

CLIENT:



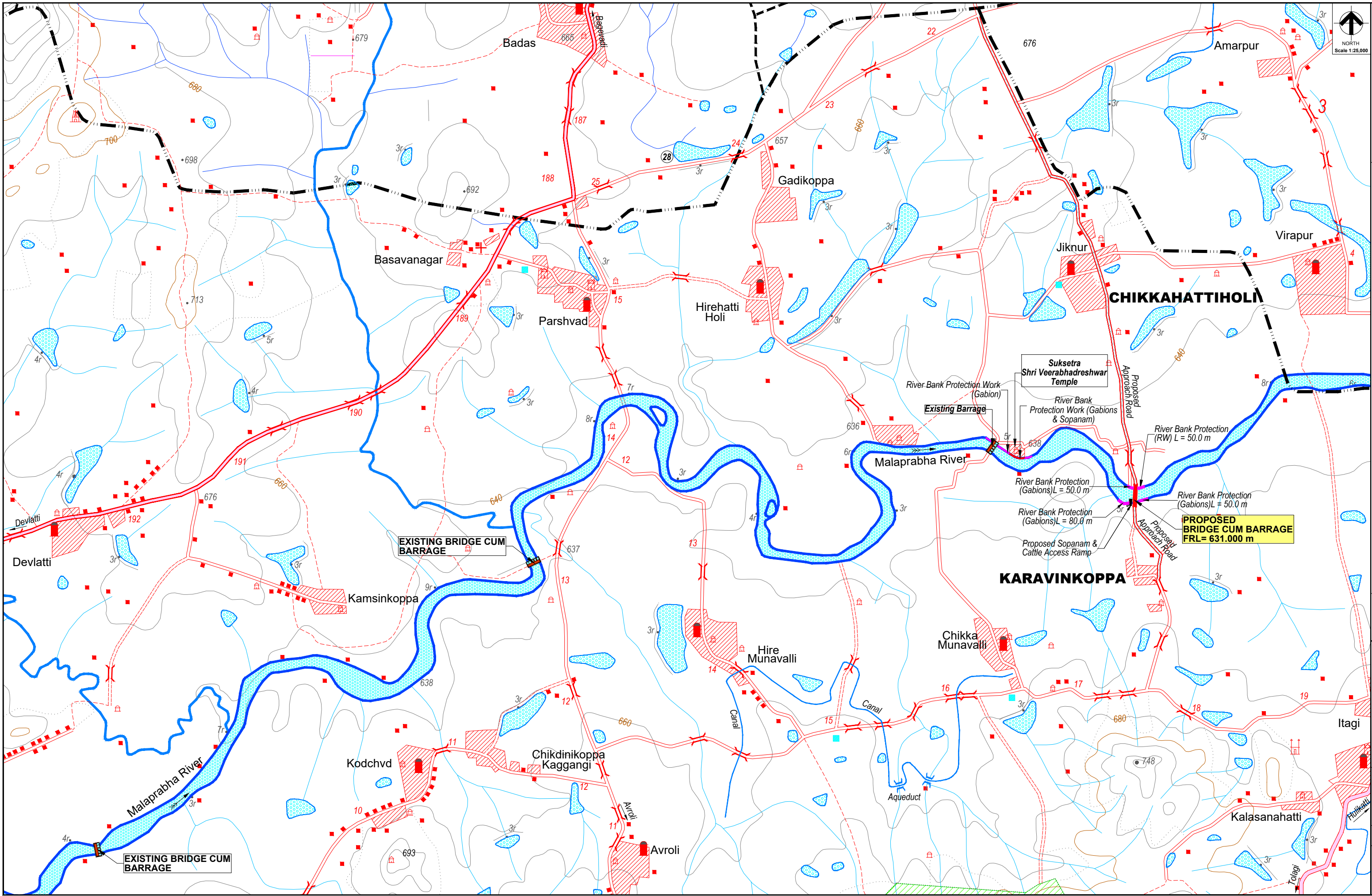
KARNATAKA NEERAVARI NIGAM LIMITED (KNNL)
(A GOVT. OF KARNATAKA UNDERTAKING)
BANGALORE - 560 001, INDIA.
www.knnlindia.com

PROPOSED BRIDGE CUM BARRAGE AND RIVER PROTECTION WORK

CONSTRUCTION OF A BRIDGE CUM BARRAGE ACROSS THE MALAPRABHA RIVER AT CHIKKAHATTI HOLI VILLAGE, KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND CONNECTING ROADS FROM CHIKKAHATTI HOLI AND KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE YEARS.

DRAWINGS

EXECUTIVE ENGINEER,
KNNL, KALASA PROJECT DIVISION,
KHANAPUR.



LEGEND

ROADS
NATIONAL HIGHWAY STATE HIGHWAY OTHER ROADS.....
UNMETALLED ROADS CART TRACK FOOT PATH.....

RAILWAYS
BROAD GAUGE WITH STATION OTHER GAUGE.....

BOUNDARY
BOUNDARY STATE DISTRICT TALUK FOREST.....

BUILDINGS
TEMPLE CHATRI TOMB MOSQUE GRAVES VILLAGE LIMITS HUT.....

Transmissions Lines
MAIN POWER LINE POWER LINE TELEPHONE LINES.....

HEIGHTS
RELATION SPOT HEIGHT SPOT HEIGHT TRIANGLE STATION.....
CONTOUR WITH VALUE BENCH MARK.....

WATER FEATURES
RIVER RESERVOIR CANAL CHANNELS STREAM.....
POND WELL TANK.....


OTHER FEATURES
CLIMBS EMBANKMENT CULVERT GATE BROKEN GROUND.....
TREE GRASS WIRE FENCE CLIFF.....
SHEET ROCK ROCKY AREA BOULDERS.....

LEGEND

PROPOSED BRIDGE BARRAGE

TENDER PURPOSE ONLY

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 KARNATAKA NEERAVARI NIGAM LIMITED
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BANGALORE - 560 001

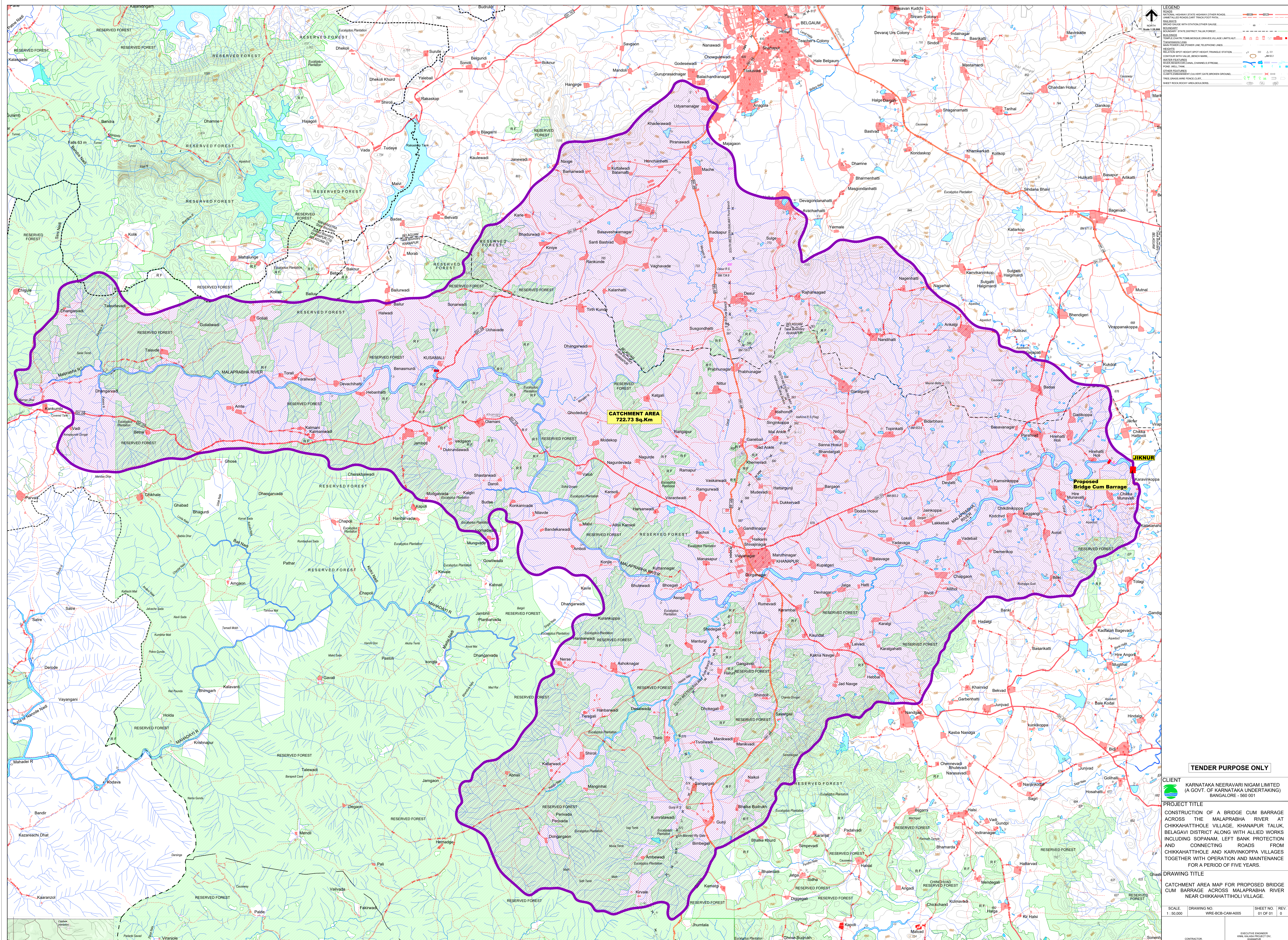
PROJECT TITLE
CONSTRUCTION OF A BRIDGE CUM BARRAGE
ACROSS THE MALAPRABHA RIVER AT
CHIKKAHATTIHOLE VILLAGE, KHANAPUR TALUK,
BELAGAVI DISTRICT ALONG WITH ALLIED WORKS
INCLUDING SOPANAM, LEFT BANK PROTECTION
AND CONNECTING ROADS FROM
CHIKKAHATTIHOLE AND KARVINKOPPA VILLAGES
TOGETHER WITH OPERATION AND MAINTENANCE
FOR A PERIOD OF FIVE YEARS.

DRAWING TITLE
INDEX MAP SHOWING THE LOCATION FOR
PROPOSED BRIDGE CUM BARRAGE AND RIVER
BANK PROTECTION FOR MALAPRABHA RIVER
NEAR CHIKKAHATTIHOLI VILLAGE.


SCALE.	DRAWING NO.	SHEET NO.	REV.
1:25,000	WRE-BCB-IND-A001	01 OF 01	0

EXECUTIVE ENGINEER
KNN, KALASA PROJECT DIV,
KHANAPUR

CONTRACTOR:



TENDER PURPOSE ONLY

CLIENT
 **KARNATAKA NEERAVARI NIGAM LIMITED**
(A GOVT. OF KARNATAKA UNDERTAKING)
BANGALORE - 560 001

PROJECT TITLE
CONSTRUCTION OF A BRIDGE CUM BARRAGE
ACROSS THE MALAPRAHBA RIVER AT
CHIKKAHATHITHOLE VILLAGE, KHANAPUR TALUK,
BELAGAVI DISTRICT ALONG WITH ALLIED WORKS
INCLUDING SOPANAM, LEFT BANK PROTECTION
AND CONNECTING ROADS FROM
CHIKKAHATHITHOLE AND KARVINKOPPA VILLAGES
TOGETHER WITH OPERATION AND MAINTENANCE
FOR A PERIOD OF FIVE YEARS.

DRAWING TITLE

CATCHMENT AREA MAP FOR PROPOSED BRIDGE
CUM BARRAGE ACROSS MALAPRABHA RIVER
NEAR CHIKKAHATTIHOLI VILLAGE.

SCALE. 1 : 50,000	DRAWING NO. WRE-RCB-C&M-A005	SHEET NO. 01 OF 01	REV. 0
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CONTRACTOR	KNEE KALASA PROJECT DIV, KHANNAPUR
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NORTH

Scale 1:25,000

LEGEND

ROADS

NATIONAL HIGHWAY, STATE HIGHWAY, OTHER ROADS

UNMETALLED ROADS, CART TRACK, FOOT PATH

RAILWAYS

BROAD GAUGE WITH STATION, OTHER GAUGE

BOUNDARY

BOUNDARY STATE, DISTRICT, TALUK, FOREST

BUILDINGS

TEMPLE, CHATRI, TOMB, MOSQUE, GRAVES, VILLAGE LIMITS, HUT

TRANSFORMERS, LINES

MAIN POWER LINE, POWER LINE, TELEPHONE LINES

HEIGHTS

RELATION SPOT HEIGHT, SPOT HEIGHT, TRIANGLE STATION

CONTOUR WITH VALUE, BENCH MARK

WATER FEATURES

RIVER, RESERVOIR, CANAL, CHANNELS, STREAM

POND, WELL, TANK

OTHER FEATURES

CLIMTS, EMBANKMENT, CULVERT, GATE, BROKEN GROUND

TREE, GRASS, WIRE FENCE, CLIFF

SHEET ROCK, ROCKY AREA, BOULDERS

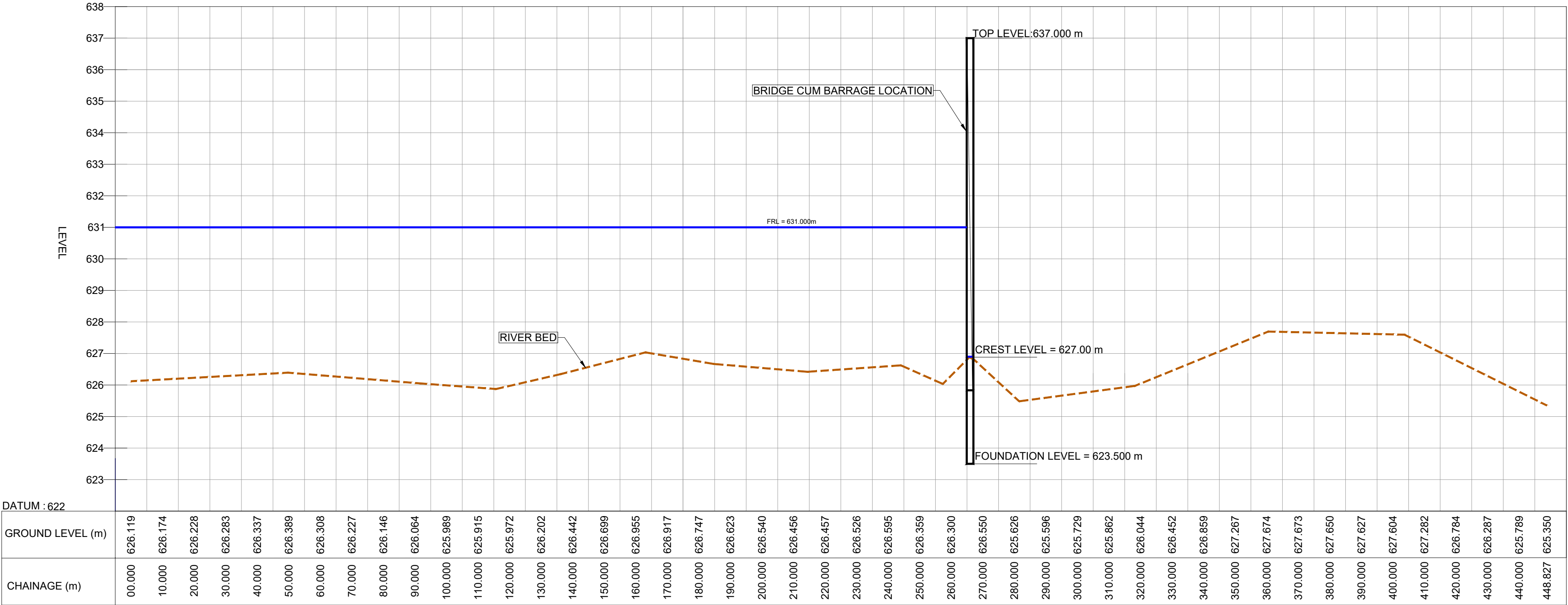
TENDER PURPOSE ONLY

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BANGALORE - 560 001

PROJECT TITLE
CONSTRUCTION OF A BRIDGE CUM BARRAGE ACROSS THE MALAPRABHA RIVER AT CHIKKAHATTI HOLE VILLAGE, KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND CONNECTING ROADS FROM CHIKKAHATTI HOLE AND KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE YEARS.

DRAWING TITLE
CAPACITY CONTOUR MAP FOR PROPOSED BRIDGE CUM BARRAGE ACROSS MALAPRABHA RIVER NEAR CHIKKAHATTI HOLE VILLAGE.



SCALE 1 : 5,000	DRAWING NO. WRE-BCB-CCM-A006	SHEET NO. 01 OF 01	REV. 0
CONTRACTOR		EXECUTIVE ENGINEER KARNATAKA PROJECT DIV. KHANAPUR	



LONGITUDINAL SECTION OF BRIDGE CUM BARRAGE


SCALE HOR 1:1000
 VER 1:100

- NOTES
1. ALL DIMENSIONS ARE IN METRES AND REDUCED LEVELS ARE IN METRES.
 2. DO NOT SCALE THE DRAWING. WRITTEN DIMENSIONS ONLY SHALL BE FOLLOWED.

PLAN & PROFILE	
GROUND LEVEL	
CREST LEVEL	

TENDER PURPOSE ONLY

CLIENT

 KARNATAKA NEERAVARI NIGAM LIMITED
(A GOVT. OF KARNATAKA UNDERTAKING)
BANGALORE - 560 001

PROJECT TITLE

CONSTRUCTION OF A BRIDGE CUM BARRAGE ACROSS THE MALAPRABHA RIVER AT CHIKKAHATTIHOLE VILLAGE, KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND CONNECTING ROADS FROM CHIKKAHATTIHOLE AND KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE YEARS.

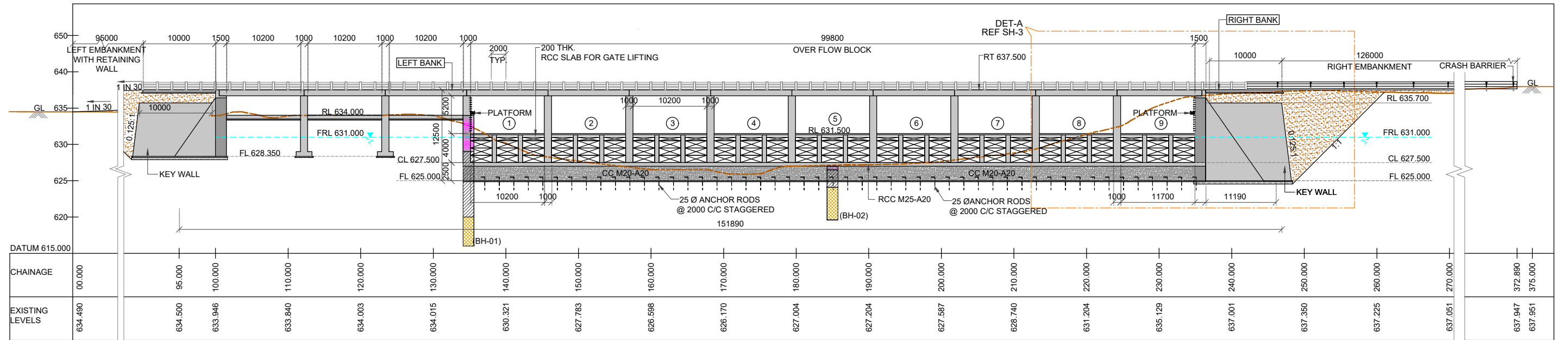
DRAWING TITLE

CROSS SECTION AND LONGITUDINAL SECTION OF MALAPRABHA RIVER AT PROPOSED BRIDGE CUM BARRAGE NEAR CHIKKAHATTIHOLE VILLAGE.

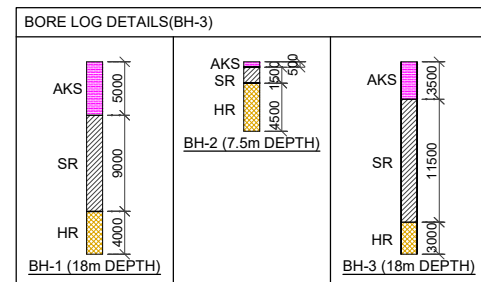
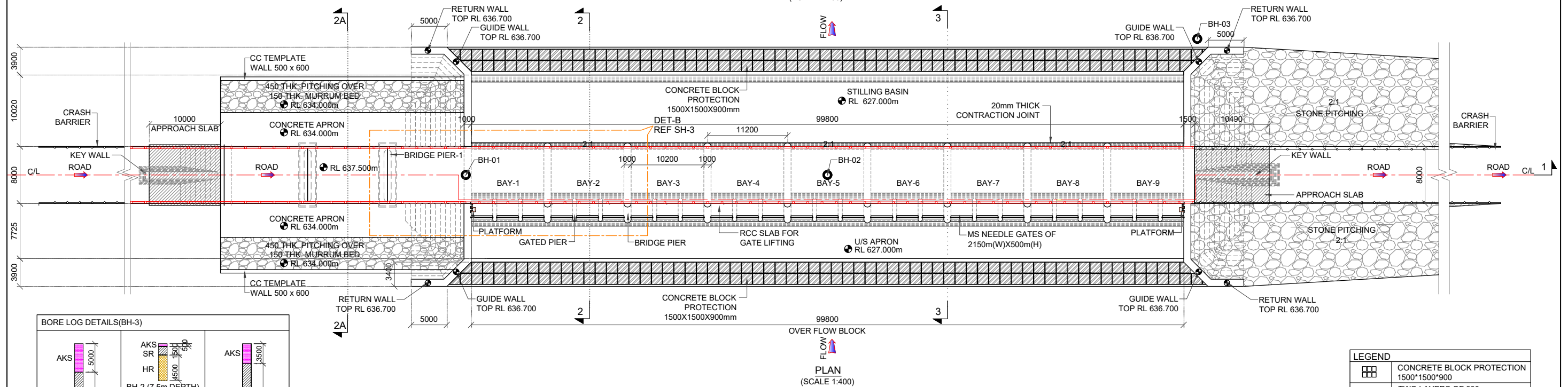
SCALE. AS SHOWN	DRAWING NO. WRE-BCB-LS-A007	SHEET NO. 01 OF 01	REV. 0
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CONTRACTOR.

EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV.,
KHANAPUR



LONGITUDINAL SECTION 1-1
(SCALE 1:400)



LEGEND	
	CONCRETE BLOCK PROTECTION 1500*1500*900
	TWO LAYERS OF 300mm THICK RUBBLE STONE PITCHING
	CC M20-A20
	RCC M25-A20
	PCC M10-A40

NOTES AND SPECIFICATIONS

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- REINFORCED CONCRETE USED SHALL BE MINIMUM M25 WITH 20mm DOWNGRADED COARSE AGGREGATE UNLESS MENTIONED.
- CONCRETE USED SHALL STRICTLY CONFORM TO THE GRADE AS INDICATED IN THE DRAWING
- REINFORCEMENT SHALL CONFORM TO FE-550 OF IS 1786
- AT ALL STAGES OF CONCRETING NECESSARY ARRANGEMENT SHALL BE MADE FOR DEWATERING TO KEEP ENTIRE AREA SAFE AGAINST UPLIFT TILL THE ENTIRE SUBSTRUCTURE IS BUILD UP TO THE GROUND LEVEL AND CURED.
- AT COLD JOINTS 225 mm WIDE PVC WATER STOP SHALL BE PROVIDED AND SHALL BE CONTINUOUS.
- BEFORE CONCRETING OF PIER, RAFT, WALL, SLAB ETC., IT SHALL BE ENSURED THAT ALL EMBEDMENT PARTS FOR GATES AND

- HOISTING SECTIONS IN FIRST STAGE CONCRETING ARE CONFIRMED BY H & M VENDOR AND ARE ERECTED IN POSITION.
- THE DOUBLE PIER CONTRACTION JOINT(WITH VERTICAL PVC WATER STOPPER) IS NOT PROVIDED ALONG THE ALIGNMENT FOR THE BARRAGE, HOWEVER WHILE CONSTRUCTING THE BARRAGE, IF ANY VARIATIONS IN FOUNDATION STRATA IS FOUND DURING EXECUTION, IN SUCH PLACES DOUBLE PIER CONTRACTION JOINT SHALL BE PROVIDED, IN ORDER TO AVOID DIFFERENTIAL SETTLEMENT DUE TO VARIATIONS IN FOUNDATION STRATA. HOWEVER THE STILLING BASIN AND MAIN STRUCTURE IS SEPARATED BY MEANS OF OPEN CONTRACTION JOINT BY PROVIDING PVC WATER STOP ACROSS JOINT.
 - TRENCH EXCAVATION USING BENTONITE SLURRY. REINFORCEMENT SHALL BE ASSEMBLED ON THE GROUND SURFACE AND INSERTED INTO THE TRENCH AND CONCRETING SHALL BE DONE BY TREMIE METHOD.

ABBREVIATIONS:

AKS - ALL KINDS OF SOIL.
BH - BORE HOLE.
C/C - CENTER TO CENTER.
CC - CEMENT CONCRETE.
C/L - CENTER LINE.
CL - CREST LEVEL.
D/S - DOWN STREAM.
FL - FOUNDATION LEVEL.
FRL - FULL RESERVOIR LEVEL.
GL - GROUND LEVEL.
H - HEIGHT.
m - METRE.
mm - MILLIMETRE.
PCC - PLAIN CEMENT CONCRETE.
RCC - REINFORCED CEMENT CONCRETE.
RL - REDUCED LEVEL.
TYP - TYPICAL.
THK - THICKNESS.
U/S - UP STREAM.
W - WIDTH.

TENDER PURPOSE ONLY



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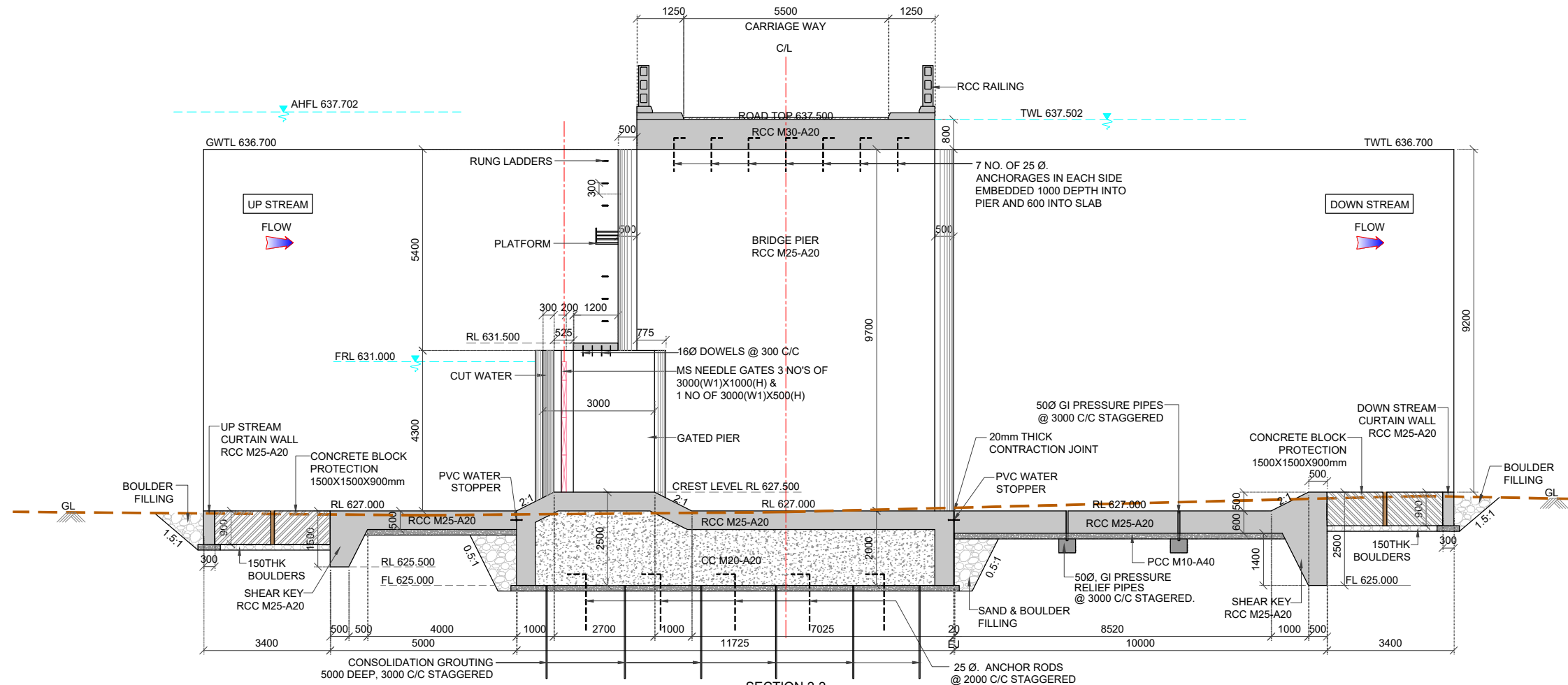
PROJECT TITLE
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DRAWING TITLE
GENERAL ARRANGEMENT DRAWINGS FOR PROPOSED BRIDGE CUM BARRAGE ACROSS MALAPRABHA RIVER NEAR CHIKKAHATTIHOI VILLAGE.

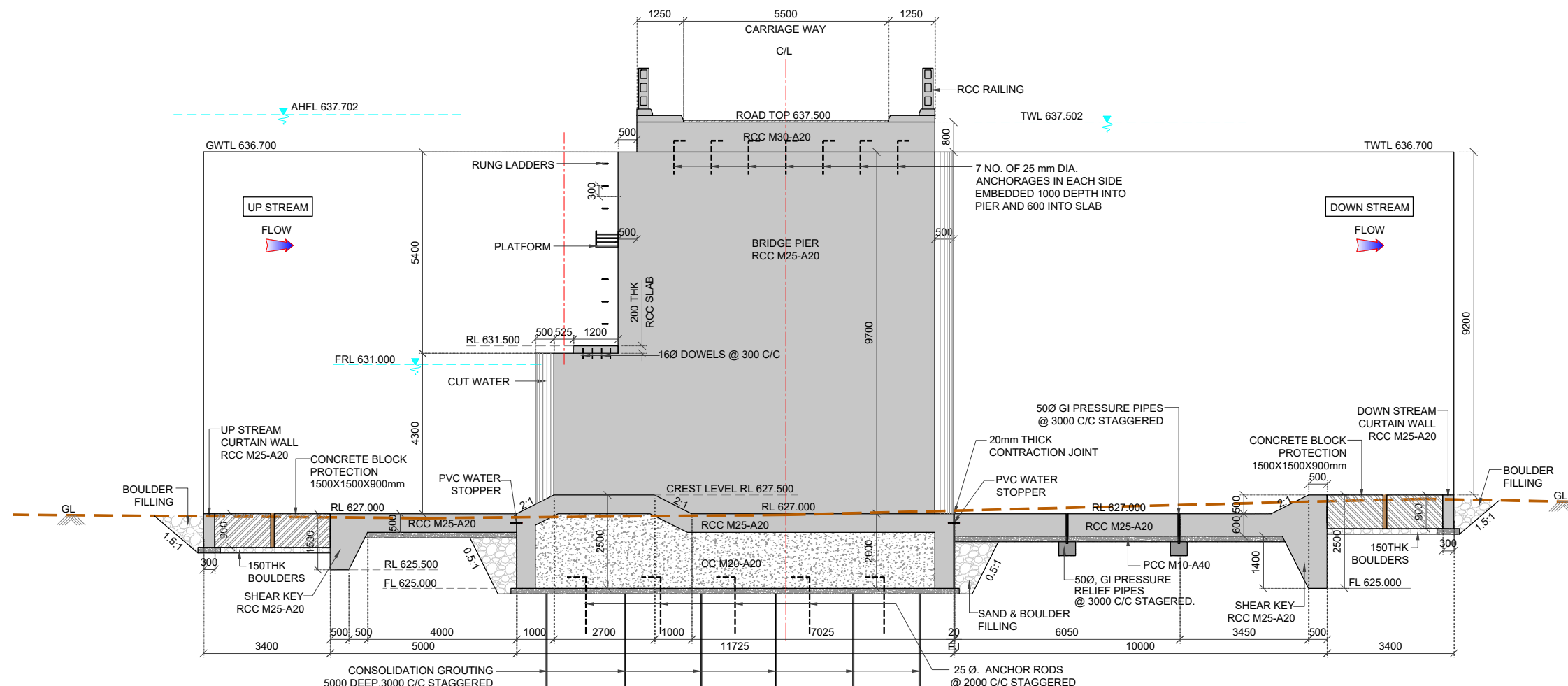
SCALE.	DRAWING NO.	SHEET NO.	REV.
AS SHOWN	WRE-BCB-GAD-A008	01 OF 07	R0

CONTRACTOR.

EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV,
KHANAPUR



SECTION 2-2
(SCALE 1:100)



SECTION 3-3
(SCALE 1:100)

NOTES AND SPECIFICATIONS

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ABBREVIATIONS:

FRL	- FULL RESERVOIR LEVEL
GL	- GROUND LEVEL
C/L	- CENTER LINE
RL	- REDUCED LEVEL
FL	- FOUNDATION LEVEL
TWL	- TAIL WATER LEVEL
TWTL	- TRAINING WALL TOP LEVEL
GWTL	- GUIDE WALL TOP LEVEL
AHFL	- AFFLUX HIGH FLOOD LEVEL
U/S	- UP STREAM
D/S	- DOWN STREAM
SL	- SCOUR LEVEL
CC	- CEMENT CONCRETE
C/C	- CENTER TO CENTER
PCC	- PLAIN CEMENT CONCRETE
RCC	- REINFORCEMENT CEMENT CONCRETE
THK	- THICK
mm	- MILLIMETRE
EJ	- EXPANSION JOINT

TENDER PURPOSE ONLY

CLIENT



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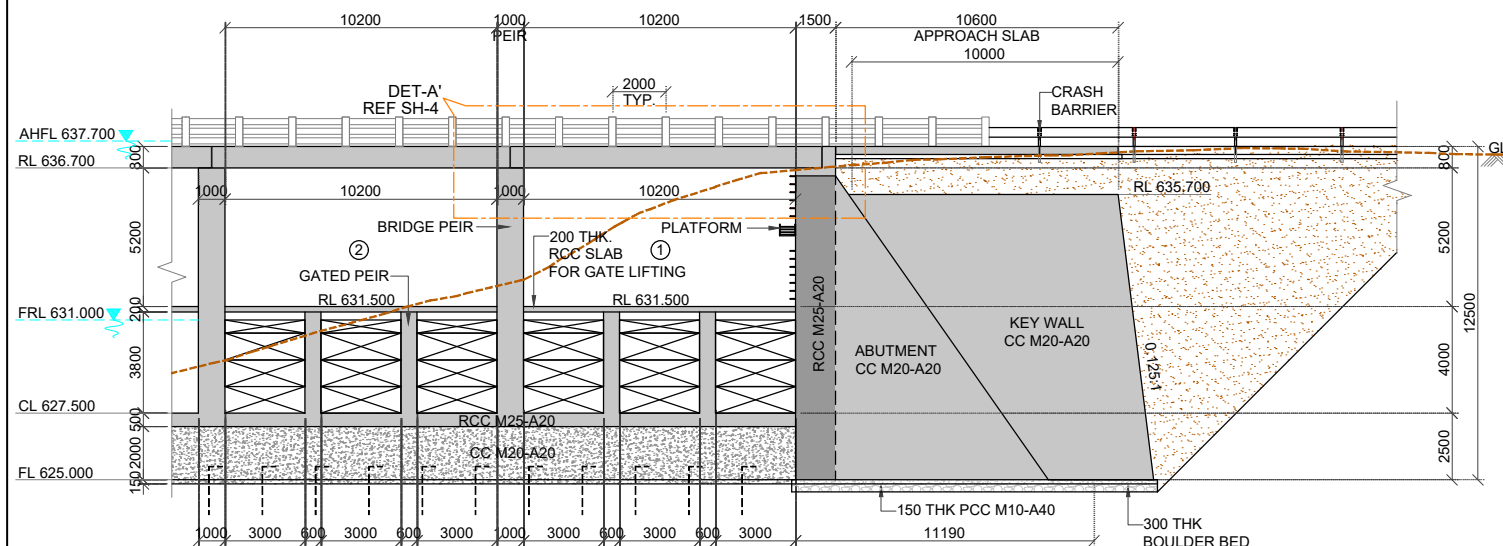
DRAWING TITLE

GENERAL ARRANGEMENT DRAWINGS FOR PROPOSED BRIDGE CUM BARRAGE ACROSS MALAPRABHA RIVER NEAR CHIKKAHATTIHOI VILLAGE.

