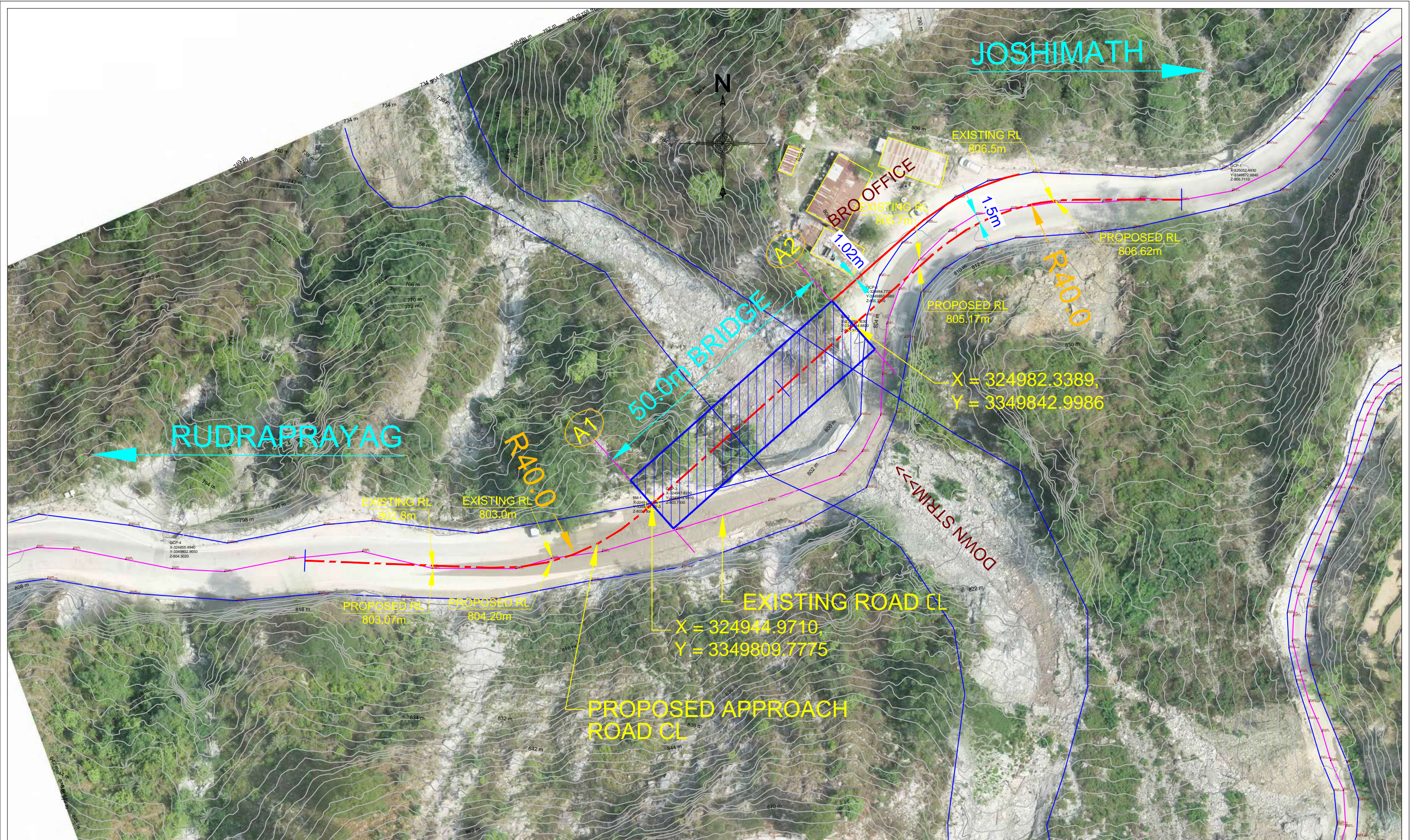


MINOR BRIDGE-1 (1x50.00m SPAN) AT Km 393+985,
VILLAGE CHATWAPEPLE




Revision Details	By	Chk	Date	Suffix

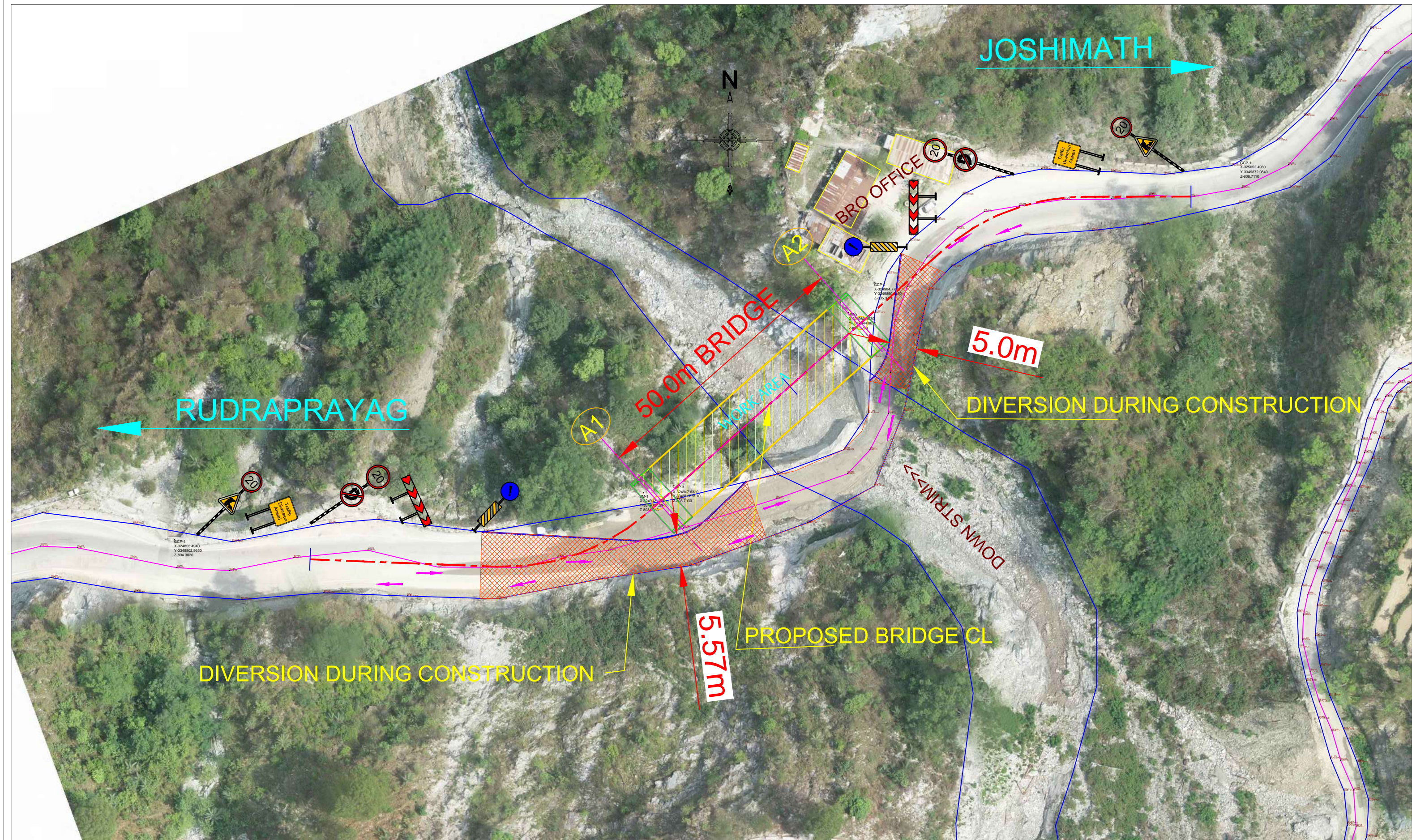
Project Title :
Consultancy Services for Identification & Preparation of Detailed Project Report for Slope Protection work on Hill & Valley Side, Sinking Zones and Bridges in between Km 368.000 to Km 468.000 (NH-07), in the State of Uttarakhand

Client :

NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
 Ministry of Road Transport & Highways, Government of India

Drawing Title :
 PLAN SHOWING BRIDGE LOCATION AT Km 393+985 OF NH-07, VILLAGE CHATWAPEOPLE
 Drawing Number :
 VKSIMPL/P-134/NHIDCL/PL/01
 Scale :
 NTS
 Drawn By : JR
 Designed By : GKG
 Checked By : ARK
 Date : June 2022

Design Consultant :

VKS INFRASTRUCTURE MANAGEMENT PVT. LTD.
Consulting Engineers, Planners & Managers
 Raghunath Bhawan, B-17/882, Block-B, Opp Prachin Shiv Mandir, New Ashok Nagar, Delhi - 110096
 (Ph: 011-45061563)



Revision	By	Chk	Date	Suffix

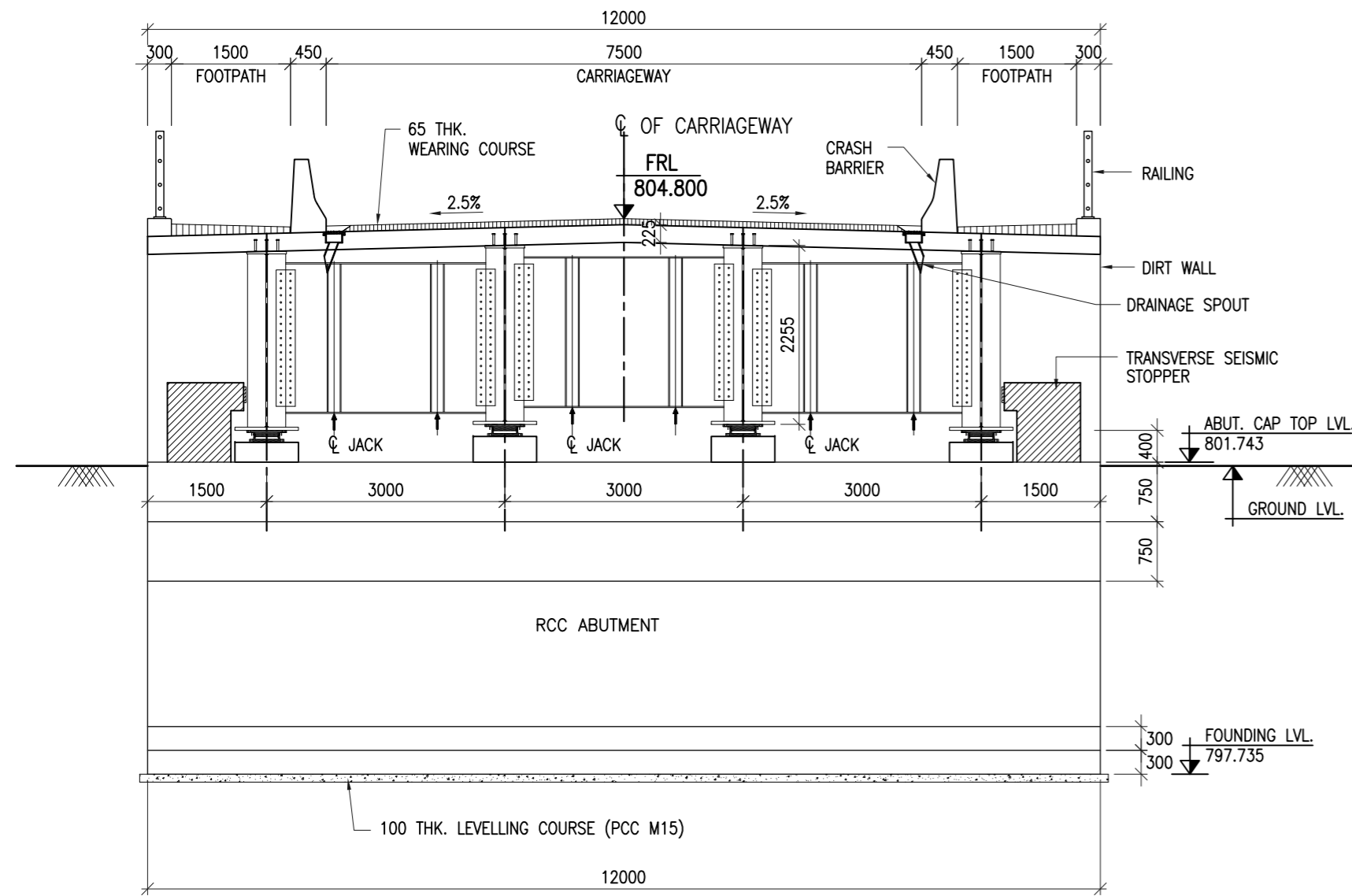
Project Title :
Consultancy Services for Identification & Preparation of Detailed Project Report for Slope Protection work on Hill & Valley Side, Sinking Zones and Bridges in between Km 368.000 to Km 468.000 (NH-07), in the State of Uttarakhand

Client :

