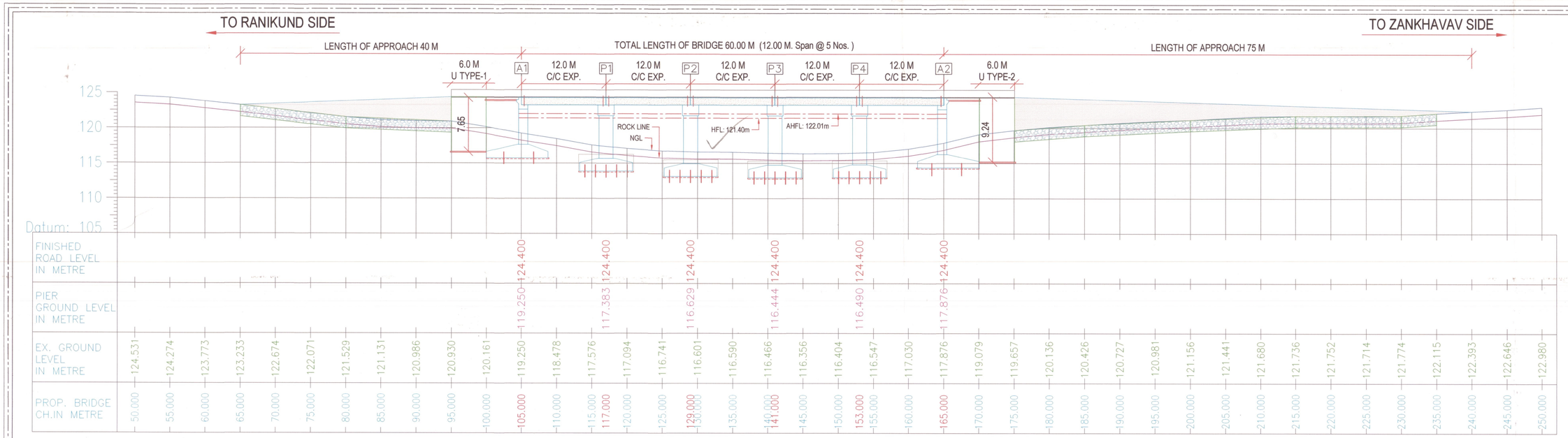
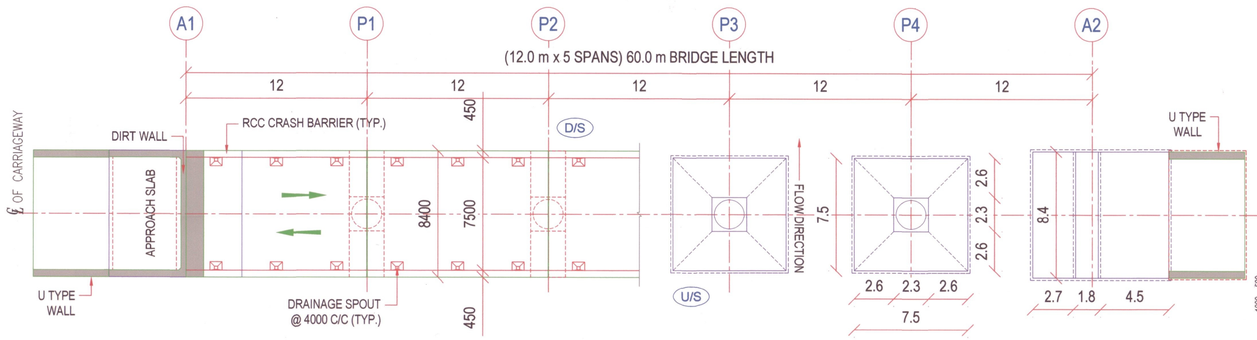
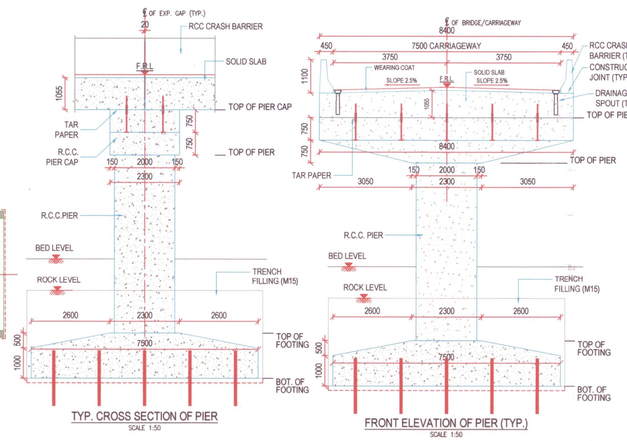
TO RANIKUND SIDE