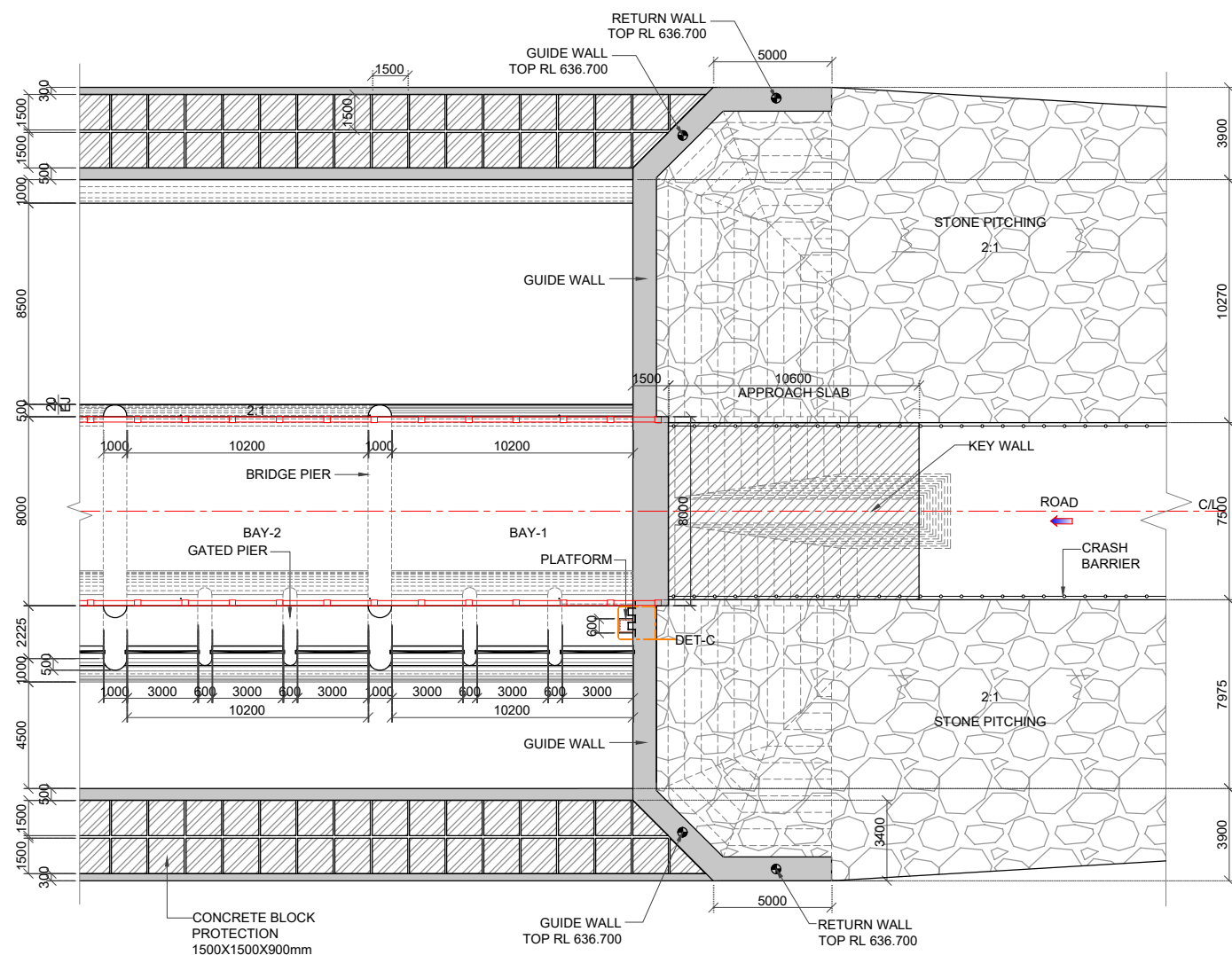
SCALE.	DRAWING NO.	SHEET NO.	REV.
AS SHOWN	WRE-BCB-GAD-A008	02 OF 07	R0

CONTRACTOR.

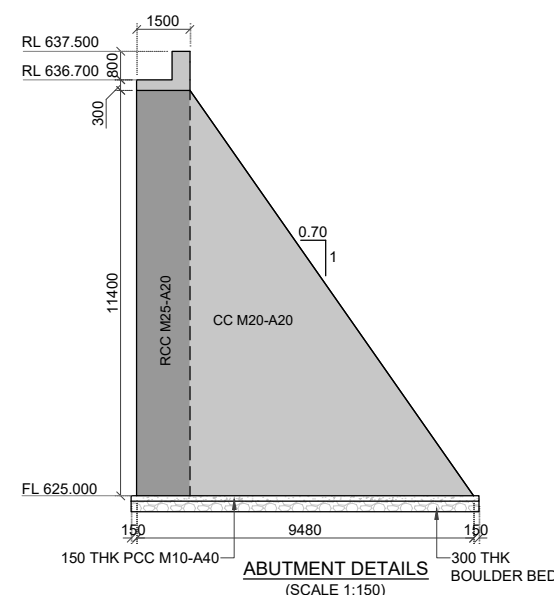
EXECUTIVE ENGINEER
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KHANAPUR



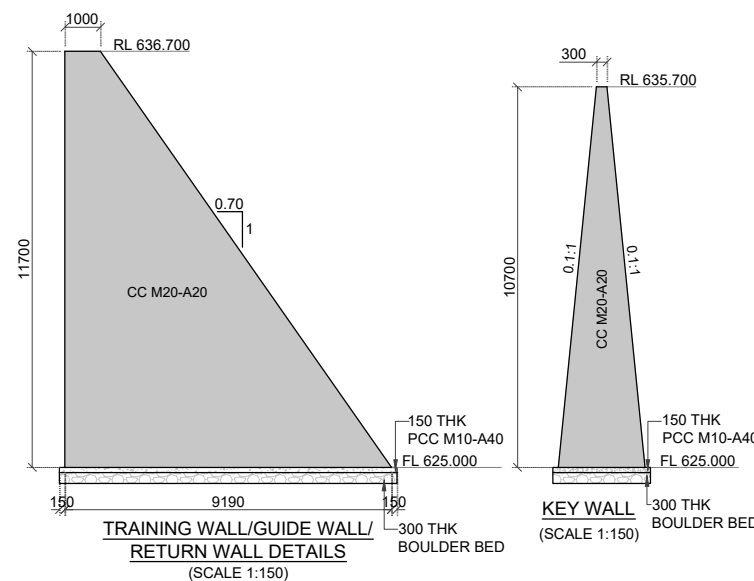
DETAIL-A
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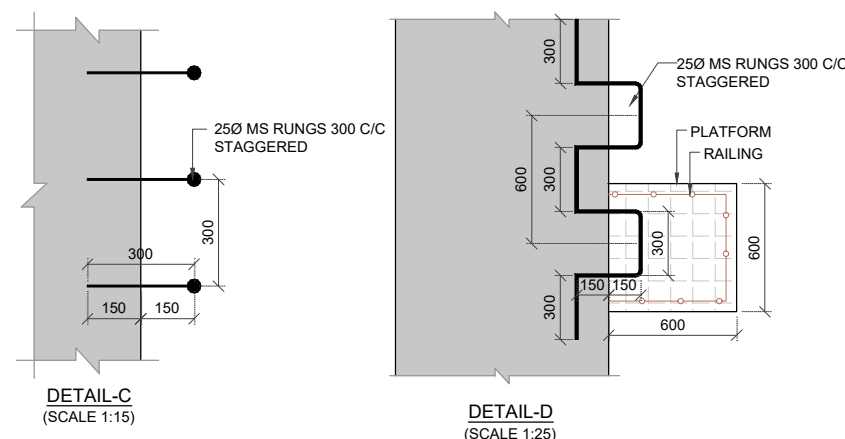
DETAIL-B
(SCALE 1:200)



ABUTMENT DETAILS
(SCALE 1:150)



TRAINING WALL/GUIDE WALL/
RETURN WALL DETAILS
(SCALE 1:150)



DETAIL-C
(SCALE 1:15)

DETAIL-D
(SCALE 1:25)

NOTES AND SPECIFICATIONS

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ABBREVIATIONS:

C/L	- CENTER LINE
C/C	- CENTER TO CENTER
GL	- GROUND LEVEL
RT	- ROAD TOP
FL	- FOUNDATION LEVEL
CL	- CREST LEVEL
RL	- REDUCED LEVEL
FRL	- FULL RESERVOIR LEVEL
AHFL	- AFFLUX HIGH FLOOD LEVEL
CC	- CEMENT CONCRETE
PCC	- PLAIN CEMENT CONCRETE
RCC	- REINFORCEMENT CEMENT CONCRETE
EJ	- EXPANSION JOINT
mm	- MILLIMETRE
THK	- THICK
TYP	- TYPICAL

TENDER PURPOSE ONLY

CLIENT	KARNATAKA NEERAVARI NIGAM LIMITED (KNNL) (A GOVT. OF KARNATAKA UNDERTAKING) BANGALORE - 560 001, INDIA. www.knnlindia.com
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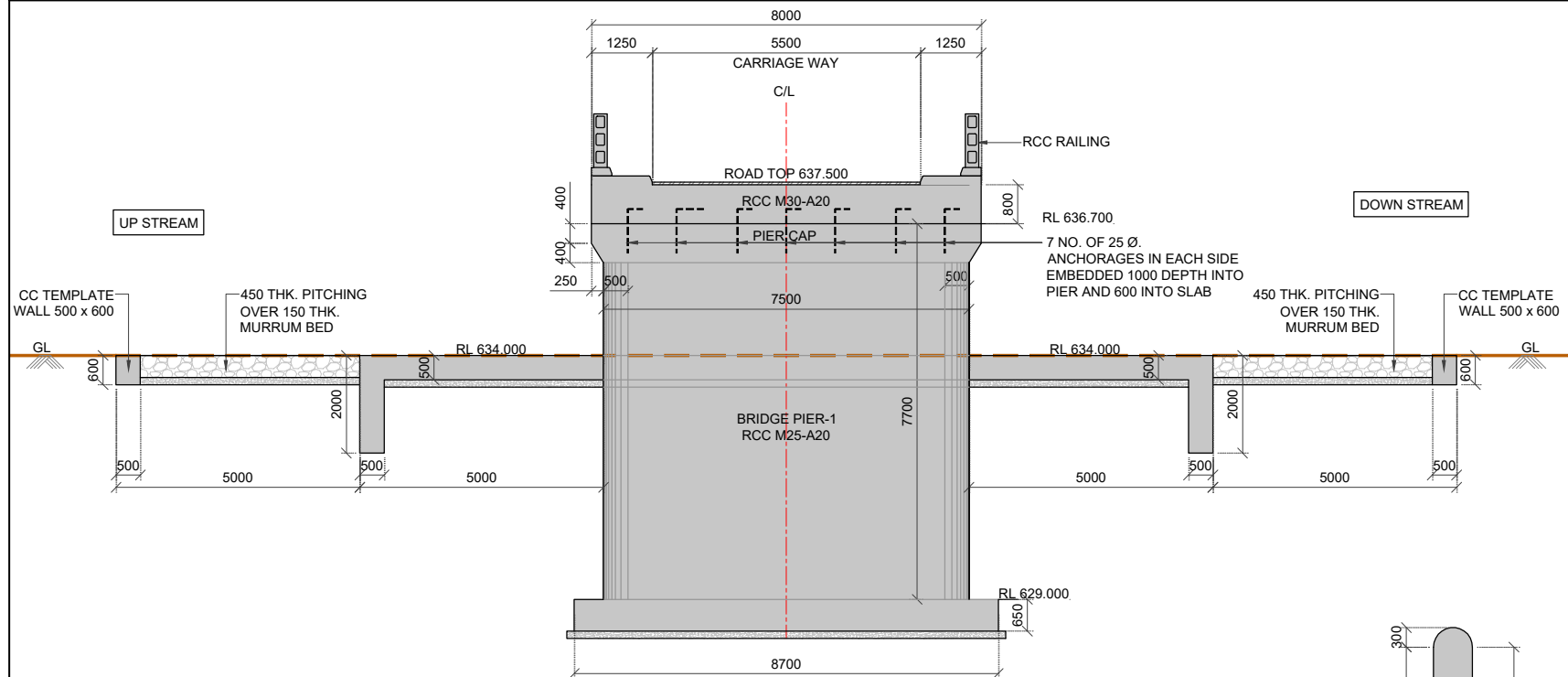
PROJECT TITLE
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DRAWING TITLE
GENERAL ARRANGEMENT DRAWINGS FOR PROPOSED BRIDGE CUM BARRAGE ACROSS MALAPRABHA RIVER NEAR CHIKKAHATTIHOI VILLAGE.

SCALE. AS SHOWN	DRAWING NO. WRE-BCB-GAD-A008	SHEET NO. 03 OF 07	REV. R0
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CONTRACTOR.

EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV.
KHANAPUR

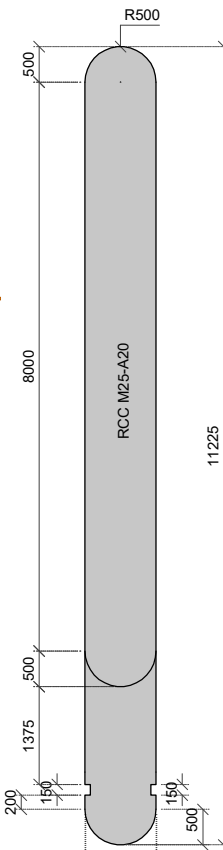
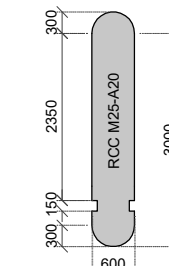


SECTION 2A-2A
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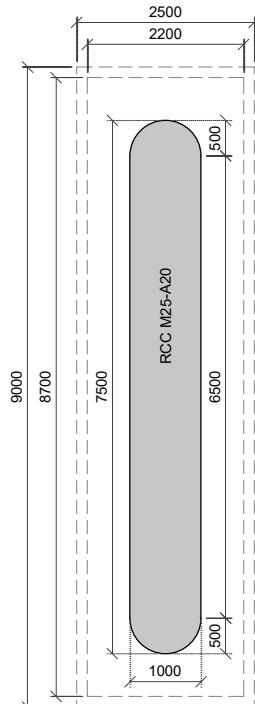
DOWN STREAM

UP STREAM

GATED PIER
(SCALE 1:75)



BRIDGE PIER
(SCALE 1:75)



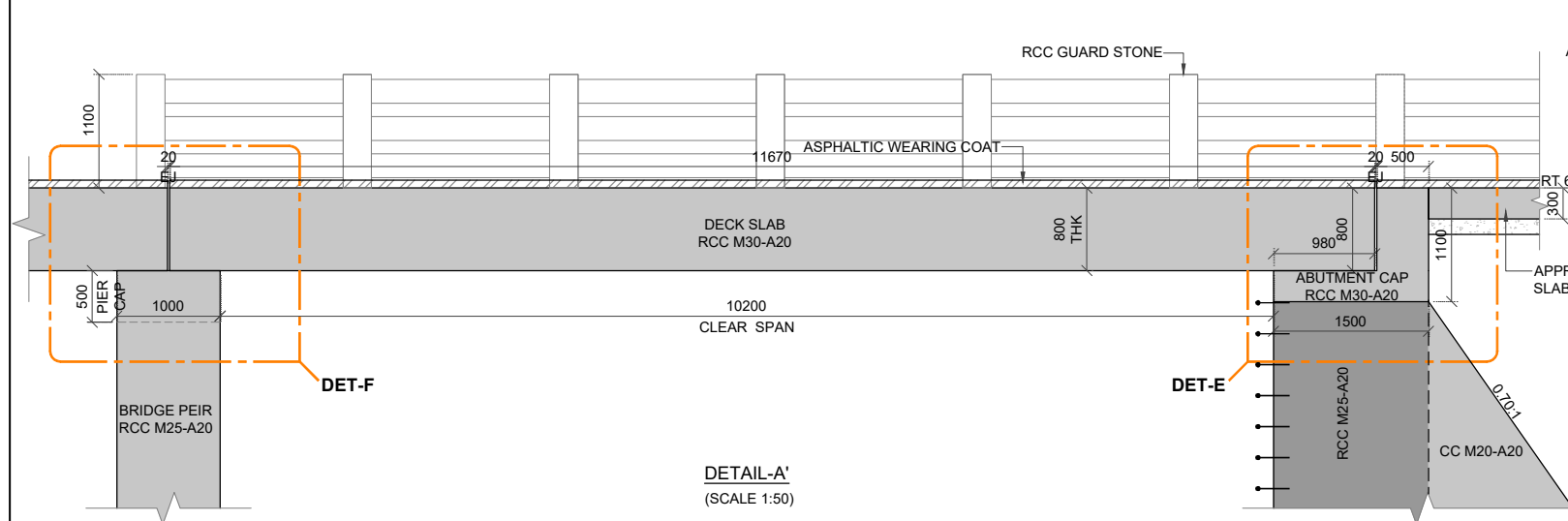
BRIDGE PIER-1
(SCALE 1:75)

NOTES AND SPECIFICATIONS

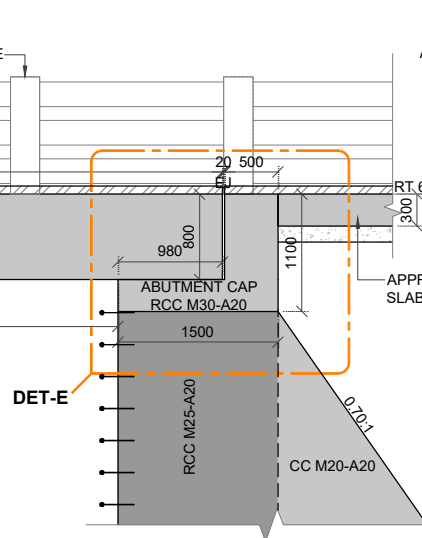
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ABBREVIATIONS:

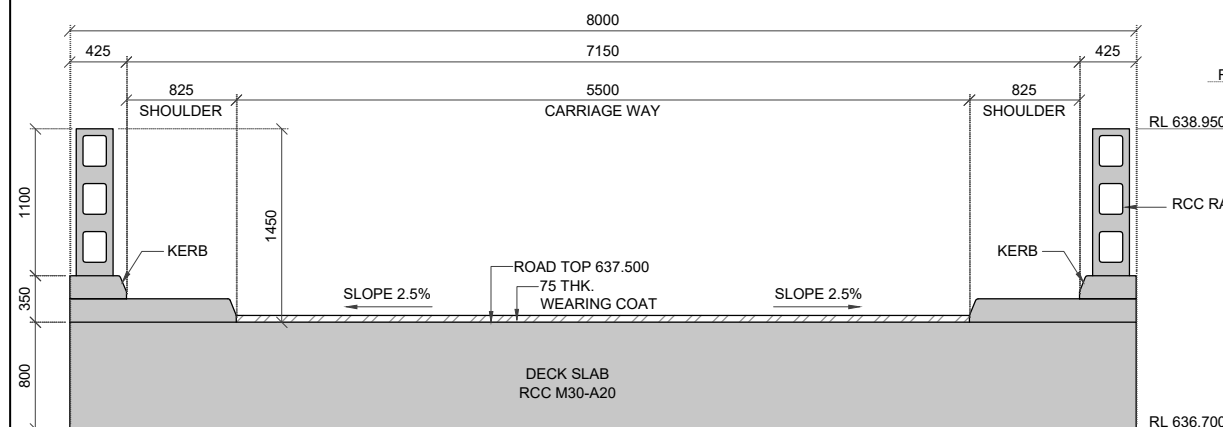
RT	- ROAD TOP
RL	- REDUCED LEVEL
FL	- FOUNDATION LEVEL
FSL	- FULL RESERVOIR LEVEL
AHFL	- AFFLUX HIGH FLOOD LEVEL
RCC	- REINFORCEMENT CEMENT CONCRETE
PCC	- PLAIN CEMENT CONCRETE
EJ	- EXPANSION JOINT
THK	- THICK
mm	- MILLIMETRE



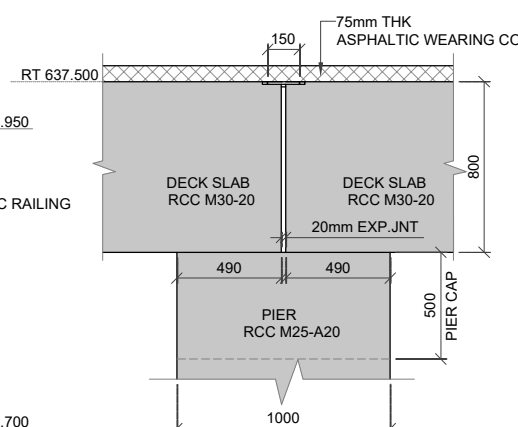
DETAIL-A'
(SCALE 1:50)



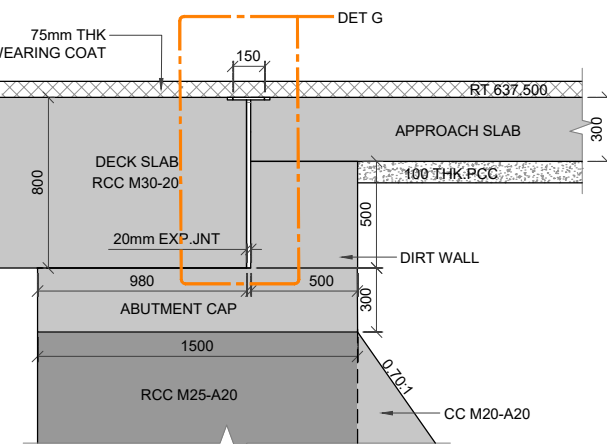
DETAIL-E
(SCALE 1:25)



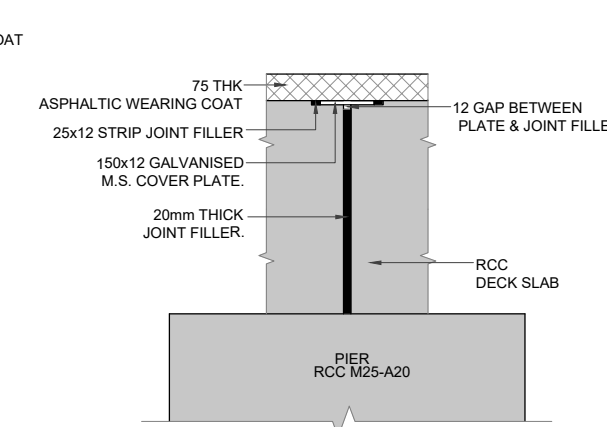
ROAD CROSS SECTION
(SCALE 1:40)



DETAIL-F
(SCALE 1:25)



DETAIL-E
(SCALE 1:25)



DETAIL-G
(SCALE 1:15)

TENDER PURPOSE ONLY

CLIENT



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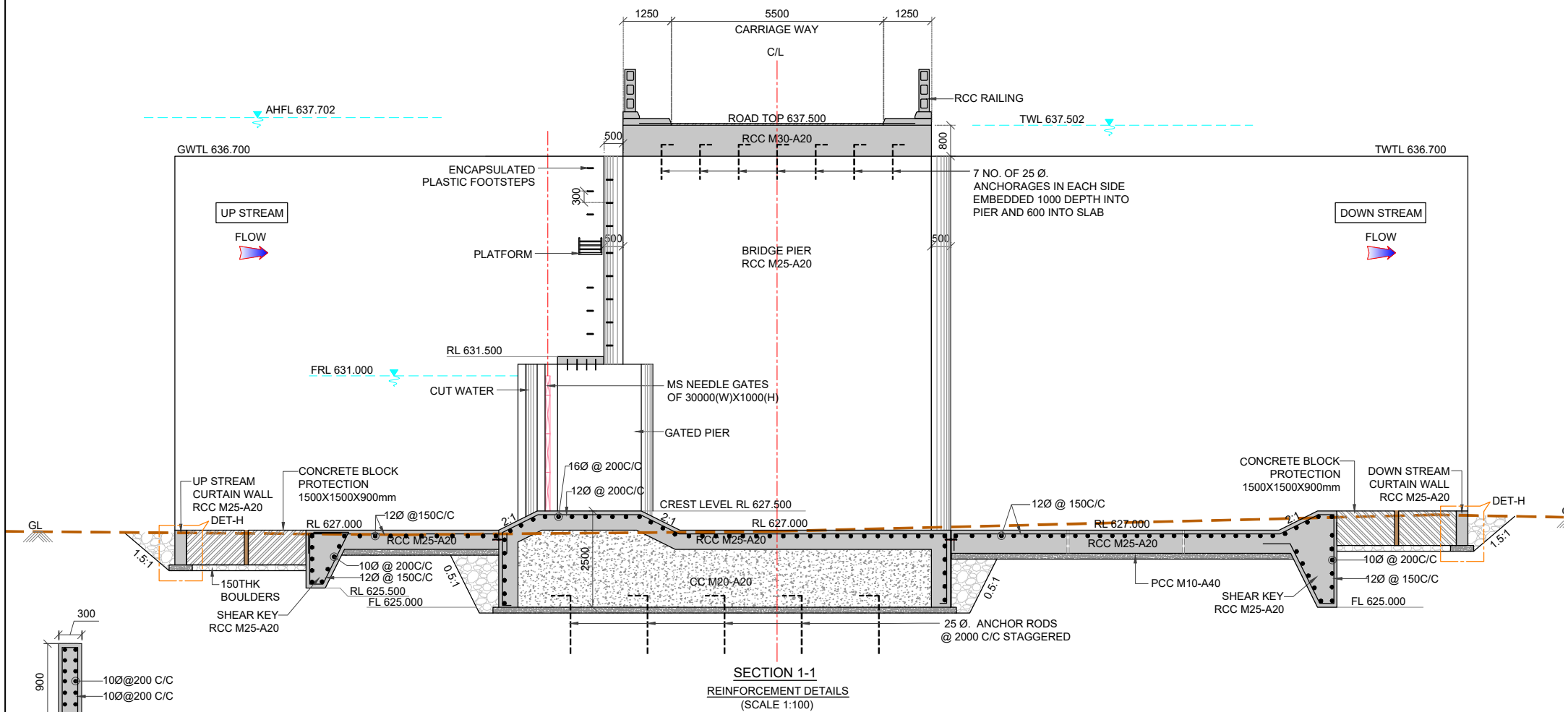
PROJECT TITLE

CONSTRUCTION OF BRIDGE CUM BARRAGE ACROSS THE MALAPRABHA RIVER AT CHIKKAHATTIHOI VILLAGE, KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND CONNECTING ROADS FROM CHIKKAHATTIHOI AND KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE YEARS.

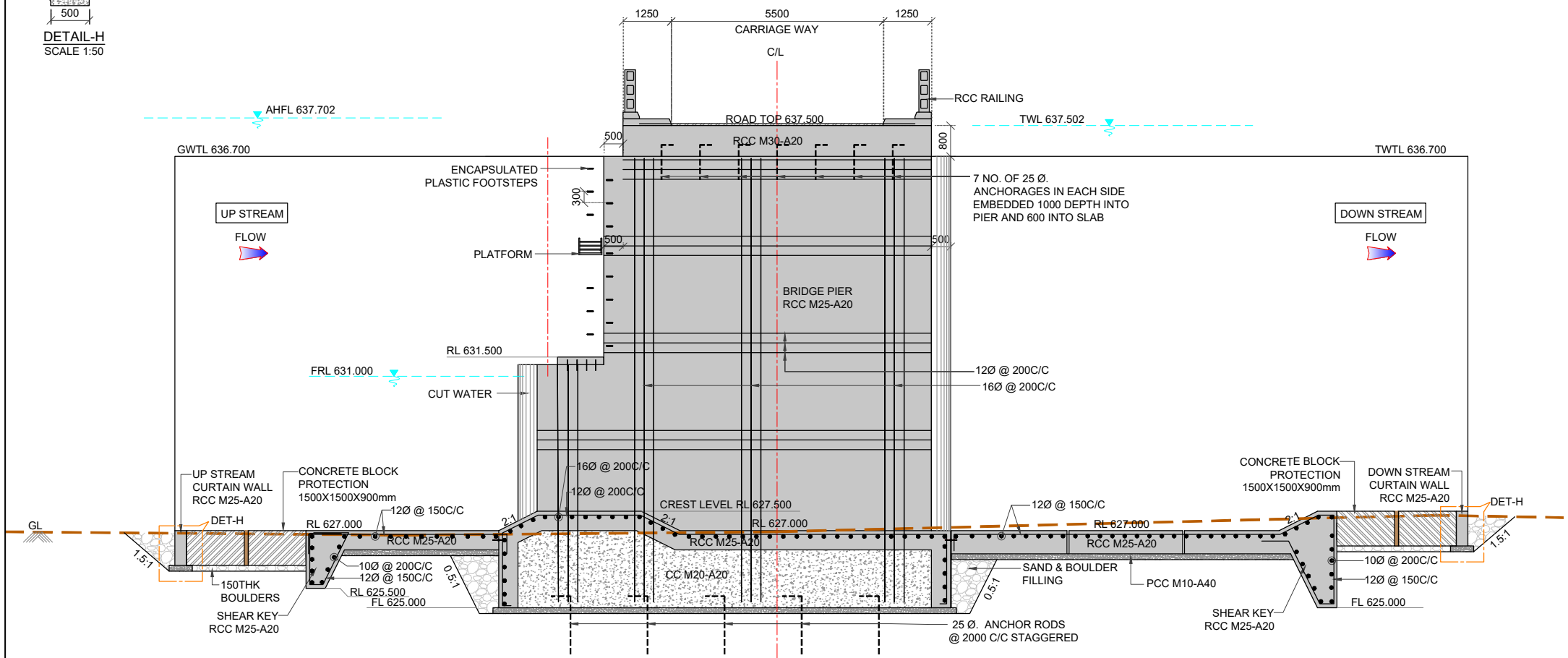
DRAWING TITLE

GENERAL ARRANGEMENT DRAWINGS FOR PROPOSED BRIDGE CUM BARRAGE ACROSS MALAPRABHA RIVER NEAR CHIKKAHATTIHOI VILLAGE.

SCALE.	DRAWING NO.	SHEET NO.	REV.
AS SHOWN	WRE-BCB-GAD-A008	04 OF 07	R0
CONTRACTOR.		EXECUTIVE ENGINEER KNNL KALASA PROJECT DIV, KHANAPUR	



SECTION 1-1
REINFORCEMENT DETAILS
(SCALE 1:100)



SECTION 2-2
REINFORCEMENT DETAILS
(SCALE 1:100)

NOTES AND SPECIFICATIONS

- ALL DIMENSIONS ARE IN MILLIMETRE AND LEVELS ARE IN METRE UNLESS OTHERWISE SPECIFIED.
- DO NOT SCALE THE DRAWINGS ONLY WRITTEN DIMENSION SHALL BE FOLLOWED.
- REINFORCED CONCRETE USED SHALL BE MINIMUM M25 WITH 20mm DOWNGRADED COARSE AGGREGATE UNLESS MENTIONED.
- CONCRETE USED SHALL STRICTLY CONFORM TO THE GRADE AS INDICATED IN THE DRAWING
- REINFORCEMENT SHALL CONFORM TO FE-550 OF IS 1786
- AT ALL STAGES OF CONCRETING NECESSARY ARRANGEMENT SHALL BE MADE FOR DEWATERING TO KEEP ENTIRE AREA SAFE AGAINST UPLIFT TILL THE ENTIRE SUBSTRUCTURE IS BUILT UPTO THE GROUND LEVEL AND CURED.
- AT COLD JOINTS 225 mm WIDE PVC WATER STOP SHALL BE PROVIDED AND SHALL BE CONTINUOUS.
- BEFORE CONCRETING OF PIER, RAFT, WALL, SLAB ETC., IT SHALL BE ENSURED THAT ALL EMBEDMENT PARTS FOR GATES AND HOISTING SECTIONS IN FIRST STAGE CONCRETING ARE CONFIRMED BY H & M VENDOR AND ARE ERECTED IN POSITION.
- TRENCH EXCAVATION USING BENTONITE SLURRY. REINFORCEMENT SHALL BE ASSEMBLED ON THE GROUND SURFACE AND INSERTED INTO THE TRENCH AND CONCRETING SHALL BE DONE BY TREMIE METHOD.

ABBREVIATIONS:

FL	- FOUNDATION LEVEL
CL	- CREST LEVEL
FSL	- FULL STORAGE LEVEL
AHFL	- AFFLUX HIGH FLOOD LEVEL
CC	- CEMENT CONCRETE
C/C	- CENTER TO CENTER
PCC	- PLAIN CEMENT CONCRETE
RCC	- REINFORCEMENT CEMENT CONCRETE
Ø	- DIA OF BAR
FRL	- FULL RESERVOIR LEVEL
GL	- GROUND LEVEL
FL	- FOUNDATION LEVEL
TWL	- TAIL WATER LEVEL
TWTL	- TRAINING WALL TOP LEVEL

TENDER PURPOSE ONLY

CLIENT



KARNATAKA NEERAVARI NIGAM LIMITED (KNNL)
(A GOVT. OF KARNATAKA UNDERTAKING)
BANGALORE - 560 001, INDIA.
www.knnlindia.com

PROJECT TITLE

CONSTRUCTION OF BRIDGE CUM BARRAGE ACROSS THE MALAPRABHA RIVER AT CHIKKAHATTIHOI VILLAGE, KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND CONNECTING ROADS FROM CHIKKAHATTIHOI AND KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE YEARS.

DRAWING TITLE

GENERAL ARRANGEMENT DRAWINGS FOR PROPOSED BRIDGE CUM BARRAGE ACROSS MALAPRABHA RIVER NEAR CHIKKAHATTIHOI VILLAGE.

SCALE.
AS SHOWN

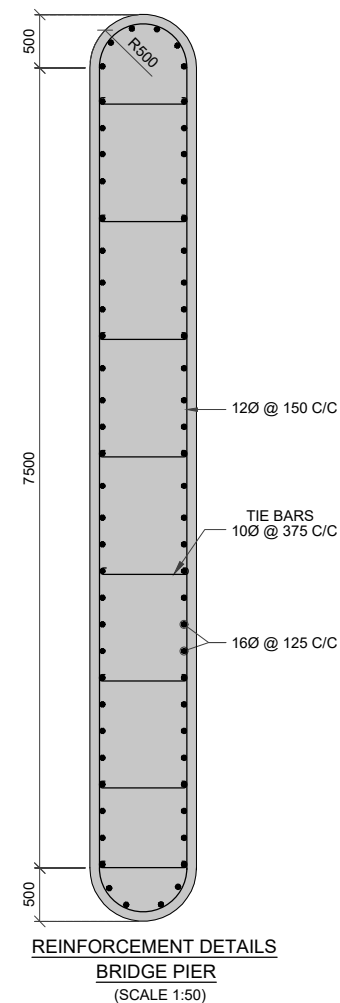
DRAWING NO.
WRE-BCB-GAD-A008

SHEET NO.
05 OF 07

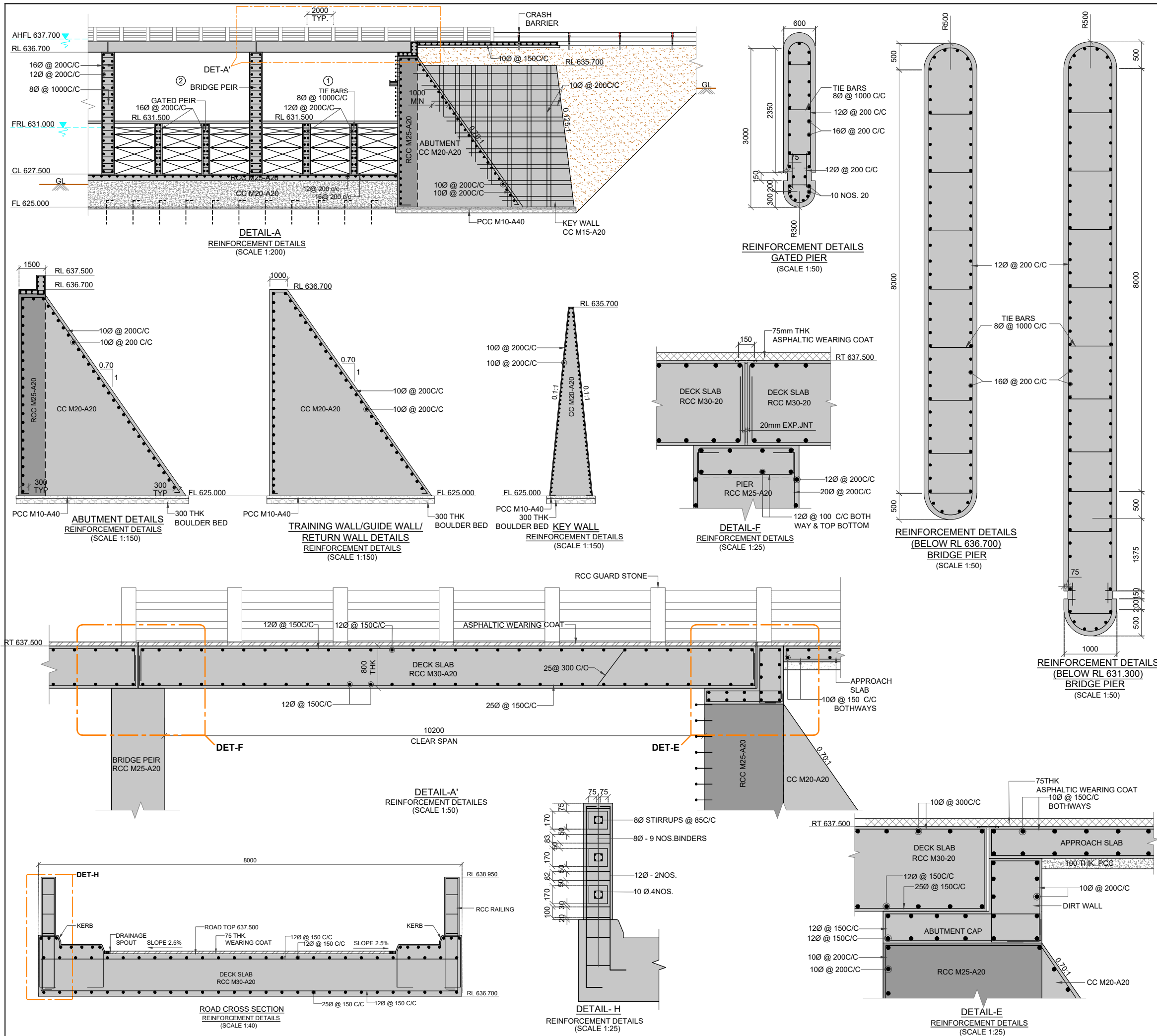
REV.
R0

CONTRACTOR.

EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV.
KHANAPUR



SCALE. AS SHOWN	DRAWING NO. WRE-BCB-GAD-A008	SHEET NO. 06 OF 07	REV. R0
CONTRACTOR.		EXECUTIVE ENGINEER KNNL KALASA PROJECT DIV., KHANAPUR	



- NOTES AND SPECIFICATIONS**
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 - TRENCH EXCAVATION USING BENTONITE SLURRY. REINFORCEMENT SHALL BE ASSEMBLED ON THE GROUND SURFACE AND INSERTED INTO THE TRENCH AND CONCRETING SHALL BE DONE BY TREMIE METHOD.

ABBREVIATIONS:

RT	- ROAD TOP
FL	- FOUNDATION LEVEL
CL	- CREST LEVEL
FSL	- FULL STORAGE LEVEL
AHFL	- AFFLUX HIGH FLOOD LEVEL
CC	- CEMENT CONCRETE
PCC	- PLAIN CEMENT CONCRETE
RCC	- REINFORCEMENT CEMENT CONCRETE
Ø	- DIA OF BAR
C/C	- CENTER TO CENTER
MIN	- MINIMUM

TENDER PURPOSE ONLY

CLIENT

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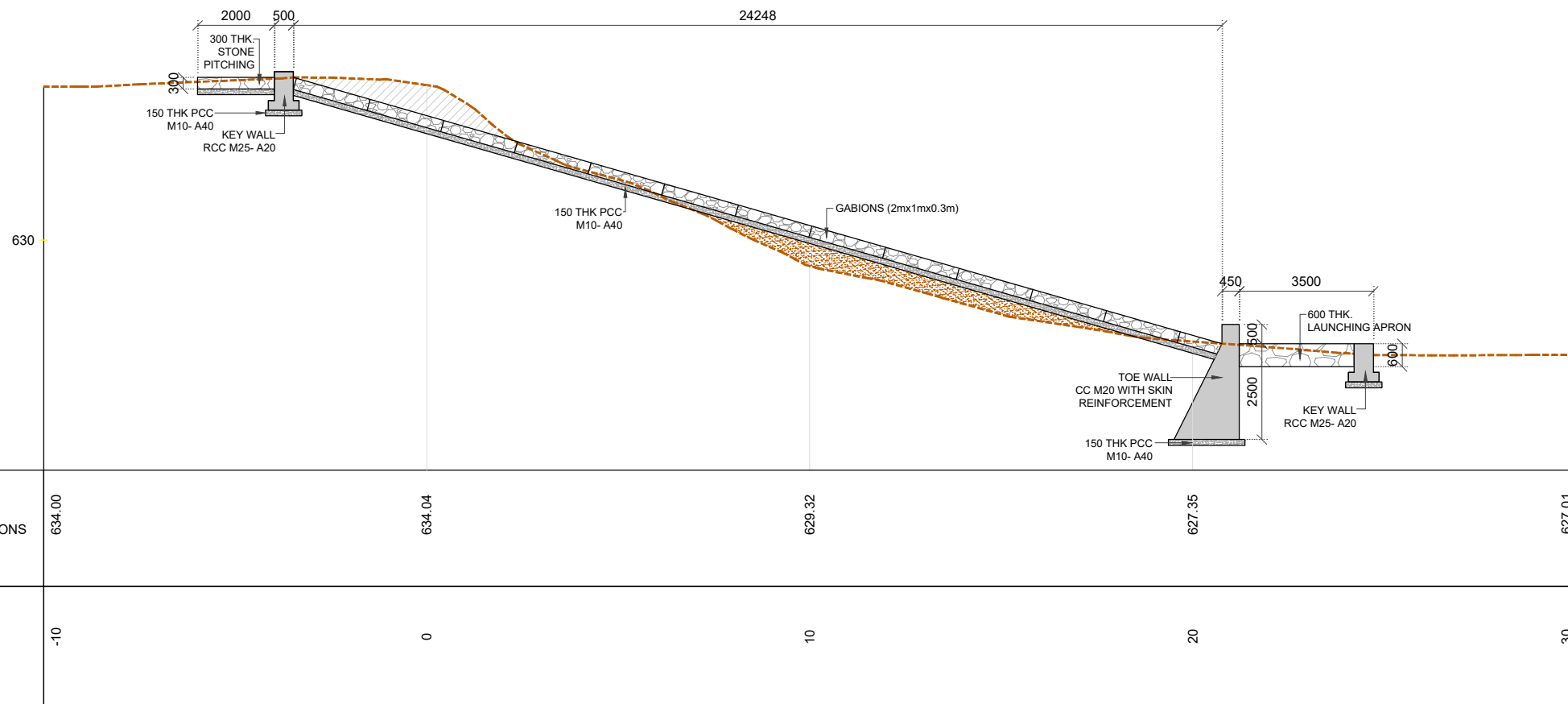
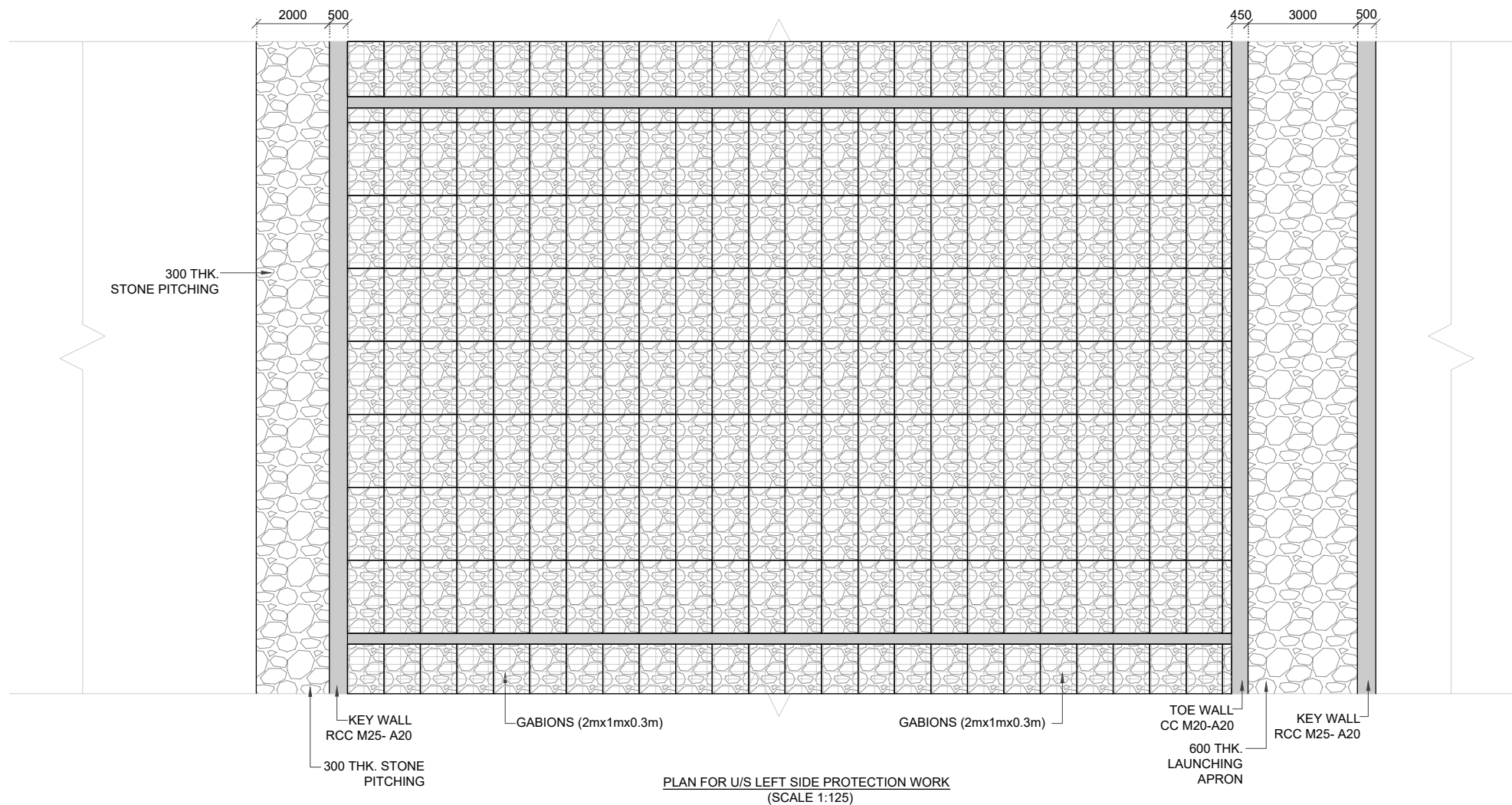
PROJECT TITLE
CONSTRUCTION OF BRIDGE CUM BARRAGE ACROSS THE MALAPRABHA RIVER AT CHIKKAHATTIHOI VILLAGE, KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND CONNECTING ROADS FROM CHIKKAHATTIHOI AND KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE YEARS.

DRAWING TITLE
GENERAL ARRANGEMENT DRAWINGS FOR PROPOSED BRIDGE CUM BARRAGE ACROSS MALAPRABHA RIVER NEAR CHIKKAHATTIHOI VILLAGE.

SCALE	DRAWING NO.	SHEET NO.	REV.
AS SHOWN	WRE-BCB-GAD-A008	07 OF 07	R0

CONTRACTOR

EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV,
KHANAPUR



LONGITUDINAL SECTION FOR U/S LEFT SIDE PROTECTION WORK
(SCALE 1:125)

NOTES AND SPECIFICATIONS :

1. ALL DIMENSIONS ARE IN MILLIMETRE AND REDUCED LEVELS ARE IN METRE UNLESS OTHERWISE SPECIFIED.
2. DO NOT SCALE THE DRAWING, ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.

ABBREVIATIONS:

GL - GROUND LEVEL
TYP - TYPICAL
THK - THICK

TENDER PURPOSE ONLY

OWNER



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BANGALORE - 560 001, INDIA.
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PROJECT TITLE

CONSTRUCTION OF BRIDGE CUM BARRAGE ACROSS THE
MALAPRABHA RIVER AT CHIKKAHATTI HOLI VILLAGE,
KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED
WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND
CONNECTING ROADS FROM CHIKKAHATTI HOLI AND
KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND
MAINTENANCE FOR A PERIOD OF FIVE YEARS.

DRAWING TITLE

GENERAL ARRANGEMENT DRAWINGS FOR PROPOSED
RIVER BANK PROTECTION WORK NEAR U/S & D/S OF
PROPOSED BRIDGE CUM BARRAGE.

SCALE.
AS SHOWN

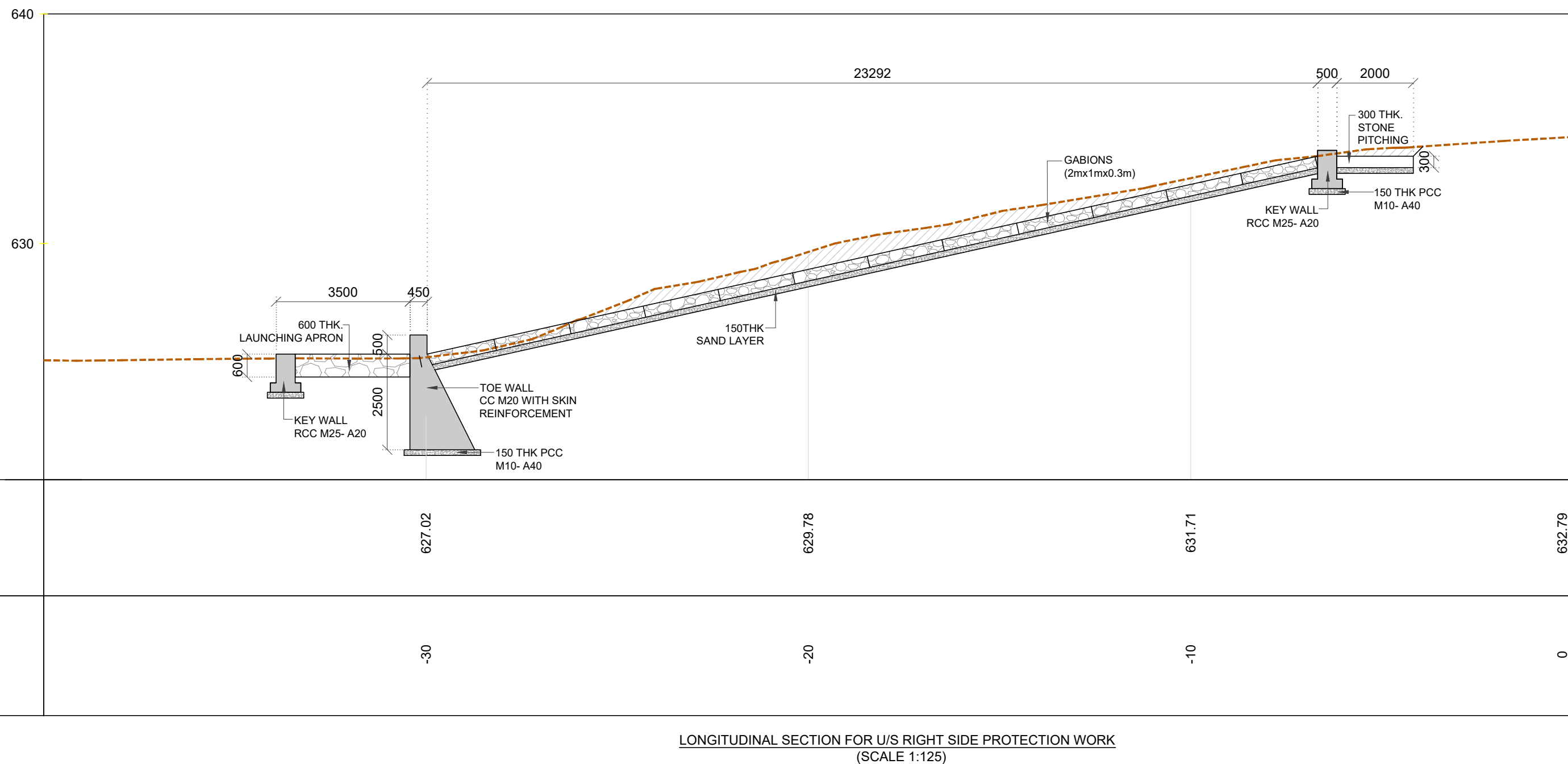
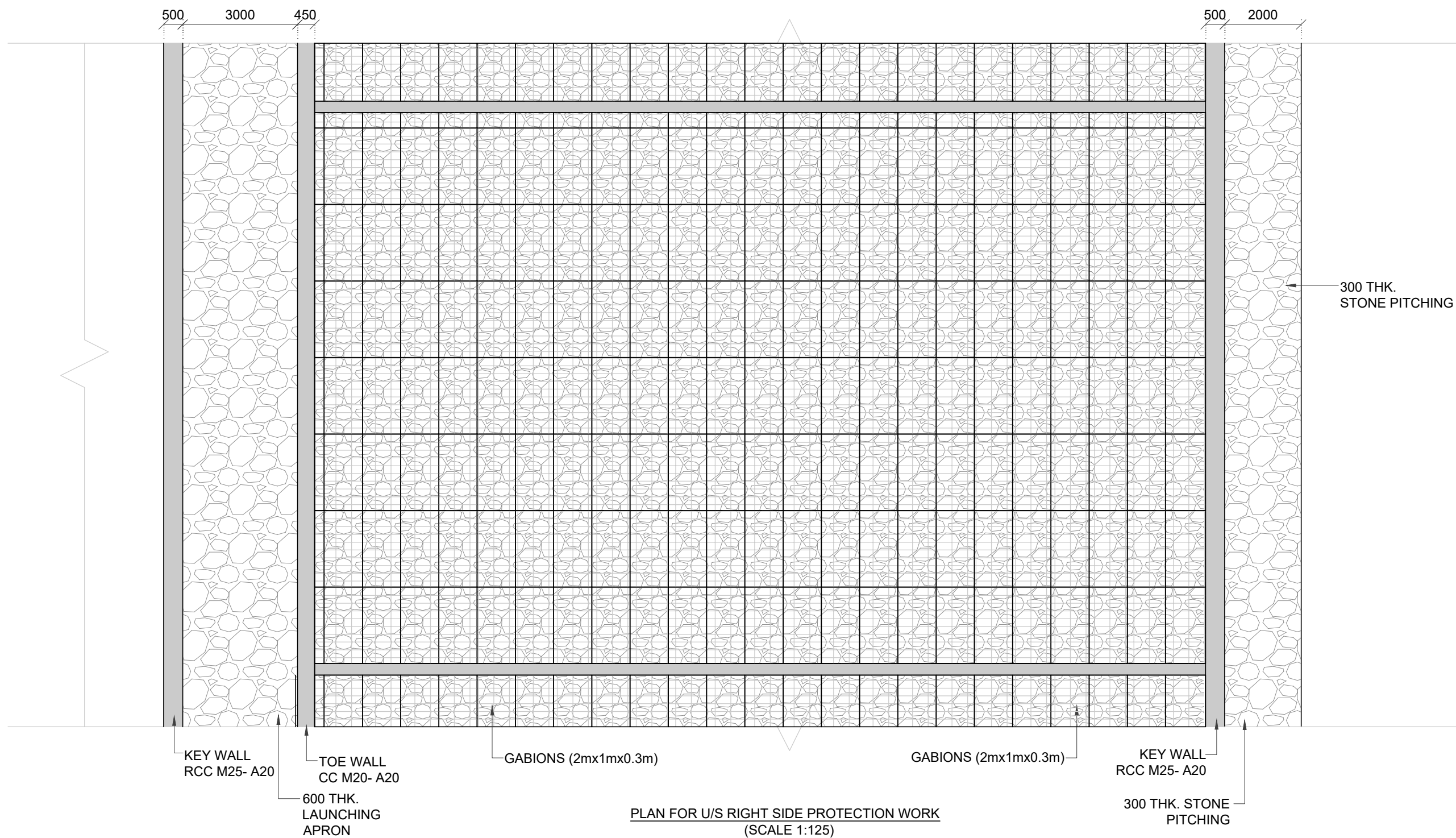
DRAWING NO.
WRE-RBP-BCB-A009

SHEET NO.
01 OF 04

REV.
R0

CONTRACTOR.

EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV.
KHANAPUR



NOTES AND SPECIFICATIONS :

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CONSTRUCTION OF BRIDGE CUM BARRAGE ACROSS THE
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DRAWING TITLE

GENERAL ARRANGEMENT DRAWINGS FOR PROPOSED
RIVER BANK PROTECTION WORK NEAR U/S & D/S OF
PROPOSED BRIDGE CUM BARRAGE.

SCALE.
AS SHOWN

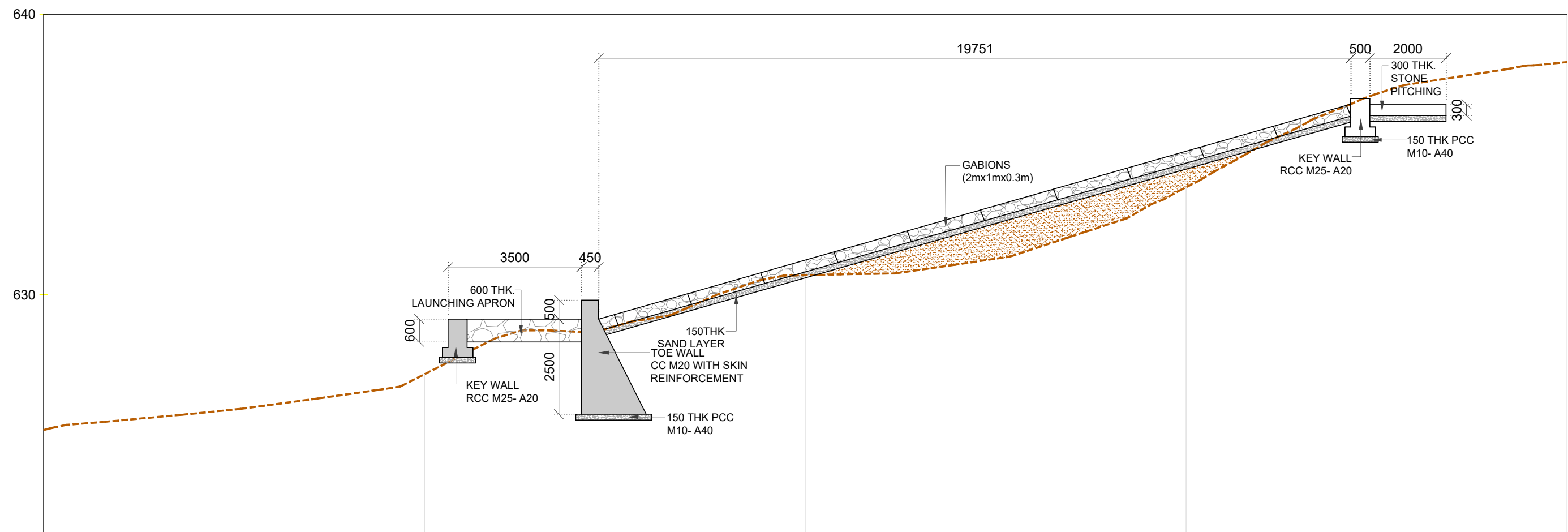
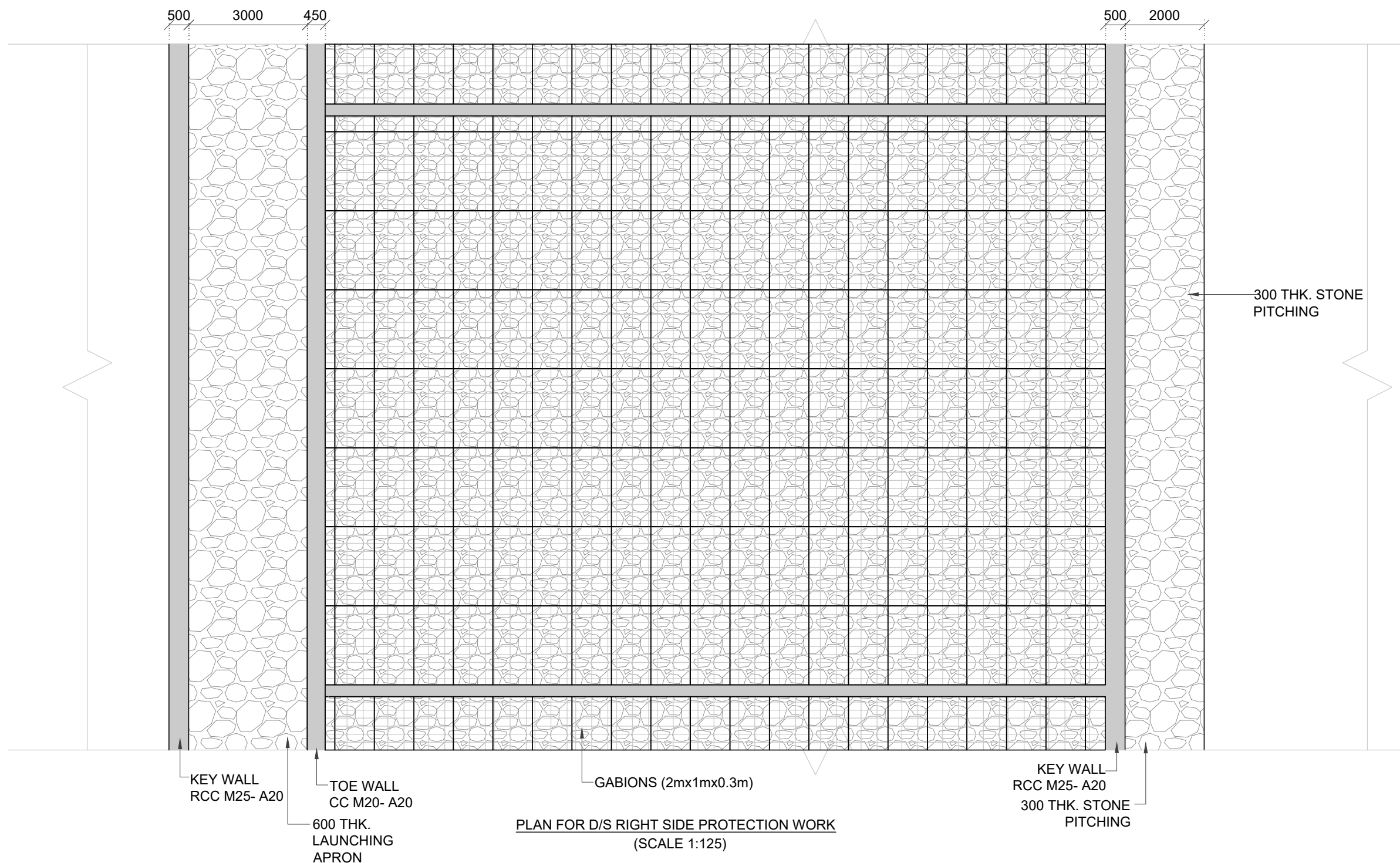
DRAWING NO.
WRE-RBP-BCB-A009

SHEET NO.
02 OF 04

REV.
R0

CONTRACTOR.

EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV.
KHANAPUR



EXISTING ELEVATIONS	627.70	630.51	632.82	636.10
OFFSET	-30	-20	-10	0

LONGITUDINAL SECTION FOR D/S RIGHT SIDE PROTECTION WORK
(SCALE 1:125)

NOTES AND SPECIFICATIONS :

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TENDER PURPOSE ONLY

OWNER



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PROJECT TITLE

CONSTRUCTION OF BRIDGE CUM BARRAGE ACROSS THE
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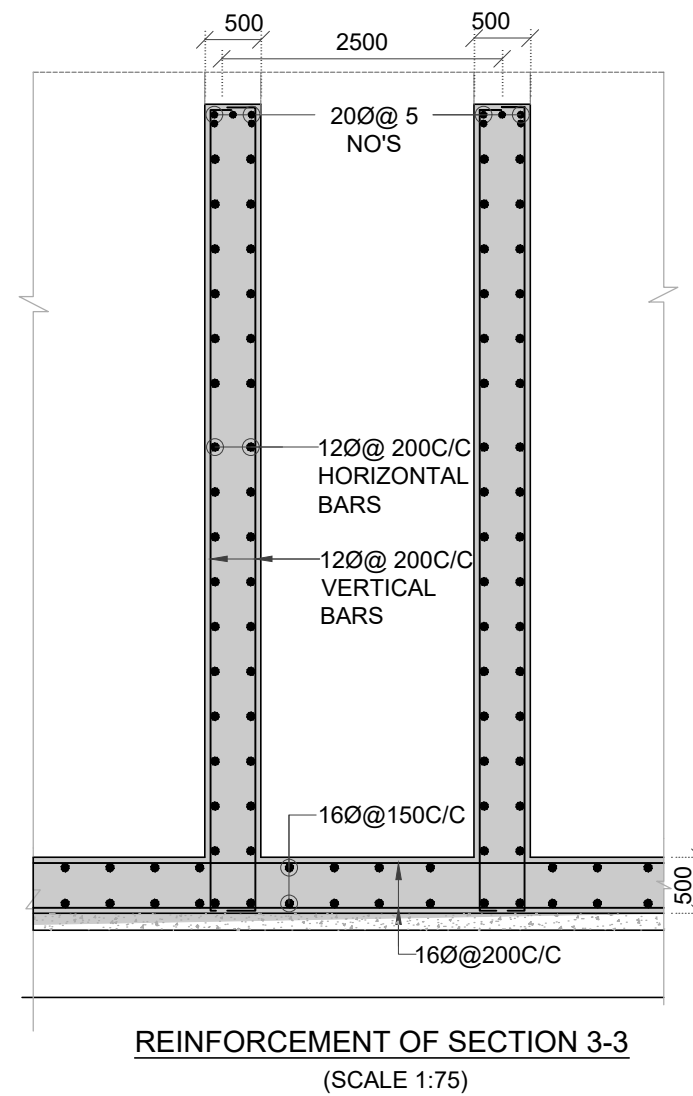
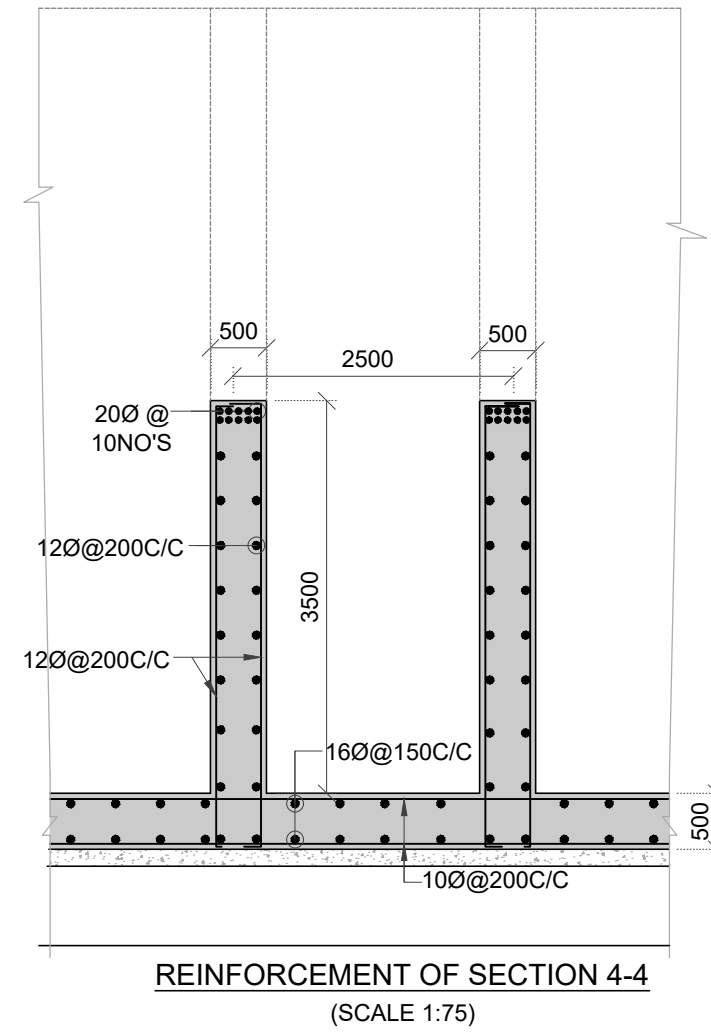
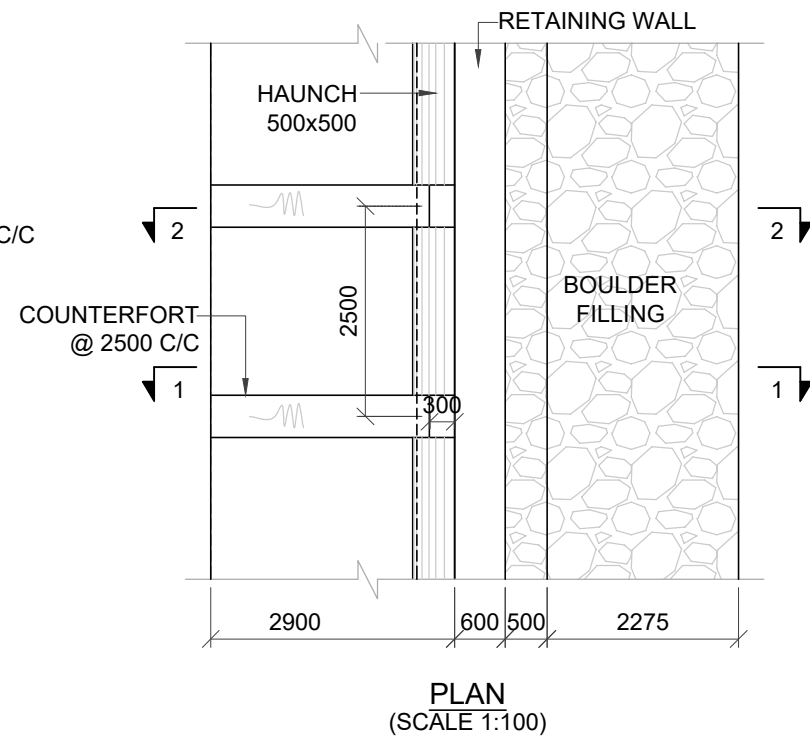
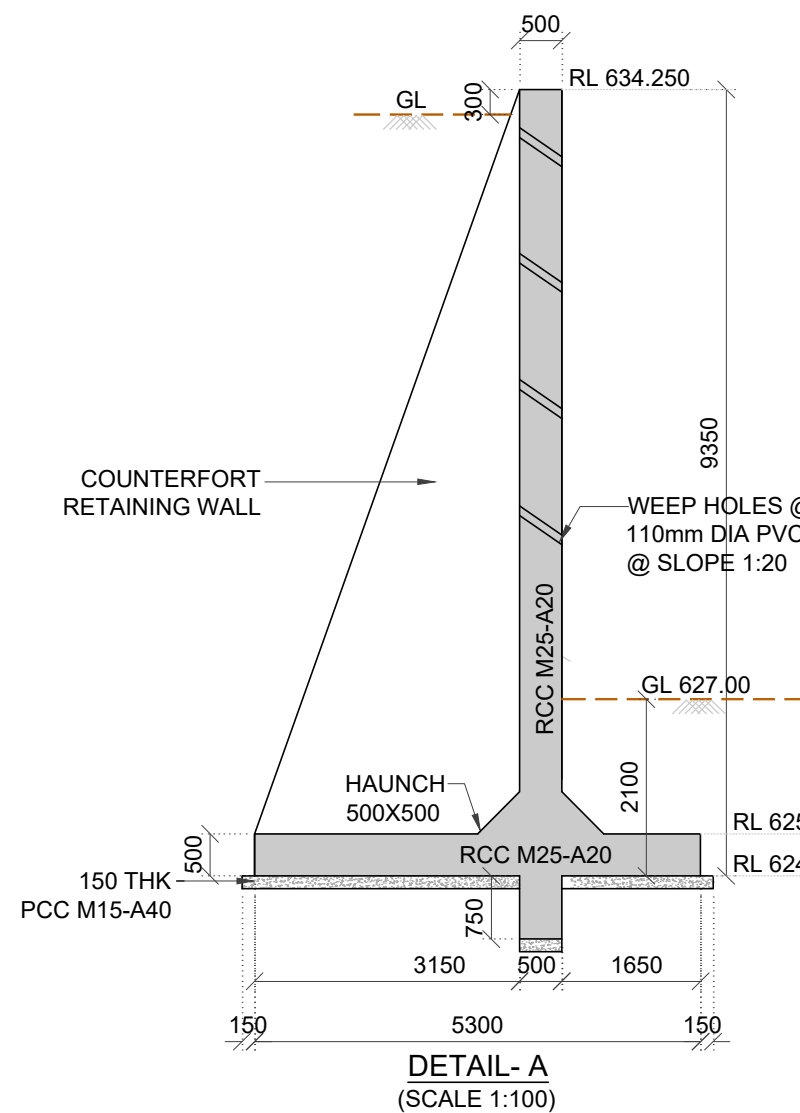
DRAWING TITLE

GENERAL ARRANGEMENT DRAWINGS FOR PROPOSED
RIVER BANK PROTECTION WORK NEAR U/S & D/S OF
PROPOSED BRIDGE CUM BARRAGE.

SCALE. AS SHOWN	DRAWING NO. WRE-RBP-BCB-A009	SHEET NO. 03 OF 04	REV. R0
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CONTRACTOR.

EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV.
KHANAPUR



NOTES AND SPECIFICATIONS :

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ABBREVIATIONS:

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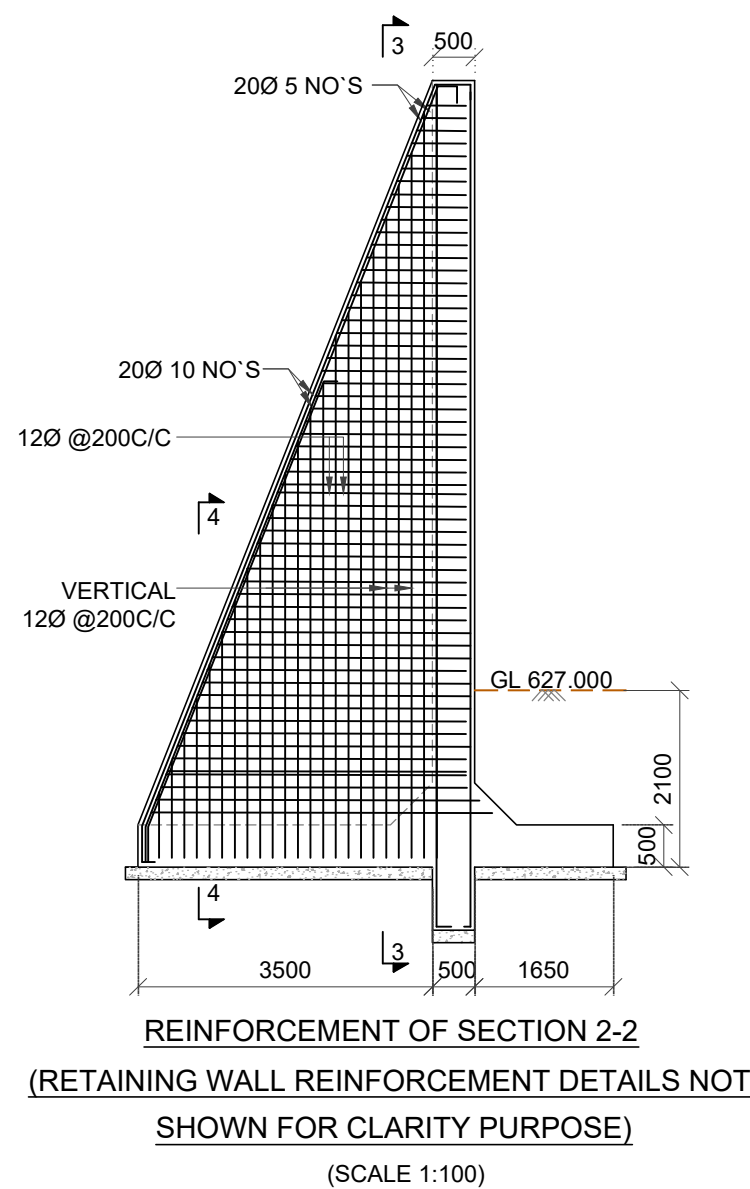
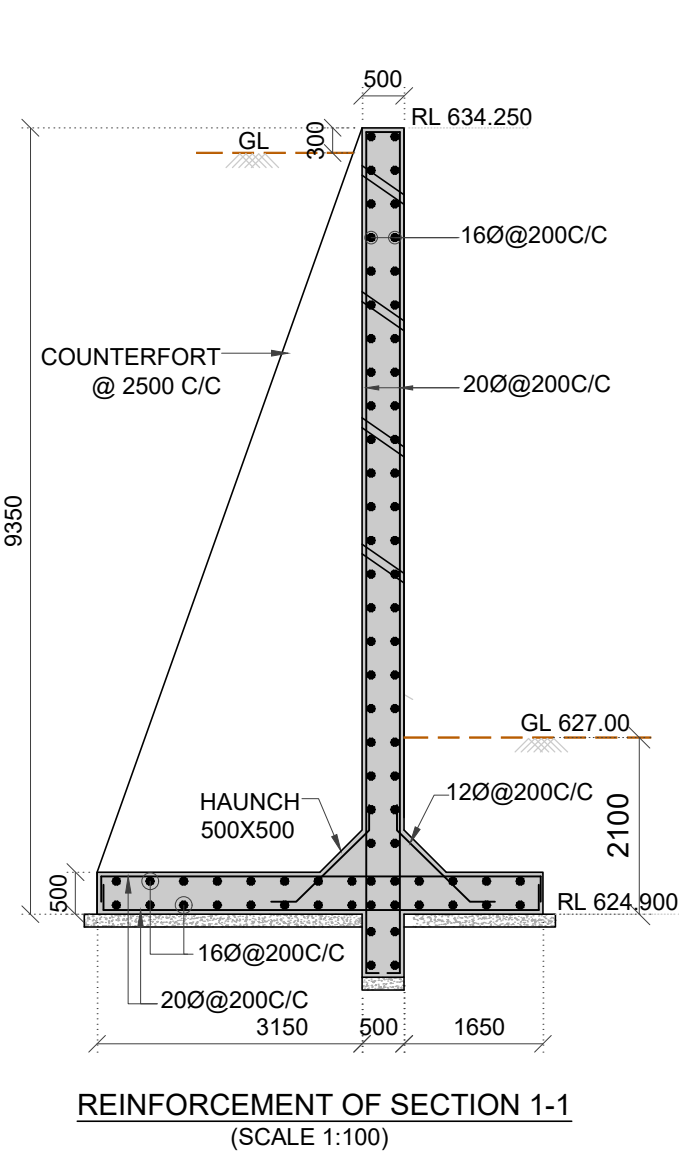
PROJECT TITLE
CONSTRUCTION OF BRIDGE CUM BARRAGE ACROSS THE MALAPRABHA RIVER AT CHIKKAHATTIHOHI VILLAGE, KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND CONNECTING ROADS FROM CHIKKAHATTIHOHI AND KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE YEARS.

DRAWING TITLE
GENERAL ARRANGEMENT DRAWINGS FOR PROPOSED RIVER BANK PROTECTION WORK NEAR U/S & D/S OF PROPOSED BRIDGE CUM BARRAGE.

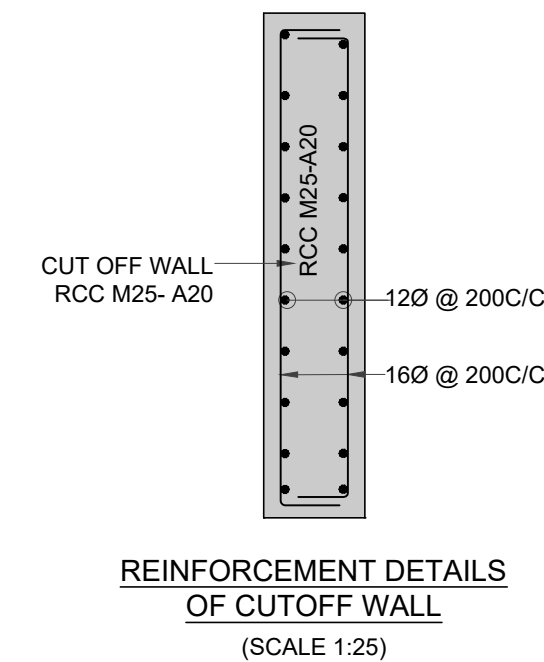
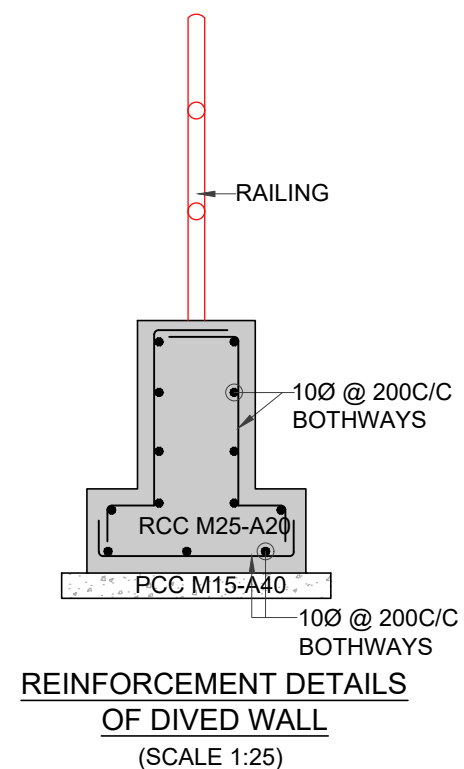
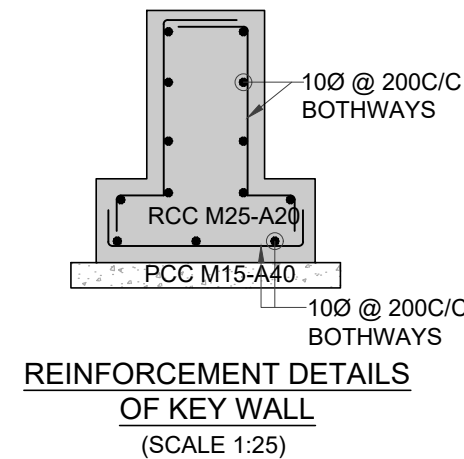
SCALE.	DRAWING NO.	SHEET NO.	REV.
AS SHOWN	WRE-RBP-BCB-A009	04 OF 04	R0

CONTRACTOR.

EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV.
KHANAPUR



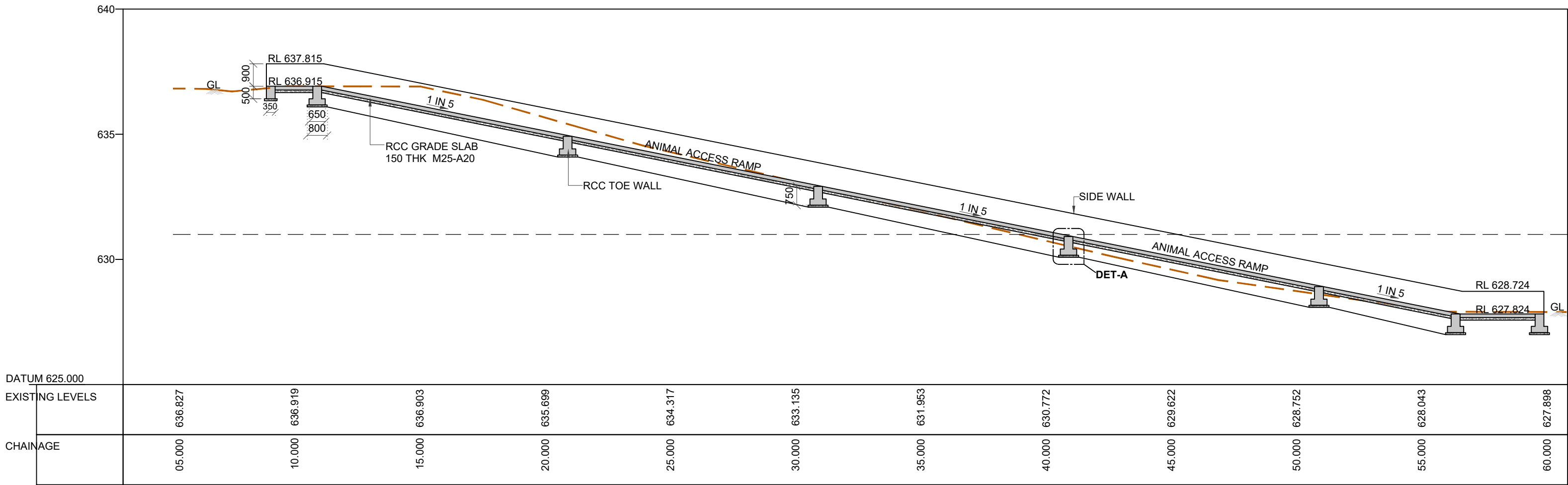
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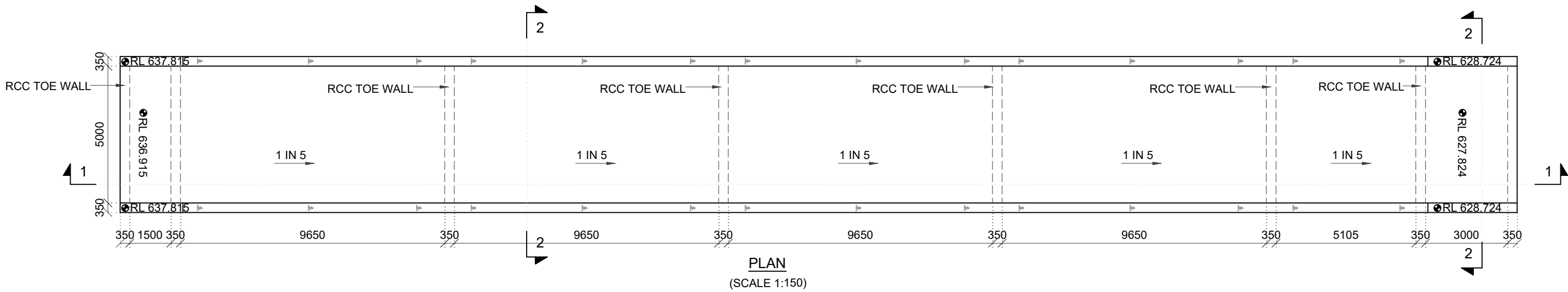
- NOTES AND SPECIFICATIONS :
- ALL DIMENSIONS ARE IN MILLIMETRE AND REDUCED LEVELS ARE IN METRE UNLESS OTHERWISE SPECIFIED.
 - DO NOT SCALE THE DRAWING, ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.

ABBREVIATIONS:

FRL	- FULL RESERVOIR LEVEL
GL	- GROUND LEVEL
RL	- REDUCED LEVEL
RCC	- REINFORCEMENT CEMENT CONCRETE
PCC	- PLAIN CEMENT CONCRETE
THK	- THICKNESS
CC	- CEMENT CONCRETE
C/C	- CENTER TO CENTER
m	- METRE



SECTION 1-1
(SCALE 1:150)



TENDER PURPOSE ONLY

CLIENT
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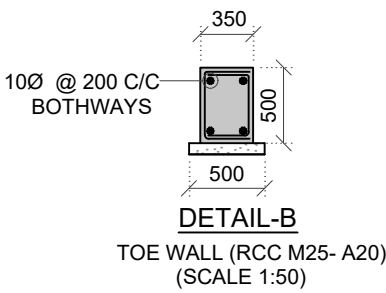
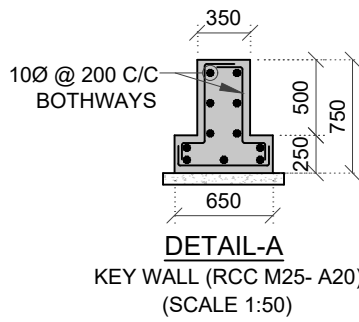
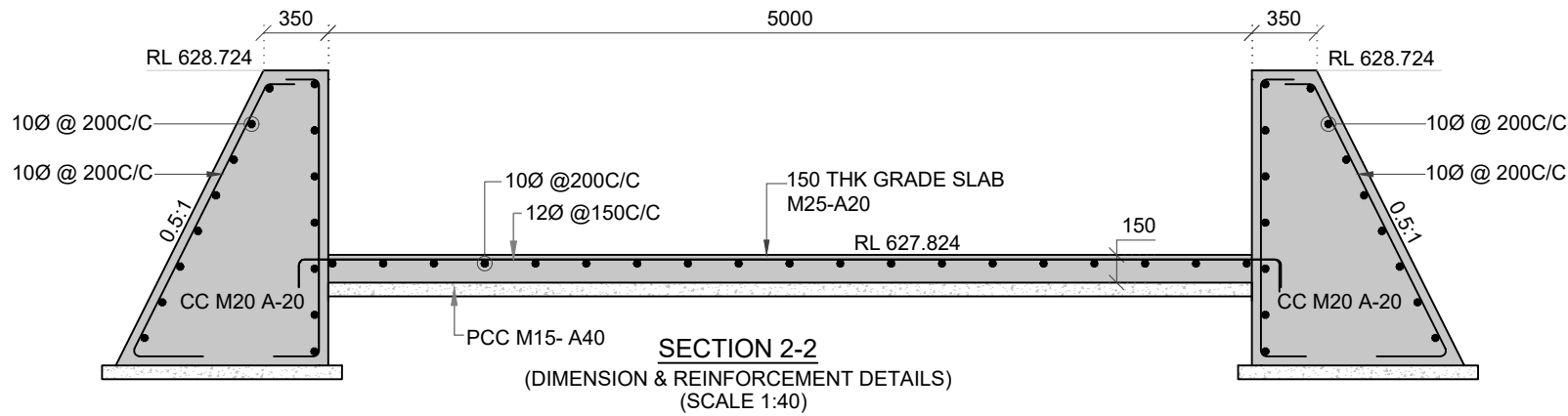
PROJECT TITLE
CONSTRUCTION OF BRIDGE CUM BARRAGE ACROSS THE MALAPRABHA RIVER AT CHIKKAHATTIHOI VILLAGE, KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND CONNECTING ROADS FROM CHIKKAHATTIHOI AND KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE YEARS.

DRAWING TITLE
GENERAL ARRANGEMENTS DRAWINGS FOR PROPOSED CATTLE ACCESS RAMP NEAR U/S RIGHT BANK OF PROPOSED BRIDGE CUM BARRAGE.

SCALE. AS SHOWN	DRAWING NO. WRE-S/CR-GAD-A010	SHEET NO. 02 OF 02	REV. R0
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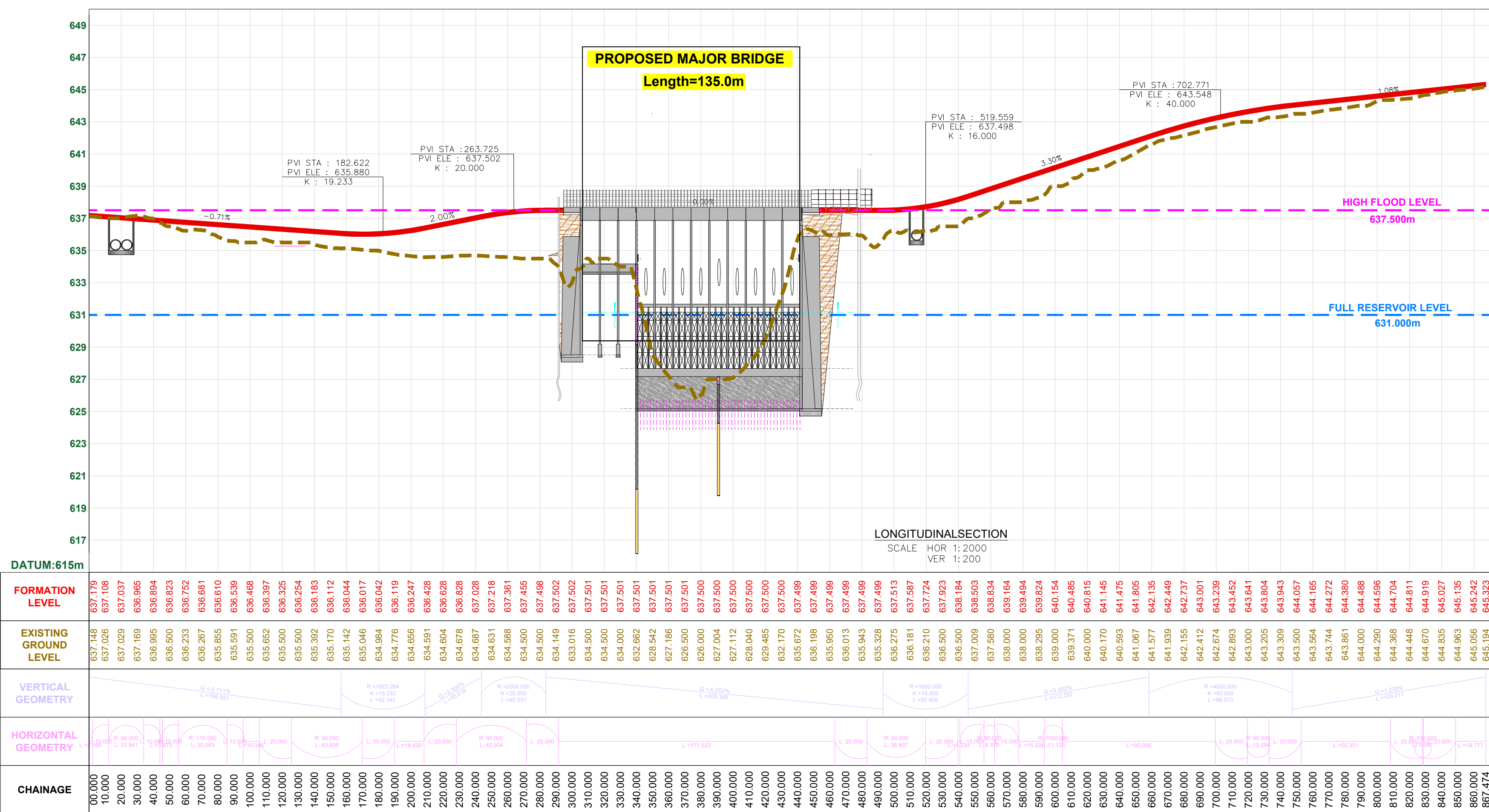
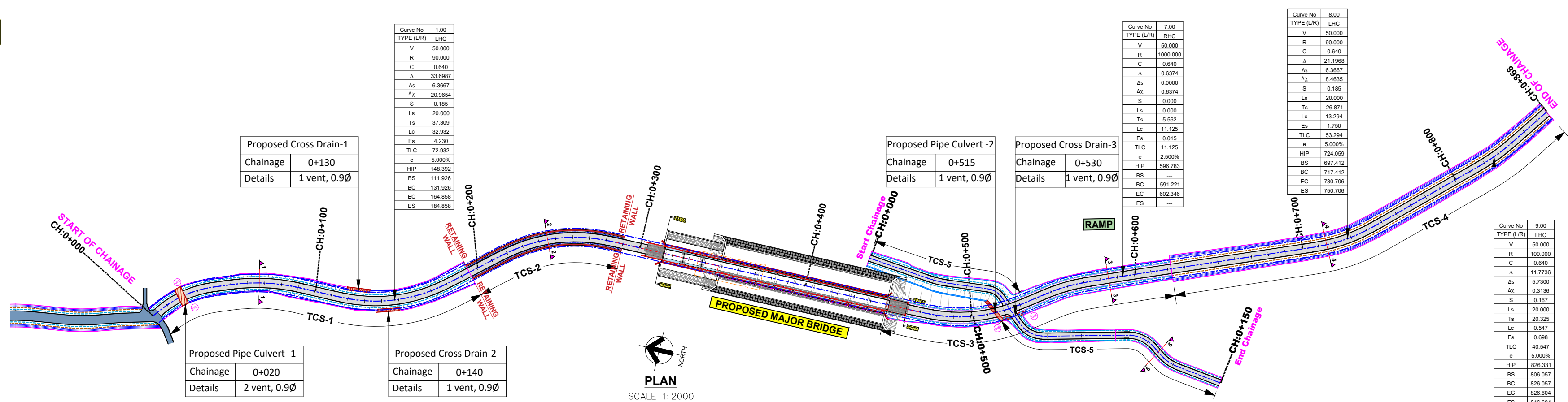
CONTRACTOR.

EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV,
KHANAPUR



Chikkhattiholi

Karvinkop











LEGEND

COMPOUND WALL, WIRE FENCE.	
PYLON, TRANSFORMER, POWER LINE, TELEGRAPH/TELEPHONE LINE.	
ROADS: METALLED WITH KM STONE, UNMETALLED, CART TRACK, FOOT PATH.	
RAILWAY WITH KM STONE, BROAD GAUGE, KILOMETER STONE.	
BUILDING: TILED HOUSE, SHEETHOUSE, UNDER CONSTRUCTION, VILLAGE LIMIT.	
STREAM: DOUBLE LINE, SING LINE, CANAL, TANK, PONDS.	
BRIDGES WITH PIERS, CULVERT, SIGN BOARD, LAMP POST, OPTIMUM FIBRE CABLE.	
WELLS: LINED, UNLINED, TUBE, BORE, PUMP HOUSE, TEMPLE, MOSQUE, IDGAH, GRAVES.	
EMBANKMENT, CUTTING WITH RELATIVE HEIGHT, QUARRY, GATE.	
DRAINS: LARGE, SMALL, FIELD CHANNEL, CULTIVATION LIMIT.	
CONTOUR WITH VALUE, SHEET ROCK, TREE, ROCKY GROUND.	
HEIGHTS: GLOBAL POSITIONING SYSTEM, CONTROL POINTS, TRAVERSE STATION, BENCH MARK.	

ABBREVIATIONS

DESIGN SPEED, KMPH	V
RADIUS, M	R
RATE OF CHANGE OF ACCELERATION	C
DEVIATION ANGLE	D
DEVIATION ANGLE, SPIRAL CURVE	qs
DEVIATION ANGLE, CIRCULAR CURVE	qc
SHIFT	S
LENGTH OF SPIRAL CURVE	Ls
TARGET LENGTH	Lt
LENGTH OF CIRCULAR CENTER	Lc
APEX DISTANCE	Ea
TOTAL LENGTH OF CURVE	TL
SUPER ELEVATION	e
HORIZONTAL INTERSECTION POINT	HI
BEGINNING OF SPEED CURVE	BS
BEGINNING OF CIRCULAR CURVE	BC
END OF CIRCULAR CURVE	EC
END OF SPIRAL CURVE	ES

PLAN LEGEND:-


PROPOSED CENTER LINE.....	
PROPOSED CARRIAGEWAY.....	
PROPOSED PAVED SHOULDER.....	
PROPOSED EARTHEN SHOULDER.....	
PROPOSED W-BEAM CRASH BARRIER.....	
PROPOSED FILLING/CUTTING.....	
PROPOSED RETAINING WALL.....	
PROPOSED UTILITY CORRIDOR.....	

PROFILE LEGEND:-

FORMATION ROAD LEVEL.....

EXISTING GROUND LEVEL.....

CLIENT	
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KARNATAKA NEERAVARI NIGAM LIMITED
(A GOVT. OF KARNATAKA UNDERTAKING)
BANGALORE - 560 001

PROJECT TITLE

CONSTRUCTION OF A BRIDGE CUM BARRAGE ACROSS THE MALAPRABHA RIVER AT CHIKKAHATTIHOLE VILLAGE, KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND CONNECTING ROADS FROM CHIKKAHATTIHOLE AND KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE YEARS.

DRAWING TITLE

PLAN AND PROFILE
(CH:0+000 To CH:0+866)

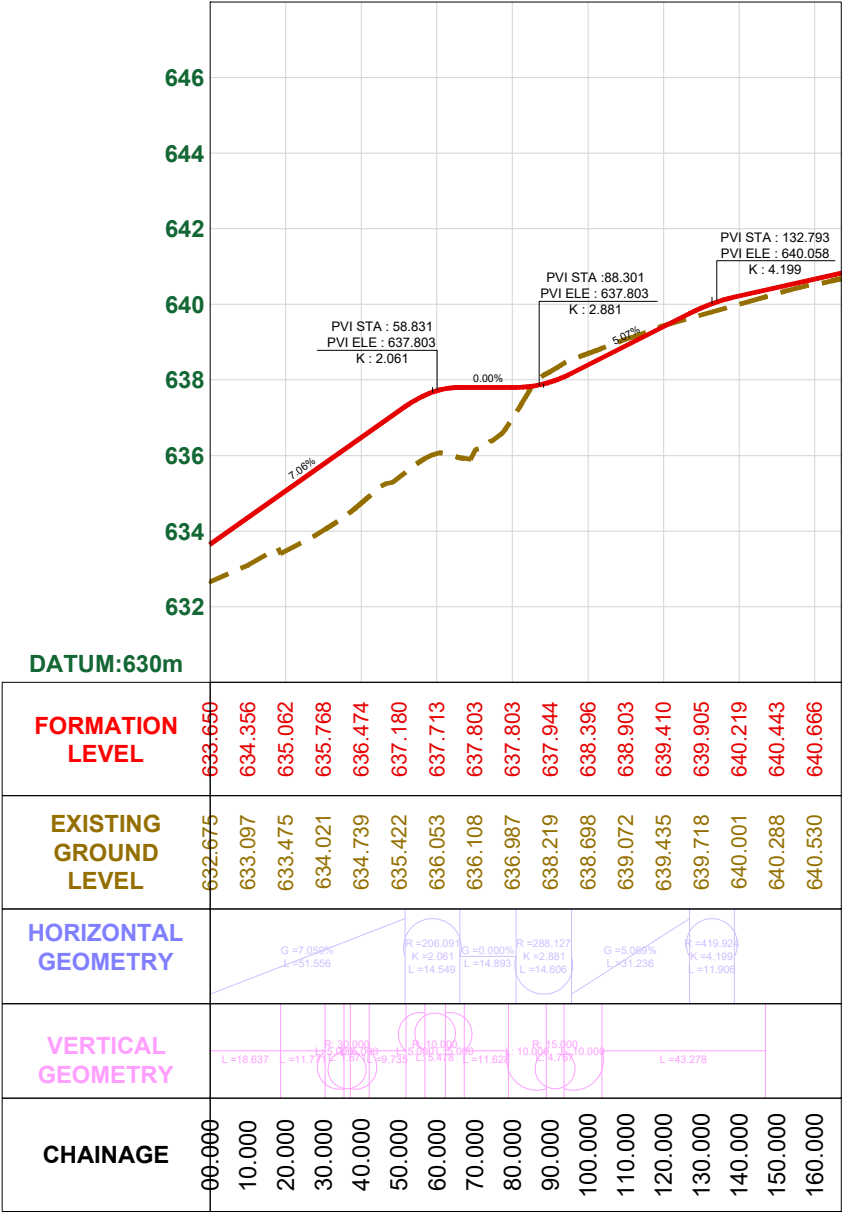
SCALE.	DRAWING NO.	SHEET NO.	REV.
AS SHOWN	WBE APP DND A010	01 OF 03	B

TENDER PURPOSE ONLY

CONTRACTOR.	EXECUTIVE ENGINEER KNIL KALASA PROJECT C KHANAPUR
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Chikkhattiholi

Karvinkop



RAMP
LONGITUDINALSECTION
SCALE HOR 1:2000
VER 1:200

- PLAN LEGEND:-
- PROPOSED CENTER LINE.....
 - PROPOSED CARRIAGEWAY.....
 - PROPOSED PAVED SHOULDER.....
 - PROPOSED EARTHEN SHOULDER.....
 - PROPOSED W-BEAM CRASH BARRIER.....
 - PROPOSED FILLING/CUTTING.....
 - PROPOSED RETAINING WALL.....
 - PROPOSED UTILITY CORRIDOR.....
- PROFILE LEGEND:-
- FORMATION ROAD LEVEL.....
 - EXISTING GROUND LEVEL.....

- ABBREVIATIONS
- DESIGN SPEED, KMPH V
 - RADIUS, M R
 - RATE OF CHANGE OF ACCELERATION C
 - DEVIATION ANGLE D
 - DEVIATION ANGLE, SPIRAL CURVE qs
 - DEVIATION ANGLE, CIRCULAR CURVE qc
 - SHIFT S
 - LENGTH OF SPIRAL CURVE Ls
 - TARGET LENGTH Ts
 - LENGTH OF CIRCULAR CENTER Lc
 - APEX DISTANCE Es
 - TOTAL LENGTH OF CURVE TLC
 - SUPER ELEVATION e
 - HORIZONTAL INTERSECTION POINT HIP
 - BEGINNING OF SPEED CURVE BS
 - BEGINNING OF CIRCULAR CURVE BC
 - END OF CIRCULAR CURVE EC
 - END OF SPIRAL CURVE ES

TENDER PURPOSE ONLY

CLIENT

KARNATAKA NEERAVARI NIGAM LIMITED
(A GOVT. OF KARNATAKA UNDERTAKING)
BANGALORE - 560 001

PROJECT TITLE

CONSTRUCTION OF A BRIDGE CUM BARRAGE ACROSS THE MALAPRABHA RIVER AT CHIKKAHATTIHOLE VILLAGE, KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND CONNECTING ROADS FROM CHIKKAHATTIHOLE AND KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE YEARS.

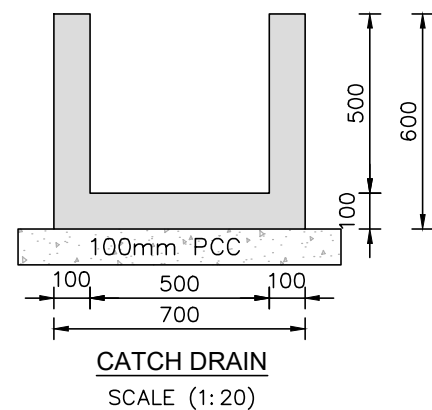
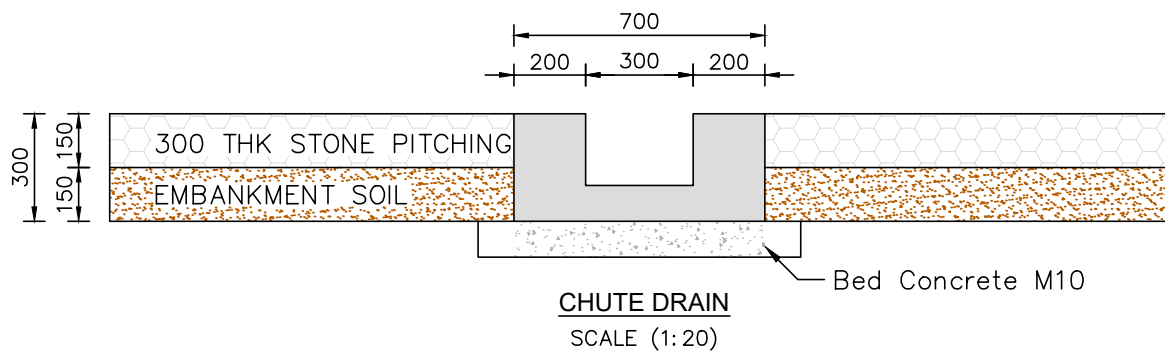
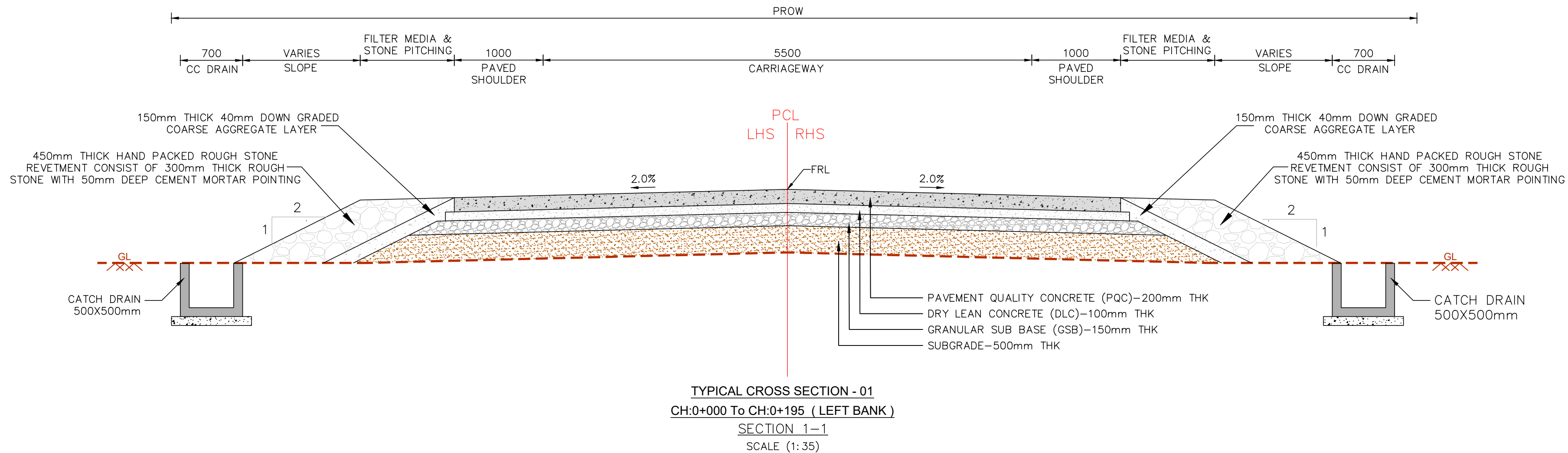
DRAWING TITLE

RAMP PROFILE

SCALE.	DRAWING NO.	SHEET NO.	REV.
AS SHOWN	WRE-APR-PNP-A010	02 OF 02	R0

CONTRACTOR.

EXECUTIVE ENGINEER
KNIL KALASA PROJECT DIV,
KHANAPUR



TCS-1			
Sl.No	Proposed Chainage, km		Length,km
	From	To	
1	0.000	0.195	0.195

GENERAL NOTES

- ALL DIMENSIONS ARE IN MILLIMETER UNLESS SPECIFIED.
- MATERIALS SPECIFICATION AND WORK SPECIFICATIONS SHALL BE IN ACCORDANCE WITH MORT&H FOR ROAD AND BRIDGE WORK - CONSTRUCTION UNLESS OTHERWISE SPECIFIED.
- FOLLOWING SPECIFICATIONS OF MORT&H SHALL BE FOLLOWED FOR MATERIAL AND CONSTRUCTION FOR DIFFERENT PAVEMENT LAYERS SELECTION
 - EARTHWORK IN EMBANKMENT :CLAUSE 305
 - EARTHWORK IN CUTTING :CLAUSE 301
 - SUBGRADE :CLAUSE 305
 - GRANULAR SUB - BASE (GSB) :CLAUSE 401
 - WET MIX MACADAM (WMM) :CLAUSE 406
 - DENSE BITUMINOUS MACADAM (DBM) :CLAUSE 505
 - BITUMINOUS CONCRETE (BC) :CLAUSE 507
 - DRY LEAN CONCRETE (DLC) :CLAUSE 601
 - PAVEMENT QUALITY CONCRETE (PQC) :CLAUSE 602
- COMPACTION REQUIREMENTS (% OF DRY DENSITY) MODIFIED PROCTOR FOR EARTHWORKS SHALL BE AS FOLLOWS:
 - EMBANKMENT :95%
 - SUBGRADE :97%
 - EARTHEN SHOULDER & MEDIAN :97%
- COMPACTED SUBGRADE SHALL HAVE EFFECTIVE CBR VALUE OF 8%(MIN.) AND COMPACTED SUB-BASE SHALL HAVE A CBR VALUE OF 30%(MIN.)
- IF THE DIFFERENCE BETWEEN THE NATURAL GROUND AND FINISHED ROAD LEVEL IS LESS THAN 500MM, THEN THE GROUND SHALL BE LOOSENED AND RECOMPACTED TO ACHIEVE 97% OF DRY DENSITY, ENSURE THE CBR OF EXISTING SUBGRADE MATERIAL IS RESULTING AN EFFECTIVE CBR OF 8%
- UNSUITABLE MATERIAL / SOIL ENCOUNTERED DURING PAVEMENT FORMATION SHALL BE REMOVED AND REFILLED WITH SELECT FILL MATERIAL AND COMPACTED IN LAYERS.
- FINISHED ROAD LEVEL (FRL) IS MEASURED ON CENTRAL CROWN OF THE CARRIAGEWAY.
- IN CASE OF CUTTING GREATER THAN 3m CATCH WATER DRAIN SHALL BE PROVIDED AT EVERY 3m & SHALL BE CONNECTED TO NEAREST CROSS DRAINAGE
- DIMENSIONS ARE NOT TO BE SCALED AND ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.
- MEDIAN FILL SHALL BE UP TO 25MM BELOW THE TOP OF THE KERB. REF: IRC:SP-50-1999
- FOR GRANULAR SUB-BASE THE MATERIAL TO BE USED SHOULD BE CLOSED GRADED FOR THE TOP LAYER AND COARSE GRADED FOR BOTTOM LAYER.
- CHUTES SHOULD TO BE PROVIDED AT EVERY 10m INTERVAL WHERE EMBANKMENT HEIGHT IS GREATER THAN 4m.
- CHUTES WITH ENERGY DISSIPATION BASIN SHALL BE PROVIDED AT EVERY 10m INTERVAL WHERE THE EMBANKMENT HEIGHT IS MORE THAN 4m.
- EMBANKMENT SLOPE SHOULD BE PROTECTED WITH STONE PITCHING ABOVE EMBANKMENT.
- APPROACH ROAD PAVEMENT DESIGN AS PER IRC-58-2015(GUIDELINES FOR THE DESIGN OF PLAIN JOINTED RIGID PAVEMENTS FOR HIGHWAYS) FROM TABLE-1, TABLE-2, TABLE-3 AND TABLE-4
- RAMP FOR THE APPROACH ROAD IS DESIGNED AS PER IRC-SP-62-2014 (GUIDELINES FOR DESIGN AND CONSTRUCTION OF CEMENT CONCRETE PAVEMENTS FOR LOW VOLUME ROADS) FROM TABLE 3, 2, TABLE-4.1, AND TABLE-4.2.