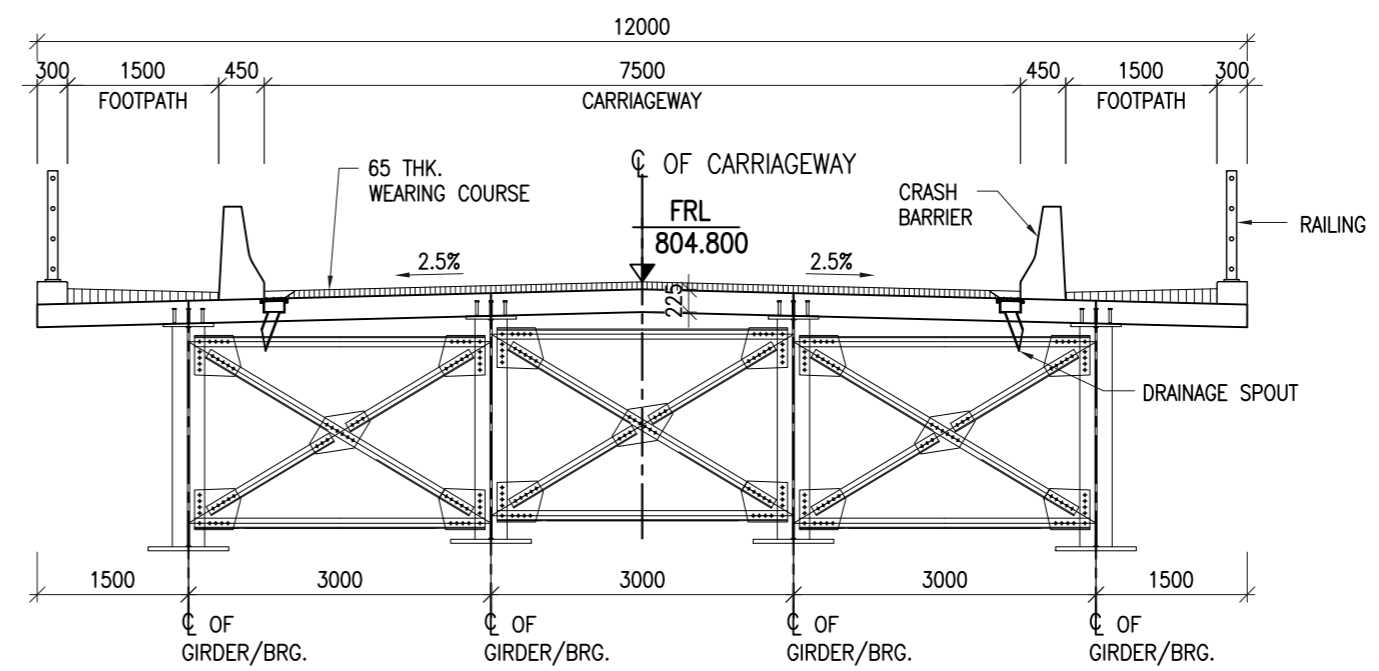
NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
 Ministry of Road Transport & Highways, Government of India

Drawing Title :
 DIVERSION PLAN AT Km 393+985 OF NH-07, VILLAGE CHATWAPEPLE
 Drawing Number :
 VKSIMPL/P-134/NHIDCL/DP/01
 Scale :
 NTS
 Drawn By : JR Designed By : GKG Checked By : ARK Date : JULY 2022

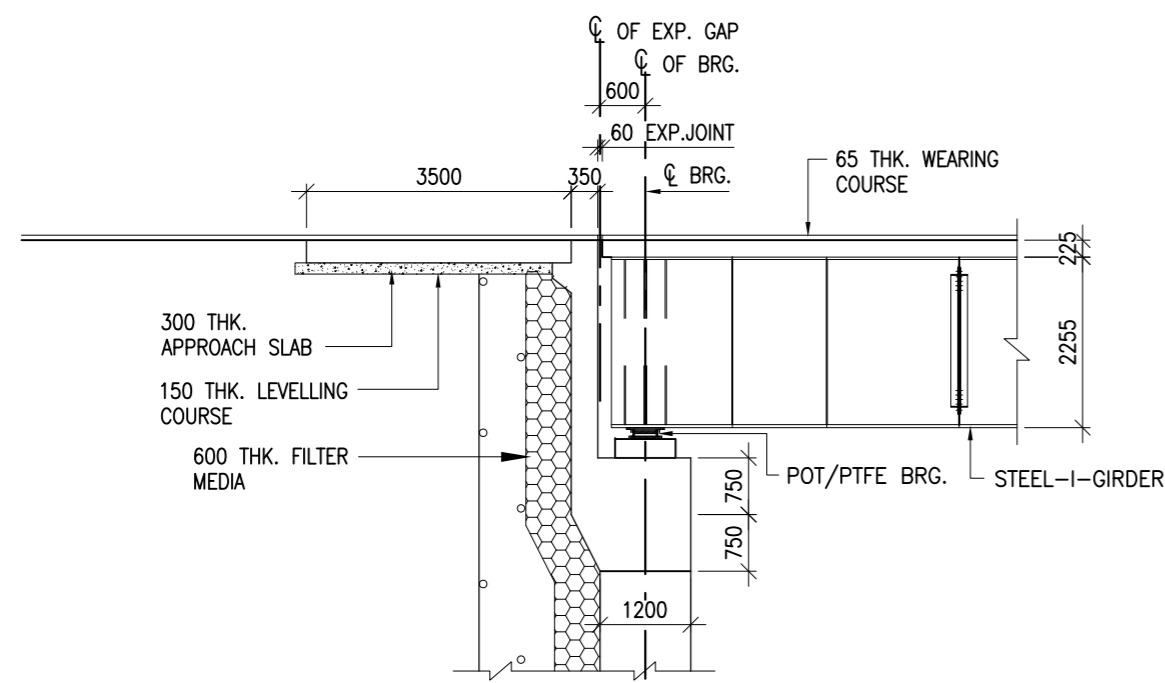
Design Consultant :
 **VKS INFRA TECH MANAGEMENT PVT. LTD.**
Consulting Engineers, Planners & Managers
 Raghunath Bhawan, B-17/882, Block-B, Opp Prachin Shiv Mandir, New Ashok Nagar, Delhi - 110096
 (Ph: 011-45061563)



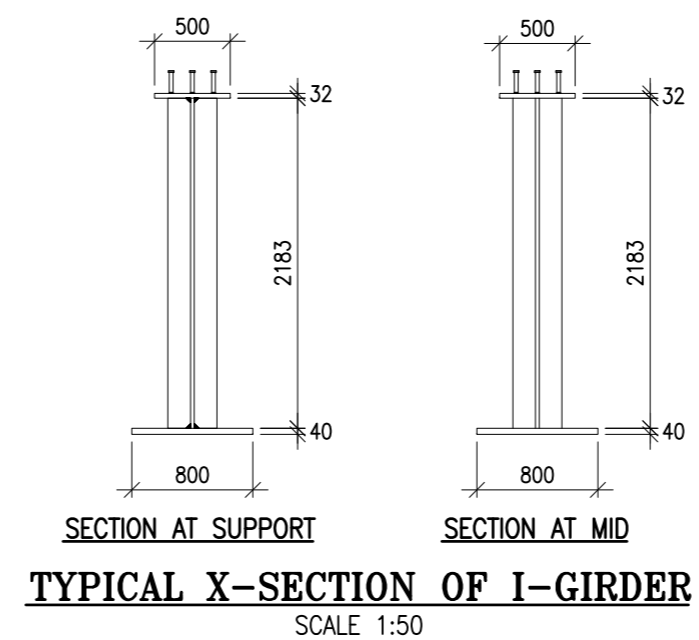
SECTION A-A
(SCALE 1:75)



SECTION B-B
(SCALE 1:75)



DETAIL 'X'
(SCALE 1:100)



TYPICAL X-SECTION OF I-GIRDER
SCALE 1:50


NOTES:

- ALL DIMENSIONS ARE IN mm AND LEVELS ARE IN METRES UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED. NO DIMENSIONS SHALL BE SCALED.
- STRUCTURE IS DESIGNED FOR 3 LANES OF CLASS A OR 1 LANE OF 70R + 1 LANE OF CLASS A WHICHEVER GOVERNS.
- CONCRETE SHALL BE DESIGN MIX WITH A MINIMUM 28 DAYS CHARACTERISTIC STRENGTH AS FOLLOWS:

RCC DECK SLAB	-	M35
STEEL I-GIRDER	-	E350(Fe490) B0
PEDESTAL	-	M35
ABUTMENT SHAFT	-	M35
OPEN FOUNDATION	-	M35
APPROACH SLAB	-	M30
LEVELLING COURSE (PCC)	-	M15
- REINFORCEMENT STEEL SHALL BE HYSD BARS OF GRADE DESIGNATION Fe-500D CONFORM TO IS:1786.
- 65mm TH. WEARING COURSE COMPRISING OF UNDER LAYER OF 40mm THK. ASPHALTIC CONCRETE OVERLAID WITH 25mm THK MASTIC SPHALT. PROVIDED AS PER SECTION 500 OF MORTH SPECIFICATIONS.
- STRIP SEAL TYPE EXPANSION JOINTS OF PROVEN QUALITY SHALL BE PROVIDED.
- WEEP HOLES, SPACED AT 1000 c/c BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN A STAGGERED MANNER IN ABUTMENT & RETURN WALL.
- THE EXCAVATED PORTION AT ABUTMENT SHALL BE FILLED WITH SUITABLE MATERIAL AS PER MORTH SPECIFICATION APPLICABLE FOR BACK FILLING IN LAYERS AND TO THE REQUIRED DENSITY.
- AFTER BACK FILLING THE EXCAVATED PORTION, THE SLOPES SHALL BE PROTECTED BY STONE PITCHING DESIGNED AS PER IRC:75 AND OTHER RELEVANT CODES.

