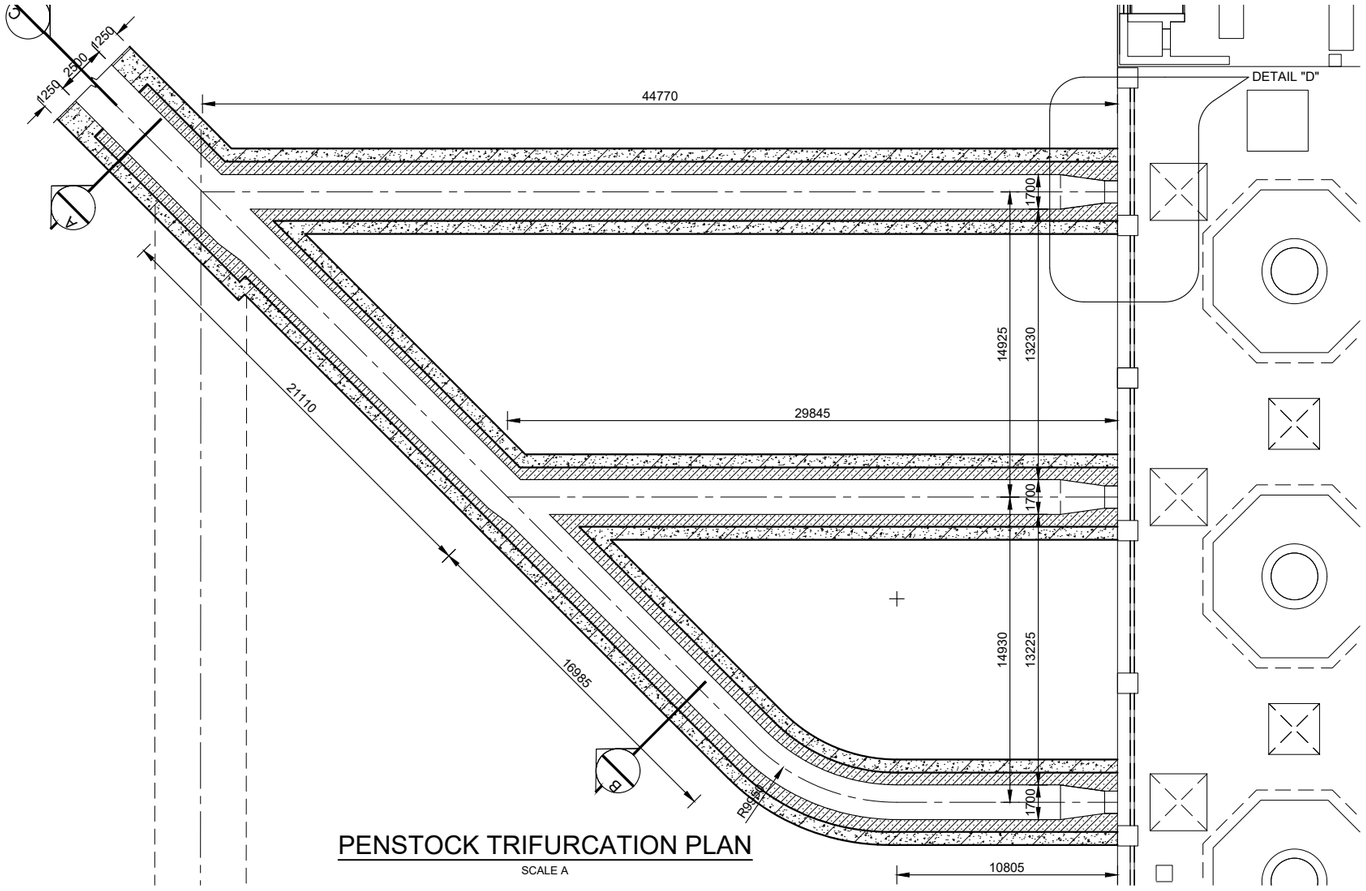
WATER CONVEYANCE SYSTEM
PRESSURE SHAFT
LONGITUDINAL PROFILE

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

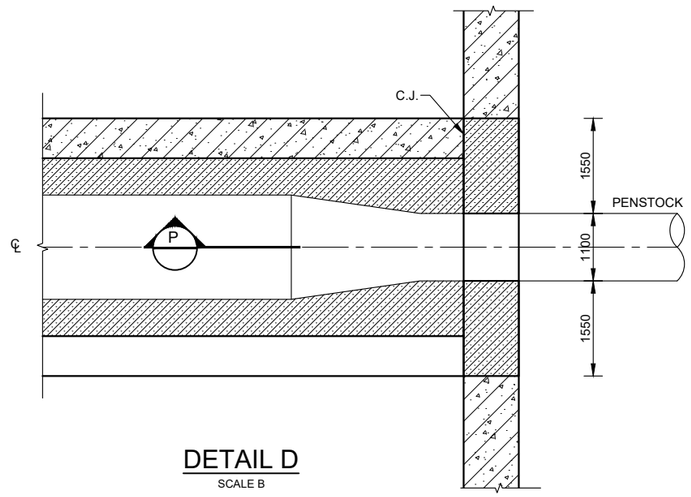
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

GK-WC-C-22	PRESSURE SHAFT EXCAVATION & ROCK SUPPORT DETAIL
GK-WC-L-20	PRESSURE SHAFT LAYOUT PLAN
DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

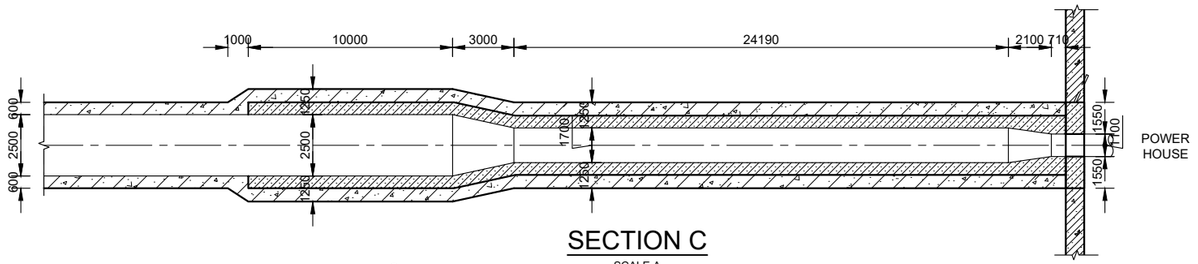
DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-23 (1/3)
SCALE: NTS	



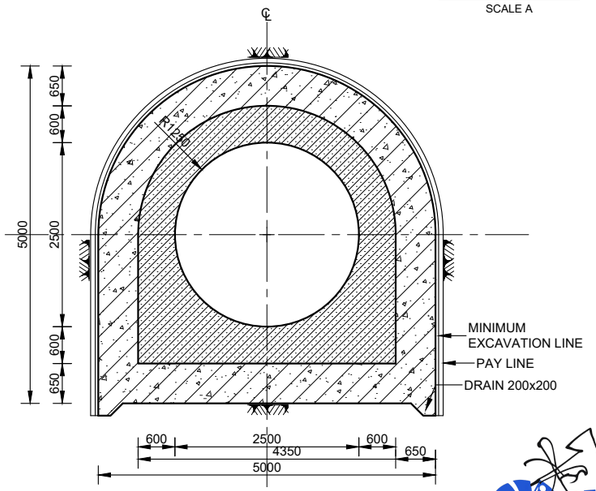
PENSTOCK TRIFURCATION PLAN
SCALE A



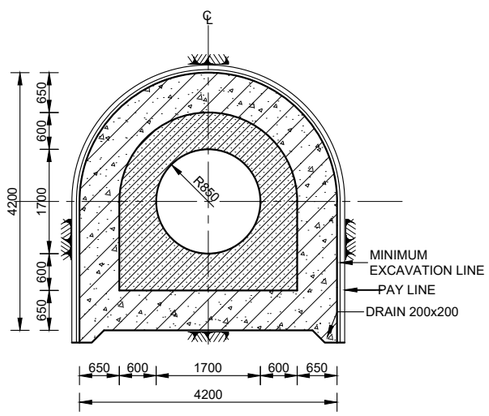
DETAIL D
SCALE B



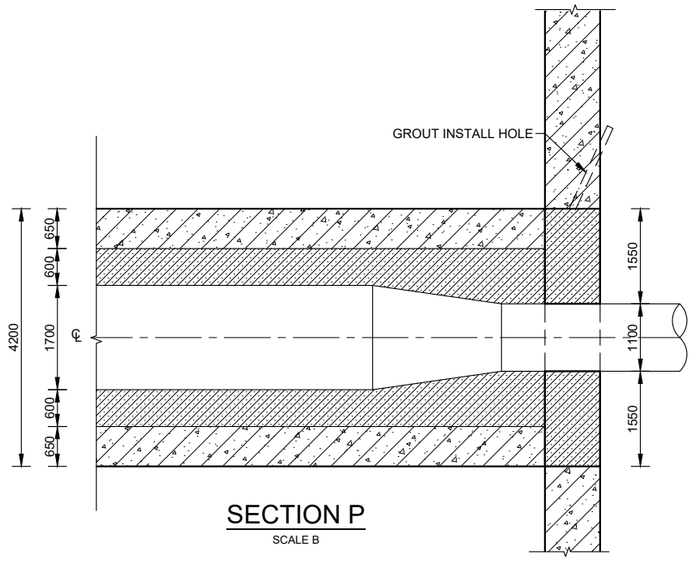
SECTION C
SCALE A



SECTION A
SCALE B



SECTION B
SCALE B



SECTION P
SCALE B

3 0 3 6 9 12 15M
SCALE A : 1:300

1 0 1 2 3 4 5M
SCALE B : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

WATER CONVEYANCE SYSTEM
PRESSURE SHAFT
TRIFURCATION DETAILS

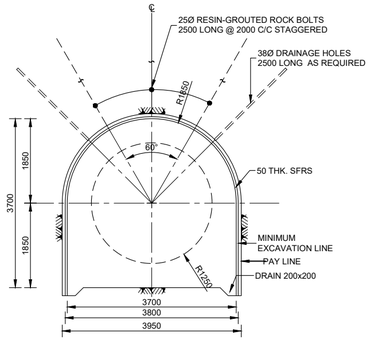
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

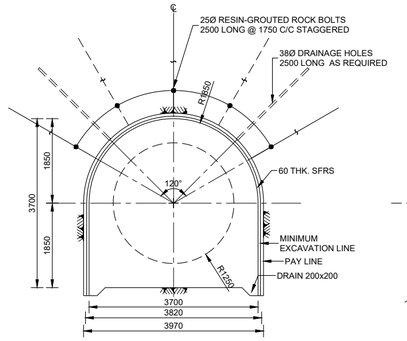
DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-25
SCALE: NTS	

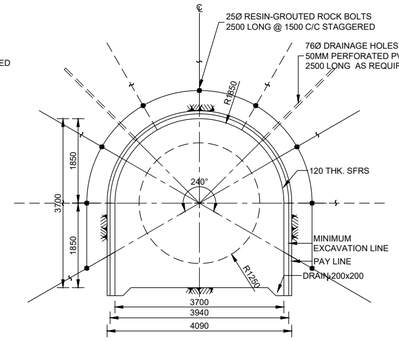
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



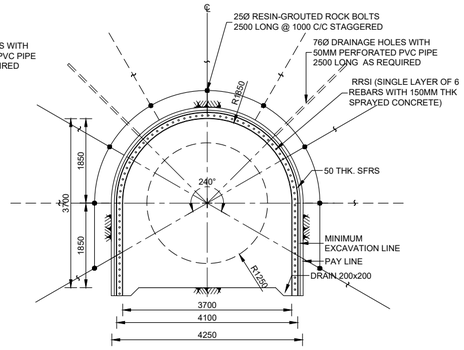
SUPPORT CATEGORY R1
(Q>4.0)



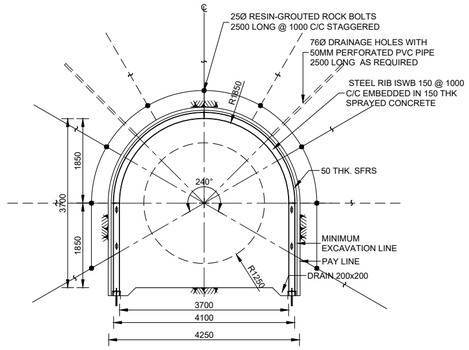
SUPPORT CATEGORY R3
(1<Q<4.0)



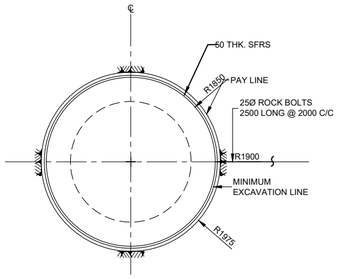
SUPPORT CATEGORY R5
(0.1<Q<1)



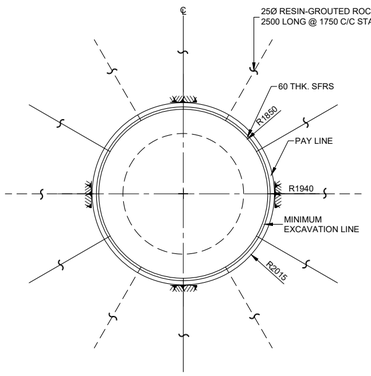
SUPPORT CATEGORY R6 (OPTION-I)
(Q<0.1)



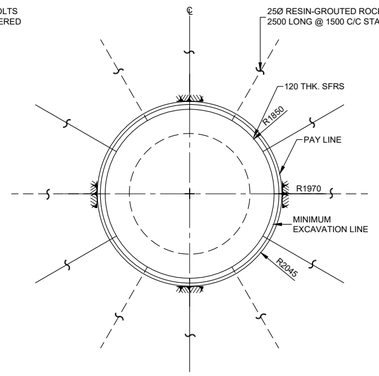
SUPPORT CATEGORY R6 (OPTION-II)
(Q<0.1)



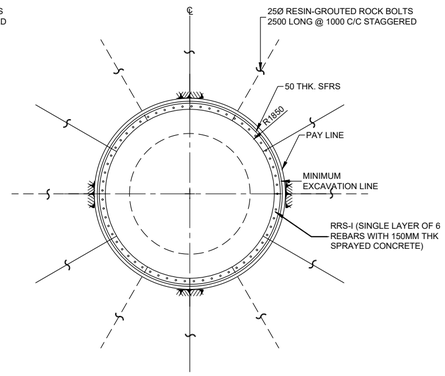
SUPPORT CATEGORY R1
(Q>4.0)



SUPPORT CATEGORY R3
(1<Q<4.0)



SUPPORT CATEGORY R5
(0.1<Q<1.0)



SUPPORT CATEGORY R6
(Q<1.0)

PRESSURE SHAFT EXCAVATION & ROCK SUPPORT DETAILS

ROCK MASS CLASSIFICATION & SUPPORT CATEGORY DETAILS

SUPPORT CATEGORY	Q-VALUE	ROCK CLASS
R_1	>4	I TO III
R_3	1.0 - 4.0	IV
R_5	0.1 - 1.0	V
R_6	< 0.1	VI

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

WATER CONVEYANCE SYSTEM
PRESSURE SHAFT
EXCAVATION & SUPPORT DETAILS

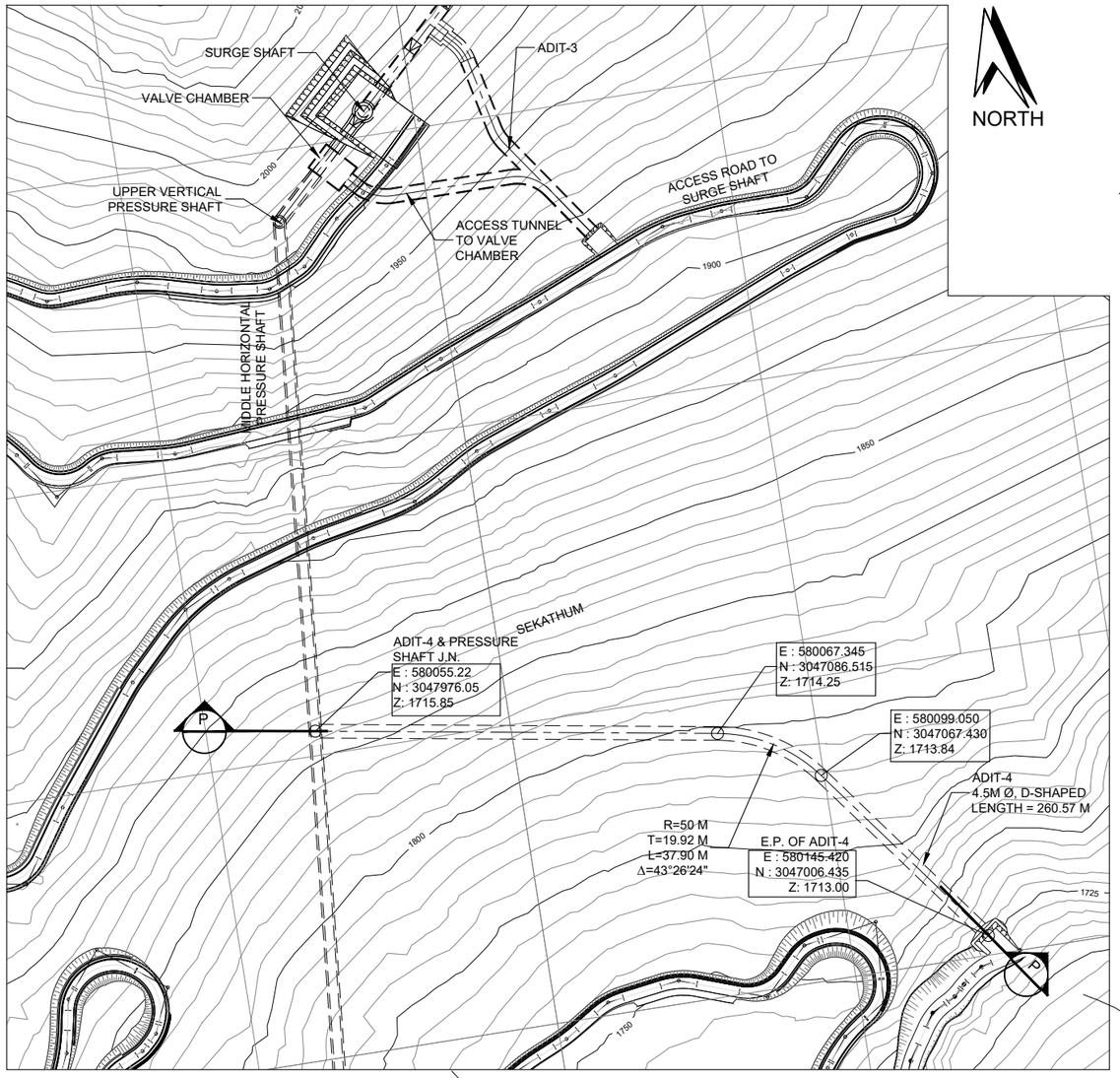
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

1 0 1 2 3 4 5M
SCALE : 1:100

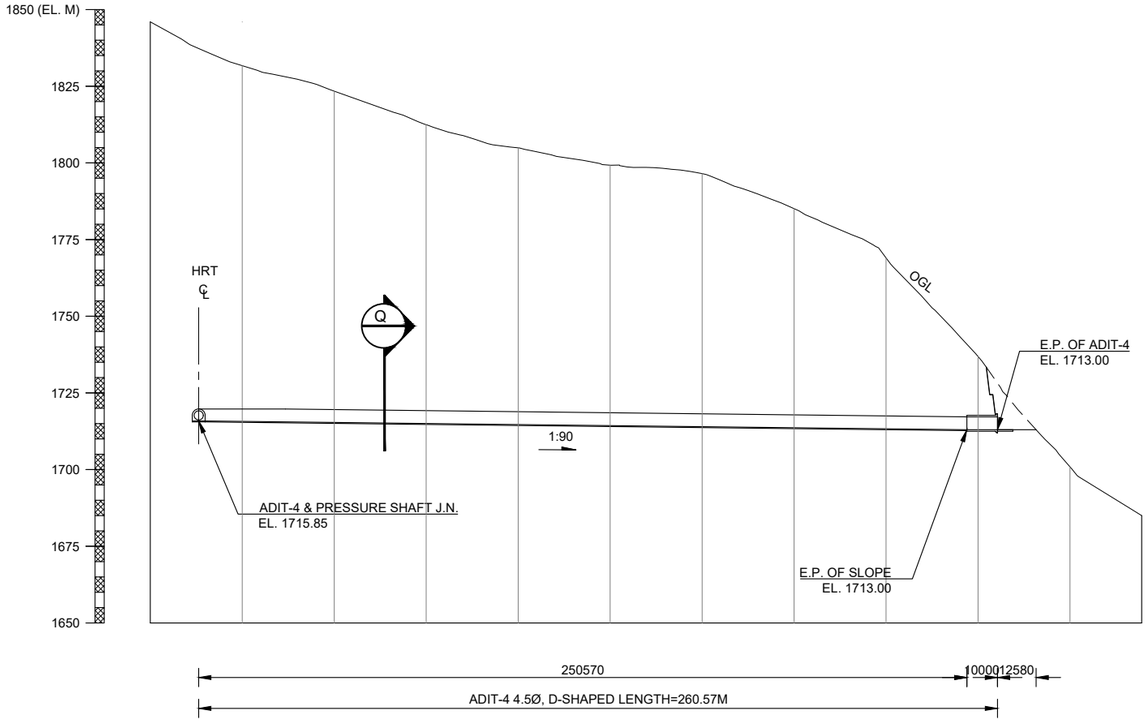
GK-WC-C-21	Longitudinal Profile along Pressure Shaft
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: DR. S. SHAH	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-24
SCALE: NTS	



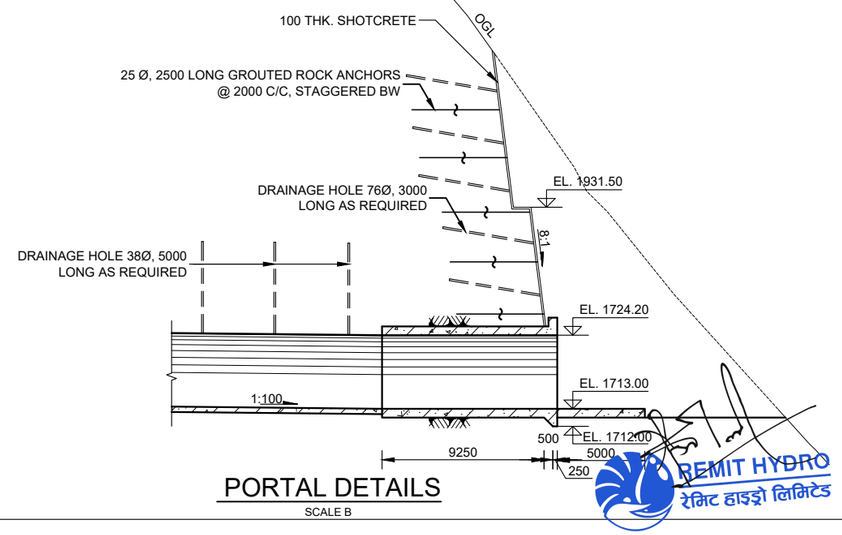
ADIT-4 PLAN

SCALE : A



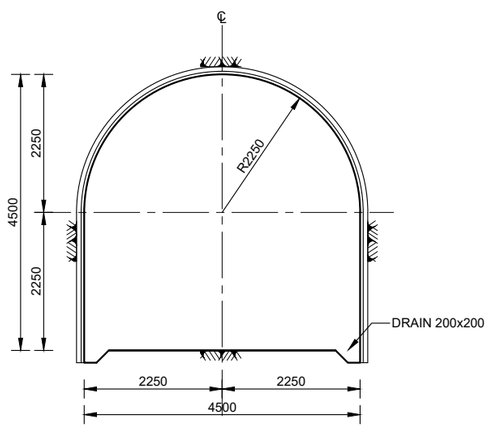
LONGITUDINAL SECTION P

SCALE A



PORTAL DETAILS

SCALE B



SECTION Q

SCALE C

CONTOUR INTERVAL 5 M

20 0 20 40 60 80 100M
SCALE A : 1:2,000

3.5 0 3.5 7 10.5 14 17.5M
SCALE B : 1:350

1 0 1 2 3 4 5M
SCALE C : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

WATER CONVEYANCE SYSTEM
ADIT TUNNELS
ADIT-4 PLAN & SECTIONAL DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

GK-WC-C-10	ADIT TUNNEL EXCAVATION & ROCK SUPPORT
	DETAILS
DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-WC-C-26
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

7. Power Station

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

NORTH

POTHEAD YARD
EL. 1550.00

E : 580019.655
N : 3046687.927
Z : 1548.50

GHUNSA KHOLA

ACCESS ROAD
TO HEADWORKS

ACCESS ROAD

E : 579569.284
N : 3046263.991
Z : 1567.25

TAMOR BRIDGE

TAMOR RIVER

E : 579866.210
N : 3046553.134
Z : 1538.00

CABLE CUM VENTILATION TUNNEL

MAIN ACCESS TUNNEL

E : 579926.547
N : 3046832.566
Z : 1545.38

E : 579928.228
N : 3046785.625
Z : 1545.38

POWERHOUSE CAVERN

TRANSFORMER CAVERN

E : 579848.689
N : 3046776.913
Z : 1525.40

E : 579811.710
N : 3046745.815
Z : 1525.40

TAILRACE TUNNEL
SLOPE 1650

E : 579802.973
N : 3046791.171
Z : 1525.40

PRESSURE SHAFT

ADIT-5

ADIT-6

E : 579900.429
N : 3046881.6608
Z : 1513.65

E : 579843.077
N : 3046823.083
Z : 1525.40

ACCESS ROAD TO
SURGE SHAFT

5800000 mE

30046400 N

30046800 N

30046200 N

5790000 mE

1650

1600

1550

1600

1650

1700

1800

1750

CONTOUR INTERVAL 5 M

20 0 20 40 60 80 100M

SCALE : 1:2,000

GENERAL LAYOUT PLAN

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

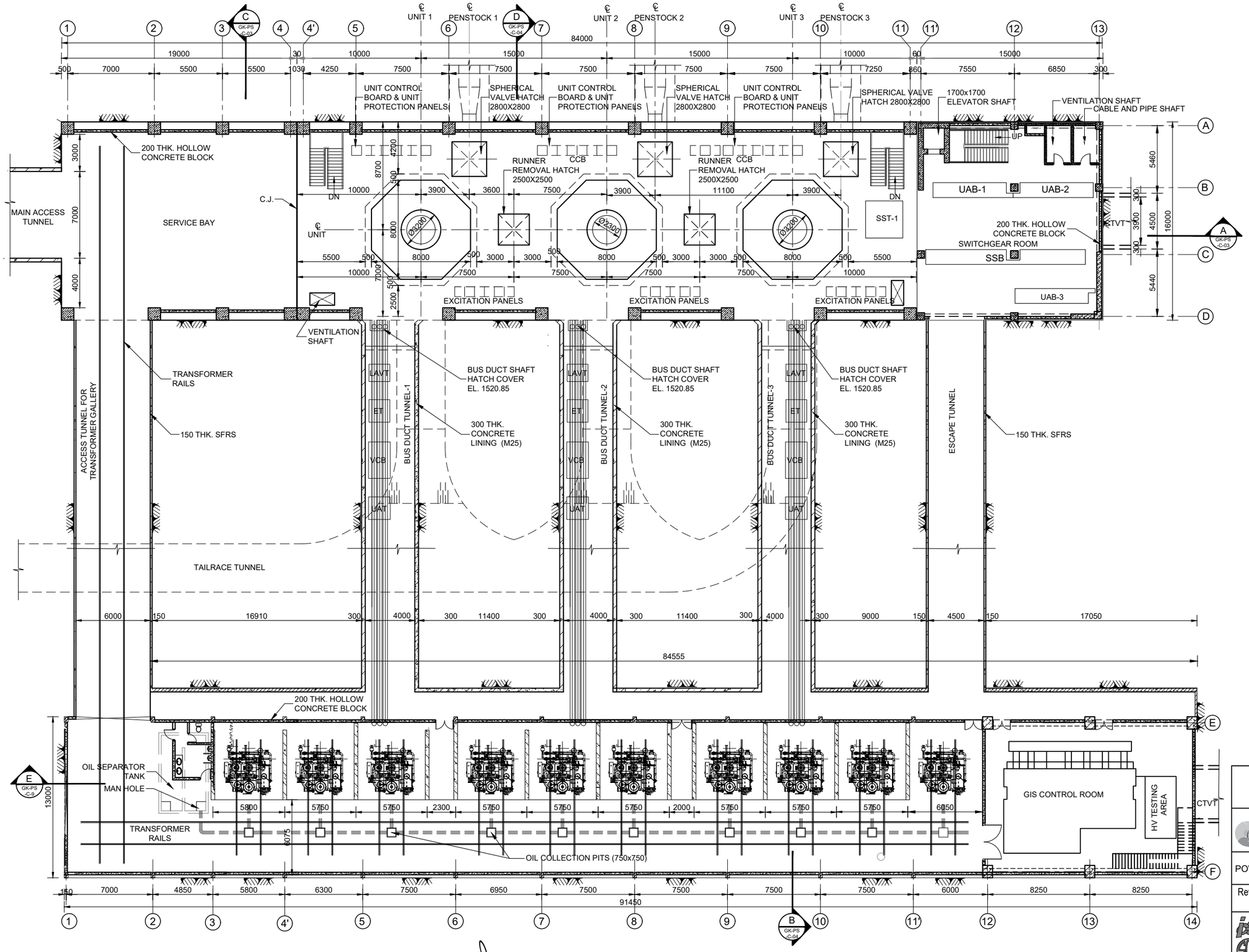
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

POWER STATION
POWERHOUSE & TRANSFORMER CAVERN
GENERAL LAYOUT PLAN

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: R. PAL/R.S. CHAUDHARY	CHECKED BY: R.C. CHAURDARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-PS-L-01
SCALE: NTS	



POWERHOUSE & TRANSFORMER CAVERN PLAN AT EL 1525.40

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

SCALE : 1:300

GK-PS-C-10	POWERHOUSE & TRANSFORMER CAVERN GIS FLOOR PLAN & SECTION
GK-PS-C-04	POWERHOUSE & TRANSFORMER CAVERN CROSS SECTION
GK-PS-C-03	POWERHOUSE & TRANSFORMER CAVERN LONGITUDINAL SECTION
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

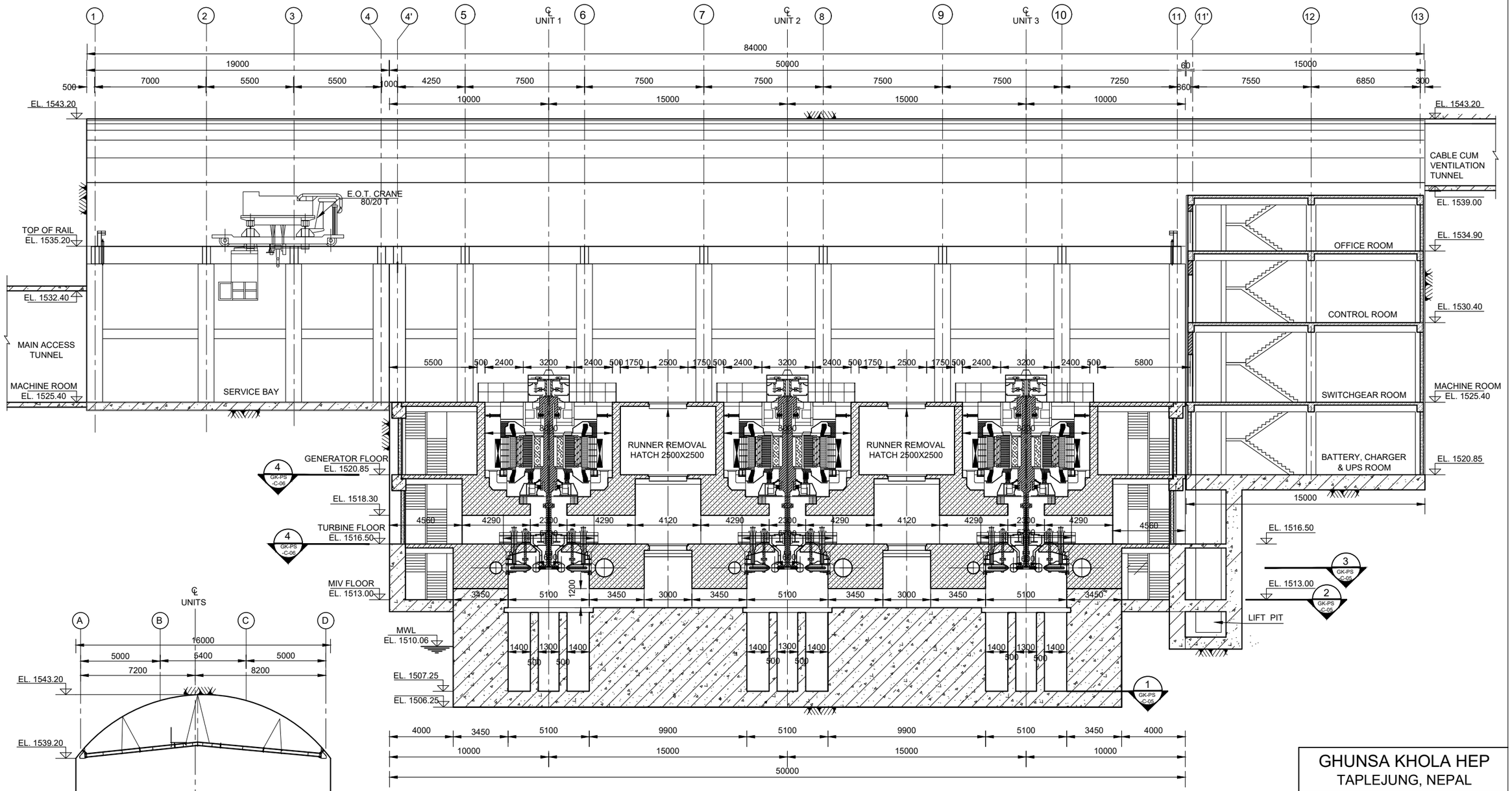
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

POWER STATION
POWERHOUSE & TRANSFORMER CAVERN PLAN AT EL 1525.40

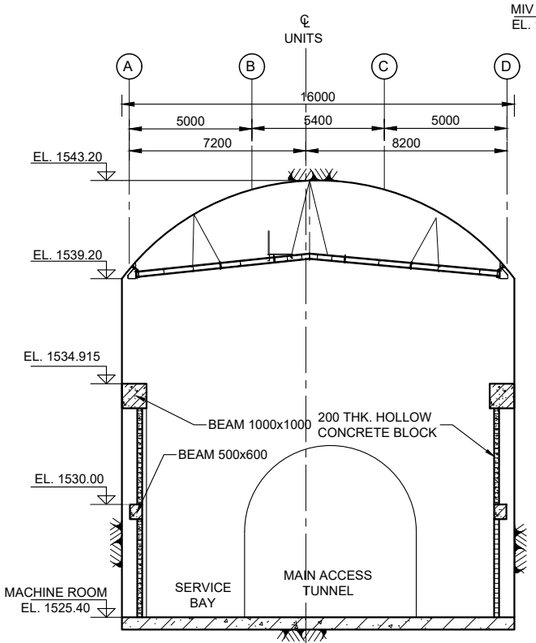
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: R. PAL/R.S. CHAUDHARY	CHECKED BY: R.C. CHAURDARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-PS-C-02
SCALE: NTS	



SECTION A
(GK-PS-C-02)



SECTION C
(GK-PS-C-02)

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

POWER STATION
POWERHOUSE & TRANSFORMER CAVERN LONGITUDINAL SECTION

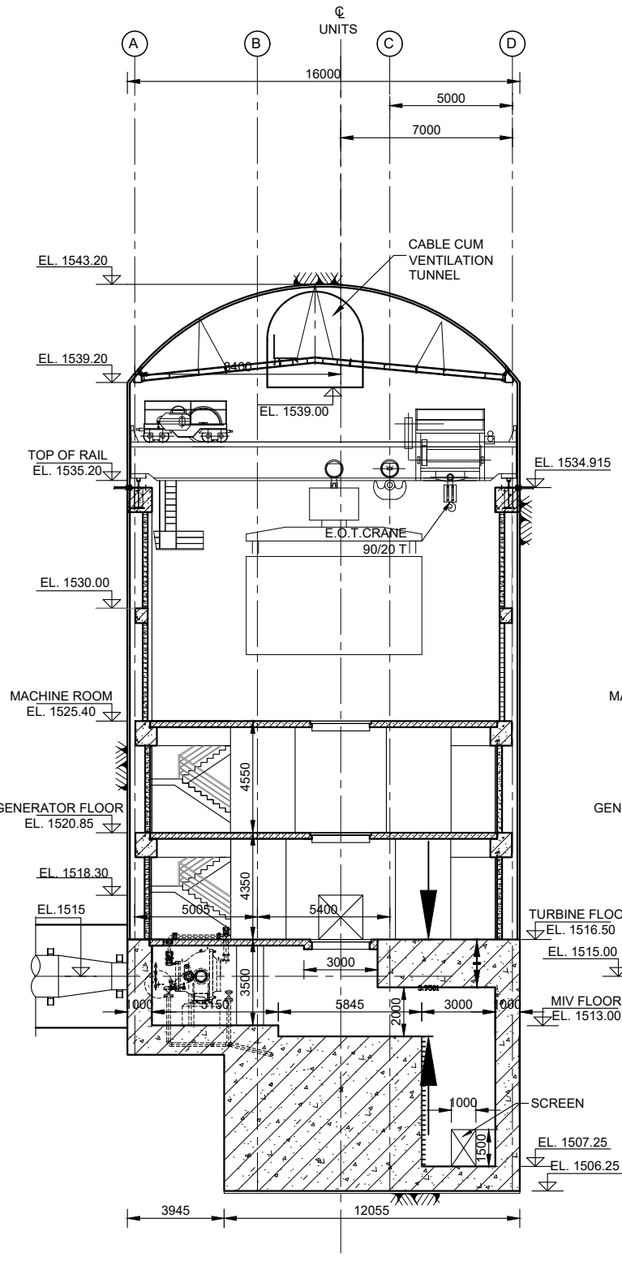
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

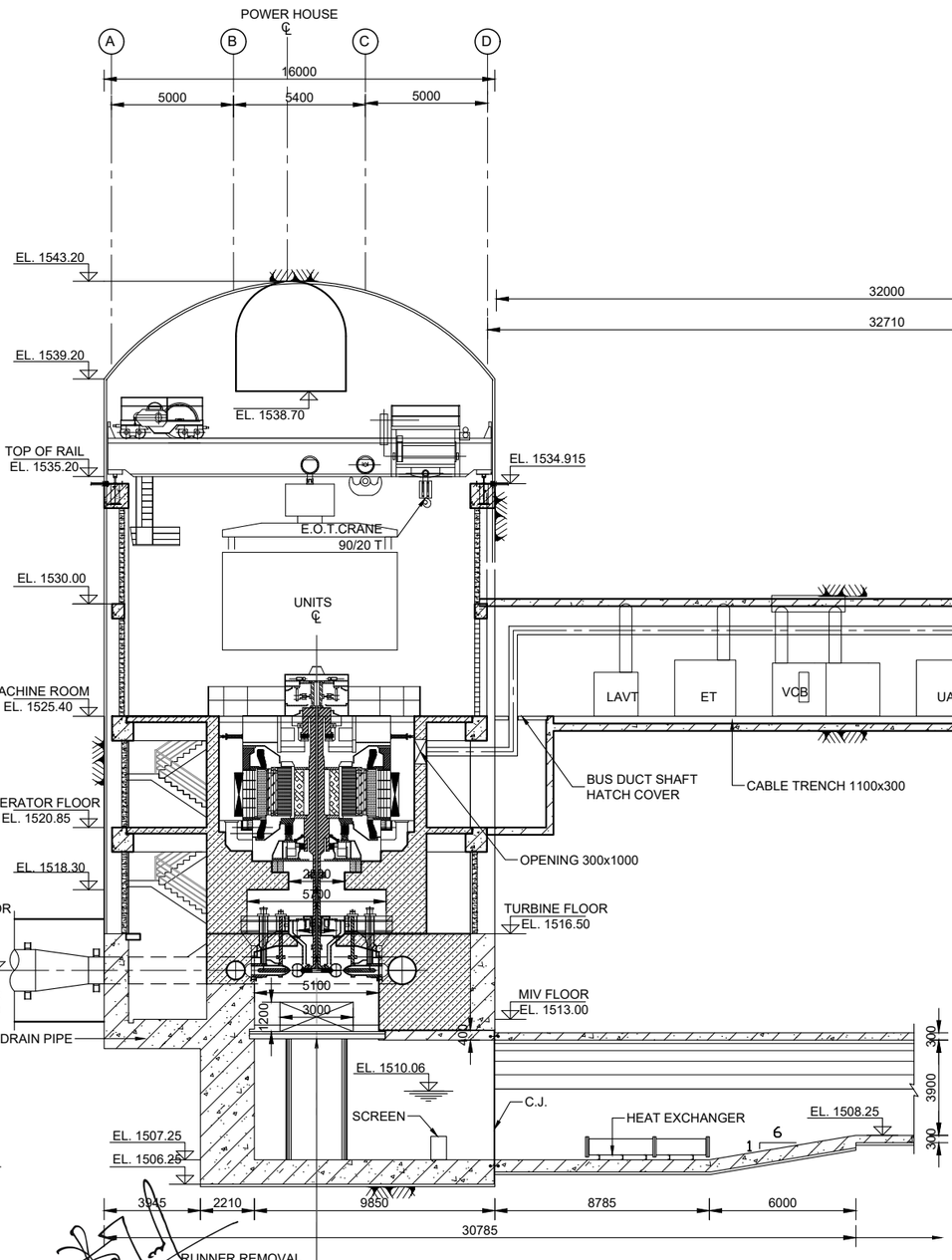
2.5 0 2.5 5 7.5 10 12.5M
SCALE A : 1:250

GK-PS-C-02	POWERHOUSE & TRANSFORMER CAVERN PLAN AT EL. 1525.40
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

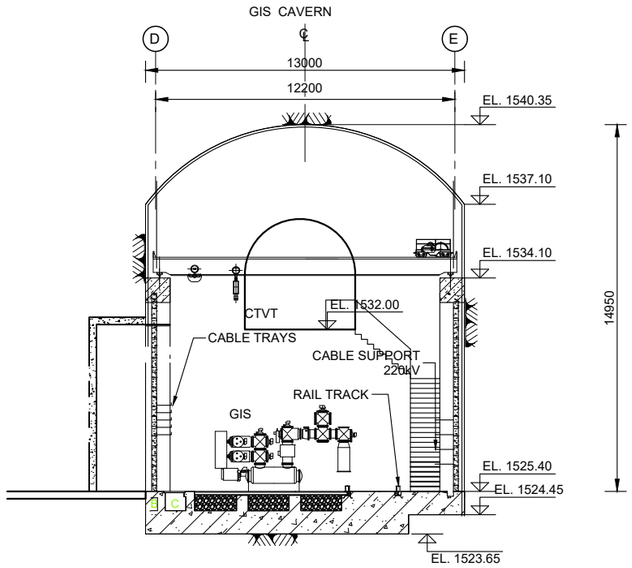
DESIGNED BY: R. PAUR/R.S. CHAUDHARY	CHECKED BY: R.C. CHAURDARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-PS-C-03
SCALE: NTS	



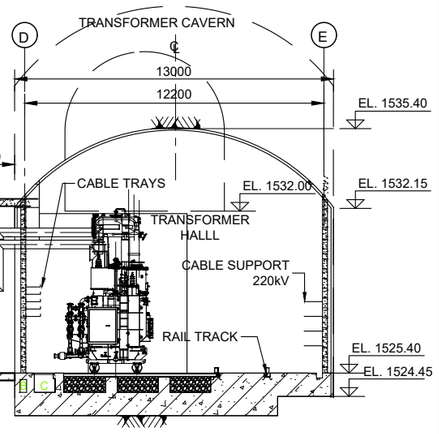
SECTION D
(GK-PS-C-02)



SECTION B
(GK-PS-C-02)



GIS CAVERN SECTION
(GK-PS-C-02)



2.5 0 2.5 5 7.5 10 12.5M
SCALE A : 1:250

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

POWER STATION
POWERHOUSE & TRANSFORMER CAVERN
CROSS SECTIONS

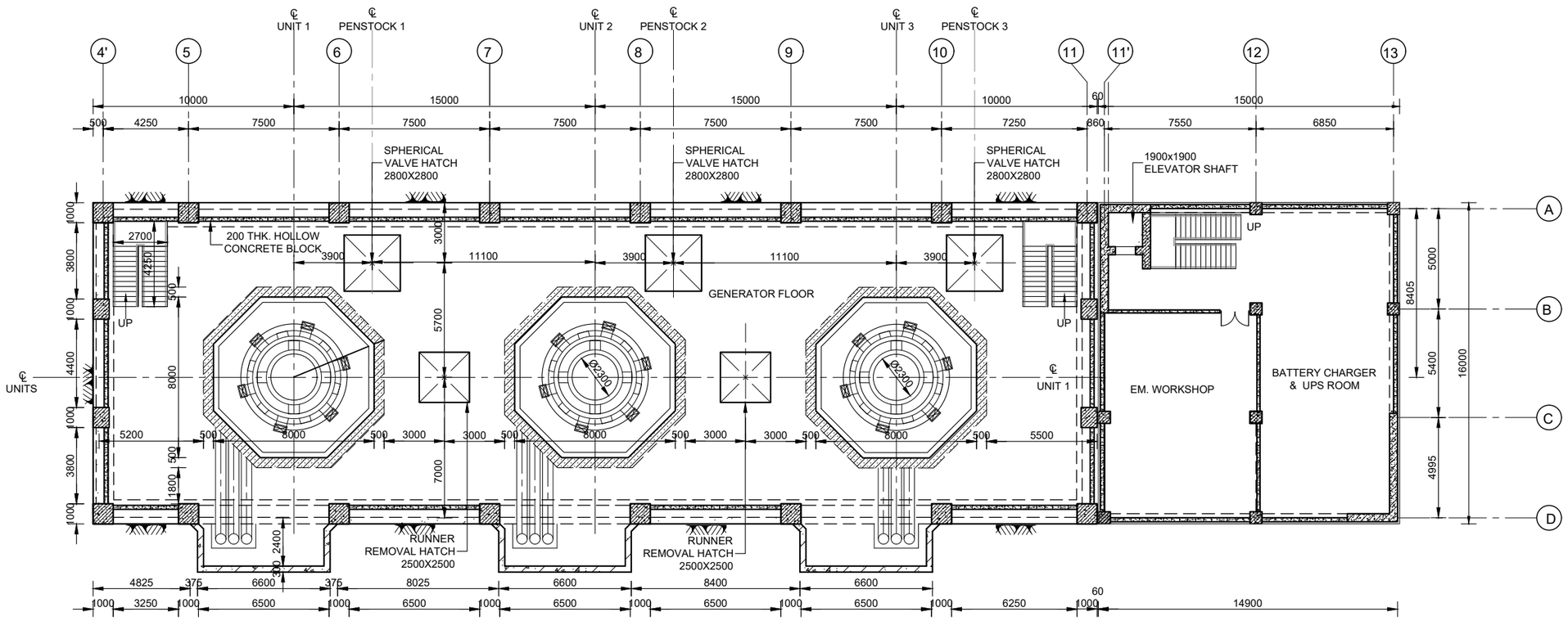
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

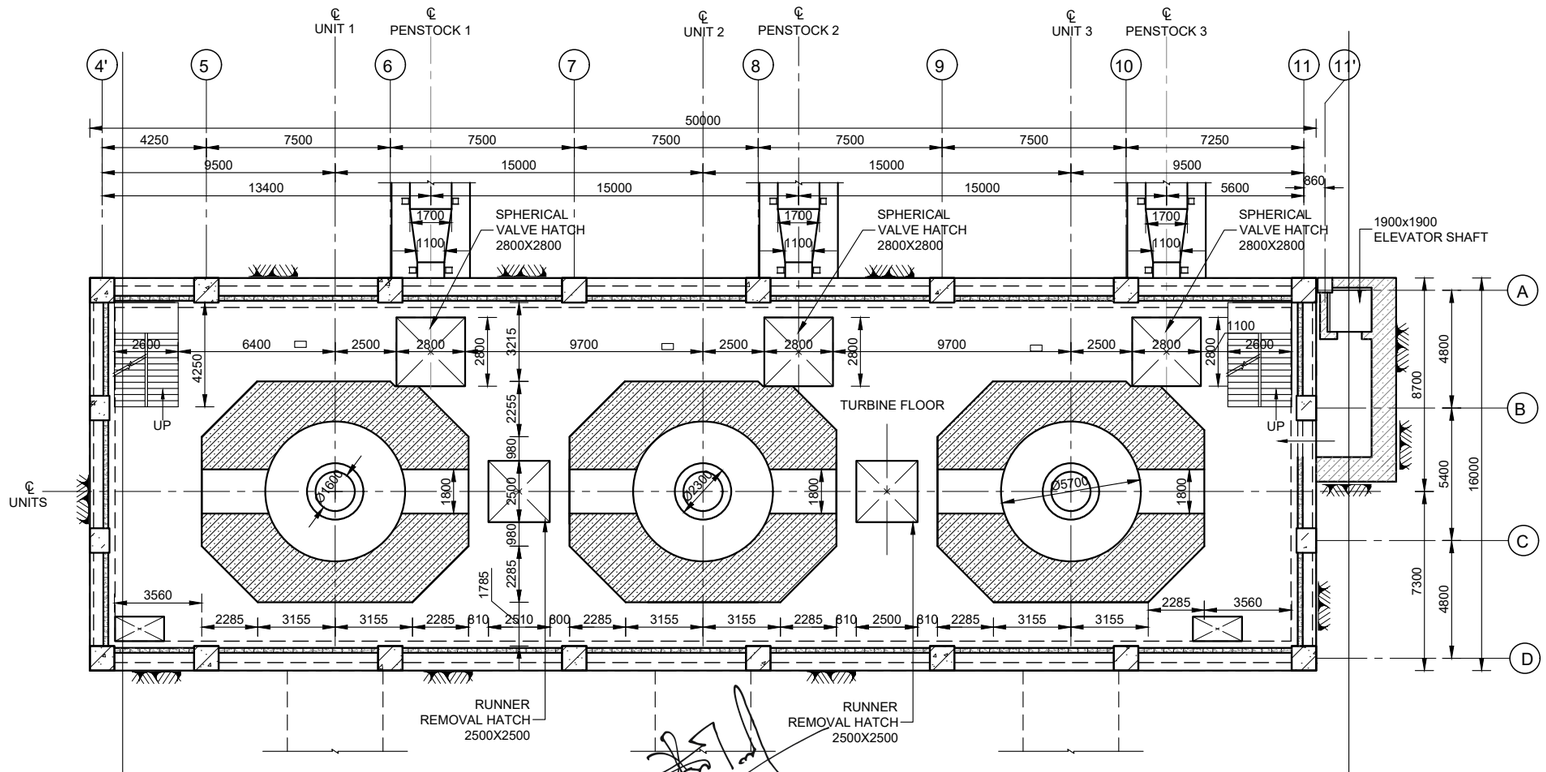
GK-PS-C-02	POWERHOUSE & TRANSFORMER CAVERN PLAN AT EL. 1525.40
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/R.S. CHAUDHARY	CHECKED BY: R.C. CHAURDARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-PS-C-04
SCALE: NTS	

REMIT HYDRO
रेमित हाइड्रो लिमिटेड



SECTIONAL PLAN AT 5 (EL. 1520.85)



SECTIONAL PLAN AT 4 (EL. 1516.50)

REMIT HYDRO रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

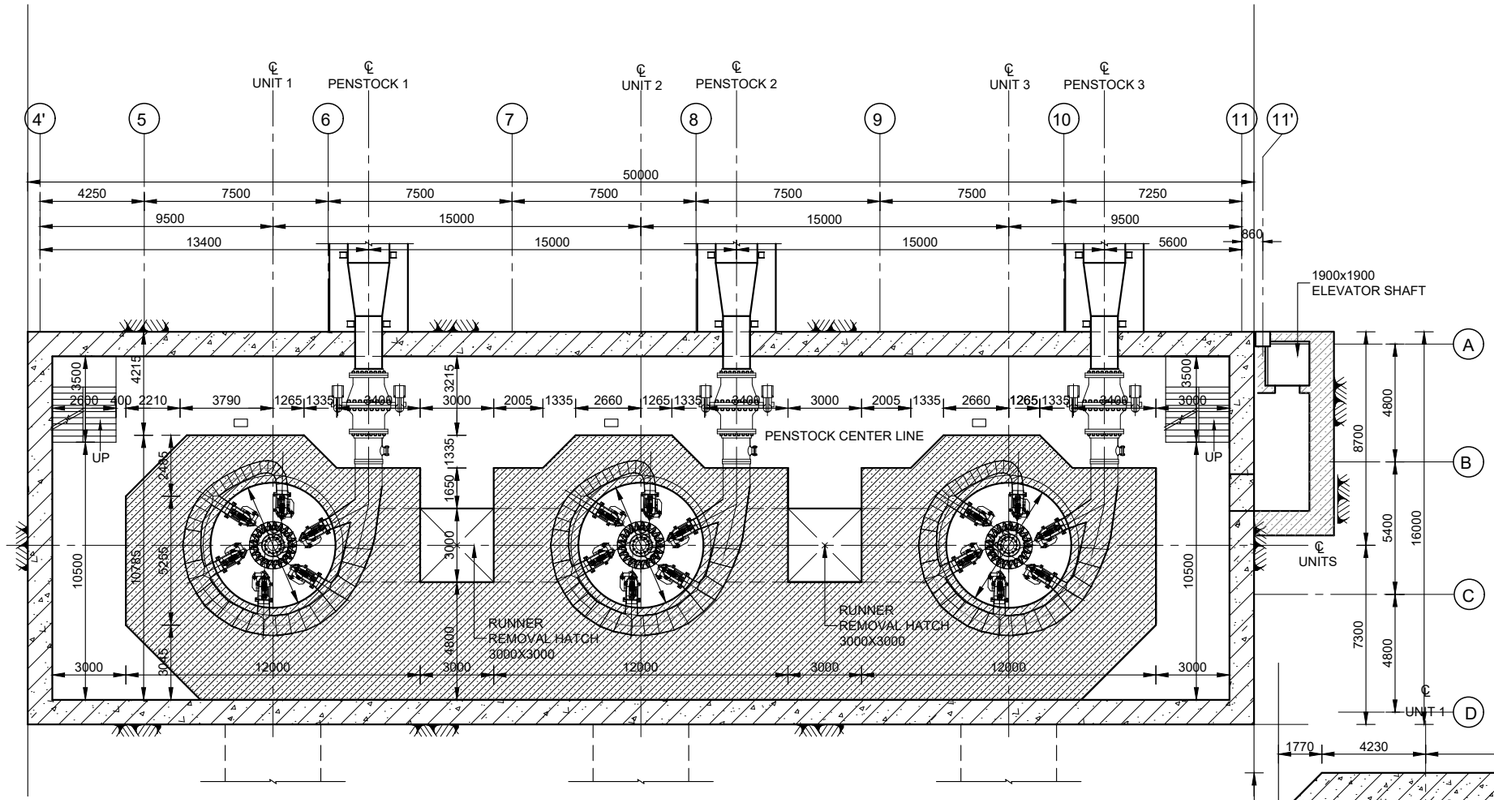
POWER STATION
POWERHOUSE & TRANSFORMER CAVERN
SECTIONAL PLANS AT EL. 1520.85 & 1516.50

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

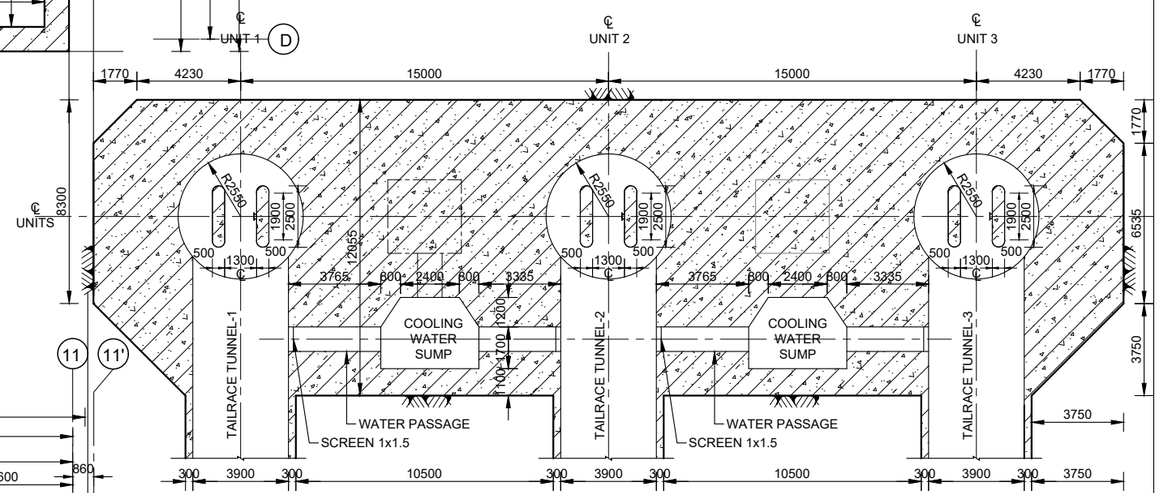
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

2.5 0 2.5 5 7.5 10 12.5M
SCALE A : 1:250

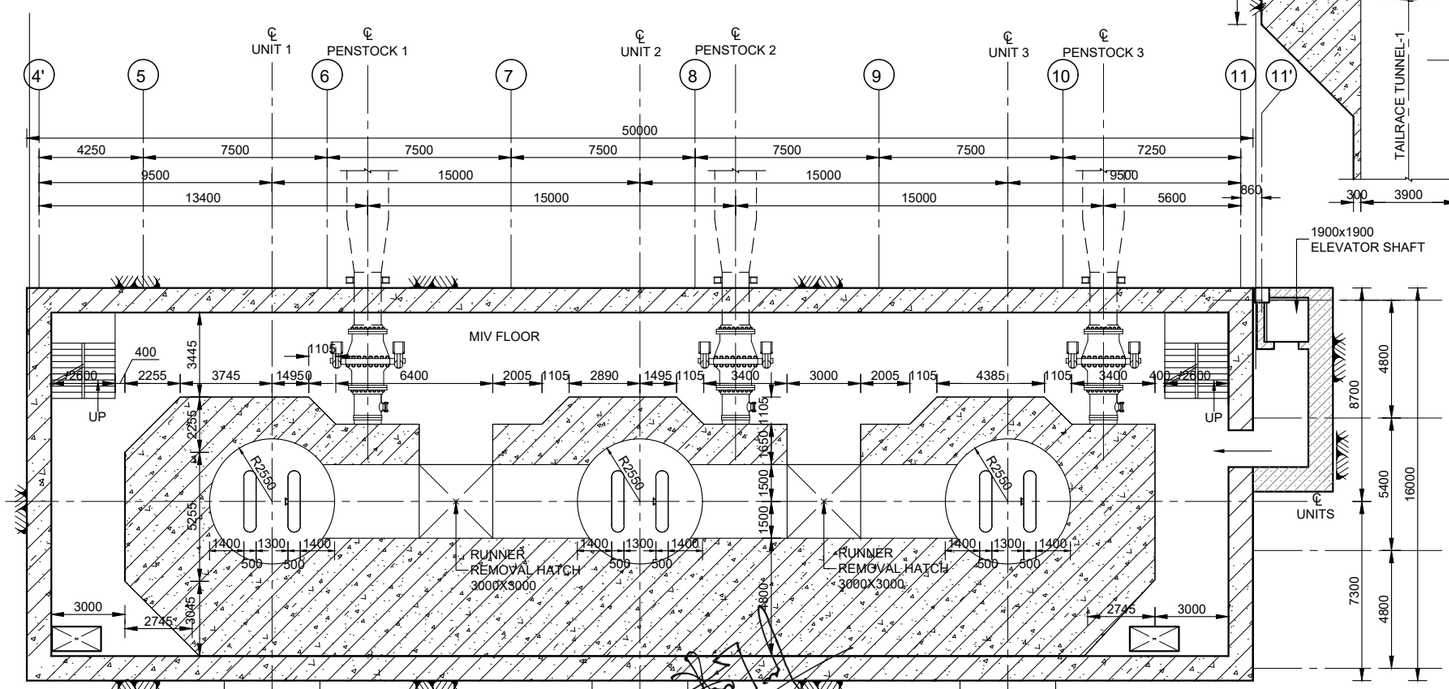
		DESIGNED BY: R. PAL/R.S. CHAUDHARY	CHECKED BY: R.C. CHAURDARY
		DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
GK-PS-C-02	POWERHOUSE & TRANSFORMER CAVERN PLAN AT EL. 1525.40	DATE: 2025	DWG. NO GK-PS-C-06
DWG. NO.	DESCRIPTION:	SCALE: NTS	
REFERENCE DRAWINGS			



SECTIONAL PLAN AT 3 (EL. 1515.50)



SECTIONAL PLAN AT 1 (EL. 1507.25)



SECTIONAL PLAN AT 2 (EL. 1515.00)

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

POWER STATION
POWERHOUSE & TRANSFORMER CAVERN
SECTIONALS PLAN AT EL. 1507.25 TO 1515.50

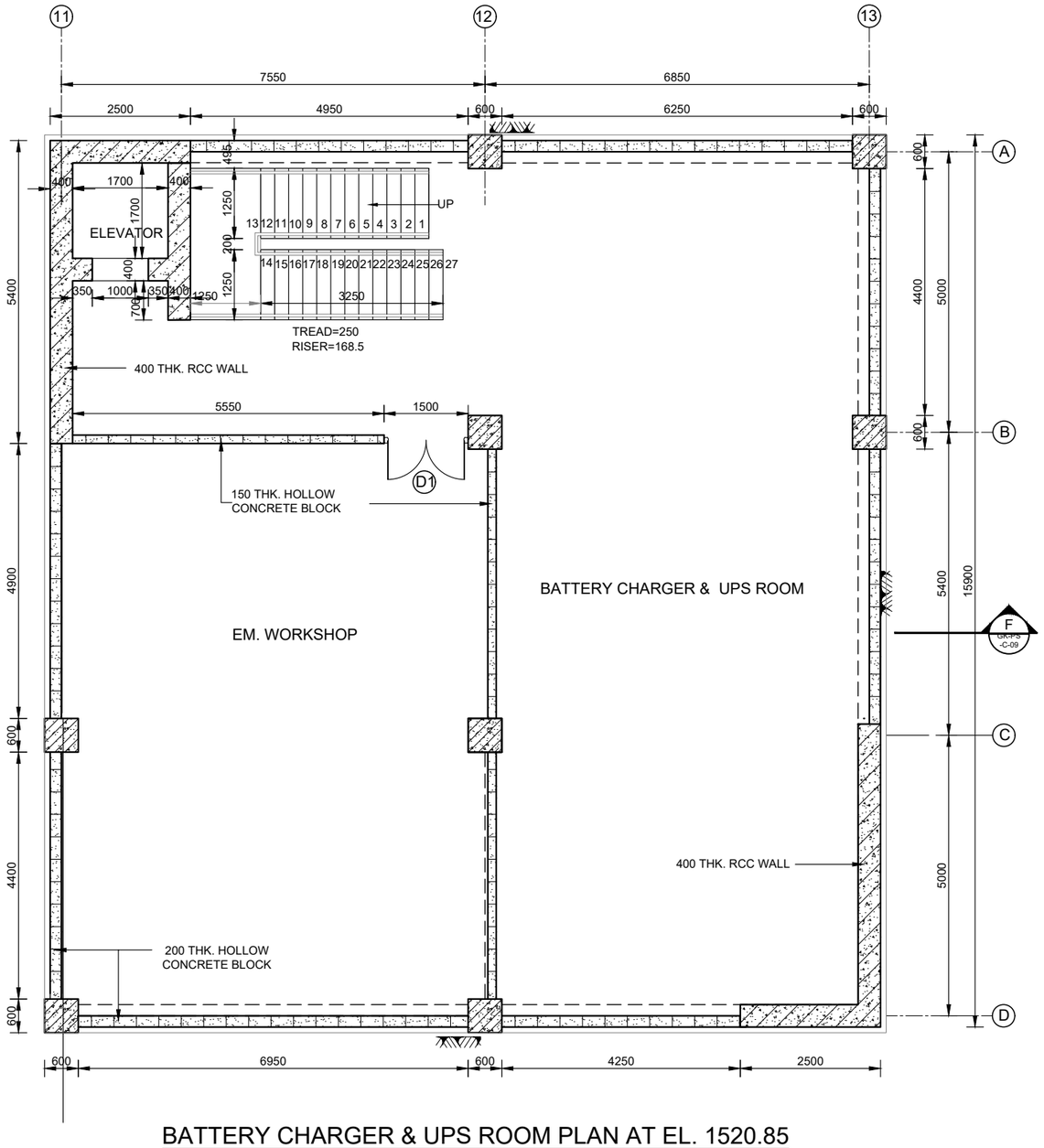
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

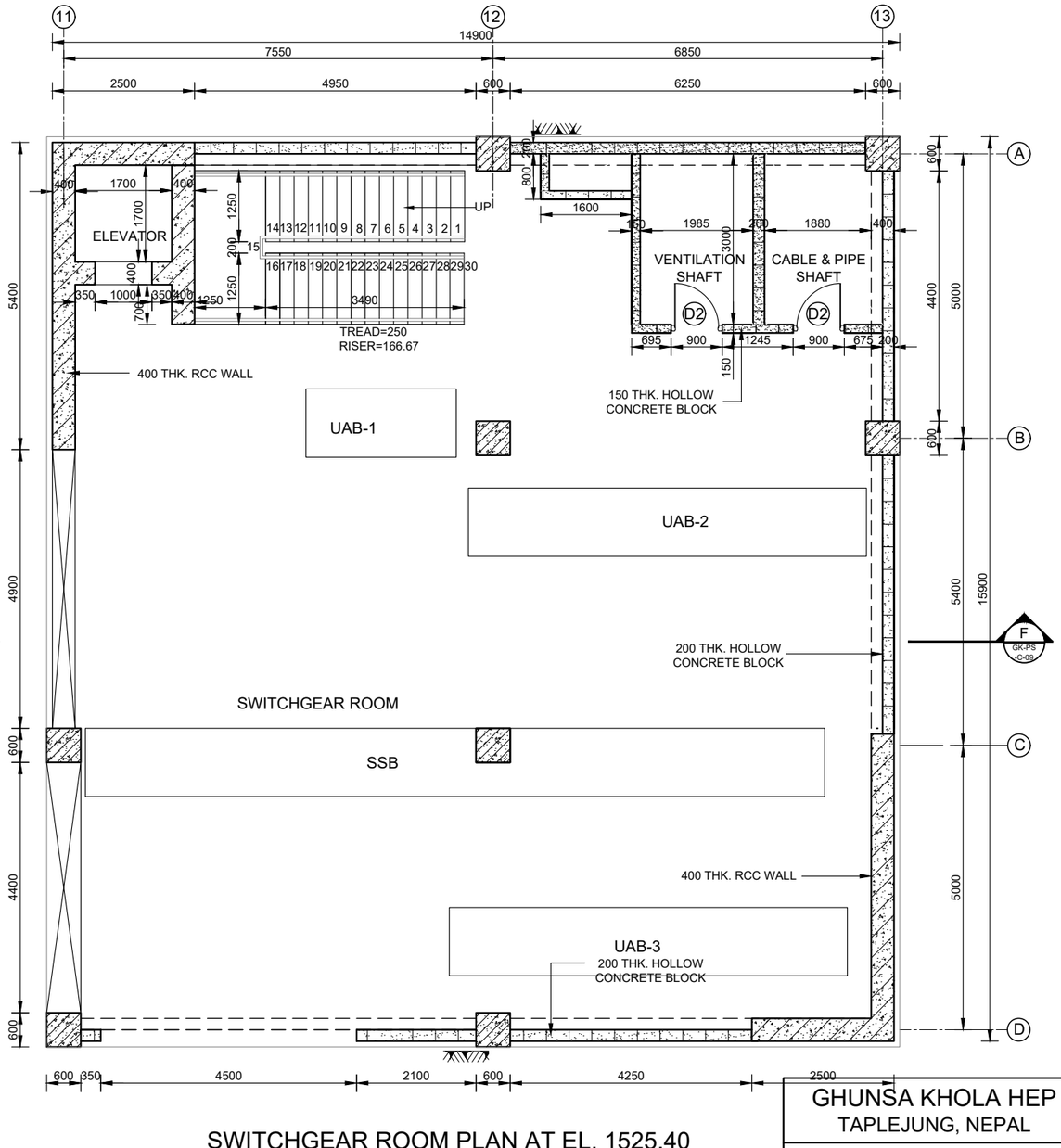
2.5 0 2.5 5 7.5 10 12.5M
SCALE : 1:250

GK-PS-C-02	POWERHOUSE & TRANSFORMER CAVERN PLAN AT EL. 1525.40
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/R.S. CHAUDHARY	CHECKED BY: R.C. CHAURDARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-PS-C-05
SCALE: NTS	



BATTERY CHARGER & UPS ROOM PLAN AT EL. 1520.85



SWITCHGEAR ROOM PLAN AT EL. 1525.40

1.0 0 1.0 2.0 3.0 4.0 5.0M
SCALE A : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