ABBREVIATION :

FRL = FINISHED ROAD LEVEL.
CL = CENTER LINE
ROW = RIGHT OF WAY
PROW = PROPOSED RIGHT OF WAY
EROW = EXISTING RIGHT OF WAY
Km = KILOMETER
OGL = ORIGINAL GROUND LEVEL
PCC = PLAIN CEMENT CONCRETE
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TENDER PURPOSE ONLY

CLIENT



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PROJECT TITLE

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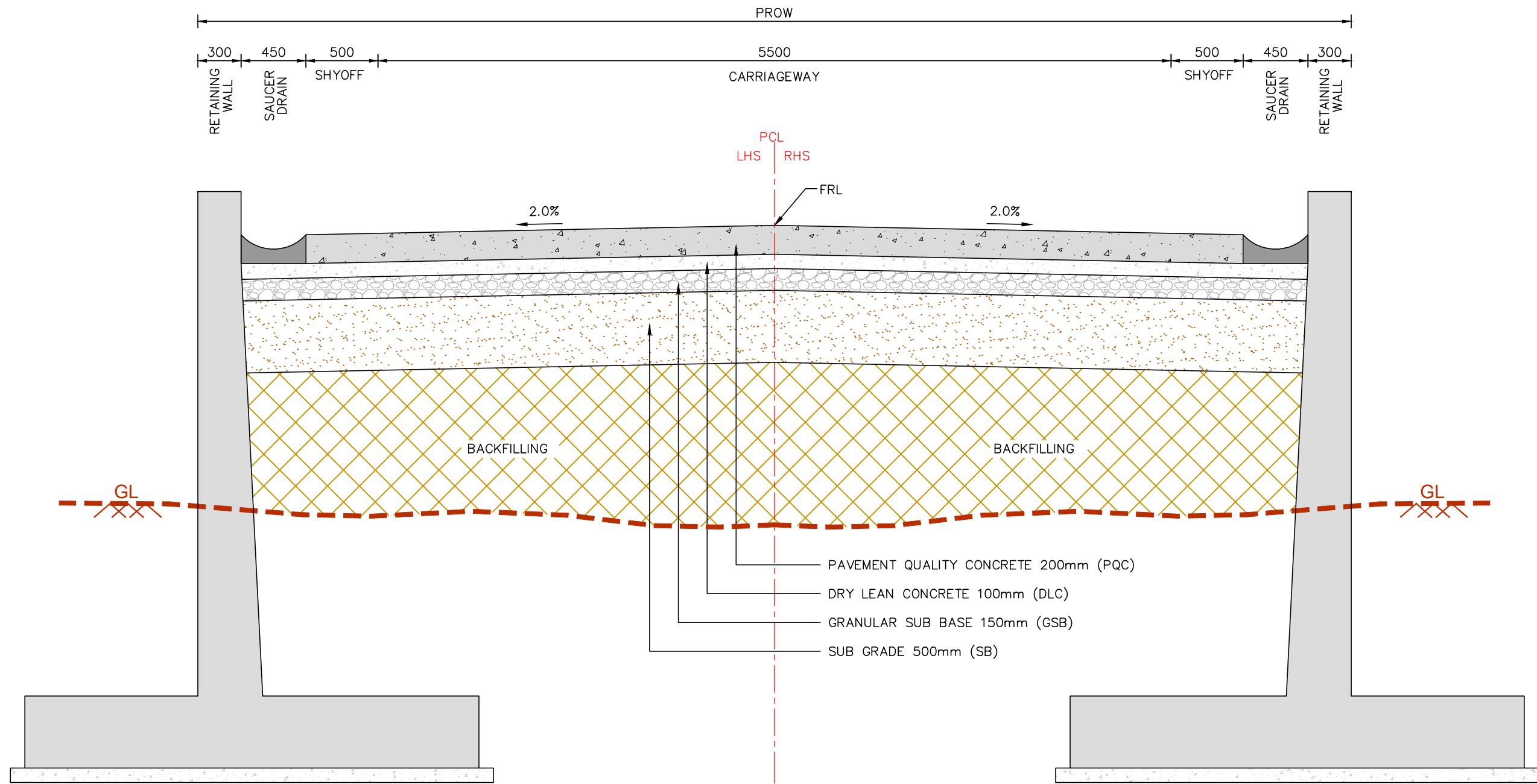
DRAWING TITLE

GENERAL ARRANGEMENT DRAWING OF APPROACH ROAD AND ALLIEND WORKS FOR PROPOSED BRIDGE CUM BARRAGE
TYPICAL CROSS SECTION (TYPE-01)

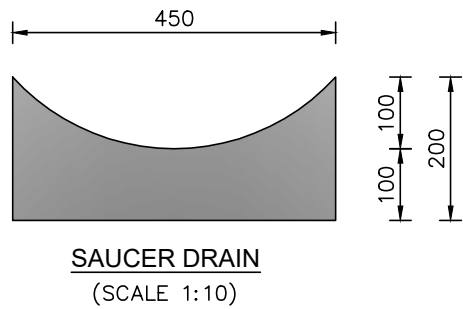
SCALE.	DRAWING NO.	SHEET NO.	REV.
AS SHOWN	WRE-APR-GAD-A012	01 OF 09	R0

CONTRACTOR.

EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV,
KHANAPUR



TYPICAL CROSS SECTION - 02
CH:0+195 To CH:0+290 (RETAINING WALL - LEFT BANK)
SECTION 2-2
SCALE (1:30)



TCS-2			
Sl.No	Proposed Chainage, km		Length,km
	From	To	
1	0.195	0.290	0.095

GENERAL NOTES

- ALL DIMENSIONS ARE IN MILLIMETER UNLESS SPECIFIED.
- MATERIALS SPECIFICATION AND WORK SPECIFICATIONS SHALL BE IN ACCORDANCE WITH MORT&H FOR ROAD AND BRIDGE WORK - CONSTRUCTION UNLESS OTHERWISE SPECIFIED.
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 - EARTHWORK IN EMBANKMENT :CLAUSE 305
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 - DENSE BITUMINOUS MACADAM (DBM) :CLAUSE 505
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 - DRY LEAN CONCRETE (DLC) :CLAUSE 601
 - PAVEMENT QUALITY CONCRETE (PQC) :CLAUSE 602
- COMPACTION REQUIREMENTS (% OF DRY DENSITY) MODIFIED PROCTOR FOR EARTHWORKS SHALL BE AS FOLLOWS:
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- DIMENSIONS ARE NOT TO BE SCALED AND ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.
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- RAMP FOR THE APPROACH ROAD IS DESIGNED AS PER IRC-SP-62-2014 (GUIDELINES FOR DESIGN AND CONSTRUCTION OF CEMENT CONCRETE PAVEMENTS FOR LOW VOLUME ROADS) FROM TABLE 3, 2, TABLE-4.1, AND TABLE-4.2.

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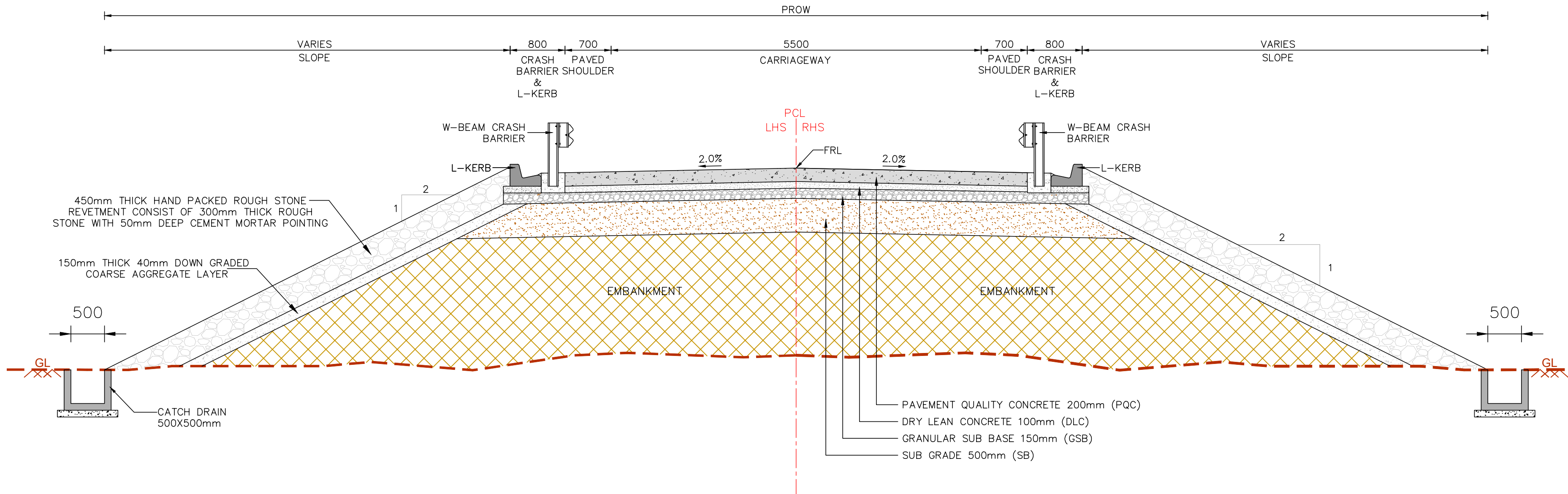
DRAWING TITLE

GENERAL ARRANGEMENT DRAWING OF APPROACH ROAD AND ALLIEND WORKS FOR PROPOSED BRIDGE CUM BARRAGE
TYPICAL CROSS SECTION (TYPE-02)

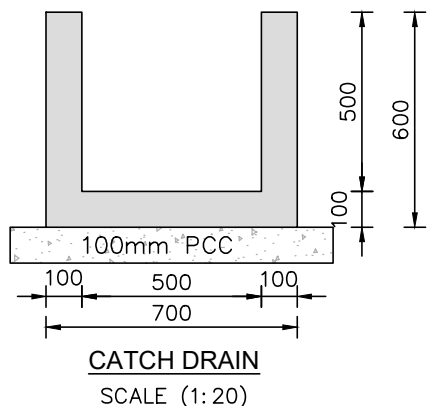
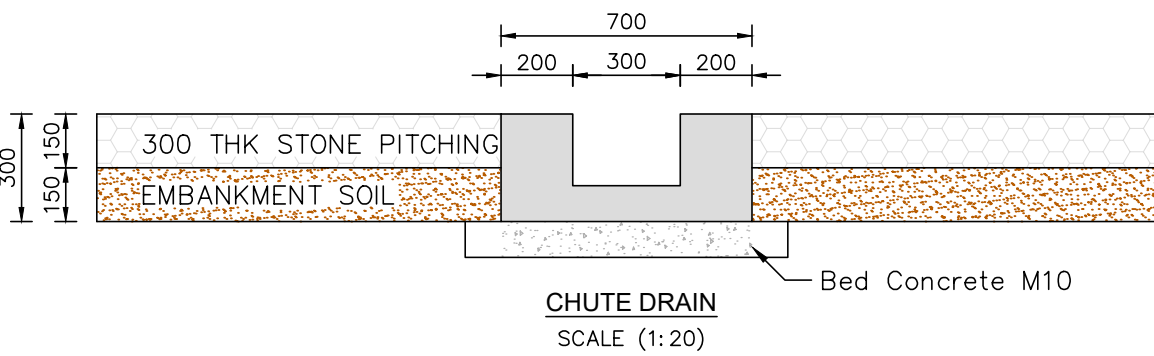
SCALE.	DRAWING NO.	SHEET NO.	REV.
AS SHOWN	WRE-APR-GAD-A012	02 OF 09	R0

CONTRACTOR.

EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV,
KHANAPUR



TYPICAL CROSS SECTION TYPE-03
CH:0+440 To CH:0+620 (HIGH EMBANKMENT - RIGHT BANK)
SECTION 3-3
SCALE (1:45)



TCS-3			
Sl.No	Proposed Chainage, km		Length,km
	From	To	
1	0.440	0.620	0.180

GENERAL NOTES

- ALL DIMENSIONS ARE IN MILLIMETER UNLESS SPECIFIED.
- MATERIALS SPECIFICATION AND WORK SPECIFICATIONS SHALL BE IN ACCORDANCE WITH MORT&H FOR ROAD AND BRIDGE WORK - CONSTRUCTION UNLESS OTHERWISE SPECIFIED.
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 - EARTHWORK IN EMBANKMENT :CLAUSE 305
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- IN CASE OF CUTTING GREATER THAN 3m CATCH WATER DRAIN SHALL BE PROVIDED AT EVERY 3m & SHALL BE CONNECTED TO NEAREST CROSS DRAINAGE
- DIMENSIONS ARE NOT TO BE SCALED AND ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.
- MEDIAN FILL SHALL BE UP TO 25MM BELOW THE TOP OF THE KERB. REF: IRC:SP-50-1999
- FOR GRANULAR SUB-BASE THE MATERIAL TO BE USED SHOULD BE CLOSED GRADED FOR THE TOP LAYER AND COARSE GRADED FOR BOTTOM LAYER.
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- RAMP FOR THE APPROACH ROAD IS DESIGNED AS PER IRC-SP-62-2014 (GUIDELINES FOR DESIGN AND CONSTRUCTION OF CEMENT CONCRETE PAVEMENTS FOR LOW VOLUME ROADS) FROM TABLE 3, 2, TABLE-4.1, AND TABLE-4.2.

ABBREVIATION :

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TENDER PURPOSE ONLY

CLIENT



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PROJECT TITLE

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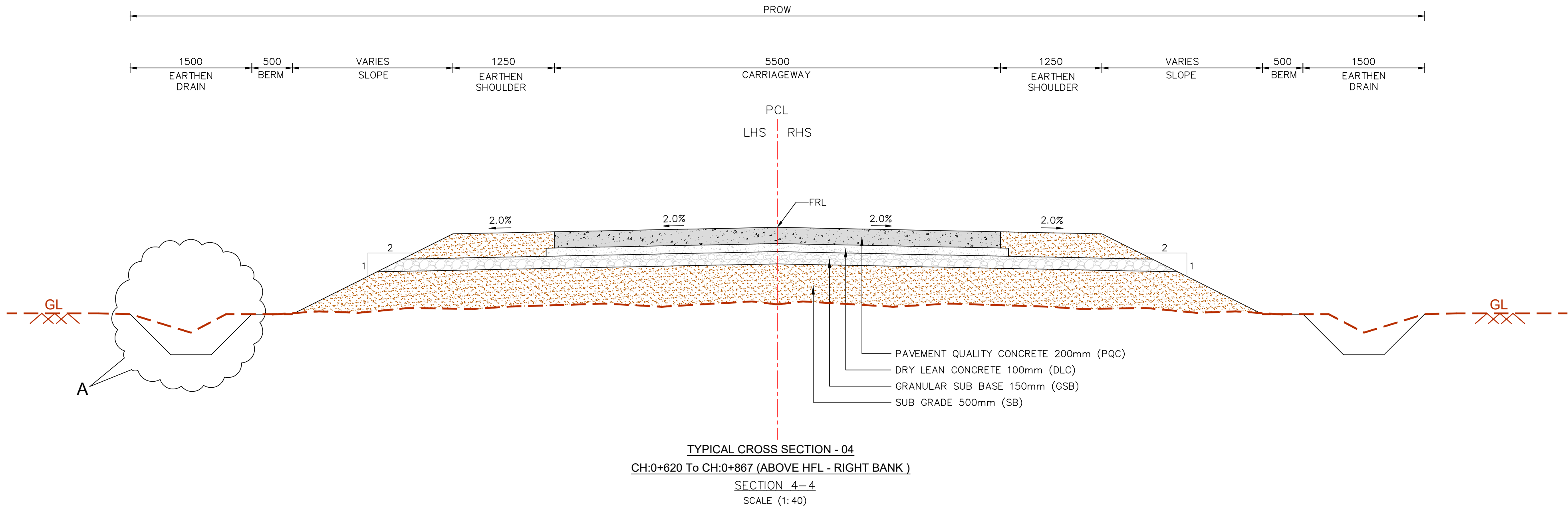
DRAWING TITLE

GENERAL ARRANGEMENT DRAWING OF APPROACH ROAD AND ALLIEND WORKS FOR PROPOSED BRIDGE CUM BARRAGE
TYPICAL CROSS SECTION (TYPE-03)

SCALE.	DRAWING NO.	SHEET NO.	REV.
AS SHOWN	WRE-APR-GAD-A012	03 OF 09	R0

CONTRACTOR.

EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV,
KHANAPUR



GENERAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETER UNLESS SPECIFIED.

2. MATERIALS SPECIFICATION AND WORK SPECIFICATIONS SHALL BE IN ACCORDANCE WITH MORT&H FOR ROAD AND BRIDGE WORK - CONSTRUCTION UNLESS OTHERWISE SPECIFIED.

3. FOLLOWING SPECIFICATIONS OF MORT&H SHALL BE FOLLOWED FOR MATERIAL AND CONSTRUCTION FOR DIFFERENT PAVEMENT LAYERS SELECTION

 - EARTHWORK IN EMBANKMENT :CLAUSE 305
 - EARTHWORK IN CUTTING :CLAUSE 301
 - SUBGRADE :CLAUSE 305
 - GRANULAR SUB - BASE (GSB) :CLAUSE 401
 - WET MIX MACADAM (WMM) :CLAUSE 406
 - DENSE BITUMINOUS MACADAM (DBM) :CLAUSE 505
 - BITUMINOUS CONCRETE (BC) :CLAUSE 507
 - DRY LEAN CONCRETE (DLC) :CLAUSE 601
 - PAVEMENT QUALITY CONCRETE (PQC) :CLAUSE 602

4. COMPACTION REQUIREMENTS (% OF DRY DENSITY) MODIFIED PROCTOR FOR EARTHWORKS SHALL BE AS FOLLOWS:

 - EMBANKMENT :95%
 - SUBGRADE :97%
 - EARTHEN SHOULDER & MEDIAN :97%

5. COMPACTED SUBGRADE SHALL HAVE EFFECTIVE CBR VALUE OF 8%(MIN.) AND COMPACTED SUB -BASE SHALL HAVE A CBR VALUE OF 30%(MIN.)
6. IF THE DIFFERENCE BETWEEN THE NATURAL GROUND AND FINISHED ROAD LEVEL IS LESS THAN 500MM, THEN THE GROUND SHALL BE LOOSENEED AND RECOMPACTED TO ACHIEVE 97% OF DRY DENSITY, ENSURE THE CBR OF EXISTING SUBGRADE MATERIAL IS RESULTING AN EFFECTIVE CBR OF 8%

7. UNSUITABLE MATERIAL / SOIL ENCOUNTERED DURING PAVEMENT FORMATION SHALL BE REMOVED AND REFILLED WITH SELECT FILL MATERIAL AND COMPACTED IN LAYERS.

8. FINISHED ROAD LEVEL (FRL) IS MEASURED ON CENTRAL CROWN OF THE CARRIAGEWAY.

9. IN CASE OF CUTTING GREATER THAN 3m CATCH WATER DRAIN SHALL BE PROVIDED AT EVERY 3m & SHALL BE CONNECTED TO NEAREST CROSS DRAINAGE

10. DIMENSIONS ARE NOT TO BE SCALED AND ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.

11. MEDIAN FILL SHALL BE UP TO 25MM BELOW THE TOP OF THE KERB. REF: IRC:SP-50-1999

12. FOR GRANULAR SUB-BASE THE MATERIAL TO BE USED SHOULD BE CLOSED GRADED FOR THE TOP LAYER AND COARSE GRADED FOR BOTTOM LAYER.

13. CHUTES SHOULD TO BE PROVIDED AT EVERY 10m INTERVAL WHERE EMBANKMENT HEIGHT IS GREATER THAN 4m.

14. CHUTES WITH ENERGY DISSIPATION BASIN SHALL BE PROVIDED AT EVERY 10m INTERVAL WHERE THE EMBANKMENT HEIGHT IS MORE THAN 4m.

15. EMBANKMENT SLOPE SHOULD BE PROTECTED WITH STONE PITCHING ABOVE EMBANKMENT.

16. APPROACH ROAD PAVEMENT DESIGN AS PER IRC-58-2015(GUIDELINES FOR THE DESIGN OF PLAIN JOINTED RIGID PAVEMENTS FOR HIGHWAYS) FROM TABLE-1, TABLE-2, TABLE-3 AND TABLE-4

17. RAMP FOR THE APPROACH ROAD IS DESIGNED AS PER IRC-SP-62-2014 (GUIDELINES FOR DESIGN AND CONSTRUCTION OF CEMENT CONCRETE PAVEMENTS FOR LOW VOLUME ROADS) FROM TABLE 3, 2, TABLE-4.1, AND TABLE-4.2.

ABBREVIATION :

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Km = KILOMETER
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TENDER PURPOSE ONLY

CLIENT



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DRAWING TITLE

GENERAL ARRANGEMENT DRAWING OF APPROACH ROAD AND ALLIEND WORKS FOR PROPOSED BRIDGE CUM BARRAGE
TYPICAL CROSS SECTION (TYPE-04)

SCALE.
AS SHOWN

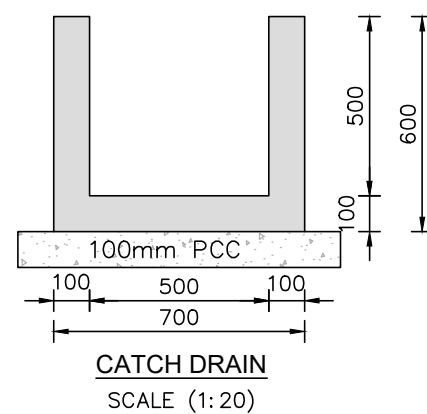
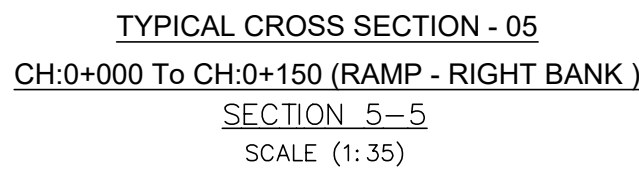
DRAWING NO.
WRE-APR-GAD-A012

SHEET NO.
04 OF 09

REV.
R0

CONTRACTOR.

EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV,
KHANAPUR



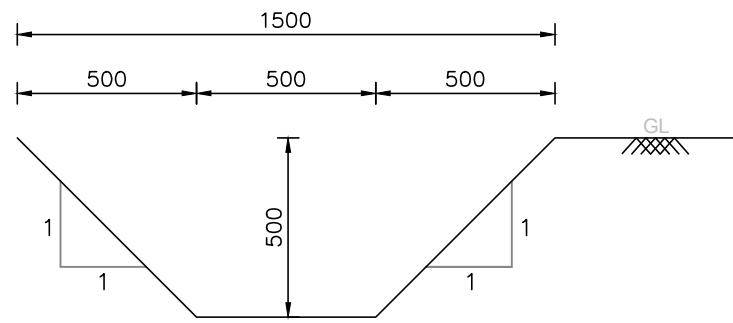
TCS-5			
Sl.No	Proposed Chainage, km		Length,km
	From	To	
1	0.000	0.150	0.150

6. IF THE DIFFERENCE BETWEEN THE NATURAL GROUND AND FINISHED ROAD LEVEL IS LESS THAN 500MM, THEN THE GROUND SHALL BE LOOSENED AND RECOMPACTED TO ACHIEVE 97% OF DRY DENSITY, ENSURE THE CBR OF EXISTING SUBGRADE MATERIAL IS RESULTING AN EFFECTIVE CBR OF 8%.
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17. RAMP FOR THE APPROACH ROAD IS DESIGNED AS PER IRC-SP-62-2014 (GUIDELINES FOR DESIGN AND CONSTRUCTION OF CEMENT CONCRETE PAVEMENTS FOR LOW VOLUME ROADS) FROM TABLE-3, TABLE-4.1, AND TABLE-4.2.

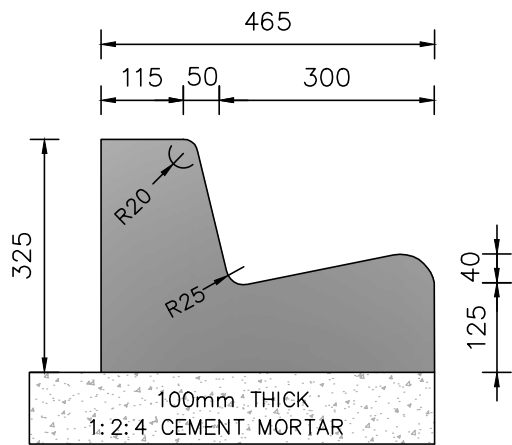
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BANGALORE - 560 001, INDIA.
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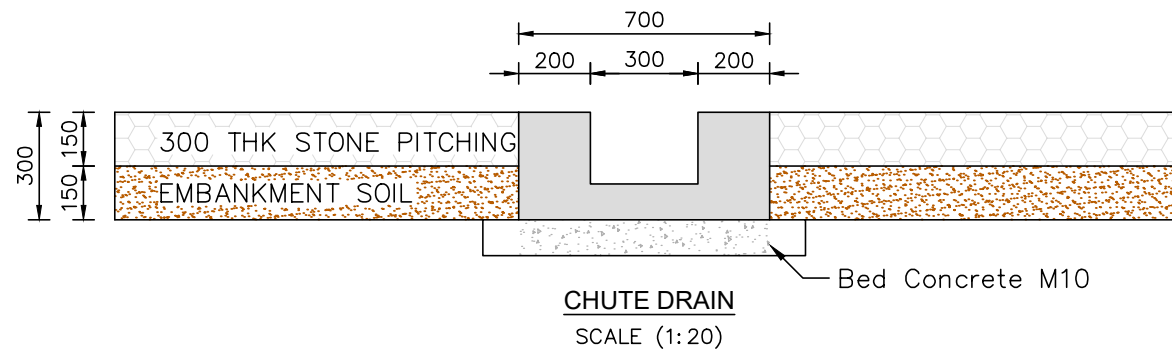
EXECUTIVE ENGINEER
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KHANAPUR



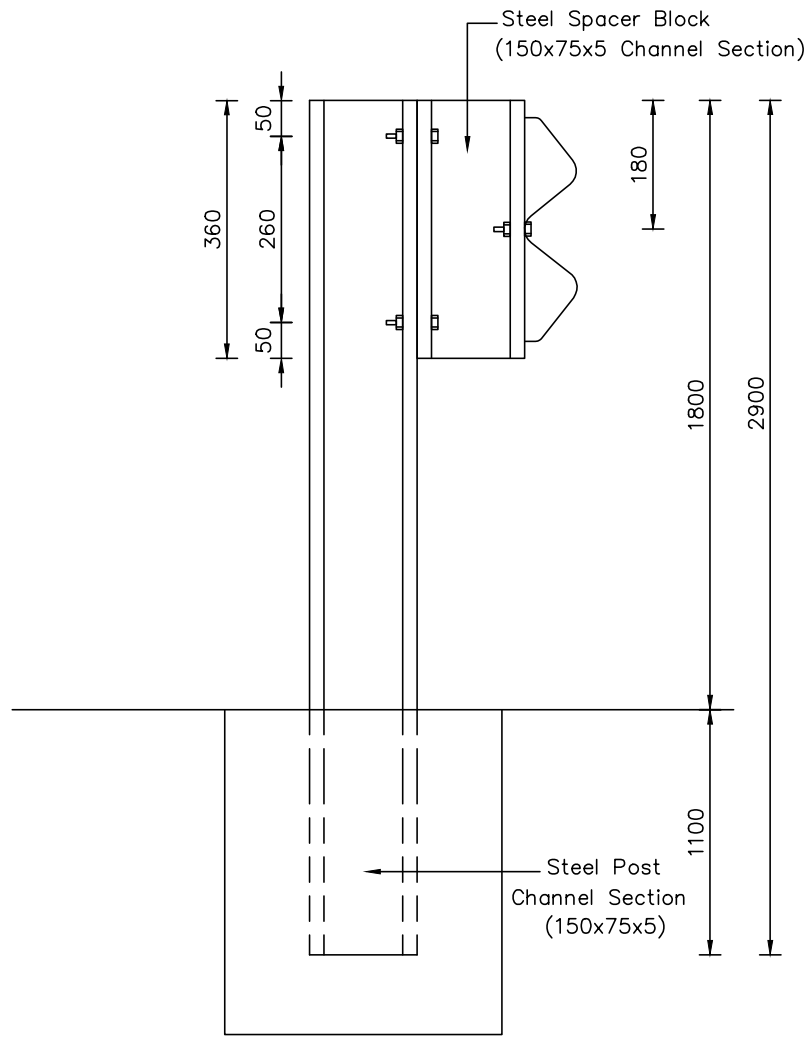
DETAIL-A
EARTHEN DRAIN FOR FILL SECTION
SCALE (1:20)



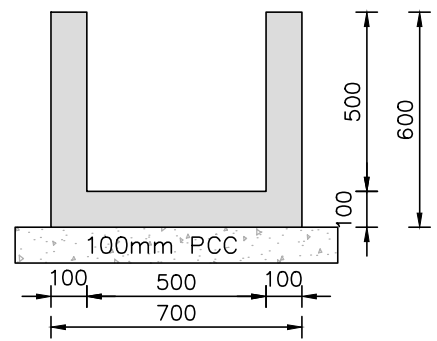
DETAIL-C
L-KERB
SCALE (1:10)



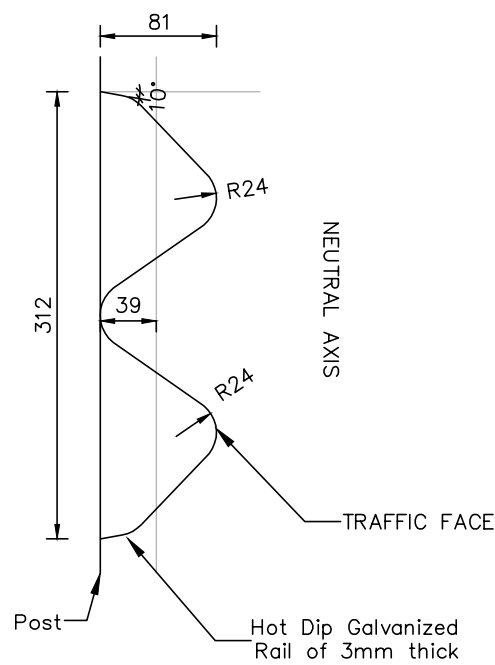
CHUTE DRAIN
SCALE (1:20)



DETAIL 'C'
ISMC POST
(Scale 1:10)



CATCH DRAIN
SCALE (1:20)



GALVANIZED RAIL DETAILS
(Scale 1:5)

GENERAL NOTES

- ALL DIMENSIONS ARE IN MILLIMETER UNLESS SPECIFIED.
- MATERIALS SPECIFICATION AND WORK SPECIFICATIONS SHALL BE IN ACCORDANCE WITH MORT&H FOR ROAD AND BRIDGE WORK - CONSTRUCTION UNLESS OTHERWISE SPECIFIED.
- FOLLOWING SPECIFICATIONS OF MORT&H SHALL BE FOLLOWED FOR MATERIAL AND CONSTRUCTION FOR DIFFERENT PAVEMENT LAYERS SELECTION
 - EARTHWORK IN EMBANKMENT :CLAUSE 305
 - EARTHWORK IN CUTTING :CLAUSE 301
 - SUBGRADE :CLAUSE 305
 - GRANULAR SUB - BASE (GSB) :CLAUSE 401
 - WET MIX MACADAM (WMM) :CLAUSE 406
 - DENSE BITUMINOUS MACADAM (DBM) :CLAUSE 505
 - BITUMINOUS CONCRETE (BC) :CLAUSE 507
 - DRY LEAN CONCRETE (DLC) :CLAUSE 601
 - PAVEMENT QUALITY CONCRETE (PQC) :CLAUSE 602
- COMPACTION REQUIREMENTS (% OF DRY DENSITY) MODIFIED PROCTOR FOR EARTHWORKS SHALL BE AS FOLLOWS:
 - EMBANKMENT :95%
 - SUBGRADE :97%
 - EARTHEN SHOULDER & MEDIAN :97%
- COMPACTED SUBGRADE SHALL HAVE EFFECTIVE CBR VALUE OF 8%(MIN.) AND COMPACTED SUB -BASE SHALL HAVE A CBR VALUE OF 30%(MIN.)
- IF THE DIFFERENCE BETWEEN THE NATURAL GROUND AND FINISHED ROAD LEVEL IS LESS THAN 500MM, THEN THE GROUND SHALL BE LOOSENEED AND RECOMPACTED TO ACHIEVE 97% OF DRY DENSITY, ENSURE THE CBR OF EXISTING SUBGRADE MATERIAL IS RESULTING AN EFFECTIVE CBR OF 8%
- UNSUITABLE MATERIAL / SOIL ENCOUNTERED DURING PAVEMENT FORMATION SHALL BE REMOVED AND REFILLED WITH SELECT FILL MATERIAL AND COMPACTED IN LAYERS.
- FINISHED ROAD LEVEL (FRL) IS MEASURED ON CENTRAL CROWN OF THE CARRIAGEWAY.
- IN CASE OF CUTTING GREATER THAN 3m CATCH WATER DRAIN SHALL BE PROVIDED AT EVERY 3m & SHALL BE CONNECTED TO NEAREST CROSS DRAINAGE
- DIMENSIONS ARE NOT TO BE SCALED AND ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.
- MEDIAN FILL SHALL BE UP TO 25MM BELOW THE TOP OF THE KERB. REF: IRC:SP-50-1999
- FOR GRANULAR SUB-BASE THE MATERIAL TO BE USED SHOULD BE CLOSED GRADED FOR THE TOP LAYER AND COARSE GRADED FOR BOTTOM LAYER.
- CHUTES SHOULD TO BE PROVIDED AT EVERY 10m INTERVAL WHERE EMBANKMENT HEIGHT IS GREATER THAN 4m.
- CHUTES WITH ENERGY DISSIPATION BASIN SHALL BE PROVIDED AT EVERY 10m INTERVAL WHERE THE EMBANKMENT HEIGHT IS MORE THAN 4m.
- EMBANKMENT SLOPE SHOULD BE PROTECTED WITH STONE PITCHING ABOVE EMBANKMENT.
- APPROACH ROAD PAVEMENT DESIGN AS PER IRC-58-2015(GUIDELINES FOR THE DESIGN OF PLAIN JOINTED RIGID PAVEMENTS FOR HIGHWAYS) FROM TABLE-1, TABLE-2, TABLE-3 AND TABLE-4
- RAMP FOR THE APPROACH ROAD IS DESIGNED AS PER IRC-SP-62-2014 (GUIDELINES FOR DESIGN AND CONSTRUCTION OF CEMENT CONCRETE PAVEMENTS FOR LOW VOLUME ROADS) FROM TABLE 3, 2, TABLE-4.1, AND TABLE-4.2.

ABBREVIATION :

- FRL = FINISHED ROAD LEVEL.
CL = CENTER LINE
ROW = RIGHT OF WAY
PROW = PROPOSED RIGHT OF WAY
EROW = EXISTING RIGHT OF WAY
Km = KILOMETER
OGL = ORIGINAL GROUND LEVEL
PCC = PLAIN CEMENT CONCRETE
RCC = REINFORCED CEMENT CONCRETE

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KARNATAKA NEERAVARI NIGAM LIMITED (KNNL)
(A GOVT. OF KARNATAKA UNDERTAKING)
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PROJECT TITLE

CONSTRUCTION OF BRIDGE CUM BARRAGE ACROSS THE MALAPRABHA RIVER AT CHIKKAHATTIHOI VILLAGE, KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND CONNECTING ROADS FROM CHIKKAHATTIHOI AND KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE YEARS.