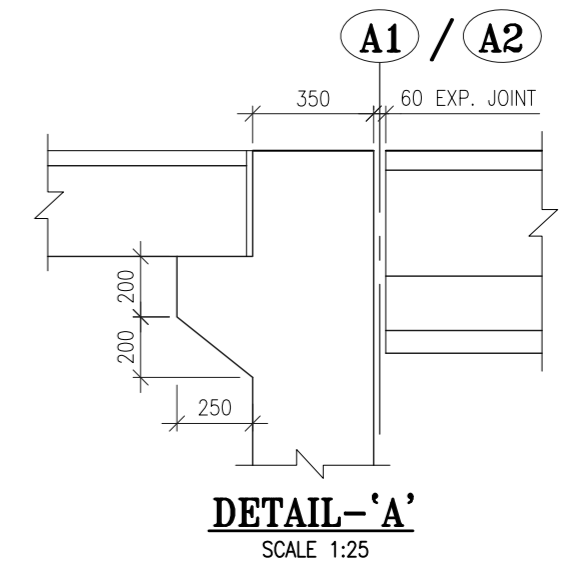
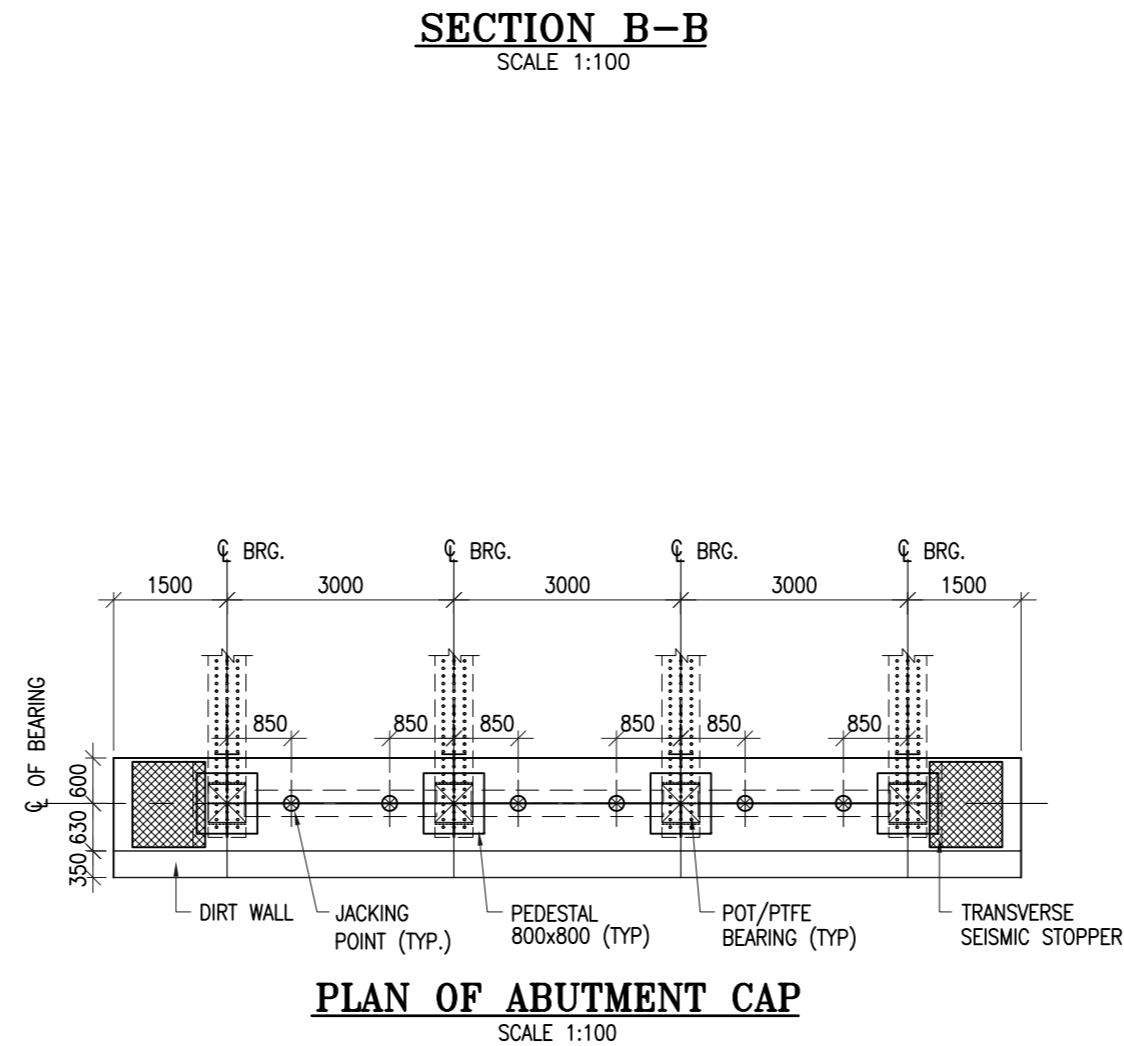
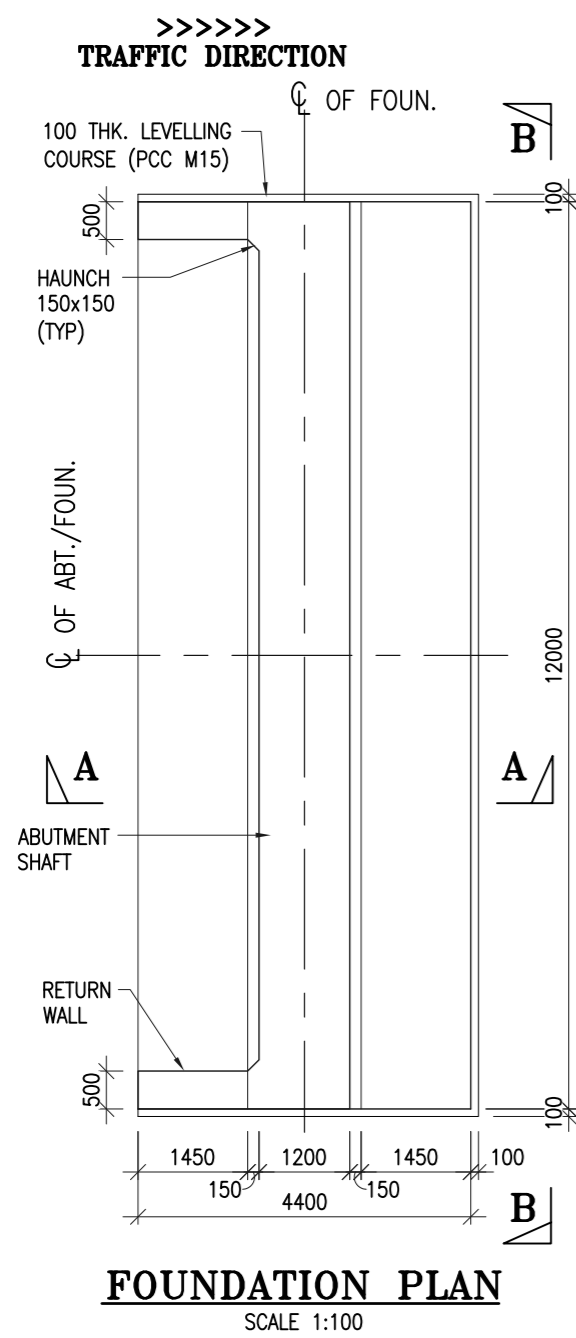
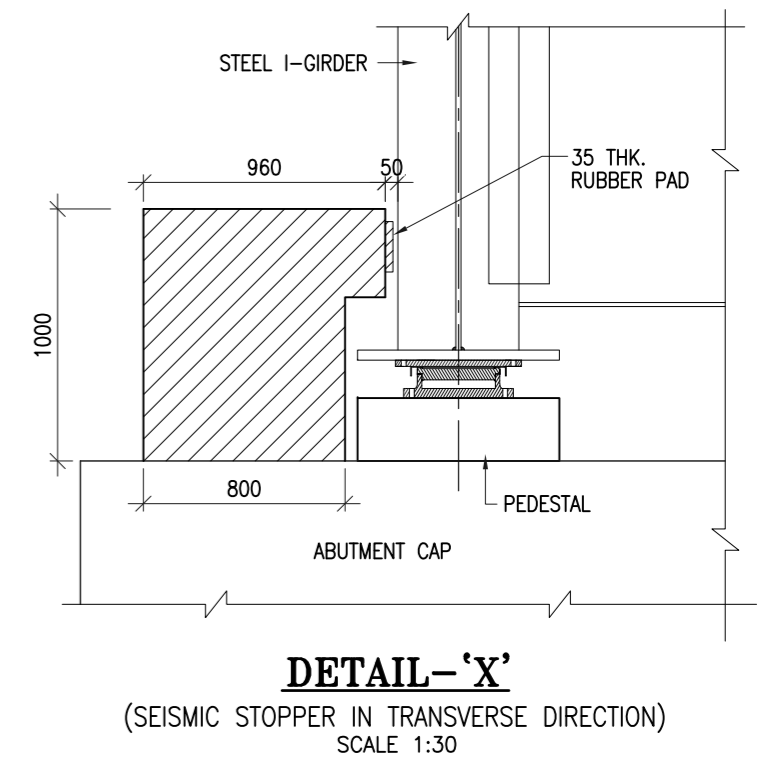
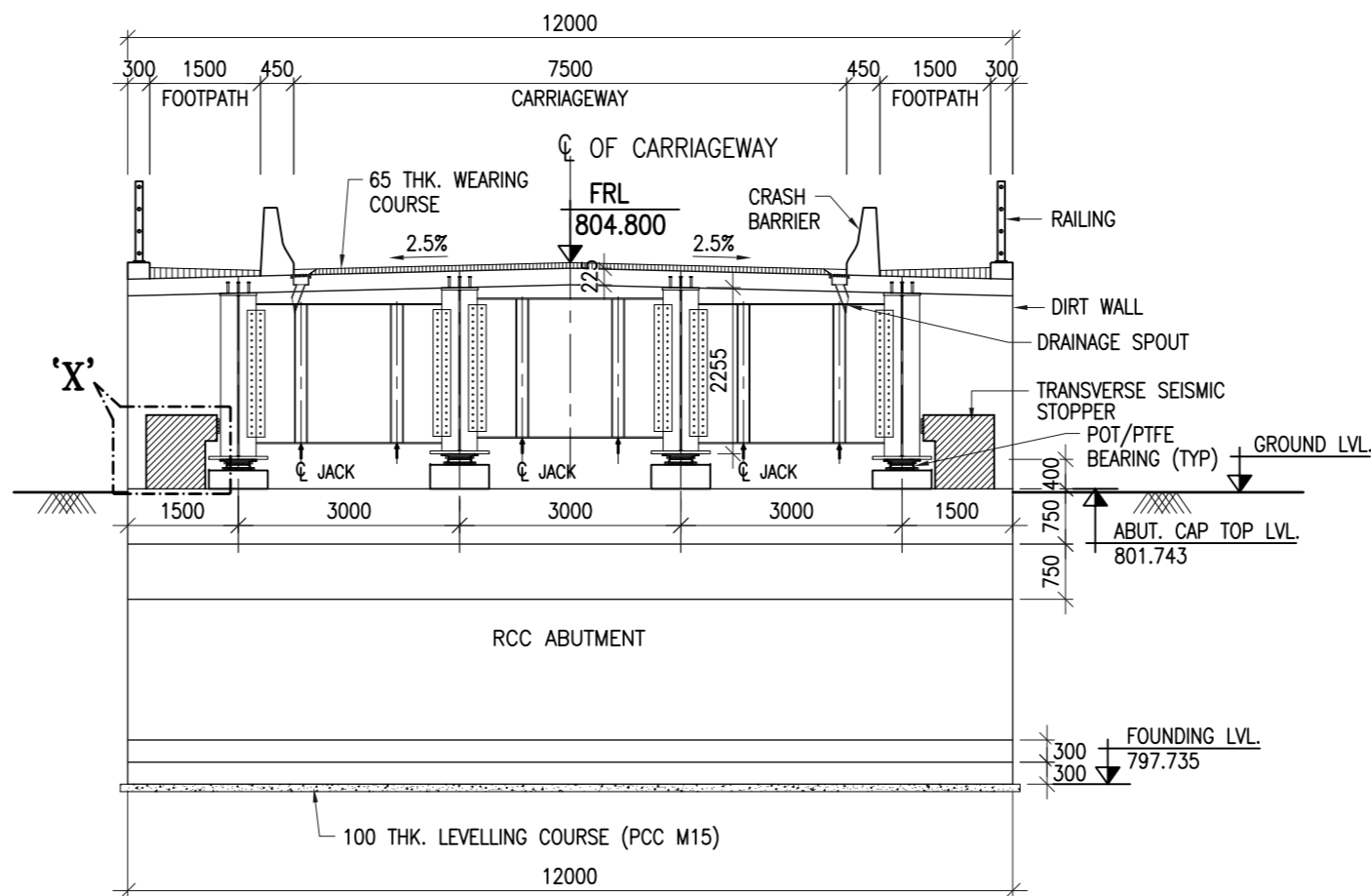
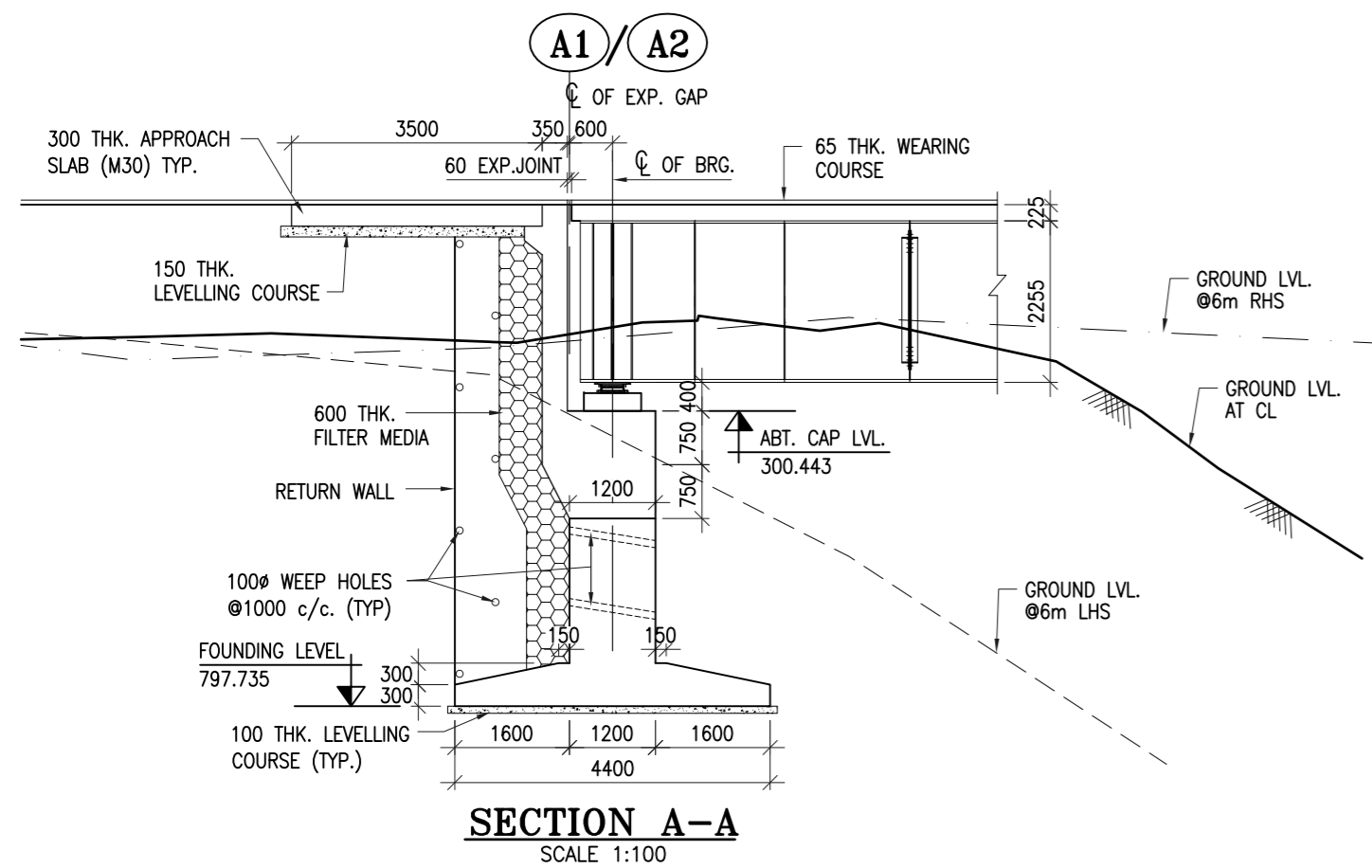
Revision	By	Date	Suffix