TO ZANKHAVAV SIDE



LONGITUDINAL SECTION



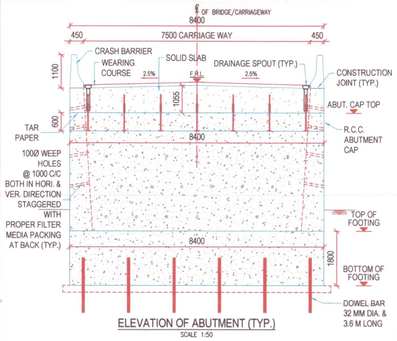


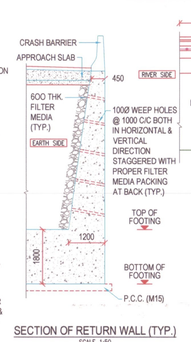
HALF TOP PLAN AT DECK LEVEL

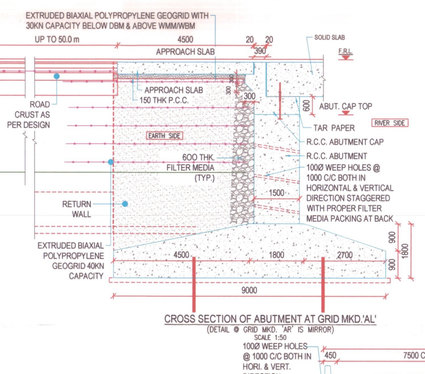
SCALE 1:200

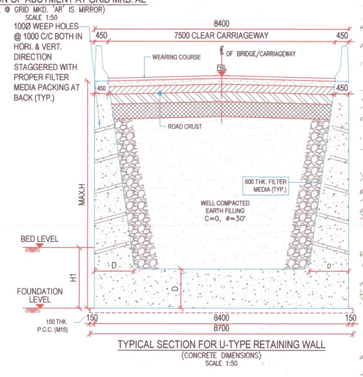
HALF BOTTOM PLAN AT FOUNDATION LEVEL

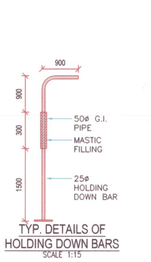
SCALE 1:200

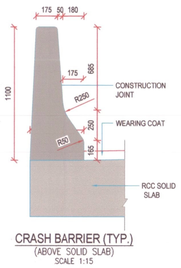


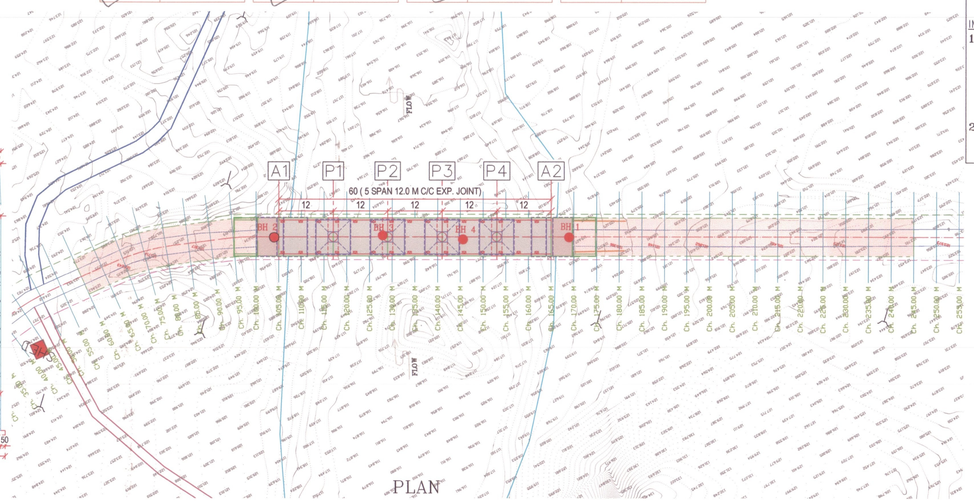












SCHEDULE OF U-TYPE RETAINING WALL

TYPE	MAX. H	H1	D
1	7650	2500	1300
2	9024	2500	1300

LEVELS

	GRID NO.	EXI. GROUND LEVEL (m)	FINISHED ROAD LEVEL (m)	PIER CAP TOP LEVEL (m)	PIER TOP LEVEL (m)	FOOTING TOP (m)	FOOTING BOTTOM (m)	PIER/ABT. HT (m)
BRIDGE PORTION	A1	119.250	124.400	123.245	122.645	117.550	115.750	5.095
	P1	117.383	124.400	123.245	121.745	115.383	113.883	6.362
	P2	116.629	124.400	123.245	121.745	114.629	113.129	7.116
	P3	116.444	124.400	123.245	121.745	114.444	112.944	7.301
	P4	116.490	124.400	123.245	121.745	114.490	112.990	7.255
	A2	117.876	124.400	123.245	122.645	116.176	114.376	6.469

DETAILS OF BORE LOG

MATTEST ENGINEERING SERVICES LLP

SOIL REPORT NO:- MES/SBC/SURAT/20260303985/589, DATED:03/03/2026

BH-1		BH-2		BH-3		BH-4	
DEPTH (M)	DESCRIPTION	DEPTH (M)	DESCRIPTION	DEPTH (M)	DESCRIPTION	DEPTH (M)	DESCRIPTION
G.L. TO 1.50	BROWNISH SILTY GRAVEL WITH SAND	G.L. TO 1.50	BLACKISH FRACTURED ROCK	G.L. TO 1.50	BLACKISH FRACTURED ROCK	G.L. TO 1.50	BLACKISH FRACTURED ROCK