POWER STATION
POWERHOUSE & TRANSFORMER CAVERN
CONTROL ROOM PLANS

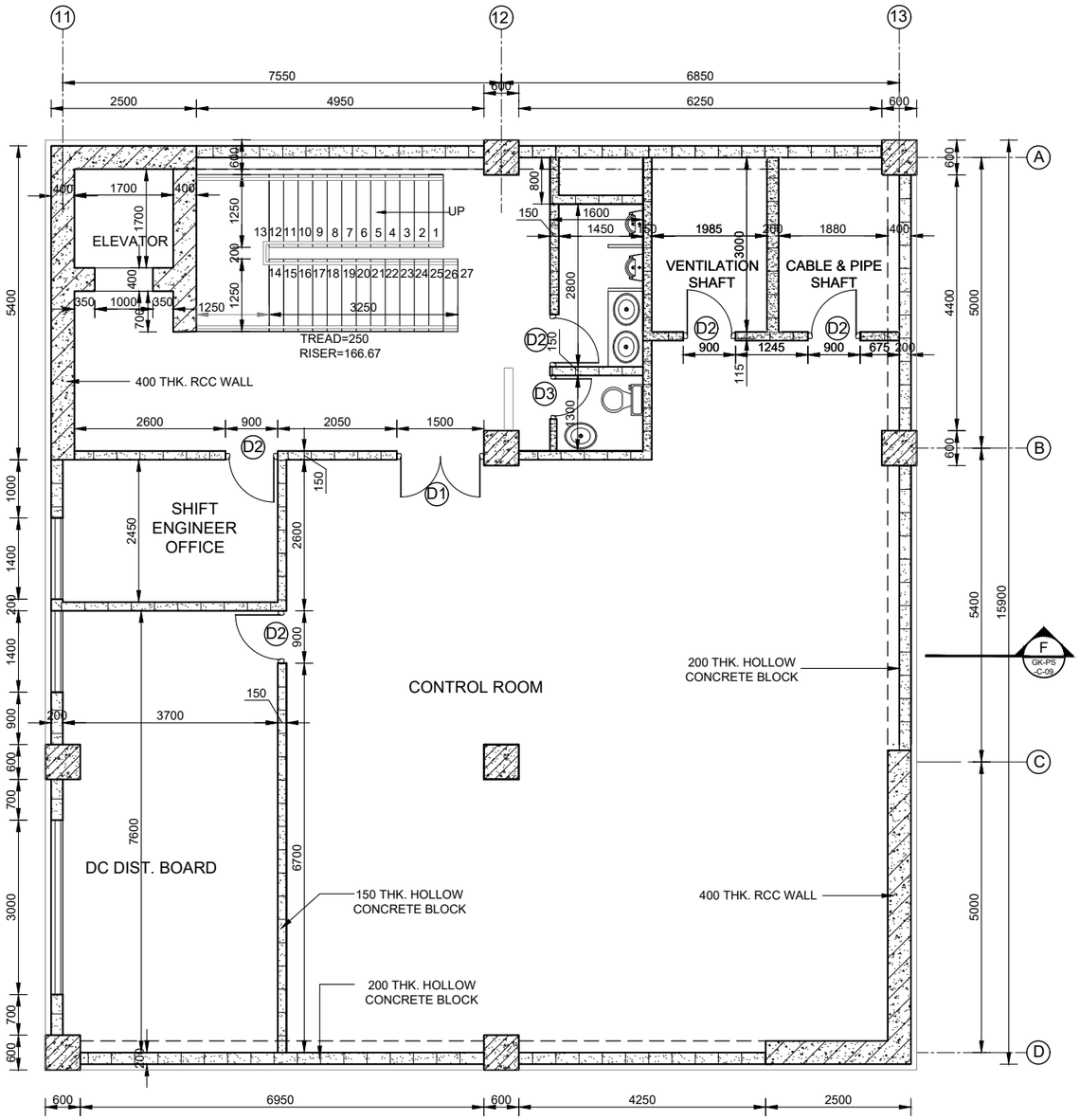
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

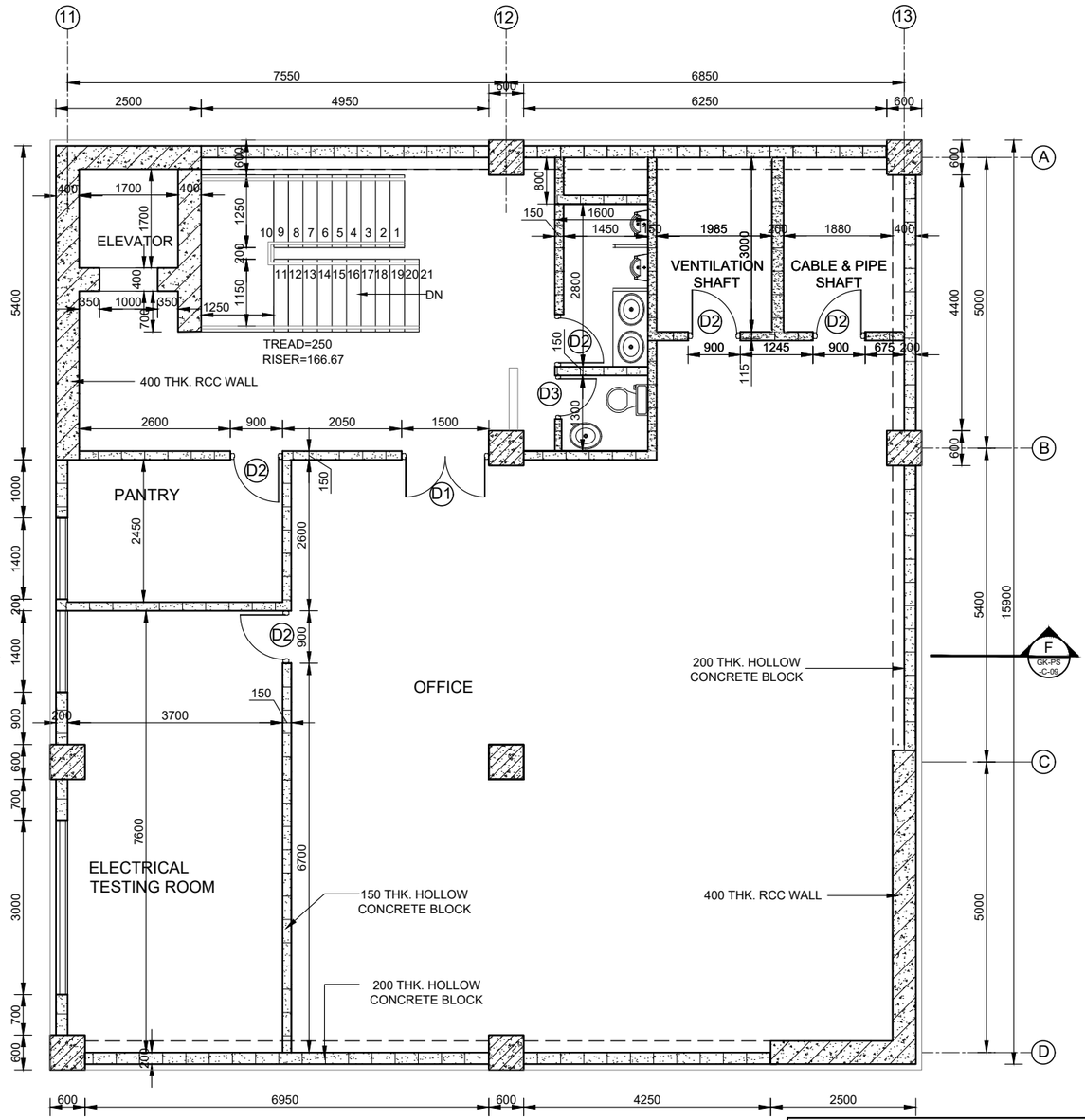
GK-PS-C-10	POWERHOUSE & TRANSFORMER CAVERN CONTROL ROOM SECTION
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/R.S. CHAUDHARY	CHECKED BY: R.C. CHAURDARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-PS-C-07
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



CONTROL ROOM PLAN AT EL. 1530.40



OFFICE PLAN AT EL. 1534.90

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

1.0 0 1.0 2.0 3.0 4.0 5.0M
SCALE A : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

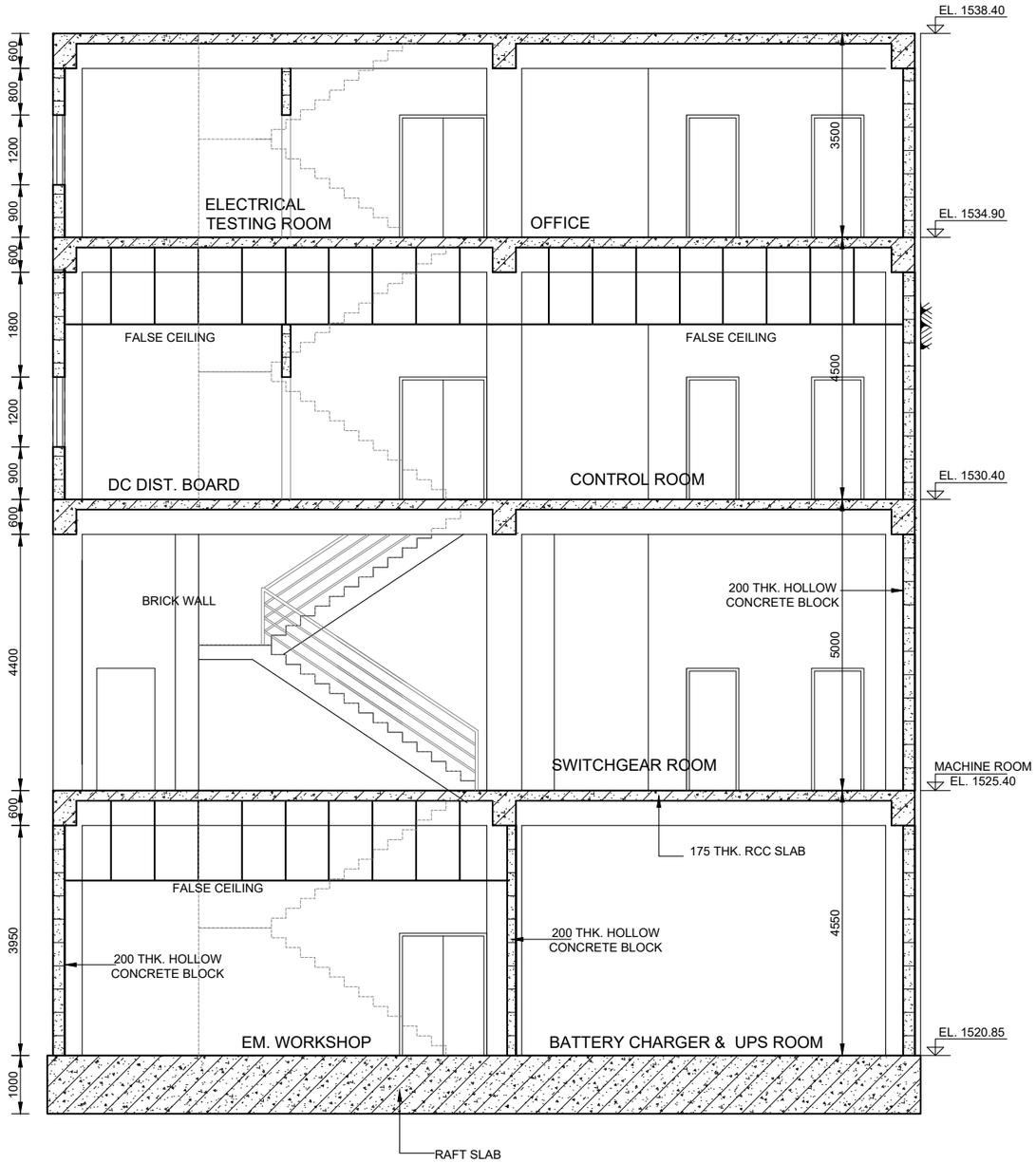
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

POWER STATION
POWERHOUSE & TRANSFORMER CAVERN
CONTROL ROOM PLANS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

		DESIGNED BY: R. PAL/R.S. CHAUDHARY	CHECKED BY: R.C. CHAURDARY
		DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
GK-PS-C-09	POWERHOUSE & TRANSFORMER CAVERN CONTROL ROOM SECTION	DATE: 2025	DWG. NO GK-PS-C-08
DWG. NO.	DESCRIPTION:	SCALE: NTS	
REFERENCE DRAWINGS			



DOOR/WINDOW SCHEDULE

SN	DESCRIPTION	SIZE
1	WINDOW (W1)	3000X1200
2	WINDOW (W2)	1400X1200
3	DOOR (D1)	1500X2100
4	DOOR (D2)	900X2100
5	DOOR (D3)	750X2100

CONTROL ROOM SECTION F
(GK-PS-C-07)

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

1.0 0 1.0 2.0 3.0 4.0 5.0M
SCALE : 1:100

GK-PS-C-08	POWERHOUSE & TRANSFORMER CAVERN CONTROL ROOM PLANS
GK-PS-C-07	POWERHOUSE & TRANSFORMER CAVERN CONTROL ROOM PLANS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

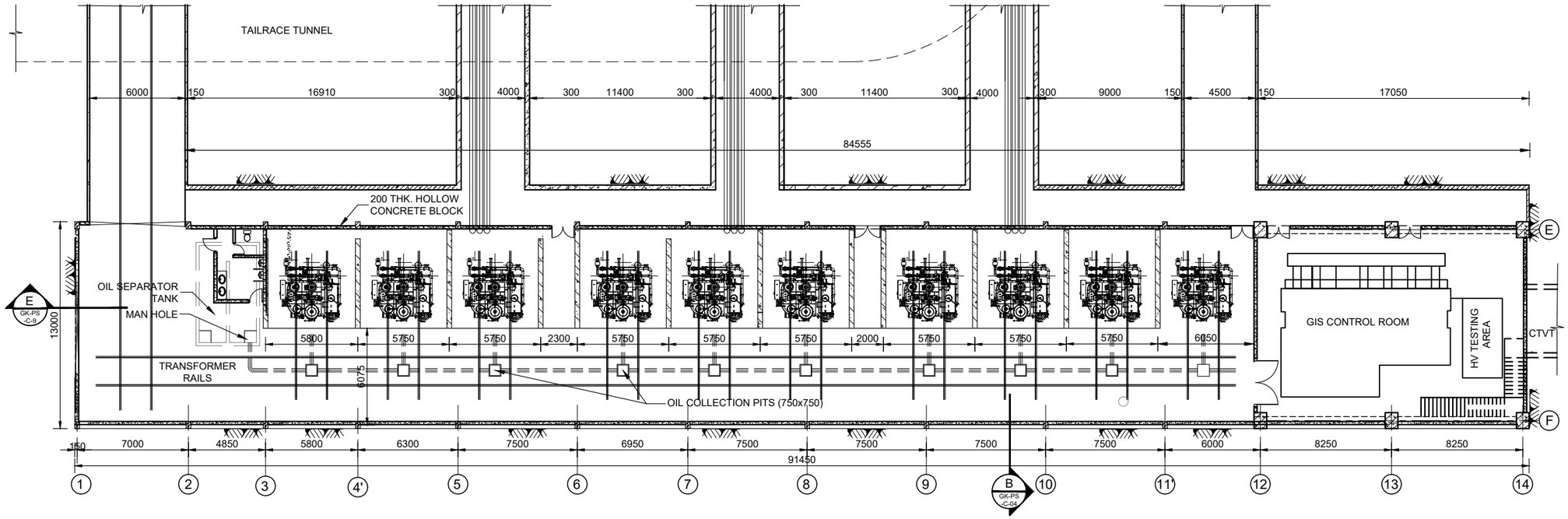
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

POWER STATION
POWERHOUSE & TRANSFORMER CAVERN
CONTROL ROOM SECTION

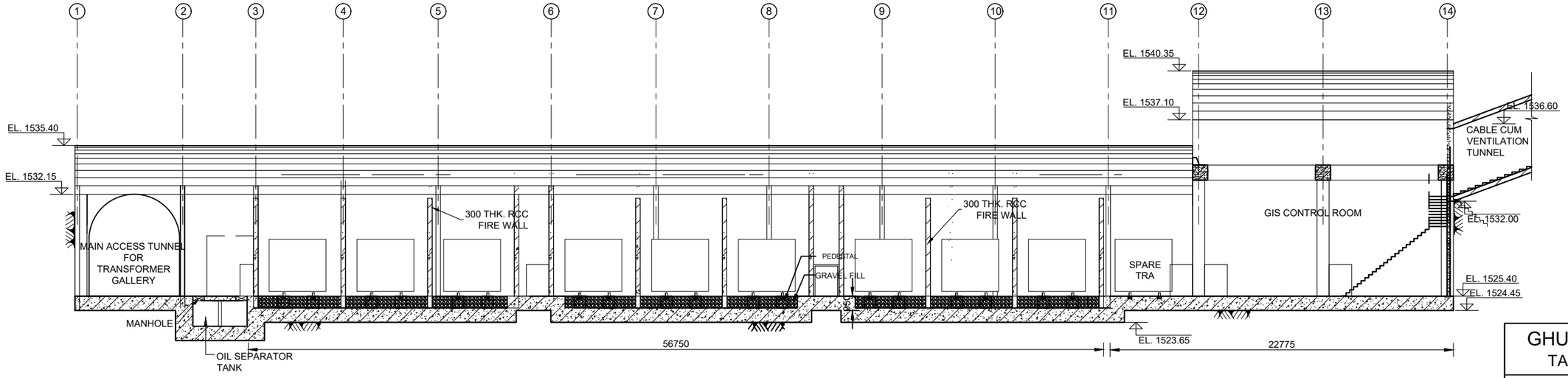
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: R. PAL/R.S. CHAUDHARY	CHECKED BY: R.C. CHAURDARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-PS-C-09
SCALE: NTS	



TRANSFORMER AND GIS FLOOR PLAN



SECTION E
(GK-PS-C-02)

SCALE A : 1:300

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

POWER STATION
POWERHOUSE & TRANSFORMER CAVERN
GIS FLOOR DETAILS

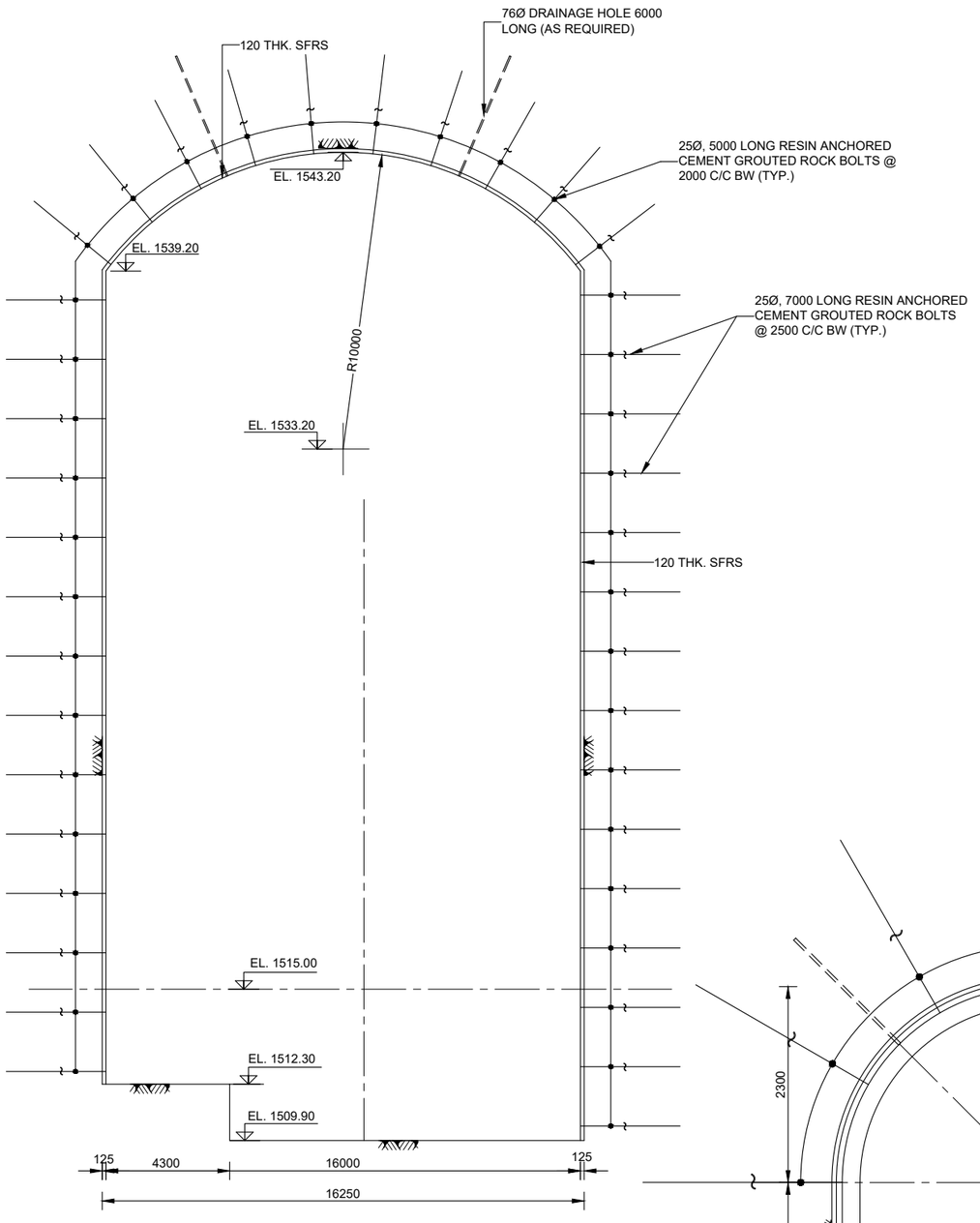
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

GK-PS-C-02	POWERHOUSE & TRANSFORMER CAVERN PLAN AT EL. 1525.40
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

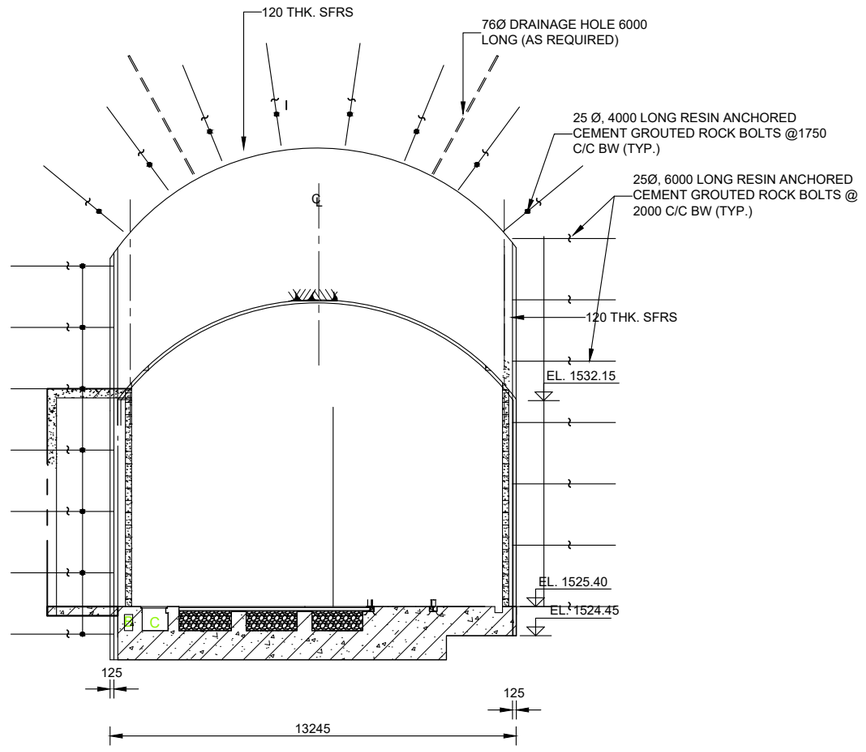
DESIGNED BY: R. PAL/R.S. CHAUDHARY	CHECKED BY: R.C. CHAURDARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: MARCH 2022	DWG. NO GK-PS-C-10
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



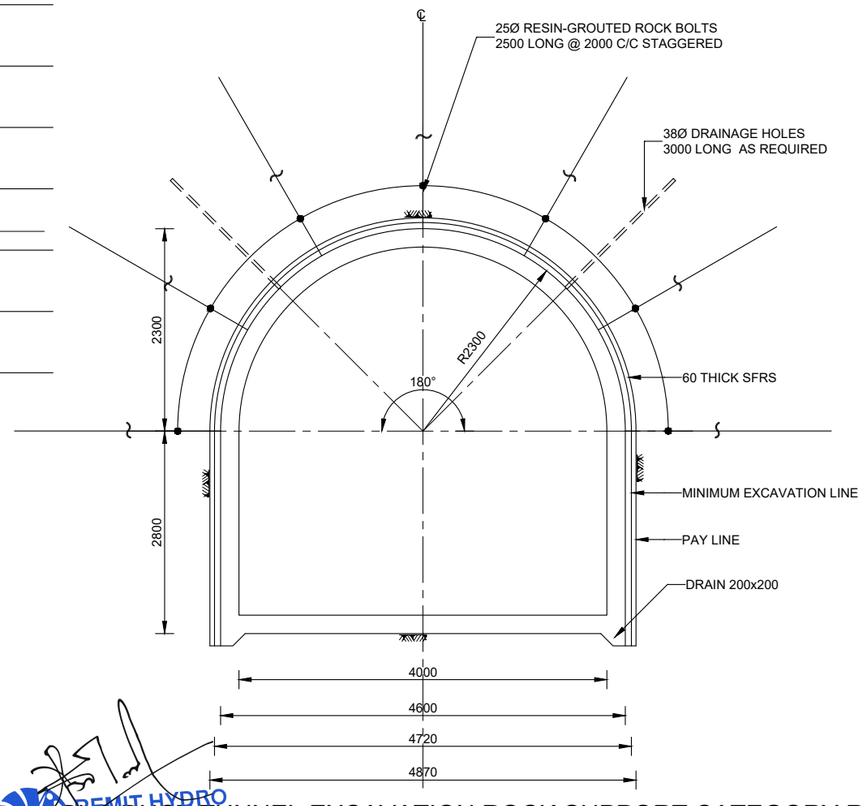
POWERHOUSE CAVERN EXCAVATION & ROCK SUPPORT CATEGORY R5

SCALE A



TRANSFORMER CAVERN ROCK SUPPORT, CATEGORY R5

SCALE A



BUS DUCT TUNNEL EXCAVATION ROCK SUPPORT CATEGORY R4

SCALE B

2 0 2 4 6 8 10M
SCALE A : 1:200

1 0 1 2 3 4 5M
SCALE B : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

POWER STATION
POWERHOUSE & TRANSFORMER CAVERN
EXCAVATION & SUPPORT DETAILS

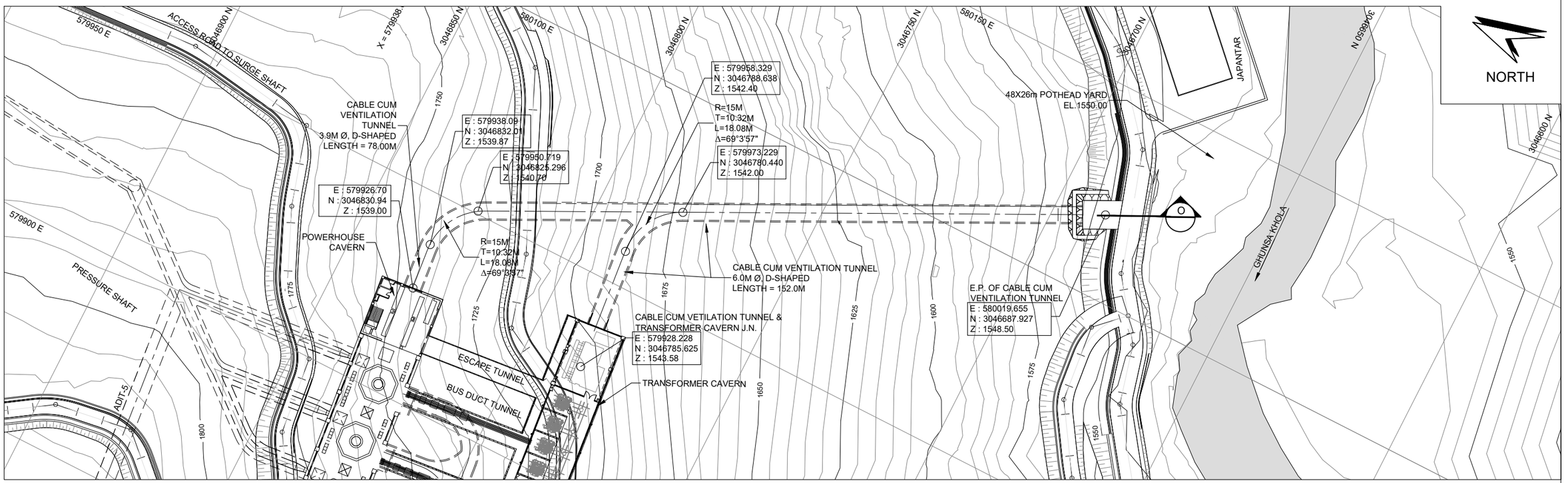
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

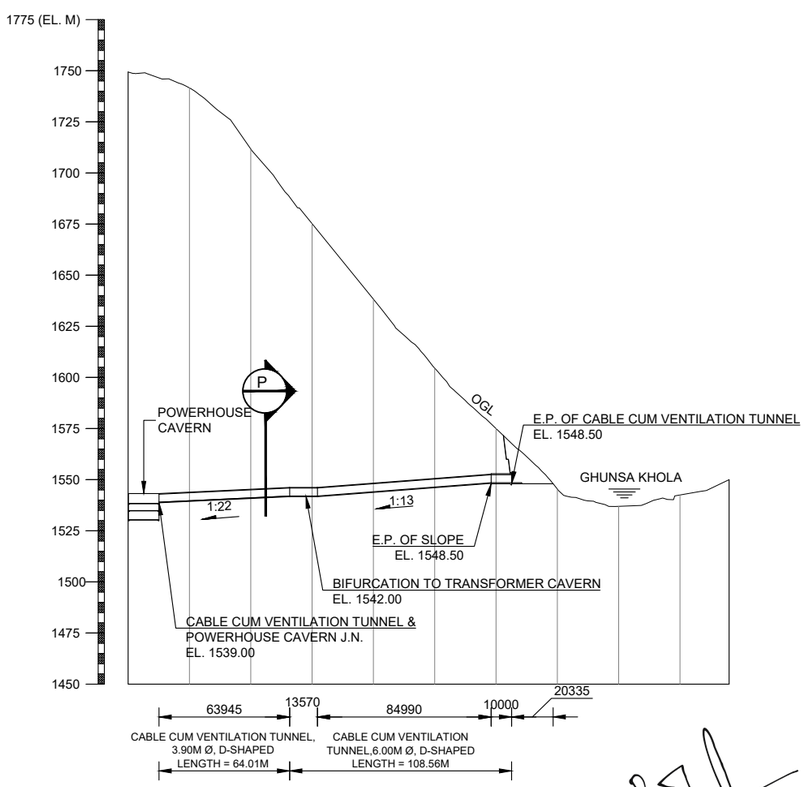
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: DR. S. SHAH	CHECKED BY: R.C. CHAURDARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-PS-C-11
SCALE: NTS	

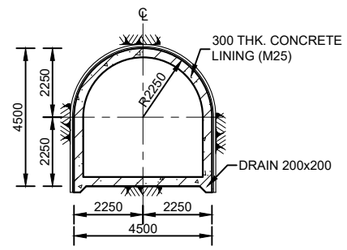
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



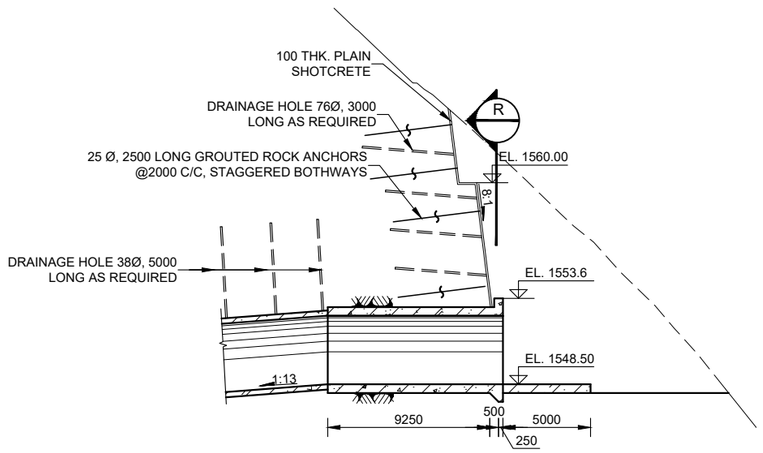
LAYOUT PLAN
SCALE A



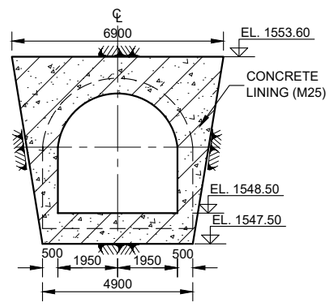
SECTION O
SCALE B



SECTION P
SCALE D



PORTAL DETAILS
SCALE C



SECTION R
SCALE D

CONTOUR INTERVAL 5 M

10 0 20 30 40 50 60M
SCALE A : 1:1,000

30 0 30 60 90 120 150M
SCALE B : 1:3,000

3.5 0 3.5 7 10.5 14 17.5M
SCALE C : 1:350

2 0 2 4 6 8 10M
SCALE D : 1:200

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

POWER STATION
CABLE CUM VENTILATION TUNNEL
PLAN & SECTIONAL DETAILS

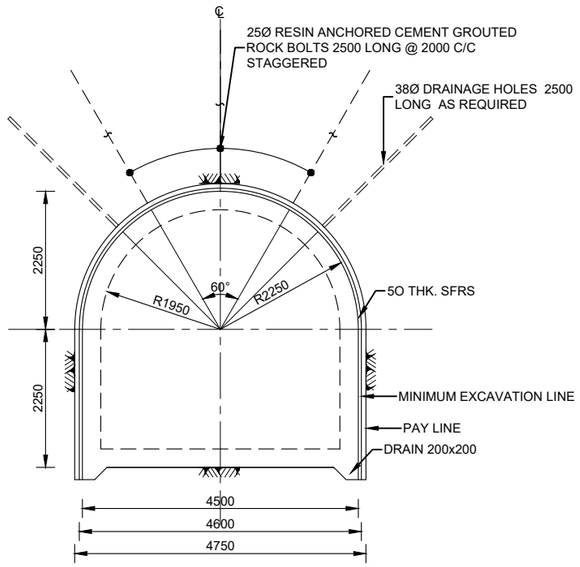
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

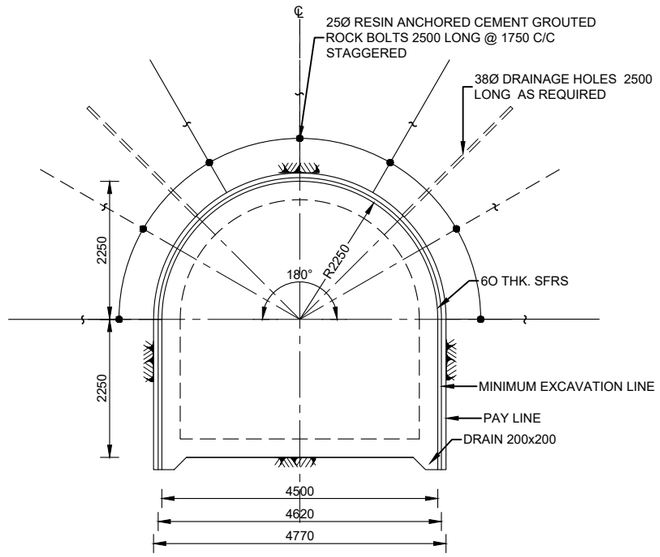
GK-PS-C-12	CABLE CUM VENTILATION TUNNEL EXCAVATION & SUPPORT DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/R.S. CHAUDHARY	CHECKED BY: R.C. CHAURDARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-PS-C-12
SCALE: NTS	

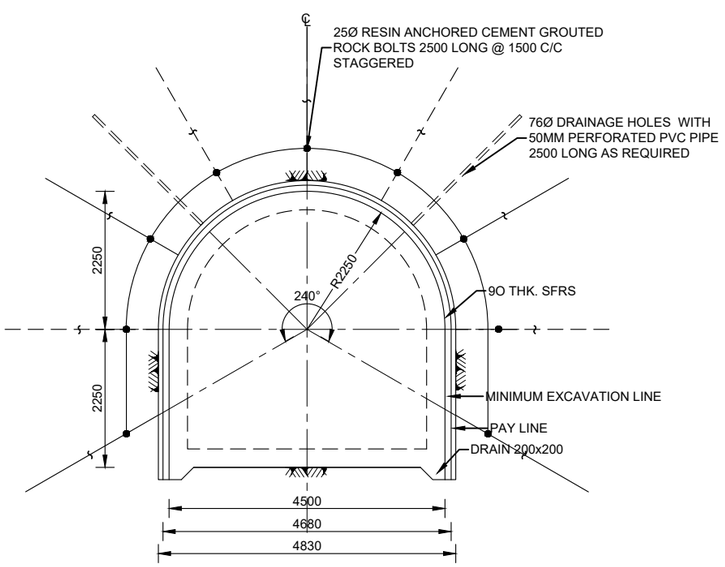
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



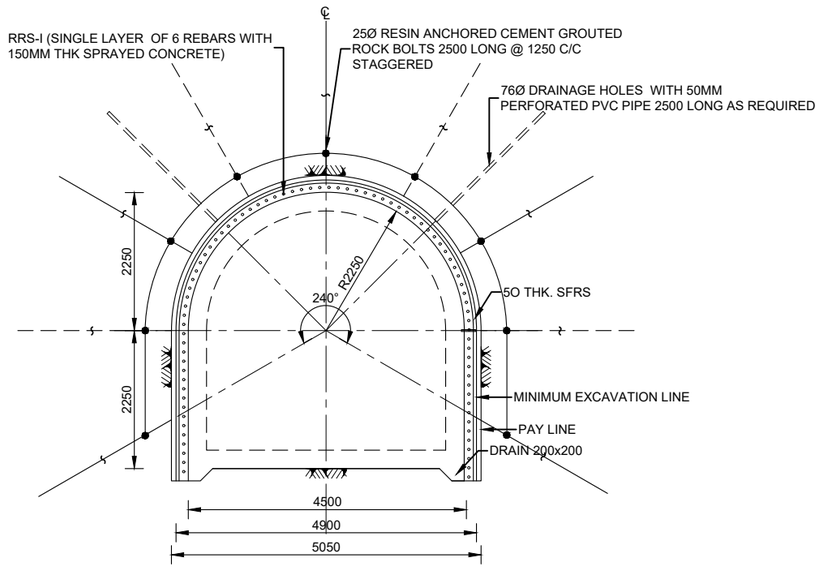
SUPPORT CATEGORY R1
(Q>4.0)



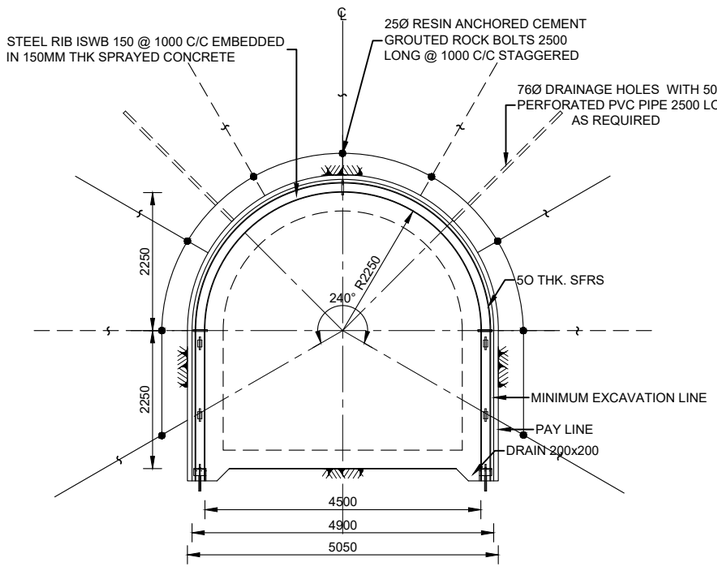
SUPPORT CATEGORY R3
(1.0 < Q < 4.0)



SUPPORT CATEGORY R4
(0.1 < Q < 1)



SUPPORT CATEGORY R6 (OPTION-I)
(Q < 0.1)



SUPPORT CATEGORY R6 (OPTION-II)
(Q < 0.1)

1 0 1 2 3 4 5M
SCALE A : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

POWER STATION
CABLE CUM VENTILATION TUNNEL
EXCAVATION & SUPPORT DETAILS (3.9MØ)

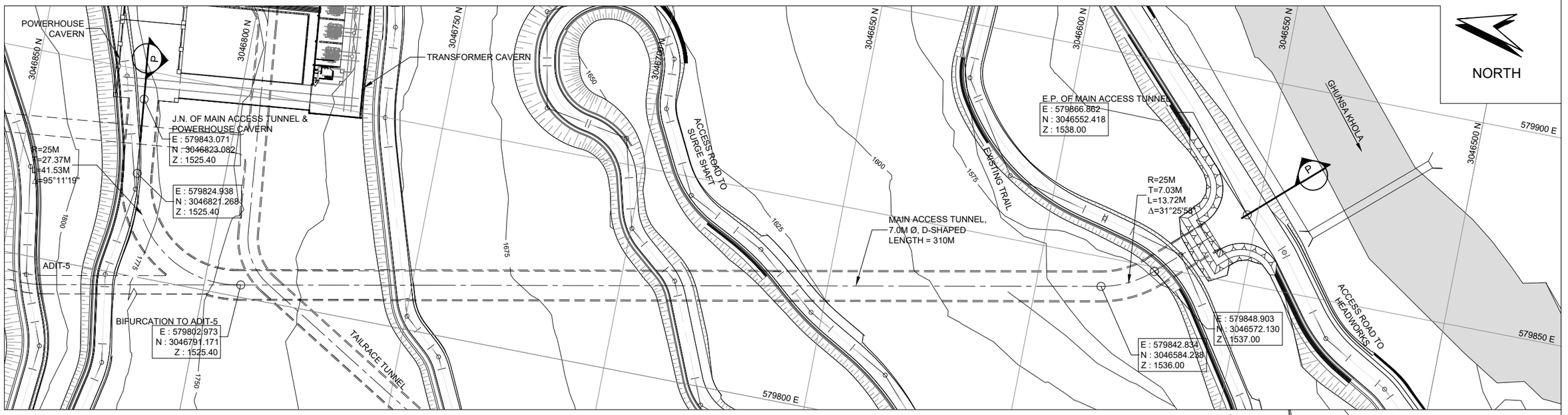
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

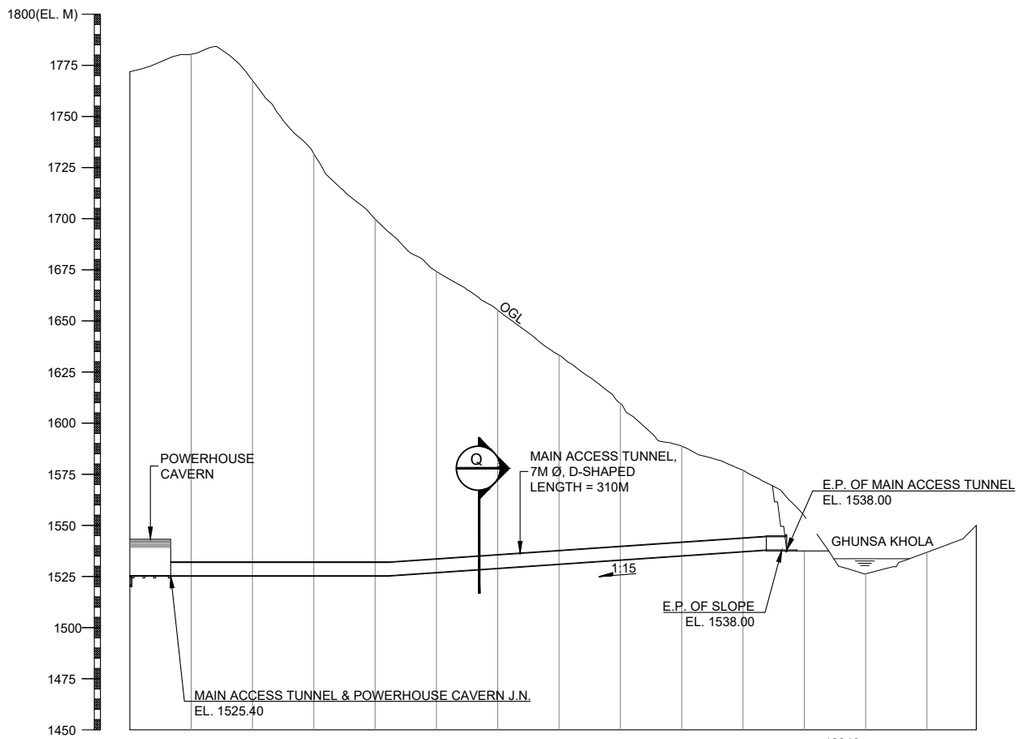
GK-PS-C-12	CABLE CUM VENTILATION TUNNEL PLAN & SECTIONAL DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: DR. S. SHAH	CHECKED BY: DR. S. SHAH/Y. DEVA
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-PS-C-13
SCALE: NTS	

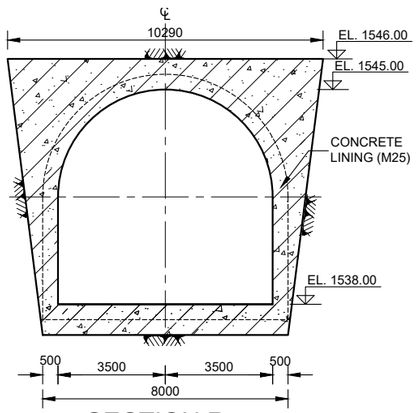
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



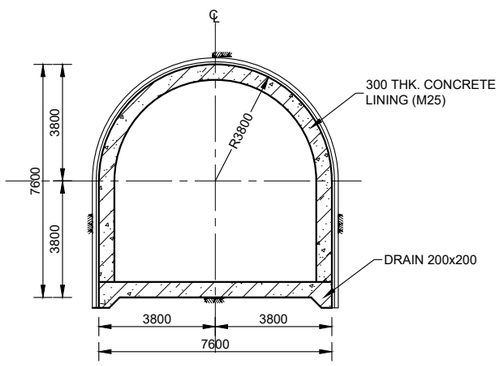
PLAN
SCALE A



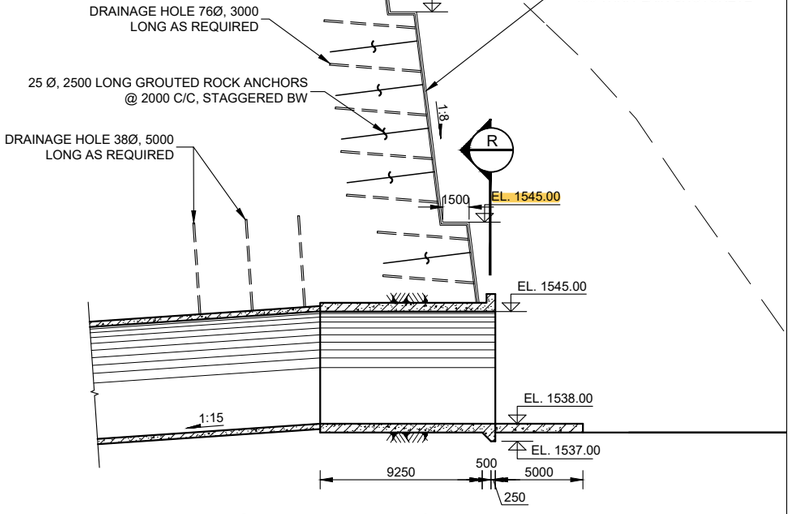
LONGITUDINAL SECTION P
SCALE B



SECTION R
SCALE D



SECTION Q
SCALE D



PORTAL DETAILS
SCALE C

CONTOUR INTERVAL 5 M

10 0 10 20 30 40 50M
SCALE A : 1:1,000

30 0 30 60 90 120 150M
SCALE B : 1:3,000

3.5 0 3.5 7 10.5 14 17.5M
SCALE C : 1:350

2 0 2 4 6 8 10M
SCALE D : 1:200

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

POWER STATION
MAIN ACCESS TUNNEL
PLAN & SECTIONAL DETAILS

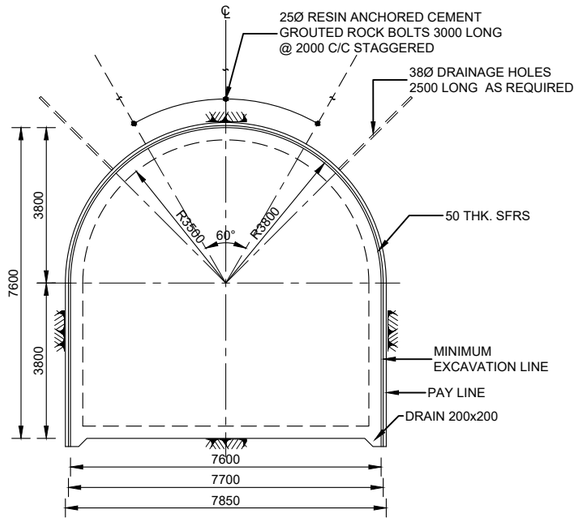
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

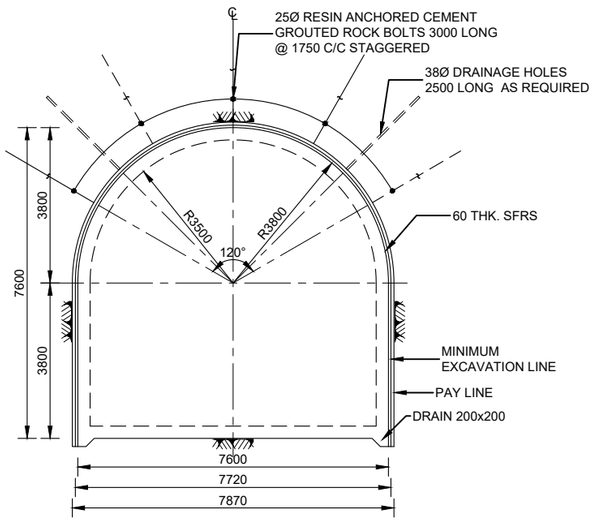
~~GK-PS-C-16~~	MAIN ACCESS TUNNEL EXCAVATION & SUPPORT DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-PS-C-15
SCALE: NTS	

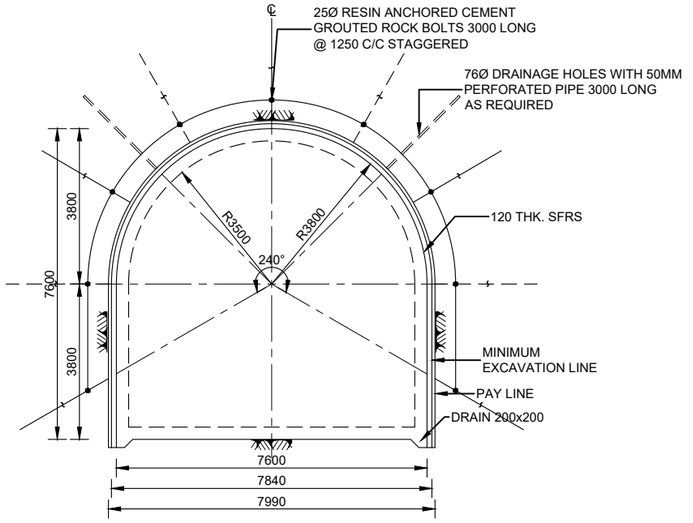
REMIT HYDRO रेमिट हाइड्रो लिमिटेड



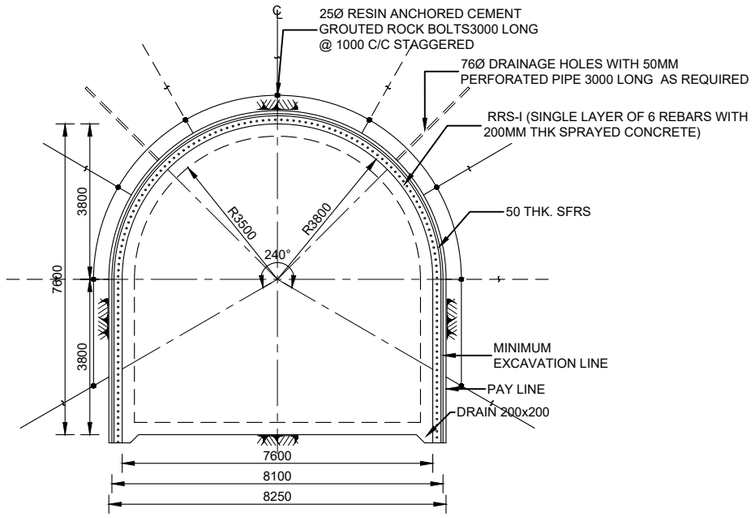
SUPPORT CATEGORY R1
(Q>4.0)



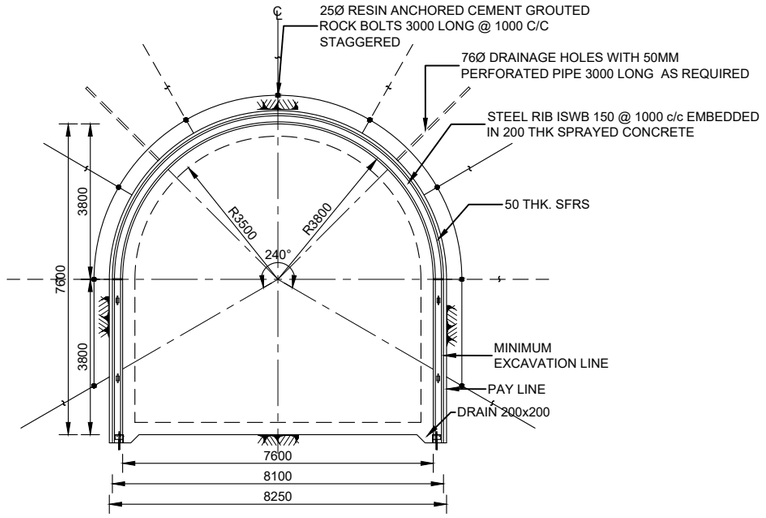
SUPPORT CATEGORY R3
(1<Q<4.0)



SUPPORT CATEGORY R5
(0.1 < Q < 1)



SUPPORT CATEGORY R7 (OPTION-I)
(Q < 0.1)



SUPPORT CATEGORY R7 (OPTION-II)
(Q < 0.1)

ROCK MASS CLASSIFICATION & SUPPORT CATEGORY DETAILS

SUPPORT CATEGORY	Q-VALUE	ROCK CLASS
R_1	>4	I TO III
R_3	1.0 - 4.0	IV
R_5	0.1 - 1.0	V
R_7	< 0.1	VI

1.5 0 1.5 3 4.5 6 7.5M
SCALE A : 1:150

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

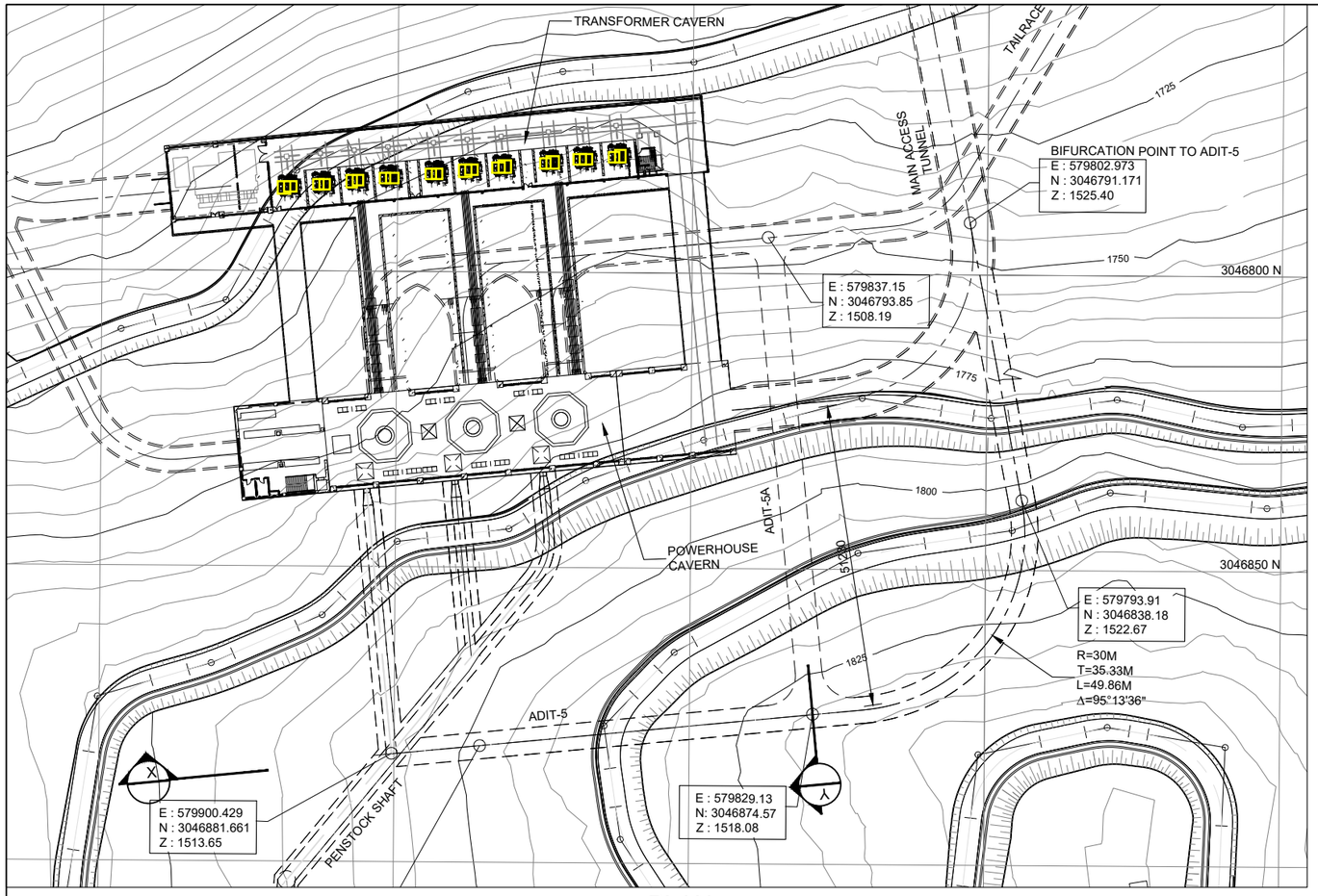
POWER STATION
MAIN ACCESS TUNNEL
EXCAVATION & SUPPORT DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

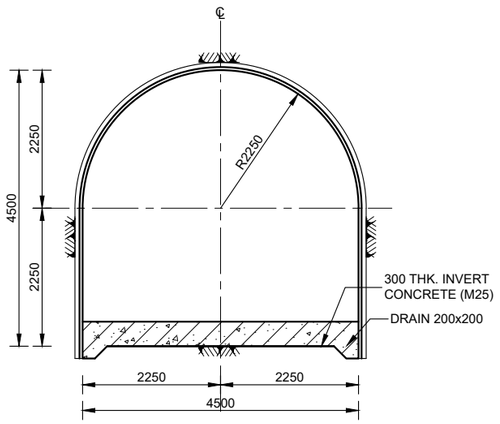
GK-PC-C-15	MAIN ACCESS TUNNEL PLAN & SECTIONAL DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: DR. S. SHAH	CHECKED BY: DR. S. SHAH/ Y. DEVA
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-PS-C-16
SCALE: NTS	

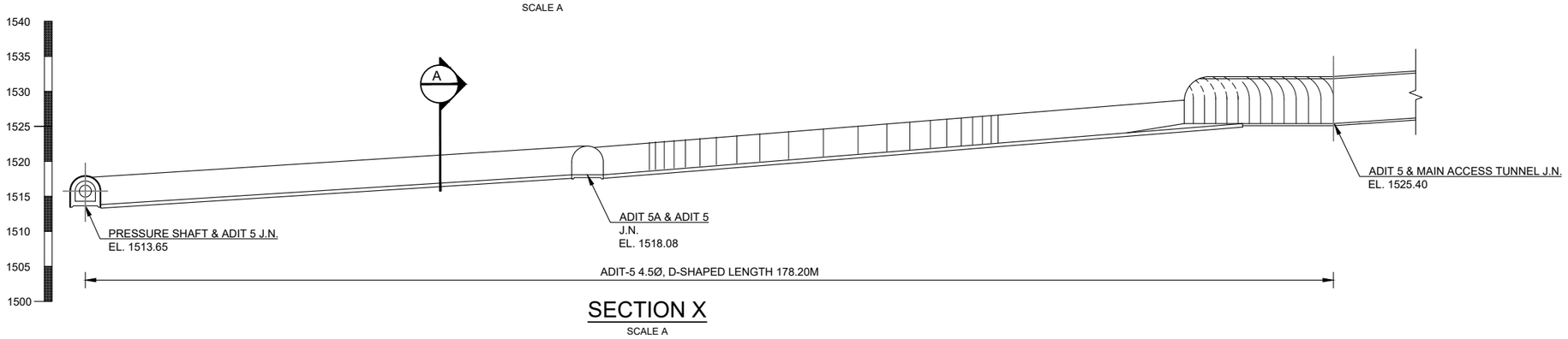


PLAN
SCALE A

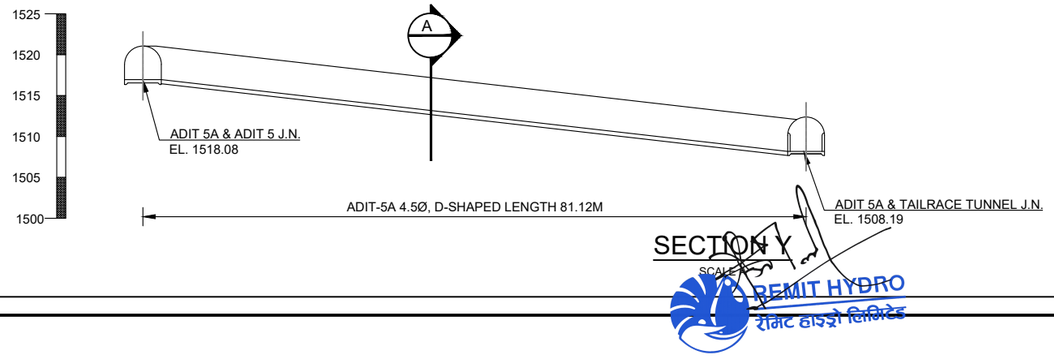
NORTH



SECTION A
SCALE B



SECTION X
SCALE A



SECTION Y
SCALE A

0 3.75 7.5 15 22.5 30
SCALE A 1:750

1 0 1 2 3 4 5M
SCALE B : 1:100

10 0 10 20 30 40 50M
SCALE A : 1:1,000

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

POWER STATION
ADIT 5 & ADIT 5A
PLAN & SECTIONAL DETAILS

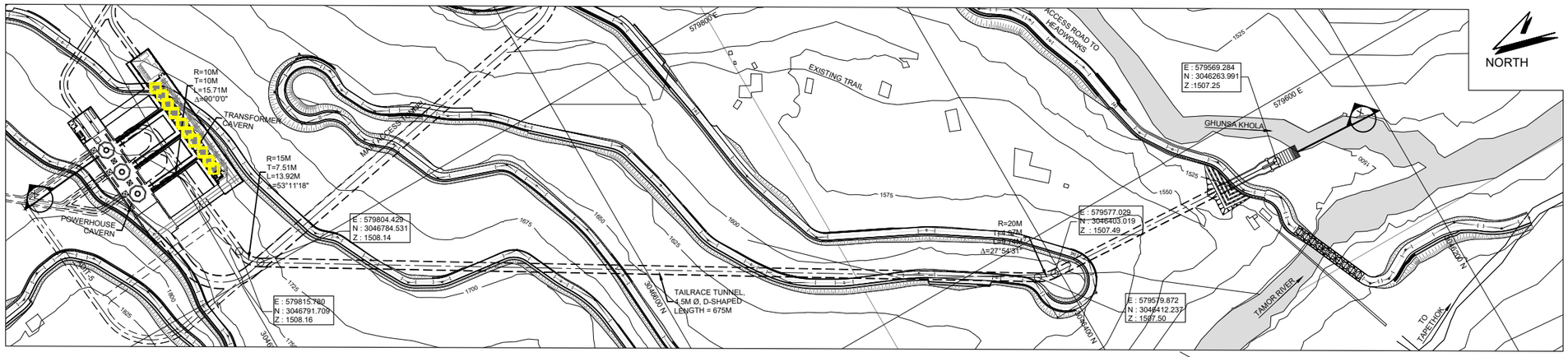
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-4215046; FAX:01-4215046

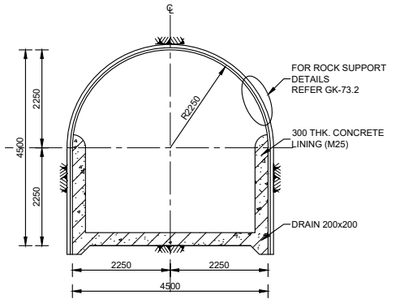
GK-WC-C-11	ADIT TUNNEL EXCAVATION & ROCK SUPPORT DETAILS
DWG. NO.	DESCRIPTION: REFERENCE DRAWINGS

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-PS-C-17
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

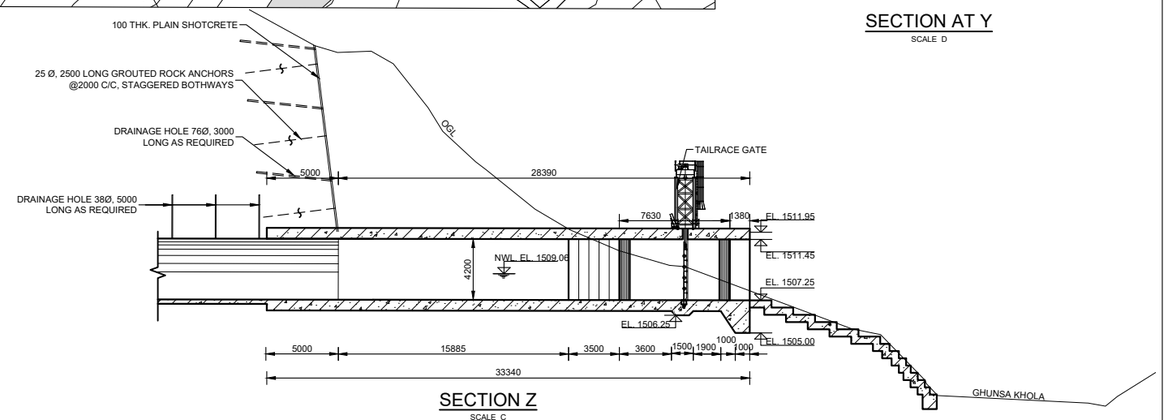


PLAN
SCALE A

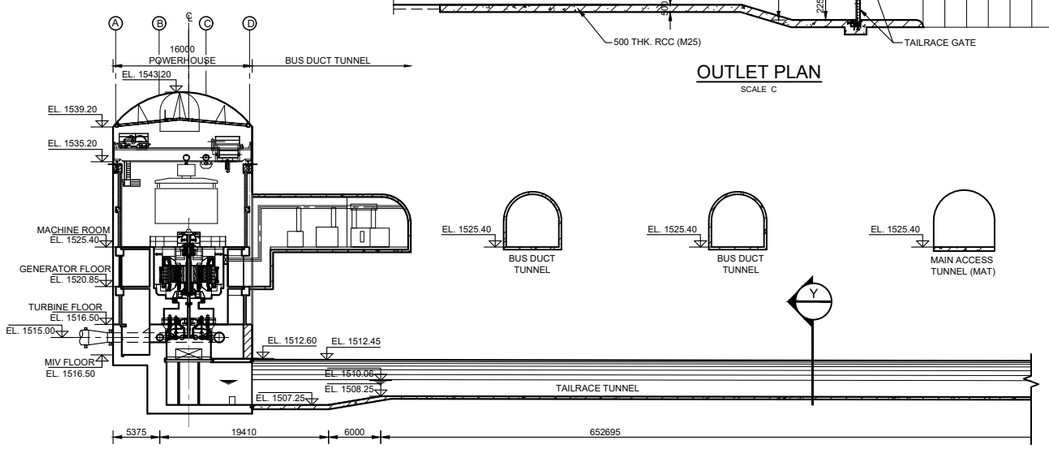


SECTION AT Y
SCALE D

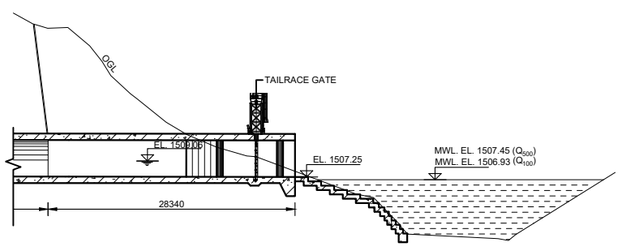
OUTLET PLAN
SCALE C



SECTION Z
SCALE C



LONGITUDINAL SECTION X
SCALE B



CONTOUR INTERVAL 5 M

SCALE A : 1:2,000
SCALE B : 1:500
SCALE C : 1:300
SCALE D : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