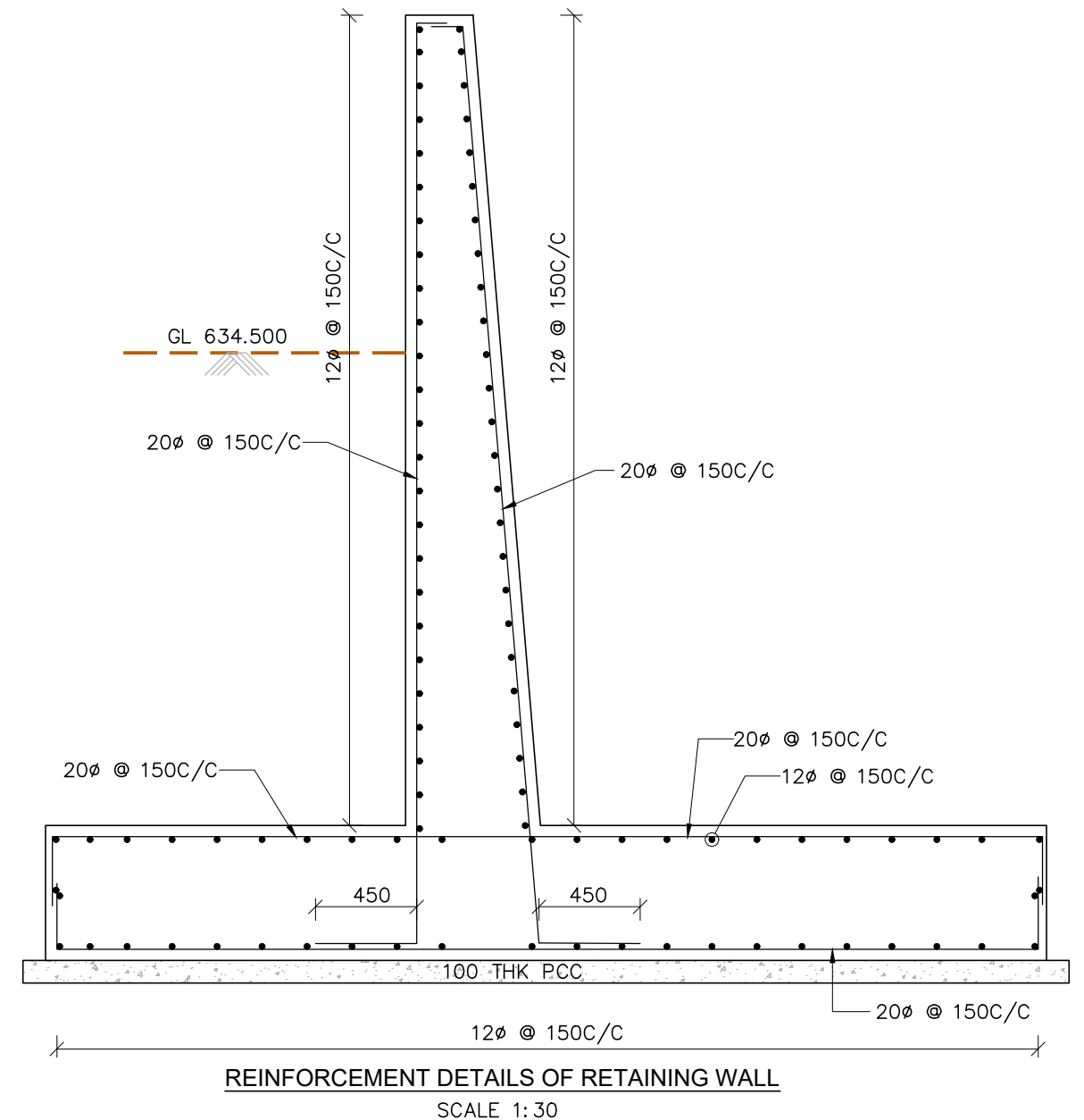
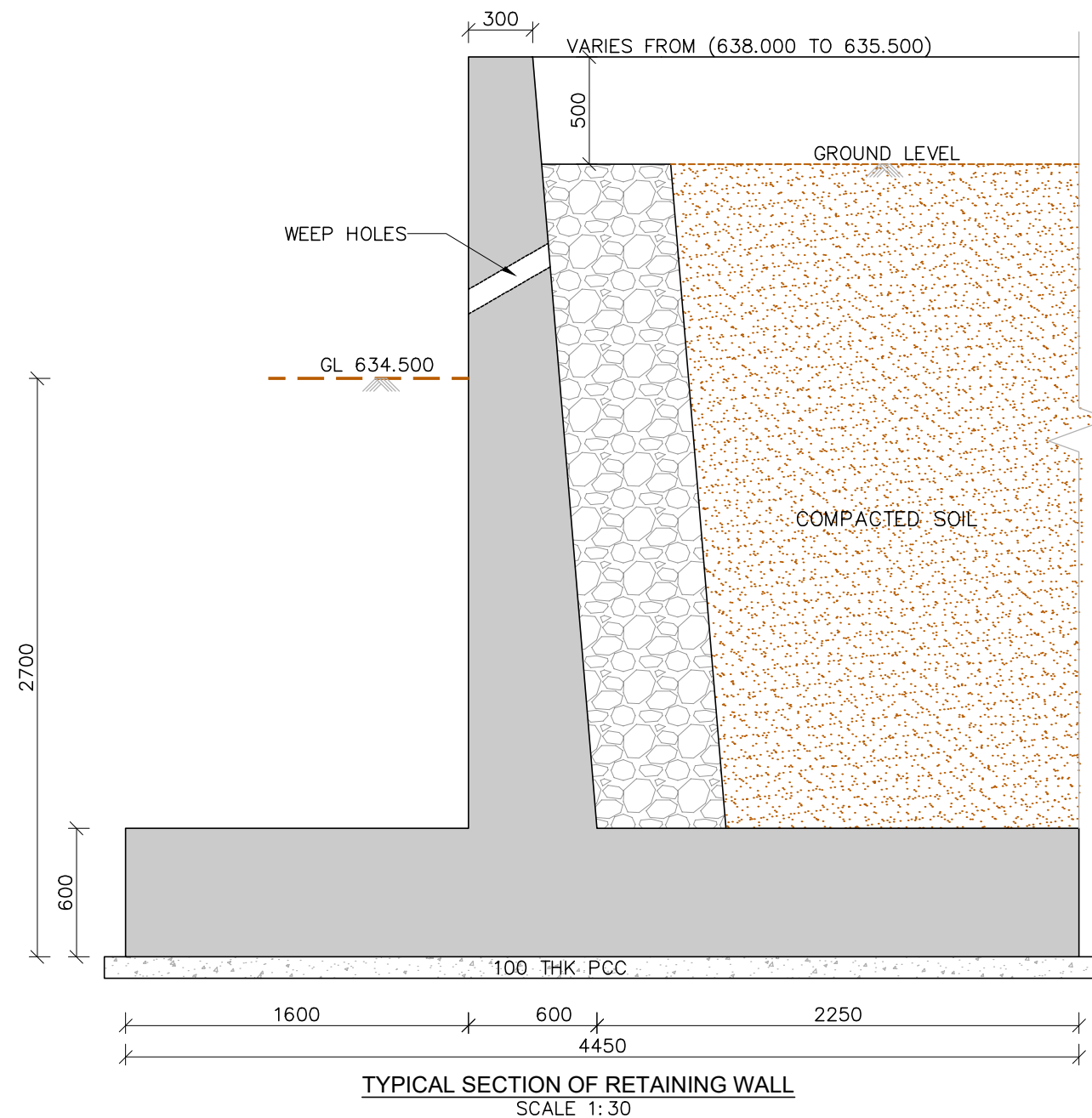
DRAWING TITLE

GENERAL ARRANGEMENT DRAWING OF APPROACH ROAD AND ALLIEND WORKS FOR PROPOSED BRIDGE CUM BARRAGE BLOWUP DETAILS

SCALE.	DRAWING NO.	SHEET NO.	REV.
AS SHOWN	WRE-APR-GAD-A012	06 OF 09	R0

CONTRACTOR.

EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV,
KHANAPUR



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS UNLESS MENTIONED OTHERWISE SPECIFIED.
2. DRAWING SHALL NOT BE SCALED OR MEASURED. FOLLOW ONLY WRITTEN DIMENSIONS.
3. CONCRETE GRADE DETAILS SHALL - M25
4. S.B.C IS CONSIDERED FOR DESIGN IS 15-20T/Sqm.
5. CLEAR COVER TOWARDS EARTH FACE 75mm(EXTREME CONDITION) FOR OTHER FACE 40mm (VERY SEVER CONDITION).

PROJECT TITLE
CONSTRUCTION OF BRIDGE CUM BARRAGE ACROSS THE MALAPRABHA RIVER AT CHIKKAHATTIHOI VILLAGE, KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND CONNECTING ROADS FROM CHIKKAHATTIHOI AND KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE YEARS.

DRAWING TITLE

GENERAL ARRANGEMENT DRAWING OF APPROACH ROAD AND ALLIEND WORKS FOR PROPOSED BRIDGE CUM BARRAGE (RETAINING WALL DETAILS)

SCALE.
AS SHOWN

DRAWING NO.
WRE-APR-GAD-A012

SHEET NO.
07 OF 09

REV.
R0

TENDER PURPOSE ONLY

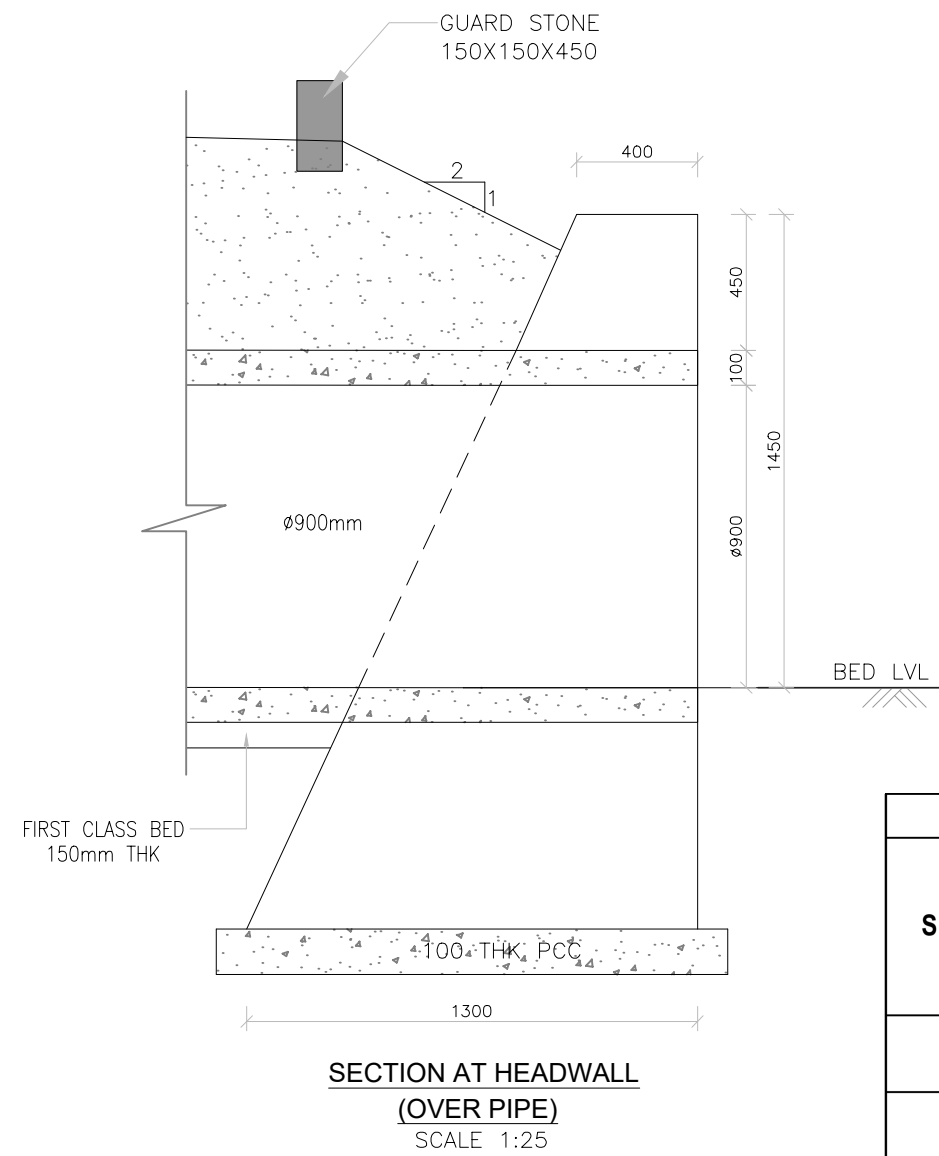
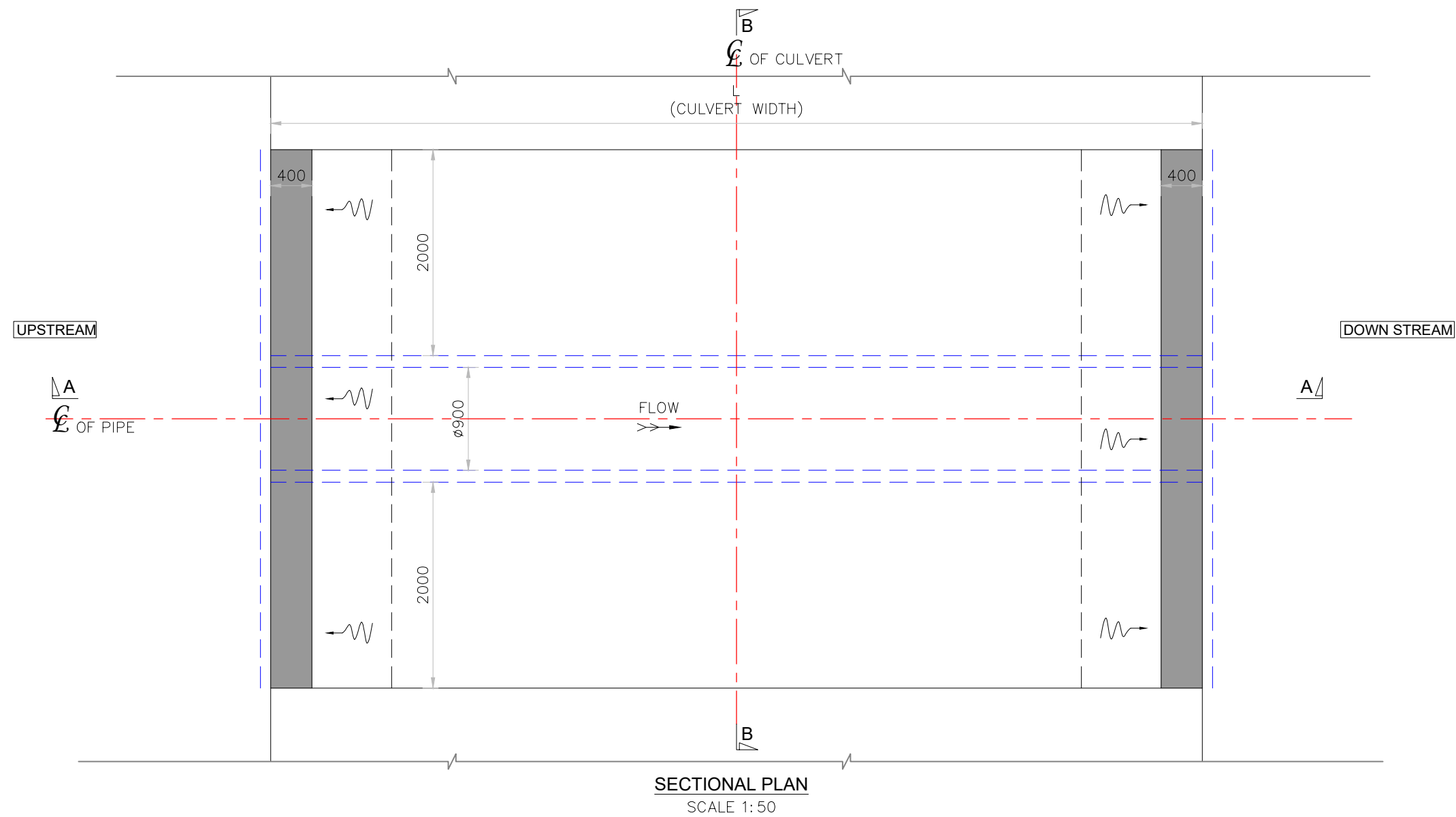
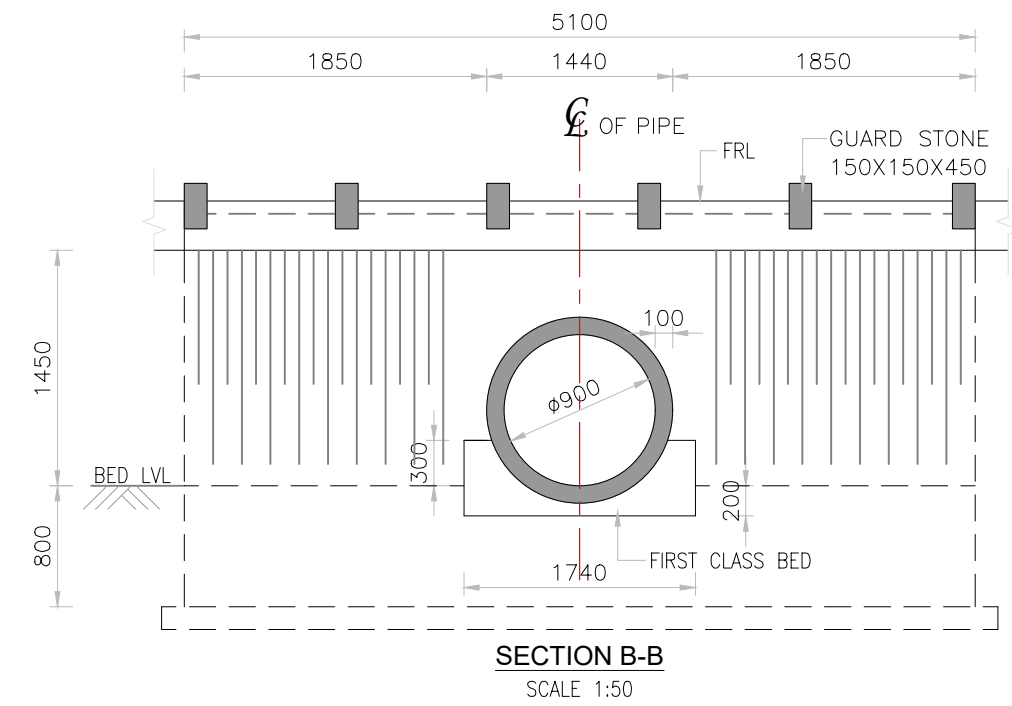
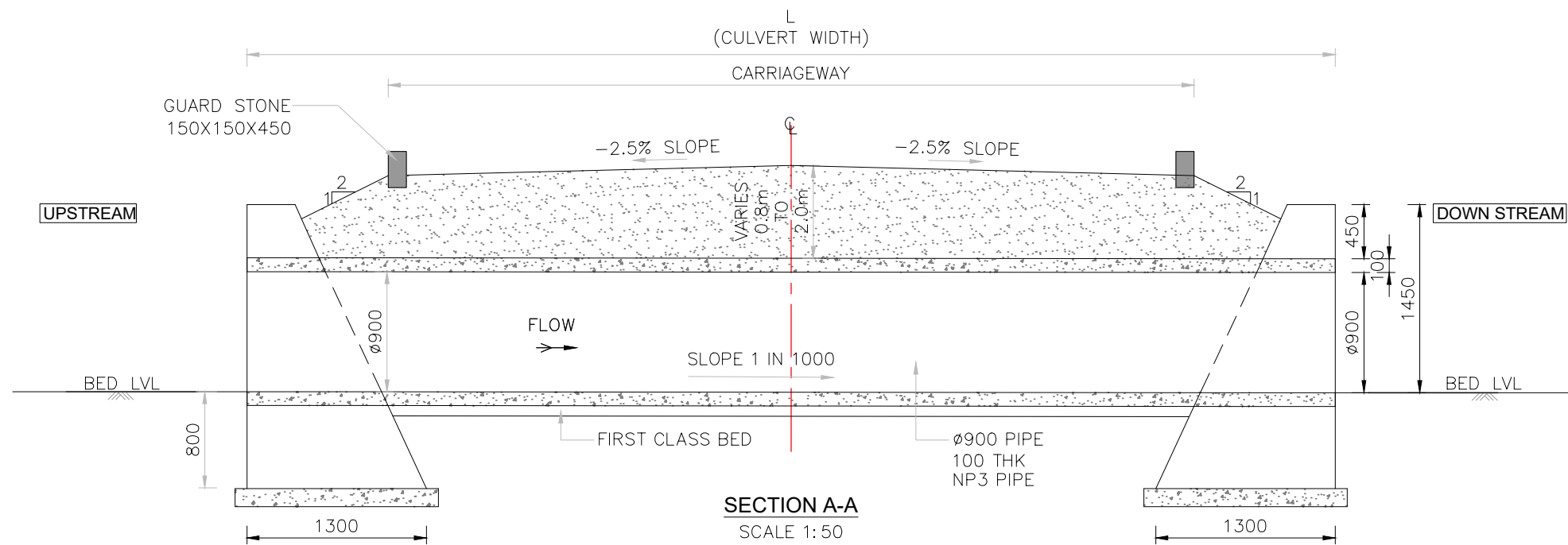
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1V 0.9 Dia Cross Road Pipe Culvert						
Sl.No	Proposed Chainage	Type of Structure	a	L	Cushion Thickness	With or Without Cushion
1	0+130 (LHS)	CD	0.900	10.0	-	Without Cushion
2	0+140 (RHS)	CD	0.900	10.0	-	Without Cushion
3	0+530 (RHS)	CD	0.900	10.0	-	Without Cushion

1V 0.9 Dia Pipe Culvert						
Sl.No	Proposed Chainage	Type of Structure	a	L	Cushion Thickness	With or Without Cushion
1	0+515	Pipe	0.900	15	-	Without Cushion

NOTES :

- ALL DIMENSIONS ARE IN MILLIMETERES, CHAINAGES AND LEVELS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
- ALL RCC PIPES TO BE OF GRADE NP4 CONFIRMING TO IS458.
- 150mm FILTER MEDIA SHALL BE PLACED BENEATH STONE PITCHING.
- CULVERT HEADWALLS ARE AS PER SP-13 OF IRC.
- EARTH FILL AND GSB SHALL BE COMPACTED USING LIGHT ROLLER.
- WMM AND OTHER LAYERS CAN BE COMPACTED NORMALLY WITH STATIC ROLLER.
- STRUCTURE NO. & SIZE OF VENT SHOULD BE PAINTED ON PLASTERED SURFACE OF (400X400) PARAPET WALL FACING TRAFFIC.
- THE HEIGHT AND WIDTH OF HEAD WALL MAY CHANGE AS PER SITE REQUIREMENTS.
- THE BEDDING BELOW THE PIPE AND FOUNDATION FOR HEADWALL SHALL BE PLACED OVER A FIRM STRATA.
- IF REQUIRED THE SUPER ELEVATION SHALL BE ADJUSTED IN THE EARTHFILL PROVIDED ABOVE PIPE.

- IN BLACK COTTON REGION PROVIDE 500mm THICK BOULDER FILLING BELOW PIPE BEDDING AND BELOW HEADWALL, BOULDER FILLING CONSIST OF QUARRY DUST (6mm DOWN IS SEIVE) AND BOULDERS WITH 95% COMPACTION.

NOTE FOR DRAIN SECTION:

- *Steel-Fe550
- *Concrete-M25
- *Top Slab Length as per Estimate

TENDER PURPOSE ONLY

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PROJECT TITLE

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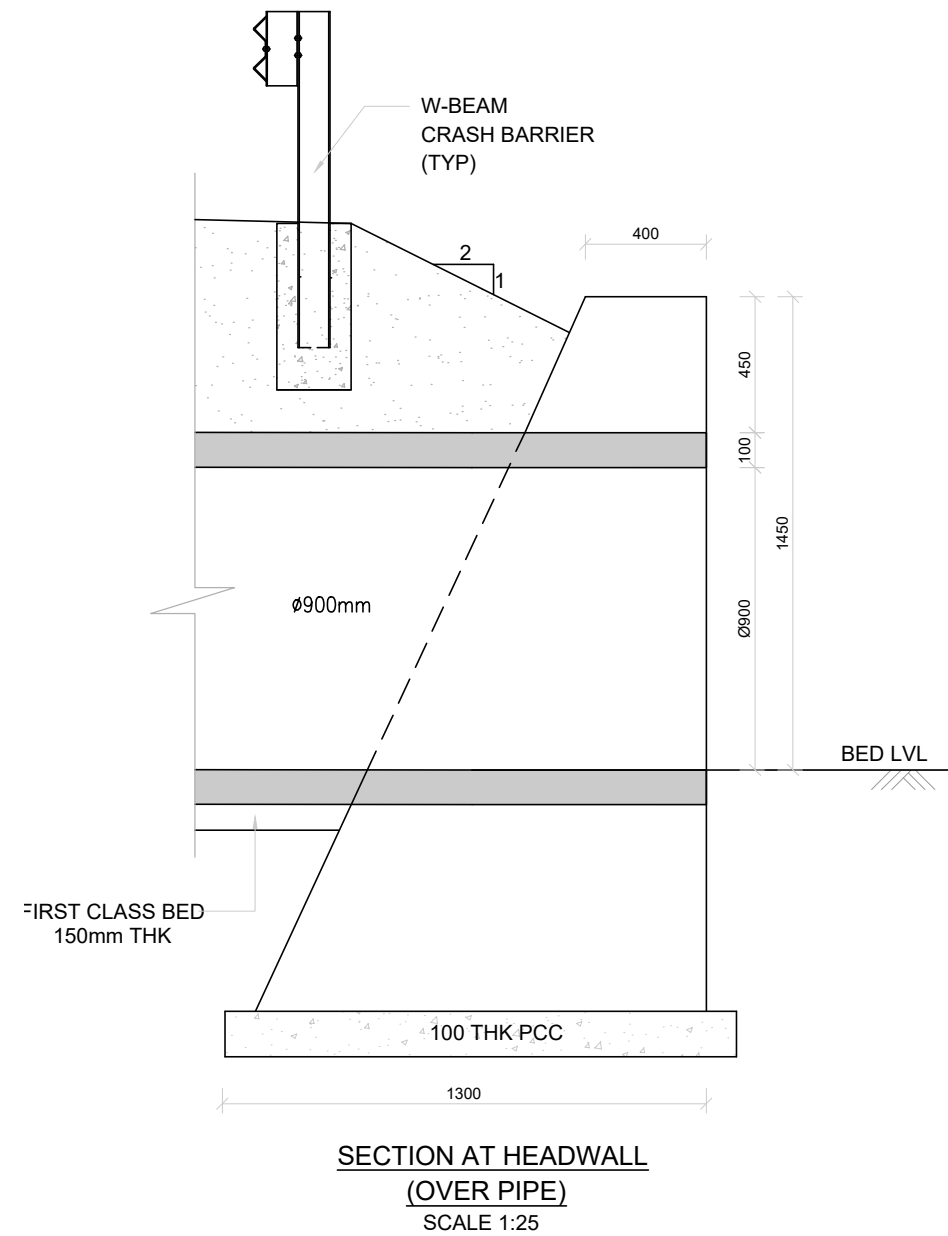
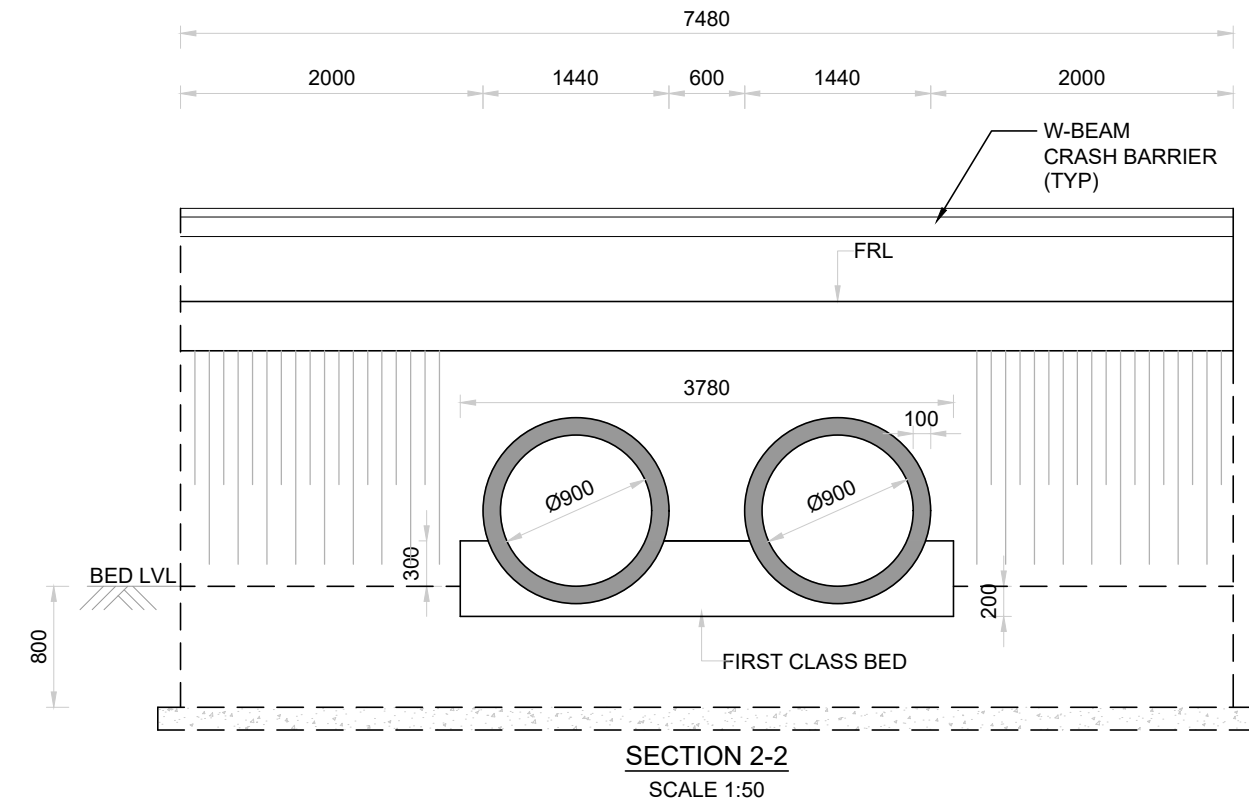
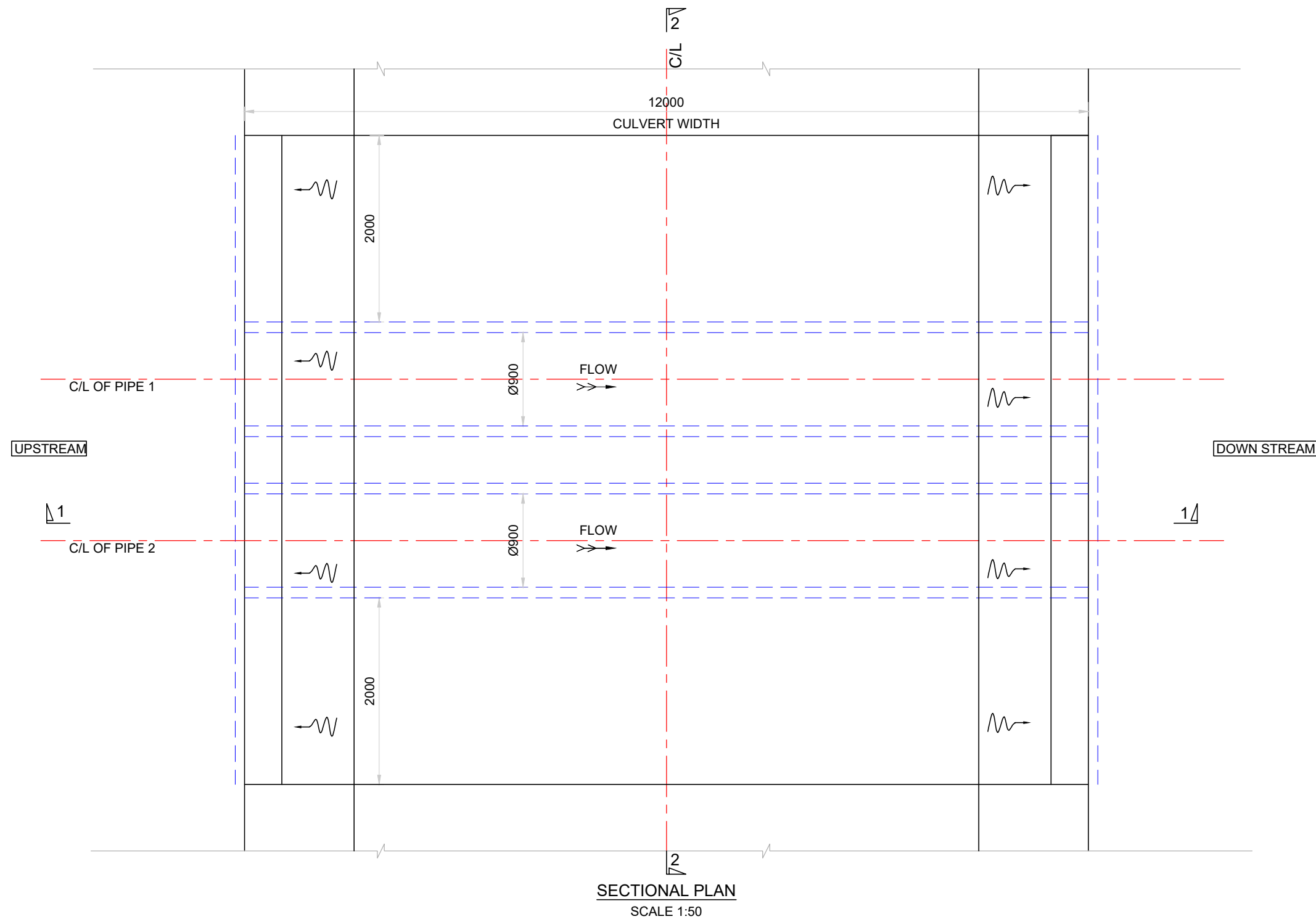
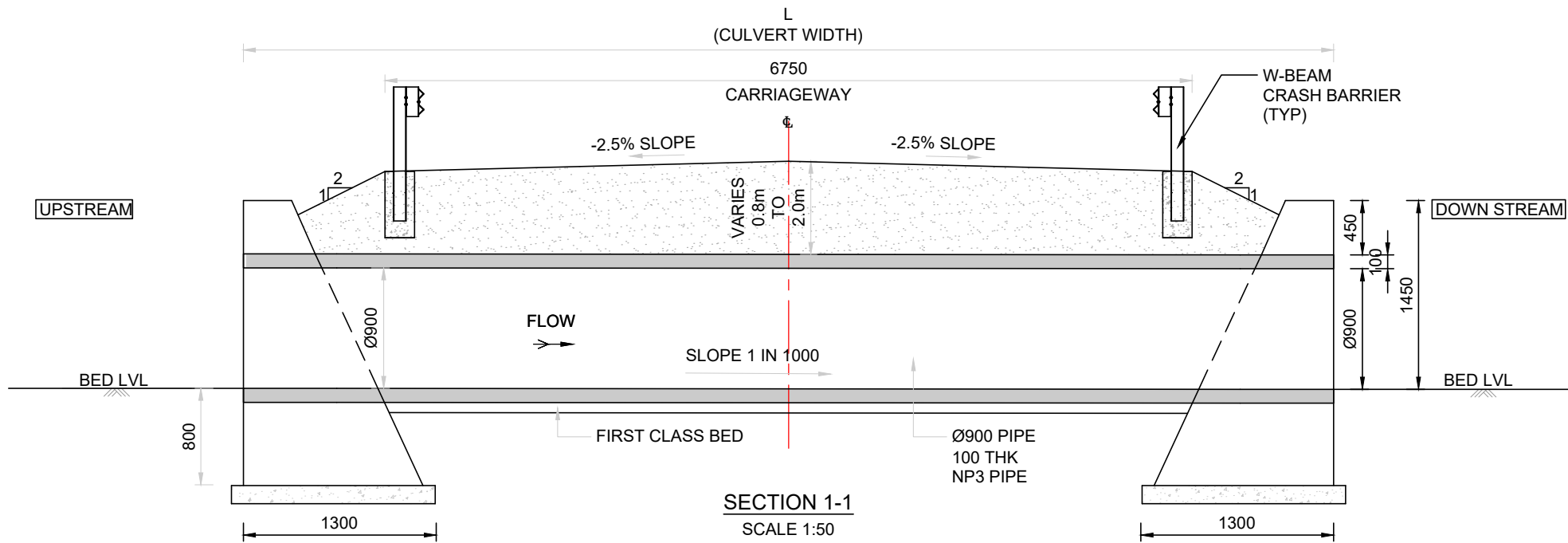
DRAWING TITLE

TYPICAL DETAILS OF PIPE CULVERT
1 VENT OF Ø0.9m

SCALE.	DRAWING NO.	SHEET NO.	REV.
AS SHOWN	WRE-APR-GAD-A012	08 OF 09	R0

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KHANAPUR



2V 0.9 Dia Pipe Culvert						
Sl.No	Proposed Chainage	Type of Structure	a	L	Cushion Thickness	With or Without Cushion
1	0+020	Pipe	0.900	20	-	Without Cushion

NOTES :

- ALL DIMENSIONS ARE IN MILLIMETERES, CHAINAGES AND LEVELS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
- ALL RCC PIPES TO BE OF GRADE NP4 CONFIRMING TO IS458.
- 150mm FILTER MEDIA SHALL BE PLACED BENEATH STONE PITCHING.
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- WMM AND OTHER LAYERS CAN BE COMPACTED NORMALLY WITH STATIC ROLLER.
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- THE BEDDING BELOW THE PIPE AND FOUNDATION FOR HEADWALL SHALL BE PLACED OVER A FIRM STRATA.
- IF REQUIRED THE SUPER ELEVATION SHALL BE ADJUSTED IN THE EARTHFILL PROVIDED ABOVE PIPE.