Project Title :
Consultancy Services for Identification & Preparation of Detailed Project Report for Slope Protection work on Hill & Valley Side, Sinking Zones and Bridges in between Km 368.000 to Km 468.000 (NH-07), in the State of Uttarakhand

Client :

NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
 Ministry of Road Transport & Highways, Government of India

Drawing Title :
GENERAL ARRANGEMENT DRAWING FOR MINOR BRIDGE (1x50.00m SPAN) AT Km 393+985, VILLAGE CHATWAPEPLA
 Drawing Number :
 VKSIMPL/P-135/NHIDCL/MNB-01/01 (SH. 2 OF 2)
 Scale :
 AS SHOWN
 Drawn By : SKG Designed By : AK Checked By : ARK Date : June, 2022


Design Consultant :
 **VKS INFRA TECH MANAGEMENT PVT. LTD.**
Consulting Engineers, Planners & Managers
Raghunath Bhawan, B-17/882, Block-B, Opp Prachin Shiv Mandir, New Ashok Nagar, Delhi - 110096
(Ph: 011-45061563)



- NOTES:**
1. ALL DIMENSIONS ARE IN mm AND LEVELS ARE IN METRES UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED. NO DIMENSIONS SHALL BE SCALED.
 2. MINIMUM GRADE OF CONCRETE SHALL BE M35 IN ABUTMENT GRADE OF STEEL IS Fe-500.
 3. FOLLOWING DRAWINGS SHALL BE READ IN CONJUNCTION WITH DRG. NO.
 VKSIMPL/P-135/NHIDCL/MNB-01/01 FOR GAD.
 VKSIMPL/P-135/NHIDCL/MISC/01 FOR DETAILS OF APPROACH SLAB.
 VKSIMPL/P-135/NHIDCL/MISC/02 FOR DETAILS OF CRASH BARRIER.
 VKSIMPL/P-135/NHIDCL/MISC/03 FOR DETAILS DRAINAGE SPOUT.

Revision	By	Date	Suffix

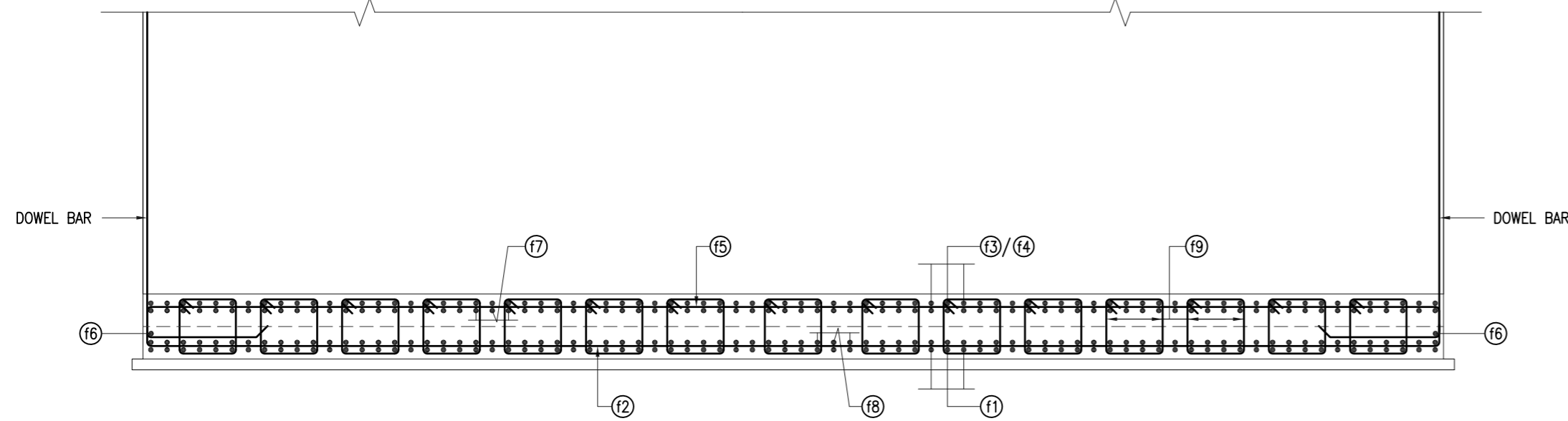
Project Title :
Consultancy Services for Identification & Preparation of Detailed Project Report for Slope Protection work on Hill & Valley Side, Sinking Zones and Bridges in between Km 368.000 to Km 468.000 (NH-07), in the State of Uttarakhand

Client :

NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
 Ministry of Road Transport & Highways, Government of India

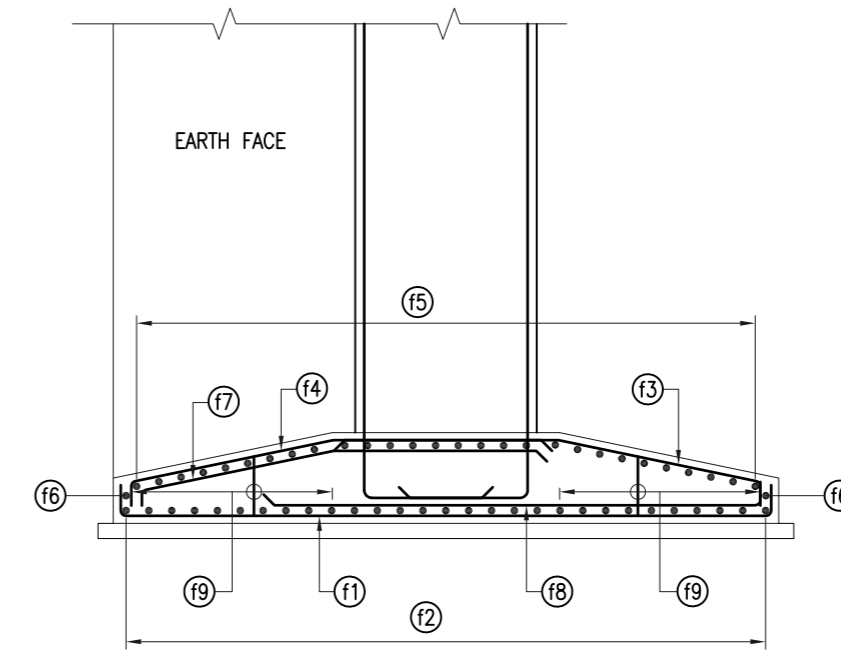
Drawing Title :
DIMENSION DETAILS OF SUBSTRUCTURE & FOUNDATION FOR ABUTMENT
 Drawing Number :
 VKSIMPL/P-135/NHIDCL/MNB-01/02
 Scale :
 AS SHOWN
 Drawn By : SKG
 Designed By : AK
 Checked By : ARK
 Date : June 2022

Design Consultant :

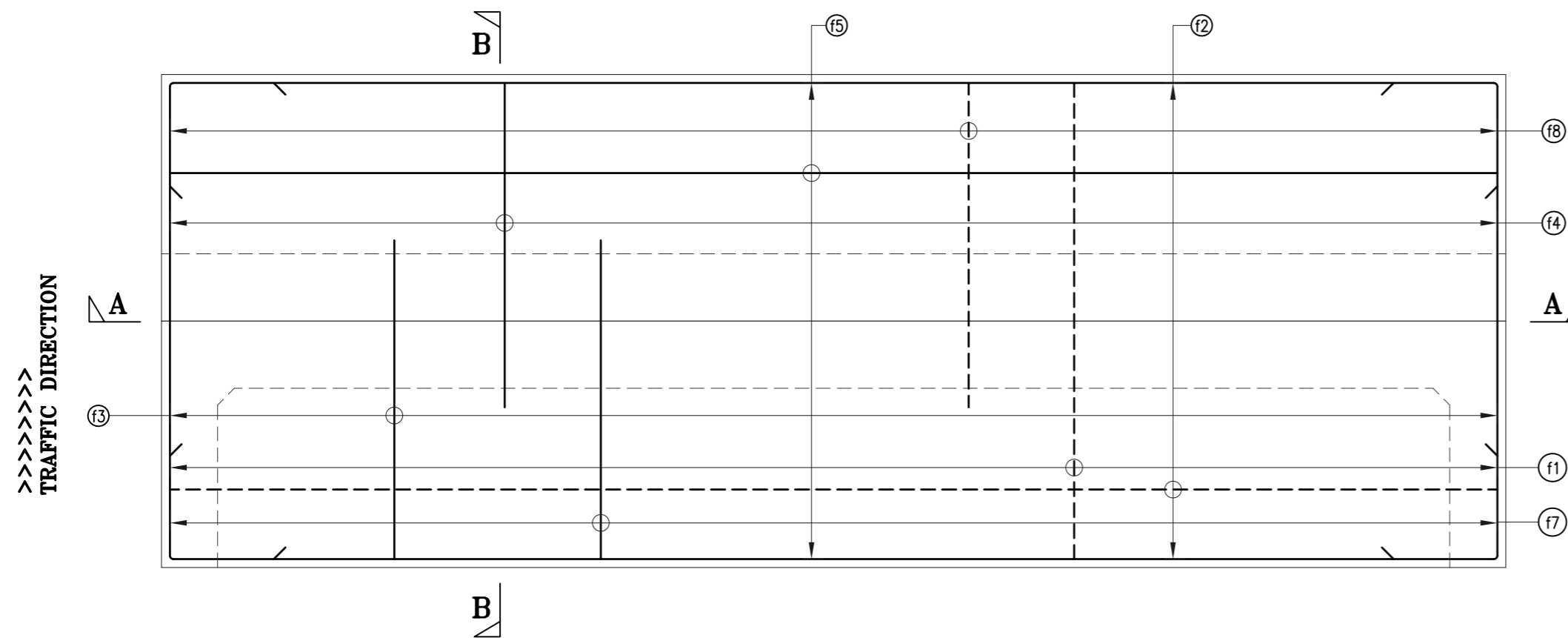
VKS INFRASTRUCTURE MANAGEMENT PVT. LTD.
Consulting Engineers, Planners & Managers
Raghunath Bhawan, B-17/882, Block-B, Opp Prachin Shiv Mandir, New Ashok Nagar, Delhi - 110096
(Ph: 011-45061563)



SECTION A-A
SCALE 1:50



SECTION B-B
SCALE 1:50



FOUNDATION PLAN (A1)
SCALE 1:50

SCHEDULE OF REINF. FOR-A1

	BAR MARK	SHAPE	DESCRIPTION
FOUNDATION	f1		∅32@125c/c
	f2		∅16@100c/c
	f3		∅25@125c/c
	f4		∅32@125c/c
	f5		∅16@100c/c
	f6		∅16@200c/c
	f7		∅25@125c/c
	f8		∅25@125c/c
	f9		∅12-36 LEGGED @150c/c

LEGEND

BOTTOM REINF. :
TOP REINF. :

NOTES:

- ALL DIMENSIONS ARE IN mm AND LEVELS ARE IN METRES UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED. NO DIMENSIONS SHALL BE SCALED.
- MINIMUM GRADE OF CONCRETE SHALL BE M35 IN ABUTMENT, & M35 IN OPEN FOUNDATION & GRADE OF STEEL IS Fe-500.
- MINIMUM COVER OF REINFORCEMENT SHALL BE 75MM IN OPEN FOUNDATION AND 40MM IN SHAFT, RETURN WALL AND DIRT WALL.
- STEEL REINFORCEMENT SHALL CONFORM TO IS:1786 (GRADE DESIGNATION Fe-500)
- NOT MORE THAN 50% BARS SHALL BE LAPPED AT A SECTION AS PER CLAUSE 15.2.5 OF IRC:112-2011
- FOLLOWING DRAWINGS SHALL BE READ IN CONJUNCTION WITH DRG. NO.
VKSIMPL/P-135/NHIDCL/MNB-01/01 FOR GENERAL ARRANGEMENT DRAWING
VKSIMPL/P-135/NHIDCL/MNB-01/02 FOR DIMENSION DETAILS OF SUBSTRUCTURE & FOUNDATION FOR ABUTMENTS

Revision Details	By	CHK	Date	Suffix

Project Title :
Consultancy Services for Identification & Preparation of Detailed Project Report for Slope Protection work on Hill & Valley Side, Sinking Zones and Bridges in between Km 368.000 to Km 468.000 (NH-07), in the State of Uttarakhand