POWER STATION
TAILRACE TUNNEL
PLAN & SECTIONAL DETAILS

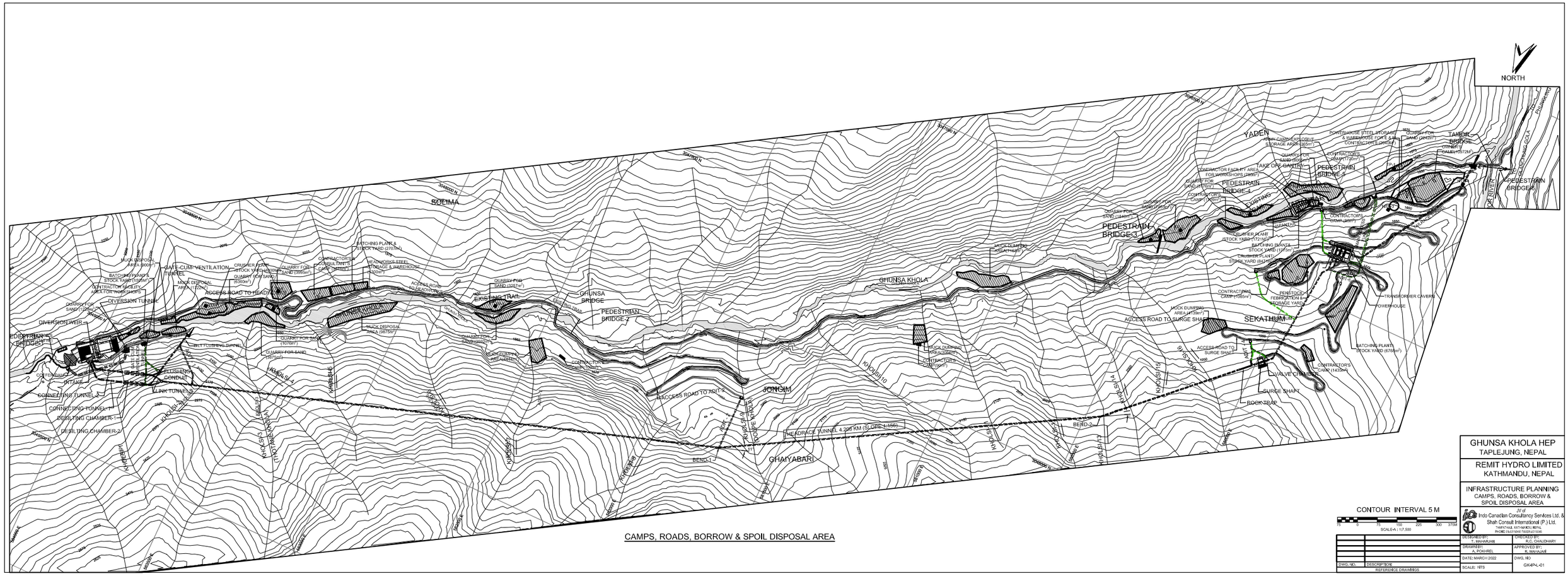
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
TYAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

		DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
		DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
GK-PS-C-19	TAILRACE TUNNEL EXCAVATION & SUPPORT DETAILS	DATE: 2025	DWG. NO GK-PS-C-18
DWG. NO.	DESCRIPTION: REFERENCE DRAWINGS	SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

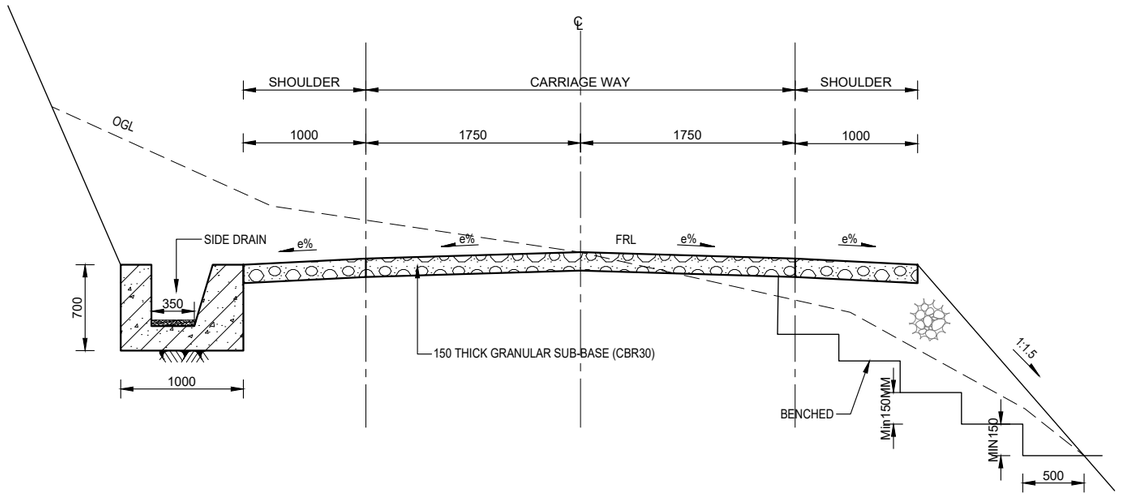
8. Infrastructure Planning


NORTH
SOLIMA
YADEN
SEKATHUM
JONGIM
GHAIYABARI
GHUNSA KHOLA
GHUNSA BRIDGE
EXISTING TRAIL
PEDESTRIAN BRIDGE-1
PEDESTRIAN BRIDGE-2
PEDESTRIAN BRIDGE-3
PEDESTRIAN BRIDGE-4
PEDESTRIAN BRIDGE-5
PEDESTRIAN BRIDGE-6
TAMOR BRIDGE
EXISTING
GATE-CUM-VENTILATION TUNNEL
DIVERSION TUNNEL
DIVERSION WEIR
INTAKE
SILT FLUSHING TUNNEL
FLUSHING CONDUIT
LINK TUNNEL-1
LINK TUNNEL-2
CONNECTING TUNNEL-1
CONNECTING TUNNEL-2
DESILTING CHAMBER-1
DESILTING CHAMBER-2
HEADRACE TUNNEL 4.208 KM (SLOPE 1:150)
BEND-1
BEND-2
ACCESS ROAD TO HEADWORKS
ACCESS ROAD TO ADIT-1
ACCESS ROAD TO ADIT-2
ACCESS ROAD TO SURGE SHAFT
ACCESS ROAD TO POWERHOUSE
POWERHOUSE
TRANSFORMER CAVERN
TAILRACE TUNNEL
SURGE SHAFT
ROCK TRAP
PENSTOCK FABRICATION & STORAGE YARD
POWERHOUSE STEEL STORAGE & WAREHOUSE FOR E&M
CONTRACTORS CAMP (1720m²)
CONTRACTORS CAMP (1435m²)
CONTRACTORS CAMP (1065m²)
CONTRACTORS CAMP (1100m²)
CONTRACTORS CAMP (1050m²)
CONTRACTORS CAMP (1000m²)
CONTRACTORS CAMP (1000m²)
CONTRACTORS CAMP (1000m²)
CONTRACTOR FACILITY AREA FOR WORKSHOPS (780m²)
ARMY CAMP/ EXPLOSIVE STORAGE AREA (900m²)
AXE ORE GANTRY
QUARRY FOR SAND (1095m³)
QUARRY FOR SAND (1357m³)
QUARRY FOR SAND (1070m³)
QUARRY FOR SAND (1875m³)
QUARRY FOR SAND (1660m³)
QUARRY FOR SAND (1050m³)
QUARRY FOR SAND (1000m³)
QUARRY FOR SAND (1000m³)
QUARRY FOR SAND (1000m³)
QUARRY FOR SAND (1000m³)
CRUSHER PLANT STOCK YARD (1200m²)
CRUSHER PLANT STOCK YARD (1721m²)
CRUSHER PLANT STOCK YARD (912m²)
BATCHING PLANT & STOCK YARD (1710m²)
BATCHING PLANT & STOCK YARD (1710m²)
BATCHING PLANT & STOCK YARD (676m²)
BATCHING PLANT & STOCK YARD (2707m²)
BATCHING PLANT & STOCK YARD (1850m²)
MUCK DISPOSAL AREA (900m³)
MUCK DISPOSAL AREA (1120m³)
MUCK DISPOSAL AREA (987m³)
MUCK DISPOSAL AREA (1660m³)
MUCK DUMPING AREA (1000m³)
MUCK DUMPING AREA (1000m³)
MUCK DUMPING AREA (1000

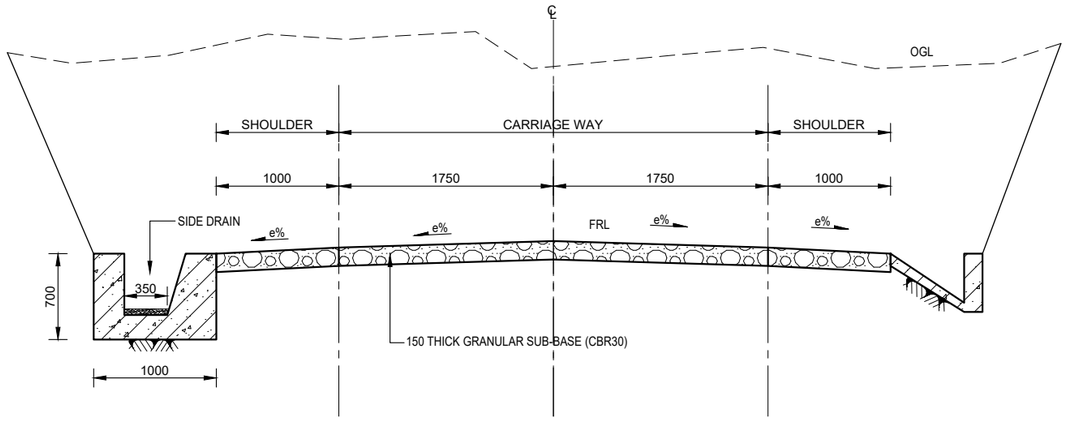
9. Project Access Road

NOTES:

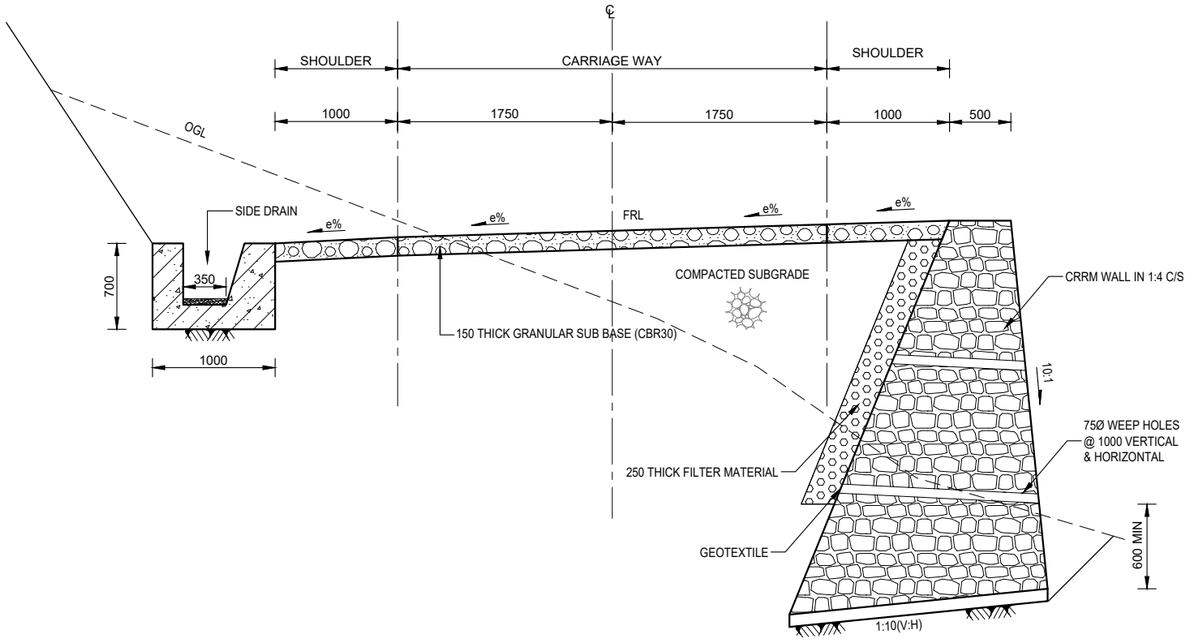
1. CUT SLOPE TO BE DECIDED AS PER ACTUAL SITE CONDITION OR AS DIRECTED BY THE ENGINEER.
2. STONE EDGING SHOULD BE PLACED CONTINUOUSLY ON ROAD EDGE WHERE DRAIN IS NOT PROVIDED/ REQUIRED.



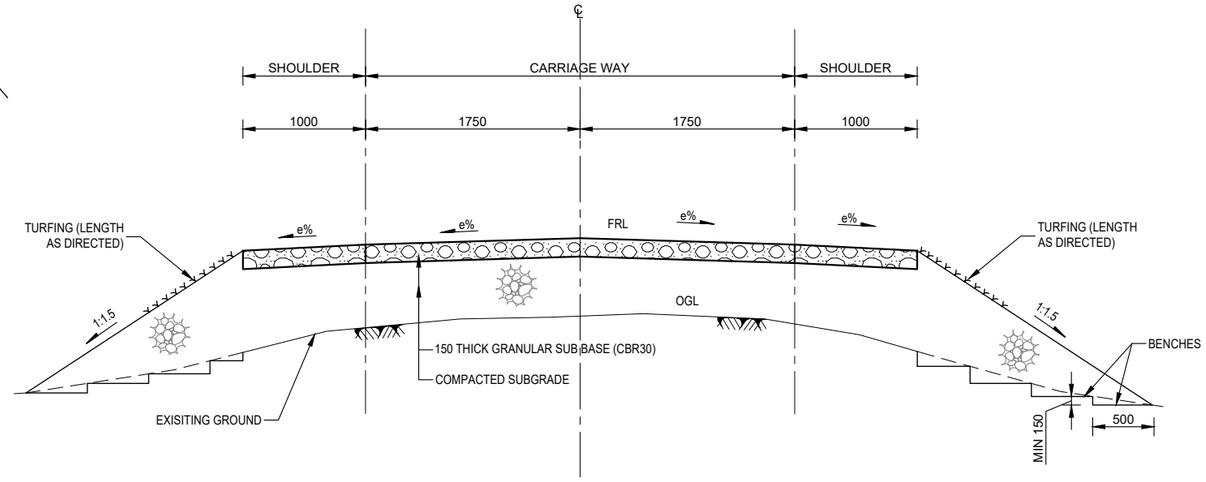
TYPICAL PARTIAL CUT & FILL SECTION



BOX CUTTING SECTION



PAARTIAL CUT & FILL SECTION WITH STRUCTURE



PLAIN ROAD SECTION

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

PROJECT ACCESS ROAD
TYPICAL DETAILS
CROSS SECTIONS & SUB-DRAIN

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-4215046; FAX:01-4215046

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

DESIGNED BY: T. MAHARJAN	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO
SCALE: NTS	GK-GN-02

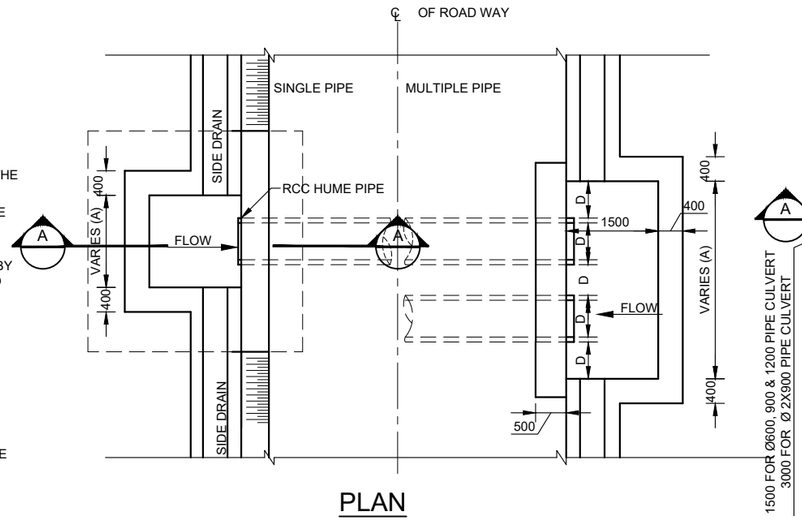
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

NOTES:

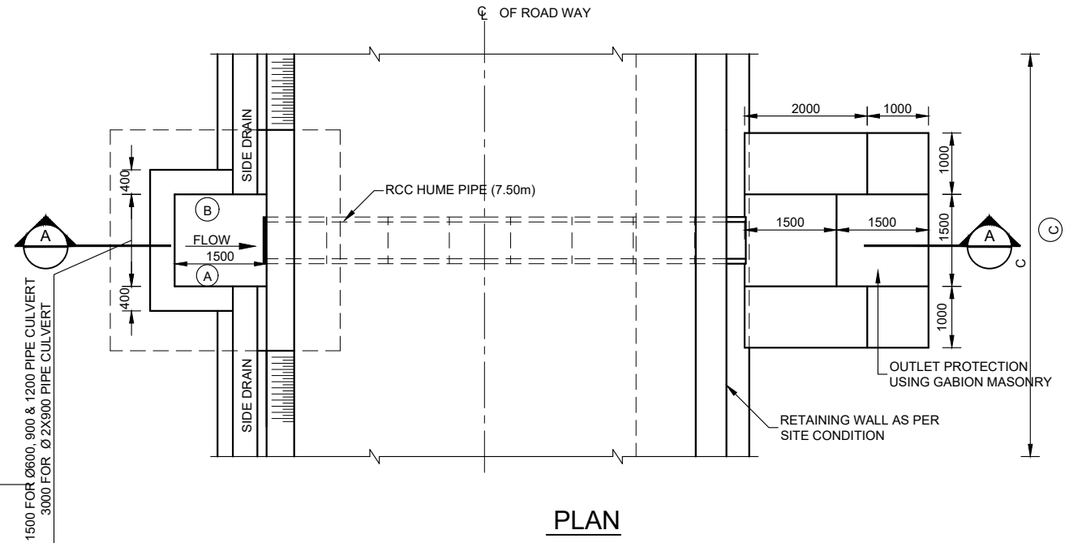
1. FOR GENERAL NOTES REFER DRG.
2. NP3 PIPES SHALL BE USED.
3. CONCRETE FOR R.C. PIPE CULVERT AND FOR HEAD WALL FONDATION GRADE M10/40
4. JOINTS SHALL BE TONGUE & GROOVE TYPE AS SHOWN
5. JOINTS SHALL BE SEALED WITH 1:2 MORTAR METHOD OF SEALING AS SPECIFIED STANDARD SPECIFICATION FOR ROAD AND BRIDGE WORKS SECTION 700
6. CULVERT INSTALLATION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATION & SPECIAL PROVISIONS
7. M10 CONCRETE SHALL BE PLACED AS DIRECTED BY THE ENGINEER IN THE BEDDING
8. THE ENGINEER SHALL CHECK AND APROVE INLET & OUTLET INVERTS CORRESPONDING TO DWGS. AFTER THE CULVERTS HAVE BEEN STAKED BY THE CONTRACTOR AND BEFORE CONSTRUCTION SHALL BE ADJUSTED TO SUIT EXISTING CREEK BED OR DITCH
9. MORTARED STONE RIP RAP SLOPE PROTECTION SHALL BE PLACED AS DIRECTED BY THE ENGINEER
10. ALL DIMENSIONS ARE IN MILIMETER UNLESS OTHERWISE NOTED
11. RIPRAP GABION APRONS AT OUTLET AND SHOWN ON DWGS. OR AS DIRECTED BY THE ENGINEER
12. LENGTH OF THE CULVERT (LC) SHALL BE AS PER THE DRAWINGS OR AS DIRECTED BY THE ENGINEER
13. H1, H2 & H3 DEPENDS UPON THE SITE CONDITION OR AS DIRECTED BY THE ENGINEER

TABLE 1: DIMENSIONS FOR A, B & C

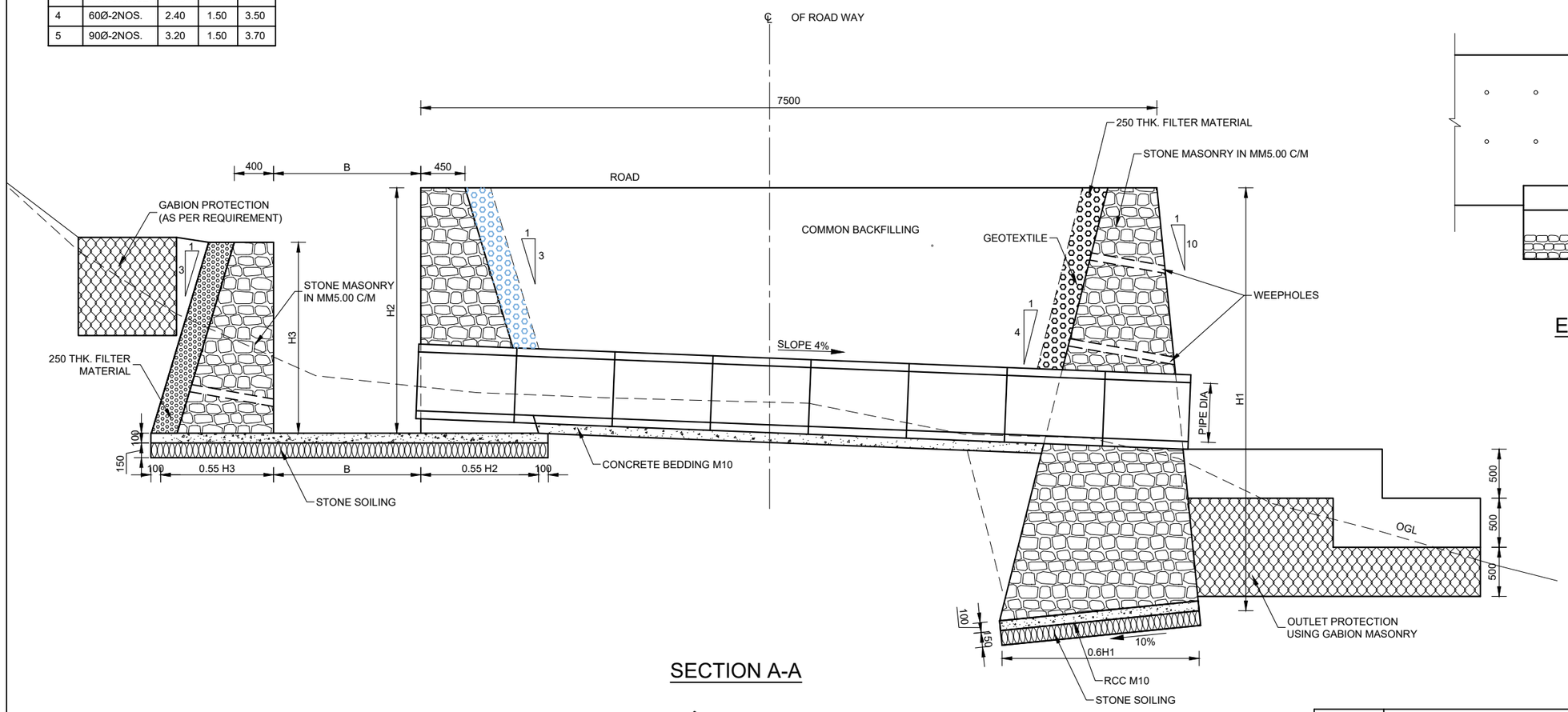
S. No.	HUME PIPE	A (m)	B (m)	C (m)
1	30Ø SINGLE	1.50	1.50	2.00
2	45Ø SINGLE	1.50	1.50	2.50
2	60Ø SINGLE	1.50	1.50	3.00
3	90Ø SINGLE	1.50	1.50	3.00
4	60Ø-2NOS.	2.40	1.50	3.50
5	90Ø-2NOS.	3.20	1.50	3.70



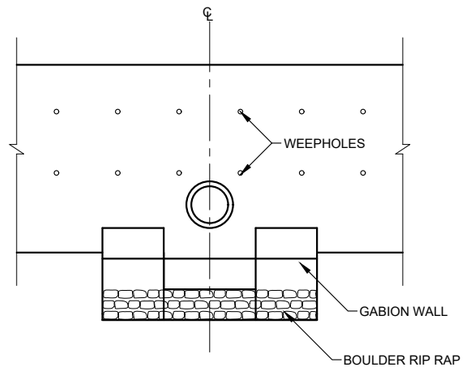
PLAN



PLAN



SECTION A-A



ELEVATION

REMIT HYDRO रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

PROJECT ACCESS ROAD
TYPICAL DETAILS
RCC PIPE CULVERT

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

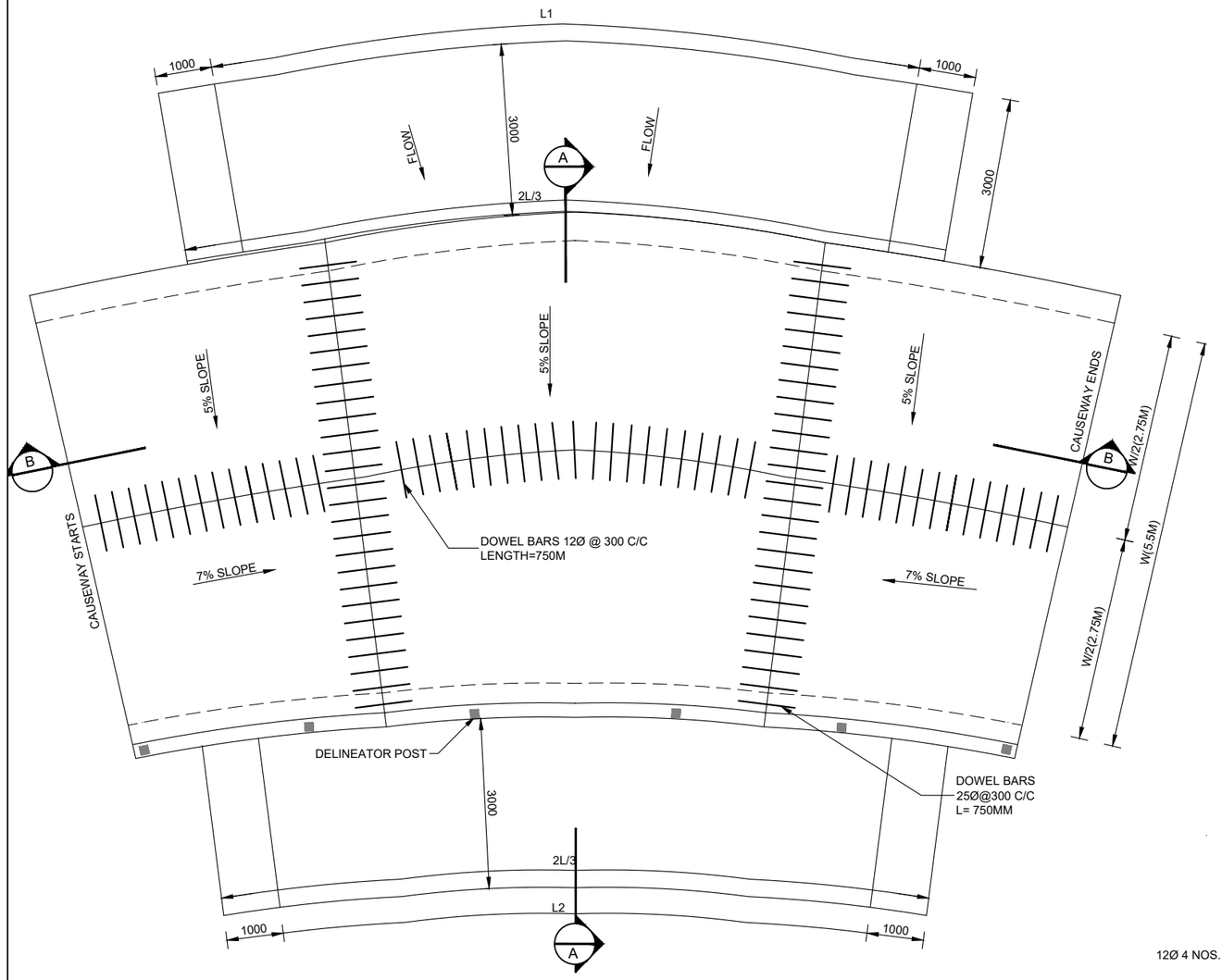
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-4215046; FAX:01-4215046

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

DESIGNED BY: T. MAHARJAN	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-GN-04
SCALE: NTS	

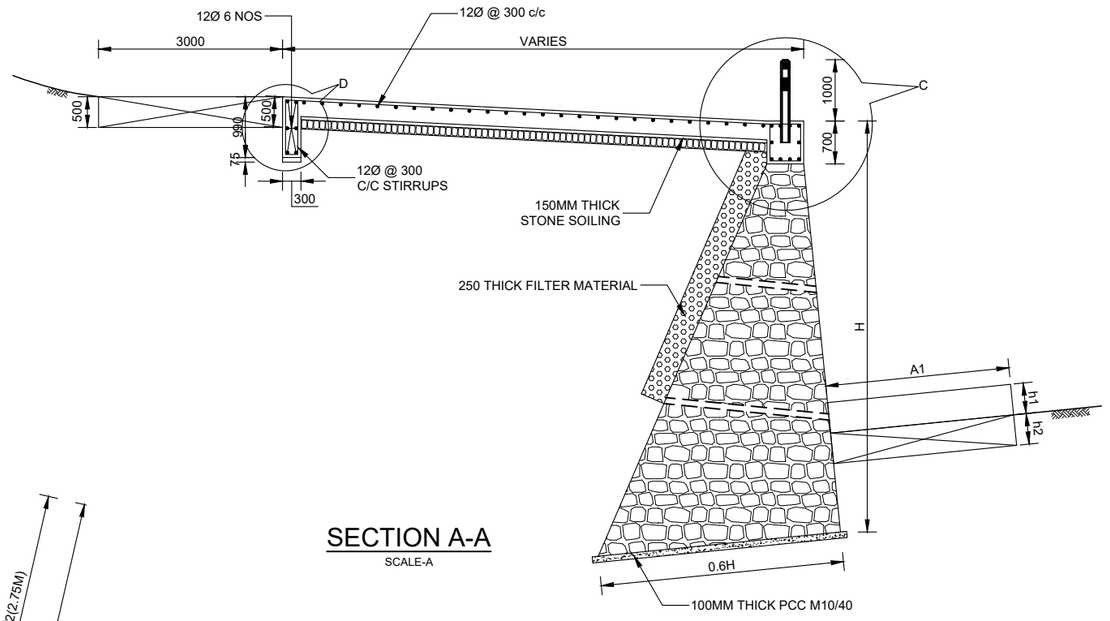
NOTES:

1. CONCRETE MIX TO BE USED SHALL BE M20/20
2. MIN. COVER TO REINFORCEMENT = 40MM
3. A1=3 TO 4.5m AND h1, h2 = 0.50m OR AS DIRECTED BY THE ENGINEER.
4. L, W, H VARIES AS PER SITE CONDITION.



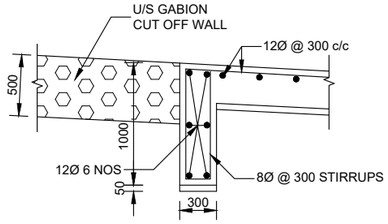
PLAN

SCALE-A



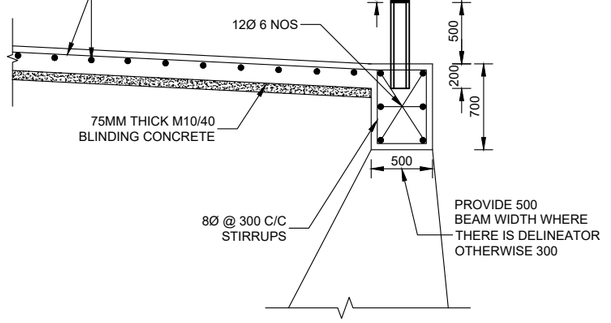
SECTION A-A

SCALE-A



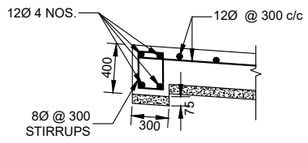
DETAIL D

SCALE-B



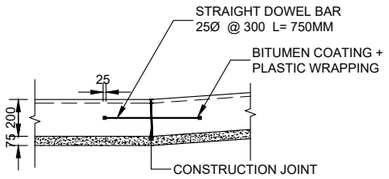
DETAIL C

SCALE-B



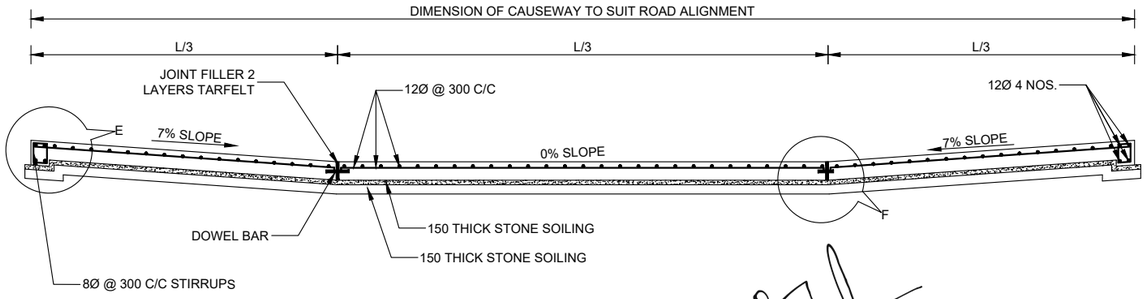
DETAIL E

SCALE-B



DETAIL F

SCALE-B



SECTION B-B

SCALE-A

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

PROJECT ACCESS ROAD
TYPICAL DETAILS
CAUSEWAY

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-4215046; FAX:01-4215046

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

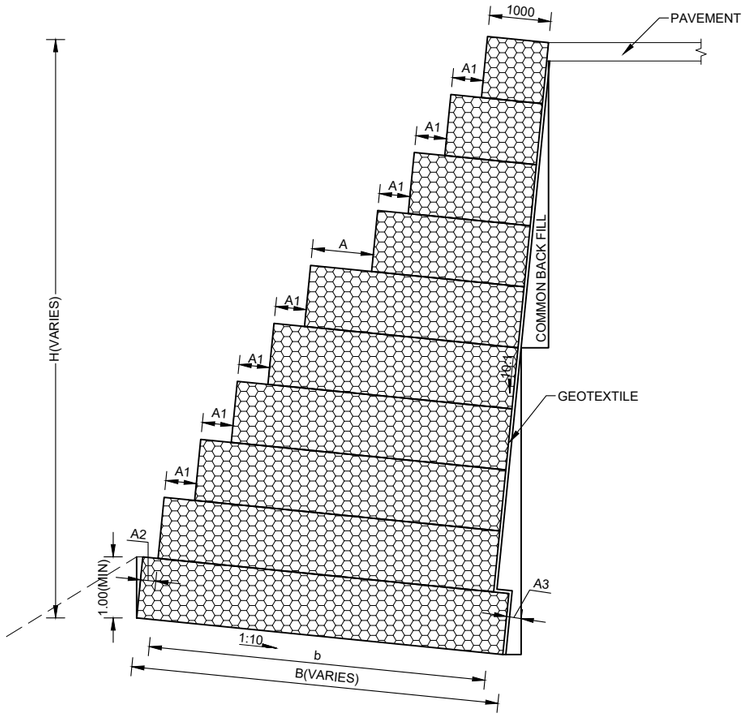
DESIGNED BY: T. MAHARJAN	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-GN-05
SCALE: NTS	

REMIT HYDRO
रेमीट हाइड्रो लिमिटेड

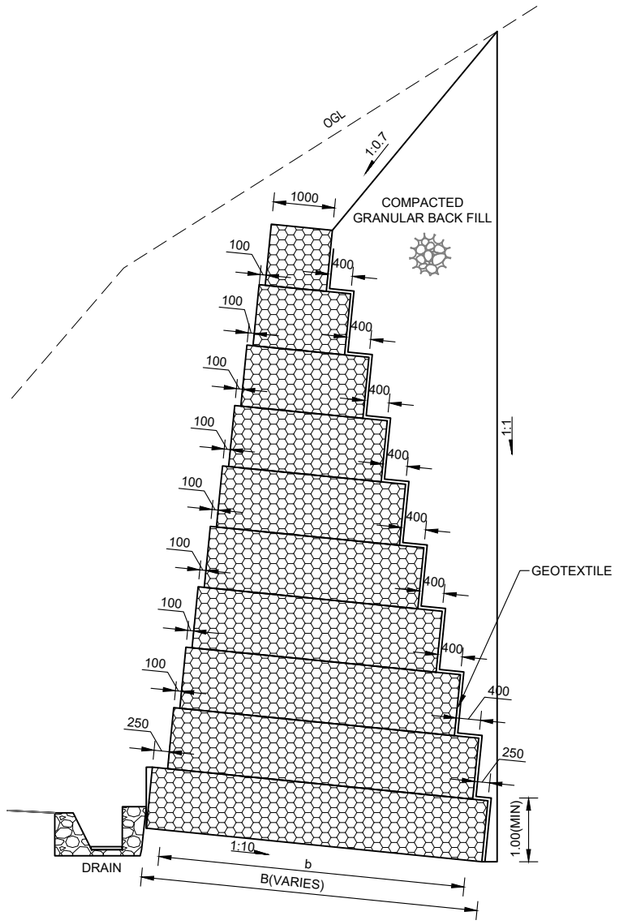
NOTES:

GRAVITY GABION WALL (GAW-FB & GAW-BB)

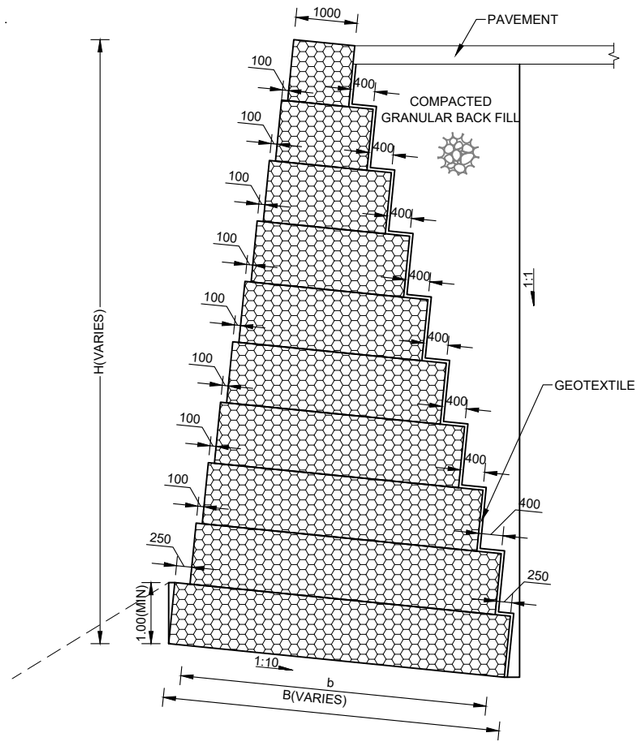
HEIGHT (M)	DIMENSION (M)					
	A	A1	A2	A3	b	B
1.00	1.00	-	-	-	-	1.50
2.00	1.00	-	-	-	-	2.00
3.00	1.00	0.50	-	-	-	2.50
4.00	1.00	0.50	-	-	-	3.00
5.00	1.00	0.50	-	-	3.00	3.50
6.00	1.00	0.50	-	-	3.50	4.00
7.00	1.00	0.50	0.25	0.25	4.00	4.50
8.00	1.00	0.50	0.25	0.25	4.50	5.00
9.00	1.00	0.50	0.25	0.25	5.00	5.50
10.00	1.00	0.50	0.25	0.25	5.50	6.00



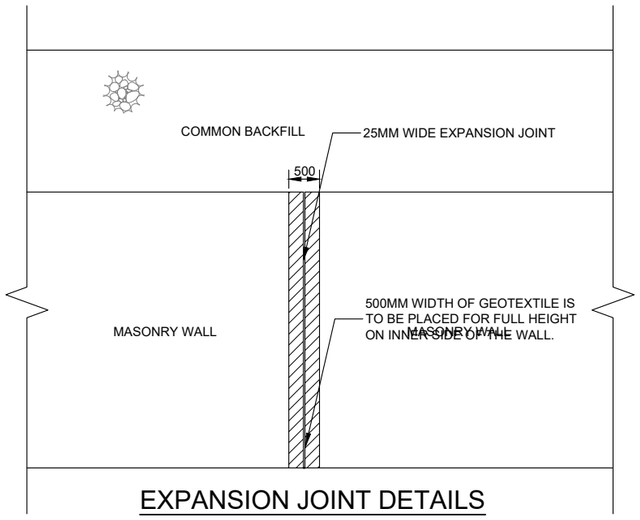
TYPICAL RETAINING GABION WALL



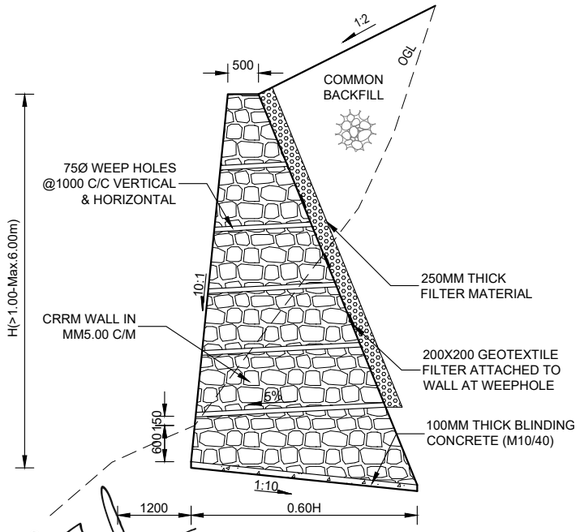
TYPICAL BREAST GABION WALL



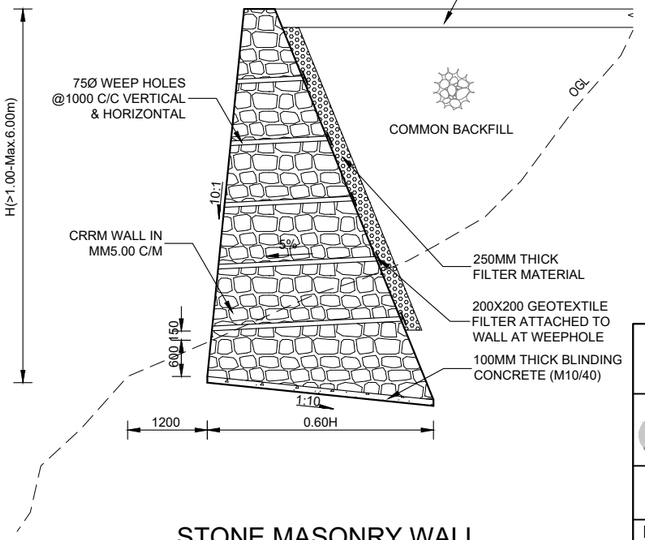
TYPICAL GRAVITY GABION WALL



EXPANSION JOINT DETAILS



STONE MASONRY WALL
(MW RET TYPE A)



STONE MASONRY WALL
(MW RET TYPE B)

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

PROJECT ACCESS ROAD
TYPICAL DETAILS
WALL DETAILS

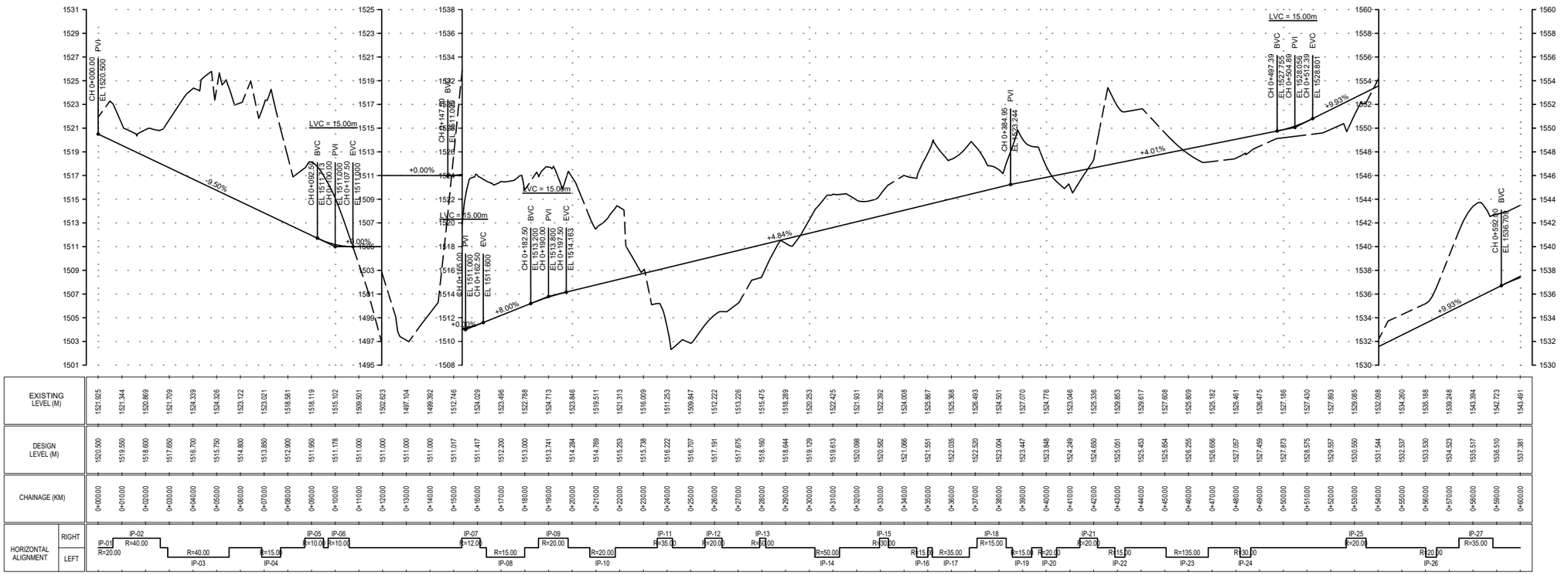
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-4215046; FAX:01-4215046

DWG. NO.	DESCRIPTION: REFERENCE DRAWINGS

DESIGNED BY: T. MAHARJAN	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-GN-03
SCALE: NTS	

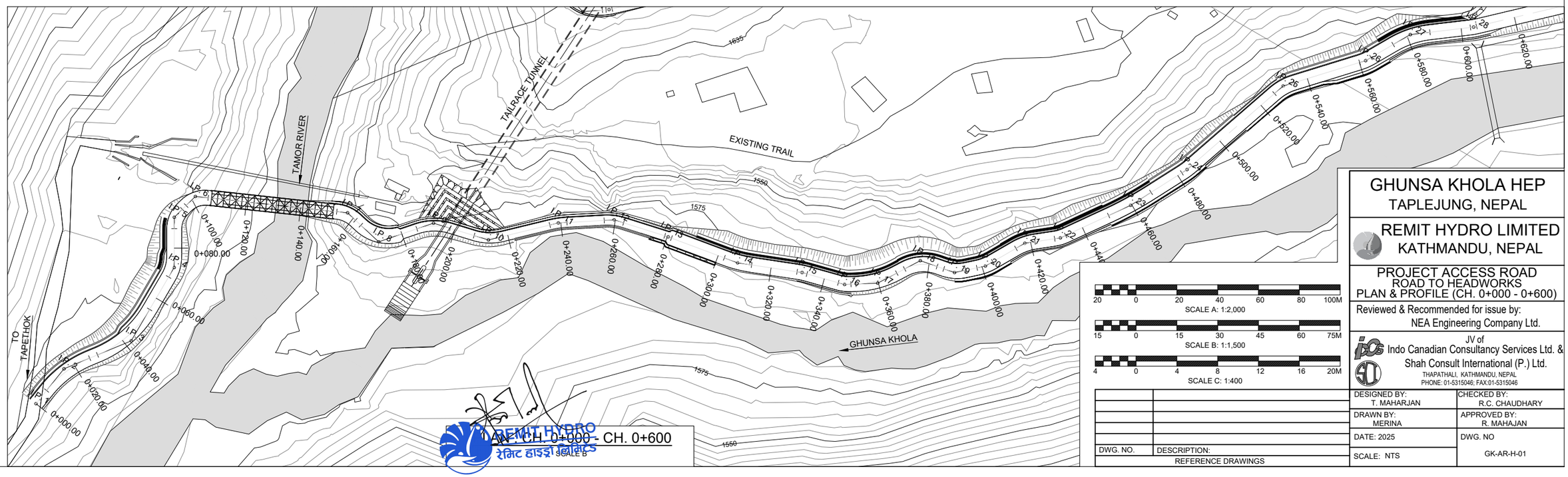
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



PROFILE : CH. 0+000 - CH. 0+600

HORIZONTAL : SCALE A, VERTICAL : SCALE C

NORTH



PLAN : CH. 0+000 - CH. 0+600

SCALE B

SCALE A: 1:2,000

SCALE B: 1:1,500

SCALE C: 1:400

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

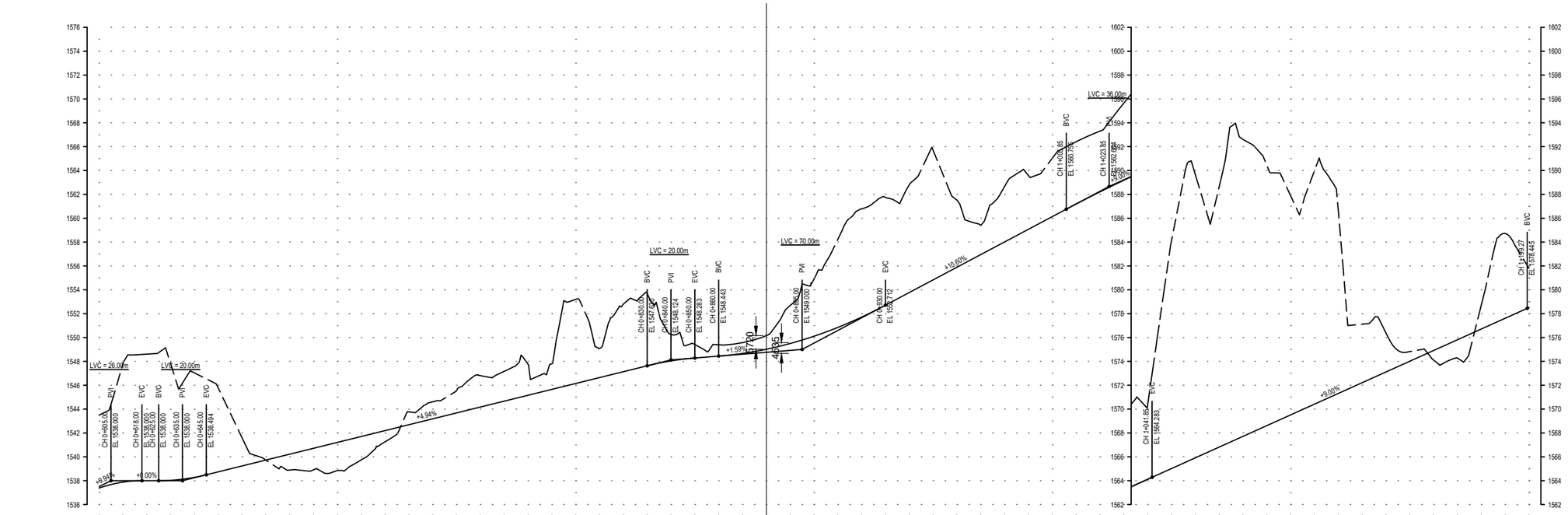
PROJECT ACCESS ROAD
ROAD TO HEADWORKS
PLAN & PROFILE (CH. 0+000 - 0+600)

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

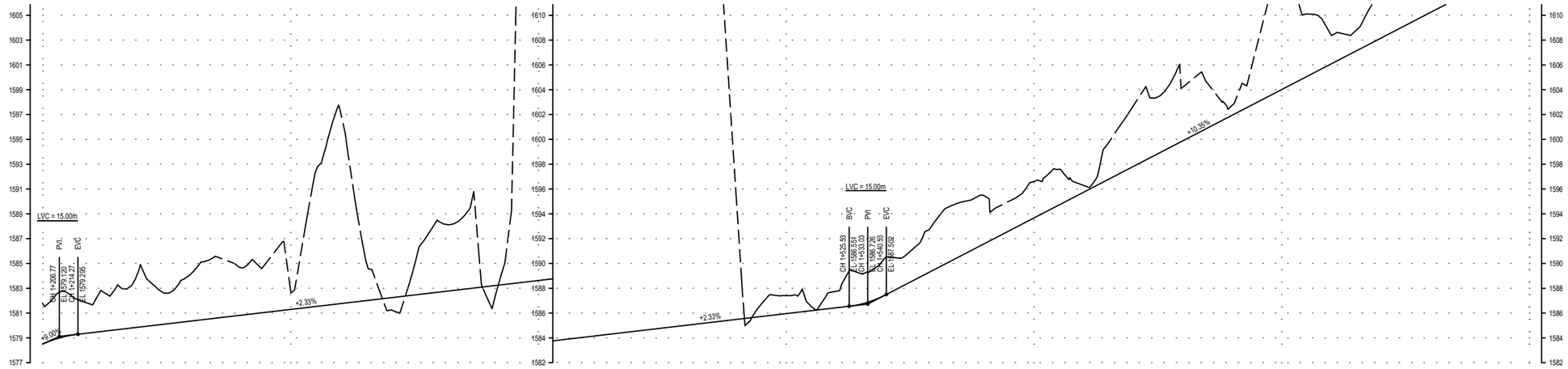
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

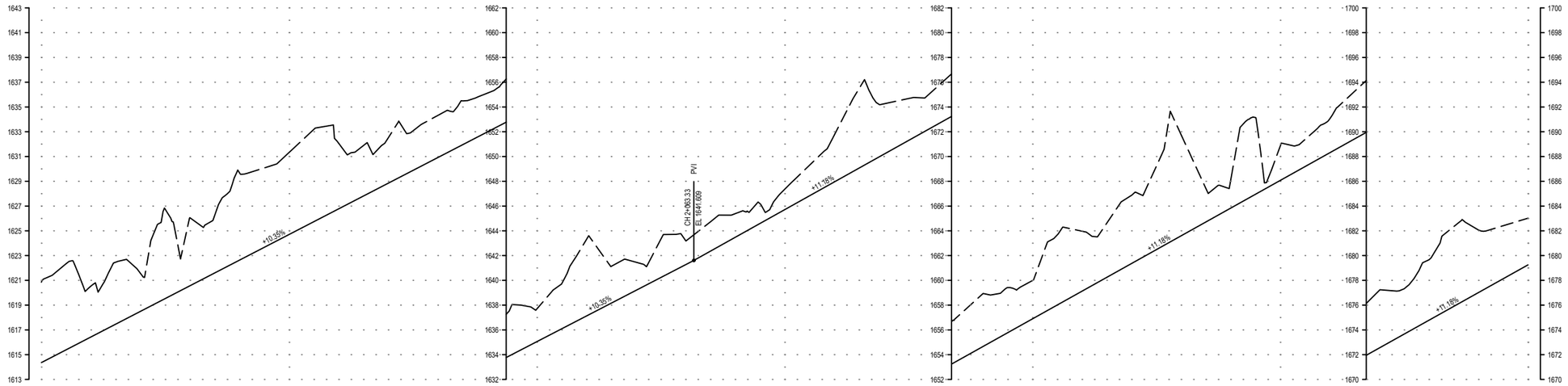
DESIGNED BY: T. MAHARJAN	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-AR-H-01
SCALE: NTS	


LVC = 26.00m
LVC = 20.00m
LVC = 20.00m
LVC = 70.00m
LVC = 36.00m
+9.96%
+0.00%
+4.94%
+1.59%
+10.60%
+9.00%
CH 0+605.00
EL 1538.000
CH 0+618.00
EL 1538.000
CH 0+623.00
EL 1538.000
CH 0+635.00
EL 1538.000
CH 0+645.00
EL 1538.494
CH 0+830.00
EL 1547.700
CH 0+840.00
EL 1548.124
CH 0+850.00
EL 1548.283
CH 0+860.00
EL 1548.443
CH 0+880.00
EL 1549.000
CH 0+900.00
EL 1550.712
CH 1+020.85
EL 1560.705
CH 1+023.85
EL 1562.685
CH 1+041.85
EL 1564.283
CH 1+197.22
EL 1578.445
PVI
EVC
BVC
4886
1700

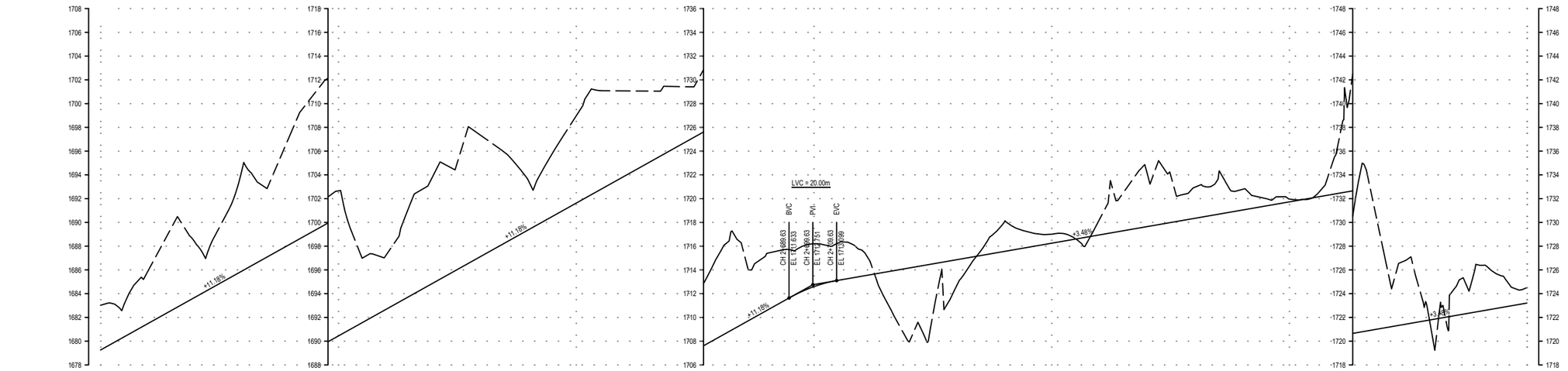
| | | |


LVC = 15.00m
P.I.
E.V.C.
B.V.C.
CH 1+206.77
EL 1579.120
CH 1+244.227
EL 1579.285
+9.09%
+2.33%
CH 1+525.93
EL 1586.533
CH 1+533.03
EL 1586.726
CH 1+540.93
EL 1587.502
+10.26%

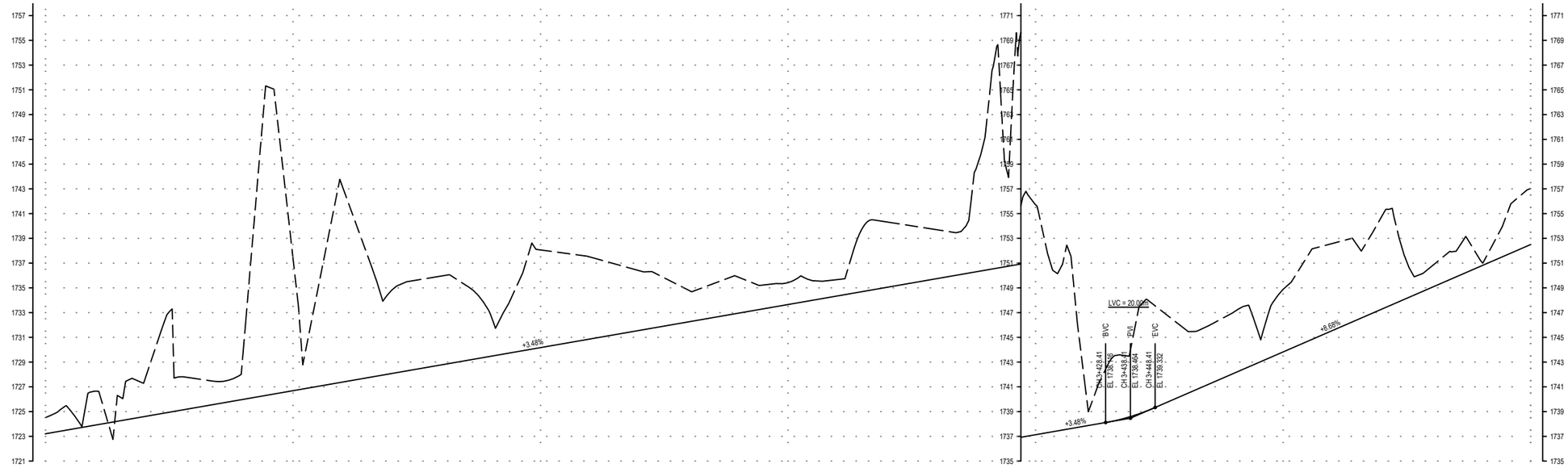
| | | |


+10.35%
+11.18%
+10.35%
+11.18%
+11.18%
CH 2+063.33
EL. 1641.609
PVI

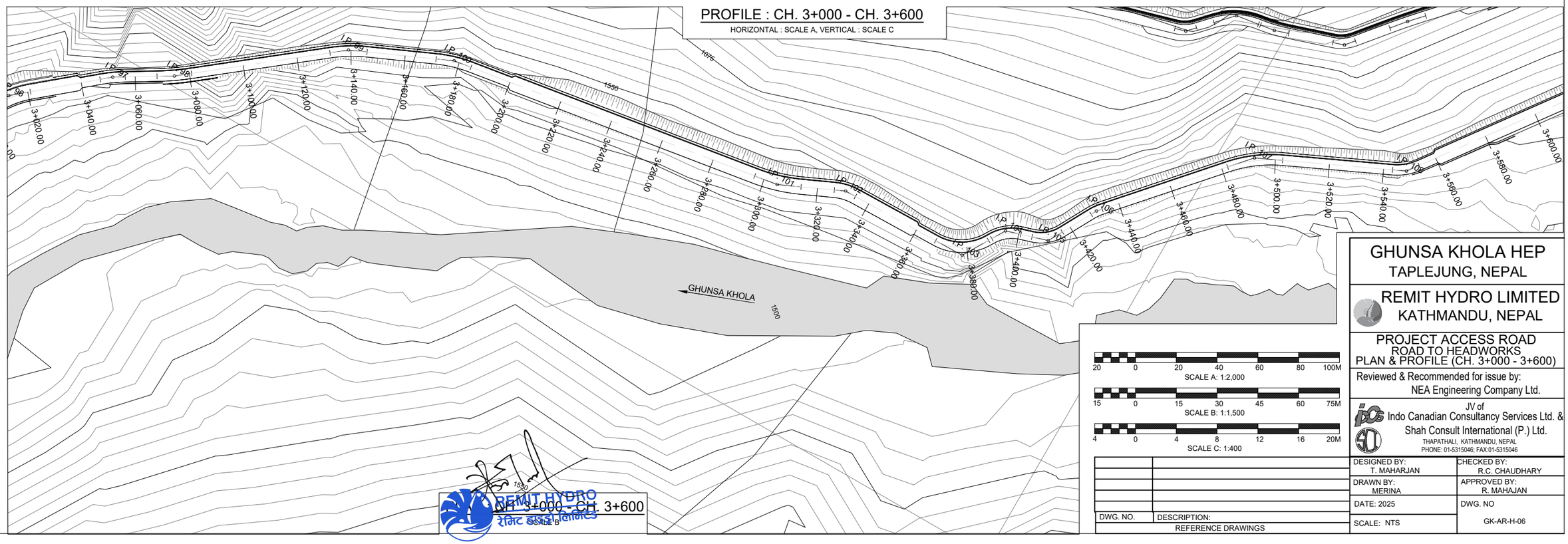
| | | |


+11.18%
+11.18%
LVC = 20.00m
BVC
PVI
EVC
CH 2+689.63
EL 1721.833
CH 2+709.63
EL 1722.751
CH 2+729.63
EL 1723.669
+11.18%
+3.46%
+3.46%

| | | |



EXISTING LEVEL (M)		1724.507 1725.137 1726.652 1726.205 1727.443 1733.034 1727.688 1727.422 1729.893 1751.243 1737.587 1734.736 1743.231 1737.733 1734.813 1735.624 1735.953 1735.204 1732.793 1734.931 1738.065 1737.708 1737.499 1736.942 1736.385 1735.816 1734.861 1735.340 1735.866 1735.228 1735.412 1735.575 1735.866 1739.777 1740.325 1740.014 1739.703 1739.549 1747.736 1747.198 1755.729 1750.528 1741.287 1743.057 1745.557 1747.299 1745.741 1745.938 1747.014 1745.462 1748.855 1751.570 1752.583 1752.459 1754.781 1751.150 1750.718 1751.963 1751.180 1754.666 1757.023
DESIGN LEVEL (M)		1723.205 1723.553 1723.901 1724.249 1724.597 1724.946 1725.294 1725.642 1725.990 1726.338 1726.686 1727.034 1727.382 1727.730 1728.078 1728.426 1728.774 1729.122 1729.470 1729.818 1730.166 1730.514 1730.862 1731.210 1731.558 1731.906 1732.254 1732.603 1732.951 1733.299 1733.647 1733.995 1734.343 1734.691 1735.039 1735.387 1735.735 1736.083 1736.431 1736.779 1737.127 1737.475 1737.823 1738.175 1738.694 1739.470 1740.338 1741.205 1742.073 1742.941 1743.809 1744.677 1745.544 1746.412 1747.280 1748.148 1749.015 1749.883 1750.751 1751.619 1752.487
CHAINAGE (KM)		3+000.00 3+010.00 3+020.00 3+030.00 3+040.00 3+050.00 3+060.00 3+070.00 3+080.00 3+090.00 3+100.00 3+110.00 3+120.00 3+130.00 3+140.00 3+150.00 3+160.00 3+170.00 3+180.00 3+190.00 3+200.00 3+210.00 3+220.00 3+230.00 3+240.00 3+250.00 3+260.00 3+270.00 3+280.00 3+290.00 3+300.00 3+310.00 3+320.00 3+330.00 3+340.00 3+350.00 3+360.00 3+370.00 3+380.00 3+390.00 3+400.00 3+410.00 3+420.00 3+430.00 3+440.00 3+450.00 3+460.00 3+470.00 3+480.00 3+490.00 3+500.00 3+510.00 3+520.00 3+530.00 3+540.00 3+550.00 3+560.00 3+570.00 3+580.00 3+590.00 3+600.00
HORIZONTAL ALIGNMENT	RIGHT	IP-96 R=35.00; IP-97 R=60.00; R=100.00 IP-98; IP-99 R=55.00; IP-100 R=50.00; R=65.00 IP-101; IP-102 R=20.00; R=20.00 IP-103; IP-104 R=15.00; R=15.00 IP-105; IP-106 R=20.00; IP-107 R=50.00; R=20.00 IP-108
	LEFT	



CH: 3+000 - CH. 3+600
SCALE B

20 0 20 40 60 80 100M
SCALE A: 1:2,000

15 0 15 30 45 60 75M
SCALE B: 1:1,500

4 0 4 8 12 16 20M
SCALE C: 1:400

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

NORTH

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

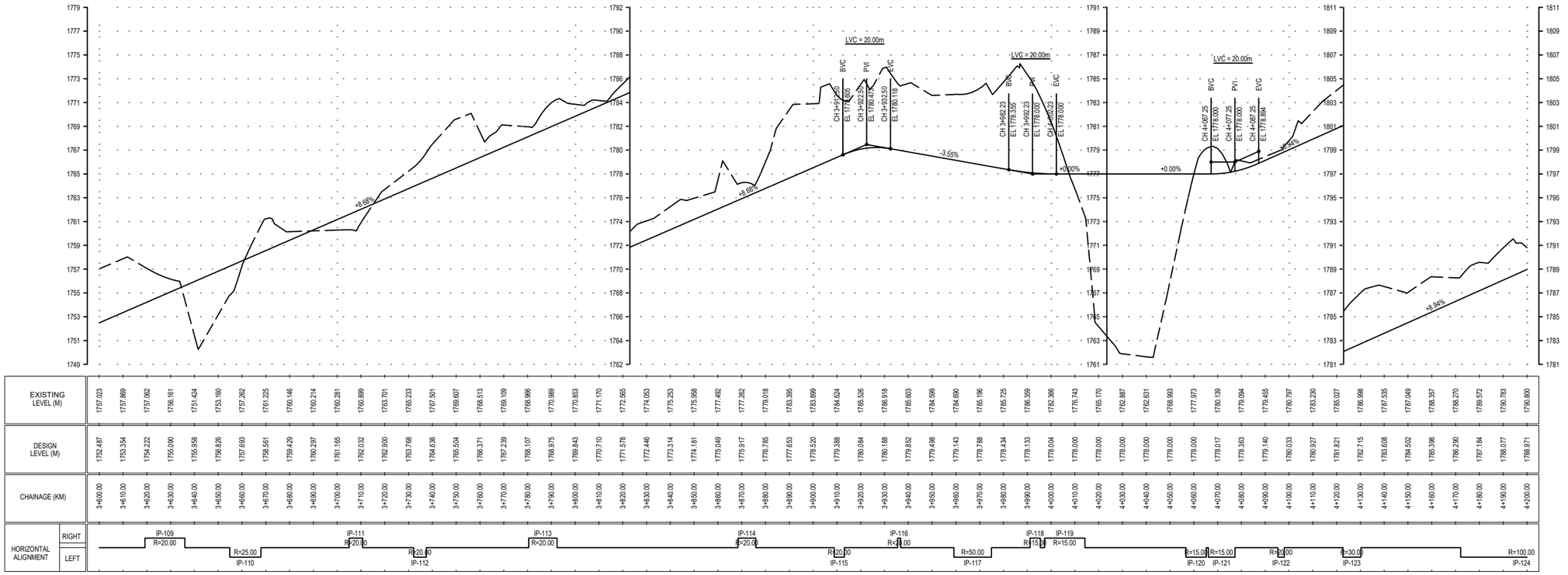
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

PROJECT ACCESS ROAD
ROAD TO HEADWORKS
PLAN & PROFILE (CH. 3+000 - 3+600)