- IN BLACK COTTON REGION PROVIDE 500mm THICK BOULDER FILLING BELOW PIPE BEDDING AND BELOW HEADWALL, BOULDER FILLING CONSIST OF QUARRY DUST (6mm DOWN IS SEIVE) AND BOULDERS WITH 95% COMPACTION.

NOTE FOR DRAIN SECTION:

- *Steel-Fe550
- *Concrete-M25
- *Top Slab Length as per Estimate

TENDER PURPOSE ONLY

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PROJECT TITLE
CONSTRUCTION OF BRIDGE CUM BARRAGE ACROSS THE MALAPRABHA RIVER AT CHIKKAHATTIHOI VILLAGE, KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND CONNECTING ROADS FROM CHIKKAHATTIHOI AND KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE YEARS.

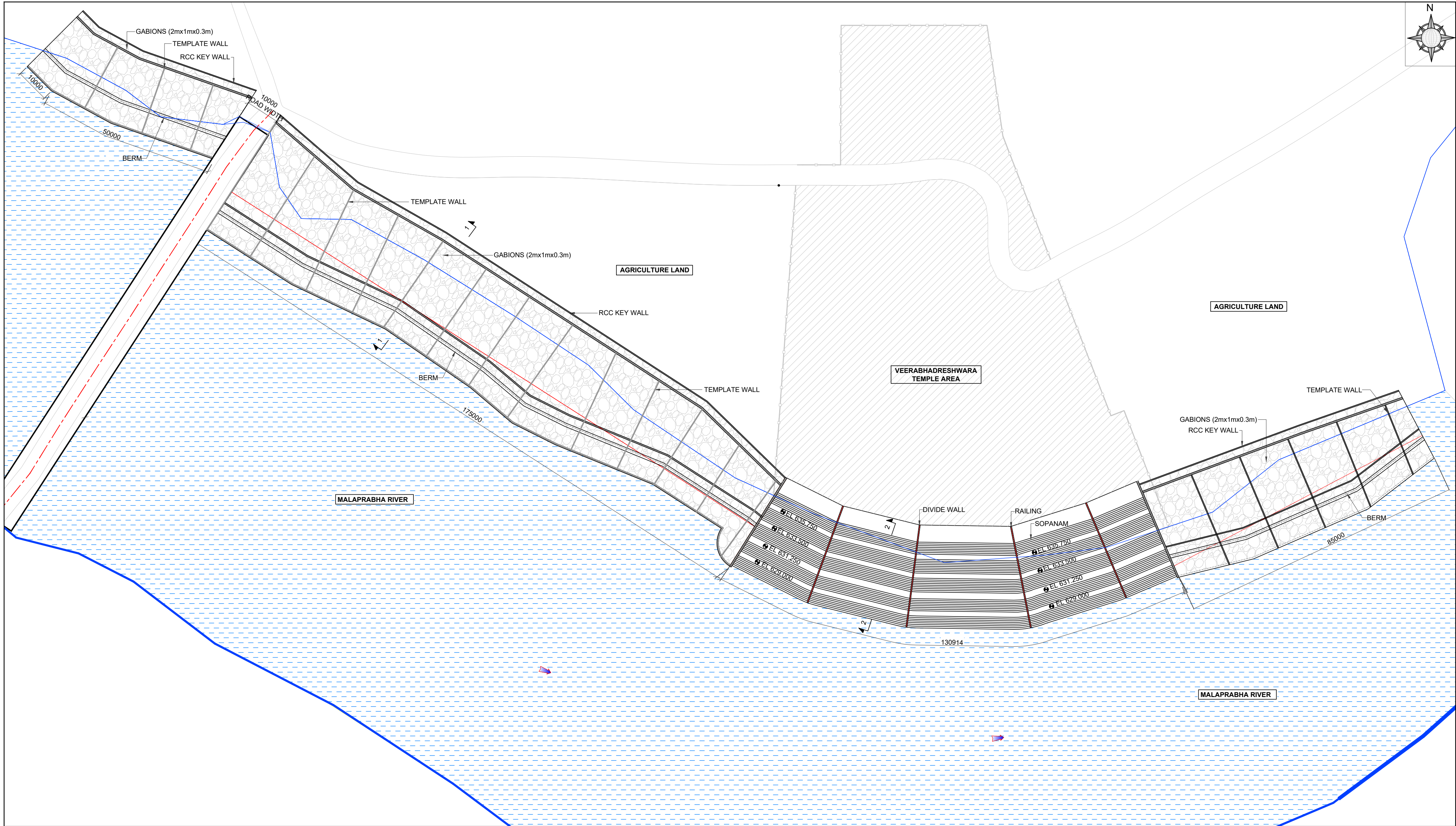
DRAWING TITLE

TYPICAL DETAILS OF PIPE CULVERT 2 VENT OF Ø0.9m

SCALE. AS SHOWN	DRAWING NO. WRE-APR-GAD-A012	SHEET NO. 09 OF 09	REV. R0
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EXECUTIVE ENGINEER
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KHANAPUR



NOTES AND SPECIFICATIONS :

1. ALL DIMENSIONS ARE IN MILLIMETRE AND REDUCED LEVELS ARE IN METRE UNLESS OTHERWISE SPECIFIED.
2. DO NOT SCALE THE DRAWING, ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.

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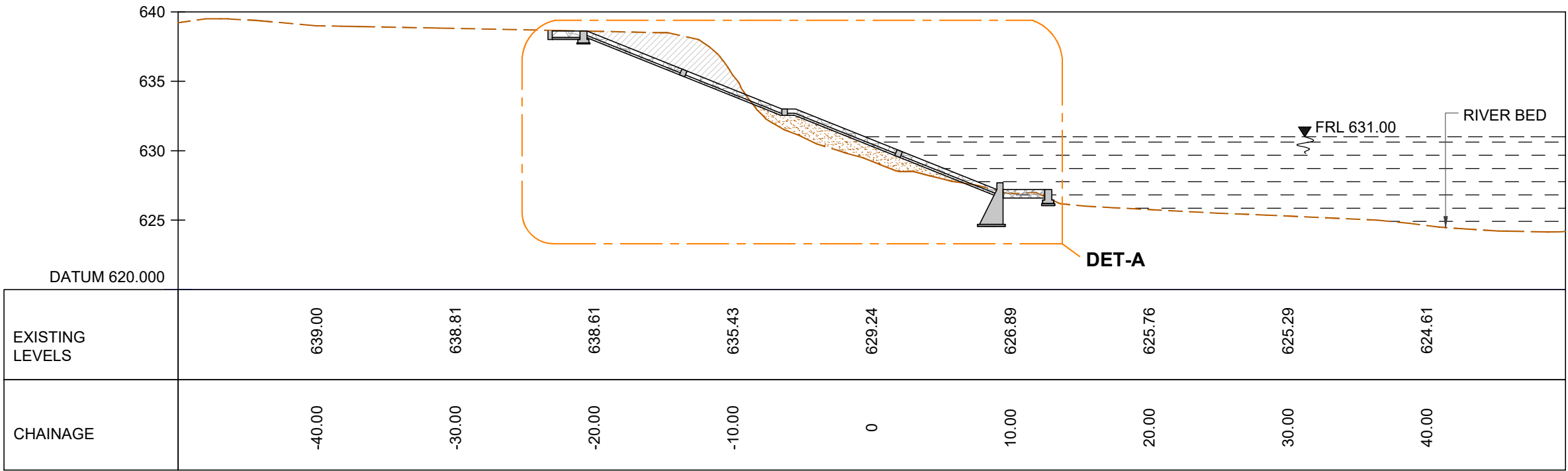
PROJECT TITLE
CONSTRUCTION OF BRIDGE CUM BARRAGE ACROSS THE
MALAPRABHA RIVER AT CHIKKAHATTIHOLI VILLAGE,
KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED
WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION
AND CONNECTING ROADS FROM CHIKKAHATTIHOLI AND
KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND
MAINTENANCE FOR A PERIOD OF FIVE YEARS.

DRAWING TITLE
GENERAL ARRANGEMENT DRAWINGS FOR PROPOSED
BANK PROTECTION FOR MALAPRABHA RIVER NEAR
TEMPLE IN CHIKKAHATTIHOLI VILLAGE.

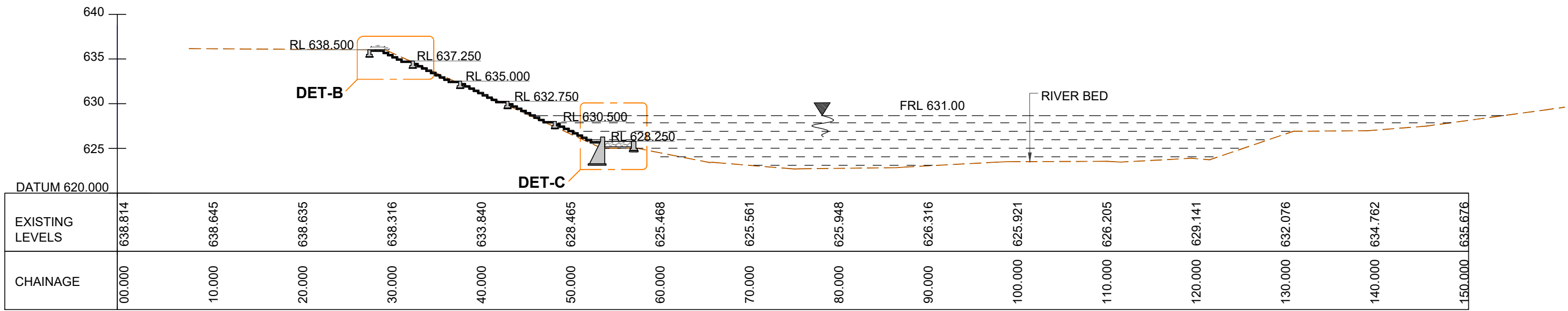
SCALE.	DRAWING NO.	SHEET NO.	REV.
AS SHOWN	WRE-RBP-GAD-A013	01 OF 03	R0

CONTRACTOR.

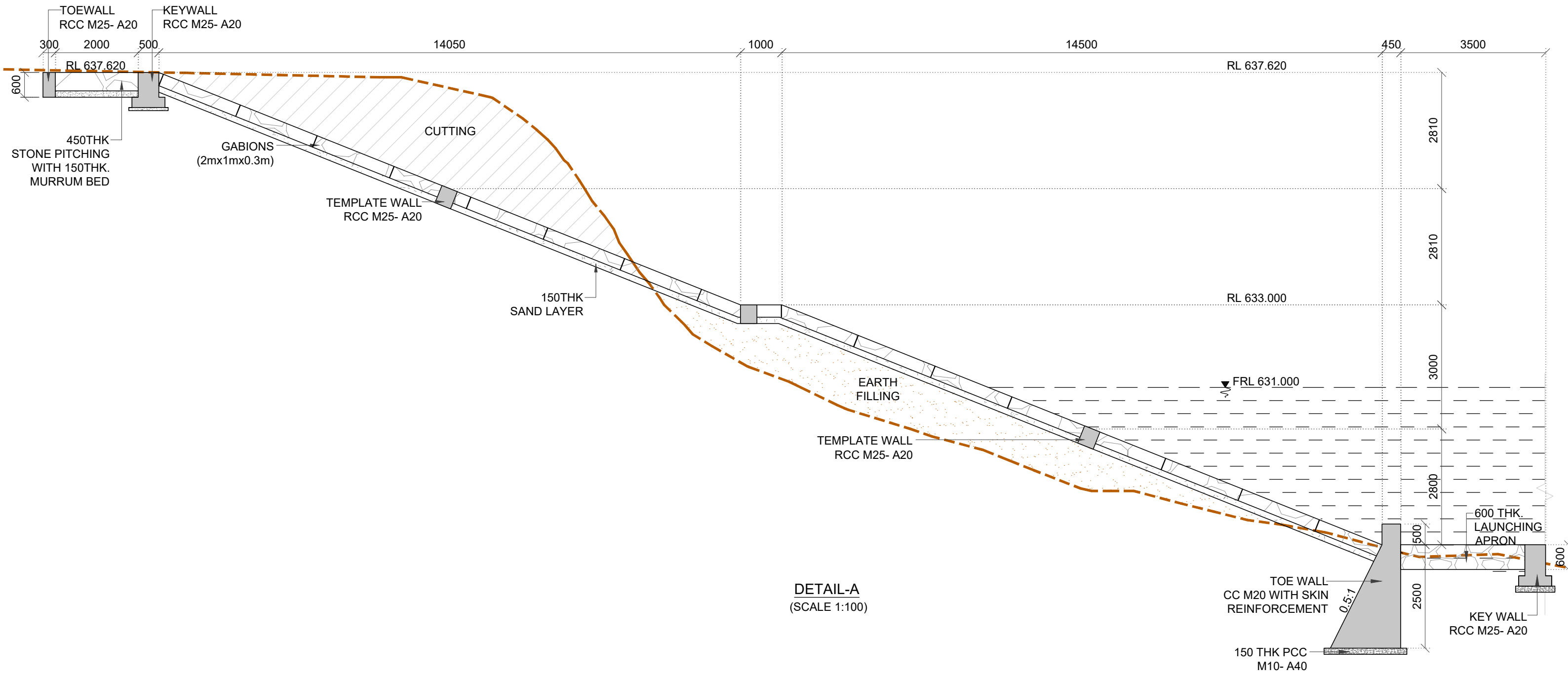
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SECTION 2-2
(SCALE 1:400)



SECTION 2-2
(SCALE 1:500)



DETAIL-A
(SCALE 1:100)

NOTES AND SPECIFICATIONS :

1. ALL DIMENSIONS ARE IN MILLIMETRE AND REDUCED LEVELS ARE IN METRE UNLESS OTHERWISE SPECIFIED.
2. DO NOT SCALE THE DRAWING, ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.

ABBREVIATIONS:

GL - GROUND LEVEL
TYP - TYPICAL
THK - THICK

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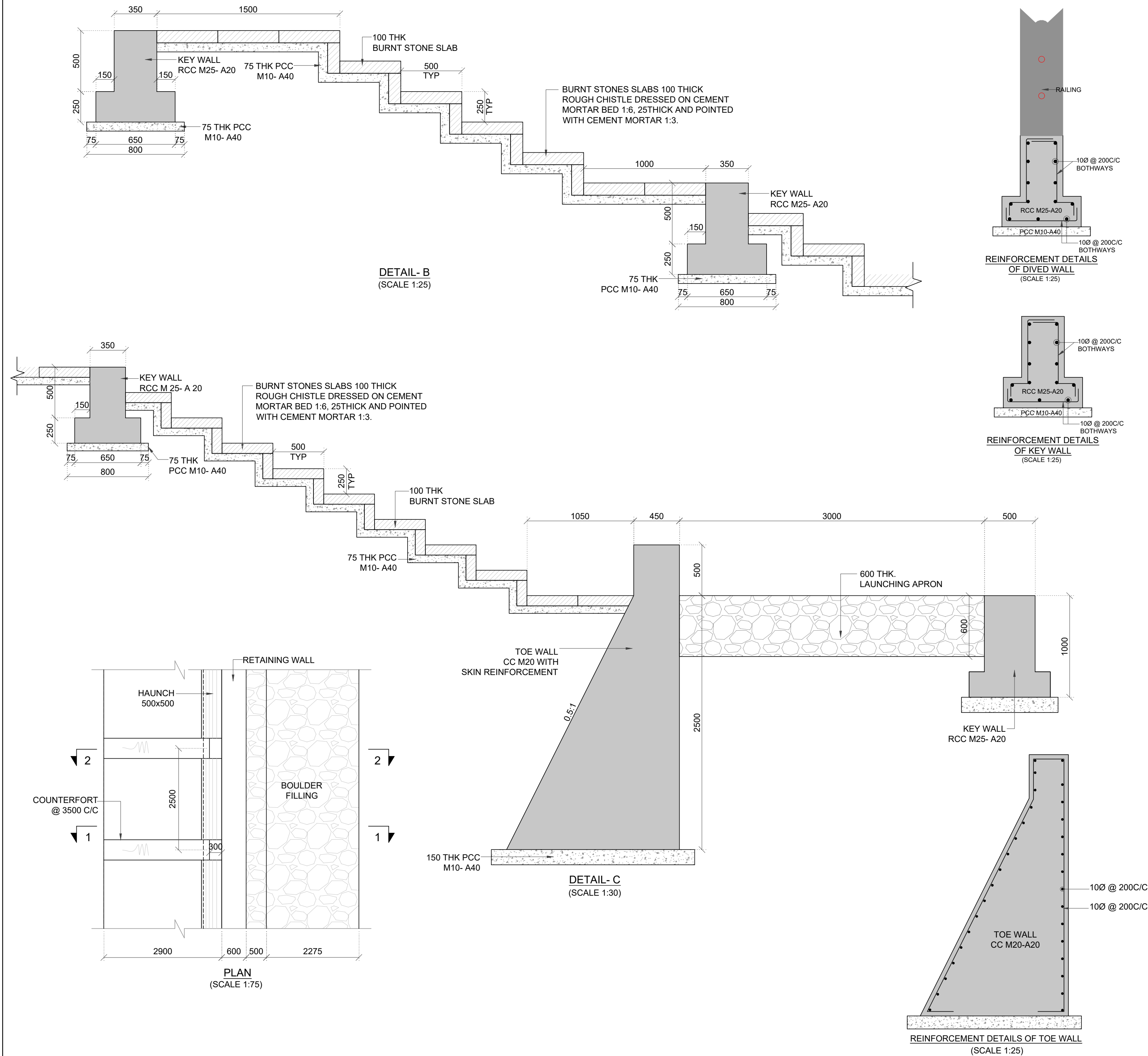
PROJECT TITLE
CONSTRUCTION OF BRIDGE CUM BARRAGE ACROSS THE MALAPRABHA RIVER AT CHIKKAHATTIHOI VILLAGE, KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND CONNECTING ROADS FROM CHIKKAHATTIHOI AND KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE YEARS.

DRAWING TITLE
GENERAL ARRANGEMENT DRAWINGS FOR PROPOSED BANK PROTECTION FOR MALAPRABHA RIVER NEAR TEMPLE IN CHIKKAHATTIHOI VILLAGE.

SCALE.	DRAWING NO.	SHEET NO.	REV.
AS SHOWN	WRE-RBP-GAD-A013	02 OF 03	R0

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- NOTES AND SPECIFICATIONS :
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 2. DO NOT SCALE THE DRAWING, ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.

ABBREVIATIONS:

GL - GROUND LEVEL
TYP - TYPICAL
THK - THICK

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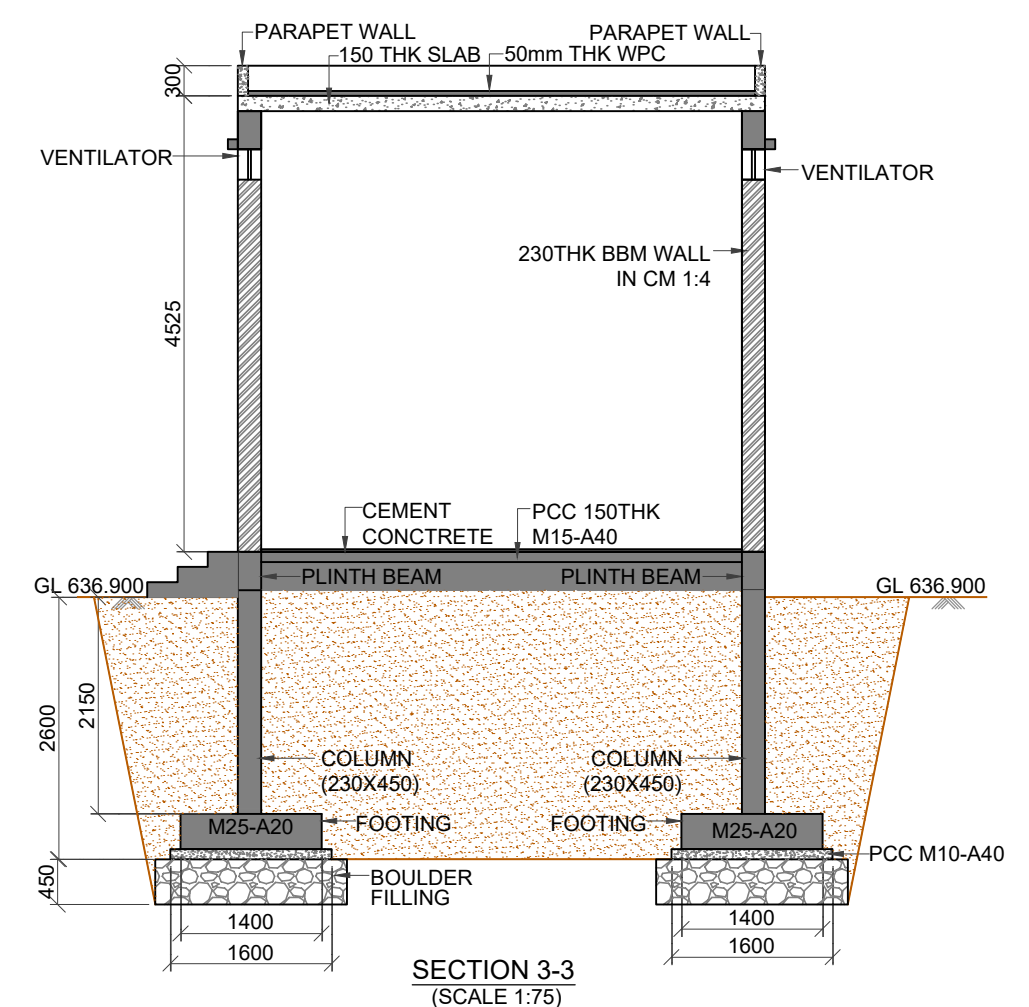
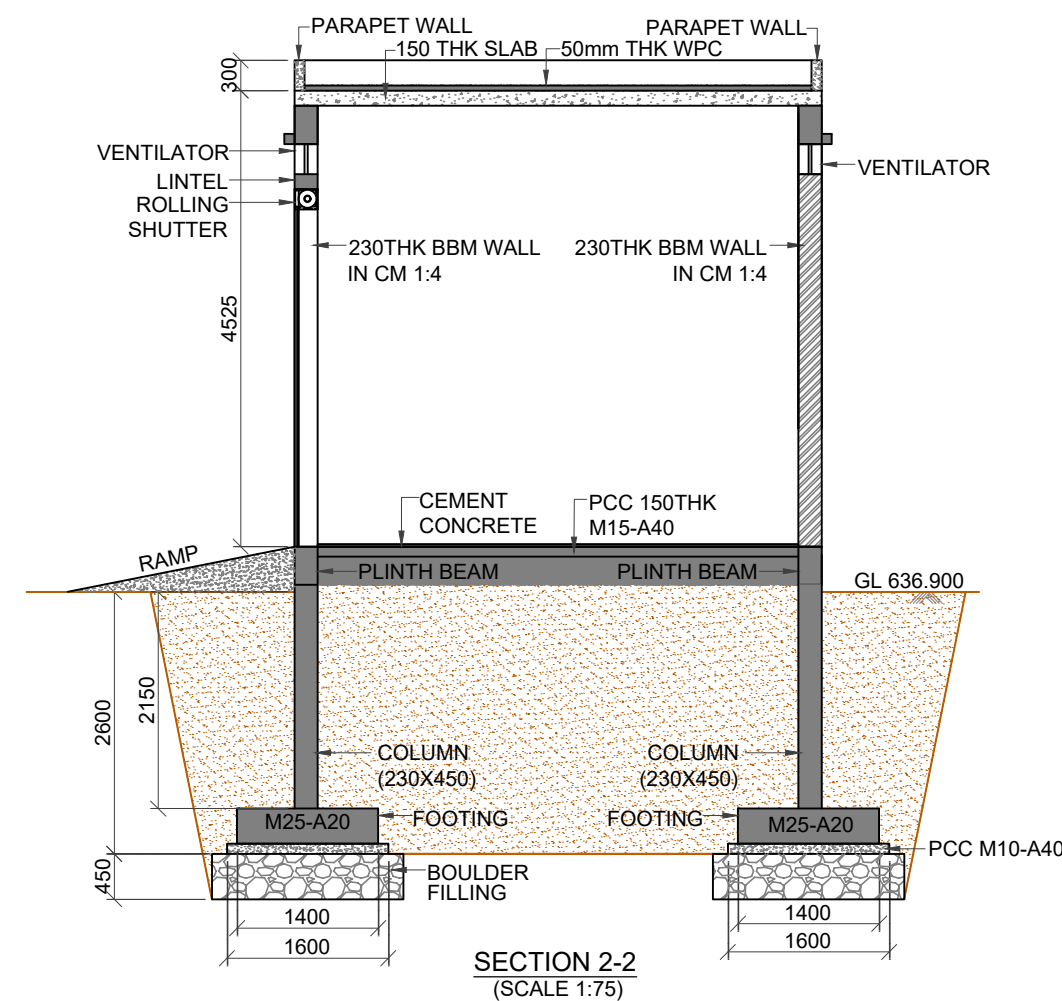
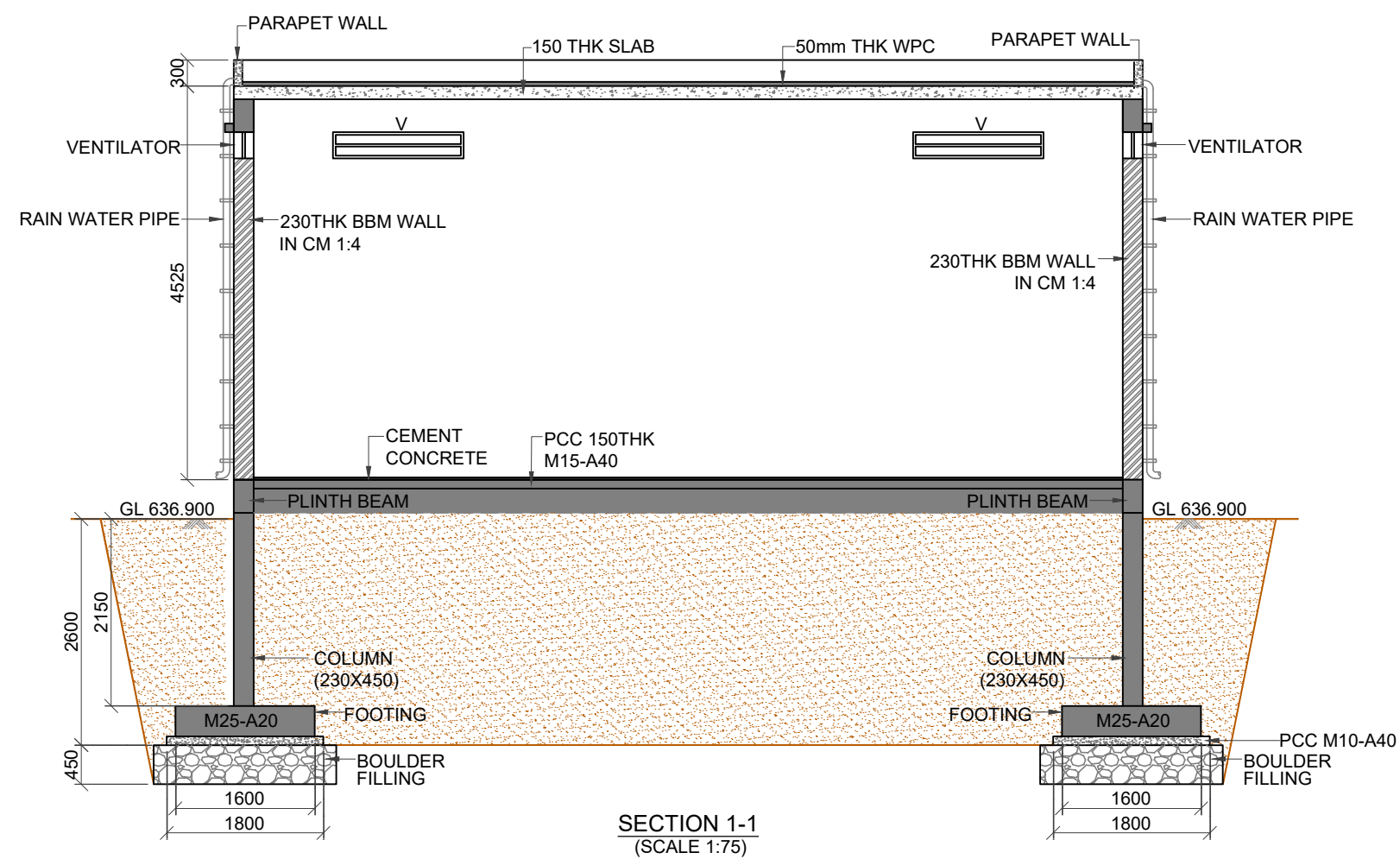
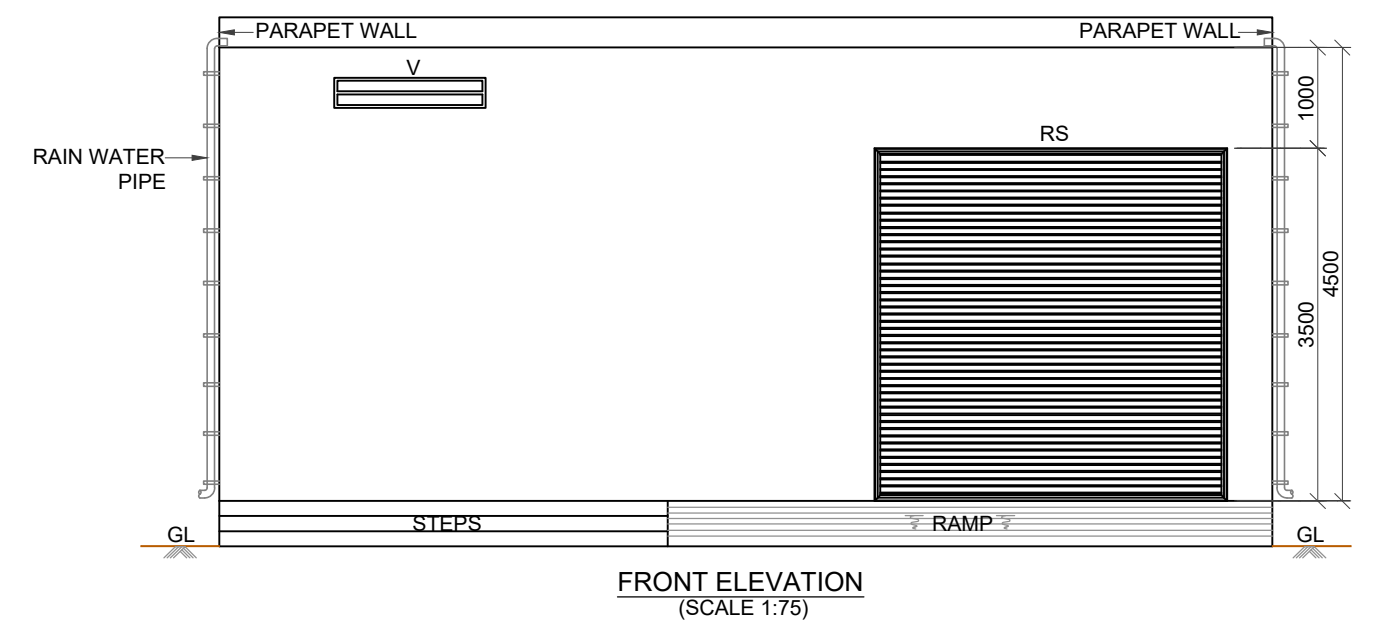
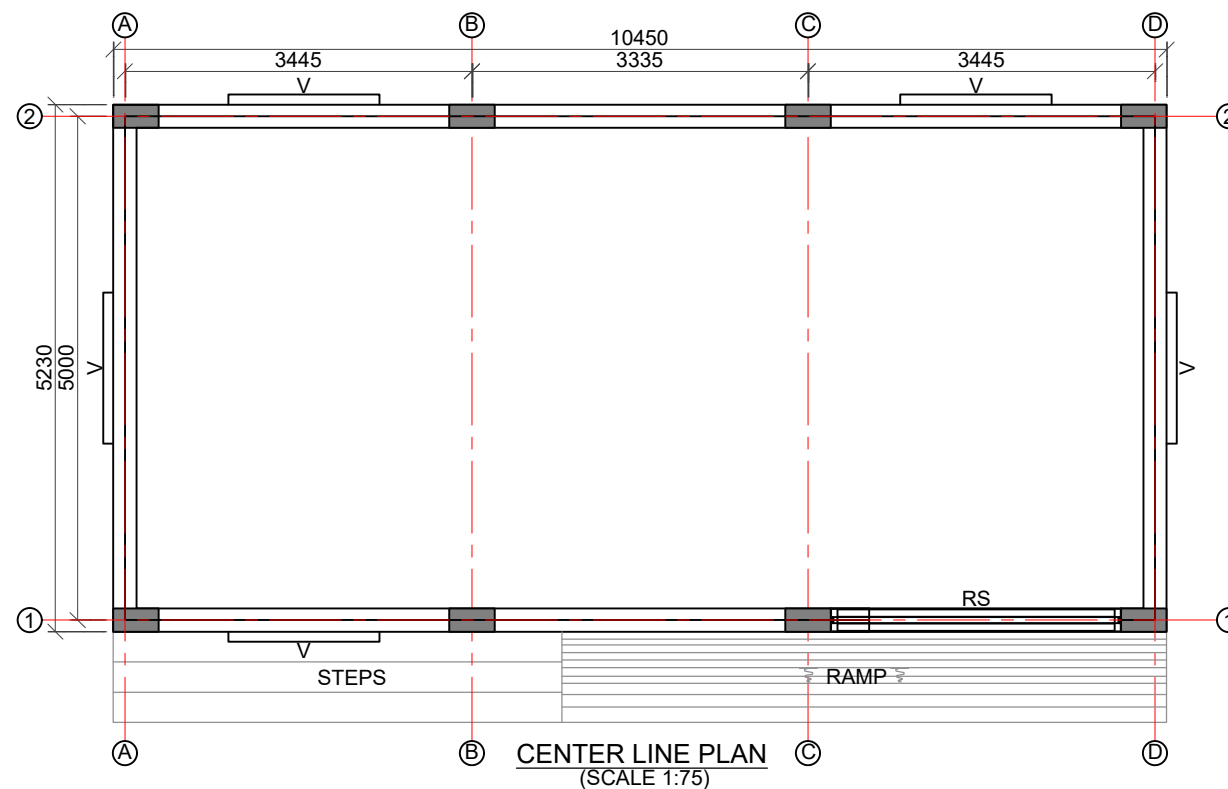
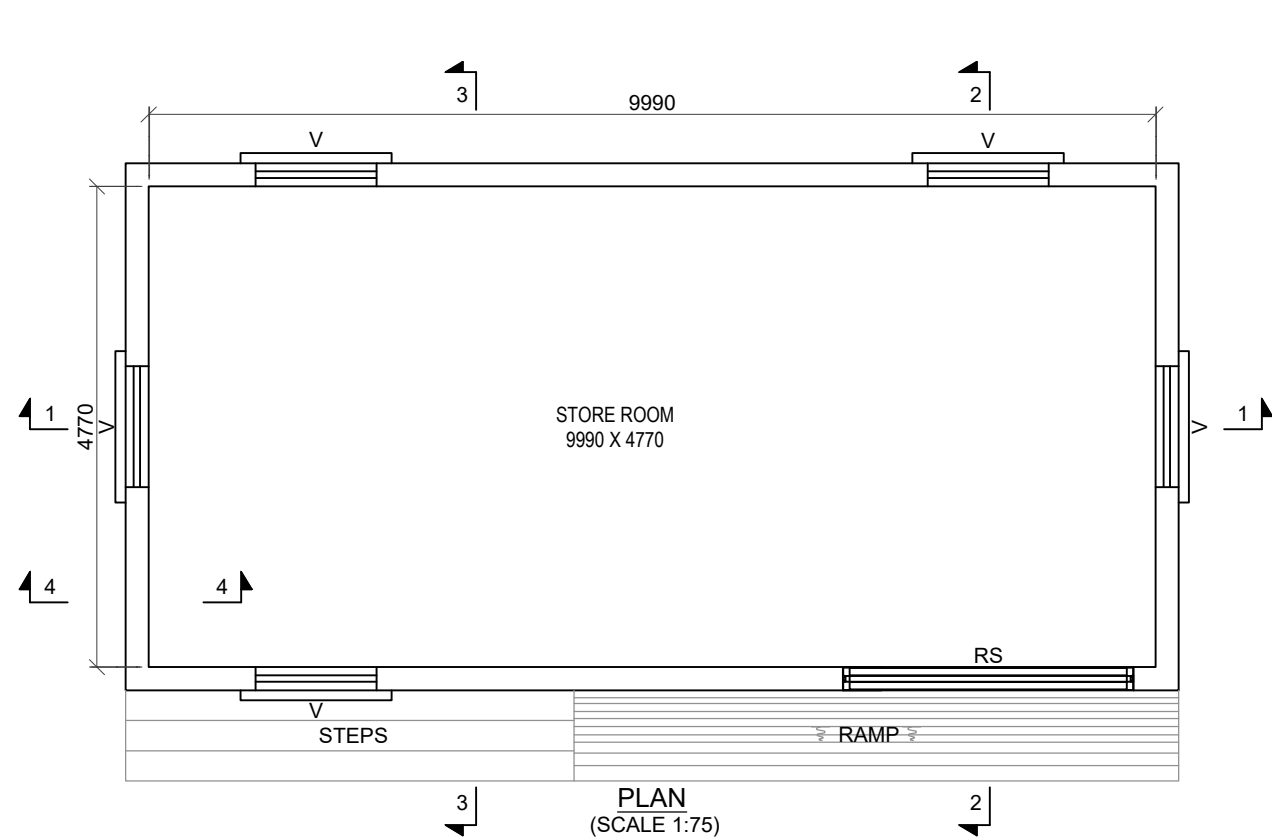
PROJECT TITLE
CONSTRUCTION OF BRIDGE CUM BARRAGE ACROSS THE MALAPRABHA RIVER AT CHIKKAHATTIHOLI VILLAGE, KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND CONNECTING ROADS FROM CHIKKAHATTIHOLI AND KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE YEARS.