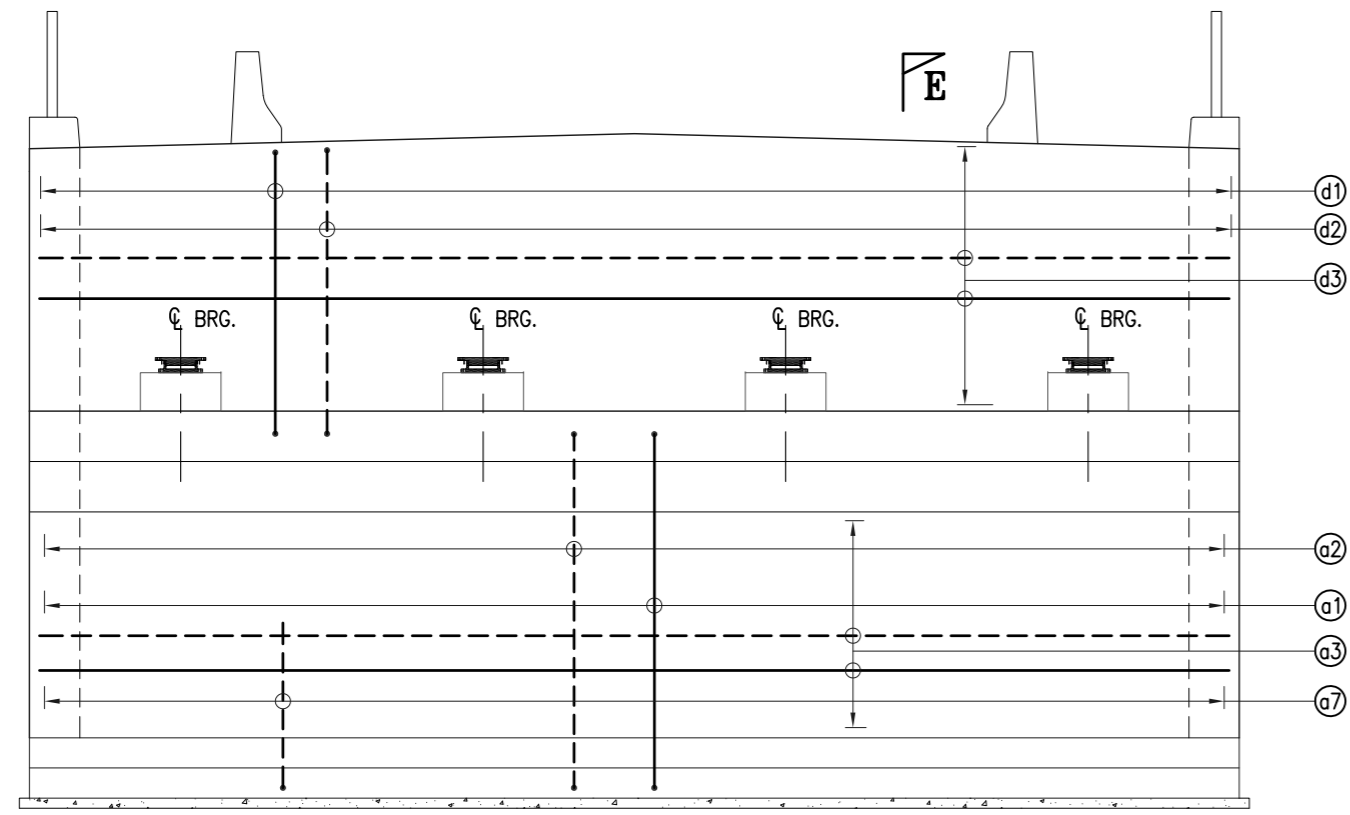
Client :

NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
Ministry of Road Transport & Highways, Government of India

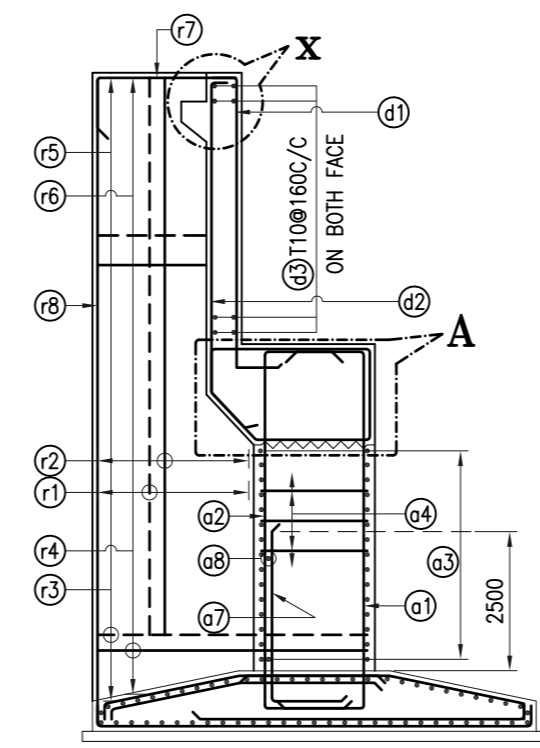
Drawing Title :
REINFORCEMENT DETAILS OF SUBSTRUCTURE & FOUNDATION FOR ABUTMENT
Drawing Number :
VKSIMPL/P-135/NHIDCL/MNB-01/03 (SH. 1 OF 2)
Scale :
AS SHOWN
Drawn By : SKG
Designed By : AK
Checked By : ARK
Date : June 2022

Design Consultant :

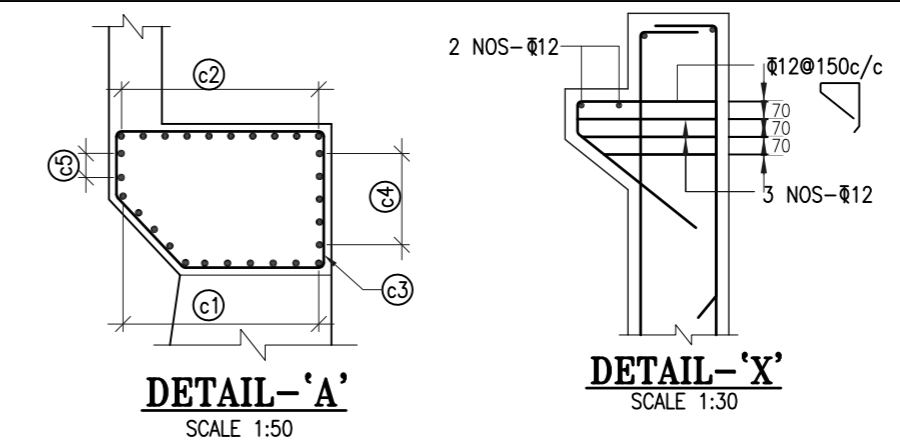
VKS INFRASTRUCTURE MANAGEMENT PVT. LTD.
Consulting Engineers, Planners & Managers
Raghunath Bhawan, B-17/882, Block-B, Opp Prachin Shiv Mandir, New Ashok Nagar, Delhi - 110096
(Ph: 011-45061563)



FRONT ELEVATION
SCALE 1:75

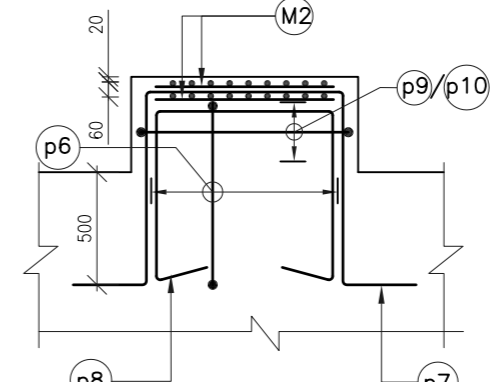


SECTION E-E
SCALE 1:75

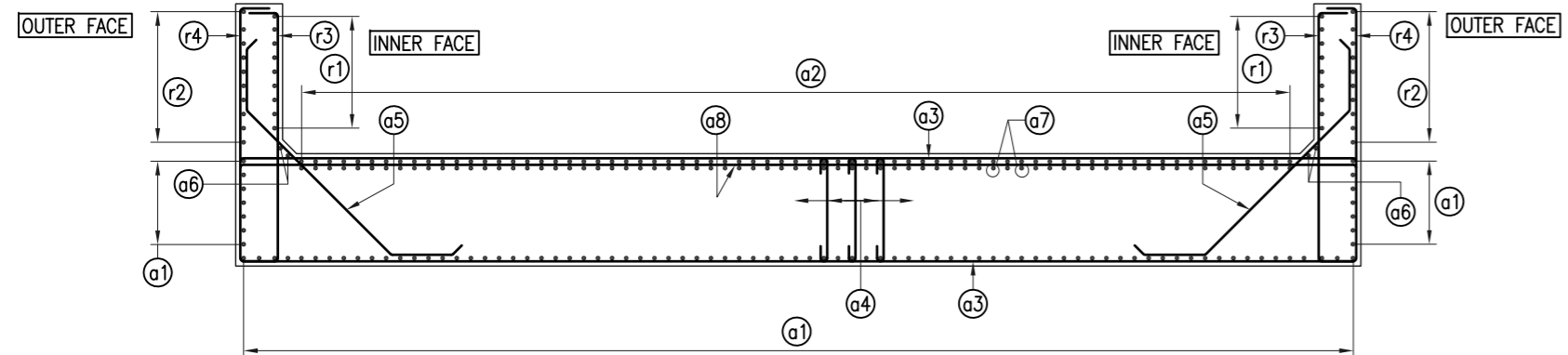


DETAIL-A
SCALE 1:50

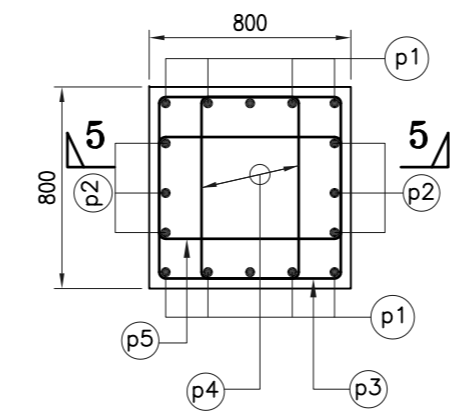
DETAIL-X
SCALE 1:30



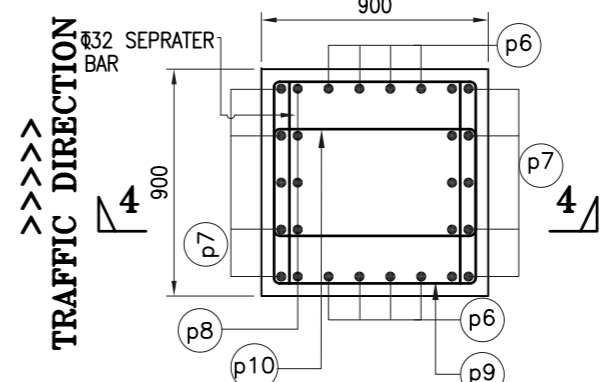
SECTION 4-4
SCALE 1:30



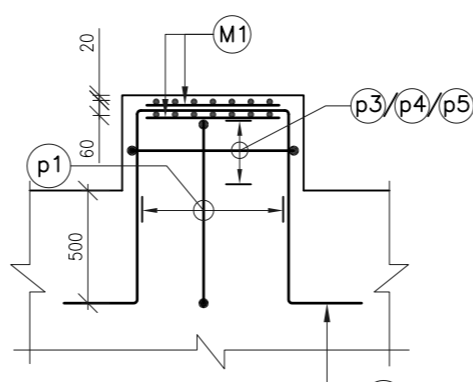
PLAN REINF. DETAIL OF ABUTMENT
SCALE 1:75



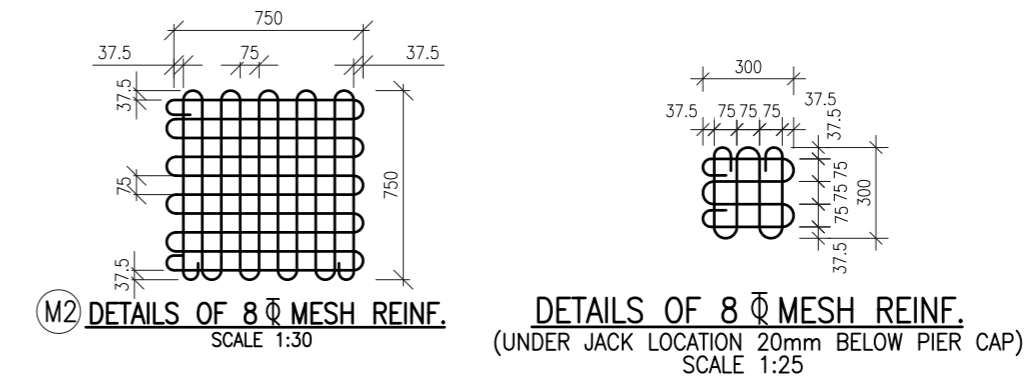
REINFORCEMENT DETAILS OF PEDESTAL (FOR FREE BEARING)
SCALE 1:30