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

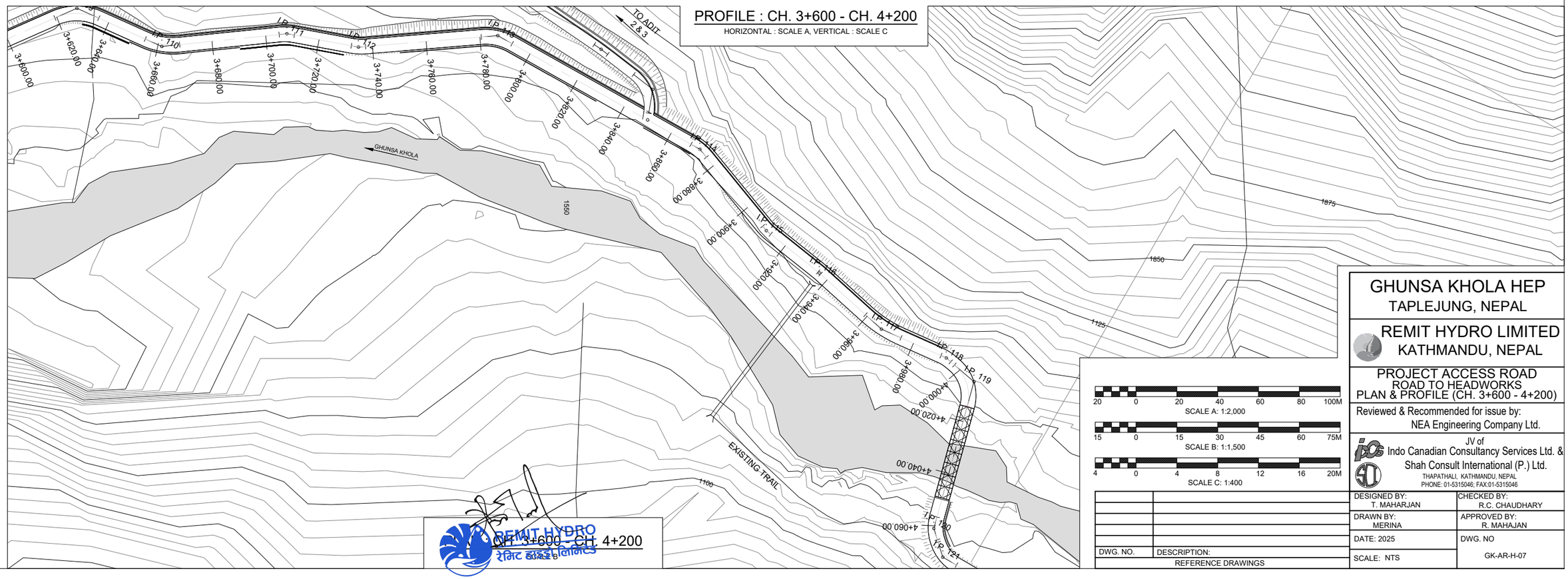
DESIGNED BY: T. MAHARJAN	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-AR-H-06
SCALE: NTS	



NORTH

PROFILE : CH. 3+600 - CH. 4+200

HORIZONTAL : SCALE A, VERTICAL : SCALE C



CH. 3+600 - CH. 4+200

REMIT HYDRO रेमिट हाईड्रो लिमिटेड

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

PROJECT ACCESS ROAD
ROAD TO HEADWORKS
PLAN & PROFILE (CH. 3+600 - 4+200)

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

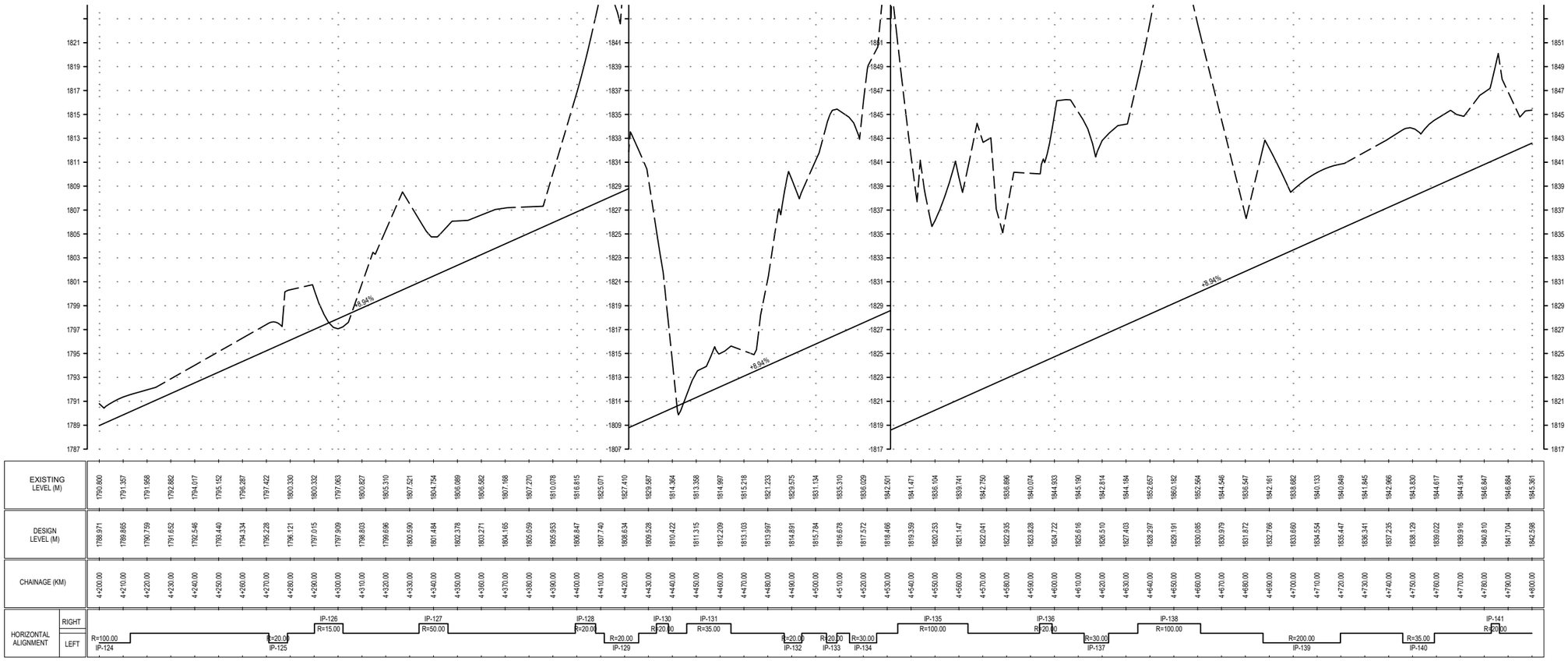
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

20 0 20 40 60 80 100M
SCALE A: 1:2,000

15 0 15 30 45 60 75M
SCALE B: 1:1,500

4 0 4 8 12 16 20M
SCALE C: 1:400

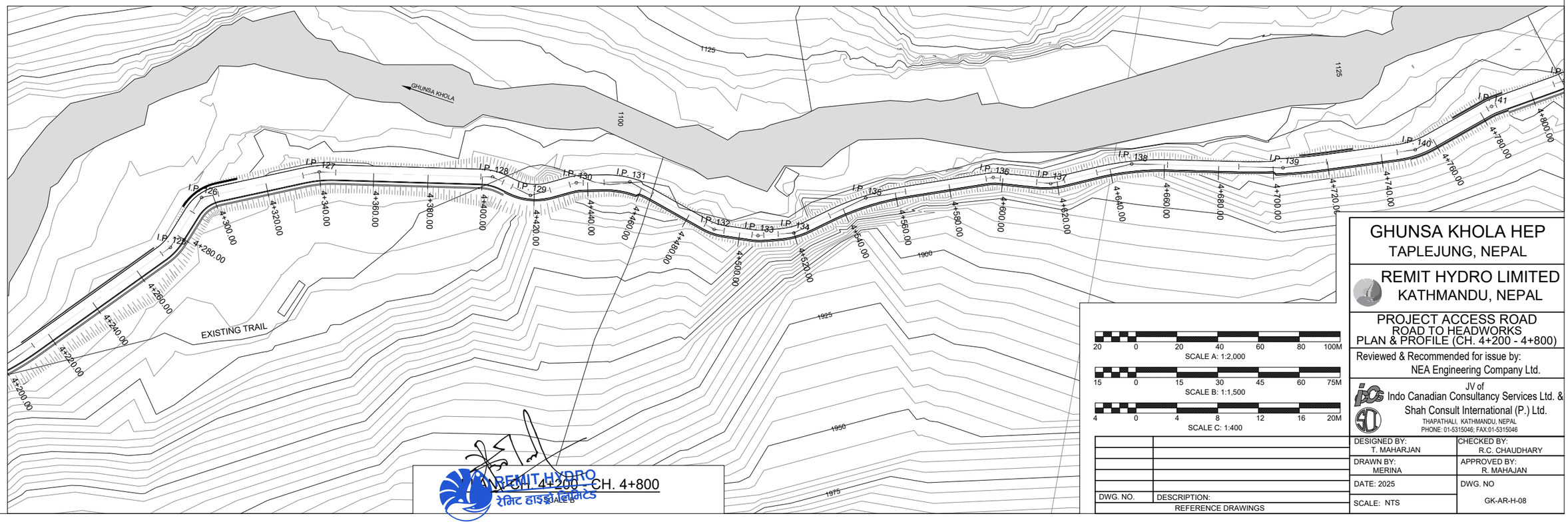
DESIGNED BY: T. MAHARJAN	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-AR-H-07
SCALE: NTS	



EXISTING LEVEL (M)		1790.800 1791.357 1791.958 1792.882 1794.017 1795.152 1796.287 1797.422 1800.330 1800.332 1797.063 1800.827 1805.310 1807.321 1804.754 1806.089 1806.582 1807.168 1807.270 1810.078 1816.815 1825.071 1827.410 1829.587 1814.364 1813.358 1814.997 1815.218 1821.233 1829.575 1831.134 1835.310 1836.029 1842.501 1841.471 1836.104 1839.741 1842.750 1836.866 1840.074 1844.933 1845.190 1842.814 1844.184 1852.657 1860.182 1852.664 1844.546 1838.547 1842.161 1838.882 1840.133 1840.849 1841.845 1842.966 1843.630 1844.617 1844.914 1846.847 1846.884 1845.361
DESIGN LEVEL (M)		1788.971 1789.865 1790.759 1791.652 1792.546 1793.440 1794.334 1795.228 1796.121 1797.015 1797.909 1798.803 1799.696 1800.590 1801.484 1802.378 1803.271 1804.165 1805.059 1805.953 1806.847 1807.740 1808.634 1809.528 1810.422 1811.315 1812.209 1813.103 1813.997 1814.891 1815.784 1816.678 1817.572 1818.466 1819.359 1820.253 1821.147 1822.041 1822.935 1823.828 1824.722 1825.616 1826.510 1827.403 1828.297 1829.191 1830.085 1830.979 1831.872 1832.766 1833.660 1834.554 1835.447 1836.341 1837.235 1838.129 1839.022 1839.916 1840.810 1841.704 1842.598
CHAINAGE (KM)		4+200.00 4+210.00 4+220.00 4+230.00 4+240.00 4+250.00 4+260.00 4+270.00 4+280.00 4+290.00 4+300.00 4+310.00 4+320.00 4+330.00 4+340.00 4+350.00 4+360.00 4+370.00 4+380.00 4+390.00 4+400.00 4+410.00 4+420.00 4+430.00 4+440.00 4+450.00 4+460.00 4+470.00 4+480.00 4+490.00 4+500.00 4+510.00 4+520.00 4+530.00 4+540.00 4+550.00 4+560.00 4+570.00 4+580.00 4+590.00 4+600.00 4+610.00 4+620.00 4+630.00 4+640.00 4+650.00 4+660.00 4+670.00 4+680.00 4+690.00 4+700.00 4+710.00 4+720.00 4+730.00 4+740.00 4+750.00 4+760.00 4+770.00 4+780.00 4+790.00 4+800.00
HORIZONTAL ALIGNMENT	RIGHT	IP-126 R=15.00; IP-127 R=50.00; IP-128 R=20.00; IP-130 R=20.00; IP-131 R=35.00; IP-135 R=100.00; IP-136 R=20.00; IP-138 R=100.00; IP-141 R=20.00
	LEFT	R=100.00 IP-124; R=20.00 IP-125; R=20.00 IP-129; R=20.00 IP-132; R=20.00 IP-133; R=30.00 IP-134; R=30.00 IP-137; R=200.00 IP-139; R=35.00 IP-140

PROFILE : CH. 4+200 - CH. 4+800

HORIZONTAL : SCALE A, VERTICAL : SCALE C



PLAN : CH. 4+200 - CH. 4+800

SCALE B

NORTH

20 0 20 40 60 80 100M
SCALE A: 1:2,000

15 0 15 30 45 60 75M
SCALE B: 1:1,500

4 0 4 8 12 16 20M
SCALE C: 1:400

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

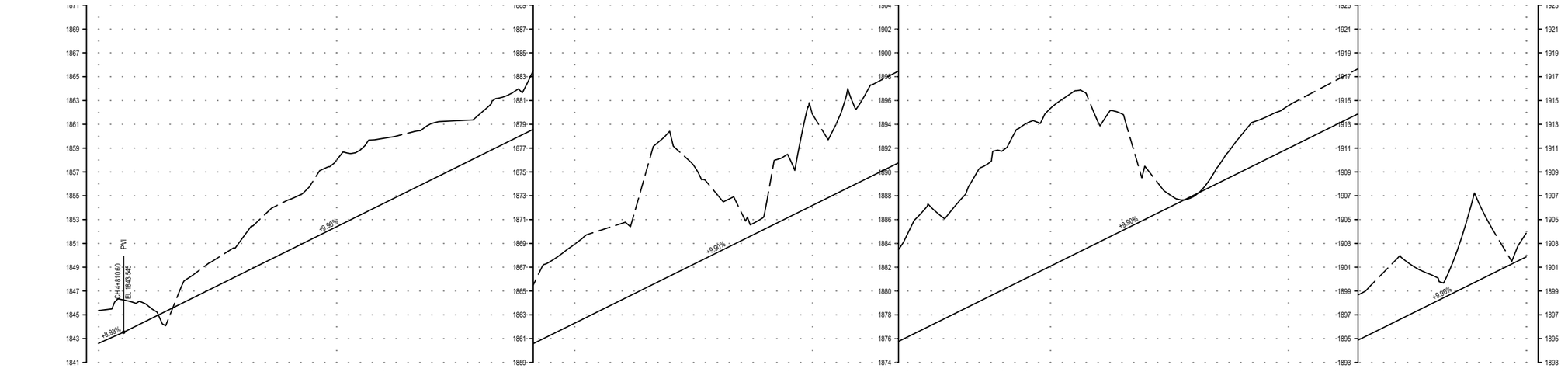
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

PROJECT ACCESS ROAD
ROAD TO HEADWORKS
PLAN & PROFILE (CH. 4+200 - 4+800)

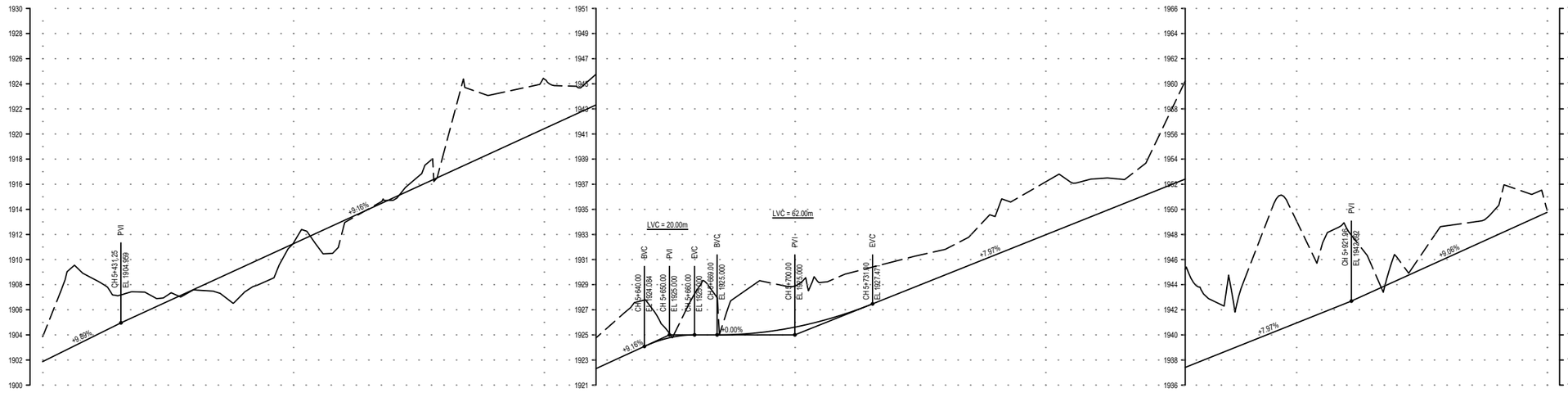
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

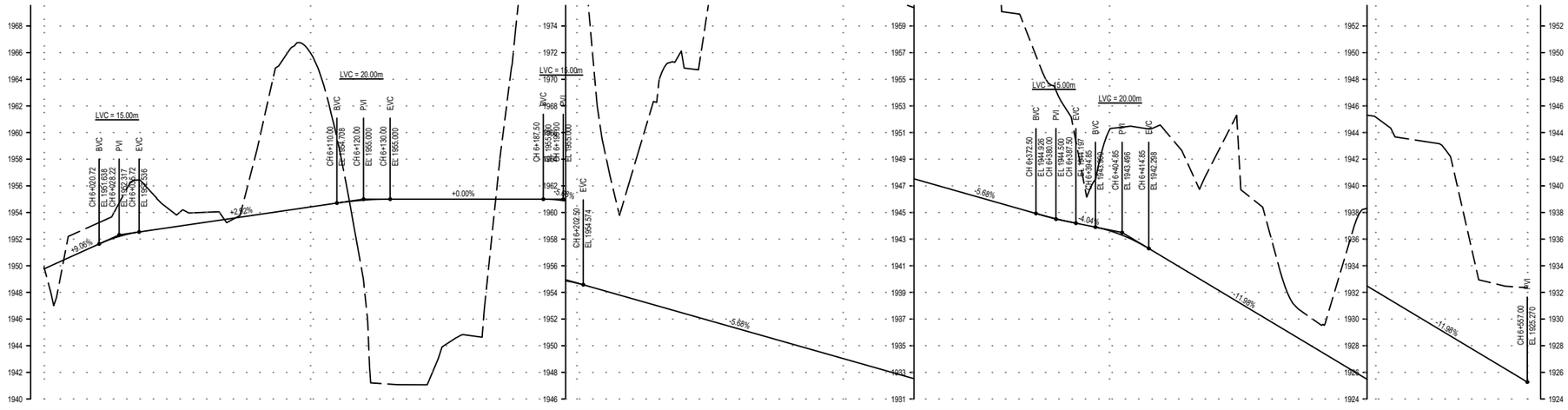
DESIGNED BY: T. MAHARJAN	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-AR-H-08
SCALE: NTS	


PVI
CH.4+810.00
EL. 1843.545
+8.93%
+9.90%
+9.90%
+9.90%
+9.90%

| | | |


+9.89%
PVI
CH 5+431.25
EL. 1904.059
+9.16%
LVC = 20.00m
BVC
CH 5+640.00
EL. 1924.184
PVI
CH 5+660.00
EL. 1925.000
EVC
CH 5+680.00
EL. 1925.000
BVC
CH 5+699.00
EL. 1925.000
0.00%
LVC = 62.00m
PVI
CH 5+700.00
EL. 1925.000
EVC
CH 5+731.00
EL. 1927.481
+7.97%
+7.97%
PVI
CH 5+921.95
EL. 1941.662
+9.08%

| | | |

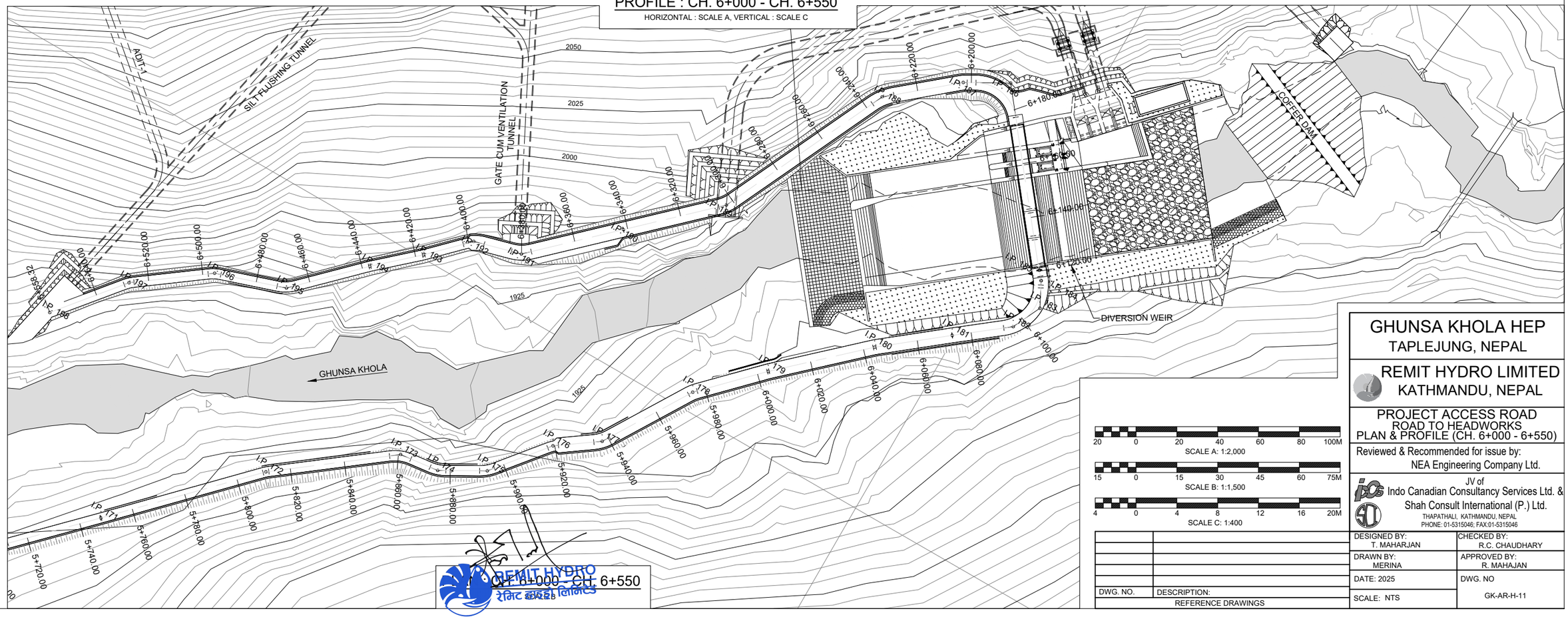


EXISTING LEVEL (M)		1949.923 1952.281 1953.180 1955.369 1955.884 1953.842 1954.009 1953.384 1958.723 1965.556 1966.006 1959.600 1948.893 1941.112 1941.067 1943.976 1944.759 1955.704 1971.728 1974.604 1983.460 1965.125 1962.401 1968.265 1971.315 1976.273 1981.331 1989.046 1988.189 1987.891 1984.979 1983.824 1975.836 1974.587 1967.880 1963.351 1960.065 1958.050 1954.152 1947.757 1951.164 1951.419 1951.370 1948.444 1949.228 1946.616 1943.667 1937.961 1936.558 1942.840 1945.173 1943.591 1943.285 1940.612 1932.888 1932.449 1932.355
DESIGN LEVEL (M)		1949.761 1950.667 1951.572 1952.302 1952.861 1952.954 1953.246 1953.538 1953.831 1954.123 1954.415 1954.708 1954.927 1955.000 1955.000 1955.000 1955.000 1955.000 1955.000 1954.988 1954.704 1954.149 1953.581 1953.014 1952.446 1951.878 1951.311 1950.743 1950.176 1949.608 1949.041 1948.473 1947.905 1947.338 1946.770 1946.203 1945.635 1945.068 1944.531 1944.096 1943.639 1942.832 1941.881 1940.483 1939.285 1938.087 1936.890 1935.692 1934.494 1933.296 1932.098 1930.900 1929.702 1928.504 1927.306 1926.109 1925.270
CHAINAGE (KM)		6+000.00 6+010.00 6+020.00 6+030.00 6+040.00 6+050.00 6+060.00 6+070.00 6+080.00 6+090.00 6+100.00 6+110.00 6+120.00 6+130.00 6+140.00 6+150.00 6+160.00 6+170.00 6+180.00 6+190.00 6+200.00 6+210.00 6+220.00 6+230.00 6+240.00 6+250.00 6+260.00 6+270.00 6+280.00 6+290.00 6+300.00 6+310.00 6+320.00 6+330.00 6+340.00 6+350.00 6+360.00 6+370.00 6+380.00 6+390.00 6+400.00 6+410.00 6+420.00 6+430.00 6+440.00 6+450.00 6+460.00 6+470.00 6+480.00 6+490.00 6+500.00 6+510.00 6+520.00 6+530.00 6+540.00 6+550.00 6+557.00
HORIZONTAL ALIGNMENT	RIGHT	IP-179 R=15.00 IP-180 R=15.00 IP-181 R=15.00 IP-185 R=15.00 R=15.00 R=15.00 R=15.00 IP-190 R=15.00 IP-191 R=15.00 IP-193 R=15.00 IP-195 R=15.00 IP-198 R=15.00
	LEFT	IP-182 IP-183 IP-184 IP-186 IP-187 IP-188 IP-189 IP-192 IP-194 IP-196 IP-197

NORTH

PROFILE : CH. 6+000 - CH. 6+550

HORIZONTAL : SCALE A, VERTICAL : SCALE C



PROFILE : CH. 6+000 - CH. 6+550

HORIZONTAL : SCALE A, VERTICAL : SCALE C

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

PROJECT ACCESS ROAD
ROAD TO HEADWORKS
PLAN & PROFILE (CH. 6+000 - 6+550)

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

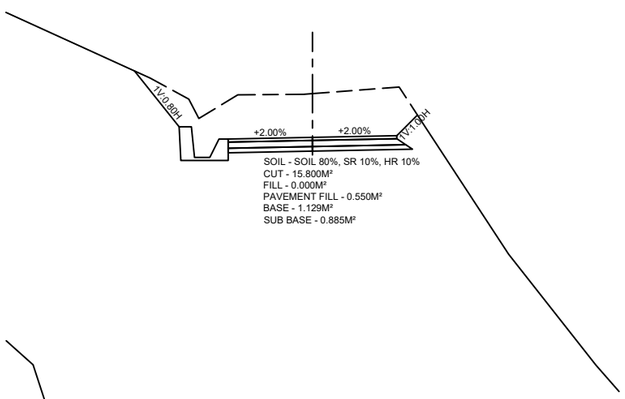
20 0 20 40 60 80 100M
SCALE A: 1:2,000

15 0 15 30 45 60 75M
SCALE B: 1:1,500

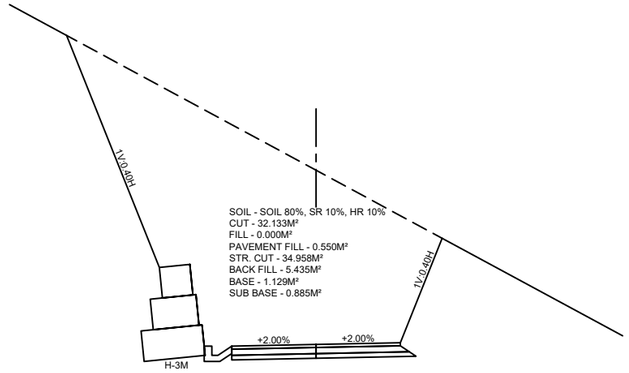
4 0 4 8 12 16 20M
SCALE C: 1:400

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

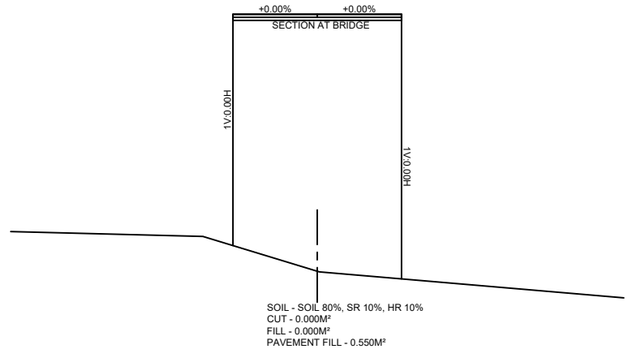
DESIGNED BY: T. MAHARJAN	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-AR-H-11
SCALE: NTS	



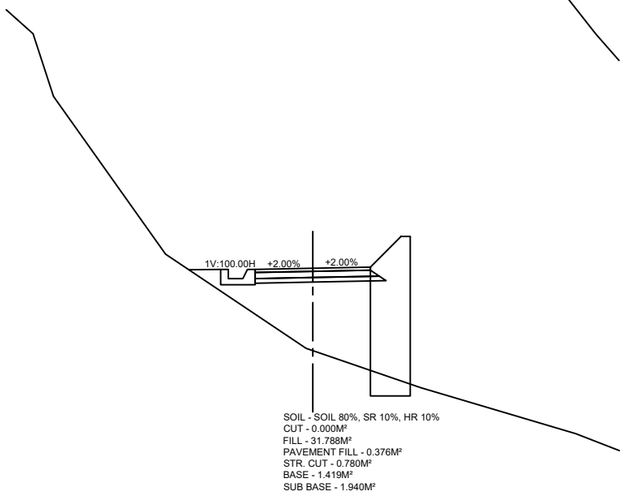
SOIL - SOIL 80%, SR 10%, HR 10%
CUT - 15.800M²
FILL - 0.000M²
PAVEMENT FILL - 0.550M²
BASE - 1.129M²
SUB BASE - 0.885M²



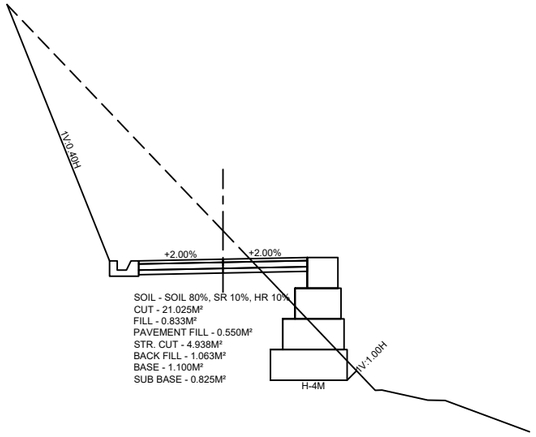
SOIL - SOIL 80%, SR 10%, HR 10%
CUT - 32.133M²
FILL - 0.000M²
PAVEMENT FILL - 0.550M²
STR. CUT - 34.958M²
BACK FILL - 5.435M²
BASE - 1.129M²
SUB BASE - 0.885M²



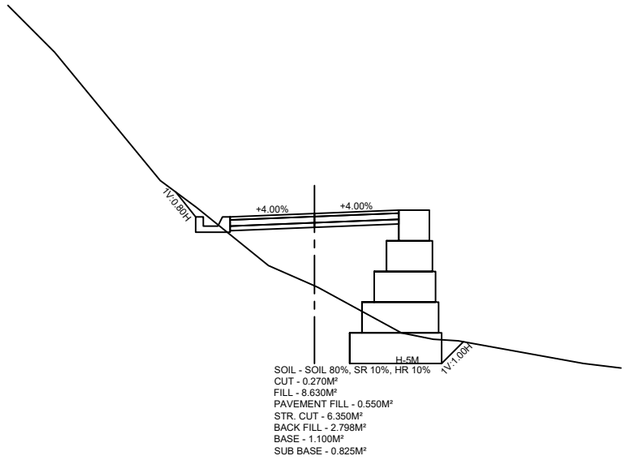
SOIL - SOIL 80%, SR 10%, HR 10%
CUT - 0.000M²
FILL - 0.000M²
PAVEMENT FILL - 0.550M²



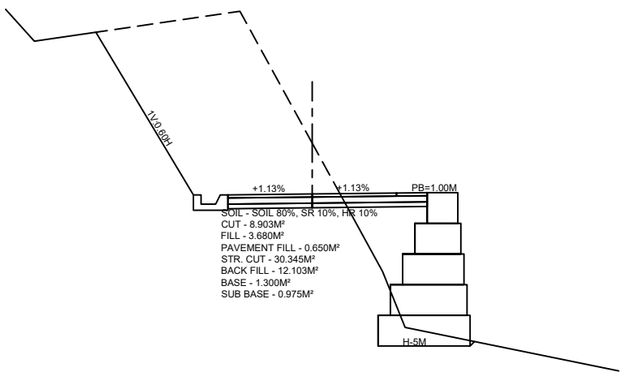
SOIL - SOIL 80%, SR 10%, HR 10%
CUT - 0.000M²
FILL - 31.788M²
PAVEMENT FILL - 0.376M²
STR. CUT - 0.780M²
BASE - 1.419M²
SUB BASE - 1.940M²



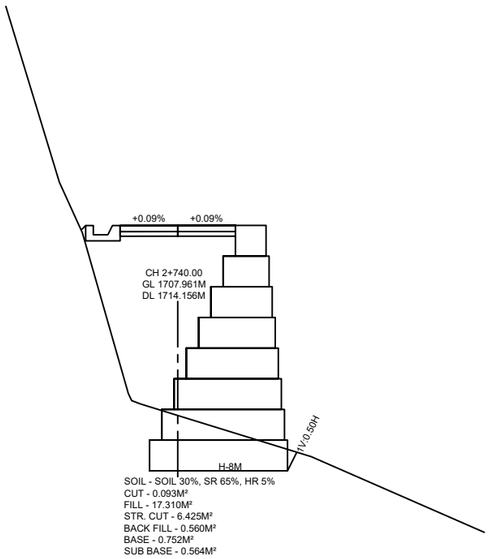
SOIL - SOIL 80%, SR 10%, HR 10%
CUT - 21.025M²
FILL - 0.833M²
PAVEMENT FILL - 0.550M²
STR. CUT - 4.938M²
BACK FILL - 1.063M²
BASE - 1.100M²
SUB BASE - 0.825M²



SOIL - SOIL 80%, SR 10%, HR 10%
CUT - 0.270M²
FILL - 8.630M²
PAVEMENT FILL - 0.550M²
STR. CUT - 6.350M²
BACK FILL - 2.798M²
BASE - 1.100M²
SUB BASE - 0.825M²



SOIL - SOIL 80%, SR 10%, HR 10%
CUT - 8.903M²
FILL - 3.680M²
PAVEMENT FILL - 0.650M²
STR. CUT - 30.345M²
BACK FILL - 12.103M²
BASE - 1.300M²
SUB BASE - 0.975M²



SOIL - SOIL 30%, SR 65%, HR 5%
CUT - 0.093M²
FILL - 17.310M²
STR. CUT - 6.425M²
BACK FILL - 0.560M²
BASE - 0.752M²
SUB BASE - 0.564M²

2 0 2 4 6 8 10M
SCALE : 1:200

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

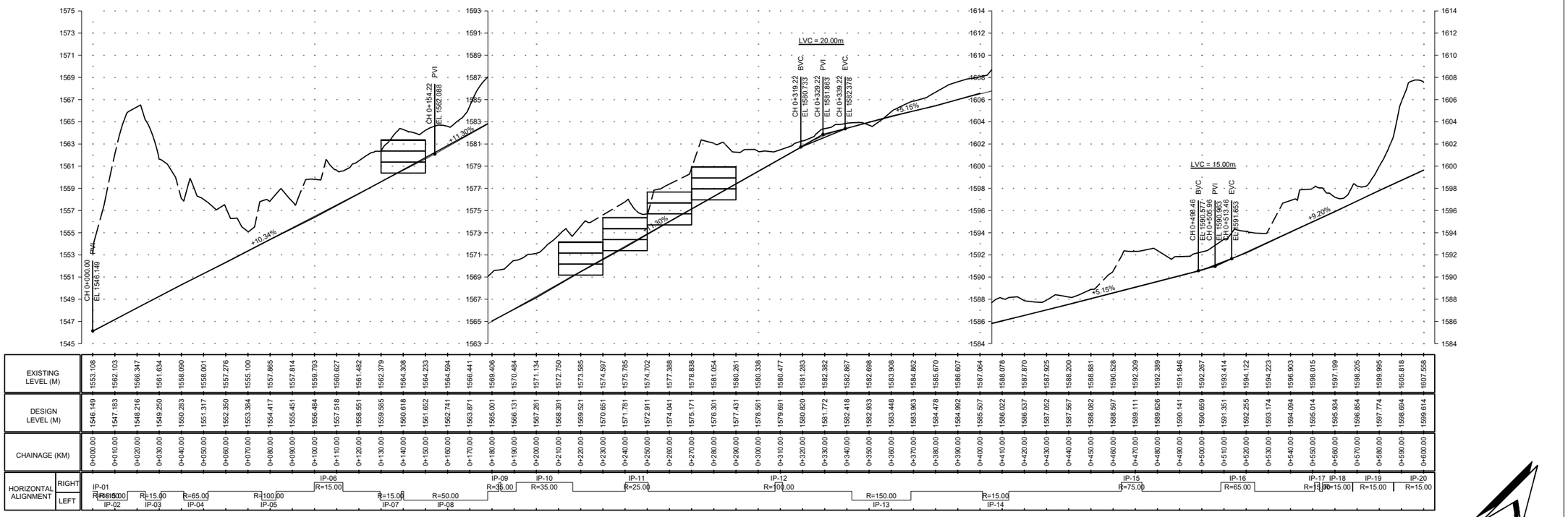
PROJECT ACCESS ROAD
ROAD TO HEADWORKS
TYPICAL CROSS SECTIONS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

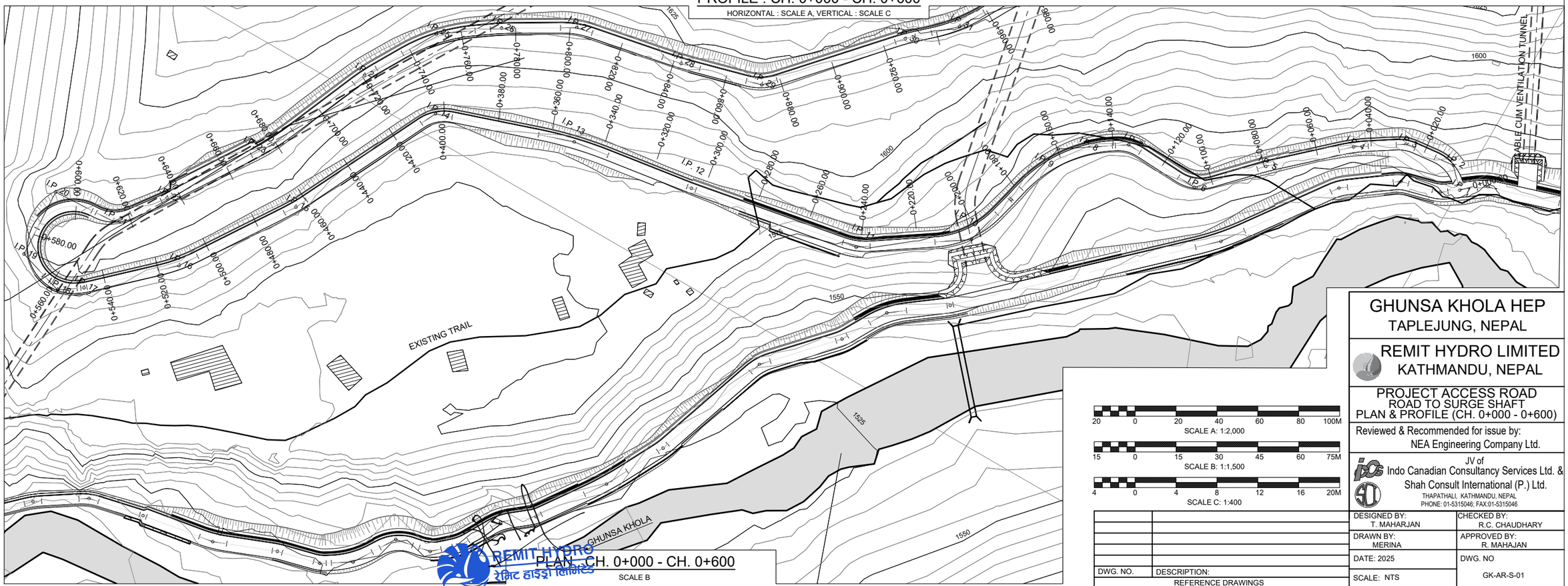
DESIGNED BY: T. MAHARJAN	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-AR-H-12
SCALE: NTS	



NORTH

PROFILE : CH. 0+000 - CH. 0+600

HORIZONTAL : SCALE A, VERTICAL : SCALE C



PLAN : CH. 0+000 - CH. 0+600

SCALE B

SCALE A: 1:2,000

SCALE B: 1:1,500

SCALE C: 1:400

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

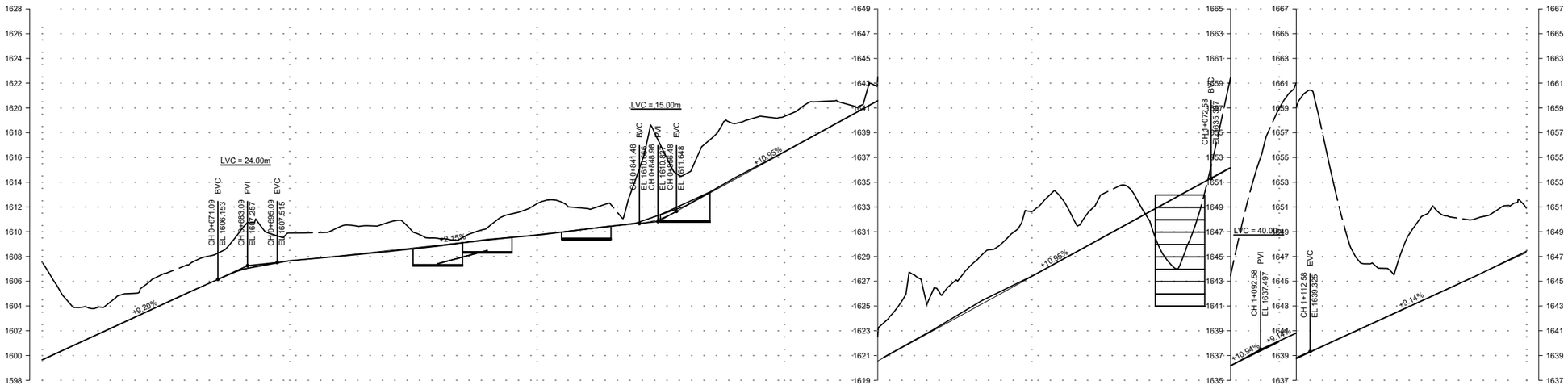
PROJECT ACCESS ROAD
ROAD TO SURGE SHAFT
PLAN & PROFILE (CH. 0+000 - 0+600)

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

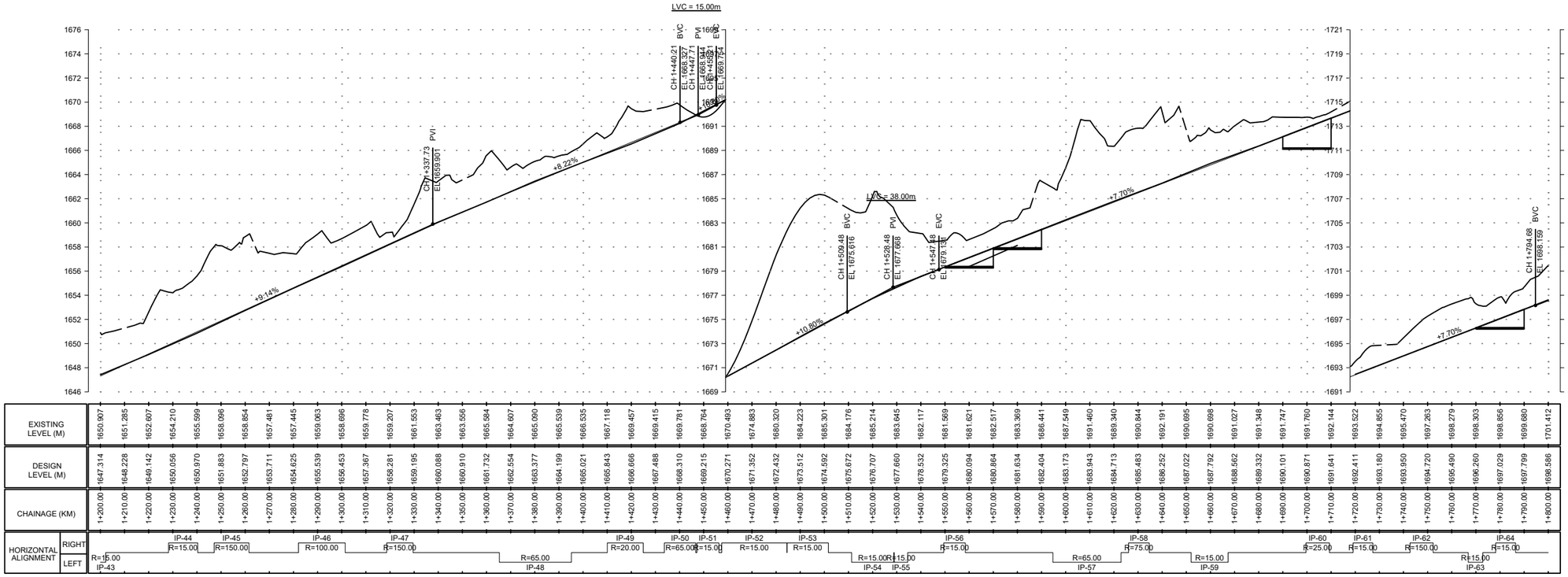
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

DESIGNED BY: T. MAHARJAN	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-AR-S-01
SCALE: NTS	

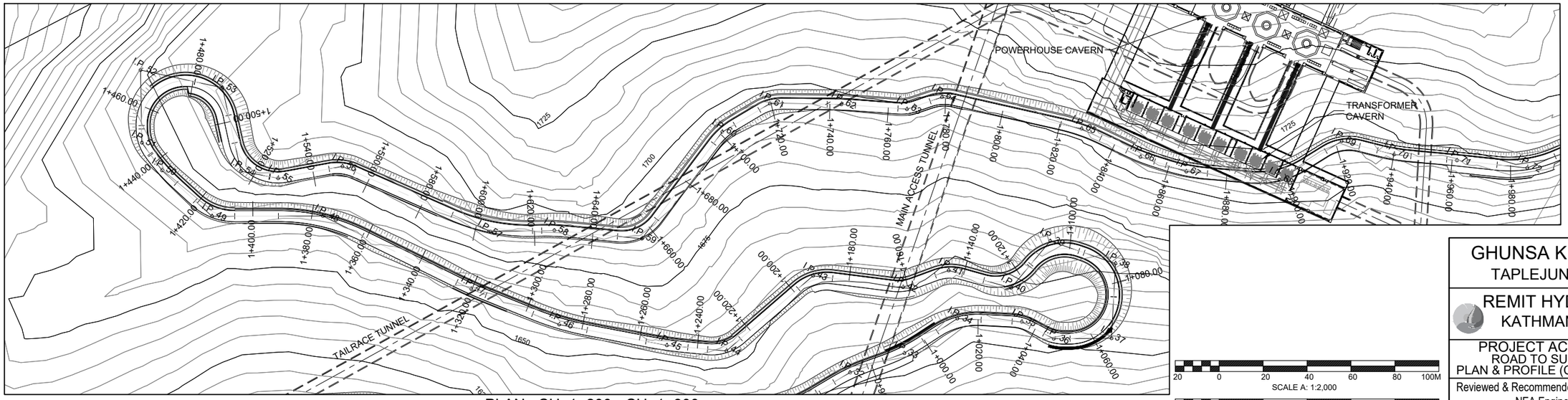

LVC = 24.00m
BVC
CH 0+671.09
EL 1606.153
PVI
CH 0+683.09
EL 1607.257
EVC
CH 0+695.09
EL 1607.515
+9.29%
+2.15%
LVC = 15.00m
BVC
CH 0+841.48
EL 1610.966
PVI
CH 0+848.98
EL 1611.648
EVC
CH 0+856.48
EL 1611.648
+10.95%
+10.95%
LVC = 40.00m
BVC
CH 1+072.58
EL 1635.487
PVI
CH 1+092.58
EL 1637.497
EVC
CH 1+112.58
EL 1638.325
+10.94%
+9.14%
+9.14%

| | | |



PROFILE : CH. 1+200 - CH. 1+800

HORIZONTAL : SCALE A, VERTICAL : SCALE C



PLAN : CH. 1+200 - CH. 1+800

SCALE B

SCALE A: 1:2,000

SCALE B: 1:1,500

SCALE C: 1:400

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

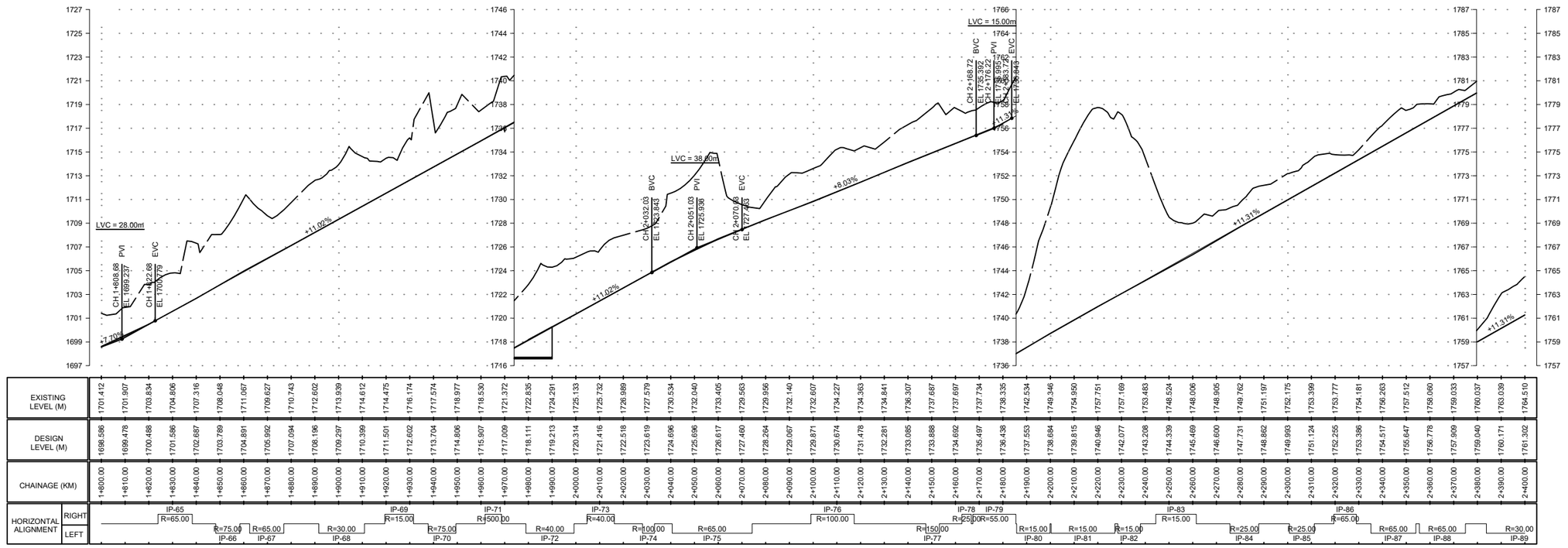
PROJECT ACCESS ROAD
ROAD TO SURGE SHAFT
PLAN & PROFILE (CH. 1+200 - 1+800)

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

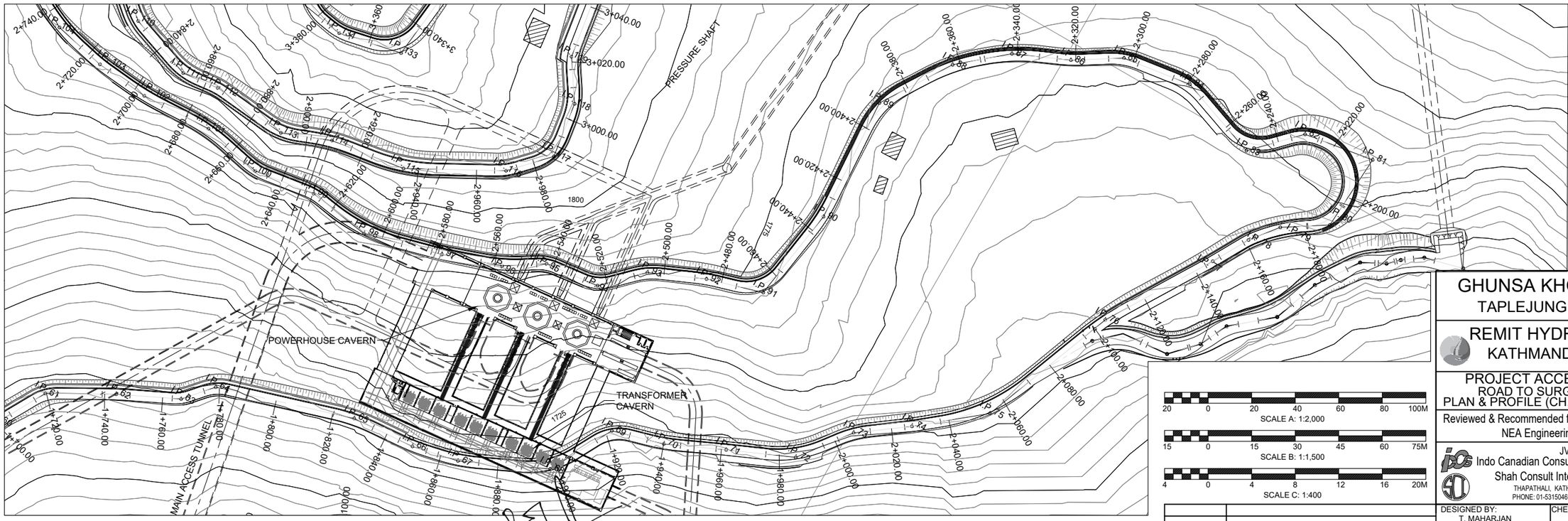
DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

DESIGNED BY: T. MAHARJAN	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-AR-S-03
SCALE: NTS	



PROFILE : CH. 1+800 - CH. 2+400

HORIZONTAL : SCALE A, VERTICAL : SCALE C



PLAN : CH. 1+800 - CH. 2+400

SCALE B

SCALE A: 1:2,000

SCALE B: 1:1,500

SCALE C: 1:400

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

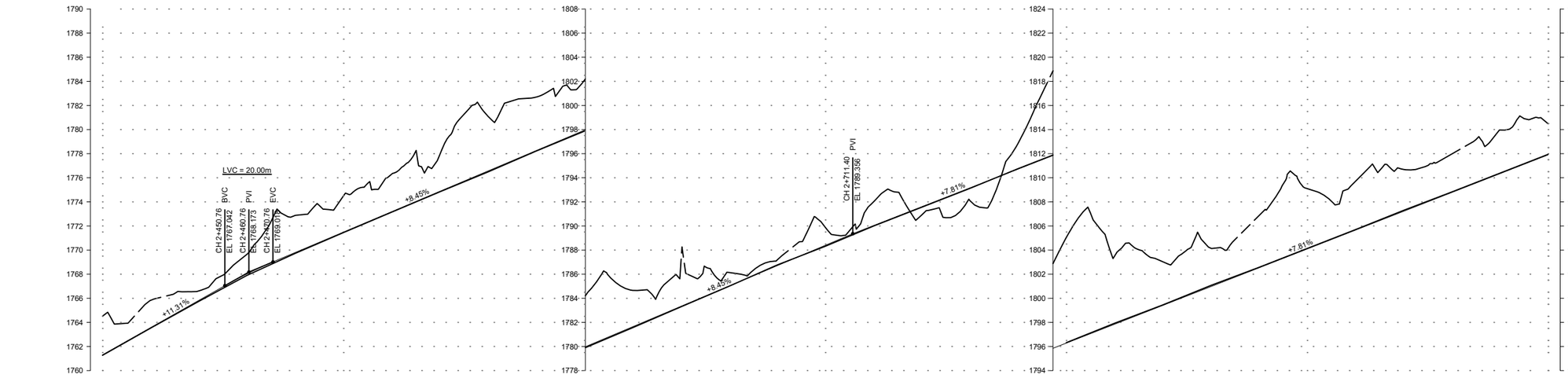
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

PROJECT ACCESS ROAD
ROAD TO SURGE SHAFT
PLAN & PROFILE (CH. 1+800 - 2+400)

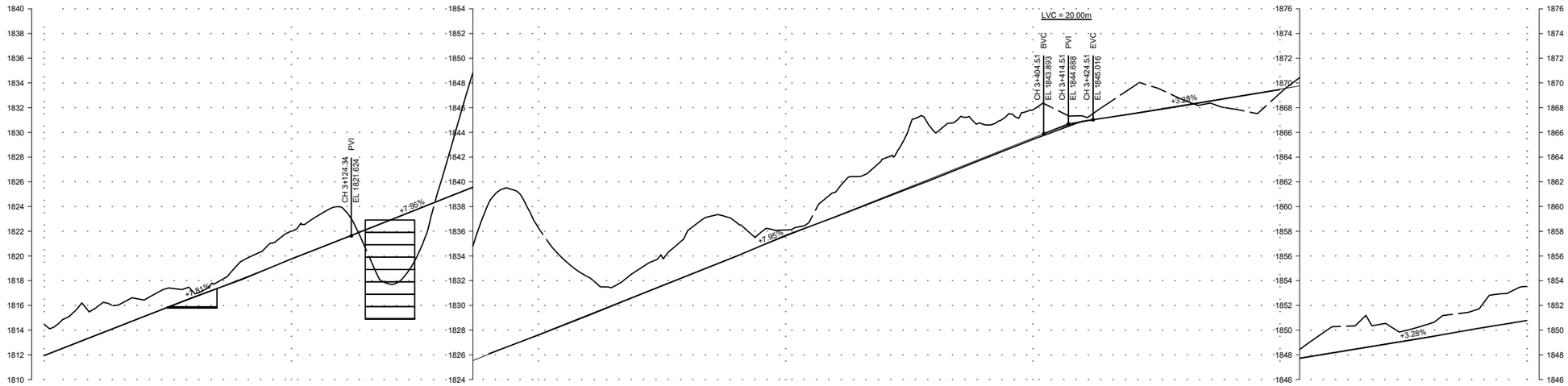
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

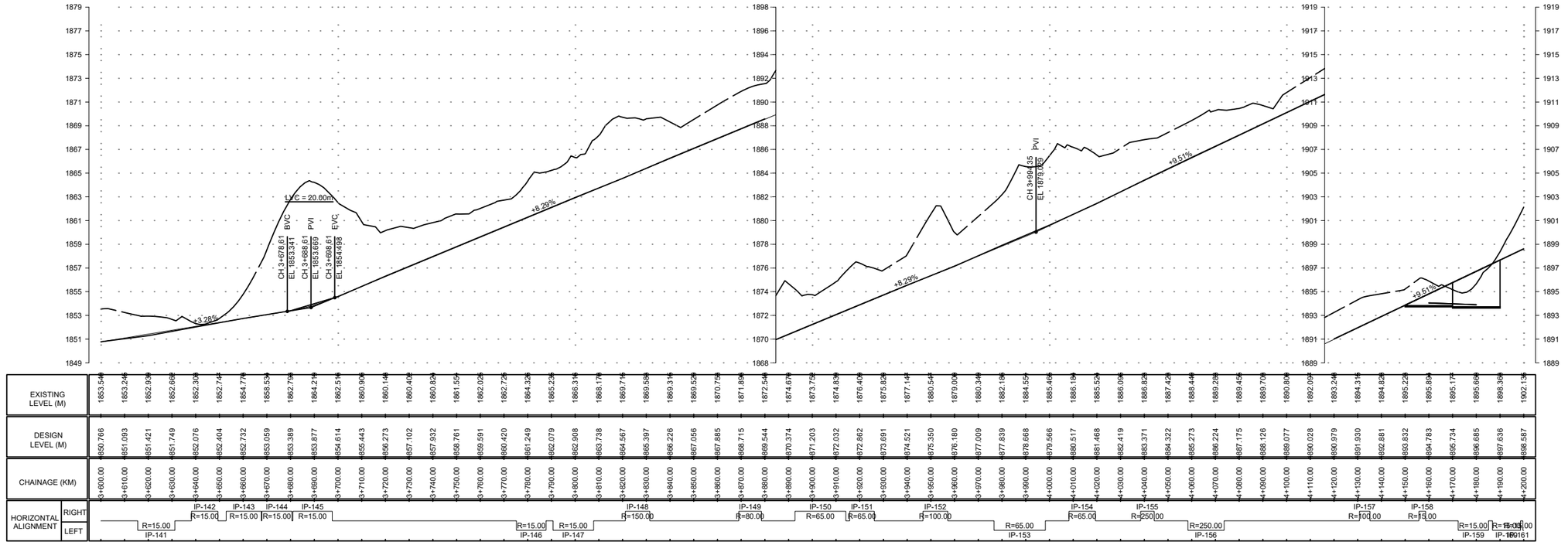
DESIGNED BY: T. MAHARJAN	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-AR-S-04
SCALE: NTS	


LVC = 20.00m
BVC
CH 2+450.76
EL 1767.092
PVI
CH 2+480.76
EL 1768.173
EVC
CH 2+510.76
EL 1769.017
+11.31%
+8.45%
PVI
CH 2+711.40
EL 1788.356
+8.45%
+7.81%
+7.81%

| | | |

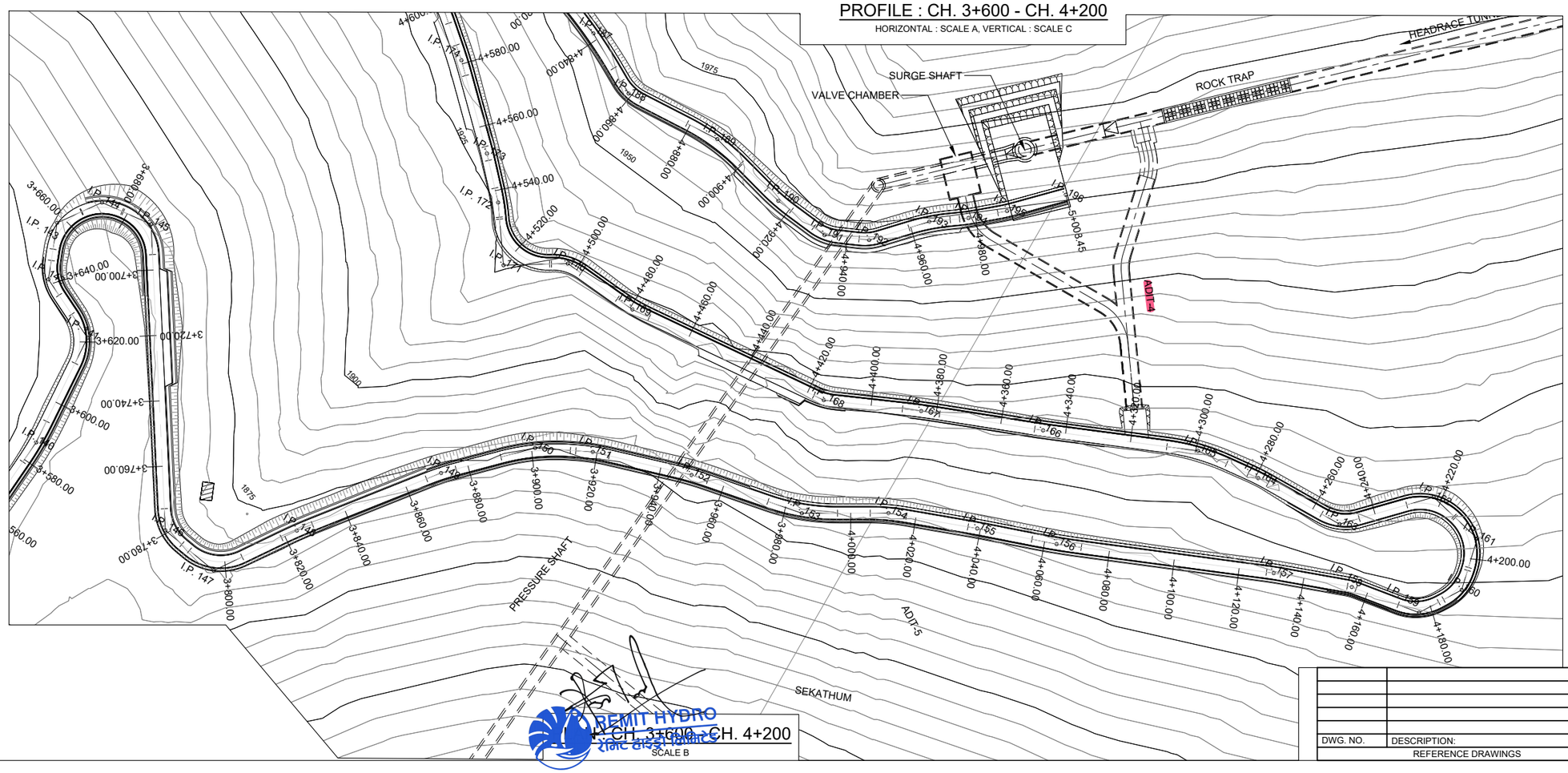

LVC = 20.00m
BVC
CH 3+404.51
EL 1843.893
PVI
CH 3+414.51
EL 1844.668
EVC
CH 3+424.51
EL 1845.016
+7.96%
+3.28%
CH 3+124.34
EL 1821.624
PVI

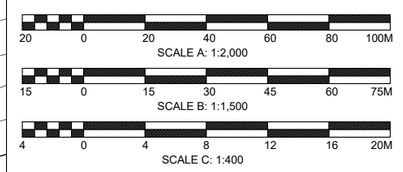
| | | |



PROFILE : CH. 3+600 - CH. 4+200

HORIZONTAL : SCALE A, VERTICAL : SCALE C





GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

PROJECT ACCESS ROAD
ROAD TO SURGE SHAFT
PLAN & PROFILE (CH. 3+600 - 4+200)

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

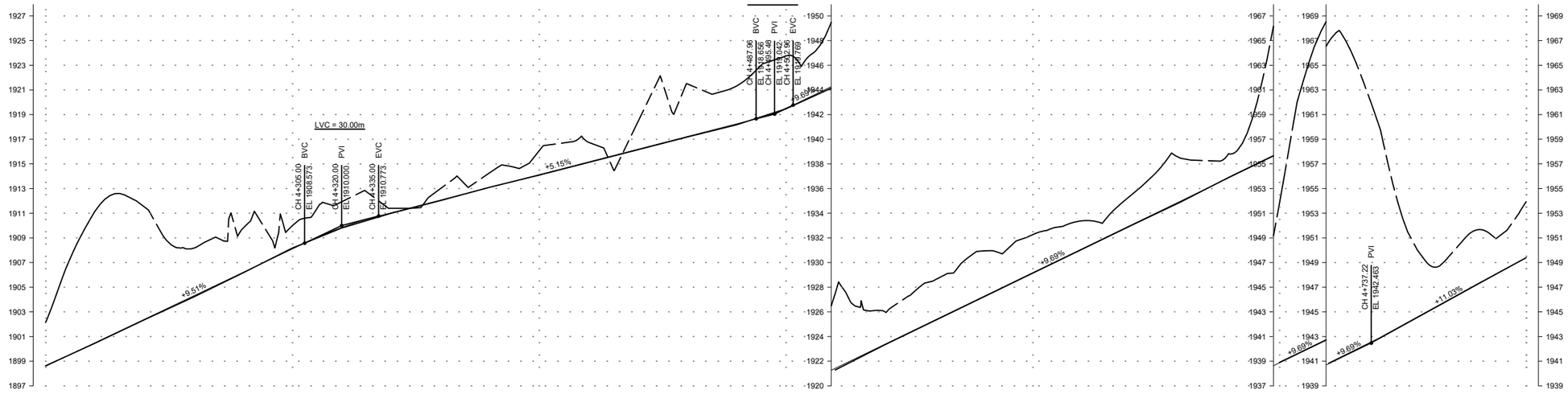
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

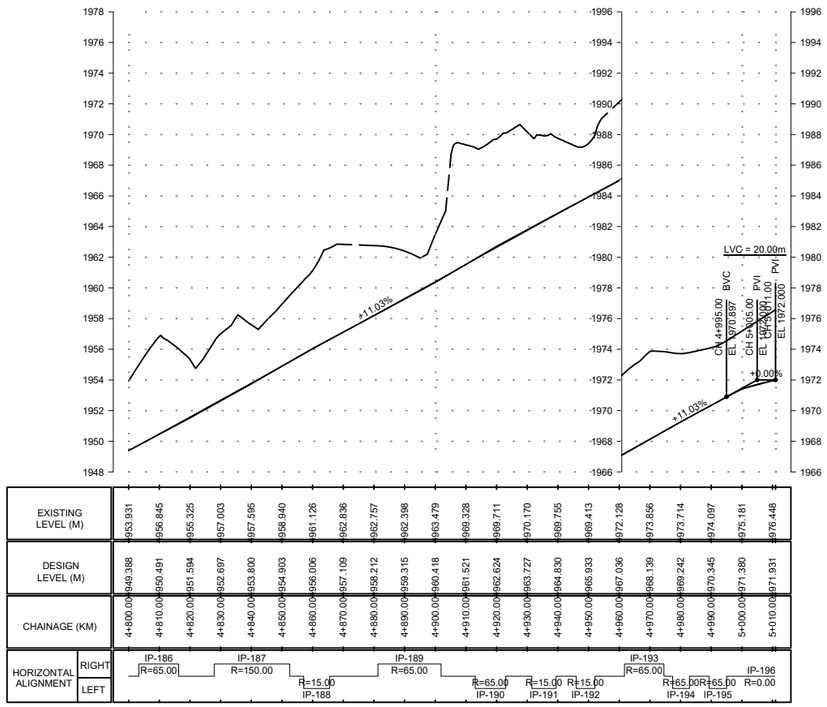
DESIGNED BY: T. MAHARJAN	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-AR-S-07
SCALE: NTS	