DRAWING TITLE
GENERAL ARRANGEMENT DRAWINGS FOR PROPOSED BANK PROTECTION FOR MALAPRABHA RIVER NEAR TEMPLE IN CHIKKAHATTIHOLI VILLAGE.

SCALE. AS SHOWN	DRAWING NO. WRE-RBP-GAD-A013	SHEET NO. 03 OF 03	REV. R0
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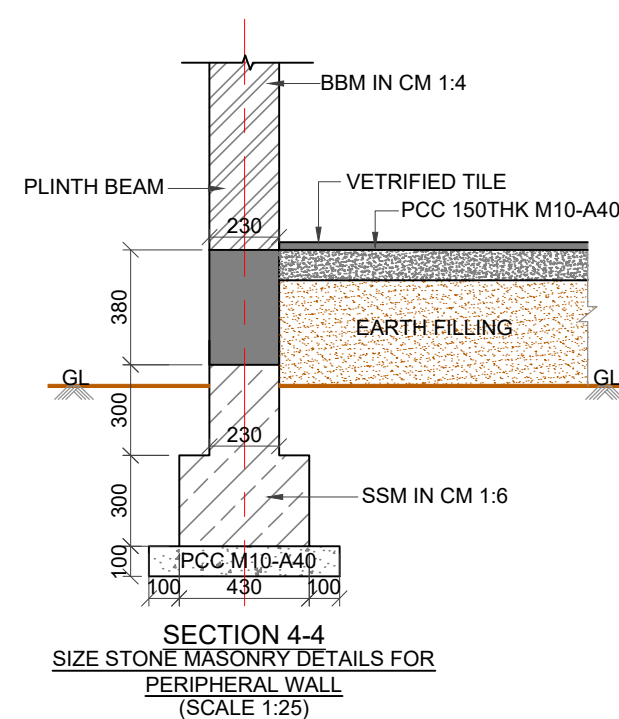
CONTRACTOR.

EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV,
KHANAPUR



NOTES:

- ALL DIMENSIONS ARE IN mm AND ELEVATIONS ARE IN METRES.
- DO NOT MEASURE THE DRAWING ONLY WRITTEN DIMENSION SHALL BE FOLLOWED.
- SUPER STRUCTURE SHALL BE IN CC BLOCK IN C.M 1:4 WITH 12mm THICK PLASTER IN C.M.1:4 WITH NEERU FINISH FROM INSIDE AND 20MM THICK CEMENT PLASTER IN C.M. 1:4 FROM OUTSIDE
- OUTER WALL THICK-230mm, INNER WALL THICK - 100mm
- R.C.C. CHEJJAS OF 0.6m PROJECTION SHALL BE PROVIDED FOR ALL WINDOWS IN EXTERNAL WALL.
- ALL THE ITEMS OF WORK SHALL BE CARRIED OUT AS PER THE STANDARD SPECIFICATION OF PWD, GOVT. OF KARNATAKA.
- ALL WATER FIXTURES, PLUMBING FIXTURES AND ELECTRICAL FIXTURES ARE OF APPROVED QUALITY AND MAKE.



SCHEDULE OF OPENING			
SL. NO	DESCRIPTION	W	H
1	RS	3500	3500
2	V	1500	300

ABBREVIATIONS:

CC	-	CEMENT CONCRETE.
C/C	-	CENTER TO CENTER.
GL	-	GROUND LEVEL.
mm	-	MILLIMETRE.
PCC	-	PLAIN CEMENT CONCRETE.
RCC	-	REINFORCED CEMENT CONCRETE.
RS	-	ROLLING SHUTTER.
Ø	-	DIA.
V	-	VENTILATOR.
THK	-	THICKNESS.
BBM	-	BURNT BRICK MASONRY.
SSM	-	SIZE STONE MASONRY.

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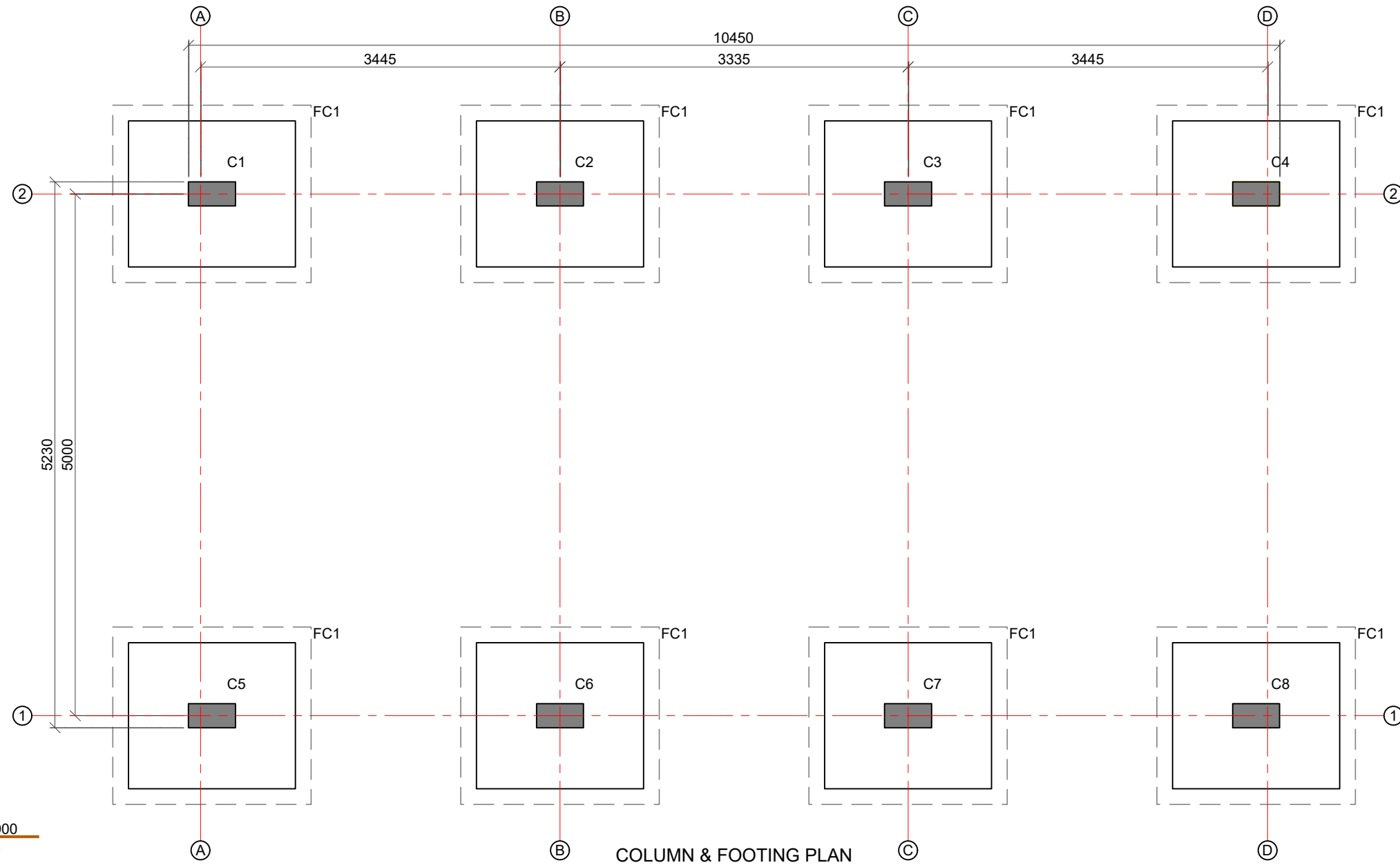
NAME OF WORK
CONSTRUCTION OF BRIDGE CUM BARRAGE ACROSS THE MALAPRABHA RIVER AT CHIKKAHATTIHOI VILLAGE, KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND CONNECTING ROADS FROM CHIKKAHATTIHOI AND KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE YEARS.

DRAWING TITLE
GENERAL ARRANGEMENT DRAWINGS FOR PROPOSED STORE ROOM AT RIGHT BANK OF PROPOSED BRIDGE CUM BARRAGE.

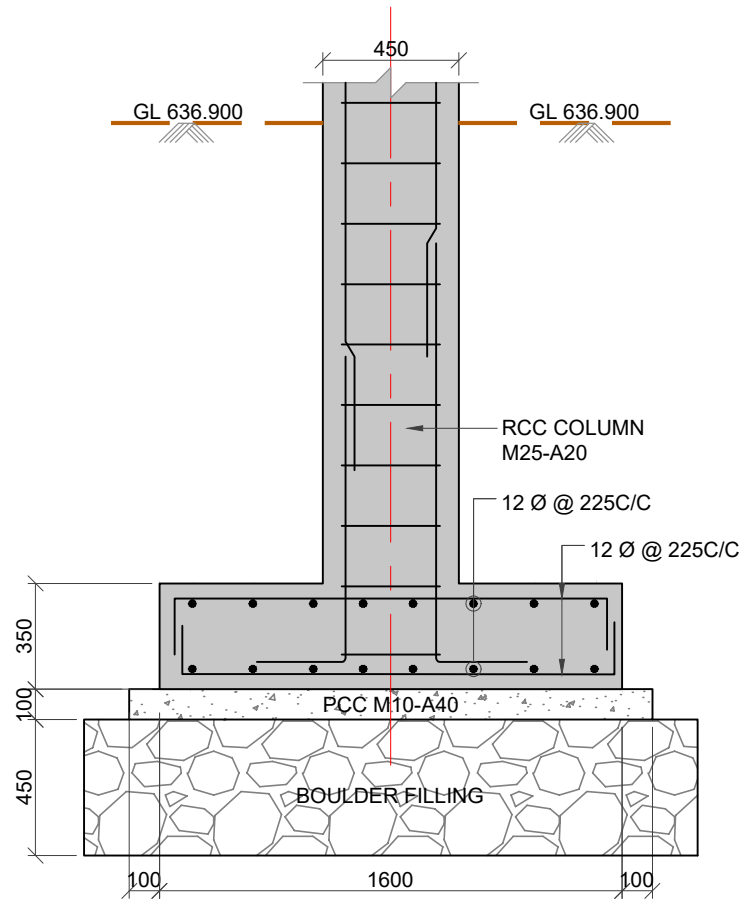
PROJECT NO. 3057X	DRAWING NO. EIT-3057X-WRE-GSR-GAD-A014	SHEET NO. 01 OF 03	REV. R0
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CONTRACTOR.

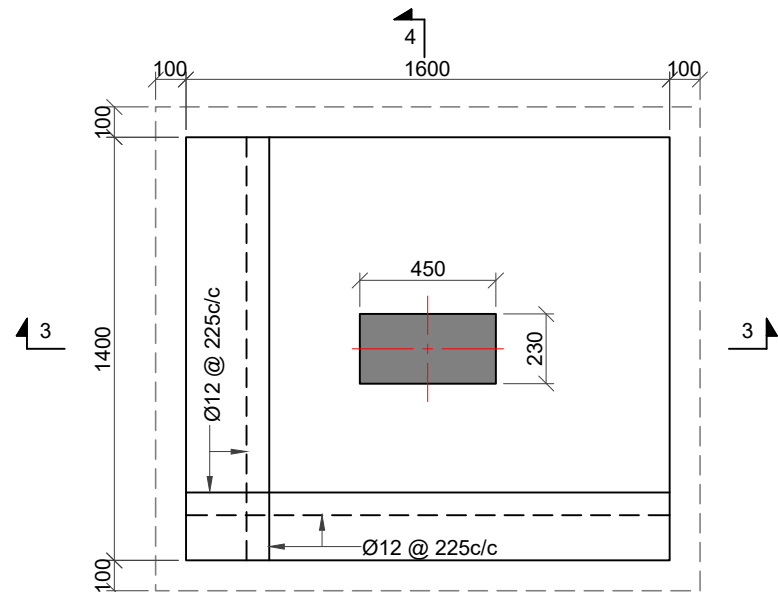
EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV,
KHANAPUR



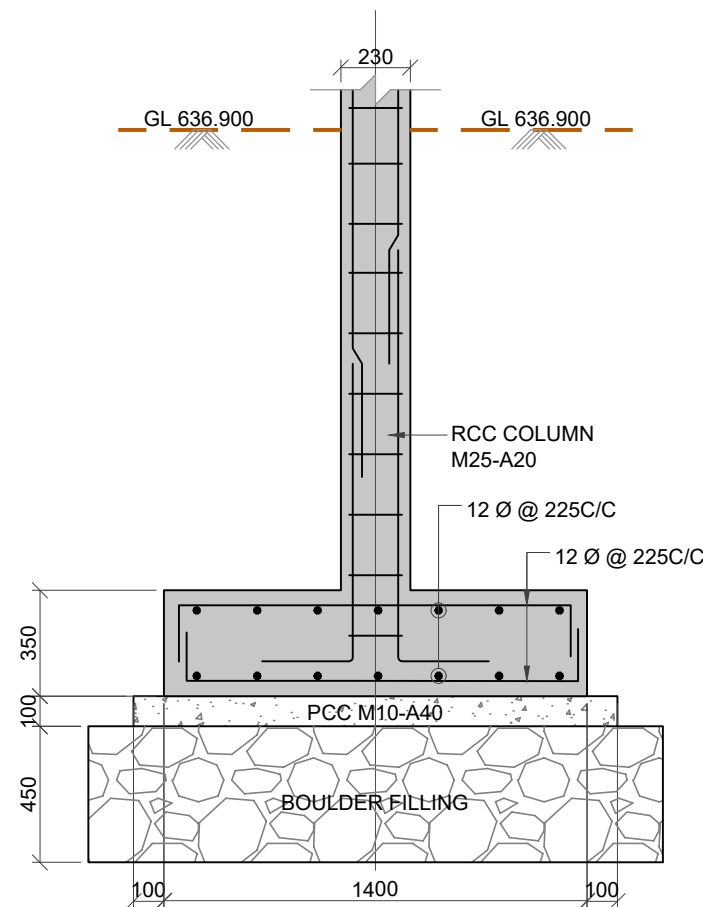
COLUMN & FOOTING PLAN
(SCALE 1:50)



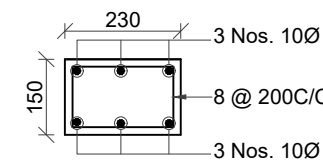
SECTION 3-3
DETAIL OF FOOTING FC1
(SCALE 1:25)



PLAN FOOTING OF FOOTING - FC1
(SCALE 1:25)



SECTION 4-4
DETAIL OF FOOTING FC1
(SCALE 1:25)



LINTEL DETAILS
SCALE 1:15

SL NO	COLUMN MARKED	COLUMN SIZE		CROSS SECTION OF COLUMN
		A1(mm)	B1(mm)	
01	C1, C4, C5, C8	230	450	
02	C2, C3, C6, C7	230	450	

NOTES:

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- DO NOT MEASURE THE DRAWING ONLY WRITTEN DIMENSION SHALL BE FOLLOWED.
- SUPER STRUCTURE SHALL BE IN CC BLOCK IN C.M 1:4 WITH 12mm THICK PLASTER IN C.M.1:4 WITH NEERU FINISH FROM INSIDE AND 20MM THICK CEMENT PLASTER IN C.M. 1:4 FROM OUTSIDE
- OUTER WALL THICK-230mm, INNER WALL THICK - 100mm
- R.C.C. CHEJJAS OF 0.6m PROJECTION SHALL BE PROVIDED FOR ALL WINDOWS IN EXTERNAL WALL.
- ALL THE ITEMS OF WORK SHALL BE CARRIED OUT AS PER THE STANDARD SPECIFICATION OF PWD, GOVT. OF KARNATAKA.
- ALL WATER FIXTURES, PLUMBING FIXTURES AND ELECTRICAL FIXTURES ARE OF APPROVED QUALITY AND MAKE.

ABBREVIATIONS:

CC	-	CEMENT CONCRETE.
C/C	-	CENTER TO CENTER.
GL	-	GROUND LEVEL.
mm	-	MILLIMETRE.
PCC	-	PLAIN CEMENT CONCRETE.
RCC	-	REINFORCED CEMENT CONCRETE.
RS	-	ROLLING SHUTTER.
Ø	-	DIA.
V	-	VENTILATOR.
THK	-	THICKNESS.

TENDER PURPOSE ONLY

OWNER	KARNATAKA NEERAVARI NIGAM LIMITED (KNNL) (A GOVT. OF KARNATAKA UNDERTAKING) BANGALORE - 560 001, INDIA. www.knnlindia.com
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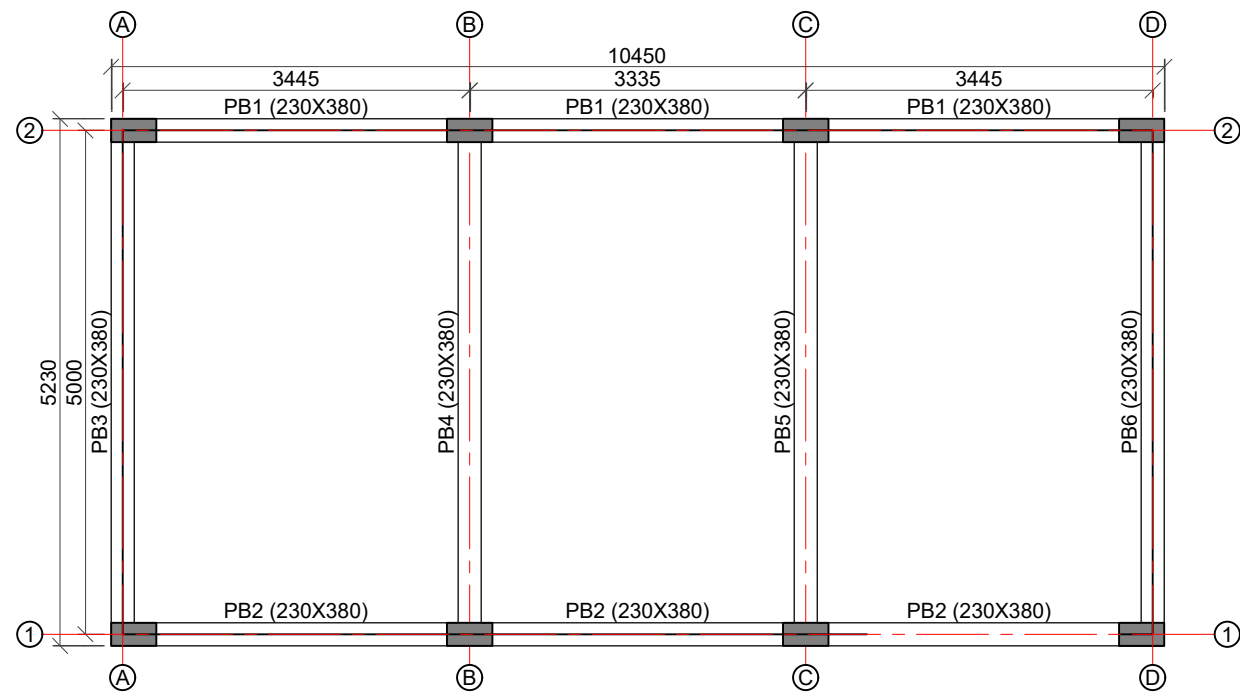
NAME OF WORK
CONSTRUCTION OF BRIDGE CUM BARRAGE ACROSS THE MALAPRABHA RIVER AT CHIKKAHATTIHOI VILLAGE, KHANAPUR TALUK, BELAGAVI DISTRICT ALONG WITH ALLIED WORKS INCLUDING SOPANAM, LEFT BANK PROTECTION AND CONNECTING ROADS FROM CHIKKAHATTIHOI AND KARVINKOPPA VILLAGES TOGETHER WITH OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE YEARS.

DRAWING TITLE
GENERAL ARRANGEMENT DRAWINGS FOR PROPOSED STORE ROOM AT RIGHT BANK OF PROPOSED BRIDGE CUM BARRAGE.

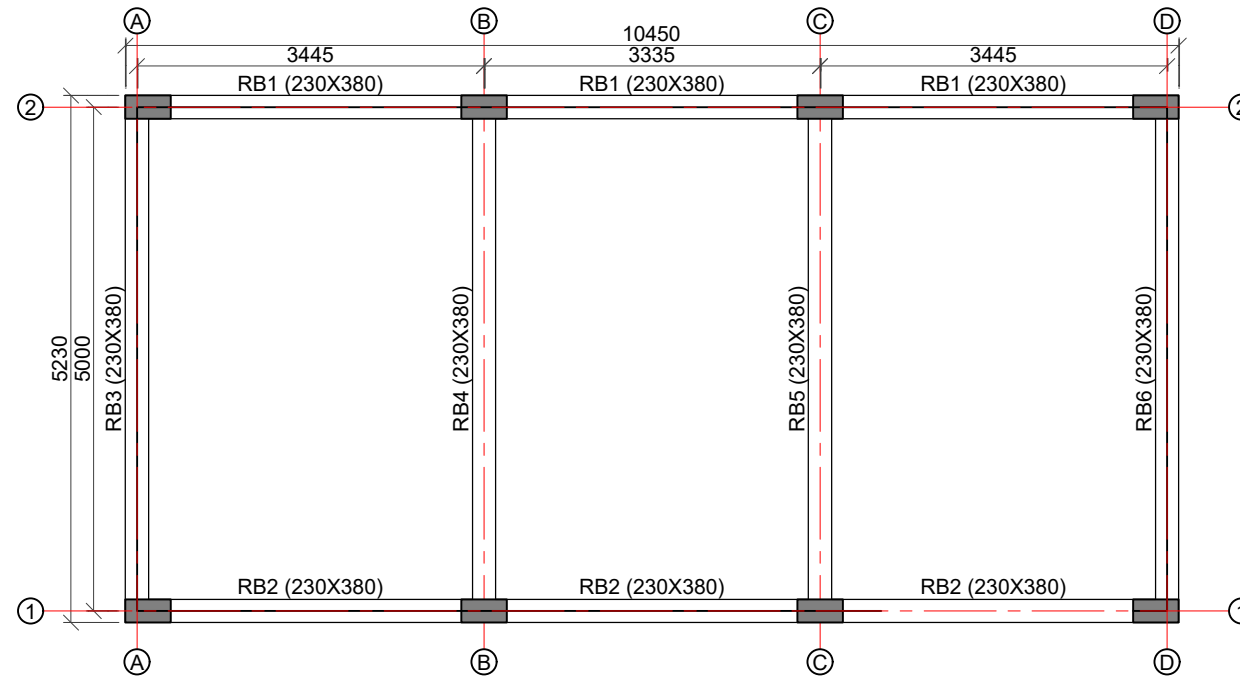
PROJECT NO. 3057X	DRAWING NO. EIT-3057X-WRE-GSR-GAD-A014	SHEET NO. 02 OF 03	REV. R0
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CONTRACTOR.

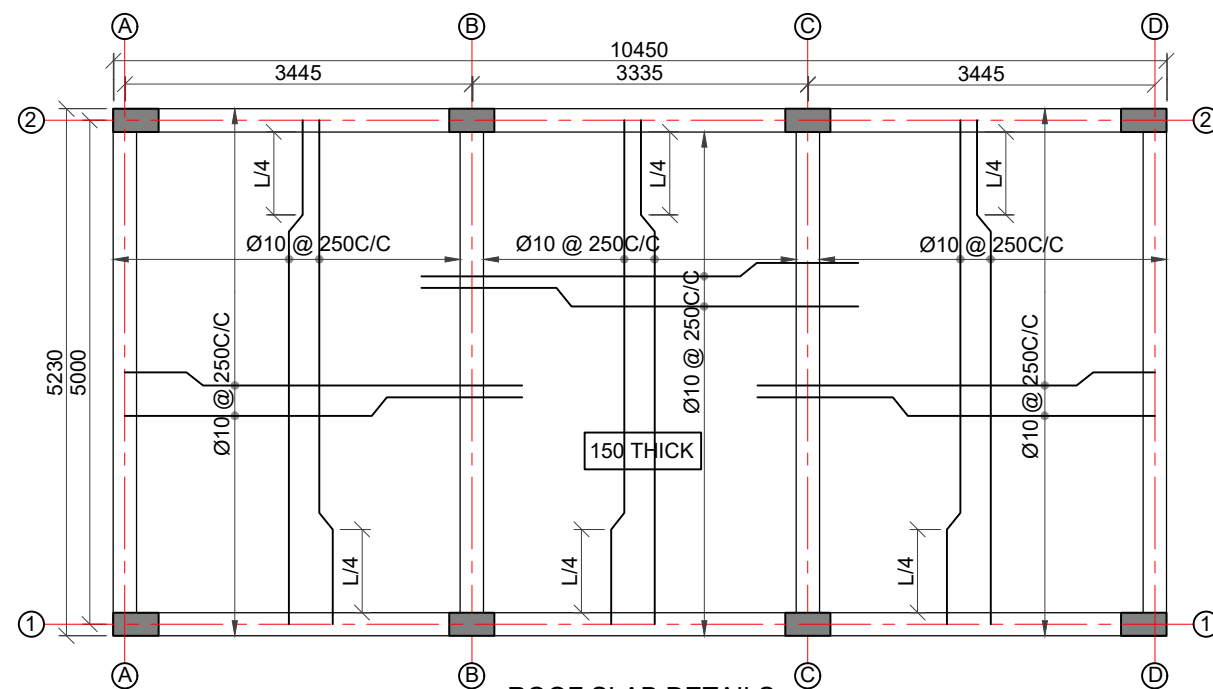
EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV,
KHANAPUR



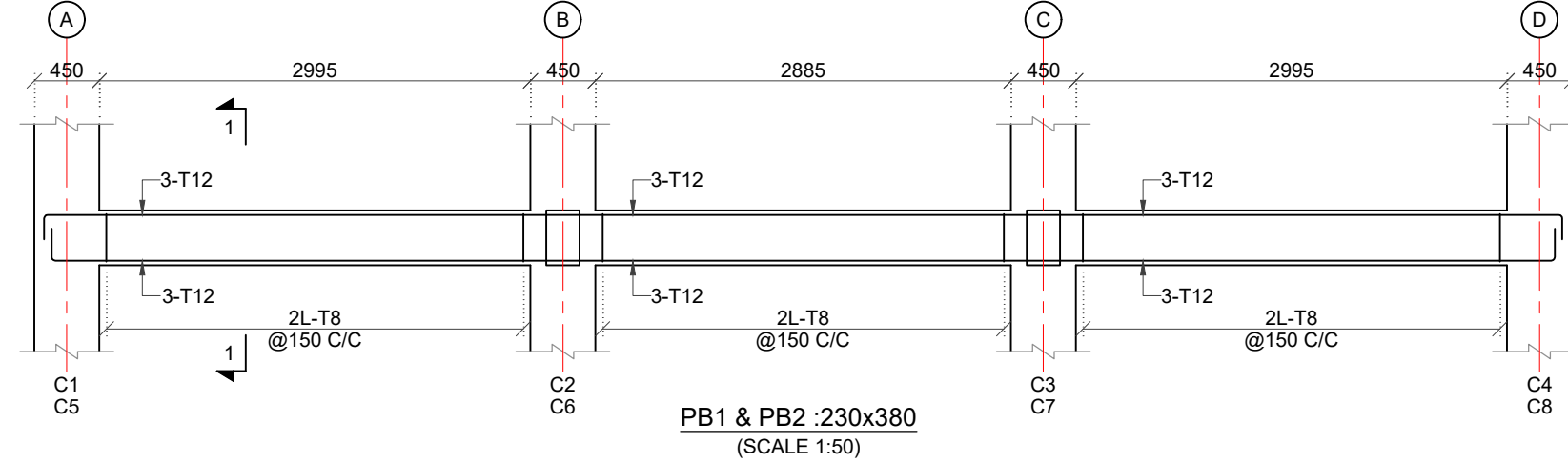
LAYOUT PLAN OF PLINTH BEAMS
(SCALE 1:75)



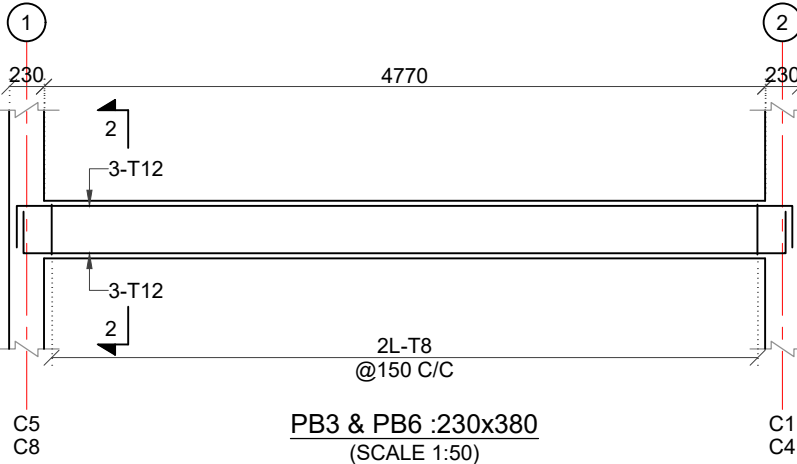
LAYOUT PLAN OF ROOF BEAMS
(SCALE 1:75)



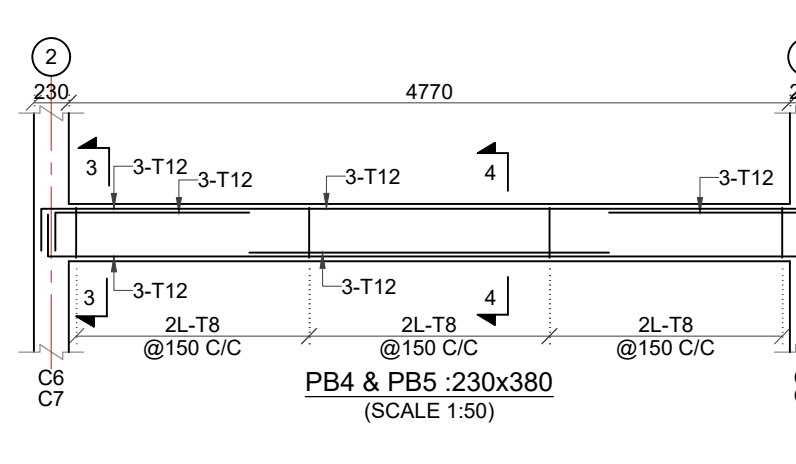
ROOF SLAB DETAILS
(SCALE 1:75)



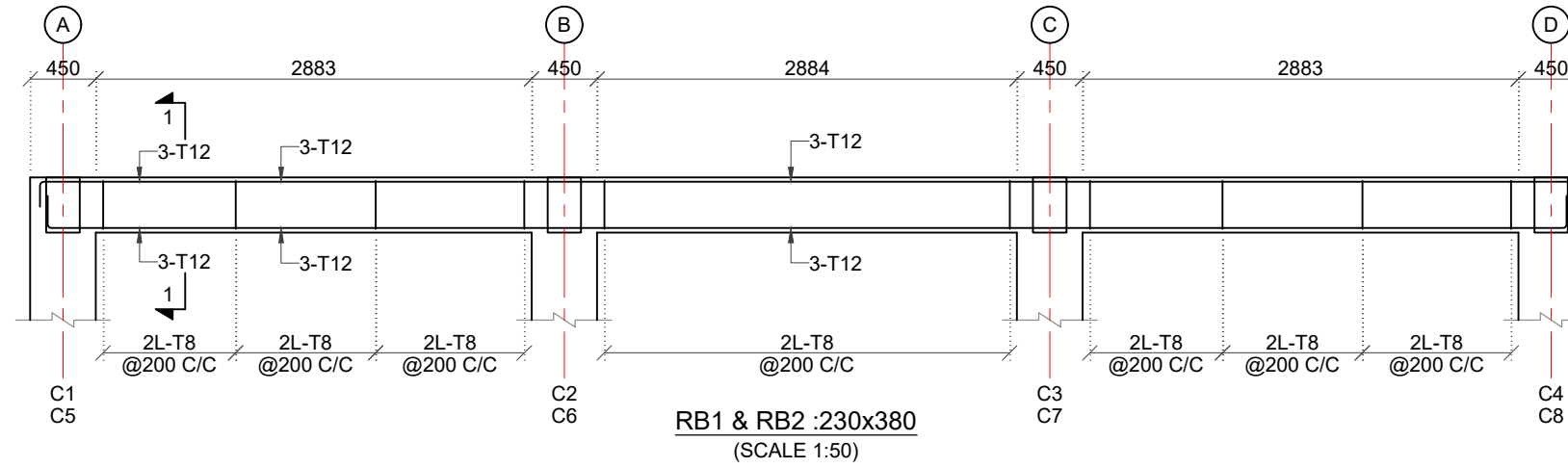
PB1 & PB2 :230x380
(SCALE 1:50)



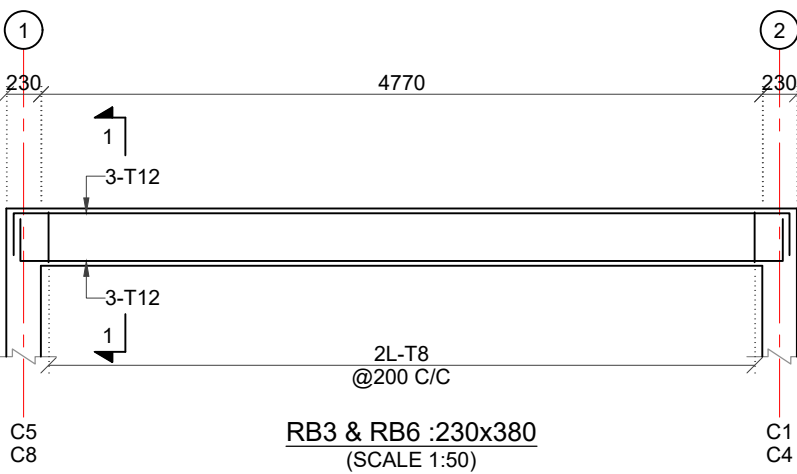
PB3 & PB6 :230x380
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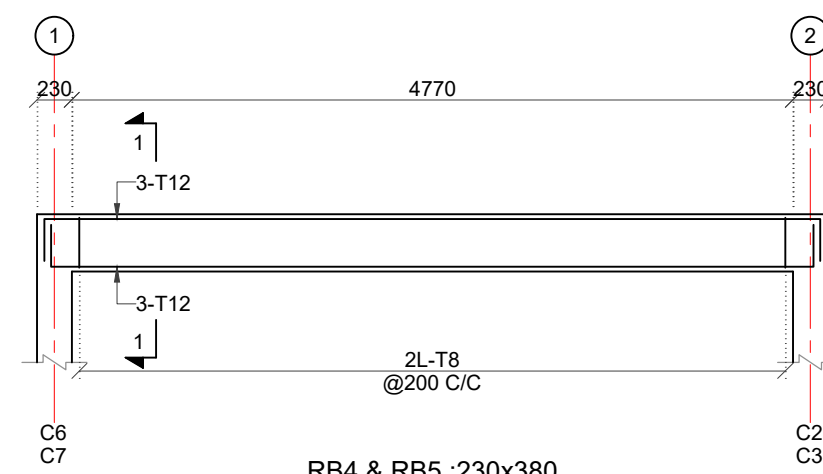
PB4 & PB5 :230x380
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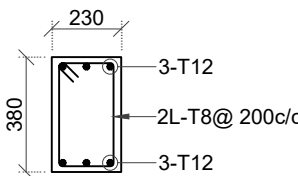
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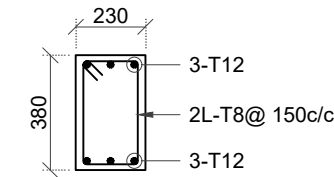
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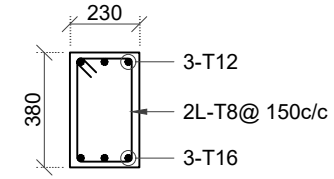
RB4 & RB5 :230x380
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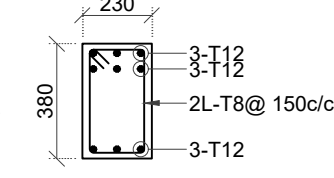
SECTION 1-1
(SCALE 1:25)



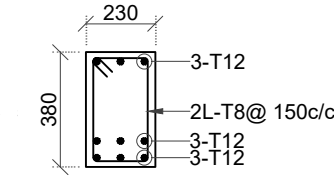
SECTION 1-1
(SCALE 1:25)



SECTION 2-2
(SCALE 1:25)



SECTION 3-3
(SCALE 1:25)



SECTION 4-4
(SCALE 1:25)

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TENDER PURPOSE ONLY

OWNER

KARNATAKA NEERAVARI NIGAM LIMITED (KNNL)
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DRAWING TITLE

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PROJECT NO. 3057X	DRAWING NO. EIT-3057X-WRE-GSR-GAD-A014	SHEET NO. 03 OF 03	REV. R0
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CONTRACTOR.

EXECUTIVE ENGINEER
KNNL KALASA PROJECT DIV,
KHANAPUR