REINFORCEMENT DETAILS OF PEDESTAL (FOR LONGITUDINAL GUIDED BEARING)
SCALE 1:30

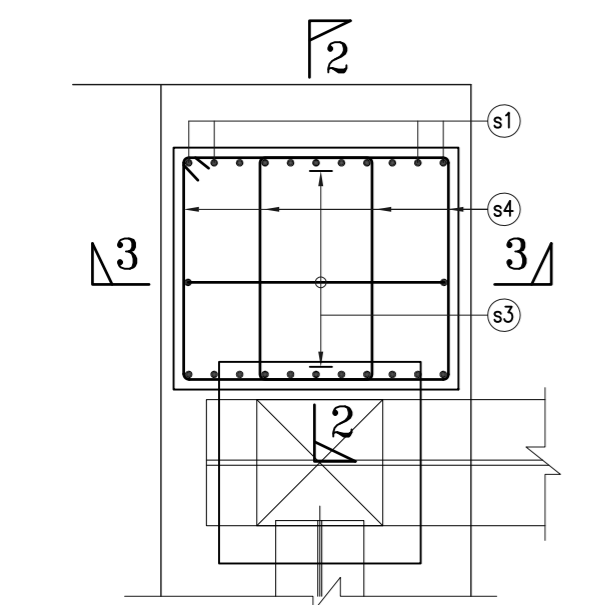


SECTION 5-5
SCALE 1:30

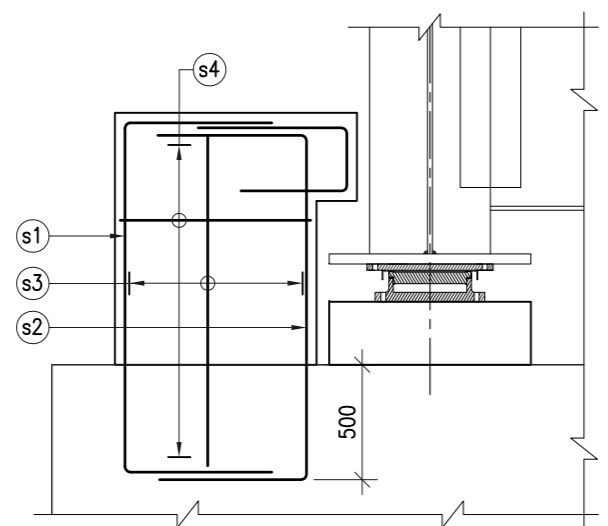


DETAILS OF 8 Ø MESH REIN. (SCALE 1:30)

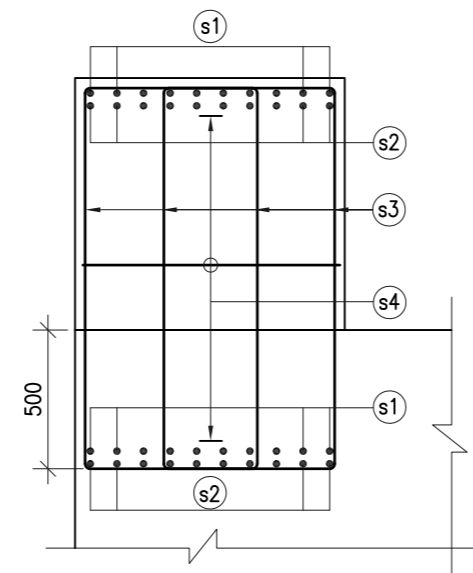
DETAILS OF 8 Ø MESH REIN. (UNDER JACK LOCATION 20mm BELOW PIER CAP) (SCALE 1:25)



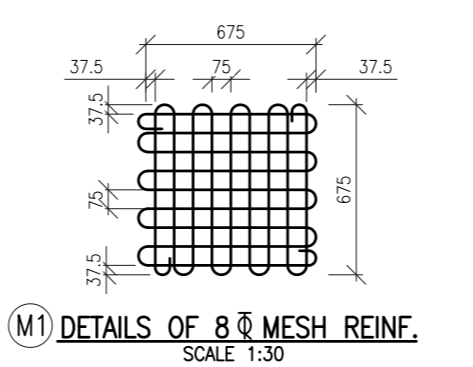
PLAN OF SEISMIC STOPPER (TRANSVERSE)
SCALE 1:30



SECTION 2-2
SCALE 1:30



SECTION 3-3
SCALE 1:30



DETAILS OF 8 Ø MESH REIN. (SCALE 1:30)

- NOTES:**
- ALL DIMENSIONS ARE IN mm AND LEVELS ARE IN METRES UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED. NO DIMENSIONS SHALL BE SCALED.
 - MINIMUM GRADE OF CONCRETE SHALL BE M35 IN ABUTMENT, & M35 IN FOUNDATION & GRADE OF STEEL IS Fe-500.
 - MINIMUM COVER OF REINFORCEMENT SHALL BE 75MM IN FOUNDATION AND SHAFT 40MM IN RETURN WALL AND DIRT WALL.
 - STEEL REINFORCEMENT SHALL CONFORM TO IS:1786 (GRADE DESIGNATION Fe-500)
 - NOT MORE THAN 50% BARS SHALL BE LAPPED AT A SECTION AS PER CLAUSE 15.2.5 OF IRC:112-2011
 - FOLLOWING DRAWINGS SHALL BE READ IN CONJUNCTION WITH DRG. NO.
VKSIMPL/P-135/NHIDCL/MNB-01/01 FOR GENERAL ARRANGEMENT DRAWING
VKSIMPL/P-135/NHIDCL/MNB-01/02 FOR DIMENSION DETAILS OF SUBSTRUCTURE & FOUNDATION FOR ABUTMENTS

SCHEDULE OF REINF.

BAR MARK	SHAPE	DESCRIPTION
a1	U	Ø20@100c/c
a2	L	Ø32@100c/c
a3	—	Ø16@150c/c ON BOTH FACE
a4	—	Ø16@300c/c
a5	—	Ø10@150c/c
a6	—	2 NOS-Ø12
a7	—	Ø32@100c/c
a8	—	Ø32@1000c/c SEPRATER BAR
c1	—	Ø16@100c/c
c2	—	Ø16@100c/c
c3	—	2L-Ø12@150c/c
c4	—	4 NOS-Ø16
c5	—	2 NOS-Ø16
d1	—	Ø10@150c/c
d2	—	Ø16@150c/c
d3	—	Ø10@150c/c ON BOTH FACE
r1	—	Ø25@100c/c ON INNER FACE
r2	—	Ø10@150c/c ON OUTER FACE
r3	—	Ø25@100c/c ON INNER FACE
r4	—	Ø10@150c/c ON OUTER FACE
r5	—	Ø16@100c/c ON INNER FACE
r6	—	Ø10@150c/c ON OUTER FACE
r7	—	4 NOS-Ø16 TOP FACE
r8	—	4 NOS-Ø10 ON FACE
s1	—	10NOS.-Ø16
s2	—	10NOS.-Ø32
s3	—	4L-Ø16 STIRRUP@100c/c
s4	—	4L-Ø16 STIRRUP@150c/c
p1	—	5NOS.-Ø20
p2	—	3NOS.-Ø20
p3	—	2L-Ø12 STIRRUP@150c/c
p4	—	2L-Ø12 STIRRUP@150c/c
p5	—	2L-Ø12 STIRRUP@150c/c
p6	—	4NOS.-Ø16
p7	—	5NOS.-Ø32
p8	—	5NOS.-Ø32
p9	—	2LØ25@150c/c
p10	—	2LØ25@150c/c

LEGEND

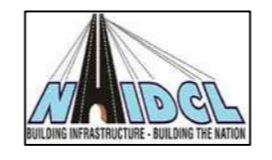
INNER FACE REINF. : - - - - -

OUTER FACE REINF. : ————

Revision	By	Date	Suffix

Project Title : **Consultancy Services for Identification & Preparation of Detailed Project Report for Slope Protection work on Hill & Valley Side, Sinking Zones and Bridges in between Km 368.000 to Km 468.000 (NH-07), in the State of Uttarakhand**

Client : **NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. Ministry of Road Transport & Highways, Government of India**



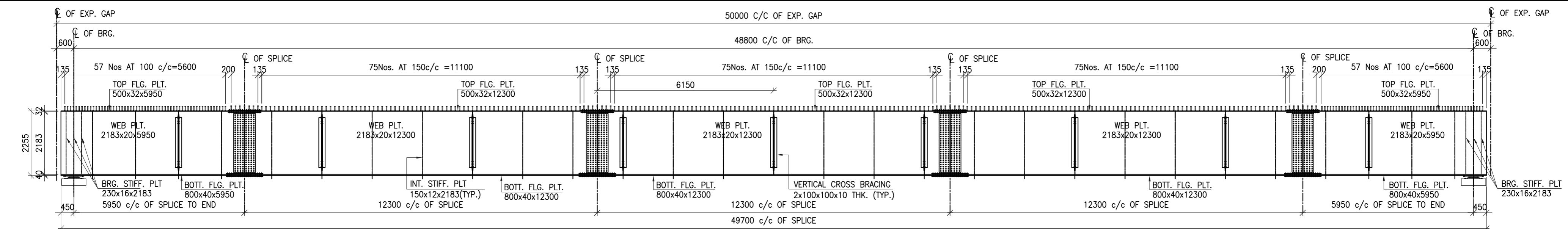
Drawing Title : **REINFORCEMENT DETAILS OF SUBSTRUCTURE & FOUNDATION FOR ABUTMENT**

Drawing Number : **VKSIMPL/P-135/NHIDCL/MNB-01/03 (SH. 2 OF 2)**

Scale : **AS SHOWN**

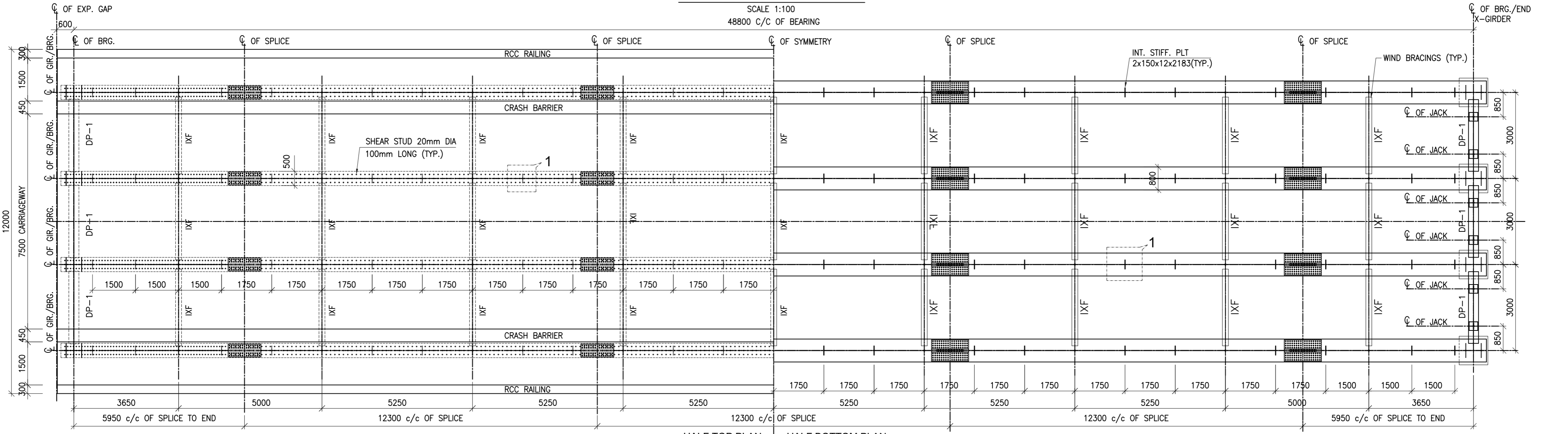
Drawn By : **SKG** Designed By : **AK** Checked By : **ARK** Date : **June 2022**

Design Consultant : **VKS INFRATECH MANAGEMENT PVT. LTD. Consulting Engineers, Planners & Managers Raghunath Bhawan, B-17/882, Block-B, Opp Prachin Shiv Mandir, New Ashok Nagar, Delhi - 110096 (Ph: 011-45061563)**