REMIT HYDRO
रेमित हाइड्रो प्रालि

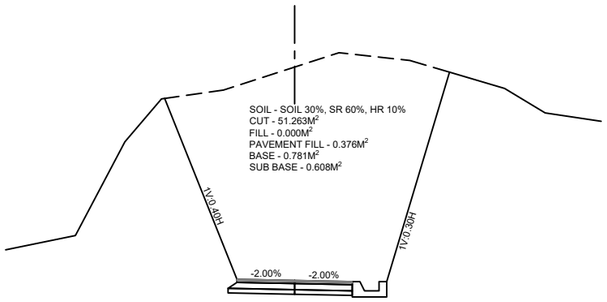
CH. 3+600 - CH. 4+200
SCALE B

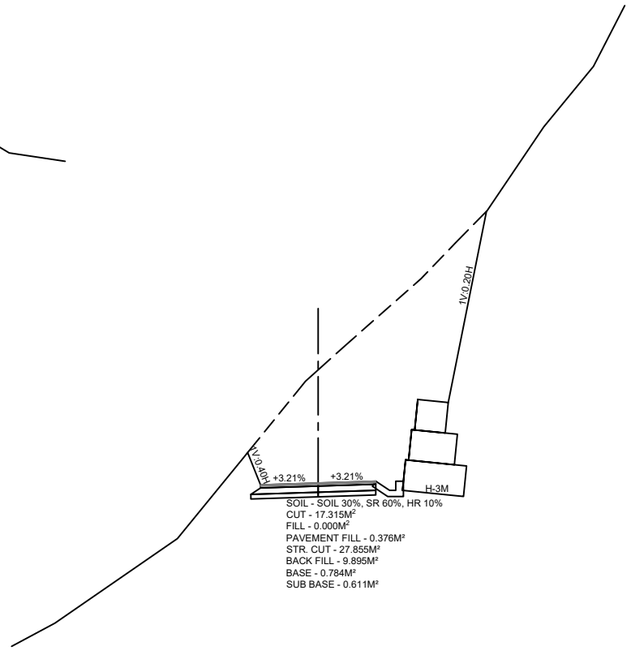

LVC = 30.00m
CH 4+305.00
EL 1908.573
BVC
CH 4+320.00
EL 1910.000
PVI
CH 4+335.00
EL 1910.773
EVC
+9.51%
+5.15%
CH 4+467.96
EL 1920.656
BVC
CH 4+485.48
EL 1922.075
PVI
CH 4+502.96
EL 1924.769
EVC
+9.69%
+9.69%
CH 4+737.22
EL 1942.463
PVI
+9.69%
+9.69%
+11.03%

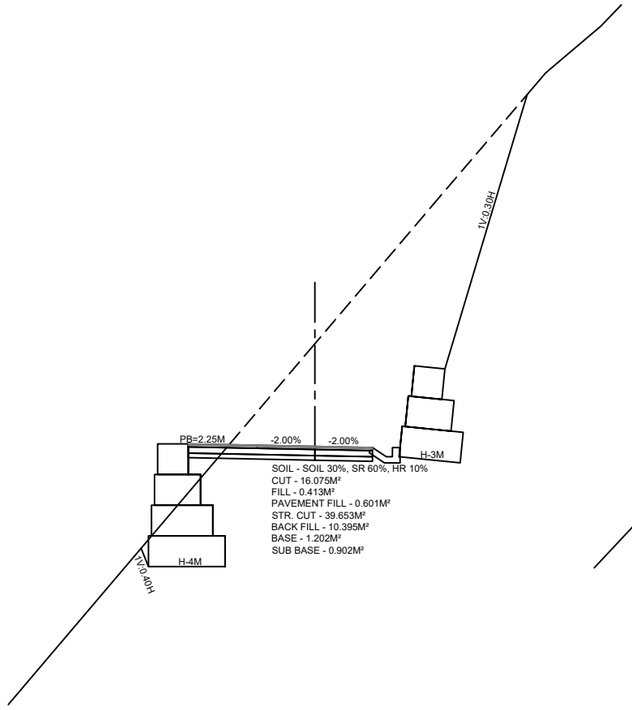
| | | |

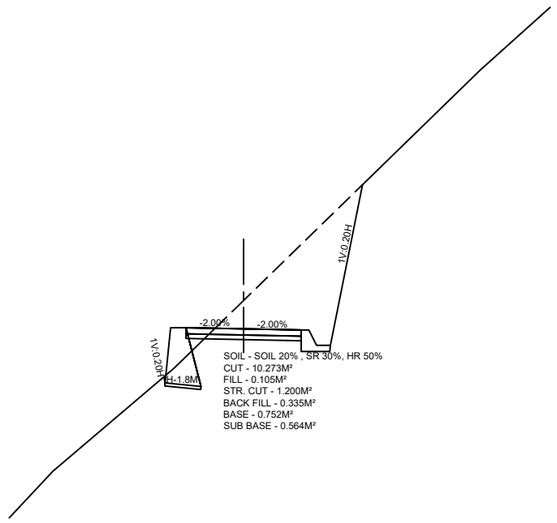

+11.03%
+11.03%
+5.00%
LVC = 20.00m
BVC
CH 4+995.00
EL 1970.897
PVI
CH 5+005.00
EL 1971.401
PVI
CH 5+015.00
EL 1972.000

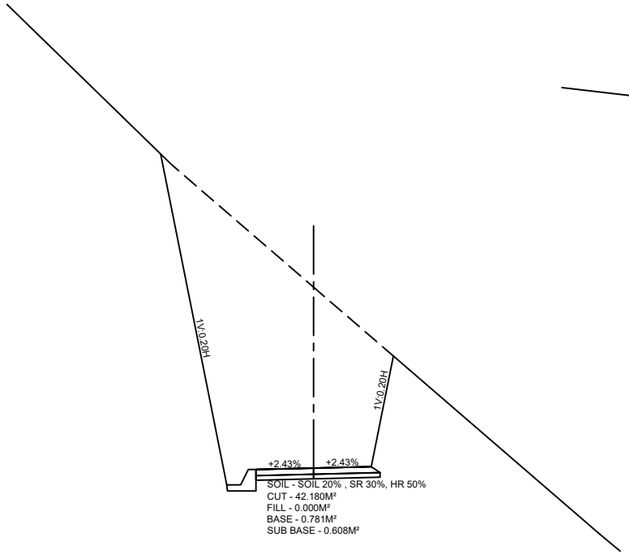
| | | |

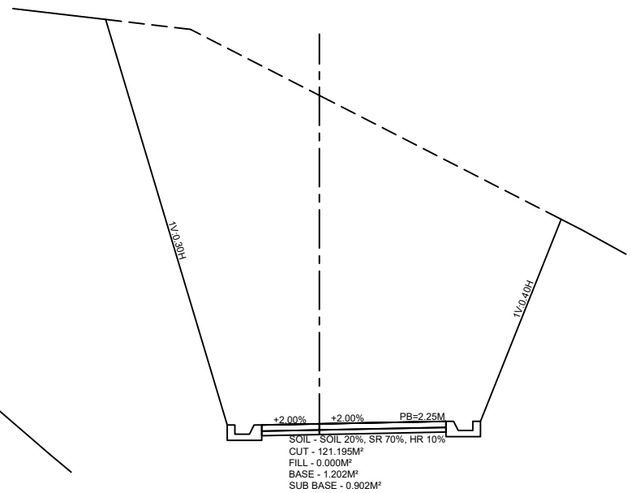


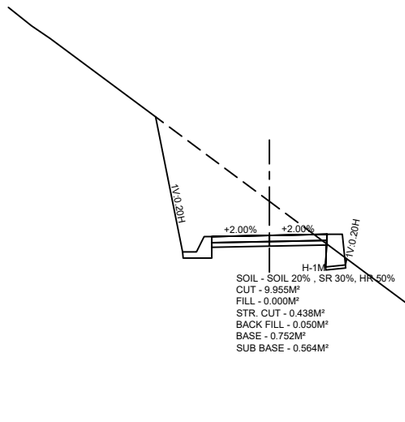


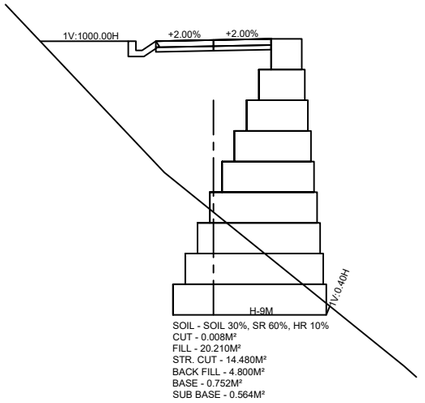












GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

PROJECT ACCESS ROAD
ROAD TO SURGE SHAFT
TYPICAL CROSS SECTIONS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

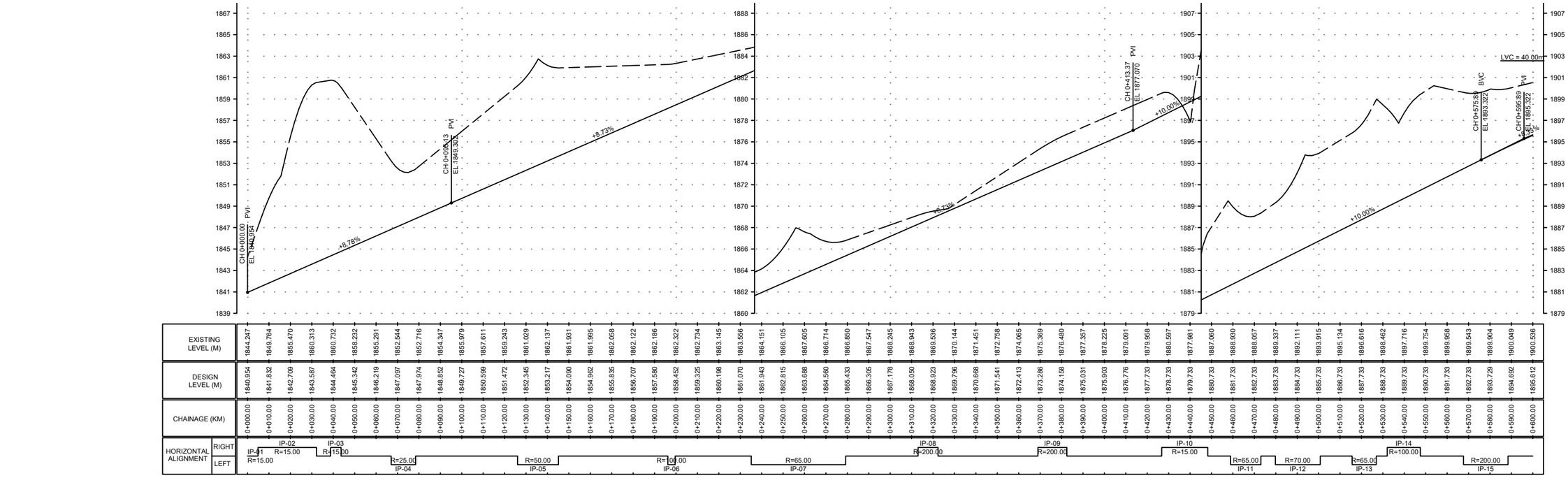
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

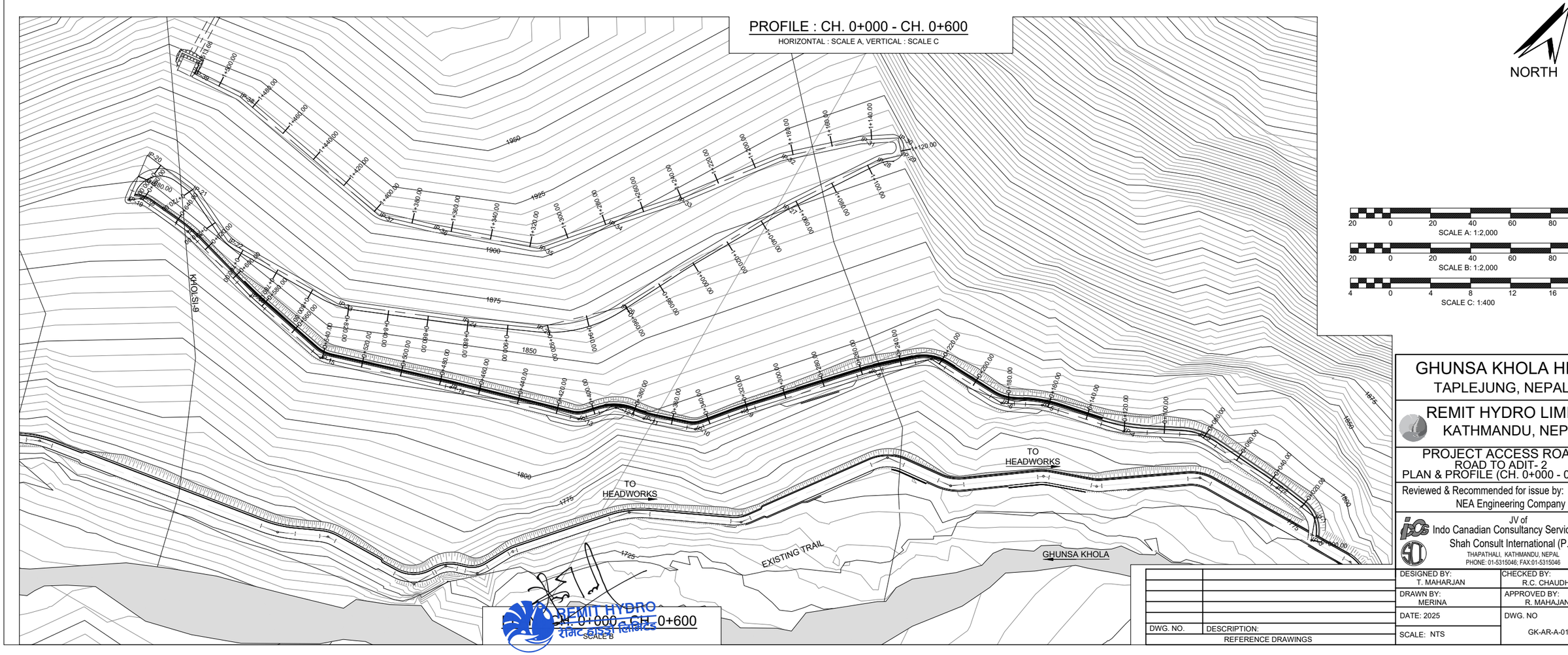
2 0 2 4 6 8 10M
SCALE : 1:200

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: T. MAHARJAN	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-AR-S-10
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड





GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

PROJECT ACCESS ROAD
ROAD TO ADIT- 2
PLAN & PROFILE (CH. 0+000 - 0+600)

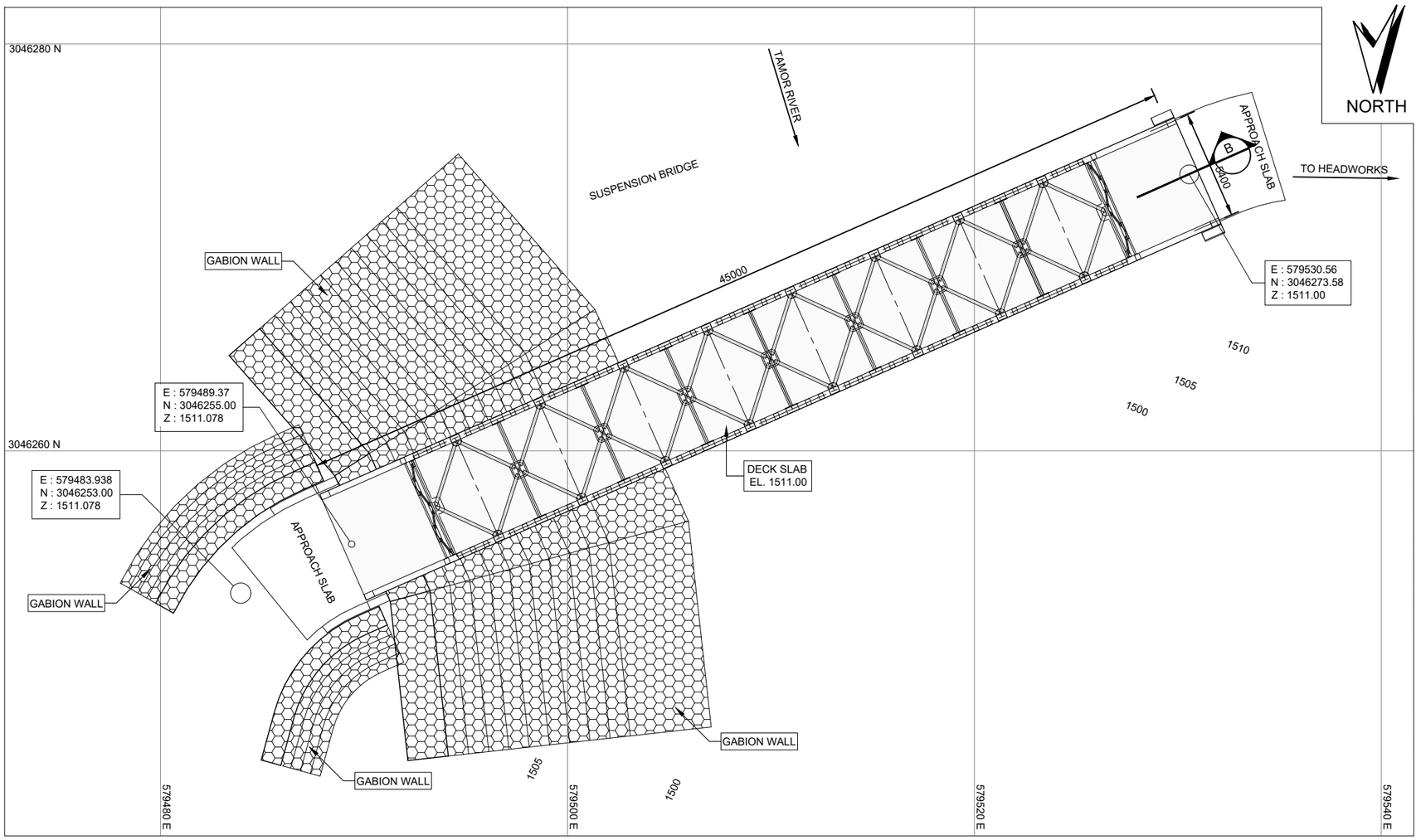
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

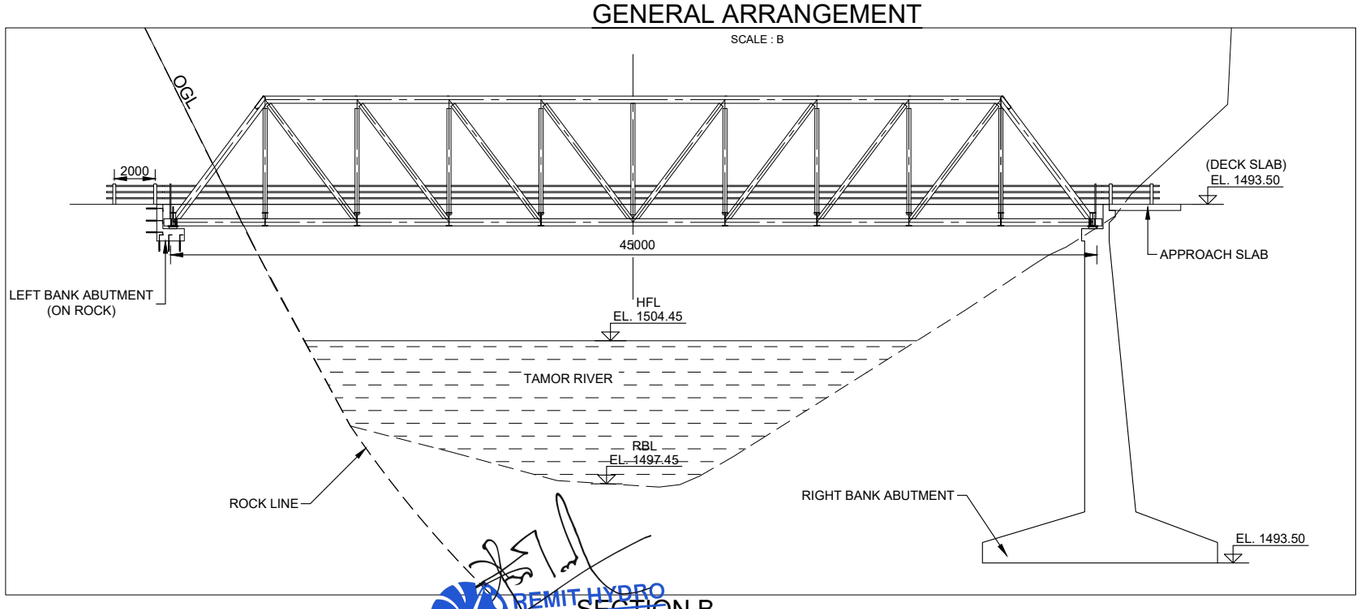
DESIGNED BY: T. MAHARJAN	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: MERINA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-AR-A-01
SCALE: NTS	

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

10. Bridges



GENERAL ARRANGEMENT



SECTION B

SCALE : A

REMIT HYDRO रेमिट हाइड्रो लिमिटेड

3 0 3 6 9 12 15M
SCALE A : 1:300

2.5 0 2.5 5 7.5 10 12.5M
SCALE B : 1:250

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

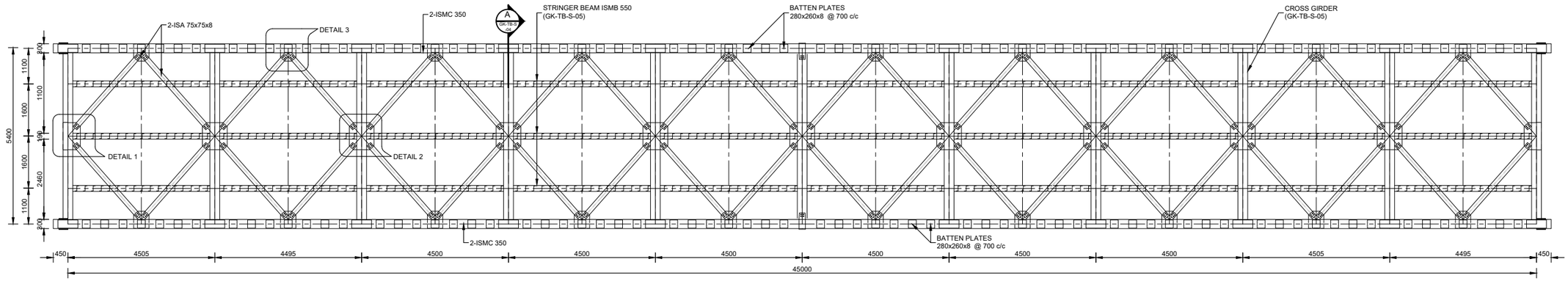
ACCESS ROAD
TAMOR BRIDGE
LAYOUT PLAN

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

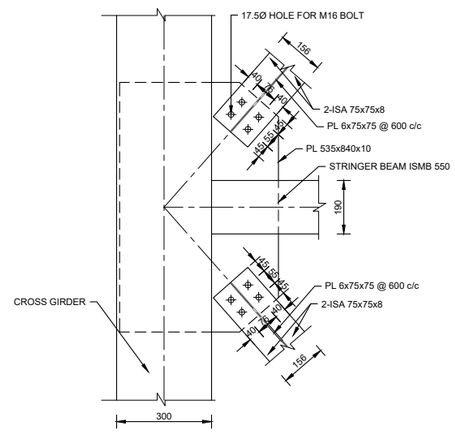
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

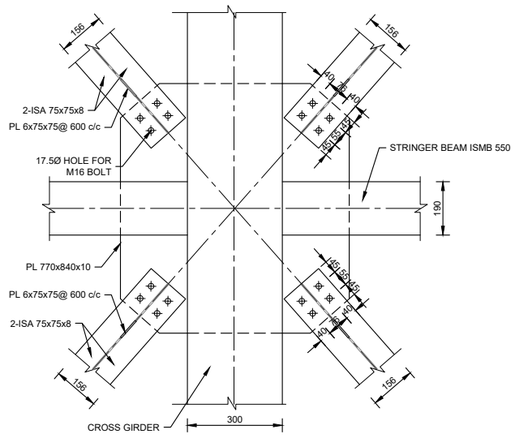
DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-TB-L-01
SCALE: NTS	



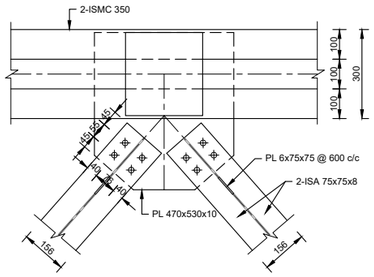
BOTTOM TIE PLAN
SCALE A



DETAIL 1
SCALE B



DETAIL 2
SCALE B



DETAIL 3
SCALE B

1 0 1 2 3 4 5M
SCALE A : 1:100

0.15 0 0.15 0.30 0.45 0.60 0.75M
SCALE B : 1:15

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

ACCESS ROAD
TAMOR BRIDGE
BOTTOM TIE PLAN & DETAILS

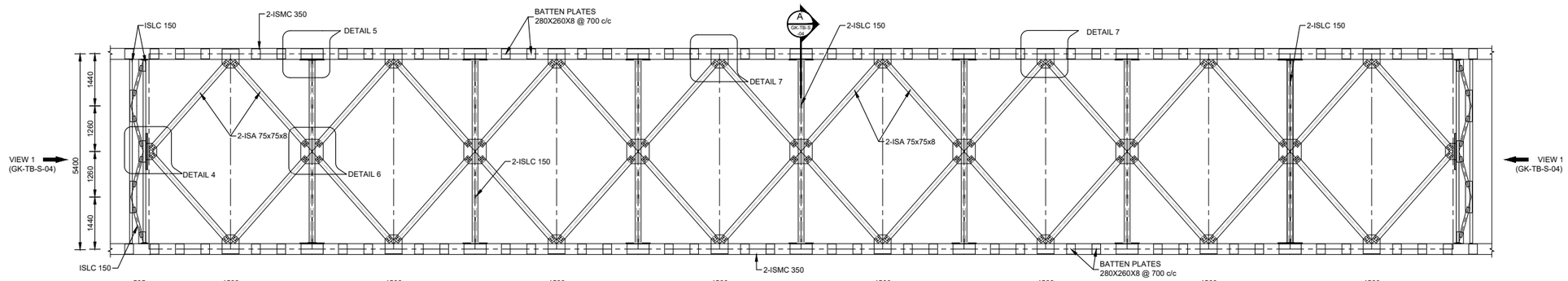
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

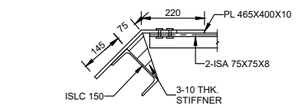
DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-TB-S-02
SCALE: NTS	

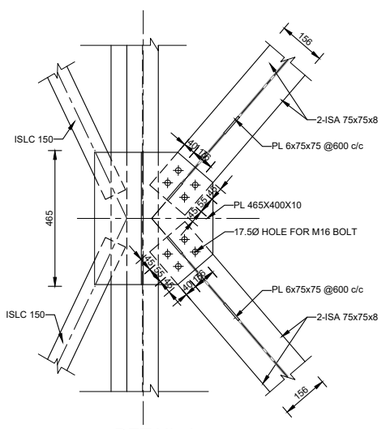
GK-TB-S-04	TAMOR BRIDGE ELEVATION & SECTIONS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

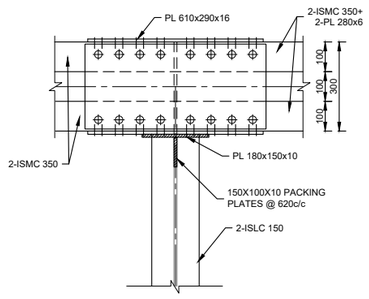


TOP TIE PLAN
SCALE A

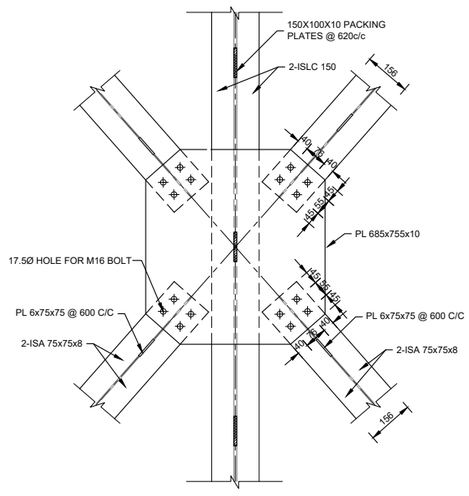




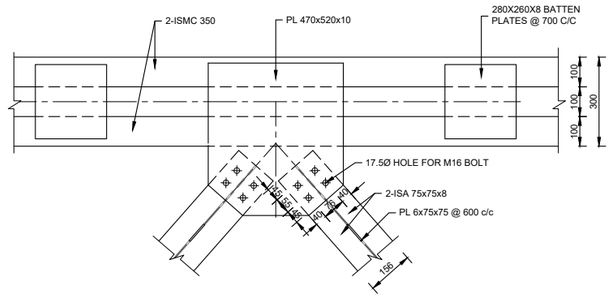
DETAIL 4
SCALE B



DETAIL 5
SCALE B



DETAIL 6
SCALE B



DETAIL 7
SCALE B

SCALE A : 1:100

SCALE B : 1:15

GK-TB-S-04	TAMOR BRIDGE ELEVATION & SECTIONS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

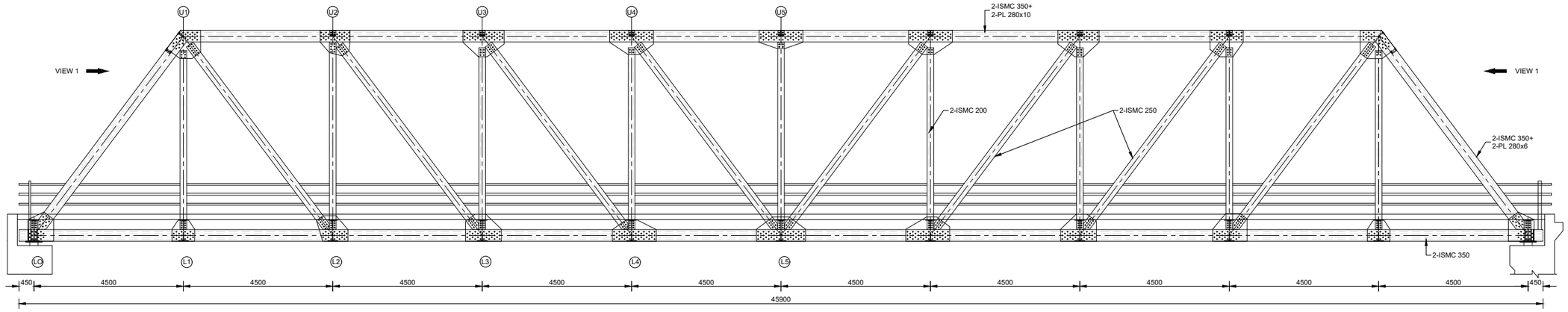
ACCESS ROAD
TAMOR BRIDGE
TOP TIE PLAN & DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

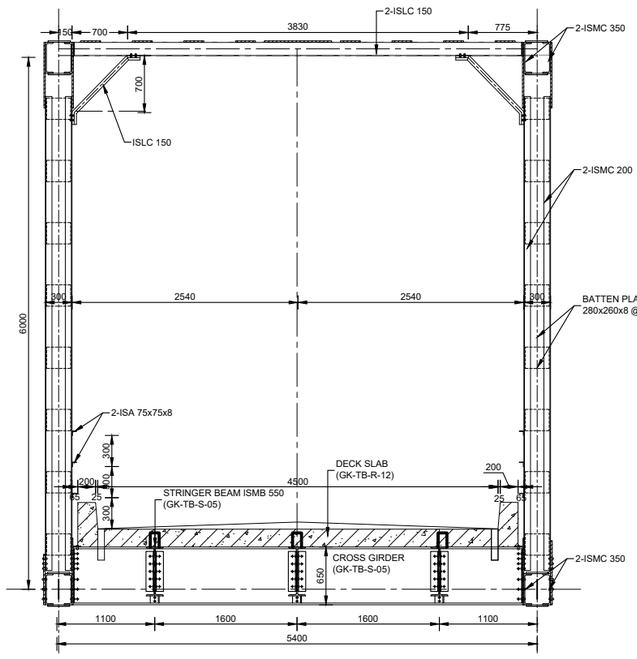
DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-TB-S-03
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



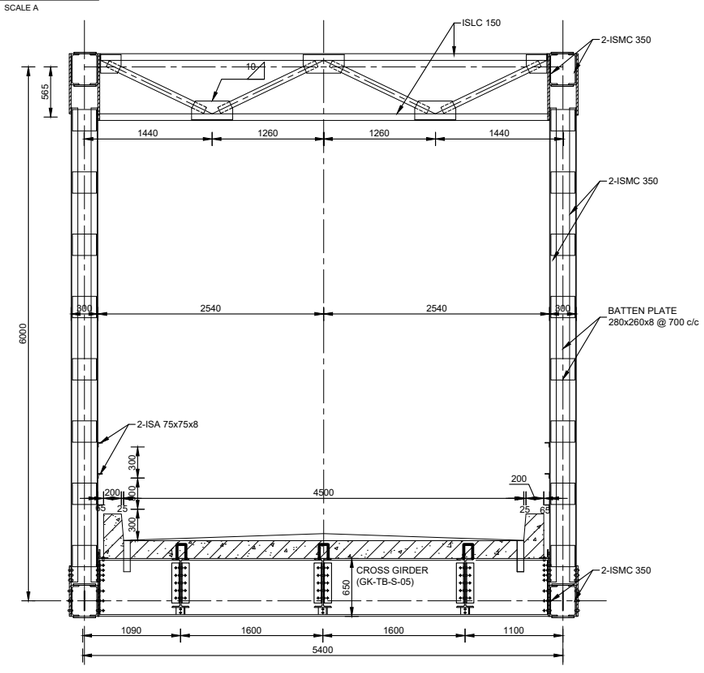
SIDE ELEVATION

SCALE A



SECTION A (GK-TB-S-02)

SCALE B



VIEW 1 (GK-TB-S-03)

SCALE B

SCALE A : 1:100

SCALE B : 1:50

GK-TB-S-03	TAMOR BRIDGE TOP TIE PLAN & DETAILS
GK-TB-S-02	TAMOR BRIDGE BOTTOM TIE PLAN & DETAILS
DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

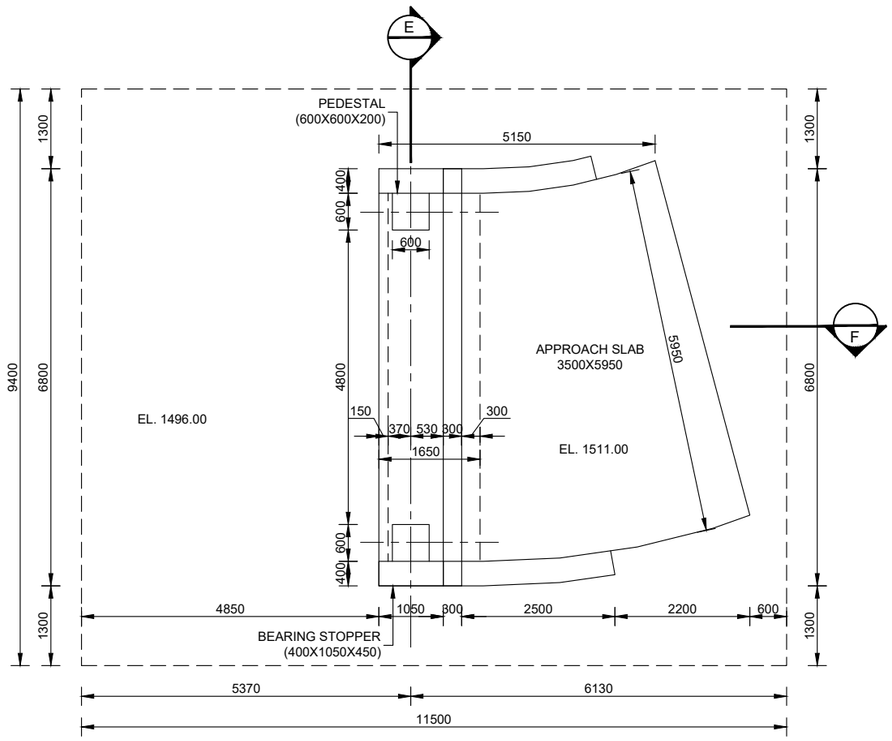
ACCESS ROAD
TAMOR BRIDGE
ELEVATION & SECTIONS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

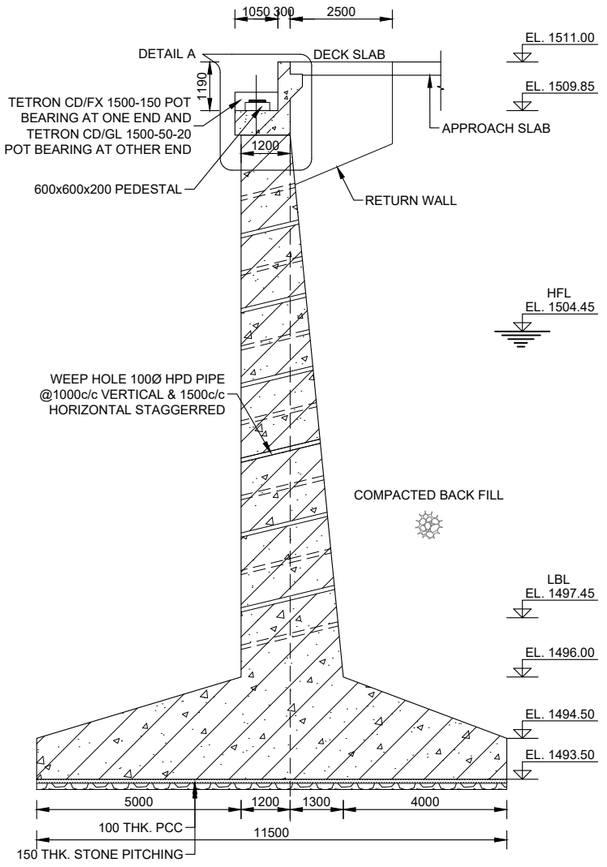
DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-TB-S-04
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



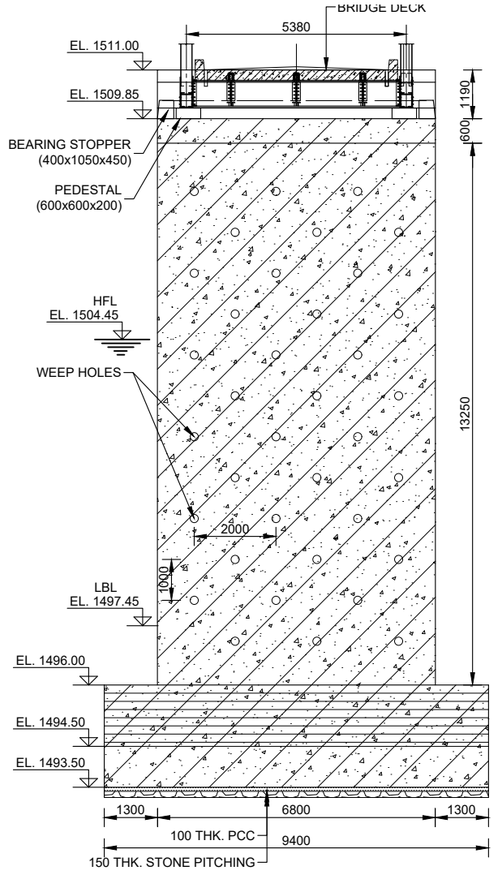
RIGHT ABUTMENT PLAN

SCALE B



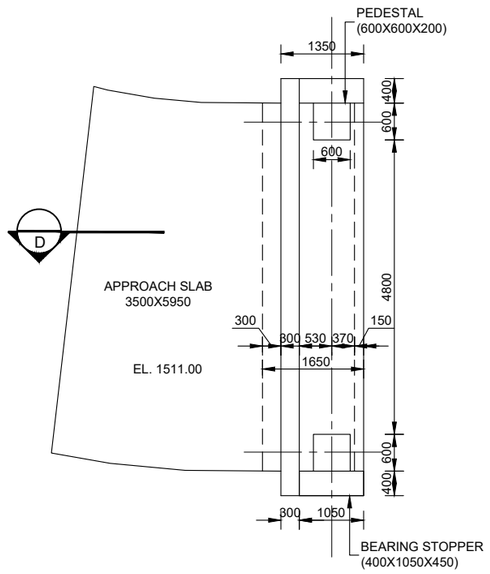
SECTION F

SCALE A



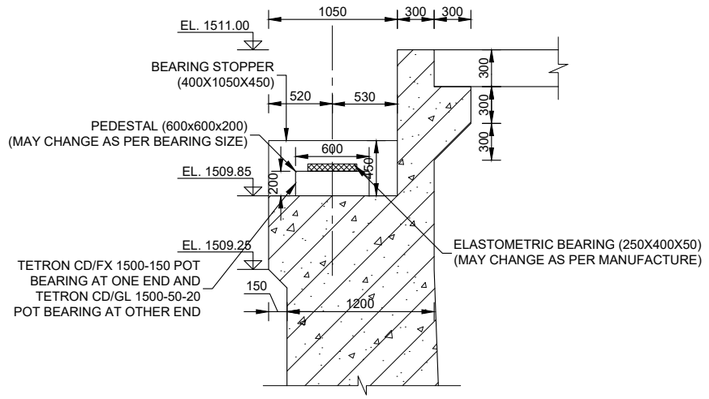
SECTION E

SCALE A



LEFT ABUTMENT PLAN

SCALE B



DETAIL A

SCALE A

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

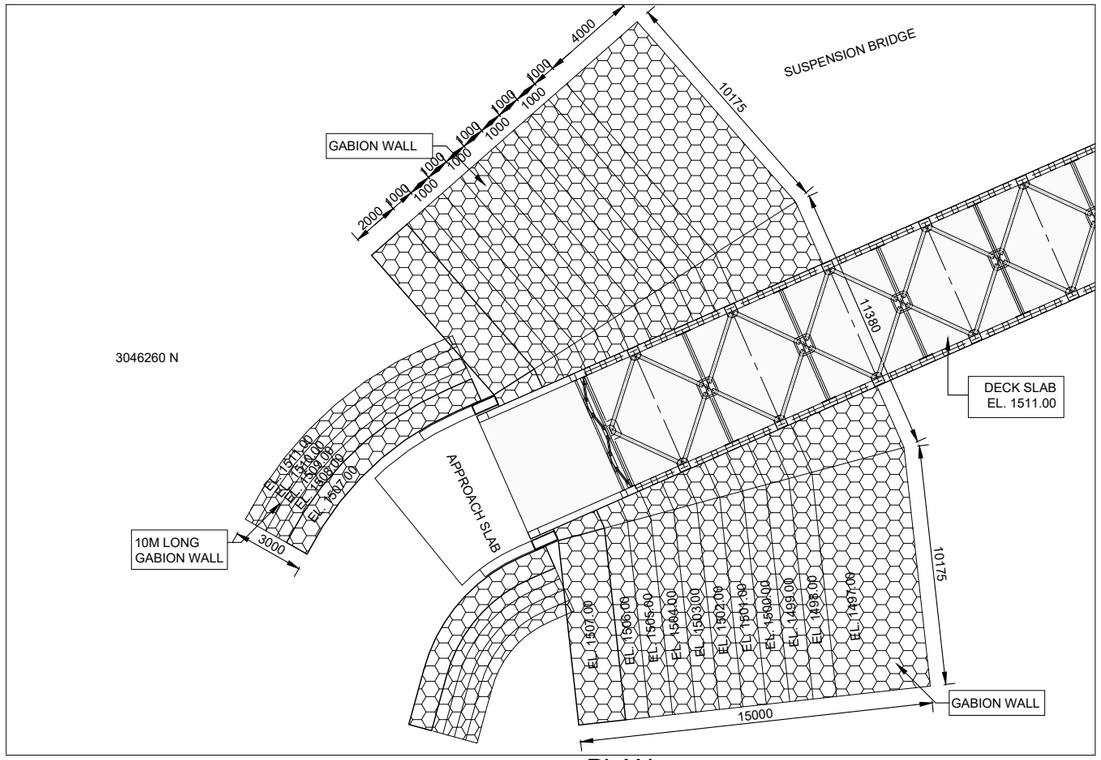
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

ACCESS ROAD
TAMOR BRIDGE
ABUTMENT PLAN & SECTIONS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

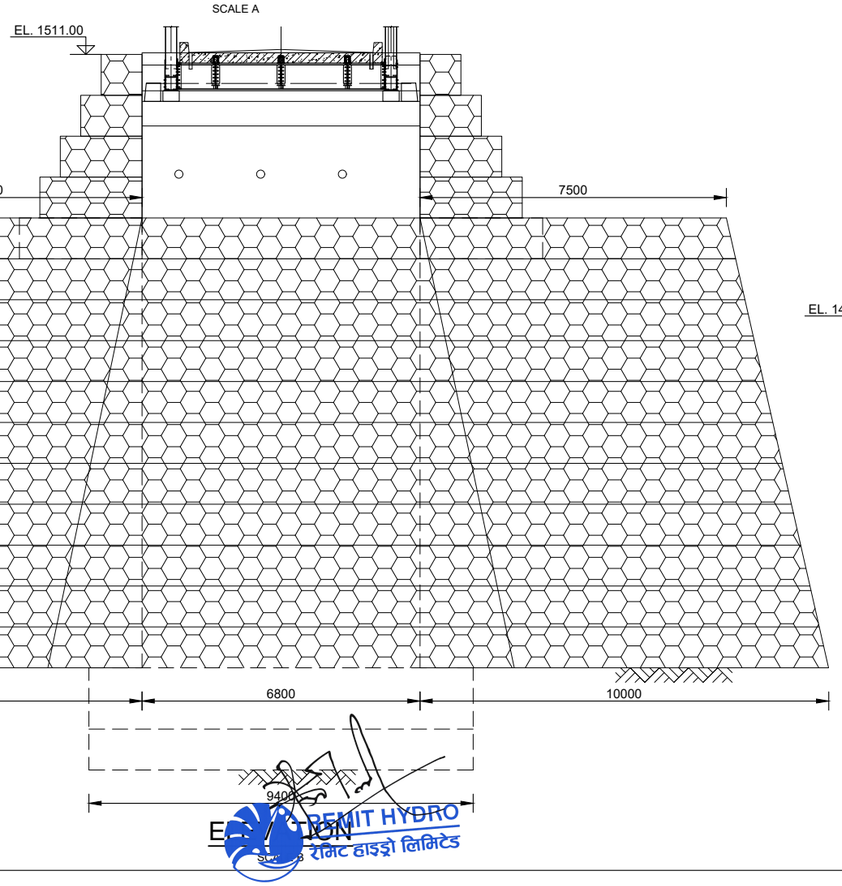
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-TB-S-05
SCALE: NTS	



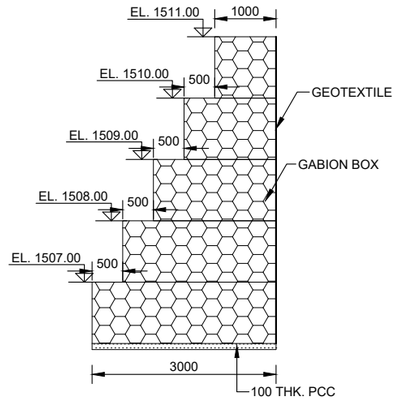
PLAN

SCALE A



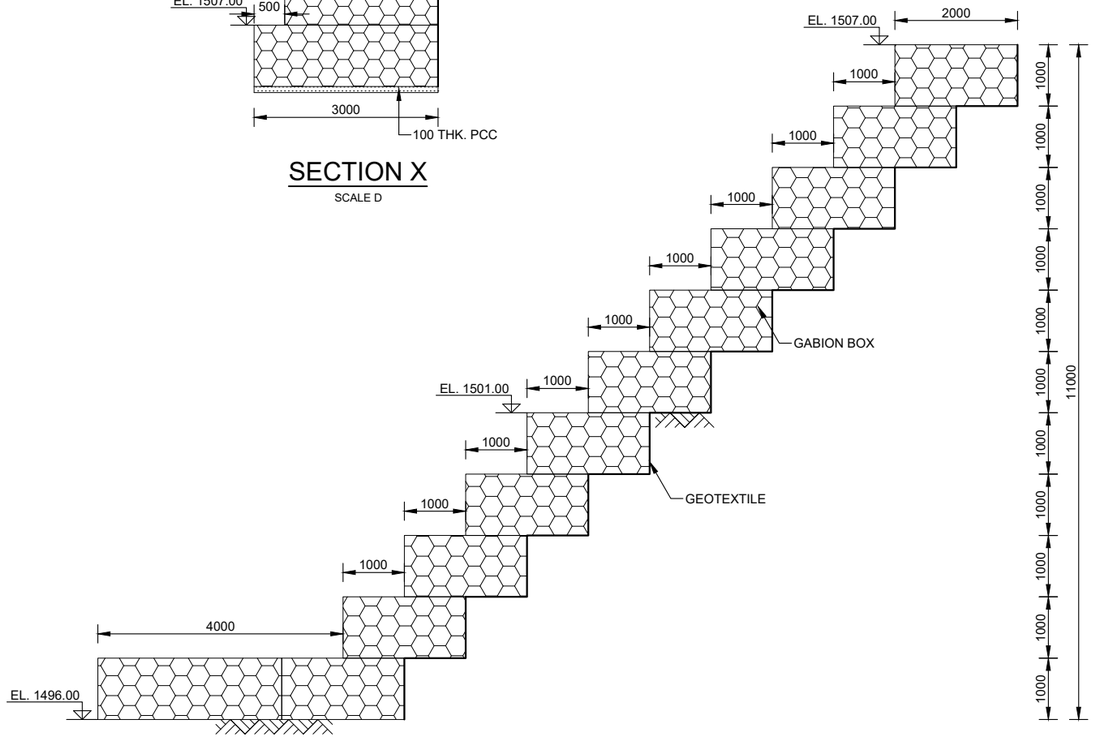
ELEVATION

SCALE B



SECTION X

SCALE D



SECTION Y

SCALE D

2.5 0 2.5 5 7.5 10 12.5M

SCALE A : 1:250

1.5 0 1.5 3 4.5 6 7.5M

SCALE B : 1:150

1 0 1 2 3 4 5M

SCALE C: 1:100

0.75 0 0.75 1.5 1.25 3 3.75M

SCALE D : 1:75

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED

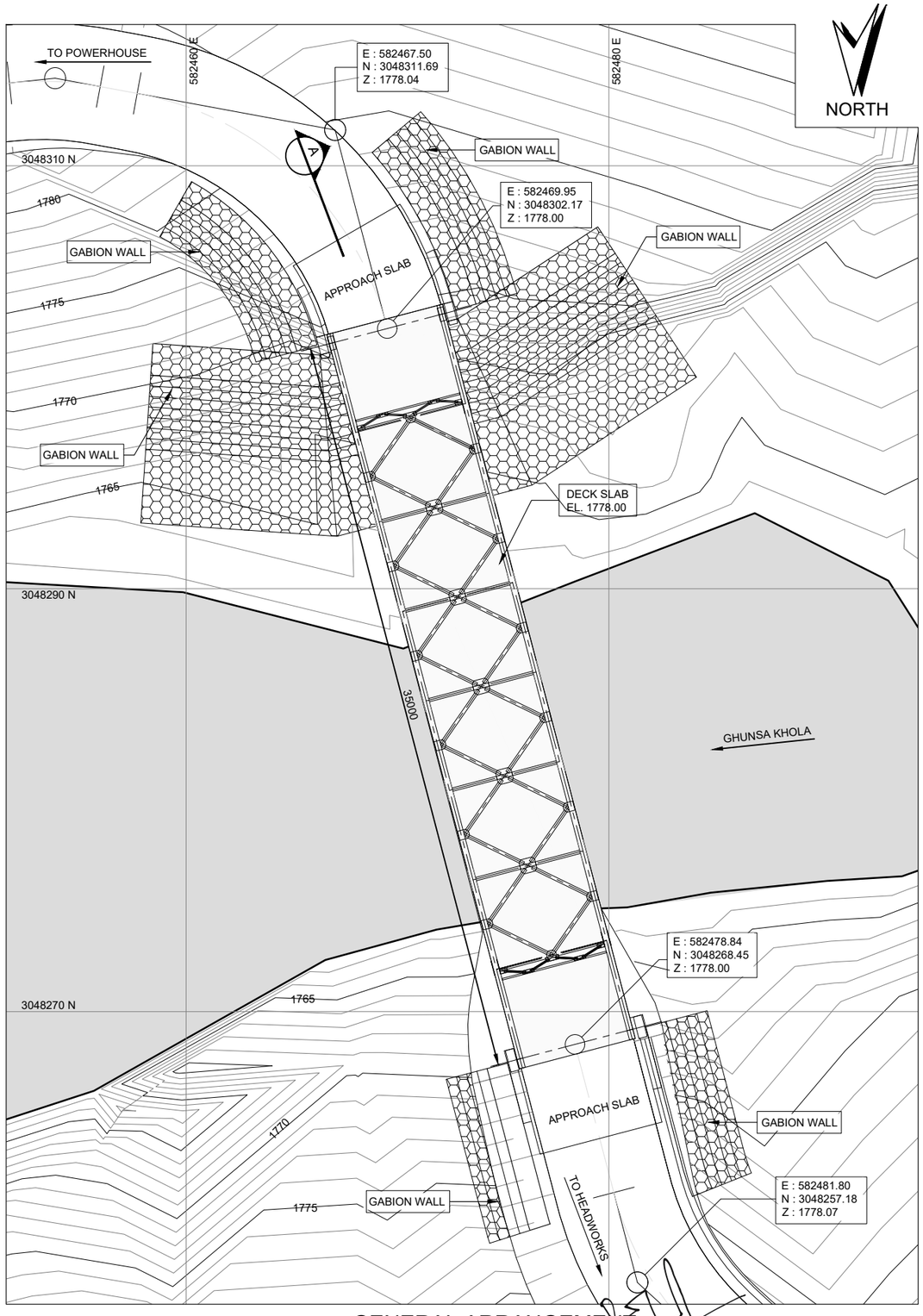
KATHMANDU, NEPAL

ACCESS ROAD
TAMOR BRIDGE
RIGHT BANK WING WALL DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

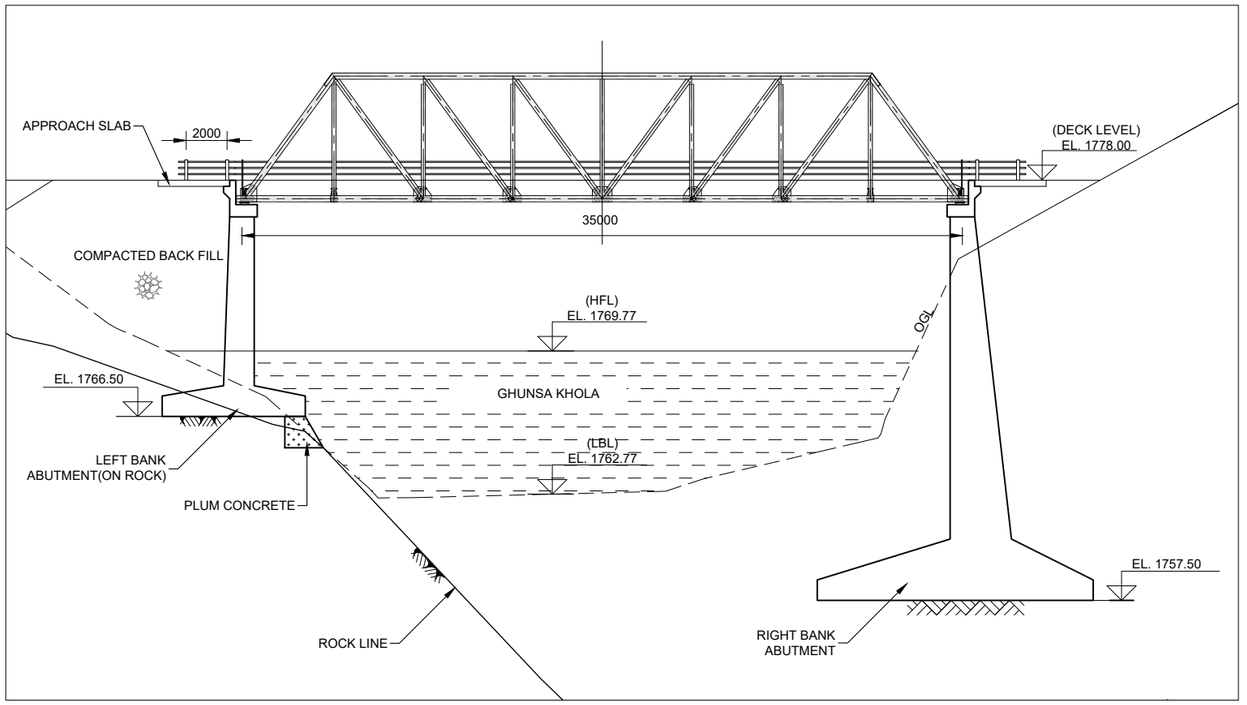
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO
SCALE: NTS	GK-TB-C-06



GENERAL ARRANGEMENT

SCALE B



SECTION A

SCALE A

3 0 3 6 9 12 15M

SCALE A : 1:300

2.5 0 2.5 5 7.5 10 12.5M

SCALE B : 1:250

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

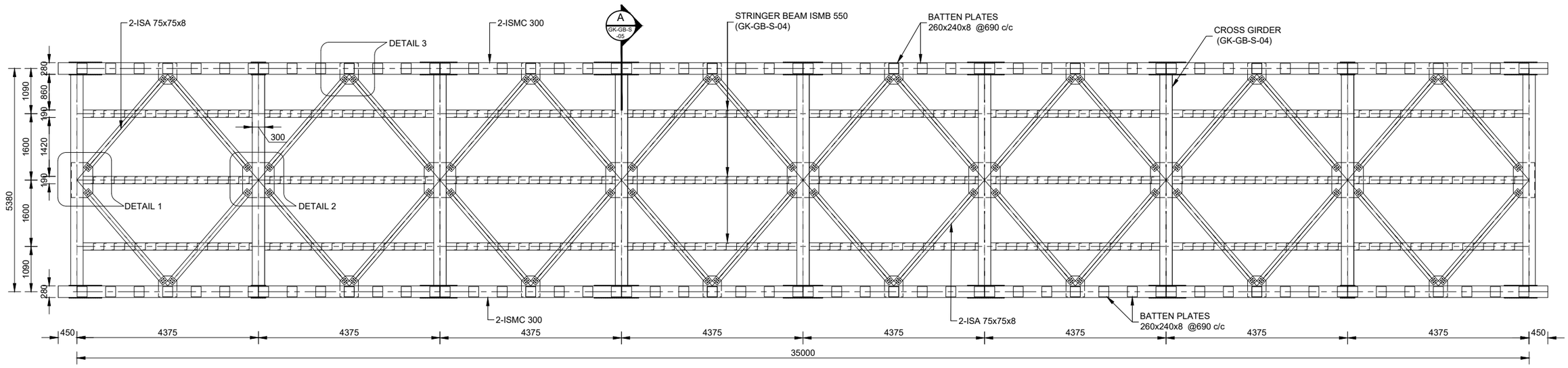
ACCESS ROAD
GHUNSA BRIDGE
GENERAL ARRANGEMENT

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

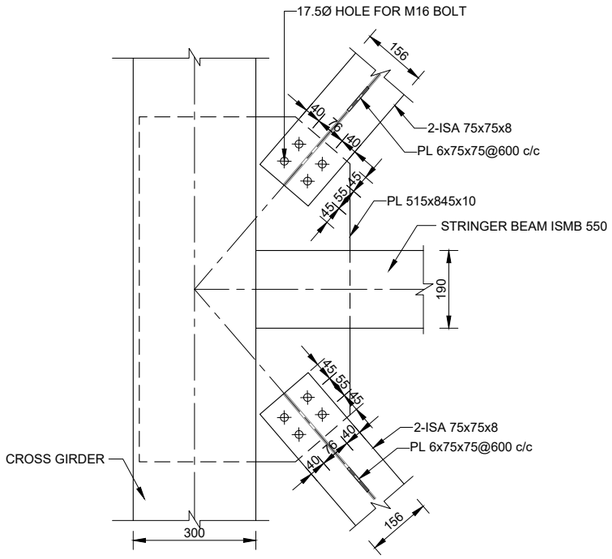
DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	
SCALE: NTS	GK-GB-L-01

REMIT HYDRO
रेमित हाइड्रो लिमिटेड



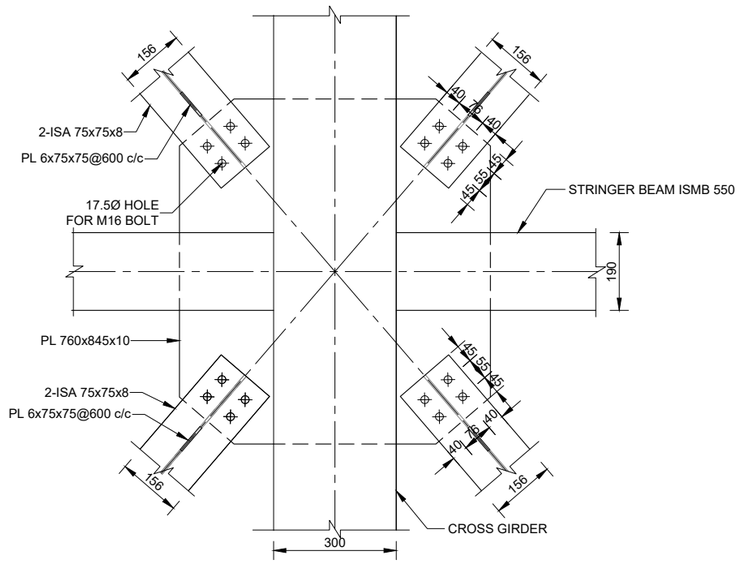
BOTTOM TIE PLAN

SCALE A



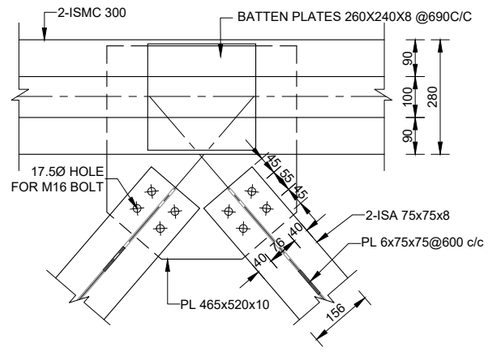
DETAIL 1

SCALE B



DETAIL 2

SCALE B



DETAIL 3

SCALE B

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

ACCESS ROAD
GHUNSA BRIDGE
BOTTOM TIE PLAN & DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

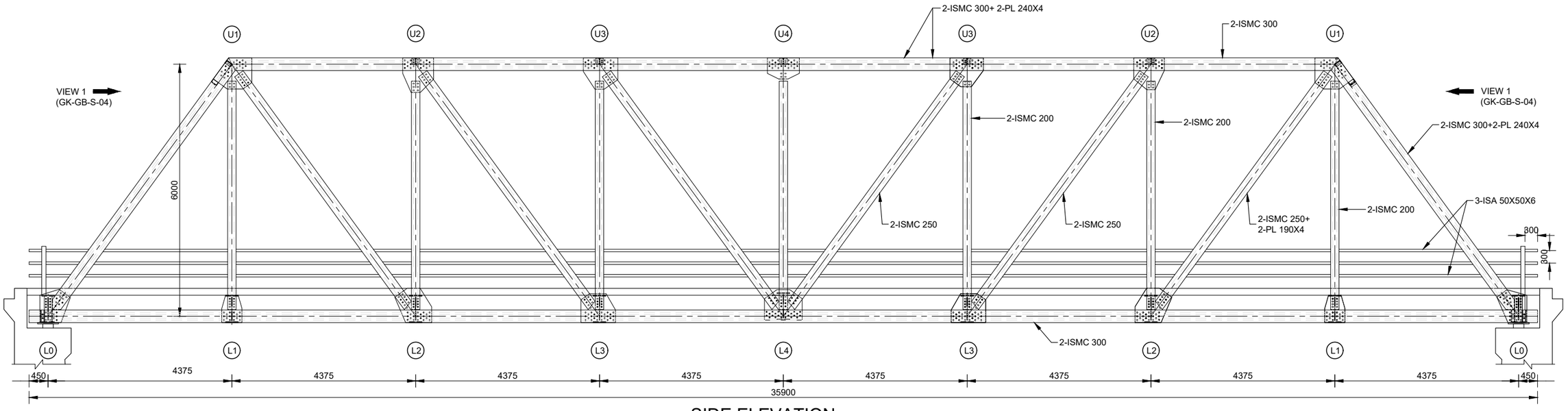
1 0 1 2 3 4 5M
SCALE A : 1:100

0.15 0 0.15 0.30 0.45 0.60 0.75M
SCALE B : 1:15

GK-GB-S-04	GHUNSA BRIDGE ELEVATION & SECTIONS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

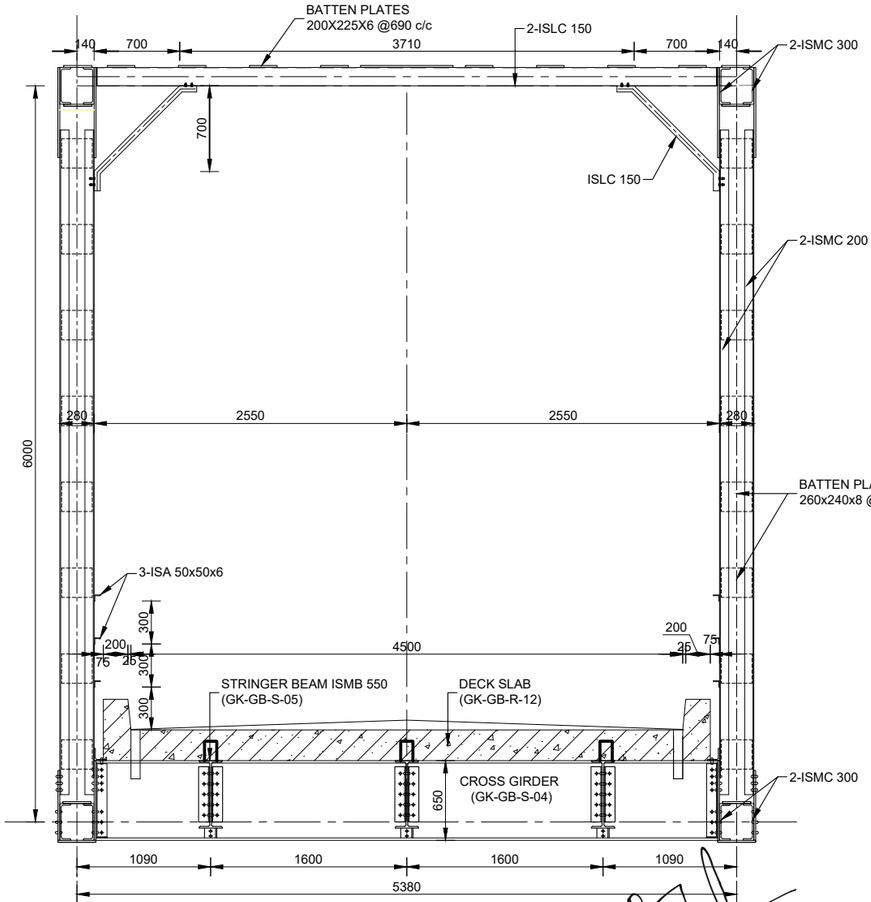
DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-GB-S-02
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



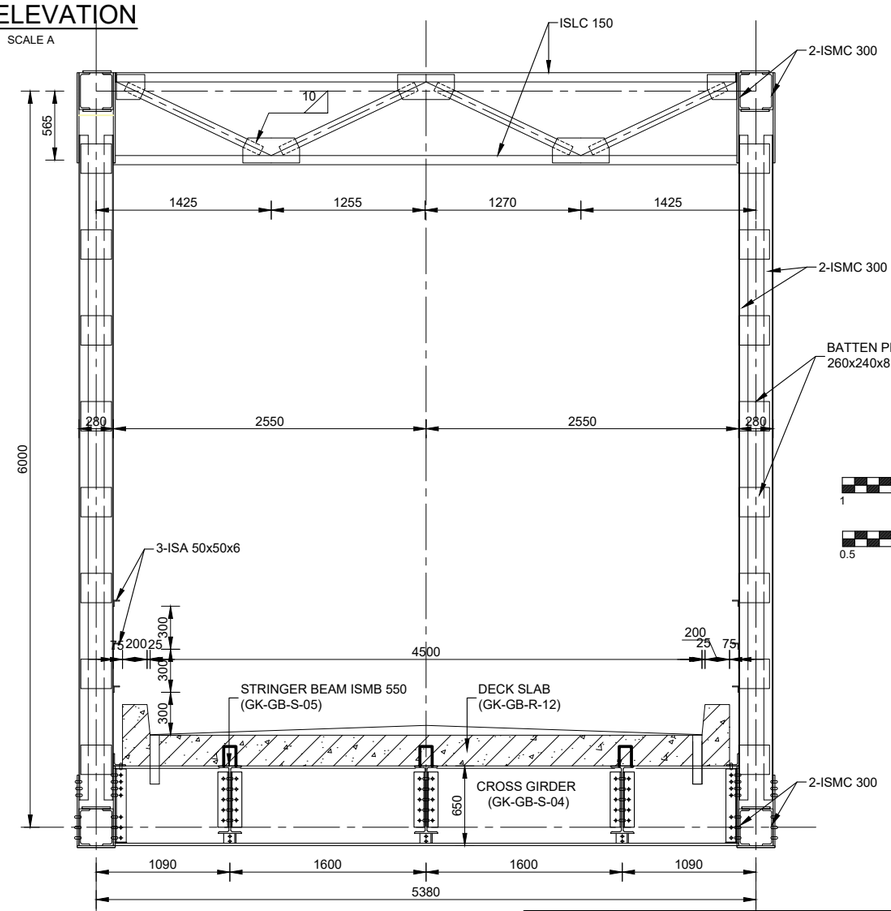
SIDE ELEVATION

SCALE A



SECTION A (GK-GB-S-02)