1.50 TO 3.0	BLACKISH FRACTURED ROCK	1.50 TO 3.0	BLACKISH MODERATELY WEAK ROCK	1.50 TO 3.0	BLACKISH MODERATELY WEAK ROCK	1.50 TO 4.50	BLACKISH MODERATELY WEAK ROCK
3.0 TO 10.0	BLACKISH MODERATELY STRONG ROCK	3.0 TO 10.0	BLACKISH MODERATELY STRONG ROCK	3.0 TO 10.0	BLACKISH MODERATELY STRONG ROCK	4.50 TO 10.0	BLACKISH MODERATELY STRONG ROCK

SCHEDULE OF HYDRAULIC FEATURES

1	CATCHMENT AREA (SQ.KM)	50.00
2	DESIGN DISCHARGE (CUMECS)	941.55
3	H.F.L.	121.40
4	A.H.F.L.	122.01
5	% OBSTRUCTION	23.09
6	VELOCITY AFTER OBSTRUCTION (M/SEC)	3.56
7	VERTICAL CLEARANCE (M)	1.20

MATERIAL LIST

SR. NO.	PARTICULARS	GRADE
1	R.C.C. FOOTING	DMC M:30
2	R.C.C. PIER, ABUTMENT, U TYPE RETURN WALL	DMC M:30
3	R.C.C. PIER CAP, ABUTMENT CAP & DIRT WALL	DMC M:30
4	R.C.C. SOLID SLAB	DMC M:30
5	R.C.C. WEARING COAT	DMC M:30
6	R.C.C. CRASH BARRIER	DMC M:40
7	R.C.C. APPROACH SLAB	DMC M:30
8	H.Y.S.D. BARS GRADE Fe-550 D (TMT) FBEC CONFORMING TO IS 1786	

STRUCTURAL & OTHER DATA

1	SPAN ARRANGEMENT	5 NOS SPANS OF 12.00 M C/C
2	FOUNDATION	OPEN FOUNDATION
4	SUPER STRUCTURE	R.C.C.SOLID SLAB
5	WEARING COAT	100 MM THK. R.C.C. W.C.
6	EXPANSION JOINT	METAL EXPANSION JOINT
7	WATER SPOUTS	AT 5.0 M C/C
8	RAILINGS	R.C.C. CRASH BARRIER

SPECIAL NOTES:

A) DURING EXECUTION OF EMBANKMENT IN APPROACH PORTION AS WELL AS BELOW APPROACH SLAB,GEOGRID SHALL BE USED AS PER G.O.G. (R&B) DEPARTMENT, BLOCK NO.14/2,SARDAR BHAVAN SACHIVALAYA, GANDHINAGAR. GR NO.PRCH/102020/1293/C, DATED-17/02/2021

NOTES :