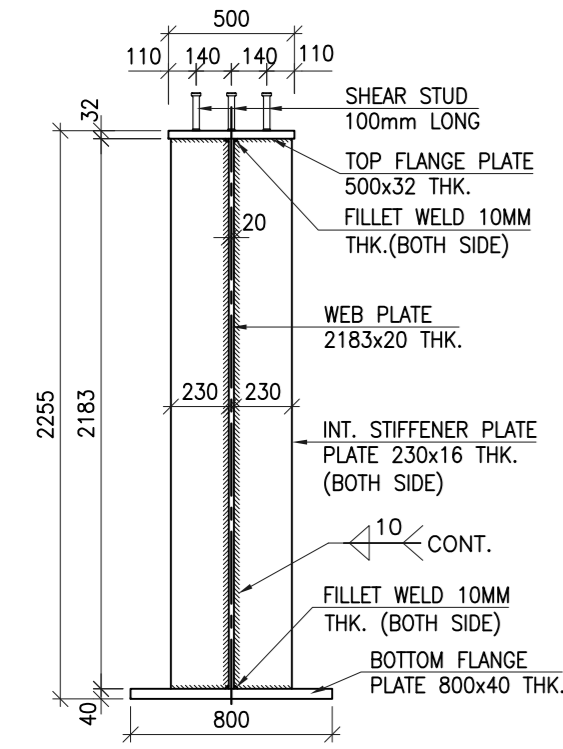
LONGITUDINAL ELEVATION

SCALE 1:100



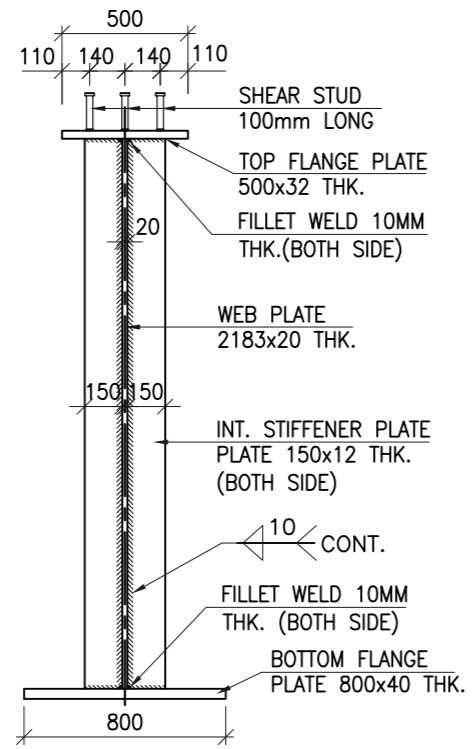
PLAN

SCALE 1:100



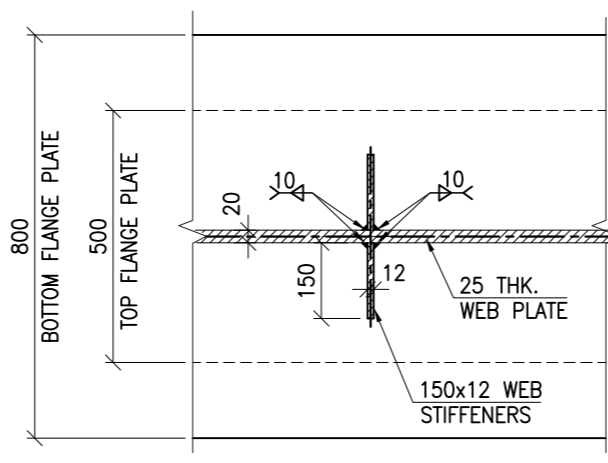
TYPICAL CROSS SECTION OF GIRDER AT SUPPORT

SCALE 1:30



TYPICAL CROSS SECTION OF GIRDER AT MID

SCALE 1:30



DETAIL-1

SCALE 1:15

NOTES:-

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DIMENSIONS SHALL BE SCALED.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET 2, 3 & 4 OF THIS DRAWING.

Revision	By	Date	Suffix

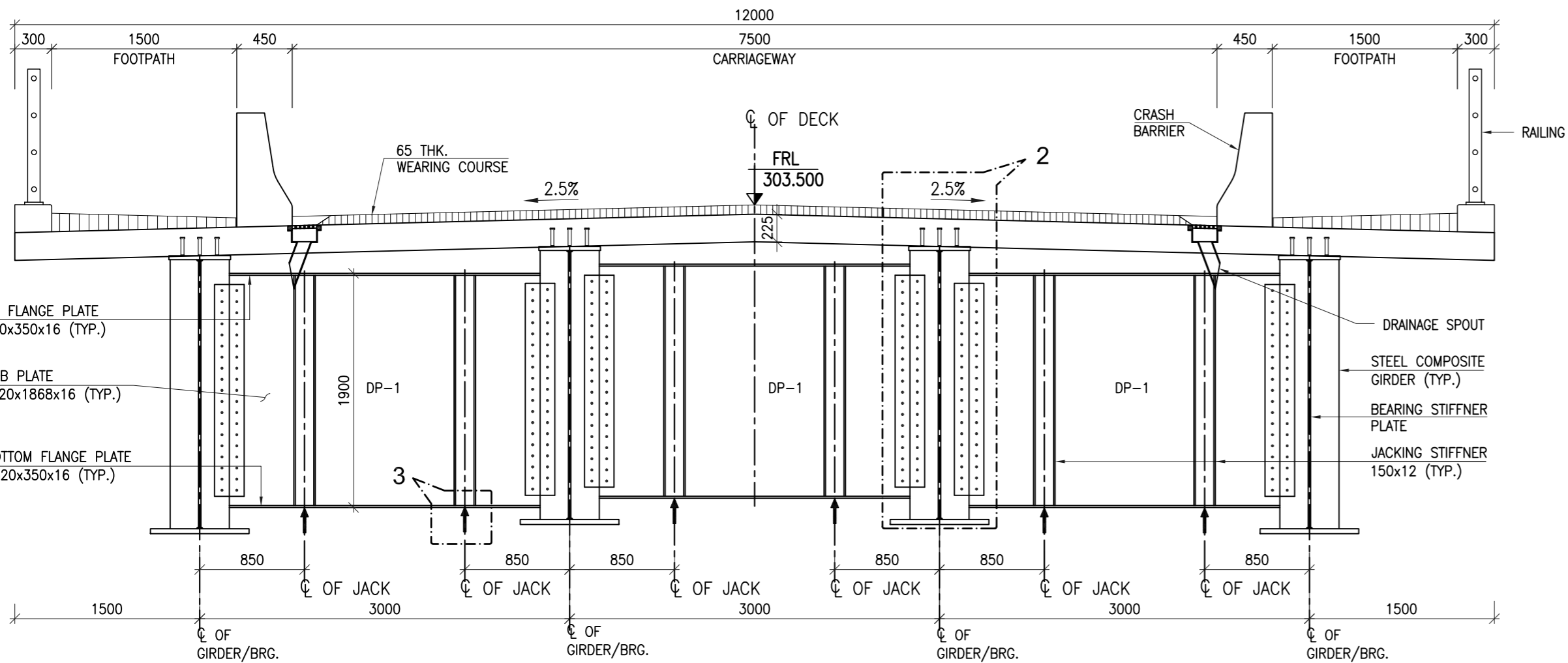
Project Title :
Consultancy Services for Identification & Preparation of Detailed Project Report for Slope Protection work on Hill & Valley Side, Sinking Zones and Bridges in between Km 368.000 to Km 468.000 (NH-07), in the State of Uttarakhand

Client :

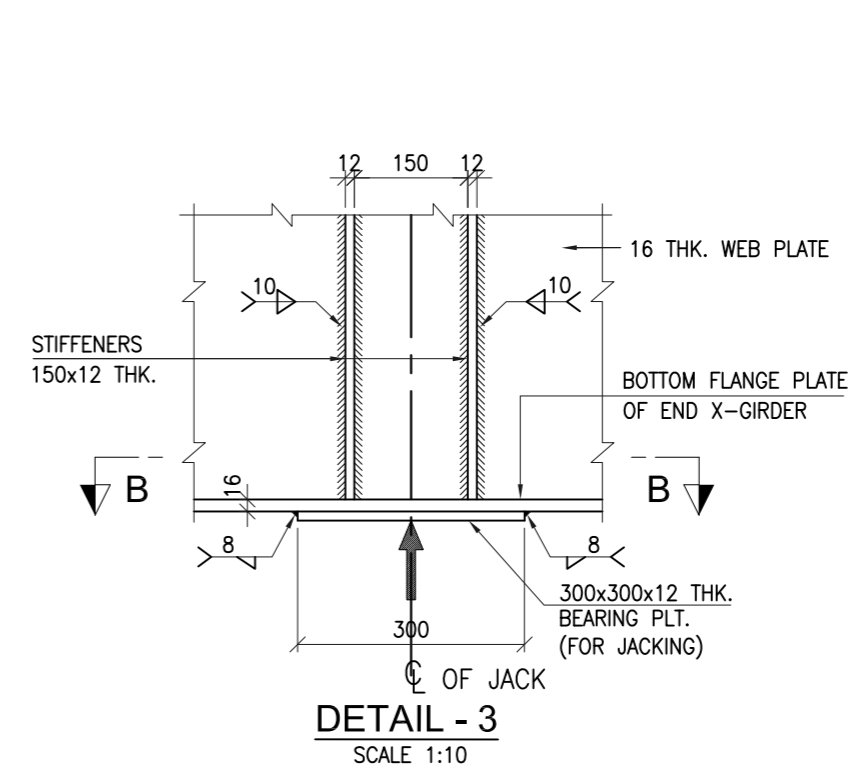
NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
 Ministry of Road Transport & Highways, Government of India

Drawing Title :
DIMENSION DETAILS OF SUPER STRUCTURE (STEEL COMPOSITE GIRDER)
 Drawing Number :
VKSIMPL/P-135/NHIDCL/MNB-01/04 (SH. 1 OF 4)
 Scale :
AS SHOWN
 Drawn By : SKG Designed By : AK Checked By : ARK Date : June, 2022

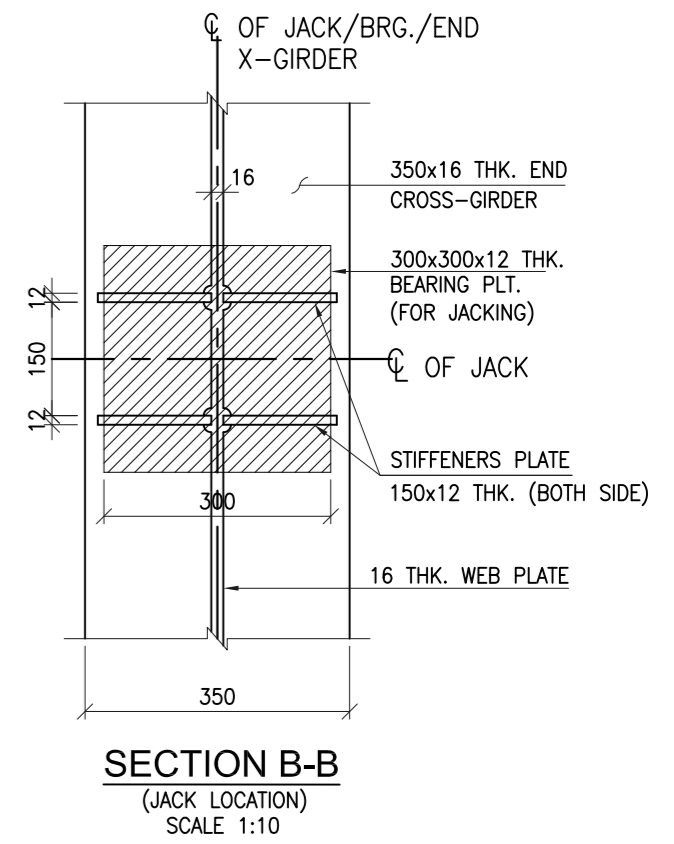
Design Consultant :
 **VKS INFRASTRUCTURE MANAGEMENT PVT. LTD.**
Consulting Engineers, Planners & Managers
Raghunath Bhawan, B-17/882, Block-B, Opp Prachin Shiv Mandir, New Ashok Nagar, Delhi - 110096 (Ph: 011-45061563)



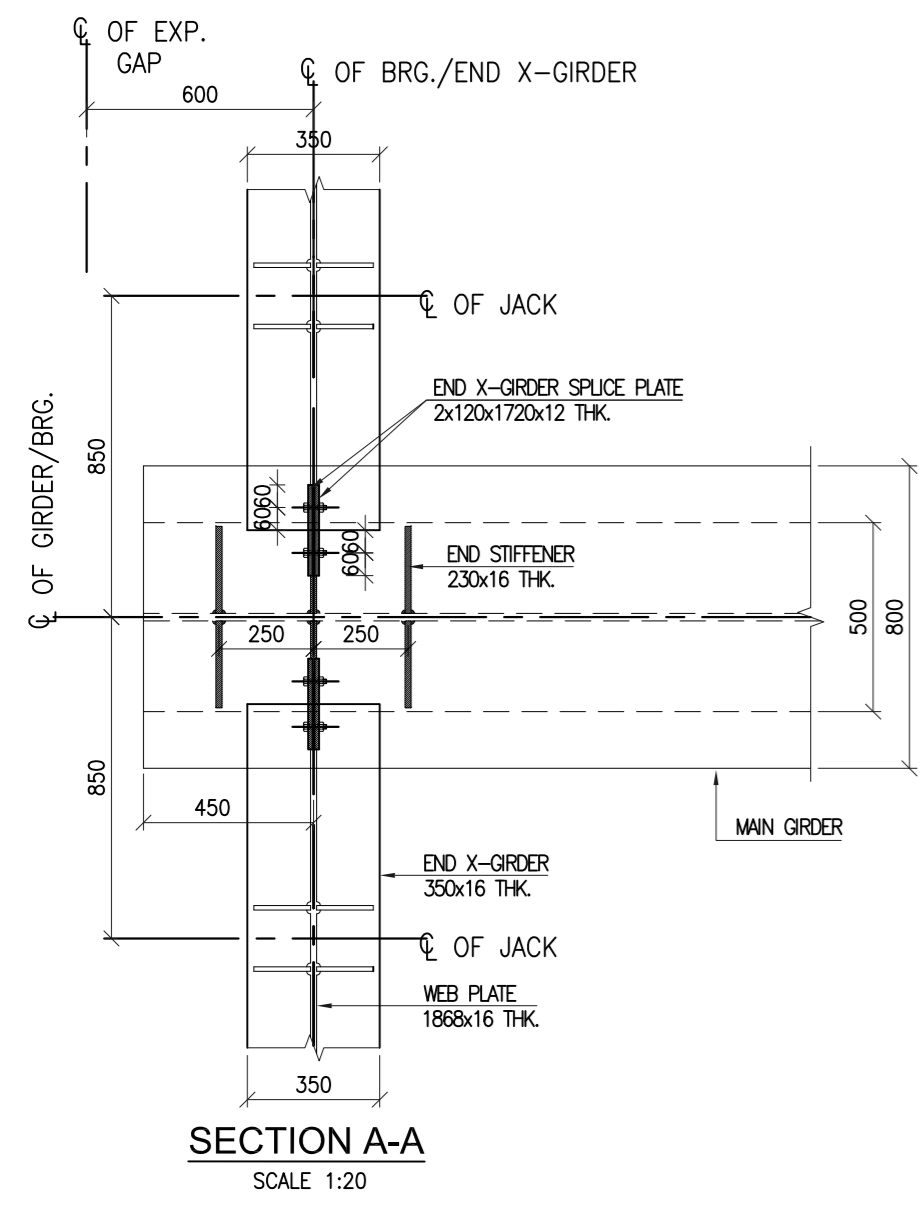
CROSS SECTION AT END X-GIRDER
SCALE 1:40