SCALE B



VIEW 1 (GK-GB-S-03)

SCALE B

1 0 1 2 3 4 5M

SCALE A : 1:100

0.5 0 0.5 0.10 0.15 0.2 0.25M

SCALE B : 1:50

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

ACCESS ROAD
GHUNSA BRIDGE
ELEVATION & SECTIONS

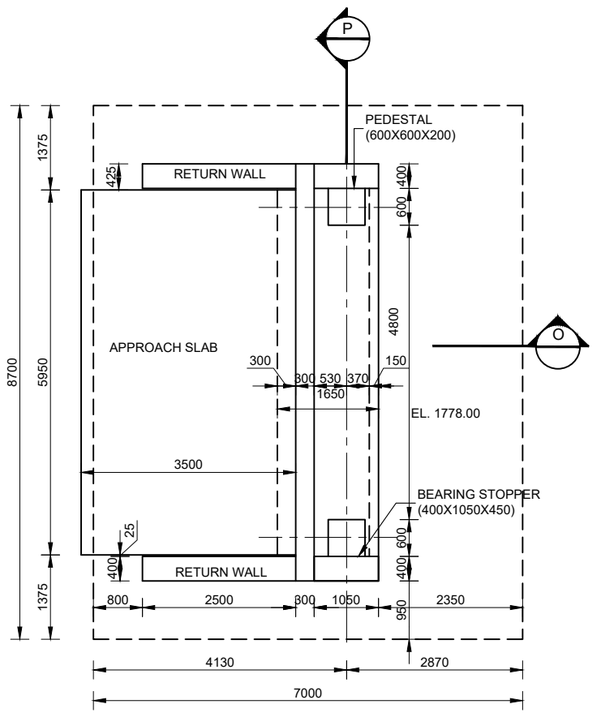
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

GK-GB-S-03	GHUNSA BRIDGE TOP TIE PLAN & DETAILS
GK-GB-S-02	GHUNSA BRIDGE BOTTOM TIE PLAN & DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

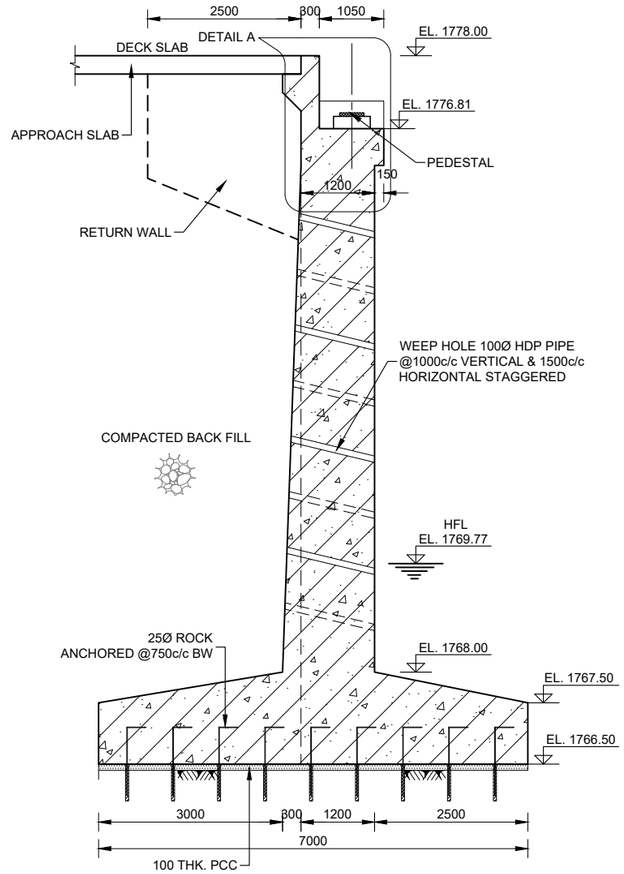
DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-GB-S-04
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



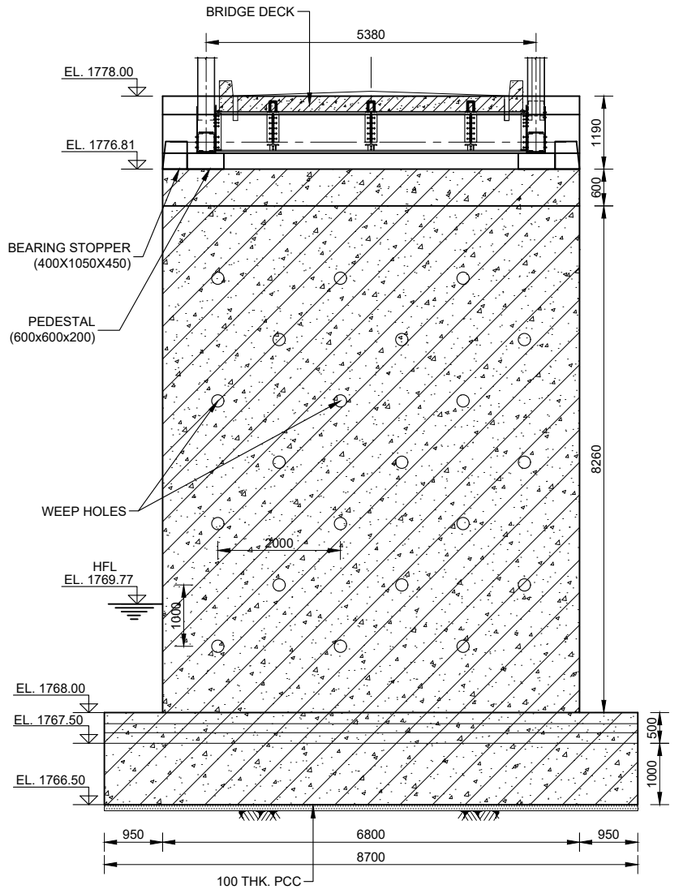
PLAN

SCALE A



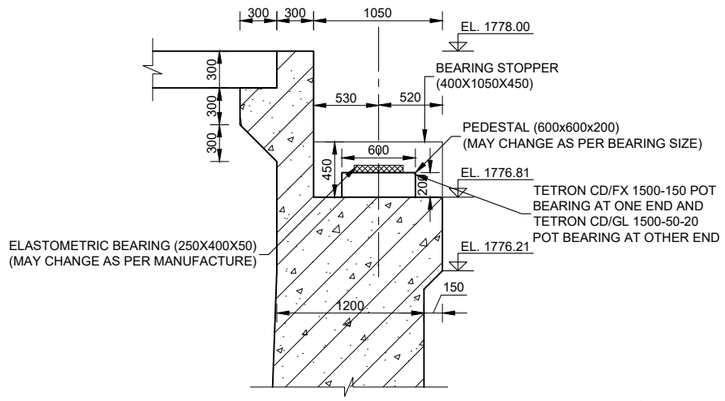
SECTION O

SCALE A



SECTION P

SCALE A



DETAIL A

SCALE A

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

ACCESS ROAD
GHUNSA BRIDGE
LEFT ABUTMENT PLAN & SECTIONS

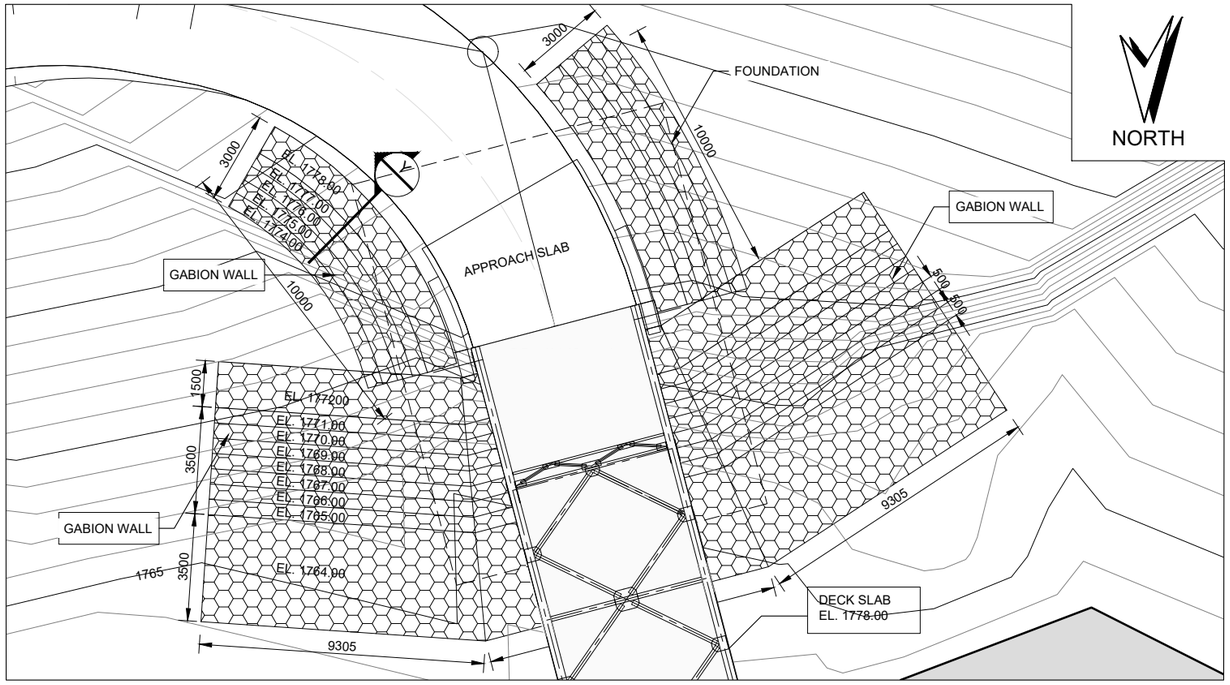
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

1 0 1 2 3 4 5M
SCALE A : 1:100

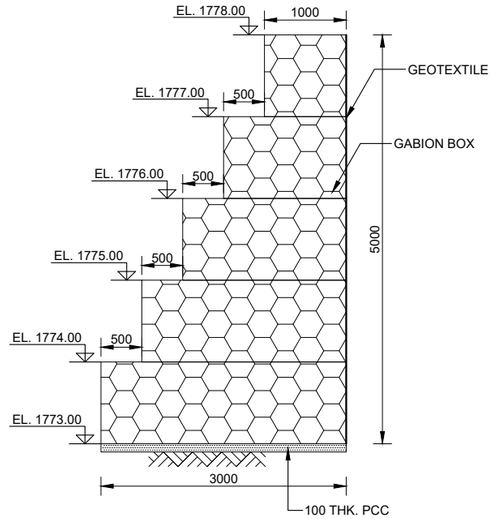
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-GB-C-06
SCALE: NTS	



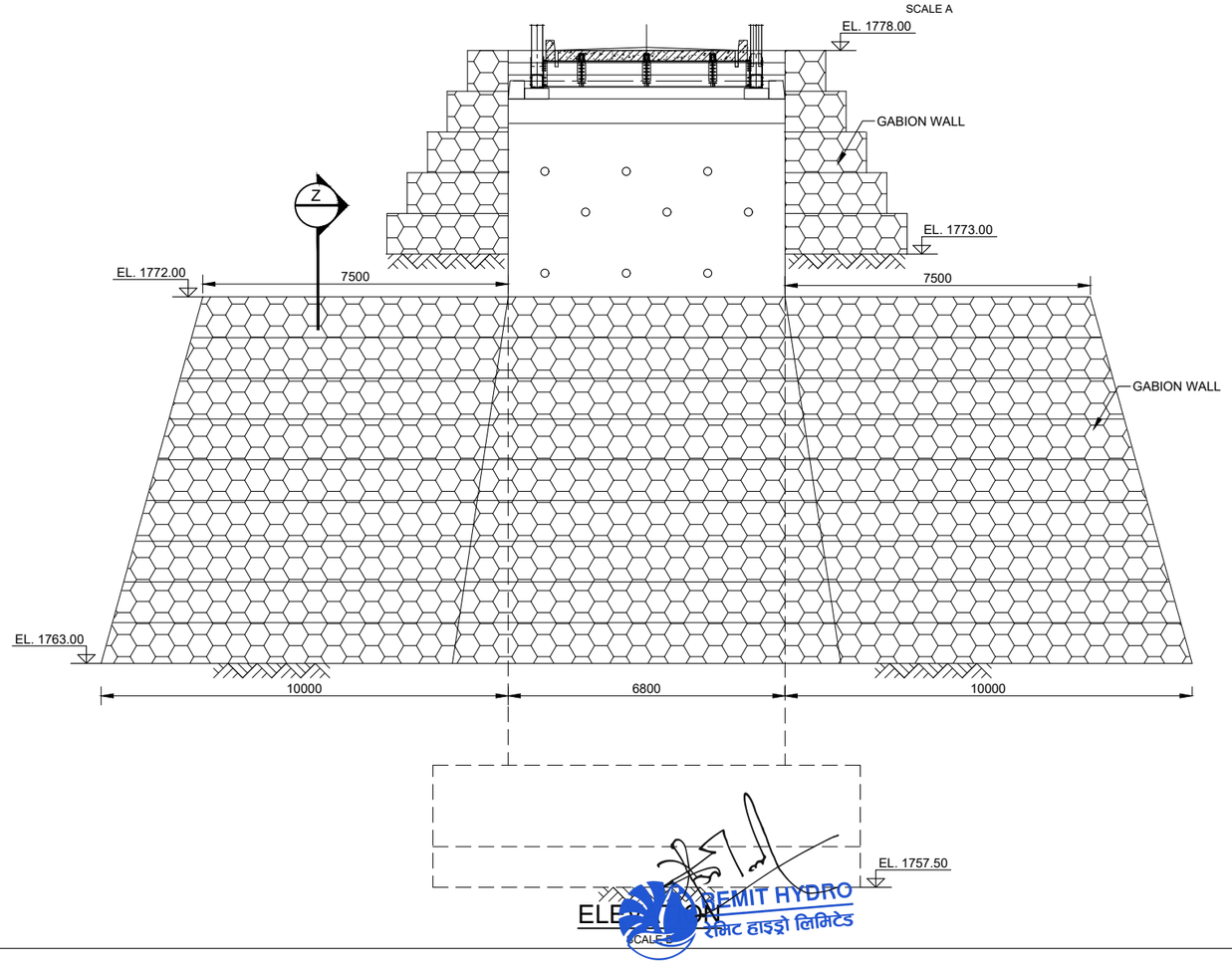
PLAN

SCALE A



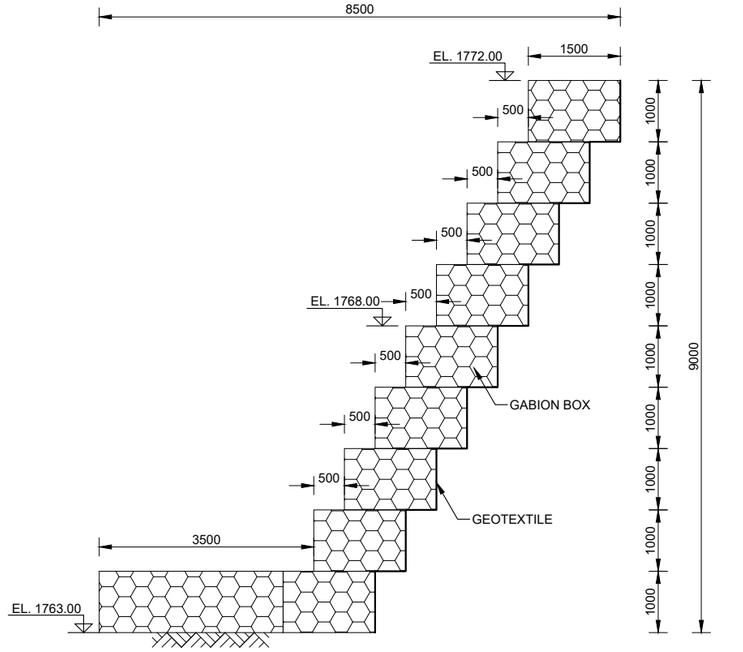
SECTION Y

SCALE C



ELEVATION

SCALE B



SECTION Z

SCALE C

2 0 2 4 6 8 10M
SCALE A : 1:200

1.5 0 1.5 3 4.5 6 7.5M
SCALE B : 1:150

1 0 1 2 3 4 5M
SCALE C : 1:100

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

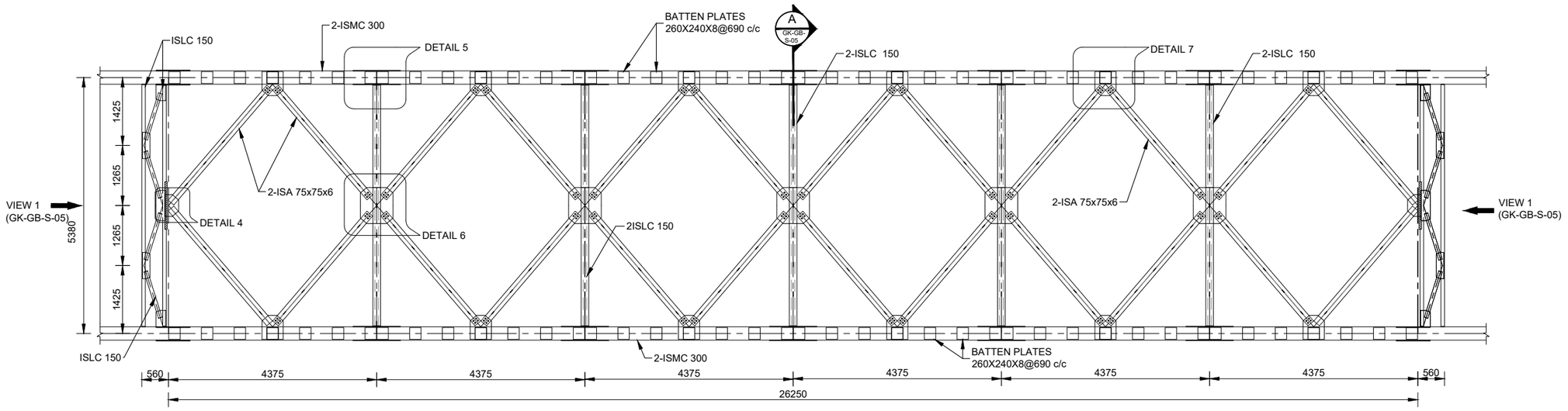
ACCESS ROAD
GHUNSA BRIDGE
RIGHT BANK WING WALL

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

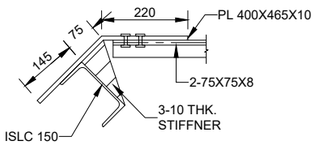
DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-GB-C-07
SCALE: NTS	

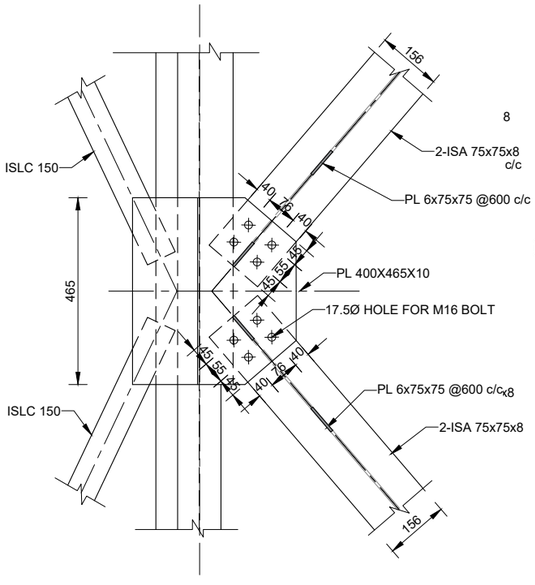
DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS



TOP TIE PLAN

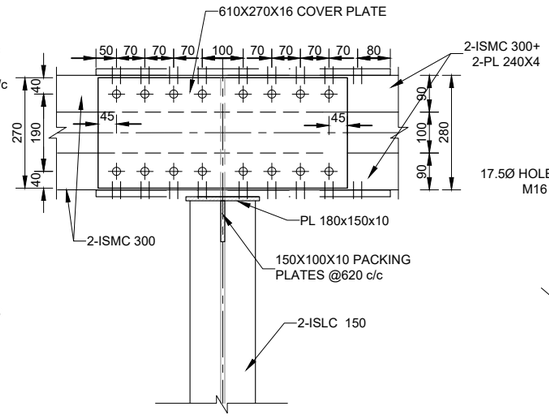
SCALE A





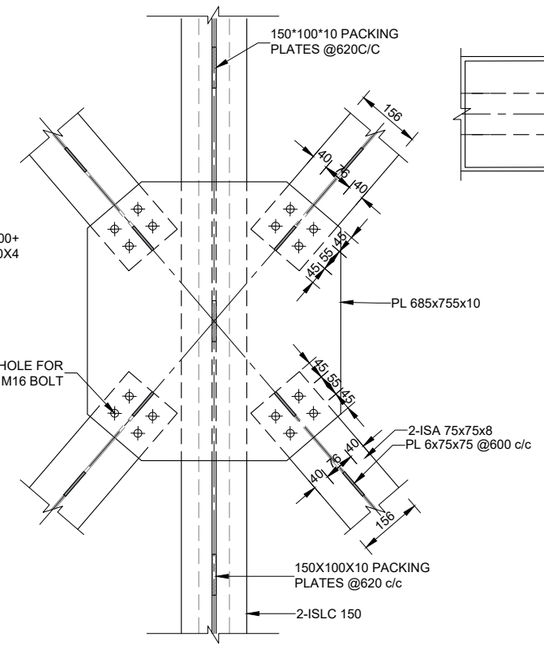
DETAIL 4

SCALE B



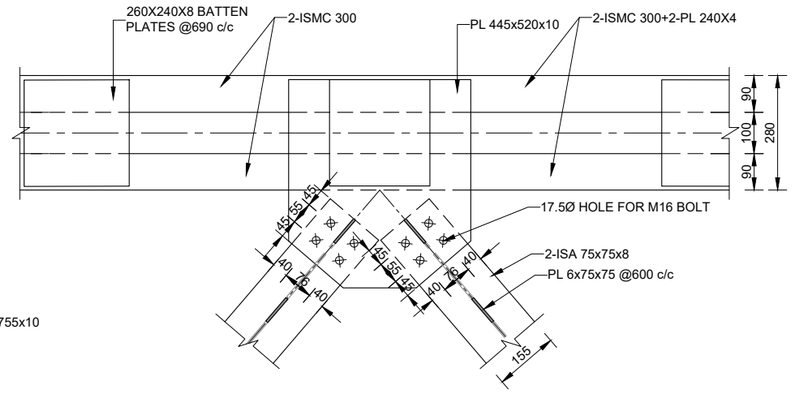
DETAIL 5

SCALE B



DETAIL 6

SCALE B



DETAIL 7

SCALE B

1 0 1 2 3 4 5M

SCALE A : 1:100

0.15 0 0.15 0.30 0.45 0.60 0.75M

SCALE B : 1:15

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

ACCESS ROAD
GHUNSA BRIDGE
TOP TIE PLAN & DETAILS

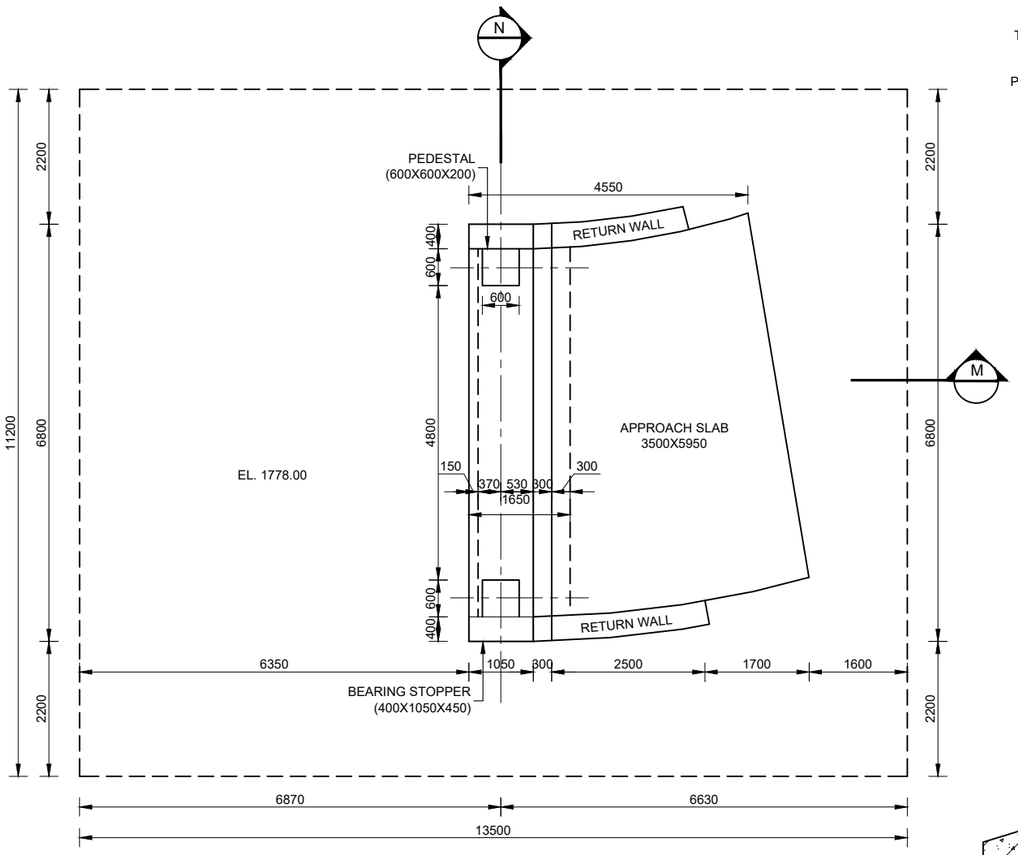
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

GK-GB-S-04	GHUNSA BRIDGE ELEVATION AND SECTIONS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

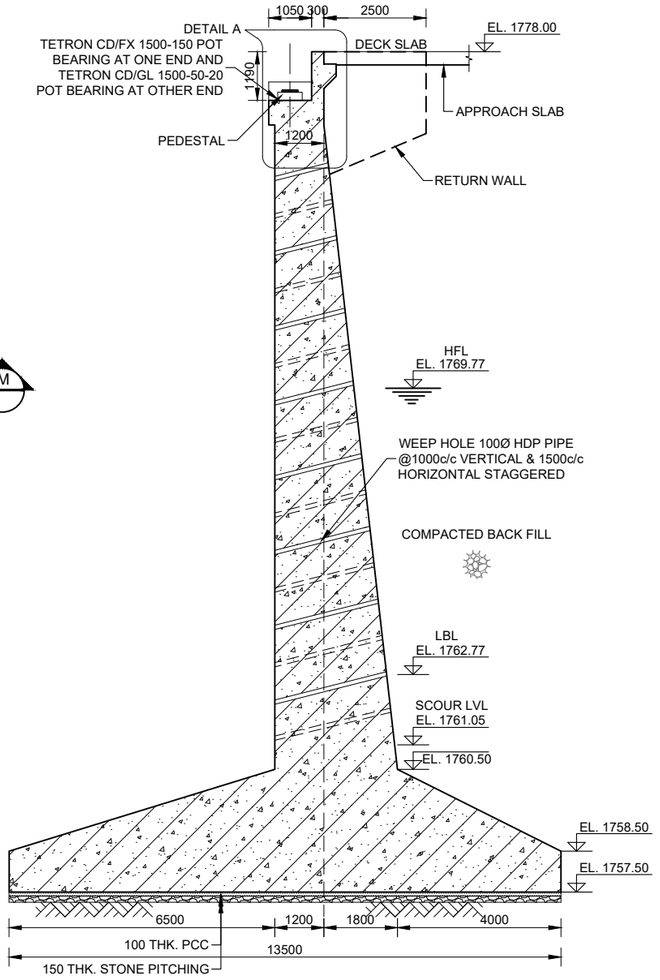
DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO
SCALE: NTS	GK-GB-S-03

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



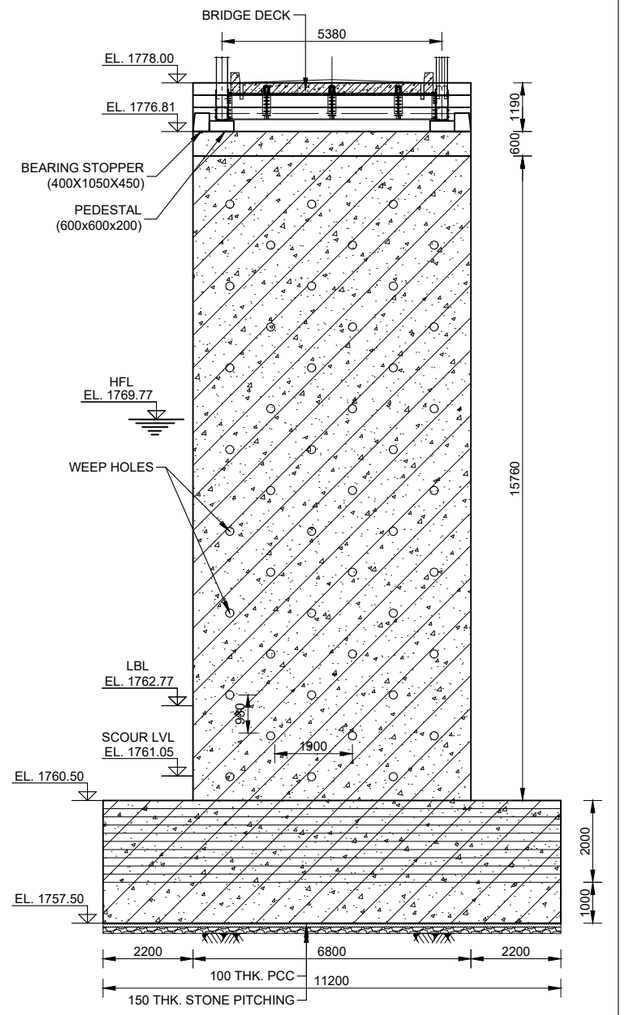
PLAN

SCALE A



SECTION M

SCALE A



SECTION N

SCALE A

1.5 0 1.5 3 4.5 6 7.5M

SCALE A : 1:150

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

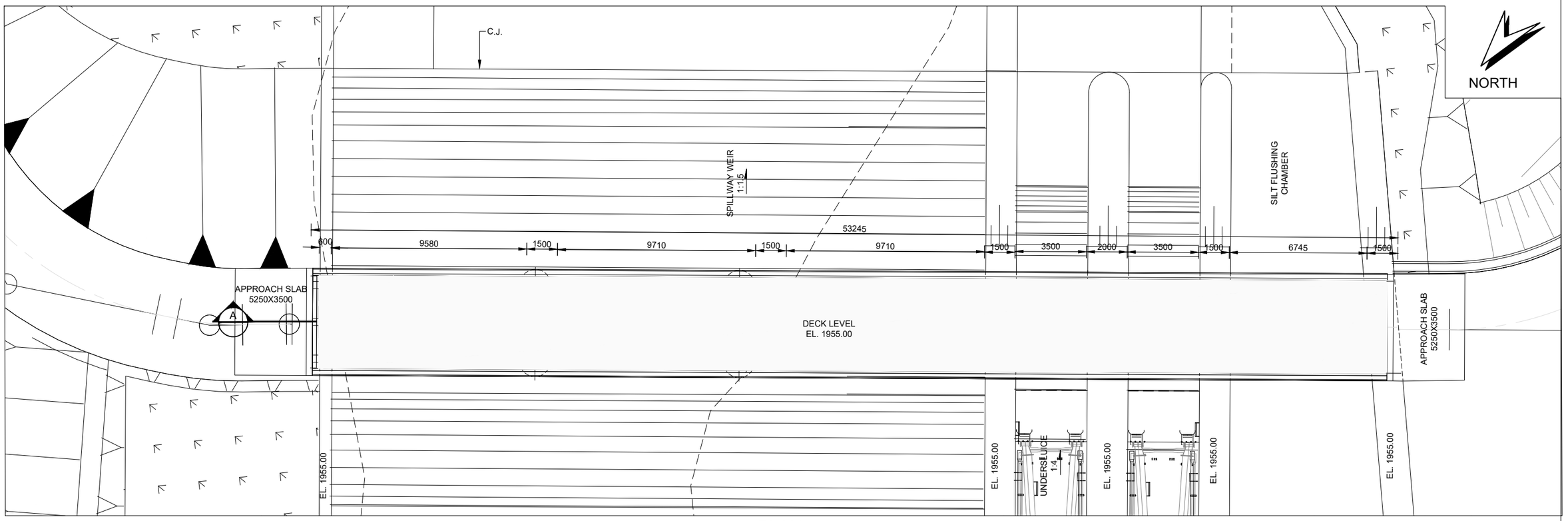
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

ACCESS ROAD
GHUNSA BRIDGE
RIGHT ABUTMENT PLAN & SECTIONS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

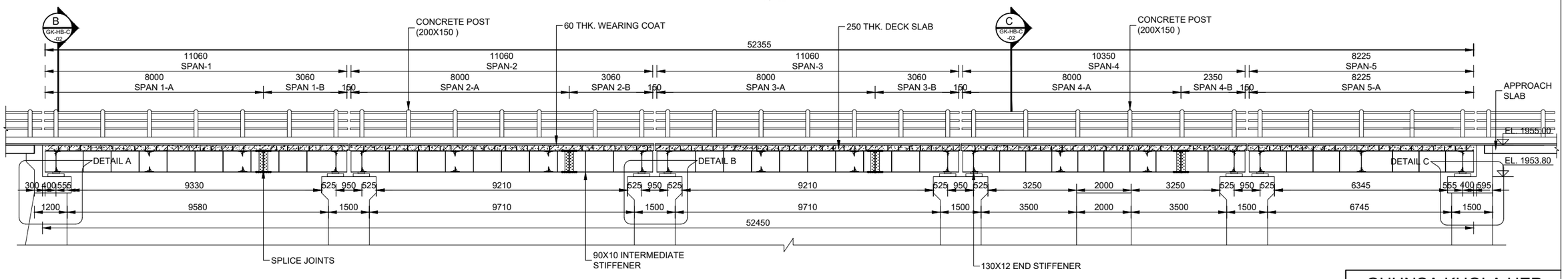
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-GB-C-05
SCALE: NTS	



PLAN

SCALE A



LONGITUDINAL SECTION A

SCALE B

SCALE A : 1:200

SCALE B : 1:150

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

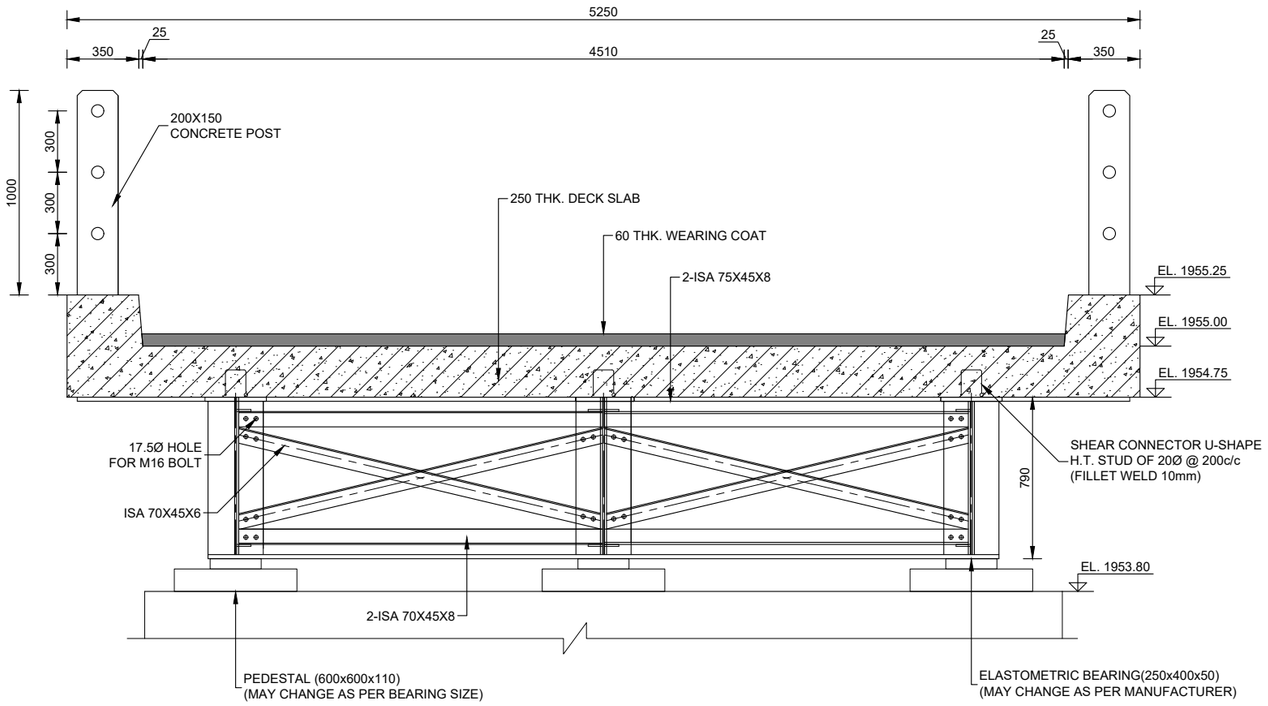
ACCESS ROAD
HEADWORKS BRIDGE
PLAN & SECTIONS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

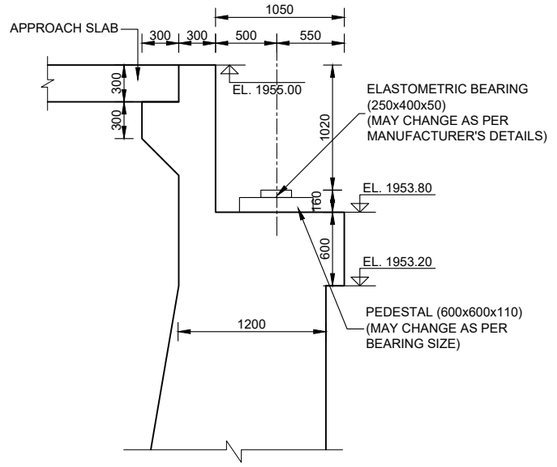
GK-HB-C-02	HEADWORKS BRIDGE SECTION & DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: DR.B. MANDAL	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HB-L-01
SCALE: NTS	



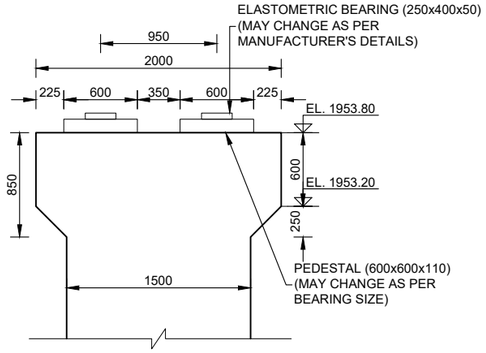
SECTION B

SCALE A



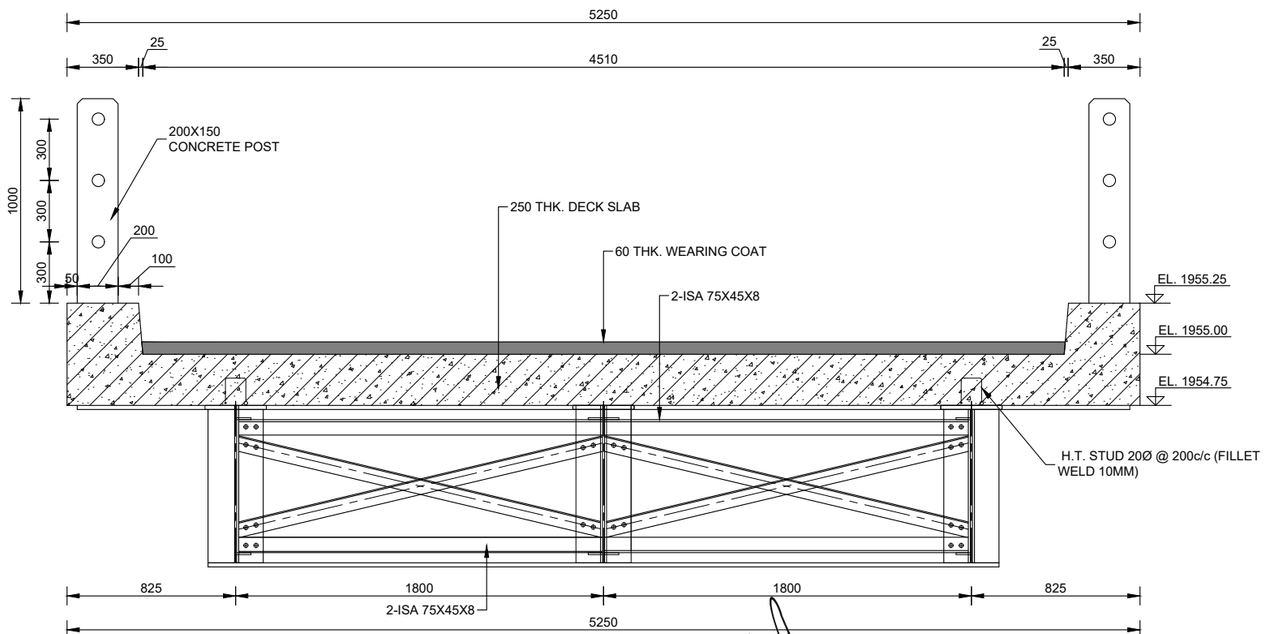
DETAIL A

SCALE B



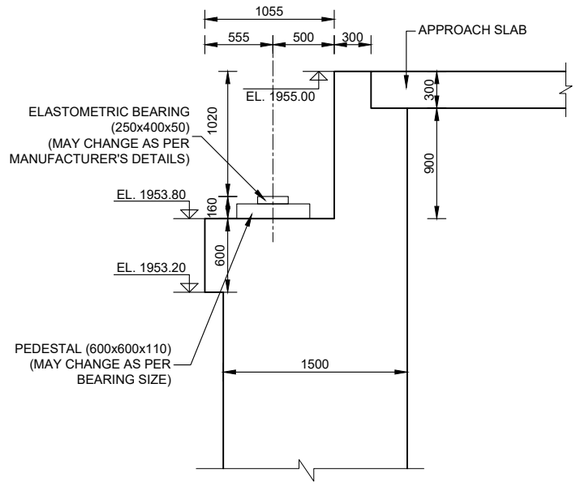
DETAIL B

SCALE B



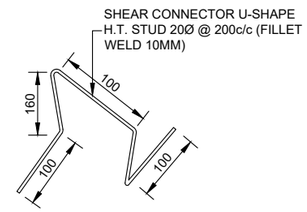
SECTION C

SCALE A



DETAIL C

SCALE B



SHEAR CONNECTOR DETAIL

NOT TO SCALE

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

0.3 0 0.3 0.6 0.9 1.2 1.5M
SCALE A : 1:30

0.5 0 0.5 1 1.5 2 2.5M
SCALE B : 1:50

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

ACCESS ROAD
HEADWORKS BRIDGE
SECTIONS & DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

GK-HB-L-01	ACCESS ROAD HEADWORKS BRIDGE PLAN & SECTIONS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HB-S-02
SCALE: NTS	

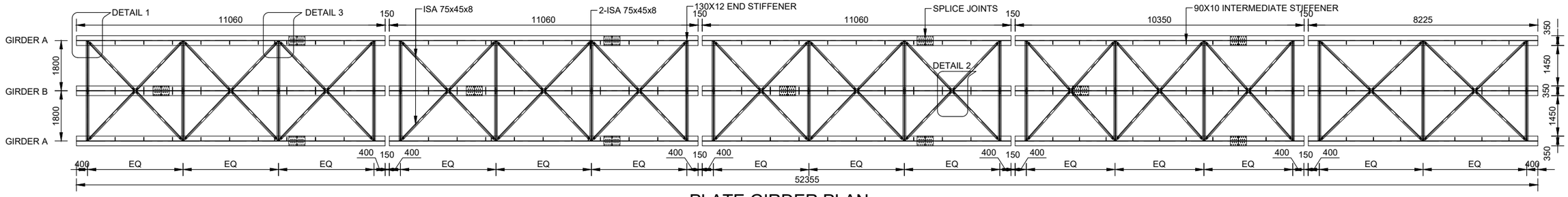
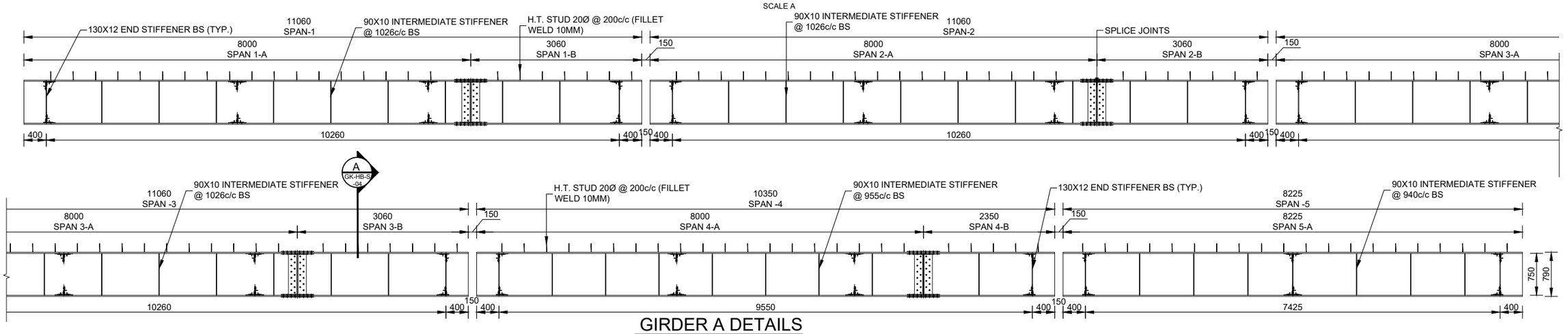


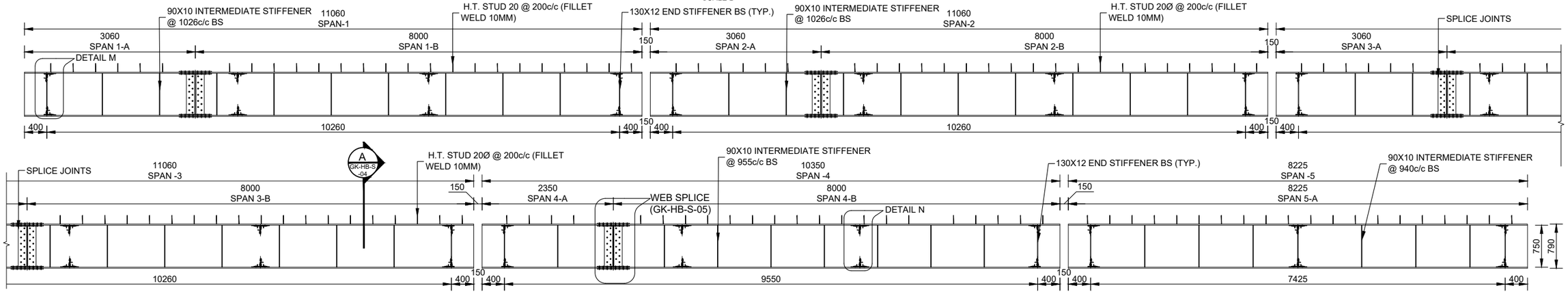
PLATE GIRDER PLAN

SCALE A



GIRDER A DETAILS

SCALE B



GIRDER B DETAILS

SCALE B

1.5 0 1.5 3 4.5 6 7.5M
SCALE A : 1:150

0.75 0 0.75 1.5 2.25 3 3.75M
SCALE B : 1:75

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

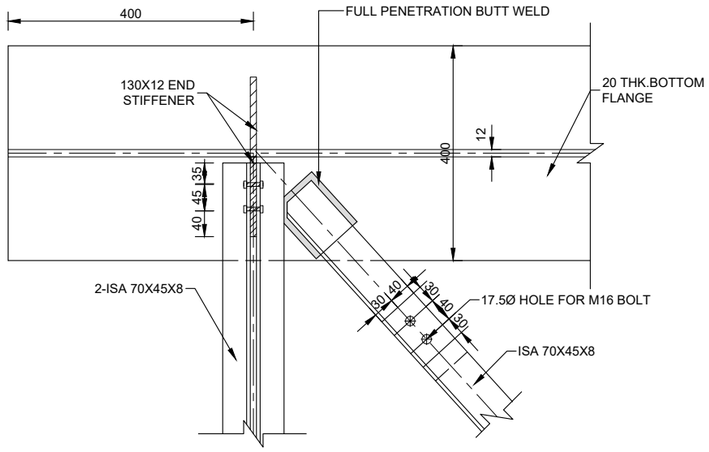
ACCESS ROAD
HEADWORKS BRIDGE
PLATE GIRDER DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

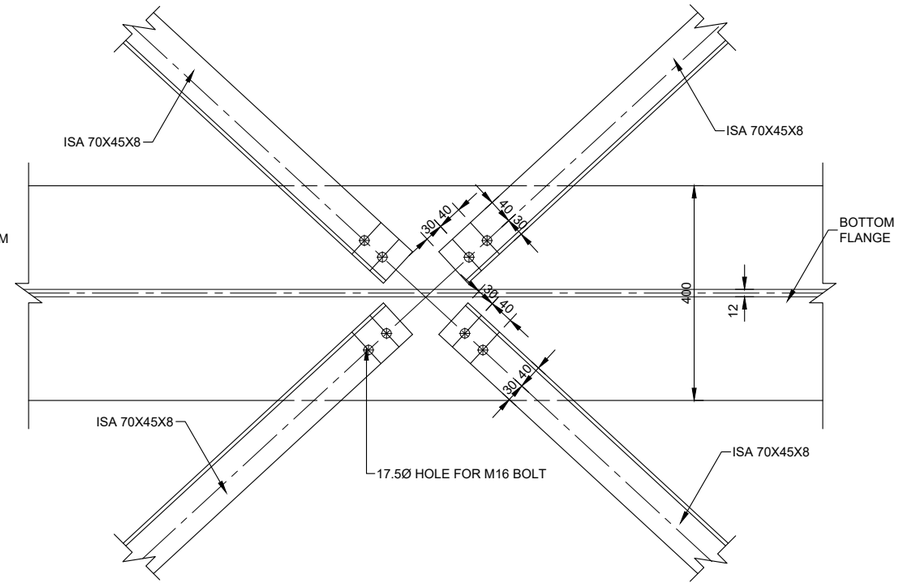
GK-HB-S-05	HEADWORKS BRIDGE GIRDER AND SPLICE DETAILS
GK-HB-S-04	HEADWORKS BRIDGE BOTTOM BRACING AND GIRDER DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HB-S-03
SCALE: NTS	



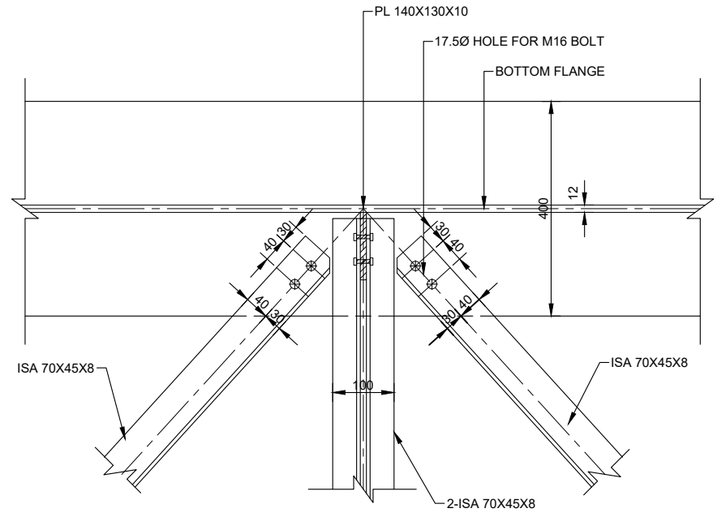
DETAIL 1

SCALE A



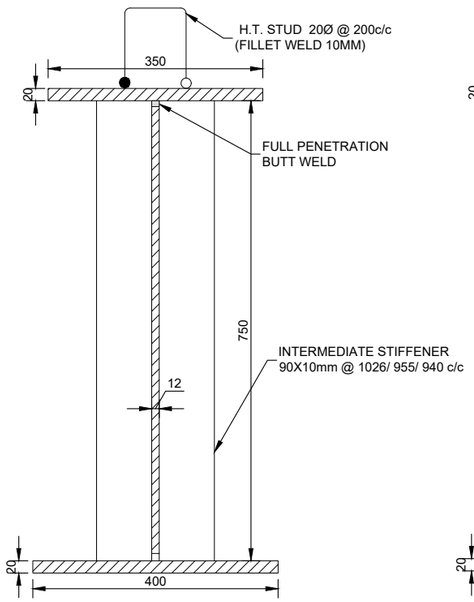
DETAIL 2

SCALE A



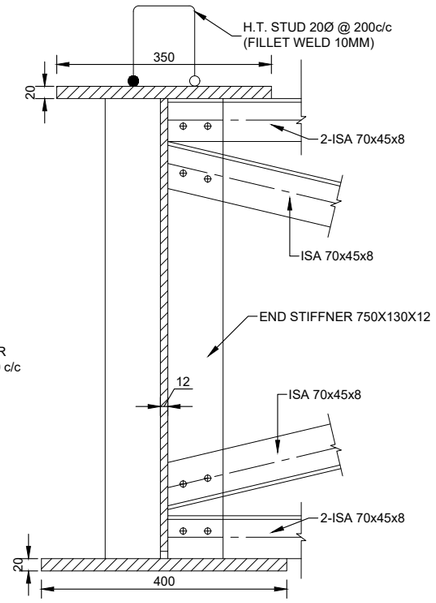
DETAIL 3

SCALE A



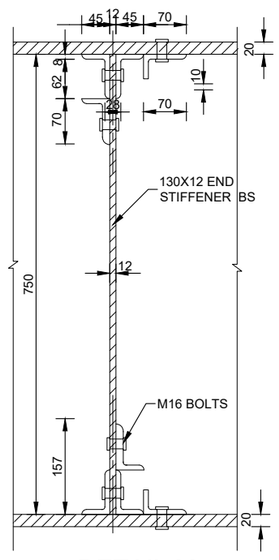
SECTION A

SCALE A



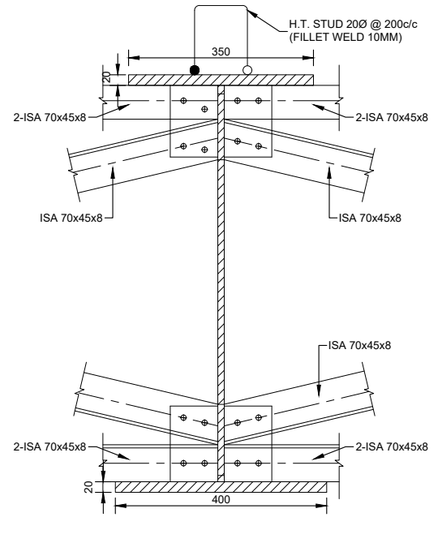
DETAIL M (SIDE VIEW)

SCALE A



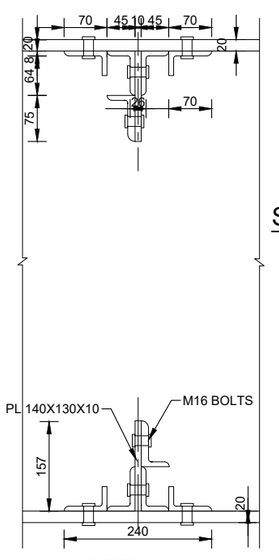
DETAIL M

SCALE A



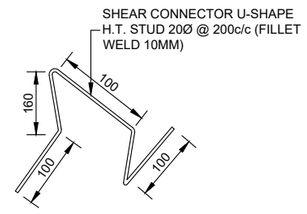
DETAIL N (SIDE VIEW)

SCALE A



DETAIL N

SCALE A



SHEAR CONNECTOR DETAIL

NOT TO SCALE

0.1 0 0.1 0.2 0.3 0.4 0.5M

SCALE A : 1:10

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GK-HB-S-03	HEADWORKS BRIDGE PLATE GIRDER DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP

TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED

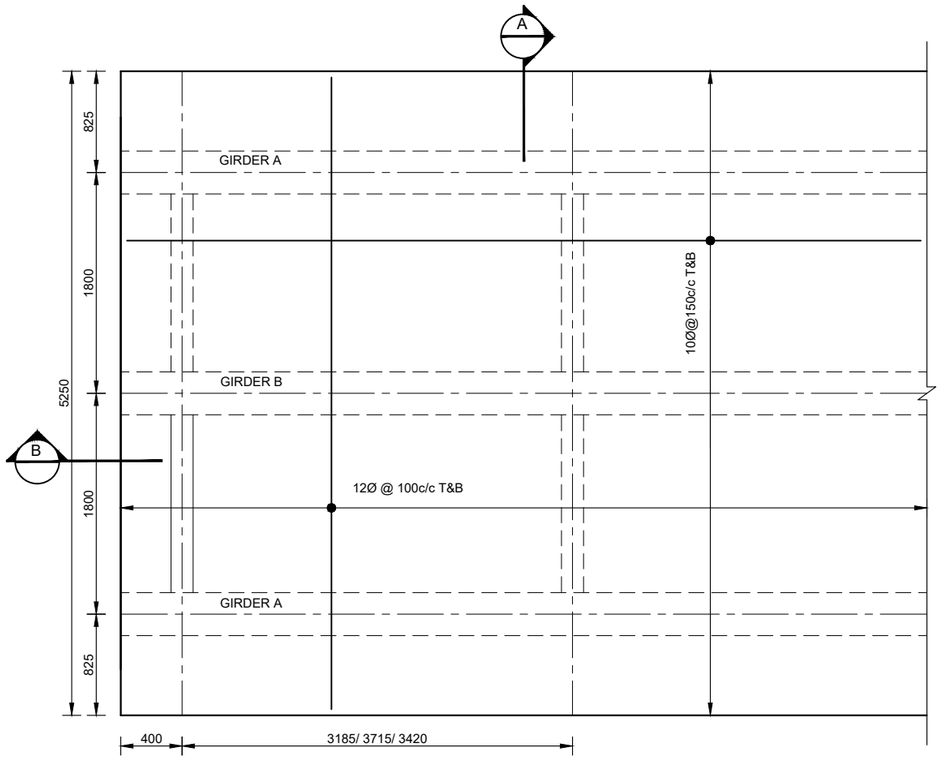
KATHMANDU, NEPAL

ACCESS ROAD
HEADWORKS BRIDGE
BOTTOM BRACING & GIRDER DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

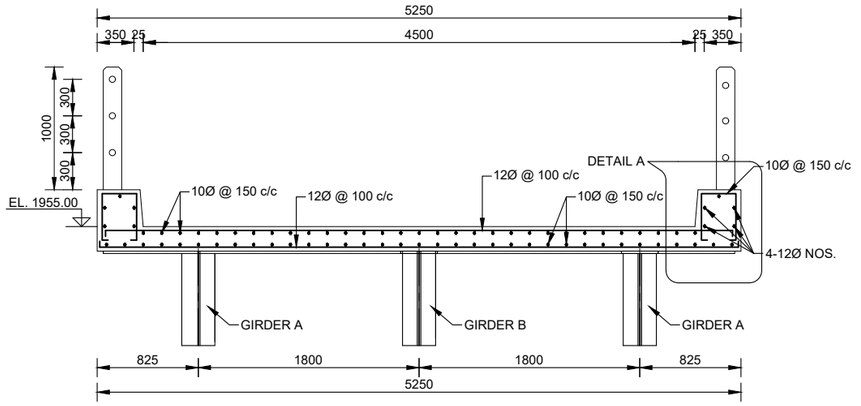
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HB-S-04
SCALE: NTS	



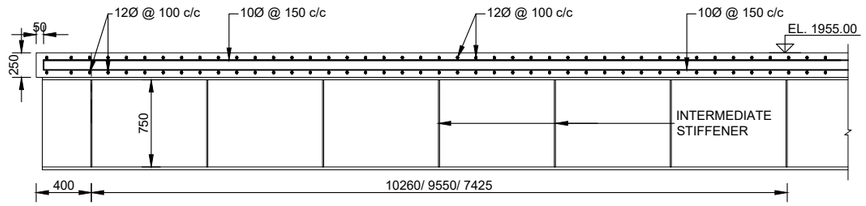
DECK SLAB REINFORCEMENT PLAN

SCALE A



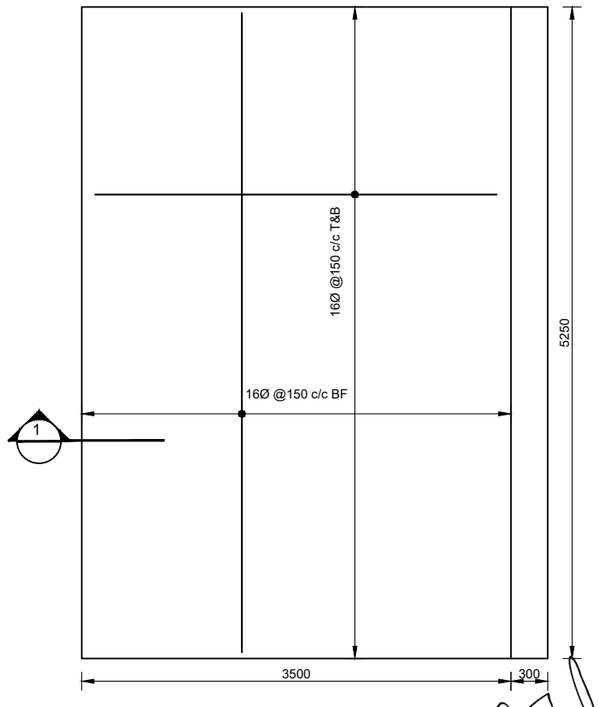
SECTION A

SCALE A



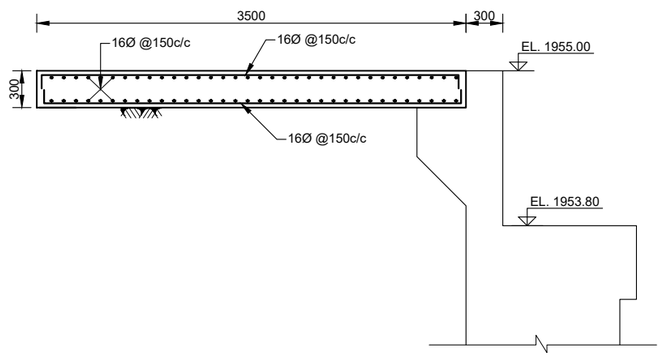
SECTION B

SCALE A



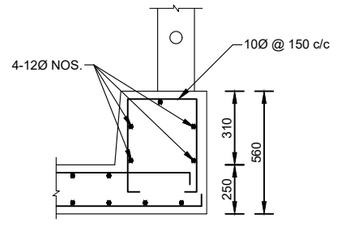
APPROACH SLAB REINFORCEMENT PLAN

SCALE A



SECTION 1

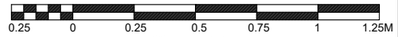
SCALE A



DETAIL A

SCALE B

SCALE A : 1:50



SCALE A : 1:25

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

ACCESS ROAD
HEADWORKS BRIDGE
DECK & APPROACH SLAB DETAILS

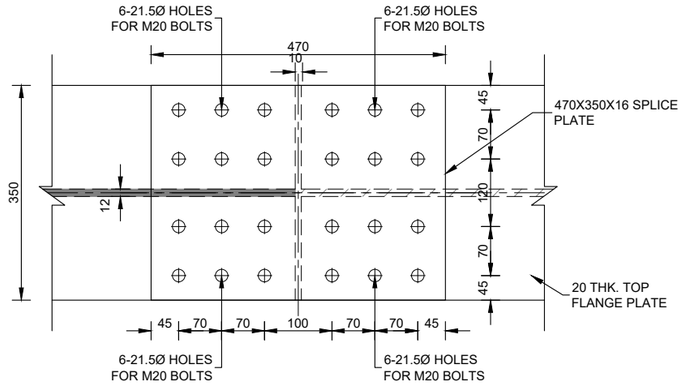
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

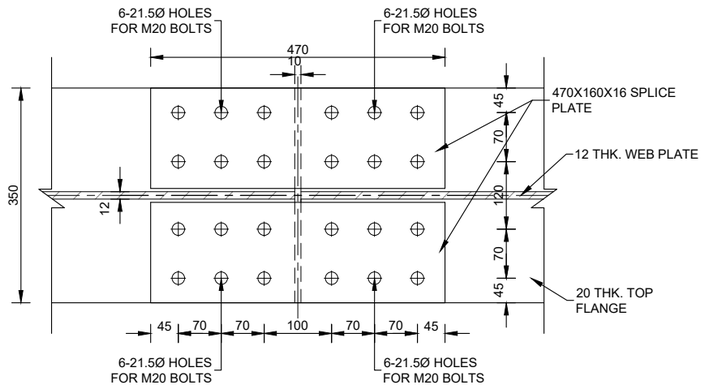
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HB-S-06
SCALE: NTS	

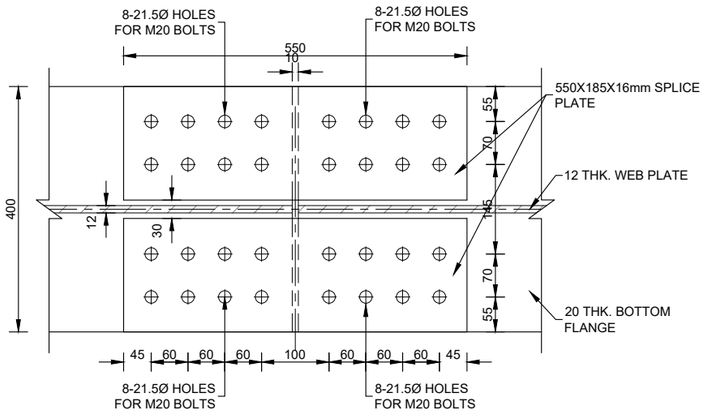
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

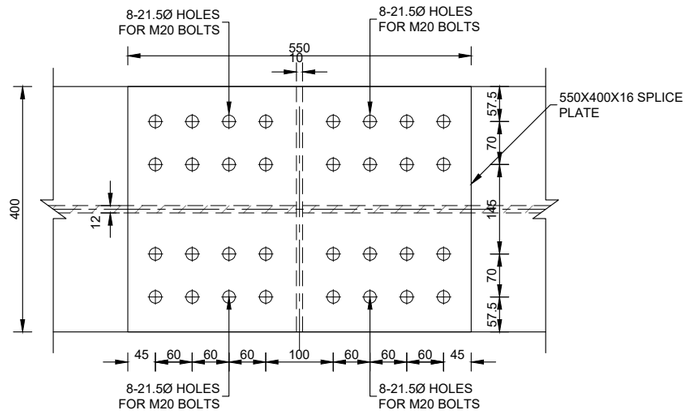




TOP FLANGE SPLICE JOINT DETAIL

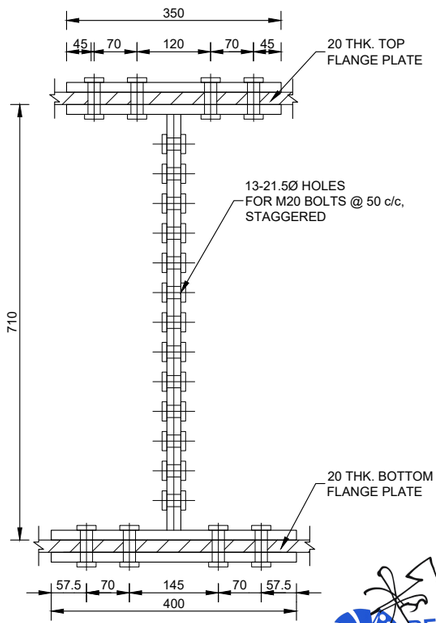
SCALE A





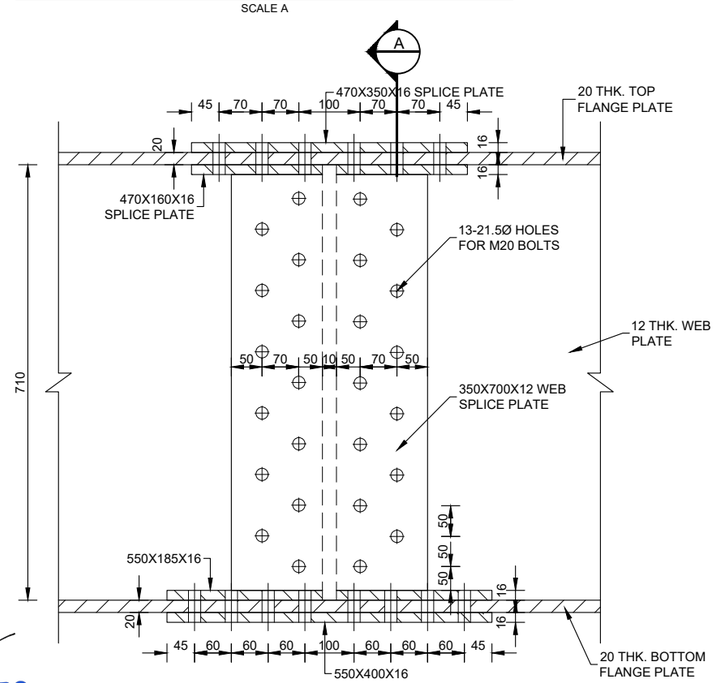
BOTTOM FLANGE SPLICE JOINT DETAIL

SCALE A



SECTION A

SCALE A



WEB SPLICE JOINTS DETAILS

SCALE A

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

0.1 0 0.1 0.2 0.3 0.4 0.5M

SCALE A : 1:10

GK-HB-S-03	HEADWORKS BRIDGE PLATE GIRDER DETAILS
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

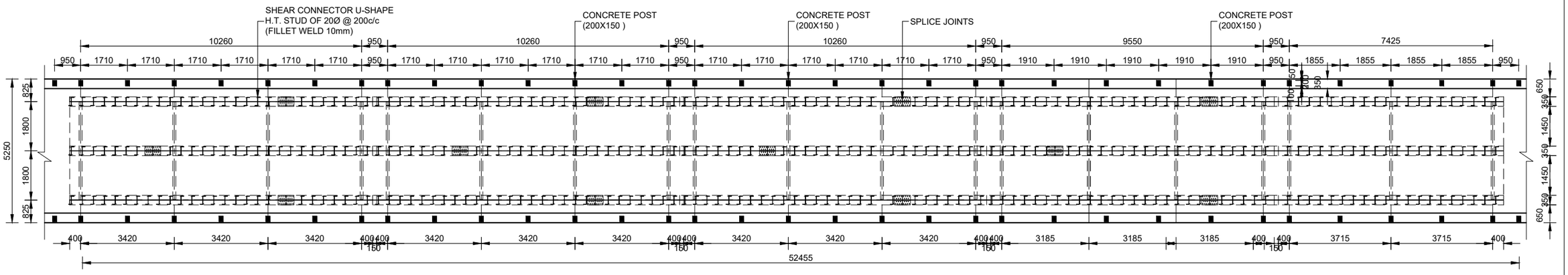
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