1. GENERAL :-

A. ALL DIMENSIONS ARE IN MILLIMETER AND LEVELS ARE IN METER UNLESS OTHERWISE MENTIONED.

B. DIMENSIONS SHALL NOT BE SCALED OFF FROM THE DRAWING.

C. PROPOSED STRUCTURE IS DESIGNED FOR MAX OF FOLLOWING IRC LOADING (2 LANE OF CLASS A) OR (1 LANE OF CL70R) OR (SPECIAL VEHICLES)

D. PROPOSED STRUCTURE BASED ON IRC:6-2017,IRC:112-2020, RC;114-2018 & IRC:78-2014

2. SUB STRUCTURE :-

A. CLEAN VERTICAL CONSTRUCTION JOINT SHALL BE PROVIDED AT THE JUNCTION OF ABUTMENT AND RETURNS AND AT THE VERTICAL SECTIONS WHERE IS STEPPING UP IN FOUNDATION LEVELS.

B. WEEP HOLES WITH BACKING OF FILTER MATERIALS SHALL BE PROVIDED IN ABUTMENT AND SQUARE RETURNS IN ACCORDANCE WITH THE LATEST IRC CODES.

3. FOUNDATION :-

A. THE FOUNDATION LEVELS SHOWN ARE TENTATIVE BASED ON THE RESULTS OF BORE LOG DETAILS AVAILABLE. IN DETAILING, THE SAME SHALL BE FINALIZED ON THE BASIS OF ACTUAL SOIL STRATA MET WITH AND THE SAFE BEARING CAPACITY OF THE STRATA AT FOUNDATION LEVEL.

B. DURING ACTUAL EXECUTION IN THE FOUNDATION LEVELS OF ABUTMENTS, PIERS, RETURNS ETC. ARE DIFFERENT FROM THOSE SHOWN IN DRAWING .THE SECTION OF THE SAME SHALL BE MODIFIED CORRESPONDING TO THEIR ACTUAL HEIGHTS ACCORDING TO THE DESIGN REQUIREMENTS.

C. THE DESIGN OF FOUNDATION IS CARRIED OUT CONSIDERING THE SOIL INVESTIGATION DONE EARLIER BY MATTEST ENGINEERING SERVICES LLP.

D. THE SOIL DATA DURING PIER FOUNDATION SHALL CONFIRM WITH RESPECTIVE BORE HOLE DATA OF SOIL INVESTIGATION REPORT TO BE SUBMITTED. AND IF ANY DISCREPANCY IS OBSERVED SAME SHALL IMMEDIATELY REPORTED TO DESIGN CONSULTANT BEFORE CONCRETING OF FOUNDATION.

IMPORTANT NOTE :-

1. THIS DRAWING IS RELEASED FOR THE PURPOSE OF TENDER ONLY. THIS DRAWING SHALL BE USED TO UNDERSTAND THE EXTENT OF WORK, TYPE / MATERIAL OF CONSTRUCTION EXPECTED AND TO WORK OUT CONSTRUCTION METHOD AND SCHEDULE ETC. DIMENSIONS, LEVELS, THICKNESS GIVEN ARE TENTATIVE AND MAY CHANGE AT THE TIME OF EXECUTION.
2. IF ANY DISCREPANCY IS OBSERVED WITH RESPECTIVE BORE HOLE DATA OF SOIL INVESTIGATION REPORT SAME SHALL BE IMMEDIATELY REPORTED TO CONSULTANT.

GOVERNMENT OF GUJARAT
ROADS AND BUILDING DEPARTMENT

OWNER: THE EXECUTIVE ENGINEER
PAN. (R&B) DIVISION, SURAT

PROJECT: CONSTRUCTION OF MINOR BRIDGE AT PADA APPROACH ROAD (VR) AT CH 4/00 TO 4/200 TA. MANGROL, DIST. SURAT

TITLE: GENERAL ARRANGEMENT DRAWING

EXECUTIVE ENGINEER
PAN.(R&B) DIVISION
SURAT

DY. EXECUTIVE ENGINEER
PAN.(R&B) SUB DIVISION
MANGROL

STRUKAD CONSULTANT — StruKAD — 20/A BANSIDHAR SOCIETY PALDI AHMEDABAD 380007

DRG NO.: STK/PADA APPROACH CH 4/0/01

DATE : 28/03/2026 — R0

PREPARED BY	CHECKED BY	APPROVED BY
PUNIT PATEL	DARSHAK PATEL	