ACCESS ROAD
HEADWORKS BRIDGE
GIRDER & WEB SPLICE DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

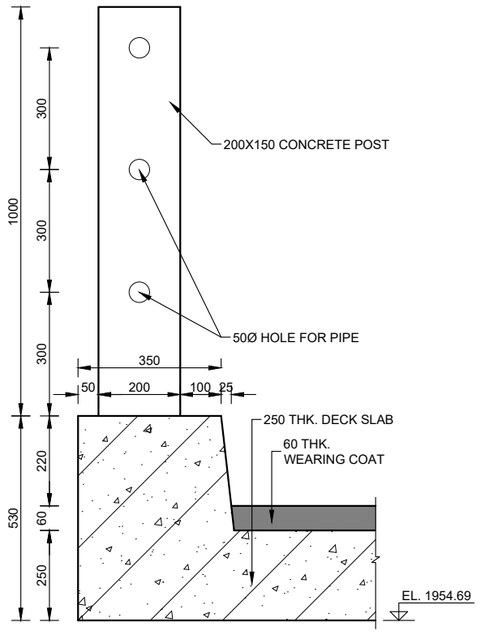
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HB-S-05
SCALE: NTS	



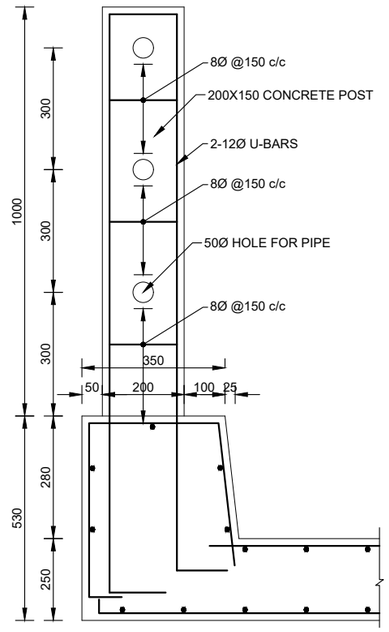
PLAN OF CONCRETE POST

SCALE-A



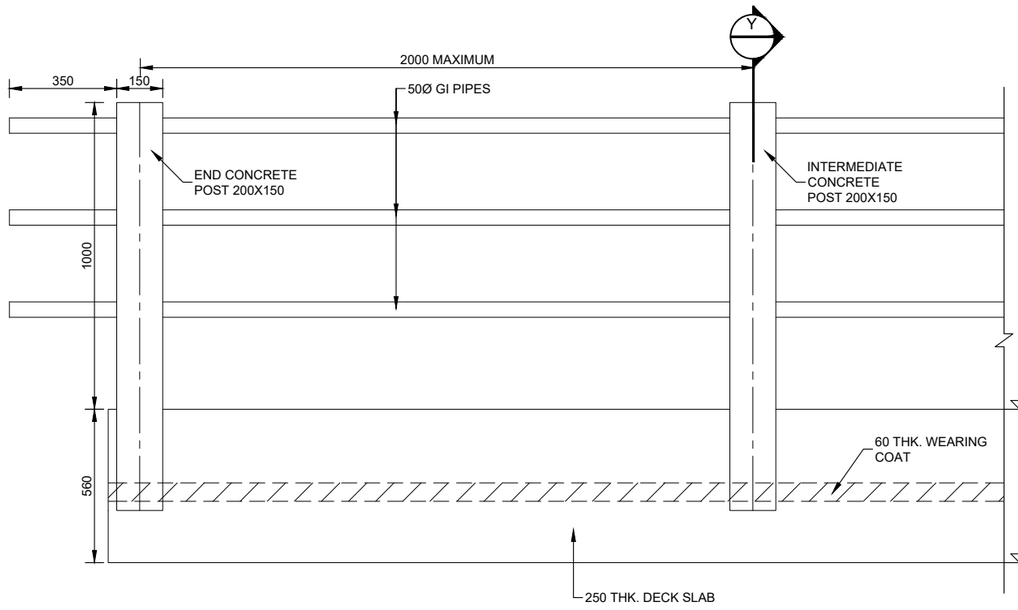
SECTION Y

SCALE C



CONCRETE POST REINFORCEMENT DETAILS

SCALE C



RAILING POST

SCALE B

1.5 0 1.5 3 4.5 6 7.5M
SCALE A : 1:150

0.20 0 0.20 0.40 0.60 0.80 1M
SCALE B : 1:20

0.15 0 0.15 0.30 0.45 0.60 0.75M
SCALE C : 1:15

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

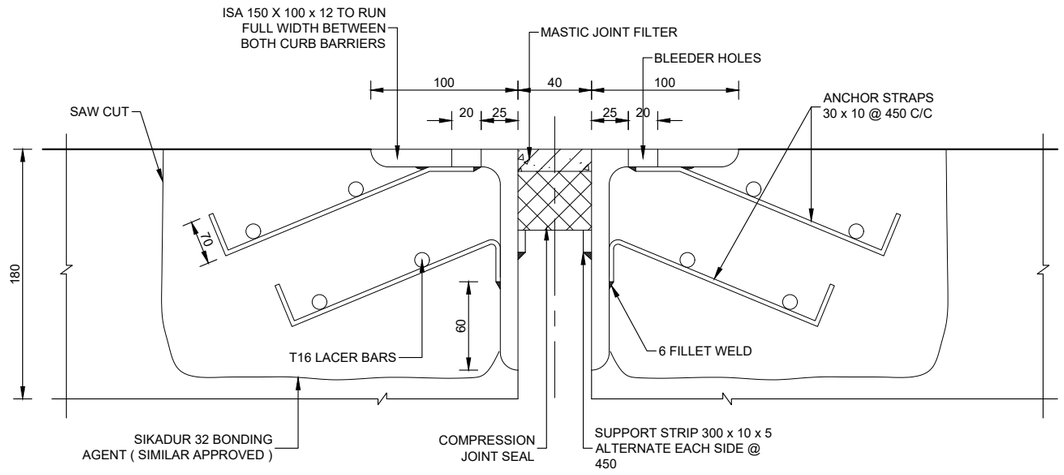
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

ACCESS ROAD
HEADWORKS BRIDGE
HANDRAIL DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

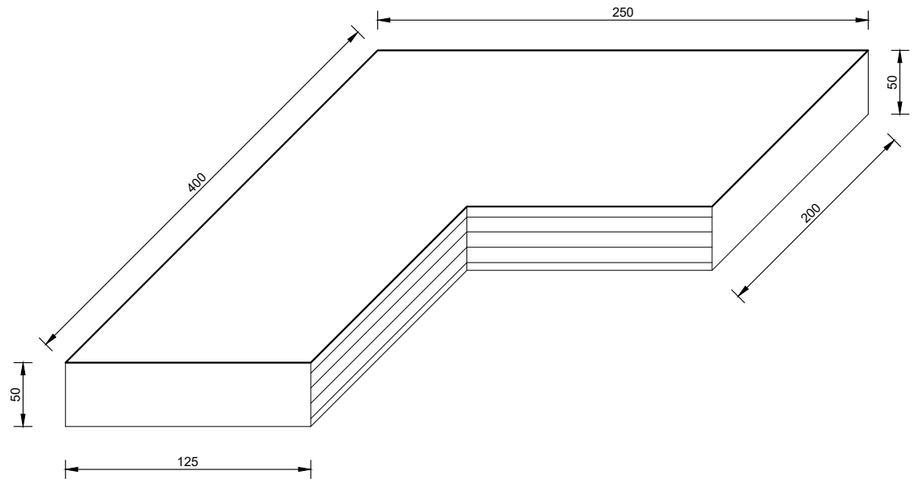
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: DR.B. MANDAL	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HB-S-07
SCALE: NTS	



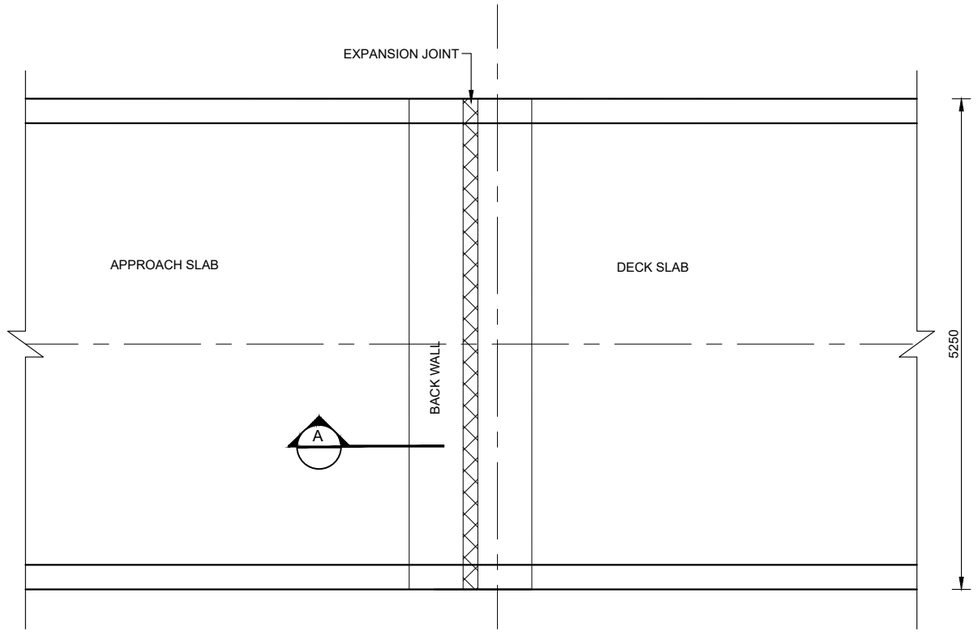
SECTION A

SCALE A



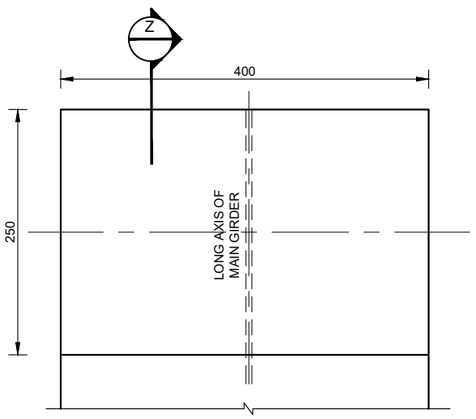
ELASTOMERIC BEARING

SCALE A



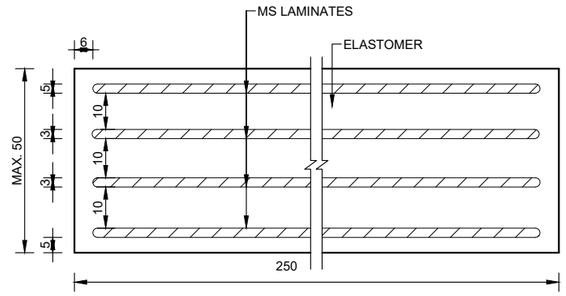
EXPANSION JOINT PLAN

SCALE B



PLAN OF ELASTOMERIC BEARING

SCALE A



SECTION Z

SCALE A

0.10 0 0.10 0.20 0.30 0.40 0.5M

SCALE A : 1:10

0.05 0 0.05 0.10 0.15 0.20 0.25M

SCALE B : 1:5

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

ACCESS ROAD
HEADWORKS BRIDGE
EXPANSION JOINT DETAILS

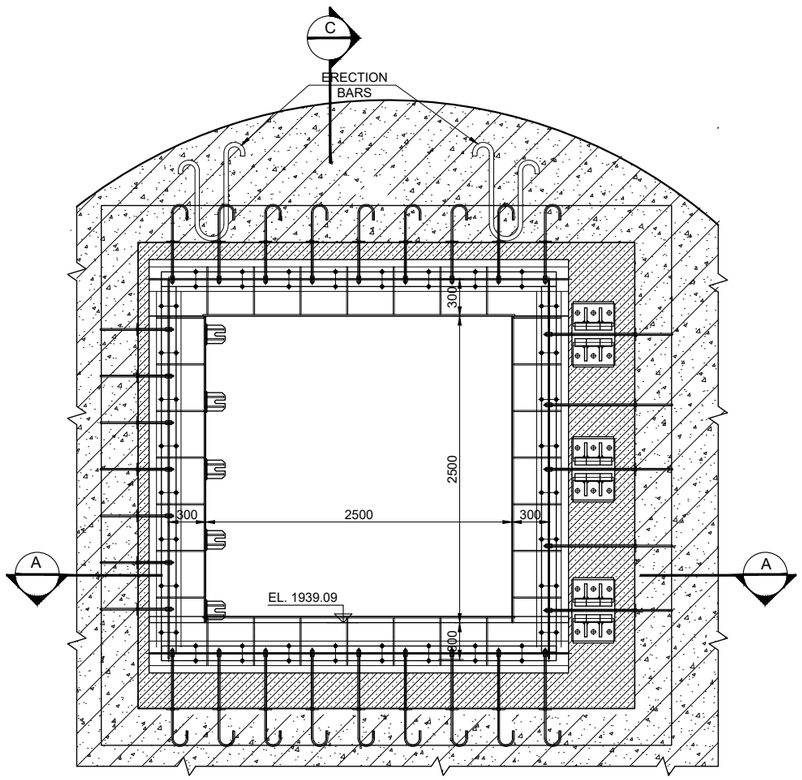
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

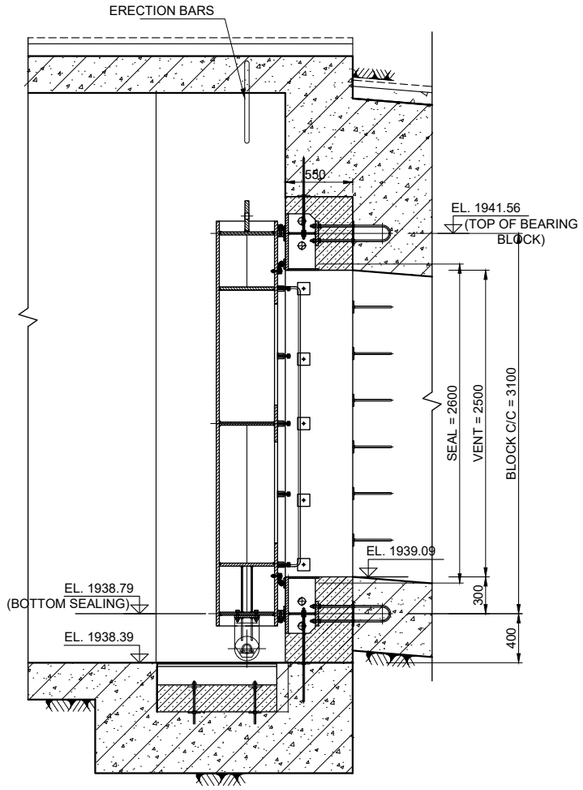
DESIGNED BY: DR. B. MANDAL	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: KRISHNA	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HB-S-08
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

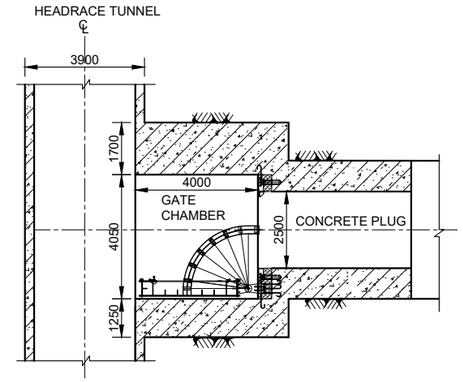
11. Hydro Mechanical



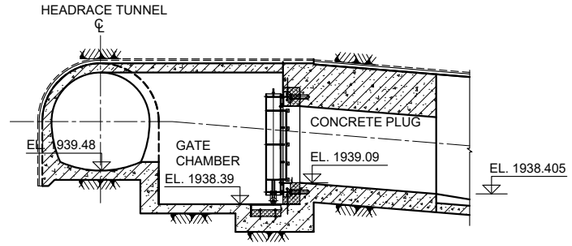
SECTION B
SCALE-A



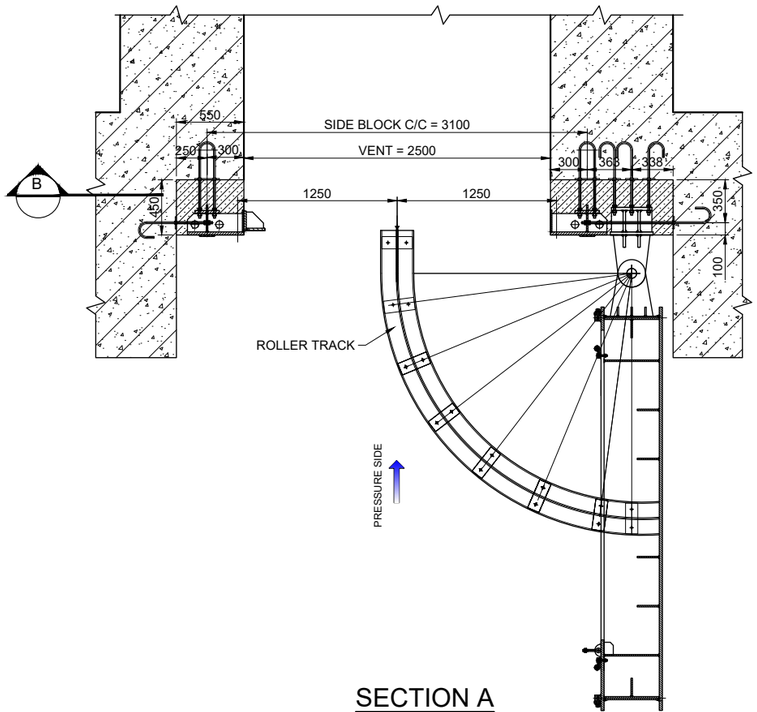
SECTION C
SCALE-A



KEY PLAN



KEY SECTION



SECTION A
SCALE-A

S NO.	DESCRIPTION/LOCATION	INTAKE TRASH RACKS
1	TYPE	INSIDE OPENABLE SIDE HINGED DOOR
2	NO OF DOORS	1
3	NO OF OPENING	1
4	CLEAR WIDTH OF OPENING	2500
5	CLEAR HEIGHT OF OPENING	2500
6	OPERATING CONDITION	
7	ESTIMATED WEIGHTS (TENTATIVE)	
(a)	GATE	4.5 T
(b)	EP	2.0 T

0.5 0 0.5 1 1.5 2 2.5M
SCALE-A: 1:50

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

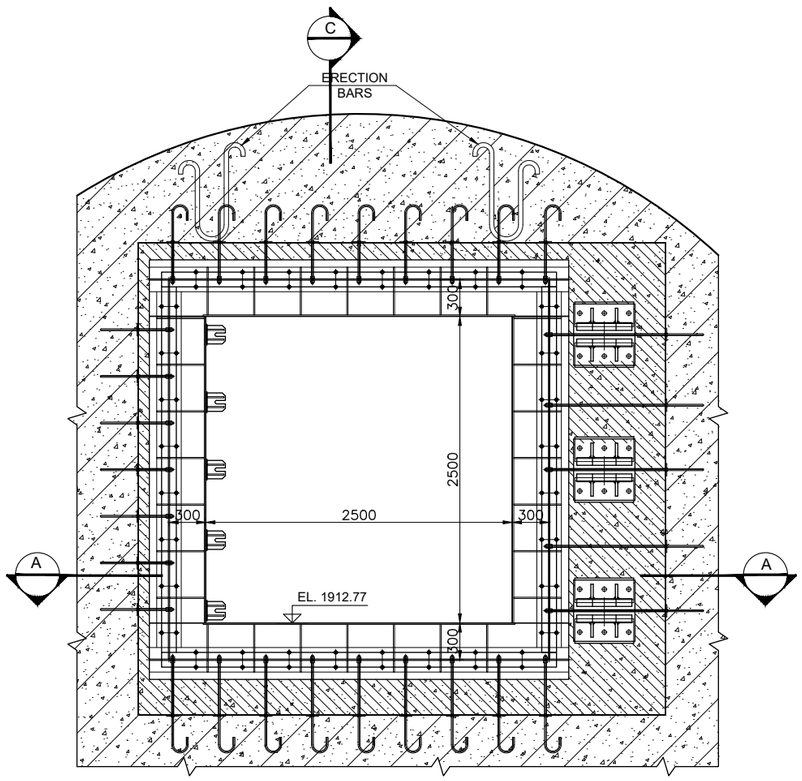
HYDRO MECHANICAL
ADIT-1
ADIT BULKHEAD DOOR

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

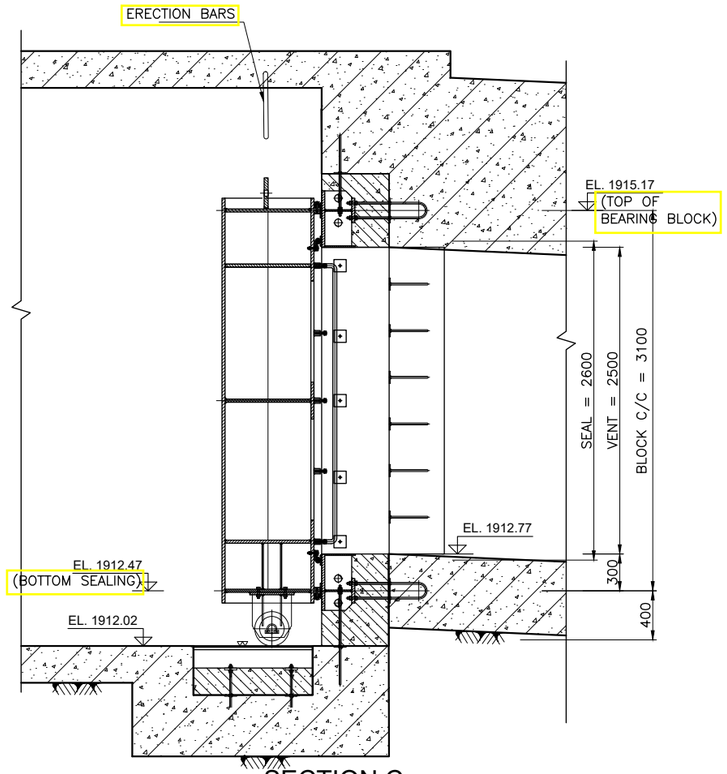
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI KATHMANDU NEPAL
PHONE: 01-4215046; FAX:01-4215046

DESIGNED BY: G. RATNAKAR	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HM-C-10
SCALE: AS SHOWN	

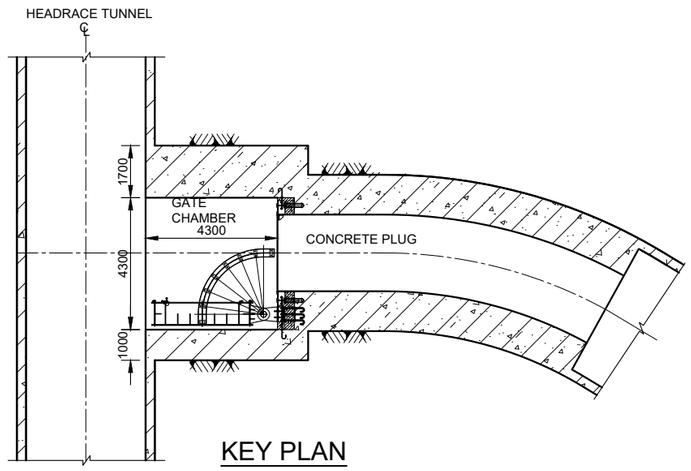
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



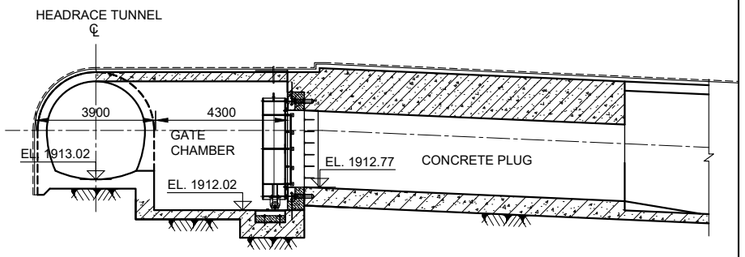
SECTION B
SCALE-A



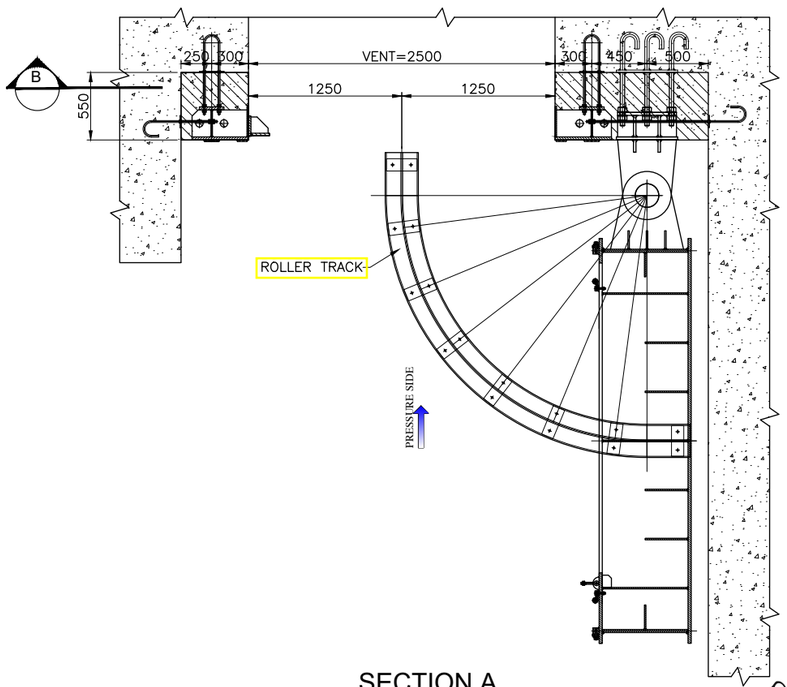
SECTION C
SCALE-A



KEY PLAN



KEY SECTION



SECTION A
SCALE-A

S NO.	DESCRIPTION/LOCATION	INTAKE TRASH RACKS
1	TYPE	INSIDE OPENABLE SIDE HINGED DOOR
2	NUMBER OF DOORS	1
3	NUMBER OF OPENING	1
4	CLEAR WIDTH OF OPENING	2500
5	CLEAR HEIGHT OF OPENING	2500
6	OPERATING CONDITION	NO WATER IN HRT
7	ESTIMATED WEIGHTS (TENTATIVE)	
(a)	GATE	10.5 T
(b)	EP	4.5 T

0.5 0 0.5 1 1.5 2 2.5M
SCALE-A: 1:50

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

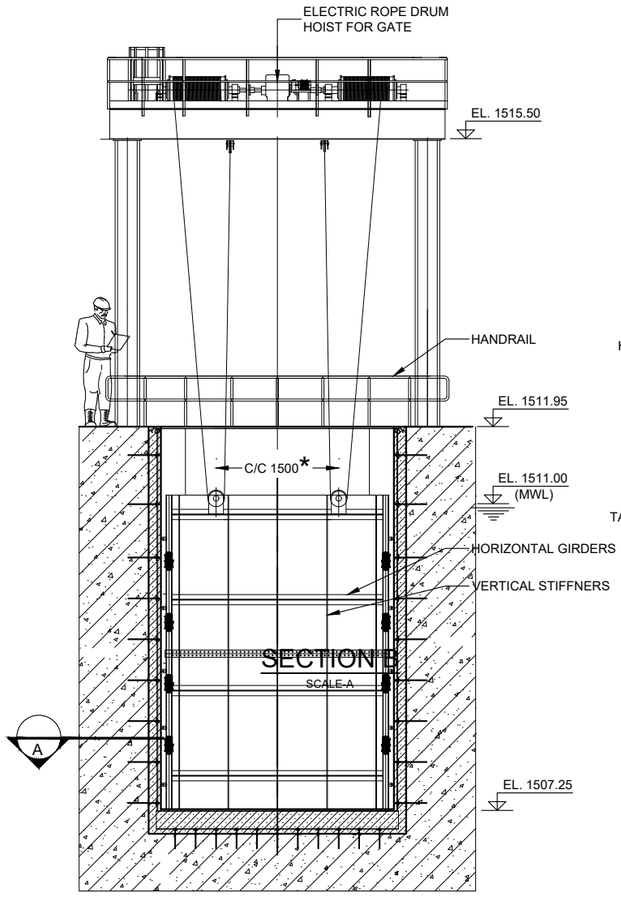
HYDRO MECHANICAL
ADIT-3
ADIT BULKHEAD DOOR

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

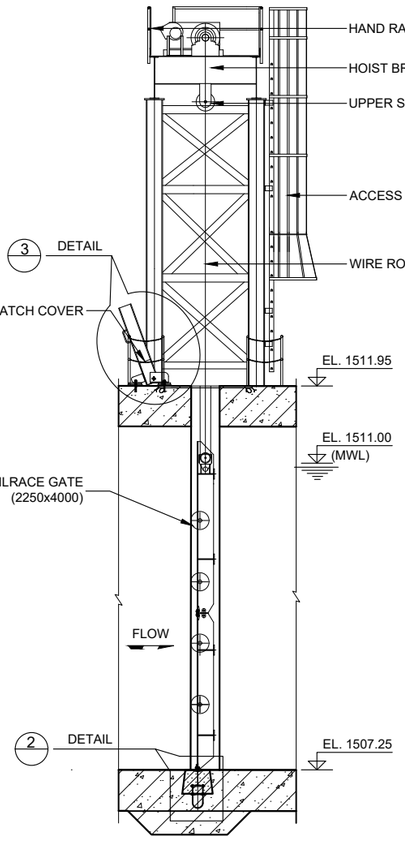
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI KATHMANDU NEPAL
PHONE: 01-4215046; FAX:01-4215046

DESIGNED BY: G. RATNAKAR	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HM-C-11
SCALE: AS SHOWN	

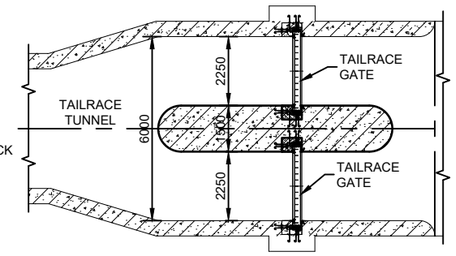
REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



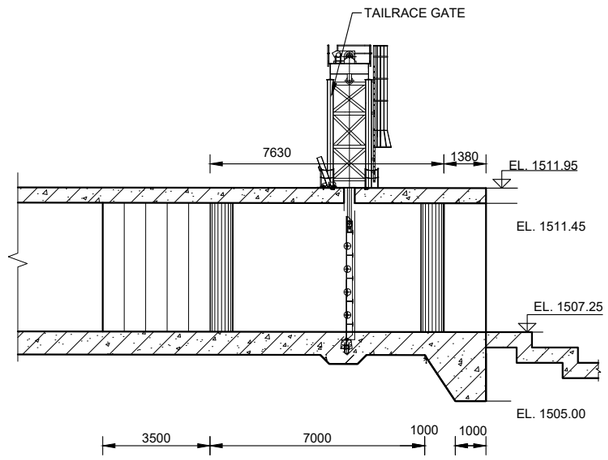
SECTION B
SCALE-A



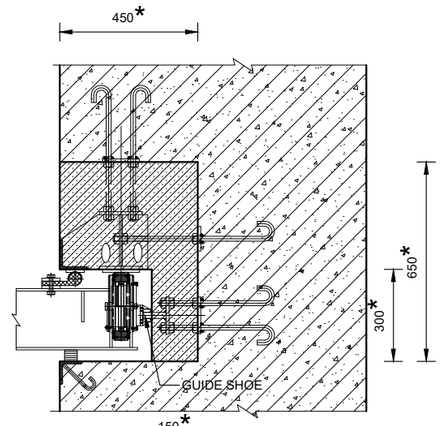
SECTION C
SCALE-A



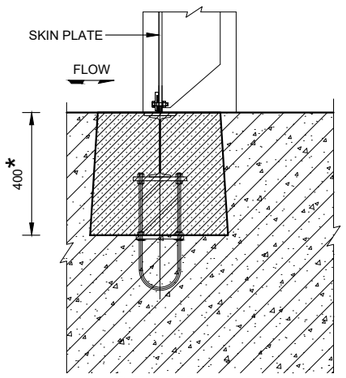
KEY PLAN



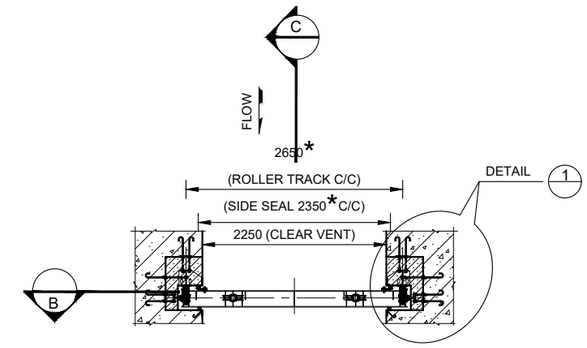
KEY SECTION



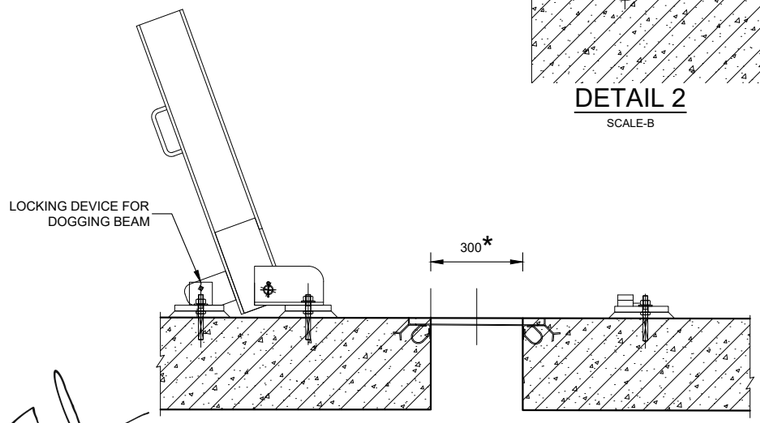
DETAIL 1
SCALE-B



DETAIL 2
SCALE-B



SECTION A
SCALE-A



DETAIL 3
SCALE-B

S.N.	DESCRIPTION/ LOCATION	TAILRACE GATE
1	TYPE	VERTICAL LIFT FIXED WHEEL TYPE
2	NUMBER OF GATESS	2
3	NUMBER OF VENTS	2
4	CLEAR WIDTH OF VENT	2250
5	HEIGHT OF GATE	4000
6	HEAD	3750
7	TYPE OF HOISTS	ELECTRIC ROPE DRUM HOIST
8	NUMBER OF HOISTS	2
9	ESTIMATED HOIST CAPACITY	5.0 T
10	OPERATING CONDITION	UNBALANCED HEAD
11	LOCATION OF SEAL	TOWARDS POWERHOUSE
12	TYPE OF SEAL	SYNTHETIC RUBBER SOLID BULB MUSIC NOTE TYPE
13	LOCATION OF SKIN PLATE	POWERHOUSE SIDE
14	DESIGN BASIS	GENERAL & PARTICULAR TECHNICAL SPECIFICATION & IS:5620 OR EQUIVALENT INTERNATIONAL CODE
15	WEIGHT (TENTATIVE)	
a	ONE GATE	2.5 T
b	EP/GATE	1.2 T

0.75 0 0.75 1.5 2.25 3.0 3.75
SCALE-A : 1:75

0.2 0 0.2 0.4 0.6 0.8 1M
SCALE-B: 1:20

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HYDROMECHANICAL
TAILRACE TUNNEL
GATE DETAILS

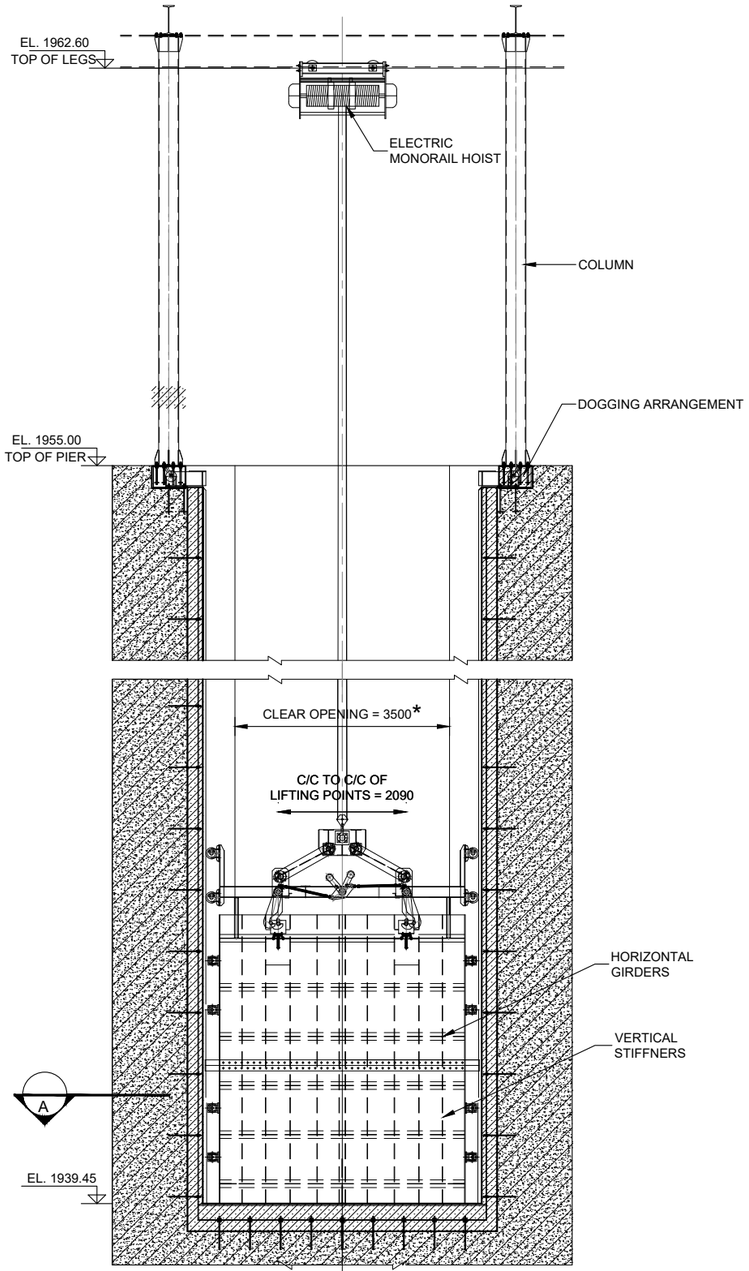
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: G. RATNAKAR	CHECKED BY: S.C. NIJHAWAN
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HM-C-09
SCALE: NTS	

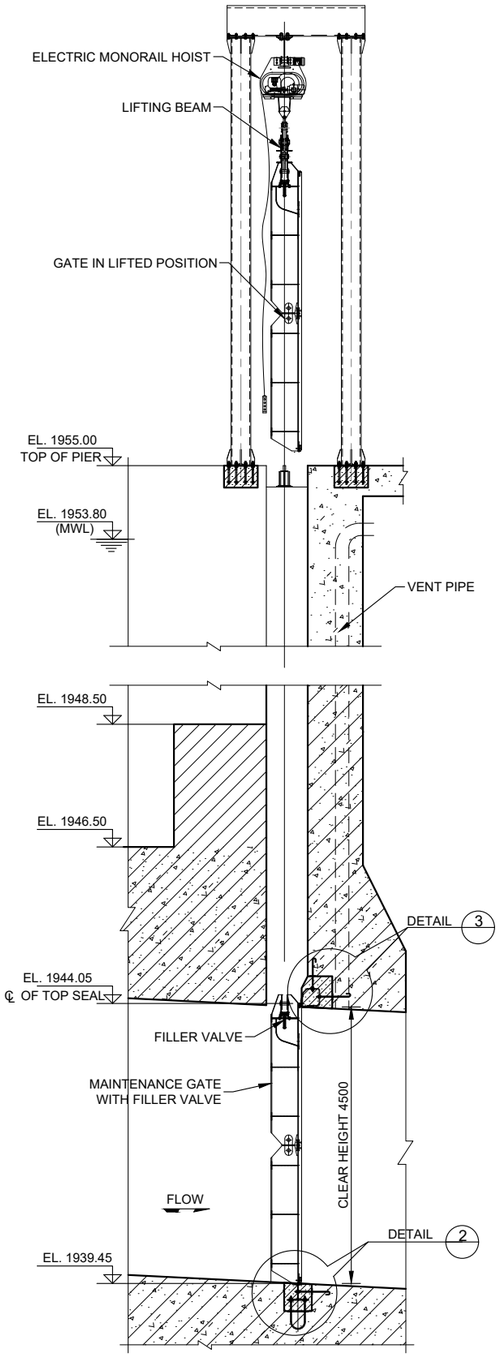
DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



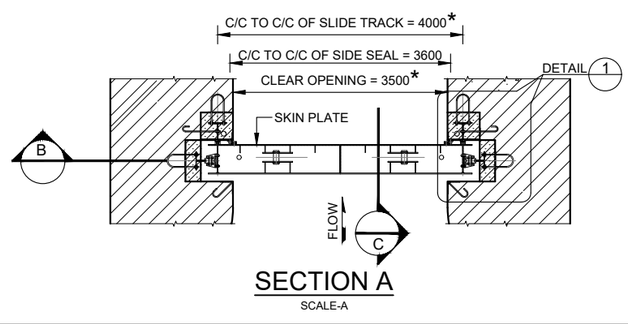
SECTION C

SCALE-A



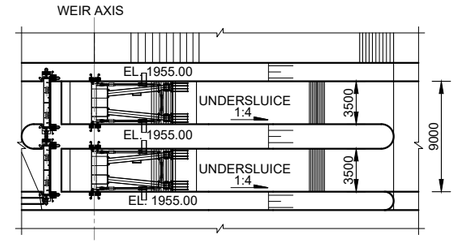
SECTION B

SCALE-A

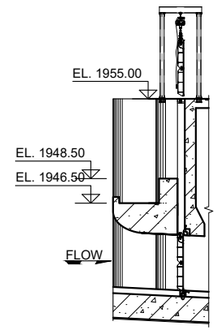


SECTION A

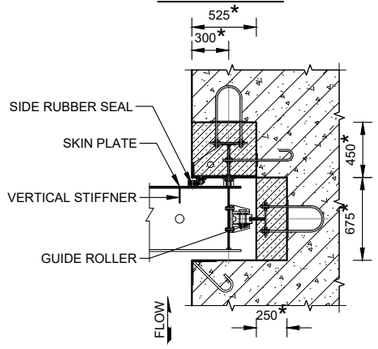
SCALE-A



KEY PLAN

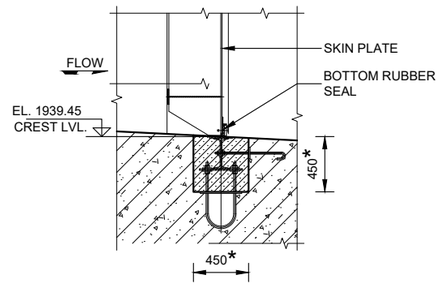


KEY SECTION



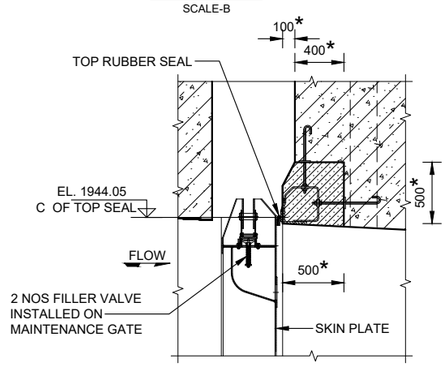
DETAIL 1

SCALE-B



DETAIL 2

SCALE-B



DETAIL 3

SCALE-B

S.N.	DESCRIPTION/ LOCATION	MAINTENANCE AT SLUICE WAY
1	TYPE	VERTICAL LIFT SLIDE TYPE
2	NUMBER OF GATES	1
3	NUMBER OF VENTS	2
4	CLEAR WIDTH OF VENT	3500
5	CLEAR HEIGHT OF VENT	4500
6	DESIGN HEAD	14.35 M
7	TYPE OF HOIST	ELECTRIC MONORAIL HOIST
8	NUMBER OF GANTRIES	1
9	ESTIMATED CAPACITY OF MONORAIL HOIST	12.5 T (TENTATIVE)
10	OPERATING CONDITION	BALANCED HEAD
11	LOCATION OF SEAL	DOWNSTREAM
12	TYPE OF SEAL	SIDE/TOP SEAL: SYNTHETIC RUBBER SOLID BULB MUSIC NOTE (FLOROCARBON CLADDED) BOTTOM SEAL: SYNTHETIC RUBBER SOLID WEDGE TYPE.
13	LOCATION OF SKIN PLATE	DOWNSTREAM
14	DESIGN BASIS	GENERAL & PARTICULAR TECHNICAL SPECIFICATION & IS:5620 OR EQUIVALENT INTERNATIONAL CODE
15	STOPLOG WEIGHT (TENTATIVE)	
(a)	UNIT WEIGHT OF BULKHEAD	5.10 T (TENTATIVE)
(b)	WEIGHT OF EP/BAY	2.75 T

1 0 22 3 4 5 6M
SCALE-A : 1:100

0.5 0 0.5 1 1.5 2 2.5M
SCALE-B: 1:50

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

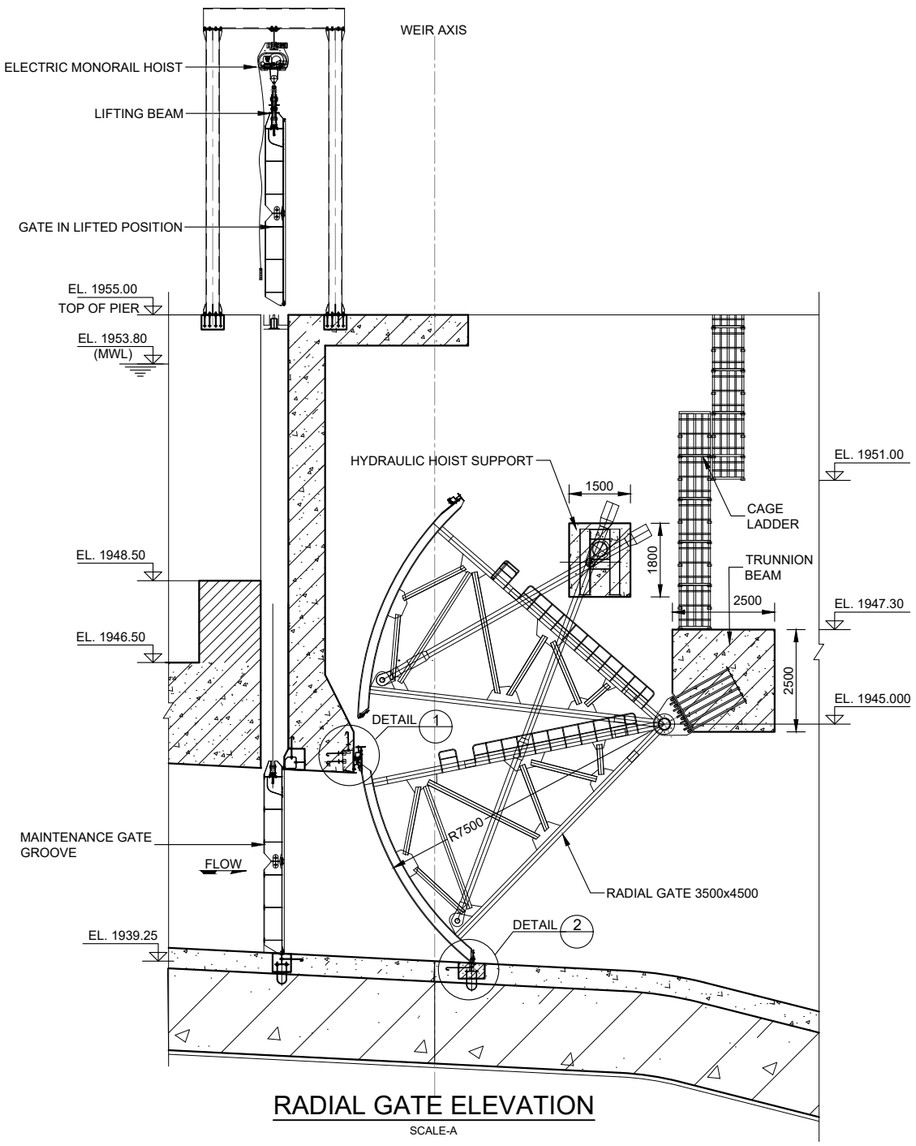
HYDROMECHANICAL
DIVERSION WEIR
UNDER SLUICE BULK HEAD GATE DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

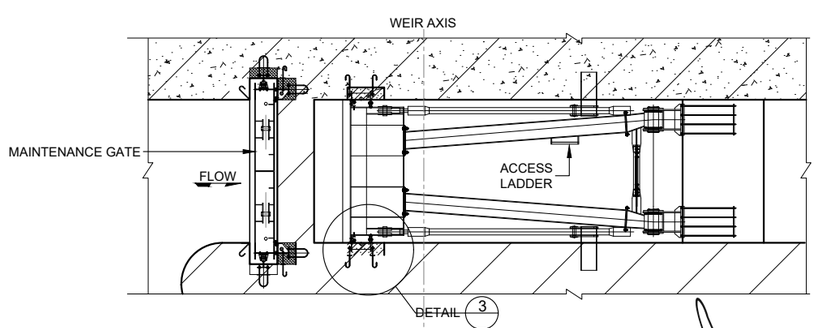
DESIGNED BY: G. RATNAKAR	CHECKED BY: S.C. NIJHAWAN
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HM-C-01
SCALE: NTS	

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS



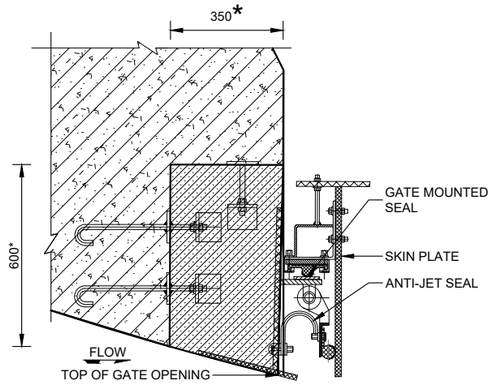
RADIAL GATE ELEVATION

SCALE-A



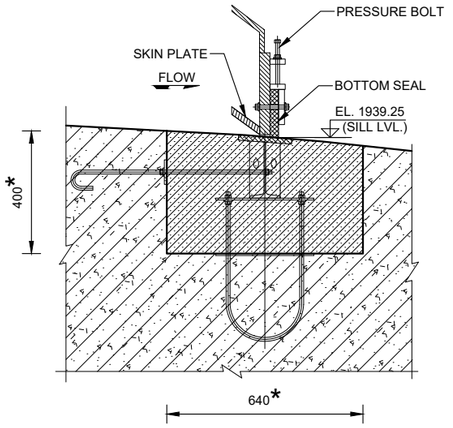
RADIAL GATE PLAN

SCALE-A



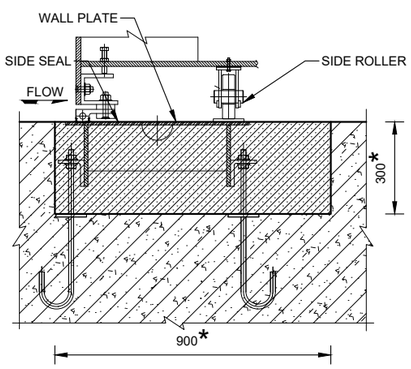
DETAIL 1

SCALE-A



DETAIL 2

SCALE-A



DETAIL 3

SCALE-A

S.N.	DESCRIPTION/ LOCATION	UNDER SLUICE
1	TYPE	RADIAL GATE
2	NUMBER OF GATESS	2
3	NUMBER OF VENTS	2
4	CLEAR WIDTH OF VENT	3500
5	CLEAR HEIGHT OF VENT	4500
6	SKIN PLATE RADIUS	7500 (OUTER)
7	HYDRAULIC HOIST STROKE LENGTH	≤ 5000
8	DESIGN HEAD	14.55 M
9	TYPE OF HOISTS ESTIMATED HOIST CAPACITY ~ 2X10T	TWIN CYLINDER HYDRAULIC HOIST (SINGLE ACTING)
10	NUMBER OF HOISTS	2 SETS
11	OPERATING CONDITION	UNBALANCED HEAD
12	LOCATION OF SEAL	UPSTREAM
13	TYPE OF SEAL	SIDE SEAL: SYNTHETIC RUBBER SOLID BULB MUSIC NOTE TYPE TOP SEAL: SYNTHETIC RUBBER SOLID DOUBLE STEM BULB TYPE TEFLON CLADDED BOTTOM : SYNTHETIC RUBBER SOLID SEAL WEDGE TYPE
14	LOCATION OF SKIN PLATE	UPSTREAM
16	DESIGN BASIS	GENERAL & PARTICULAR TECHNICAL SPECIFICATION & IS:5620 OR EQUIVALENT INTERNATIONAL CODE
17	GATE WEIGHT (TENTATIVE)	
17(a)	UNIT WEIGHT OF ONE GATE	10.0 T
17(b)	WEIGHT OF EP/GATE	4.0 T

1.5 0 1.5 3 4.5 6 7.5M
SCALE-A : 1:150

0.2 0 0.2 0.4 0.6 0.8 1M
SCALE-B: 1:20

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

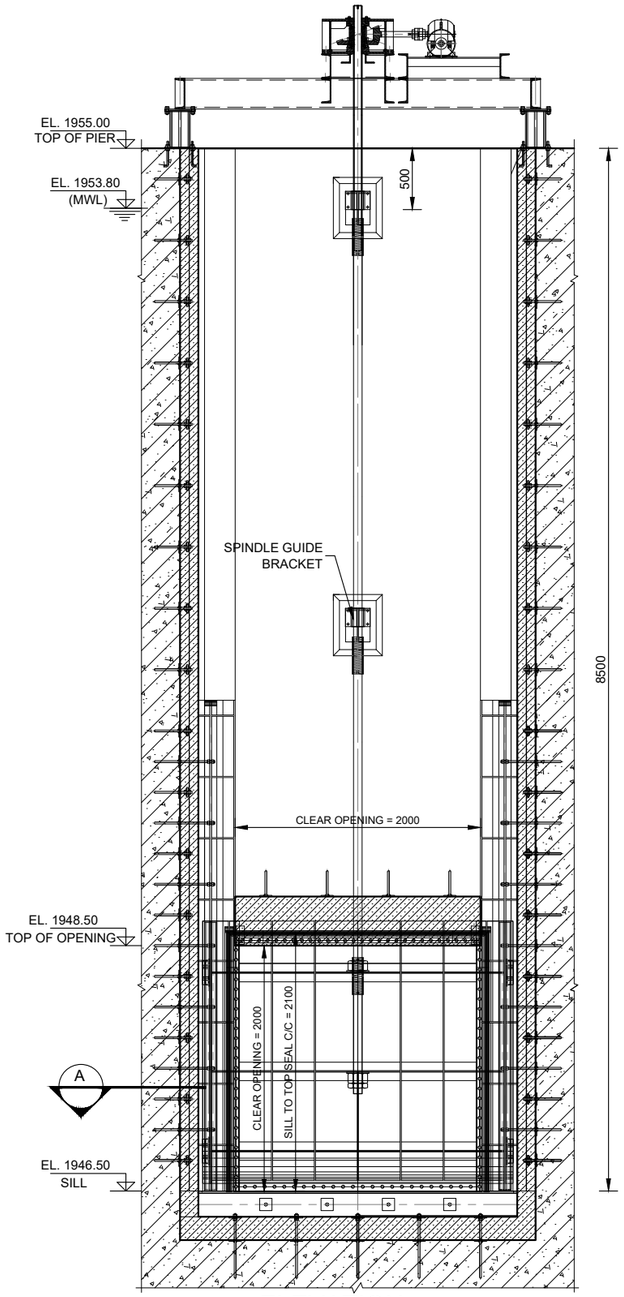
HYDROMECHANICAL
DIVERSION WEIR
UNDERSLUICE RADIAL GATE DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

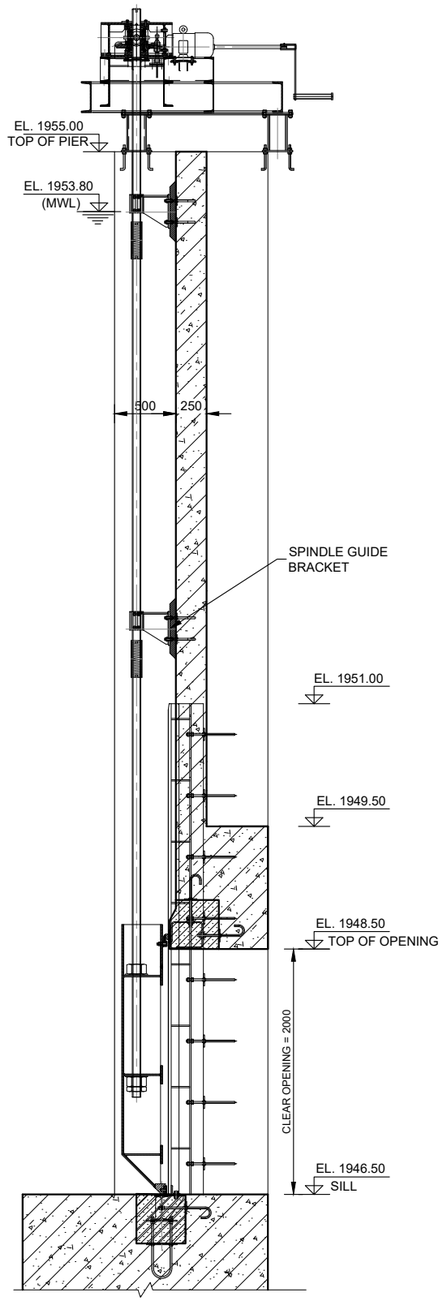
DESIGNED BY: G. RATNAKAR	CHECKED BY: S.C. NIJHAWAN
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HM-C-02
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



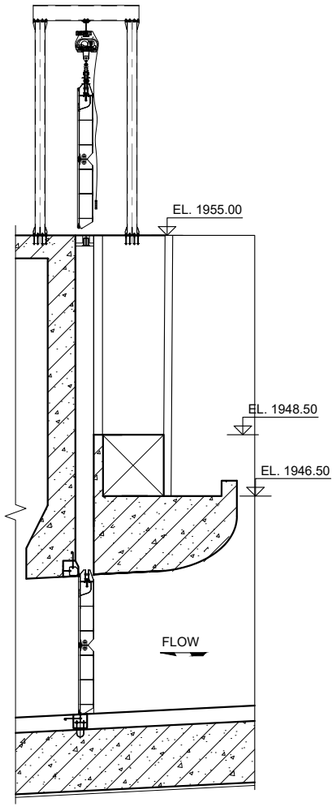
ELEVATION

SCALE-A

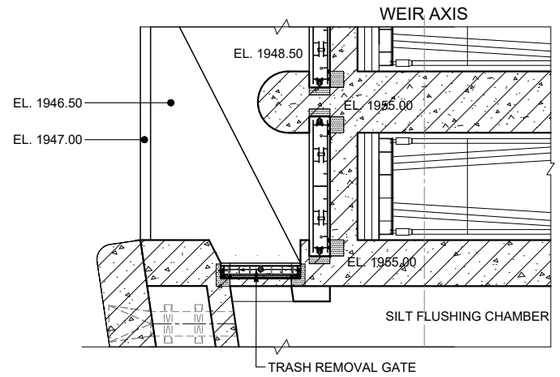


SIDE ELEVATION

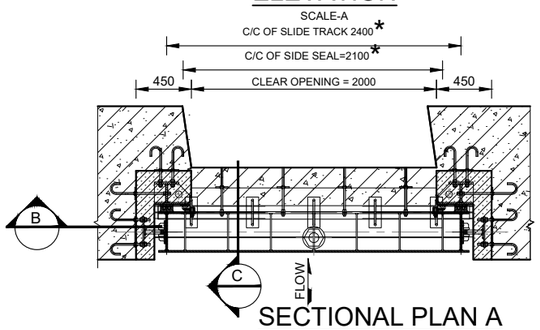
SCALE-A



KEY SECTION



KEY PLAN



SECTIONAL PLAN A

SCALE-A

S.N.	DESCRIPTION/ LOCATION	TRASH REMOVAL GATE
1	TYPE	VERTICAL LIFT SLIDE TYPE
2	NUMBER OF GATESS	1
3	NUMBER OF VENTS	1
4	CLEAR WIDTH OF VENT	2000
5	CLEAR HEIGHT OF VENT	2000
6	DESIGN HEAD	7300
7	TYPE OF HOIST	ELECTRIC SCREW HOIST
8	ESTIMATED HOIST CAPACITY	20 T
9	NUMBER OF HOISTS	1
10	OPERATING CONDITION	UNBALANCED HEAD
11	LOCATION OF SEAL	DOWNSTREAM
12	TYPE OF SEAL	BOTTOM SEAL/ TOP SEAL/ SIDE SEAL SYNTHETIC RUBBER SOLID WEDGE TYPE.
13	LOCATION OF SKIN PLATE	UPSTREAM
14	DESIGN BASIS	GENERAL & PARTICULAR TECHNICAL SPECIFICATION & IS:5620 OR EQUIVALENT INTERNATIONAL CODE
15	WEIGHT (TENTATIVE)	
a	UNIT WEIGHT OF ONE GATE	1.0 T
b	UNIT WEIGHT OF EP/GATE	1.15 T

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

0.5 0 0.5 1 1.5 2 2.5M
SCALE A: 1:50

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

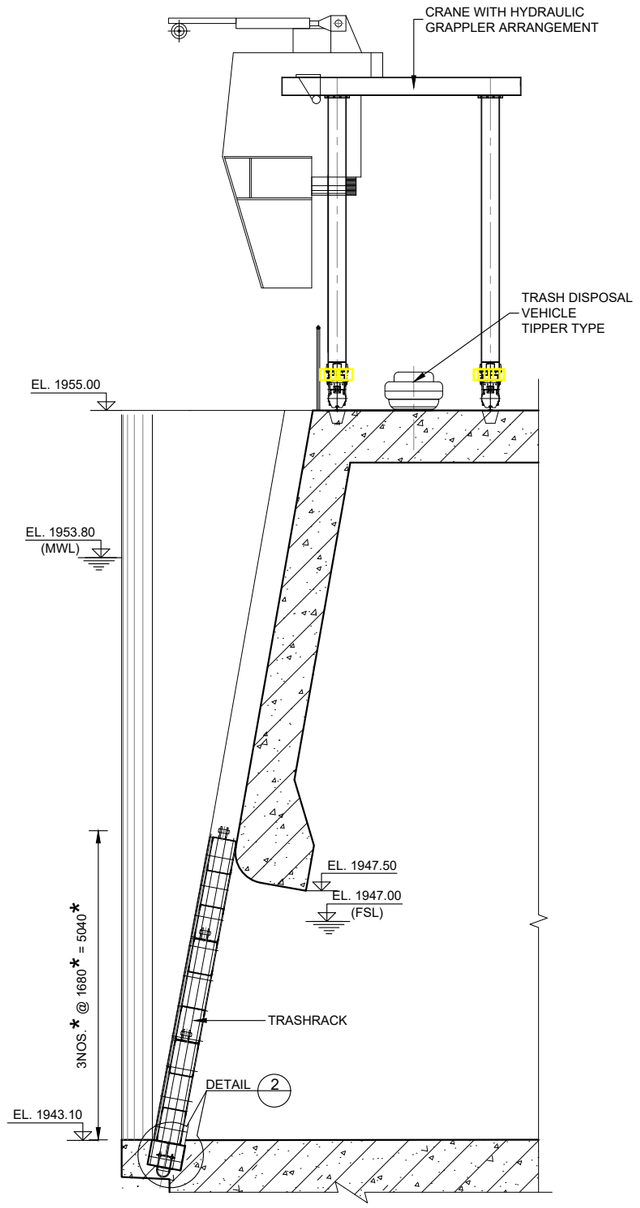
HYDROMECHANICAL
DIVERSION WEIR
TRASH REMOVAL GATE DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

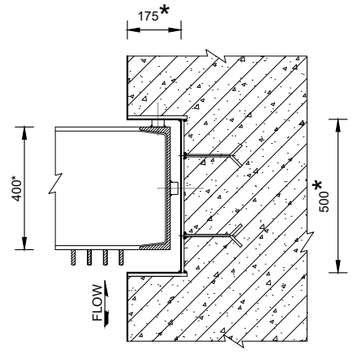
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS

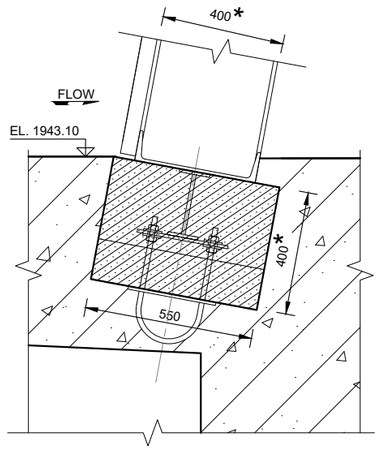
DESIGNED BY: G. RATNAKAR	CHECKED BY: S.C. NIJHAWAN
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HM-C-03
SCALE: NTS	



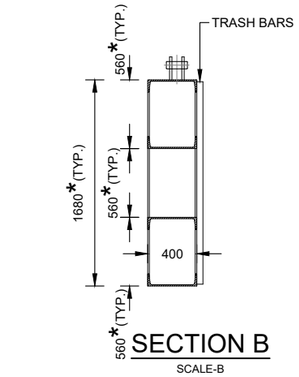
SECTION C
SCALE-A



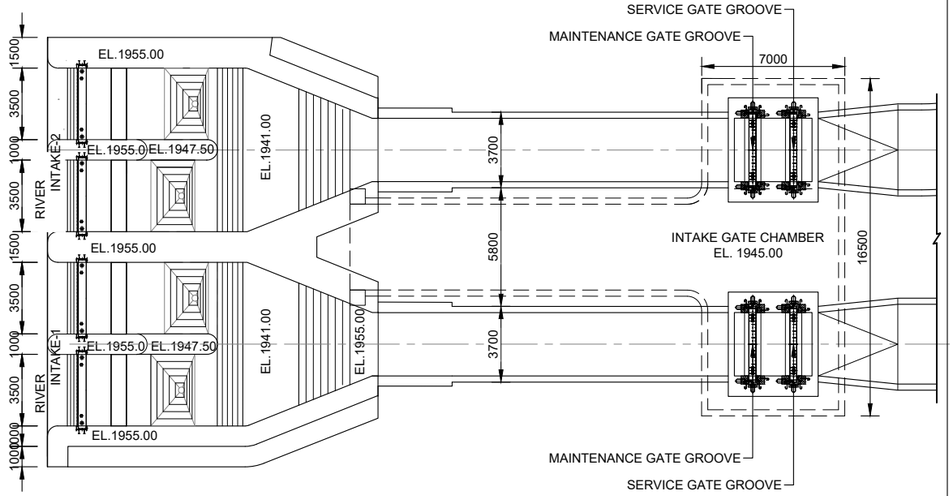
DETAIL 1
SCALE-C



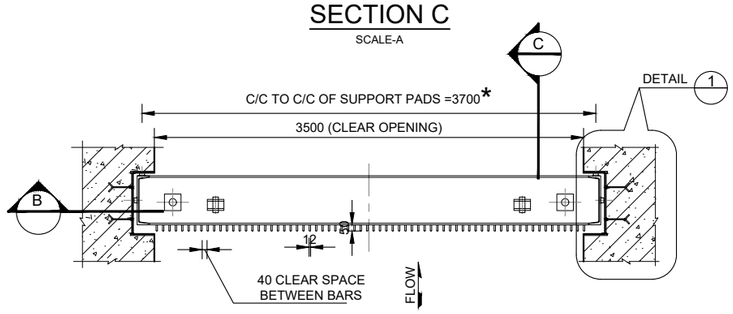
DETAIL 2
SCALE-C



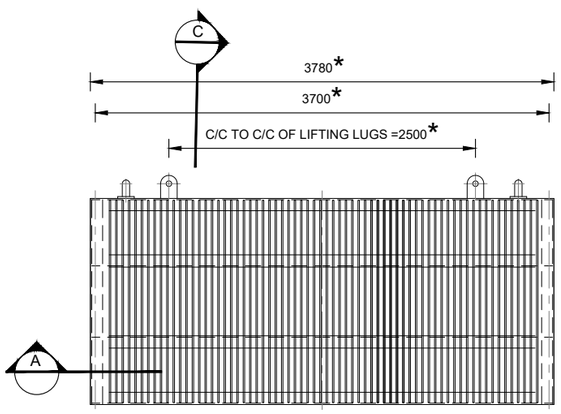
SECTION B
SCALE-B



KEY PLAN



SECTION A
SCALE-B



TRASH RACK ELEVATION
SCALE-B

SN	DESCRIPTION/ LOCATION	INTAKE TRASH RACKS
1	TYPE	REMOVABLE TRASH RACK
2	NUMBER OF TRASH RACKS	4
3	NUMBER OF VENTS	4
4	CLEAR WIDTH OF VENT	3500
5	CLEAR HEIGHT OF VENT	5000 (INCLINED)
6	NO OF INTERCHANGEABLE PANELS	3
7	SYSTEM OF CLEANING	HYDRAULIC GRAPPLER CRANE
8	NO. OF TRASH RACK CLEANINING MACHINES (TRCM)	1
9	ESTIMATED CAPACITY OF TRCM	2 T
10	OPERATING CONDITION	BALANCED HEAD
11	WEIGHTS	
a	PANEL / VENT	4.5 T
b	EP / VENT	2.0 T
12	CLEAR SPACE BETWEEN BARS	40

0.2 0 0.2 0.4 0.6 0.8 1M
SCALE-C: 1:20

0.5 0 0.5 1 1.5 2 2.5M
SCALE-B: 1:50

1 0 1 2 3 4 5M
SCALE-A : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

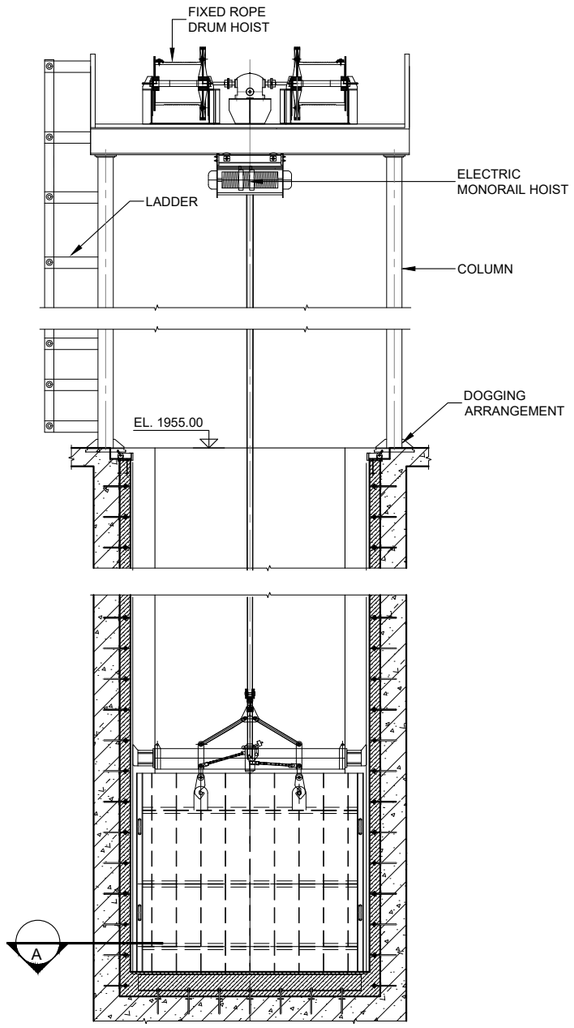
HYDROMECHANICAL
RIVER INTAKE
UNDERSLUICE RADIAL GATE DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

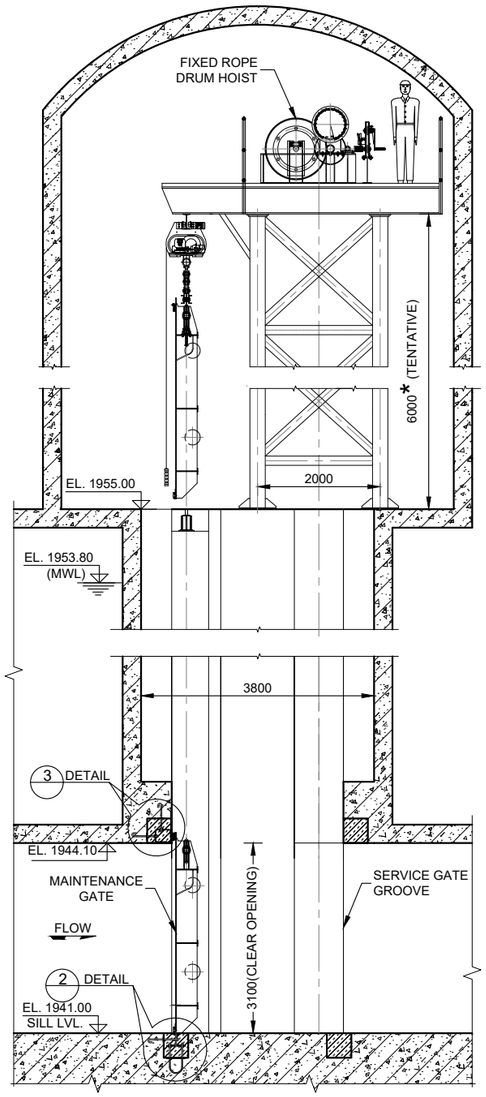
DESIGNED BY: G. RATNAKAR	CHECKED BY: S.C. NIJHAWAN
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HM-C-04
SCALE: NTS	

DWG. NO.	DESCRIPTION:
	REFERENCE DRAWINGS



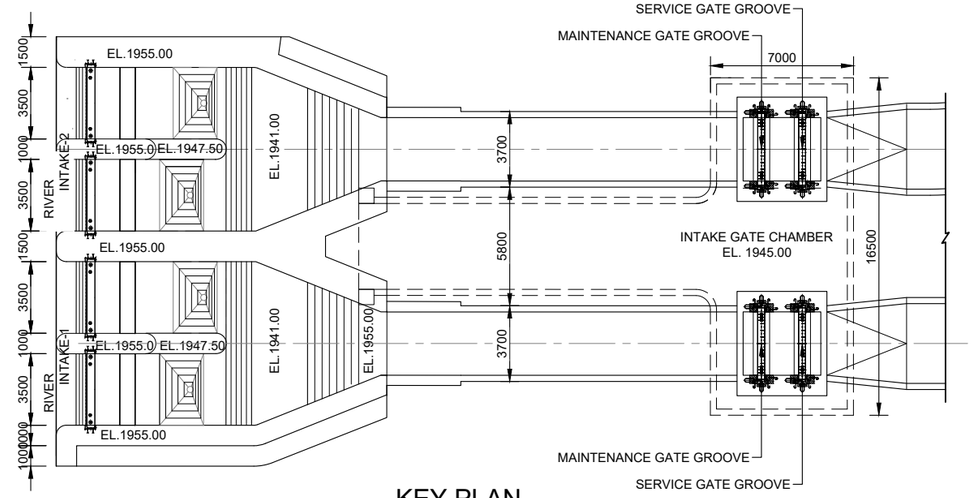
SECTION B

SCALE-A

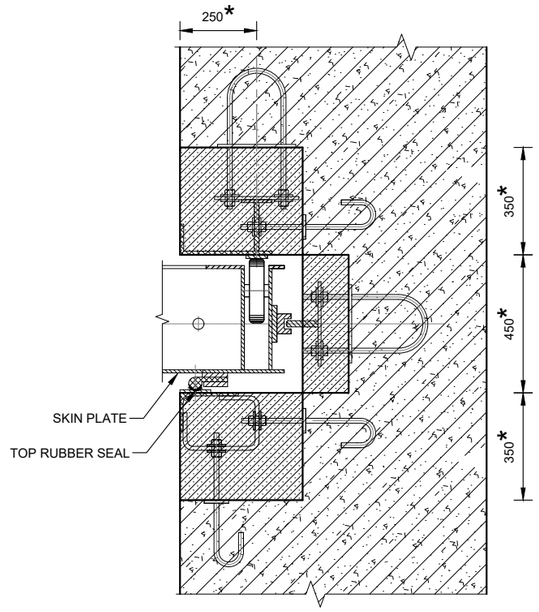


SECTION C

SCALE-A



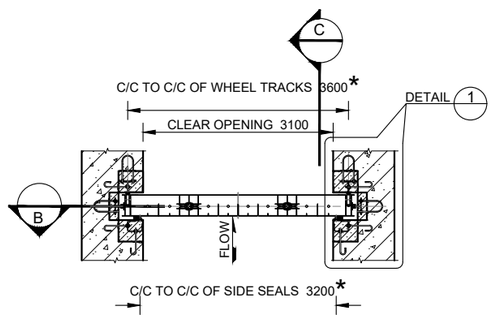
KEY PLAN



DETAIL 1

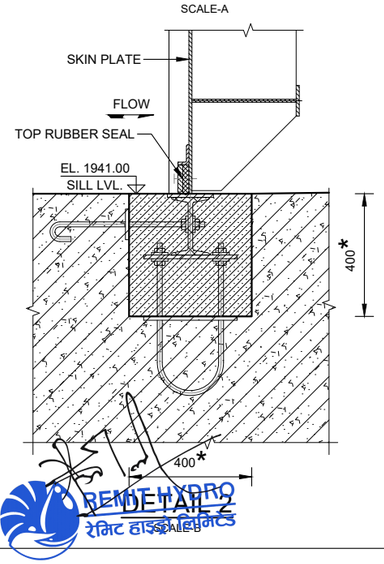
SCALE-B

S.N.	DESCRIPTION/ LOCATION	MAINTENANCE GATE AT RIVER INTAKE
1	TYPE	VERTICAL LIFT FIXED WHEEL TYPE
2	NUMBER OF GATESS	1
3	NUMBER OF VENTS	2
4	CLEAR WIDTH OF VENT	3100
5	CLEAR HEIGHT OF VENT	3100
6	DESIGN HEAD	12800
7	TYPE OF HOIST	ELECTRIC MONORAIL HOIST
8	NUMBER OF HOISTS	1
9	ESTIMATED CAPACITY OF HOIST	10 T
10	OPERATING CONDITION	BALANCED HEAD
11	LOCATION OF SEAL	UPSTREAM
12	TYPE OF SEAL	SIDE/TOP SEAL: SYNTHETIC RUBBER SOLID BULB MUSIC NOTE (FLOROCARBON CLADDED) BOTTOM SEAL: SYNTHETIC RUBBER SOLID WEDGE TYPE.
13	LOCATION OF SKIN PLATE	UPSTREAM
14	DESIGN BASIS	GENERAL & PARTICULAR TECHNICAL SPECIFICATION & IS:5620 OR EQUIVALENT INTERNATIONAL CODE
15	WEIGHTS (TENTATIVE)	
a	ONE GATE	3.8 T
b	EP/GATE	3.0 T



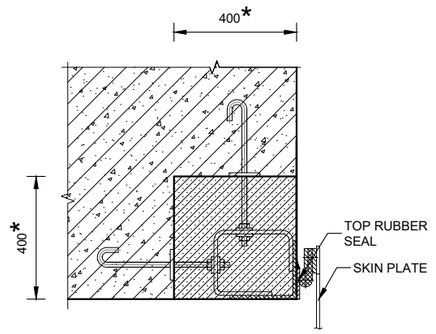
SECTION A

SCALE-A



DETAIL 2

SCALE-B



DETAIL 3

SCALE-B

1 0 1 2 3 4 5M

SCALE-A : 1:100

0.2 0 0.2 0.4 0.6 0.8 1M

SCALE-B: 1:20

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

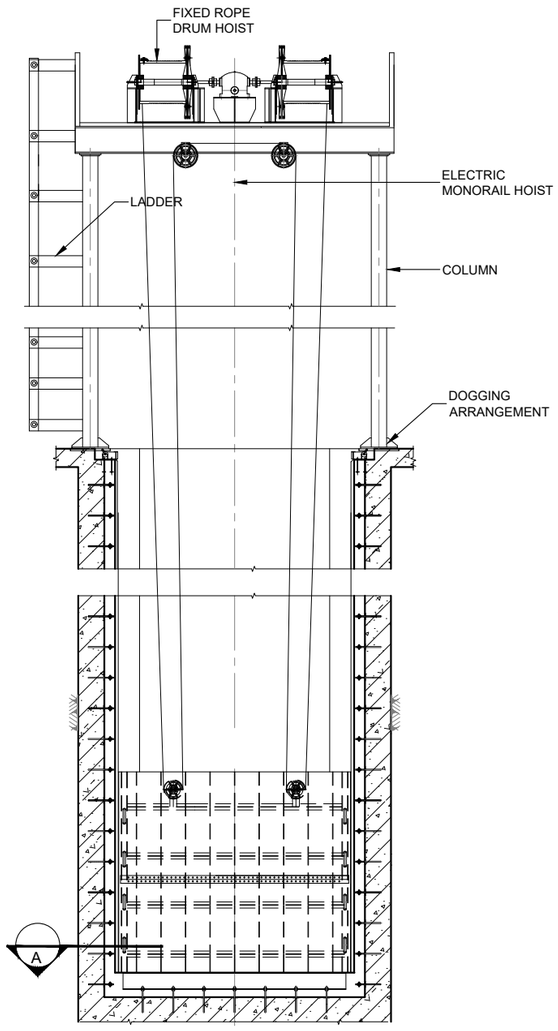
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HYDROMECHANICAL
RIVER INTAKE
MAINTENANCE GATE DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

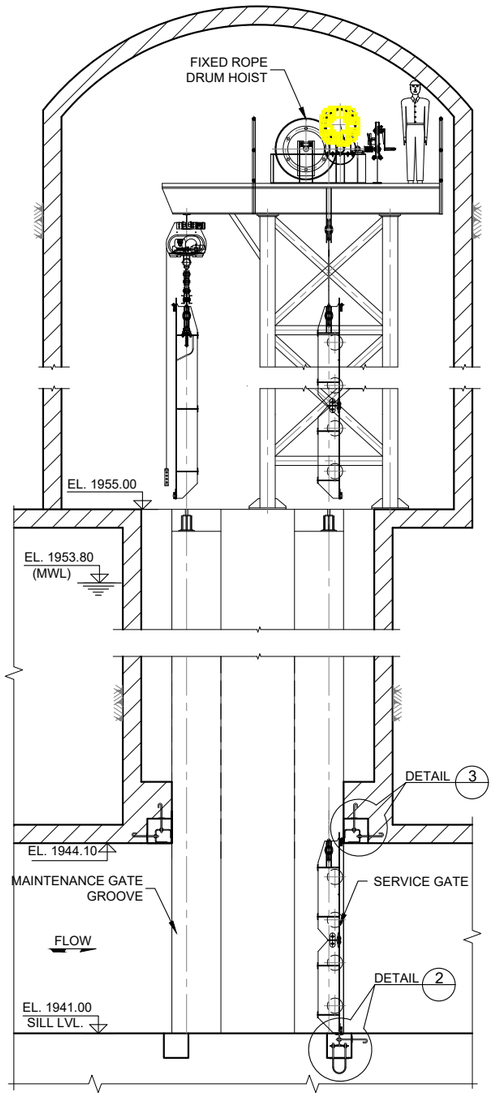
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: G. RATNAKAR	CHECKED BY: S.C. NIJHAWAN
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HM-C-05
SCALE: NTS	



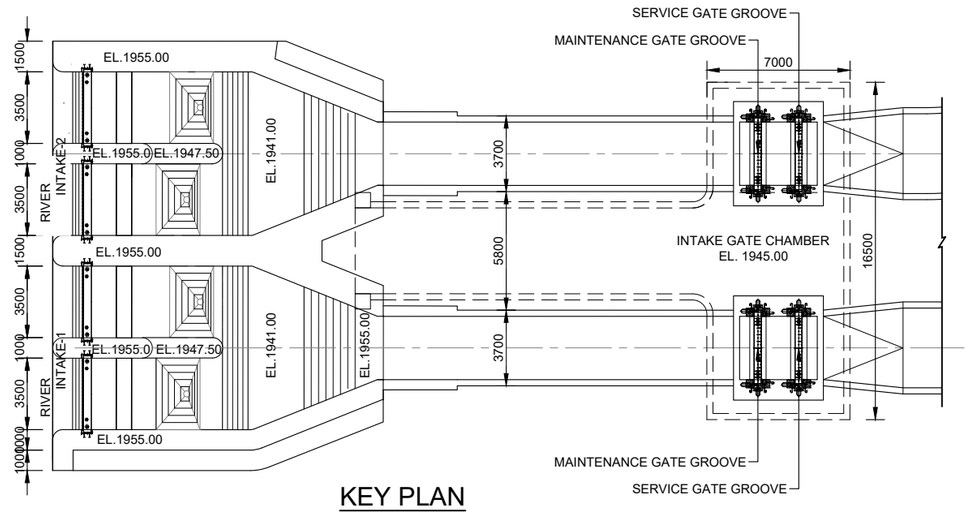
SECTION B

SCALE-A

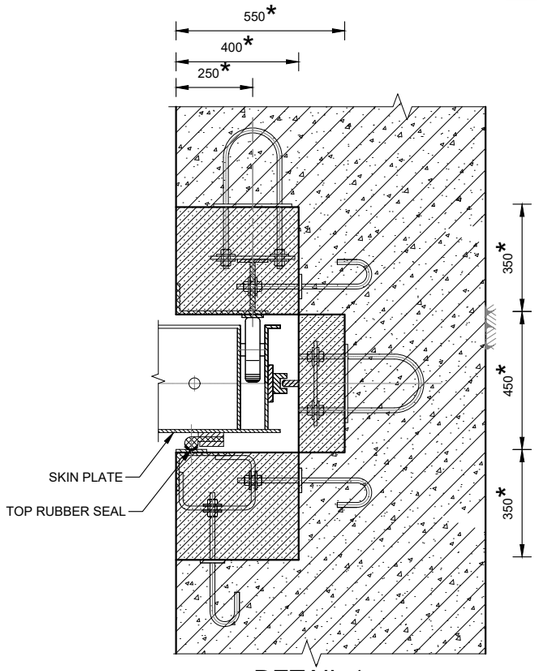


SECTION C

SCALE-A



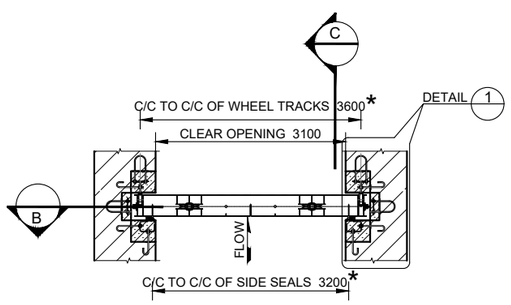
KEY PLAN



DETAIL 1

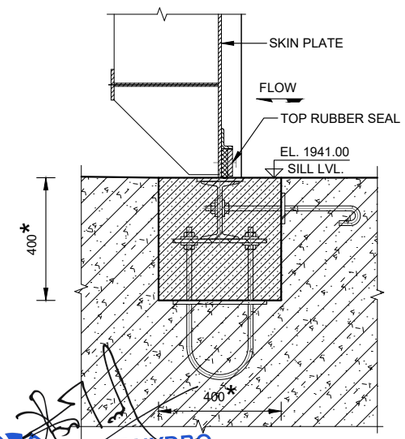
SCALE-B

S.N.	DESCRIPTION/ LOCATION	MAINTENANCE GATE AT RIVER INTAKE
1	TYPE	VERTICAL LIFT FIXED WHEEL TYPE
2	NUMBER OF GATESS	1
3	NUMBER OF VENTS	2
4	CLEAR WIDTH OF VENT	3100
5	CLEAR HEIGHT OF VENT	3100
6	DESIGN HEAD	12800
7	TYPE OF HOIST	ELECTRIC MONORAIL HOIST
8	NUMBER OF HOISTS	1
9	ESTIMATED CAPACITY OF HOIST	10 T
10	OPERATING CONDITION	BALANCED HEAD
11	LOCATION OF SEAL	UPSTREAM
12	TYPE OF SEAL	SIDE/TOP SEAL: SYNTHETIC RUBBER SOLID BULB MUSIC NOTE (FLOROCARBON CLADDED) BOTTOM SEAL: SYNTHETIC RUBBER SOLID WEDGE TYPE.
13	LOCATION OF SKIN PLATE	UPSTREAM
14	DESIGN BASIS	GENERAL & PARTICULAR TECHNICAL SPECIFICATION & IS:5620 OR EQUIVALENT INTERNATIONAL CODE
15	WEIGHTS (TENTATIVE)	
a	ONE GATE	3.8 T
b	EP/GATE	3.0 T



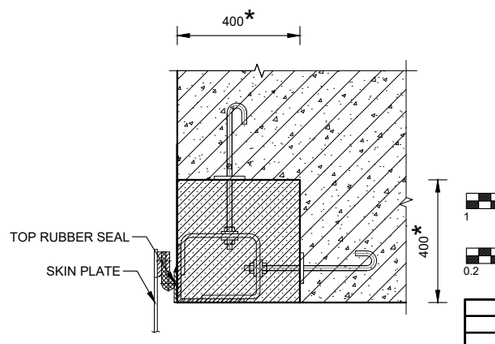
SECTION A

SCALE-A



DETAIL 2

SCALE-B



DETAIL 3

SCALE-B

1 0 1 2 3 4 5M

SCALE-A : 1:100

0.2 0 0.2 0.4 0.6 0.8 1M

SCALE-B: 1:20

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

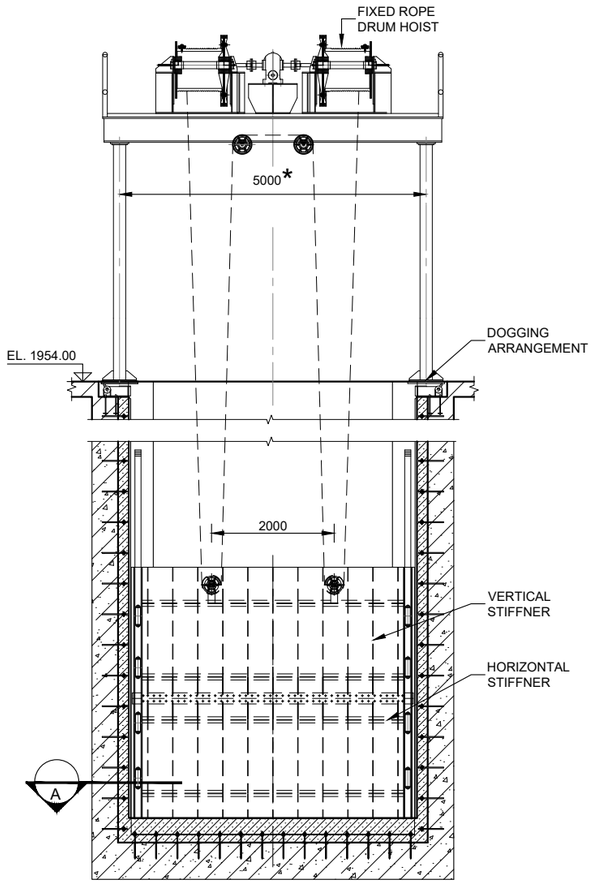
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HYDROMECHANICAL
RIVER INTAKE
SERVICE GATE DETAILS

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

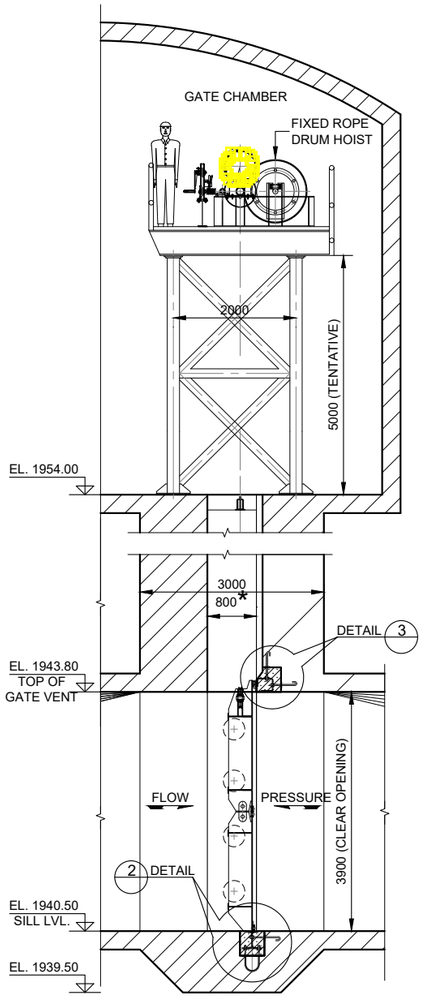
		DESIGNED BY: G. RATNAKAR	CHECKED BY: S.C. NIJHAWAN
		DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
		DATE: MARCH 2022	DWG. NO GK-HM-C-06
DWG. NO.	DESCRIPTION:	SCALE: NTS	
REFERENCE DRAWINGS			

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड



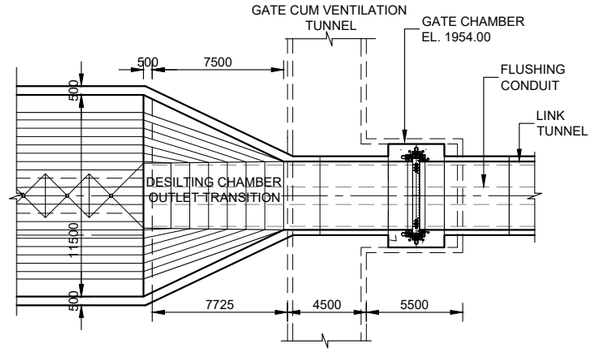
SECTION B

SCALE-A

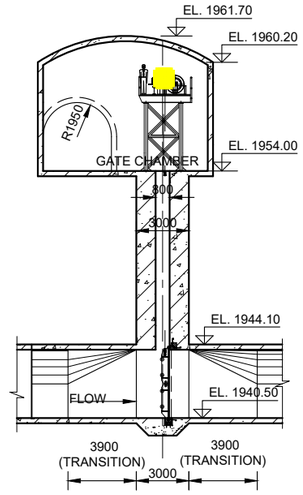


SECTION C

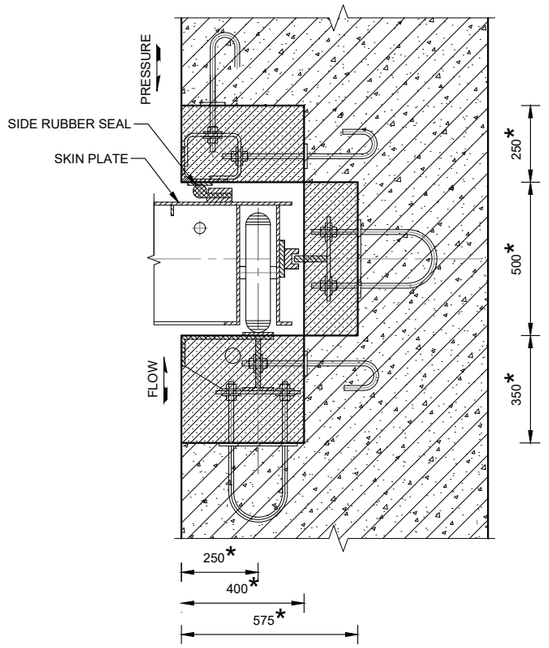
SCALE-A



KEY PLAN



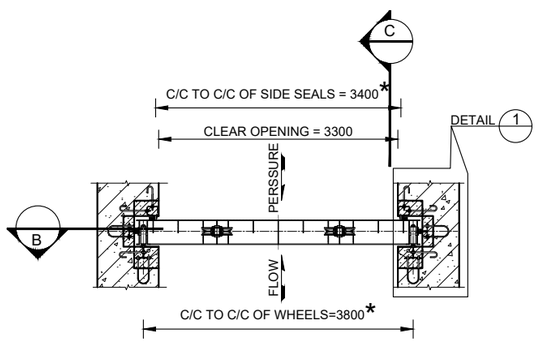
KEY SECTION



DETAIL 1

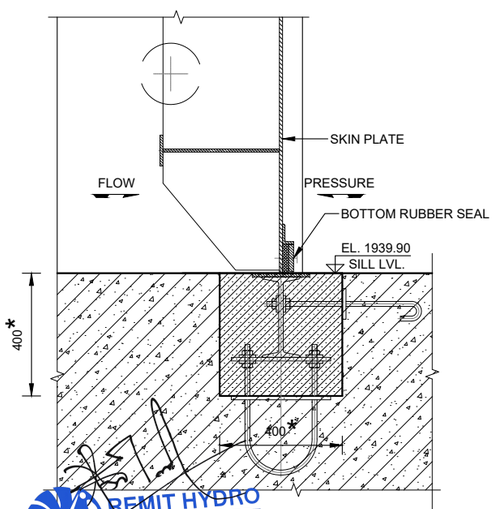
SCALE-B

S.N.	DESCRIPTION/ LOCATION	DESILTING CHAMBER GATE
1	TYPE	VERTICAL LIFT FIXED WHEEL TYPE
2	NUMBER OF GATESS	2
3	NUMBER OF VENTS	2
4	CLEAR WIDTH OF VENT	3900
5	CLEAR HEIGHT OF VENT	3900
6	DESIGN HEAD	13900
7	TYPE OF HOIST	ELECTRIC ROPE DRUM HOIST
8	NUMBER OF HOISTS	2
9	OPERATING CONDITION	BALANCED HEAD
10	LOCATION OF SEAL	DOWNSTREAM
11	TYPE OF SEAL	SIDE/TOP SEAL: SYNTHETIC RUBBER SOLID BULB MUSIC NOTE (FLOROCARBON CLADDED) BOTTOM SEAL: SYNTHETIC RUBBER SOLID WEDGE TYPE.
12	LOCATION OF SKIN PLATE	DOWNSTREAM
13	DESIGN BASIS	GENERAL & PARTICULAR TECHNICAL SPECIFICATION & IS:5620 OR EQUIVALENT INTERNATIONAL CODE
14	WEIGHT (TENTATIVE)	
a	ONE GATE	5.75 T
b	EP/GATE	3.3 T
15	ESTIMATED CAPACITY OF HOIST	12.5 T



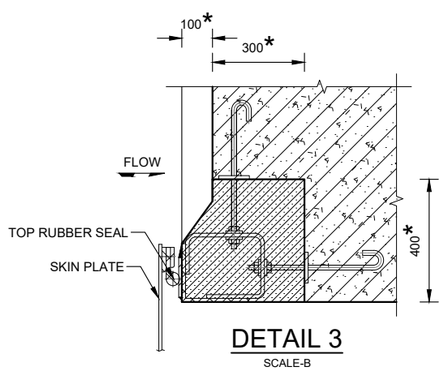
SECTIONAL PLAN A

SCALE-A



DETAIL 2

SCALE-B



DETAIL 3

SCALE-B

REMIT HYDRO
रेमित हाइड्रो लिमिटेड

1 0 1 2 3 4 5M
SCALE-A : 1:100

0.2 0 0.2 0.4 0.6 0.8 1M
SCALE-B: 1:20

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

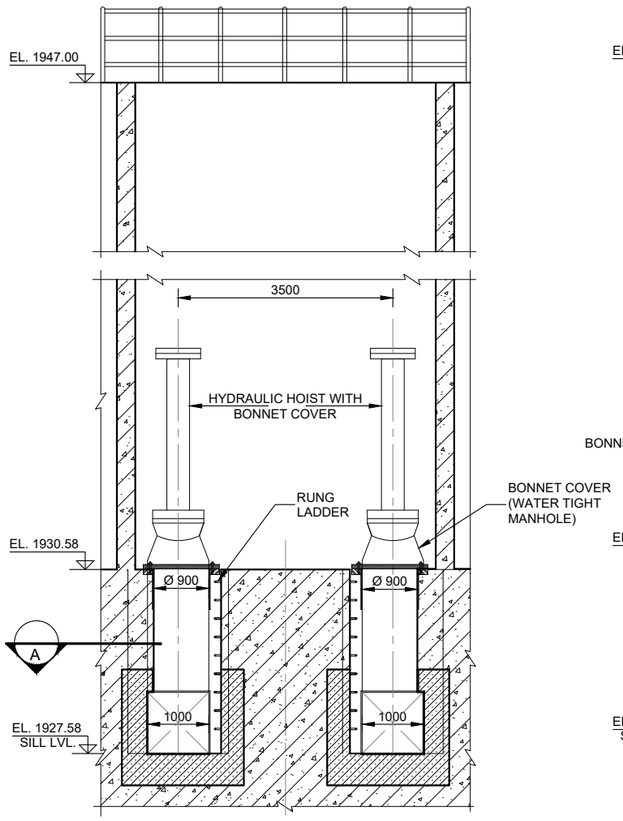
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HYDROMECHANICAL
DESILTING CHAMBER
GATE DETAILS

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

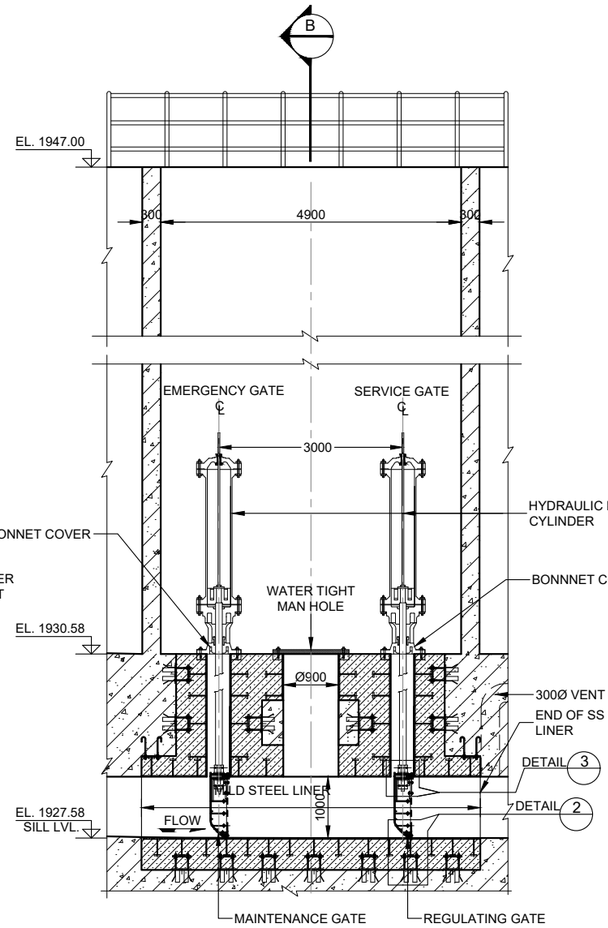
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

		DESIGNED BY: G. RATNAKAR	CHECKED BY: S.C. NIJHAWAN
		DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
		DATE: 2025	DWG. NO GK-HM-C-07
DWG. NO.	DESCRIPTION: REFERENCE DRAWINGS	SCALE: NTS	



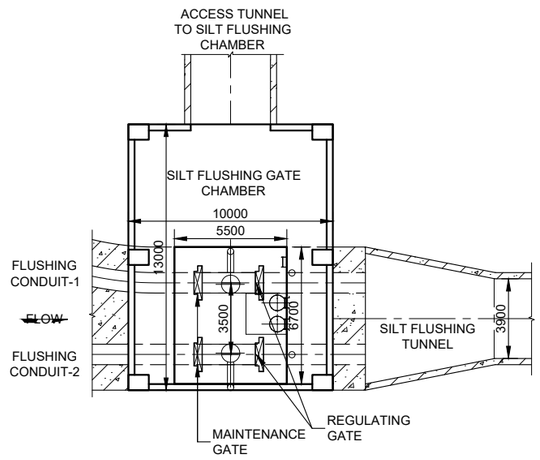
SECTION B

SCALE-A

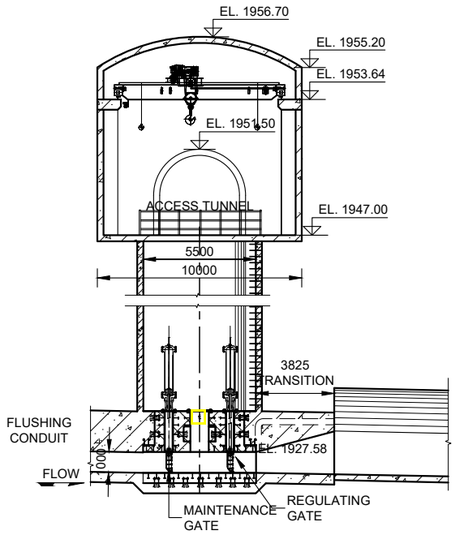


SECTION C

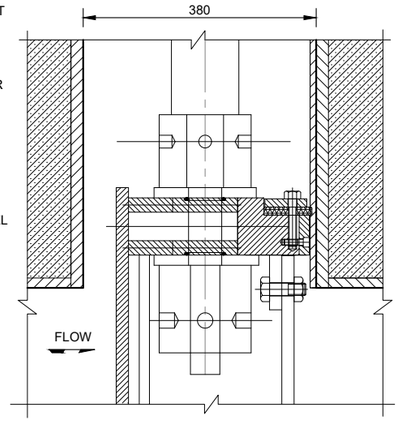
SCALE-A



KEY PLAN

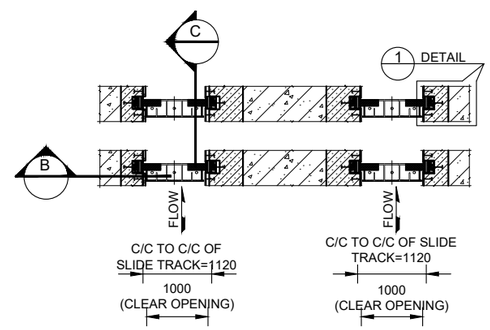


KEY SECTION



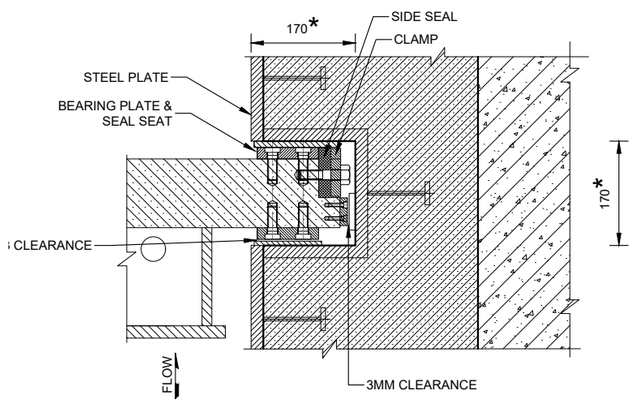
DETAIL 3

SCALE-B



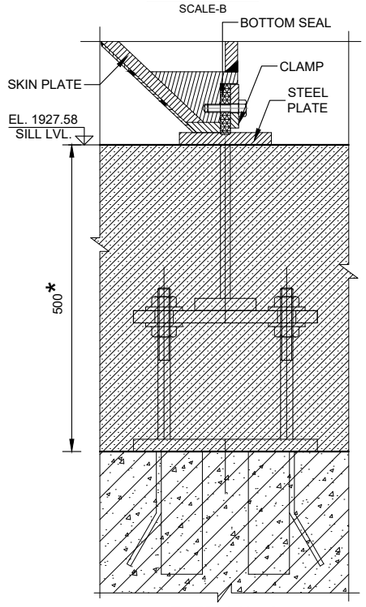
SECTIONAL PLAN A

SCALE-A



DETAIL 1

SCALE-B



DETAIL 2

SCALE-B

S.N.	DESCRIPTION/ LOCATION	SILT FLUSHING GATES
1	TYPE	BONNET TYPE
2	NUMBER OF GATESS	2 EMERGENCY + 2 SERVICE GATE
3	NUMBER OF VENTS	4
4	CLEAR WIDTH OF VENT	1000
5	CLEAR HEIGHT OF VENT	1000
6	DESIGN HEAD	262200+2000 (VACUUM HEAD)
7	TYPE OF HOIST	HYDRAULIC HOIST (DOUBLE ACTING)
8	ESTIMATED HOIST CAPACITY	30 T
9	NUMBER OF HOISTS	4
10	OPERATING CONDITION	UNBALANCED HEAD
11	LOCATION OF SEAL	DOWNSTREAM
12	TYPE OF SEAL	BOTTOM SEAL/TOP SEAL/SIDE SEAL SYNTHETIC RUBBER SOLID WEDGE TYPE.
13	LOCATION OF SKIN PLATE	UPSTREAM
14	DESIGN BASIS	GENERAL & PARTICULAR TECHNICAL SPECIFICATION & IS:5620 OR EQUIVALENT INTERNATIONAL CODE
15	UNIT WEIGHT (TENTATIVE)	
a	ONE GATE	0.5 T
b	EP/GATE	3.0 T

1 0 1 2 3 4 5M
SCALE-A : 1:100

0.1 0 0.1 0.2 0.3 0.4 0.5M
SCALE-B: 1:10

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HYDROMECHANICAL
FLUSHING CONDUIT
SILT FLUSHING GATE DETAILS

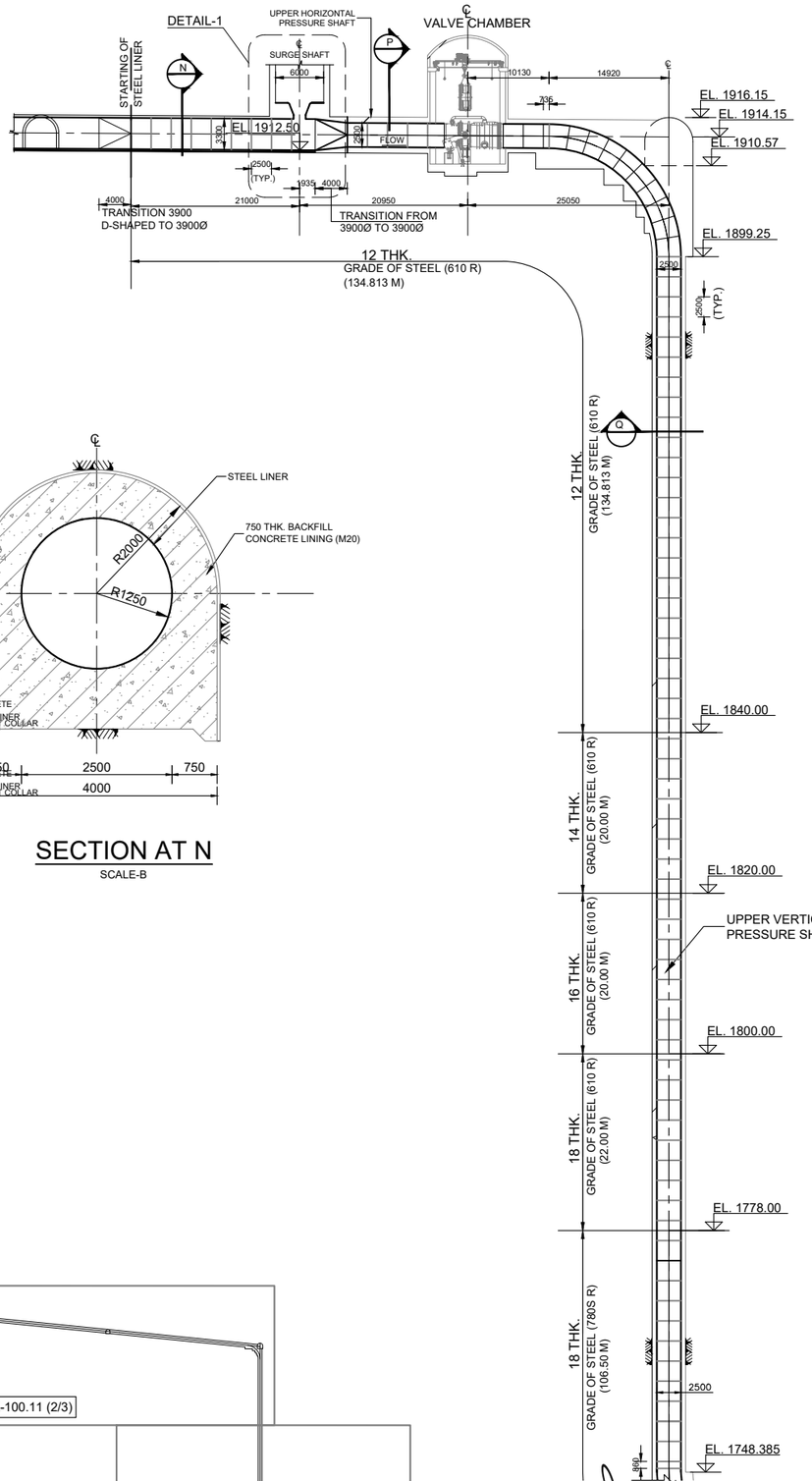
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

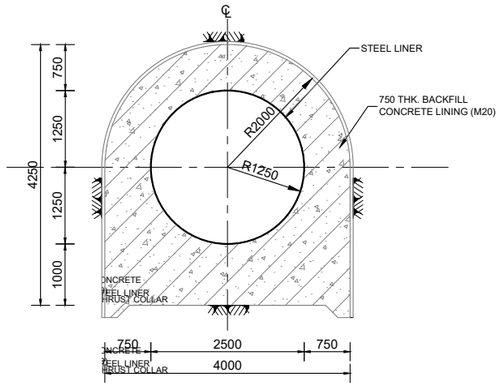
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

DESIGNED BY: G. RATNAKAR	CHECKED BY: S.C. NIJHAWAN
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HM-C-08
SCALE: NTS	

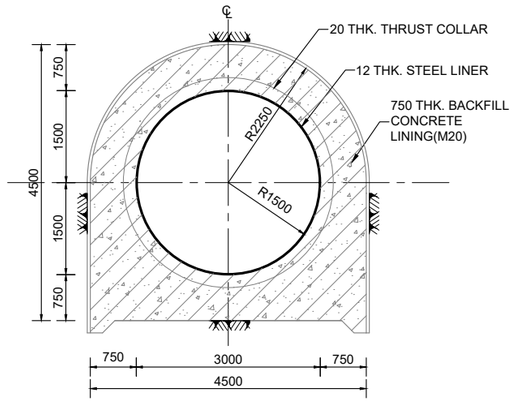
No. of Steel Plates for HRT, Surge Shaft Orifice, Pressure Shaft of Ghunsa Khola HEP

S.No.	Description	Grade of Steel	Thickness (mm)	Size/ Diameter	Length as per	Plate length required	Size of Plate to be ordred		Nos.	Weight (MT)
							length(m)	Width (m)		
1	HRT steel Liner u/s of Surge Shaft- 3.9m dia.	610R	12	3.9	27.00	12.29	12.49	2.5	11	32.36
2	Transition 3.9m dia to 3.0m dia	610R	12	3.9	4.00	12.29	12.49	2.5	2	5.88
3	Pressure Shaft Steel - 3.0m dia.	610R	12	3	107.86	9.46	9.66	2.5	44	100.12
4	Pressure Shaft Steel - 3.0m dia.	610R	14	3	20.00	9.47	9.67	2.5	8	21.25
5	Pressure Shaft Steel - 3.0m dia.	610R	16	3	20.00	9.48	9.68	2.5	8	24.30
6	Pressure Shaft Steel - 3.0m dia.	610R	18	3	22.00	9.48	9.68	2.5	9	30.78
7	Pressure Shaft Steel - 3.0m dia.	780S	18	3	106.50	9.48	9.68	2.5	43	147.06
8	Pressure Shaft Steel - 3.0m dia.	780S	20	3	256.50	9.49	9.69	2.5	103	391.65
9	Pressure Shaft Steel - 3.0m dia.	780S	22	3	26.00	9.49	9.69	2.5	11	46.04
10	Pressure Shaft Steel - 3.0m dia.	780S	24	3	26.00	9.50	9.70	2.5	11	50.26
11	Pressure Shaft Steel - 3.0m dia.	780S	26	3	26.00	9.51	9.71	2.5	11	54.48
12	Pressure Shaft Steel - 3.0m dia.	780S	28	3	26.00	9.51	9.71	2.5	11	58.71
13	Pressure Shaft Steel - 3.0m dia.	780S	30	3	26.00	9.52	9.72	2.5	11	62.94
14	Pressure Shaft Steel - 3.0m dia.	780S	32	3	26.00	9.53	9.73	2.5	11	67.18
15	Pressure Shaft Steel - 3.0m dia.	780S	34	3	93.50	9.53	9.73	2.5	38	246.75
16	Trifurcation Piece	780S	40	3	3.50	9.55	9.75	2.5	2	15.31
17	Trifurcation Piece	780S	40	1.7	10.50	5.47	5.67	2.5	5	22.24
18	Unit pressure shaft 1.7m dia	780S	34	1.7	7.50	5.45	5.65	2.5	3	11.30
19	Unit pressure shaft 1.7m dia	780S	30	1.7	7.50	5.43	5.63	2.5	3	9.95
20	Unit pressure shaft 1.7m dia	780S	20	1.7	66.65	5.40	5.60	2.5	27	59.38
21	Transition 1.7m dia to 1.1m dia	780S	20	1.7	6.30	5.40	5.60	2.5	3	6.60
22	Unit pressure shaft 1.1m dia	780S	20	1.1	6.63	3.52	3.72	2.5	3	4.38
	Total				921.94					**1468.92**
	Misc. steel for surge shaft orifice, manholes, sickle plates, back strips etc.	@	5%							73.45
	Grand Total									**1542.37**

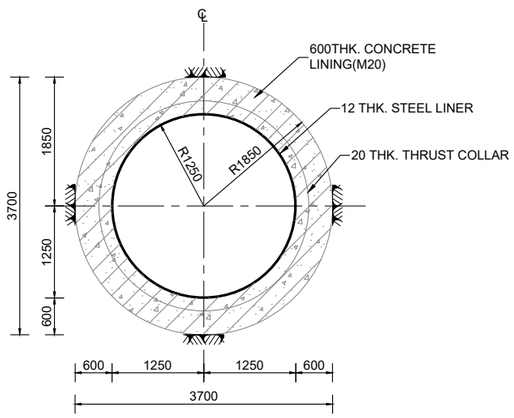




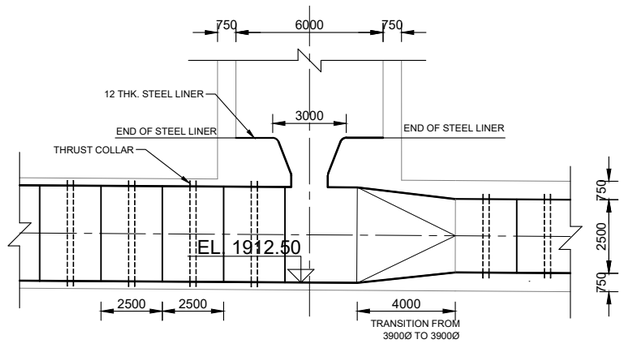
SECTION AT N
SCALE-B



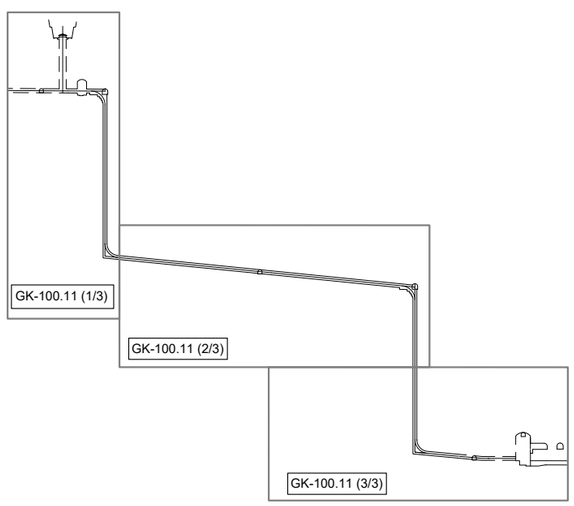
SECTION AT P
SCALE-B



SECTION AT Q
SCALE-B



DETAIL-1



KEY PLAN

LONGITUDINAL PROFILE ALONG PRESSURE SHAFT
SECTION AT L (GK-100.11(1 OF 3))
SCALE-A

5 0 5 10 15 20 25M
SCALE-A : 1:750

1 0 1 2 3 4 5M
SCALE-B : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HYDRO MECHANICAL
PRESSURE SHAFT-STEEL LINER
LONGITUDINAL PROFILE 1/3

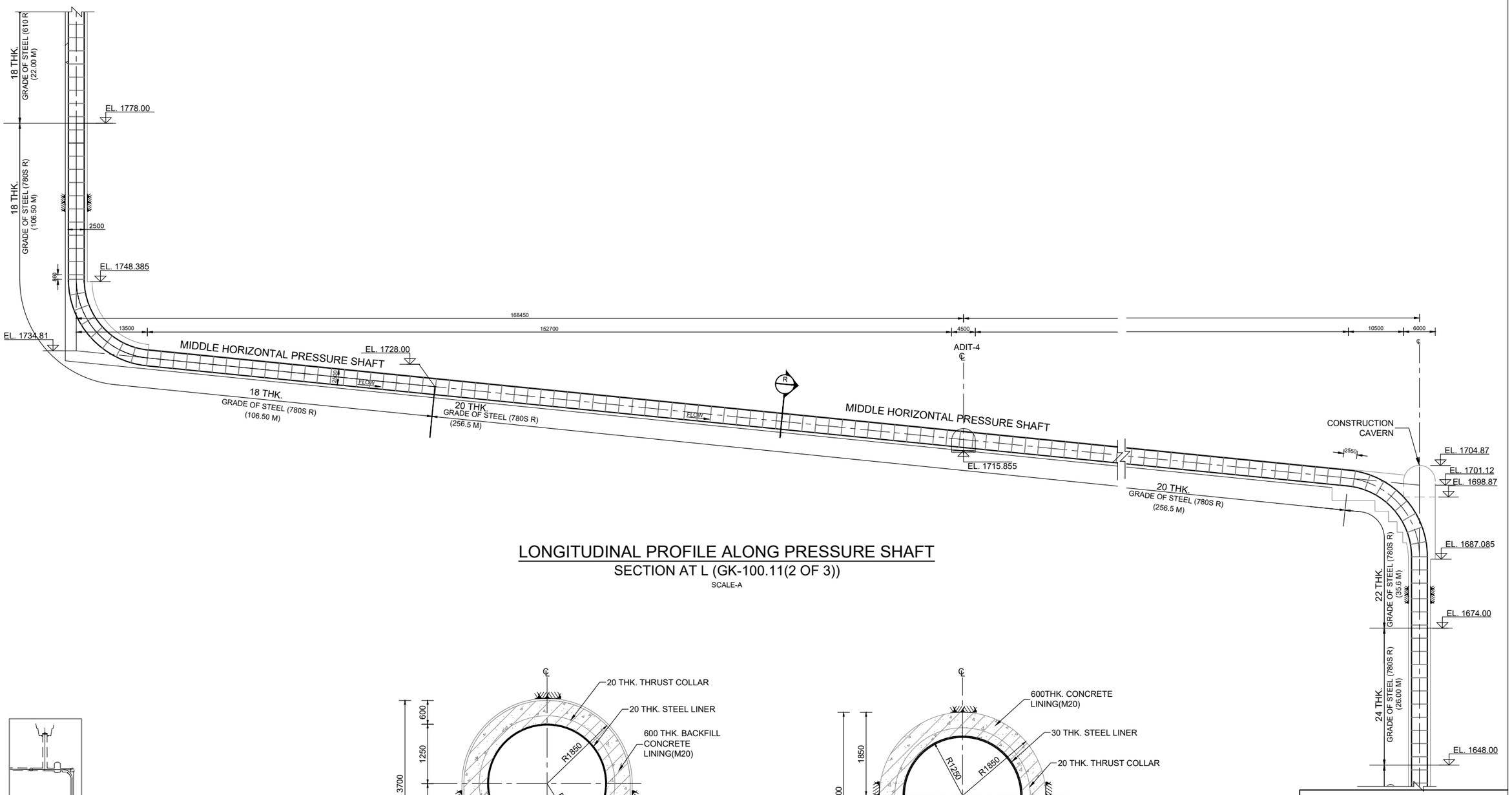
Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

GK-WC-C-23	PRESSURE SHAFT EXCAVATION & ROCK SUPPORT DETAIL
GK-WC-L-21	PRESSURE SHAFT LAYOUT PLAN
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HM-C-12
SCALE: NTS	

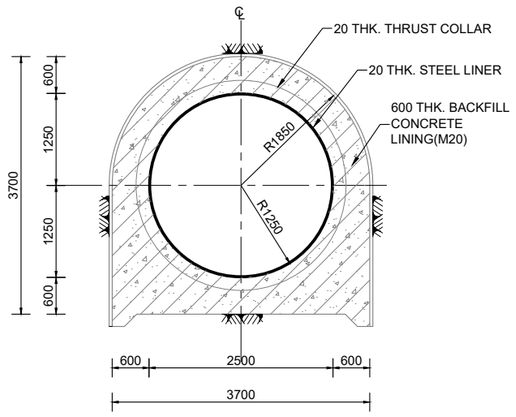
REMIT HYDRO रेमिट हाइड्रो लिमिटेड



LONGITUDINAL PROFILE ALONG PRESSURE SHAFT

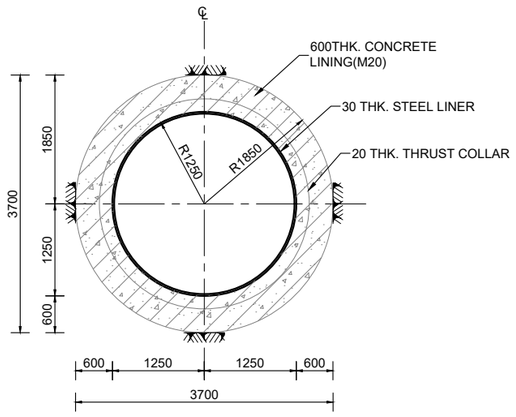
SECTION AT L (GK-100.11(2 OF 3))

SCALE-A



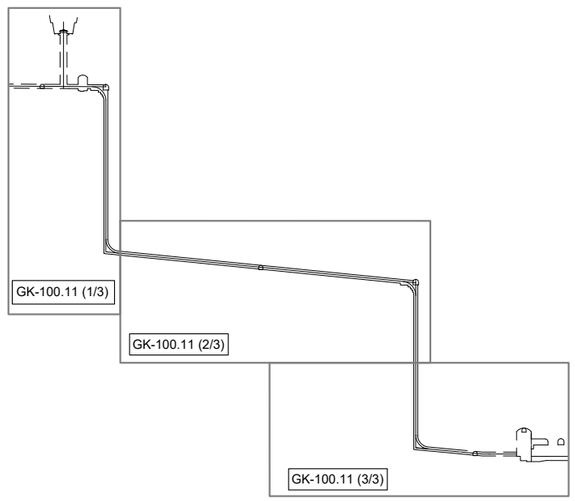
SECTION AT R

SCALE-B



SECTION AT Q

SCALE-B



KEY PLAN

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड

5 0 5 10 15 20 25M
SCALE-A : 1:750

1 0 1 2 3 4 5M
SCALE-B : 1:100

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

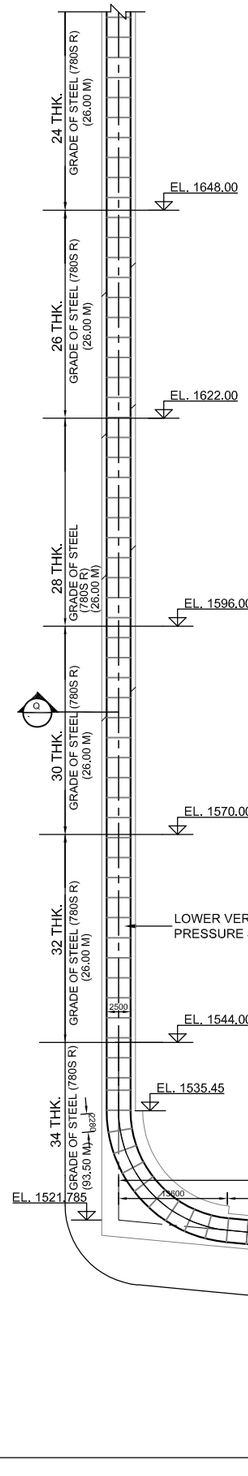
REMIT HYDRO LIMITED
KATHMANDU, NEPAL

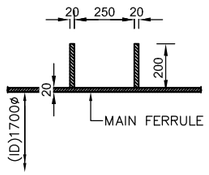
HYDRO MECHANICAL
PRESSURE SHAFT-STEEL LINER
LONGITUDINAL PROFILE 2/3

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

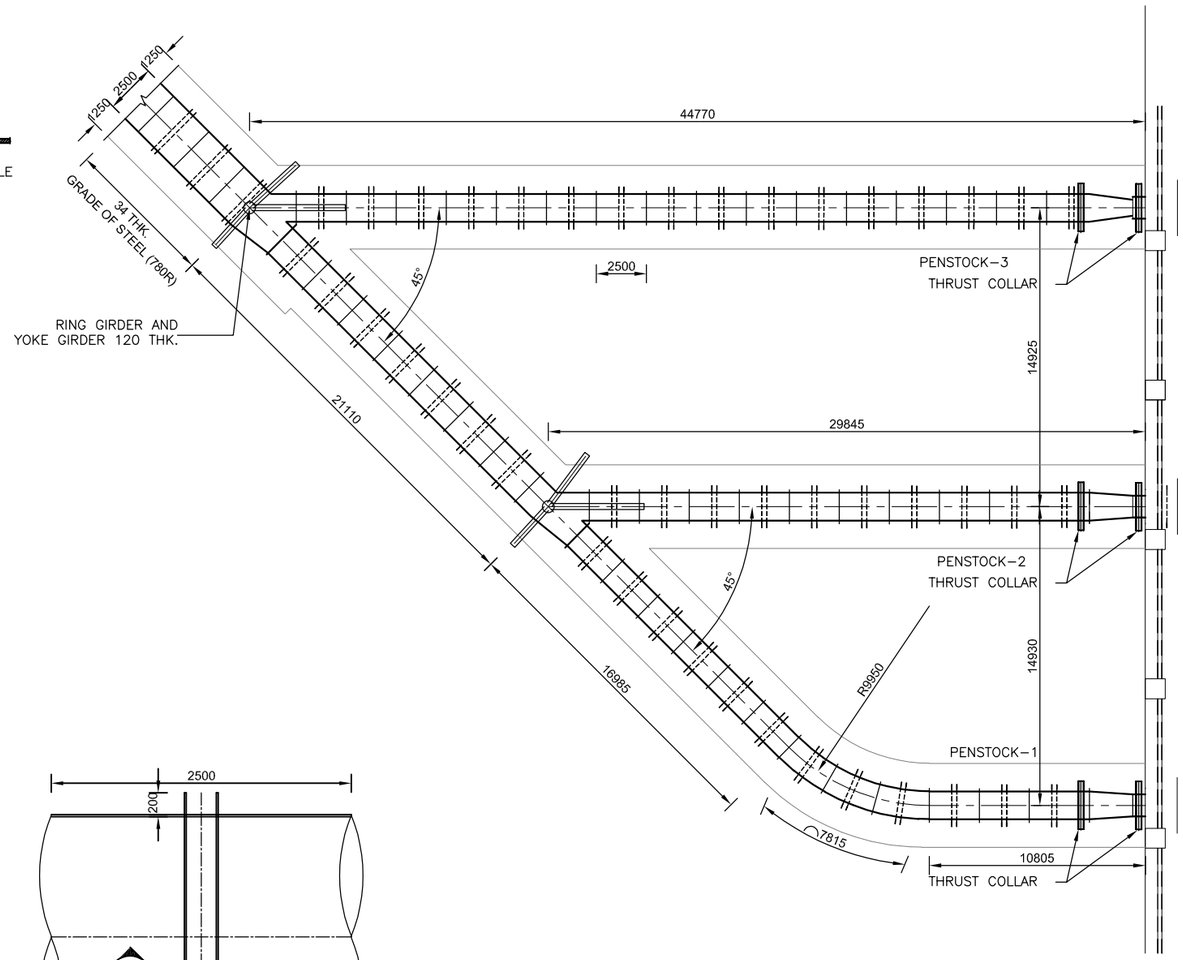
JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

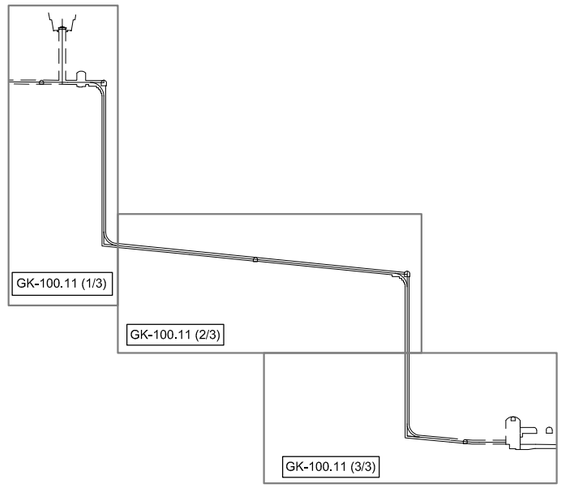
		DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
		DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
GK-WC-C-23	PRESSURE SHAFT EXCAVATION & ROCK SUPPORT DETAIL	DATE: 2025	DWG. NO GK-HM-C-13
GK-WC-L-21	PRESSURE SHAFT LAYOUT PLAN	SCALE: NTS	
DWG. NO.	DESCRIPTION:		
REFERENCE DRAWINGS			



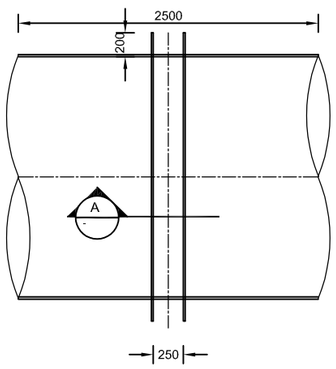


SECTION A



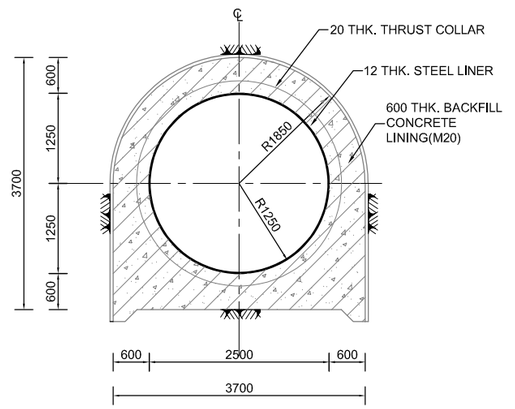


KEY PLAN

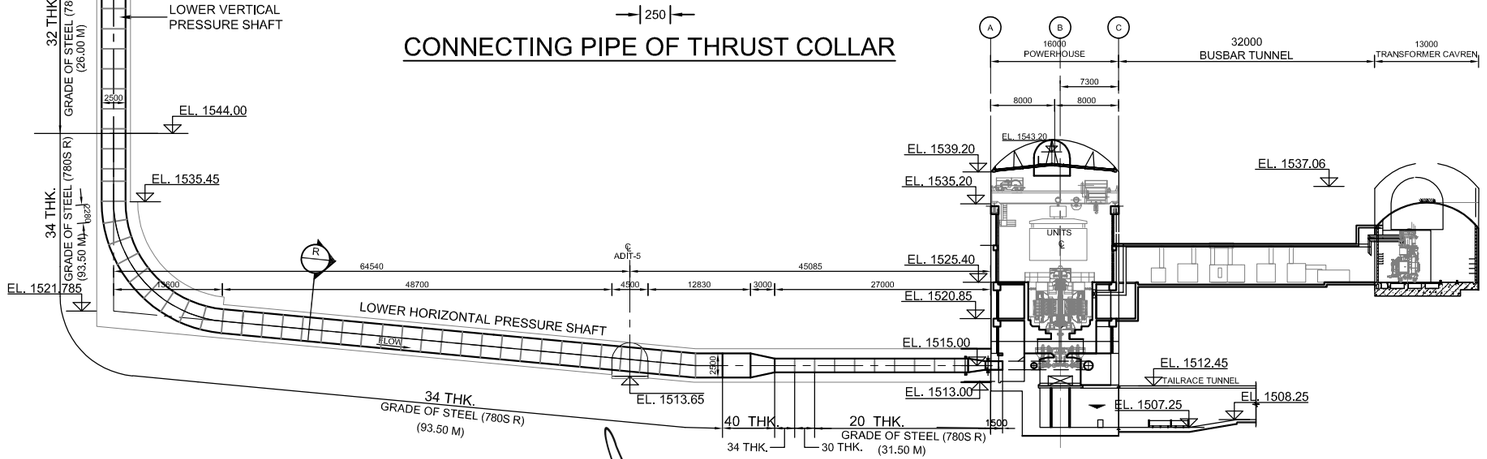


CONNECTING PIPE OF THRUST COLLAR

PENSTOCK TRIFURCATION PLAN
SCALE-C



SECTION AT R
SCALE-B



LONGITUDINAL PROFILE ALONG PRESSURE SHAFT
SECTION AT L (GK-100.11(3 OF 3))

SCALE A : 1:750

SCALE-B : 1:100

SCALE-C : 1:300

GHUNSA KHOLA HEP
TAPLEJUNG, NEPAL

REMIT HYDRO LIMITED
KATHMANDU, NEPAL

HYDRO MECHANICAL
PRESSURE SHAFT-STEEL LINER
LONGITUDINAL PROFILE 3/3

Reviewed & Recommended for issue by:
NEA Engineering Company Ltd.

JV of
Indo Canadian Consultancy Services Ltd. &
Shah Consult International (P.) Ltd.
THAPATHALI, KATHMANDU, NEPAL
PHONE: 01-5315046; FAX:01-5315046

GK-WC-C-23	PRESSURE SHAFT EXCAVATION & ROCK SUPPORT DETAIL
GK-WC-L-21	PRESSURE SHAFT LAYOUT PLAN
DWG. NO.	DESCRIPTION:
REFERENCE DRAWINGS	

DESIGNED BY: R. PAL/ R.S. CHAUDHARY	CHECKED BY: R.C. CHAUDHARY
DRAWN BY: A. POKHREL	APPROVED BY: R. MAHAJAN
DATE: 2025	DWG. NO GK-HM-C-14
SCALE: NTS	

REMIT HYDRO
रेमिट हाइड्रो लिमिटेड