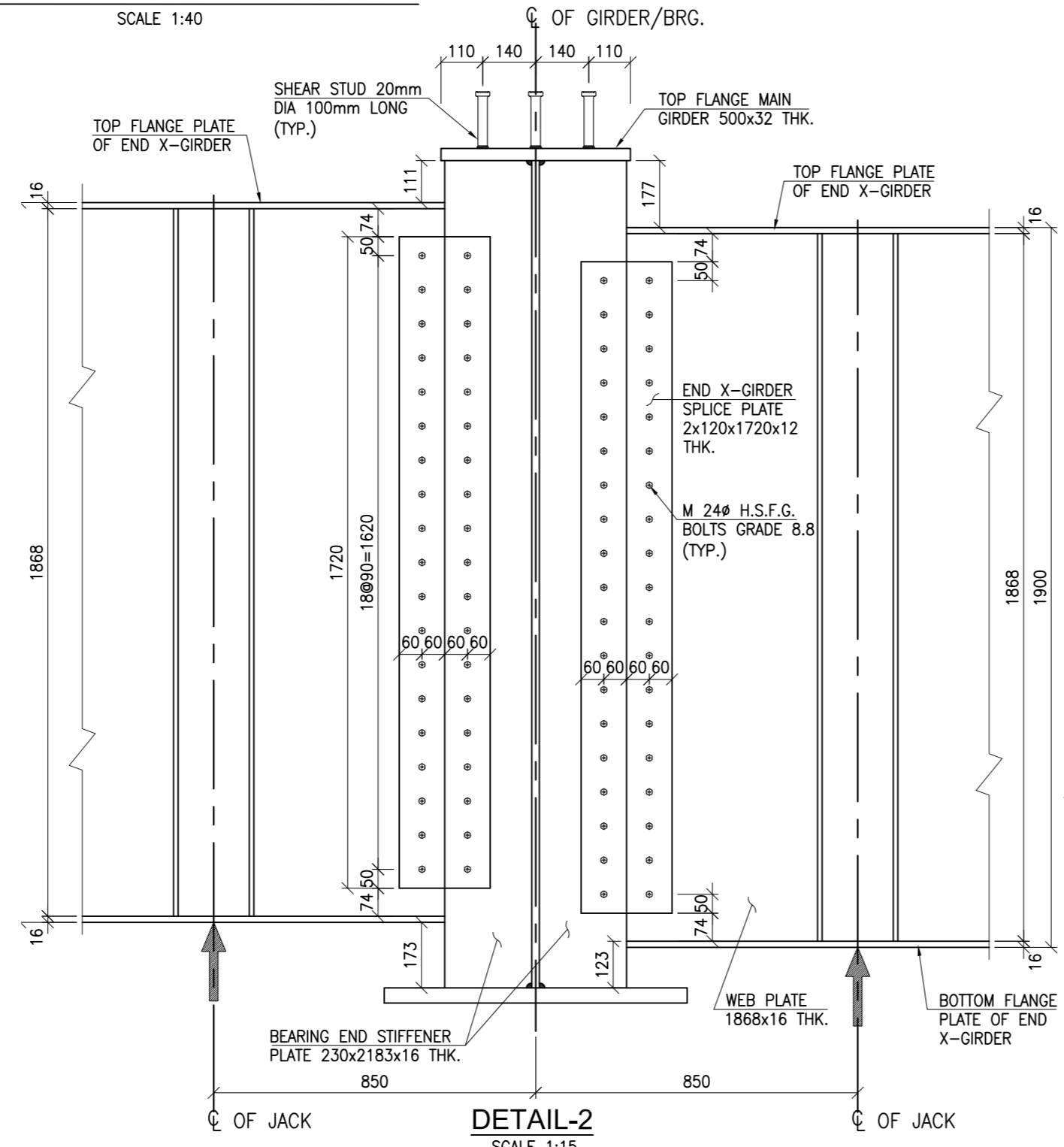
DETAIL - 3
SCALE 1:10



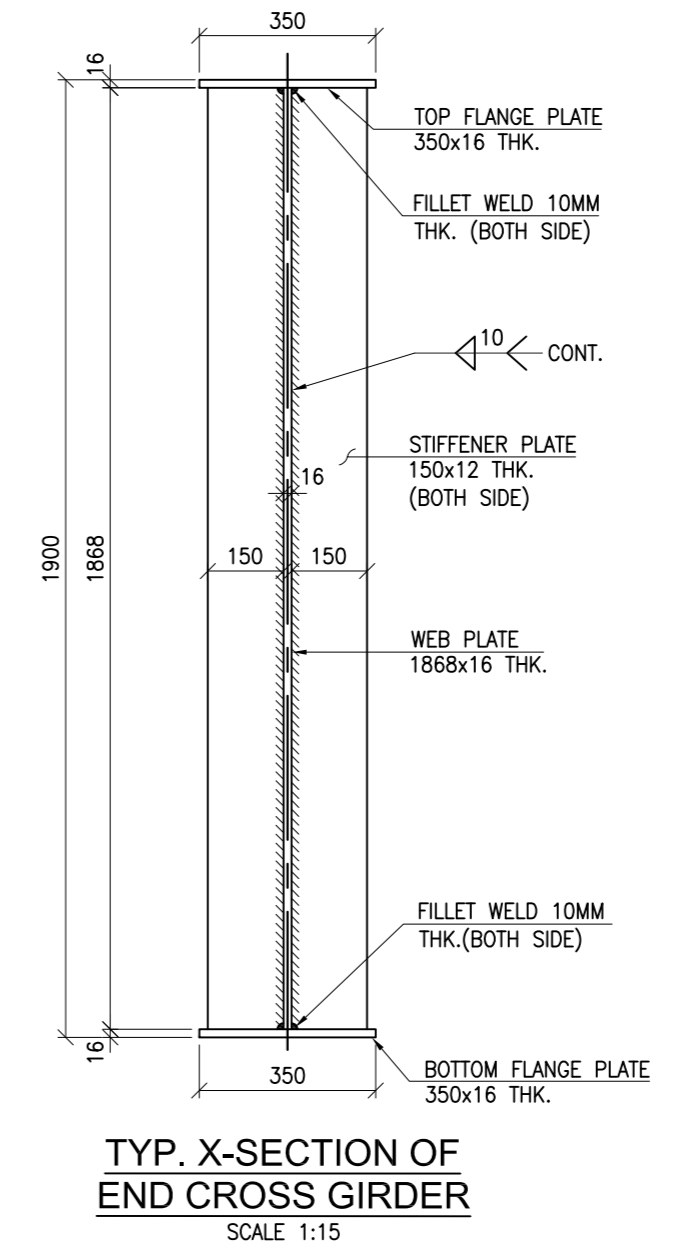
SECTION B-B
(JACK LOCATION)
SCALE 1:10



SECTION A-A
SCALE 1:20



DETAIL-2
SCALE 1:15

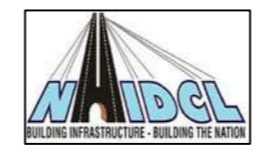


TYP. X-SECTION OF END CROSS GIRDER
SCALE 1:15

- NOTES:-**
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 - THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET 1, 3 & 4 OF 4 OF THIS DRAWING.

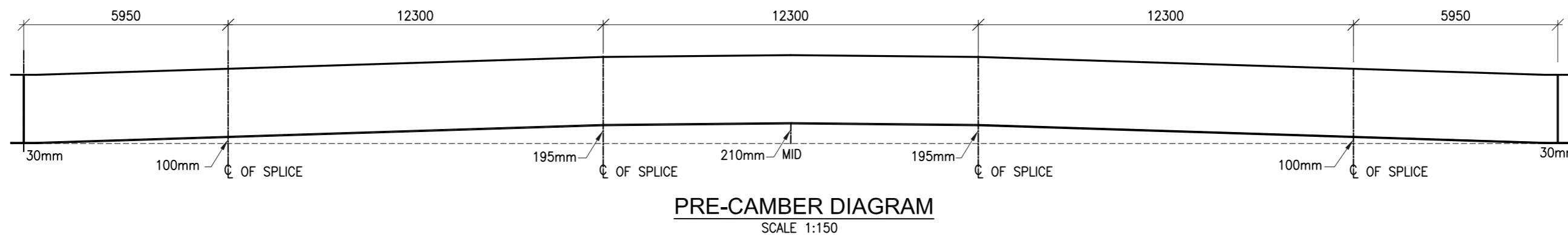
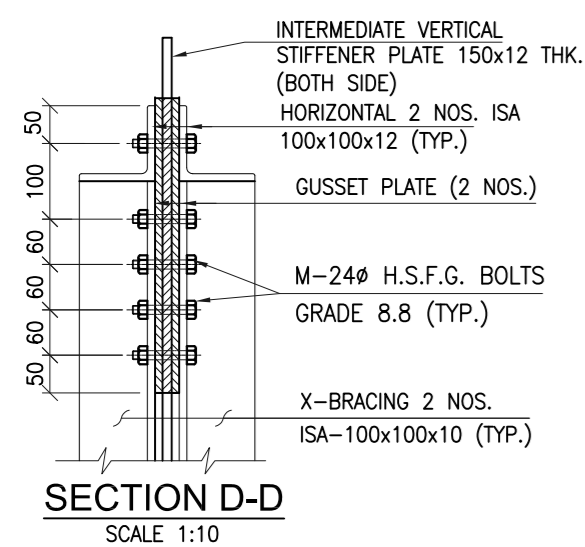
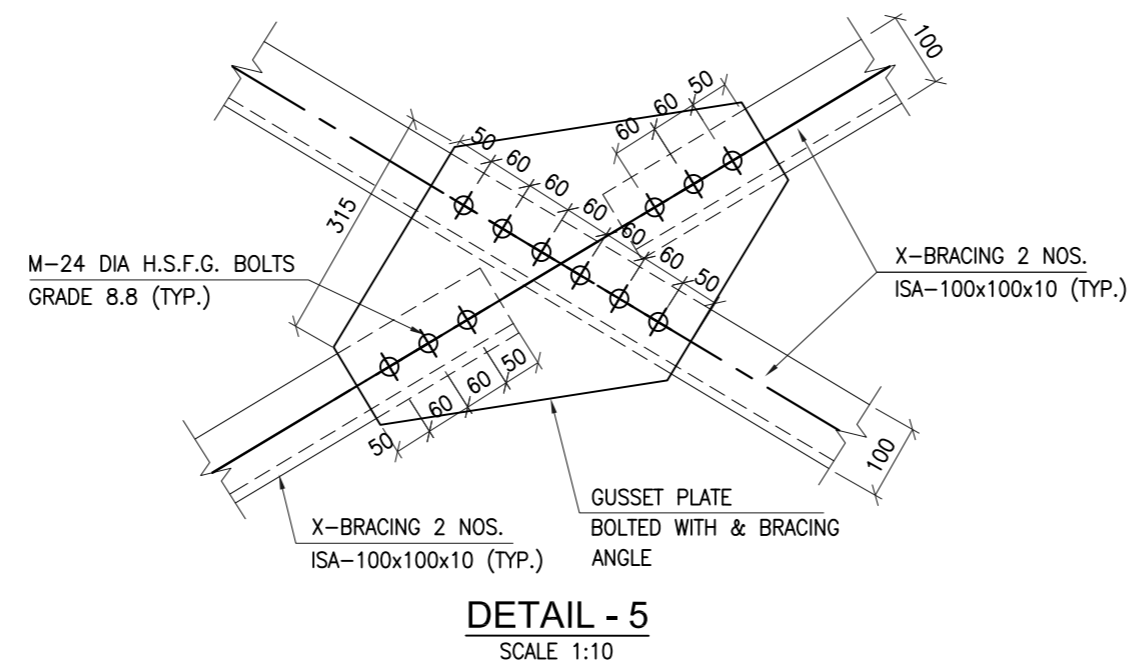
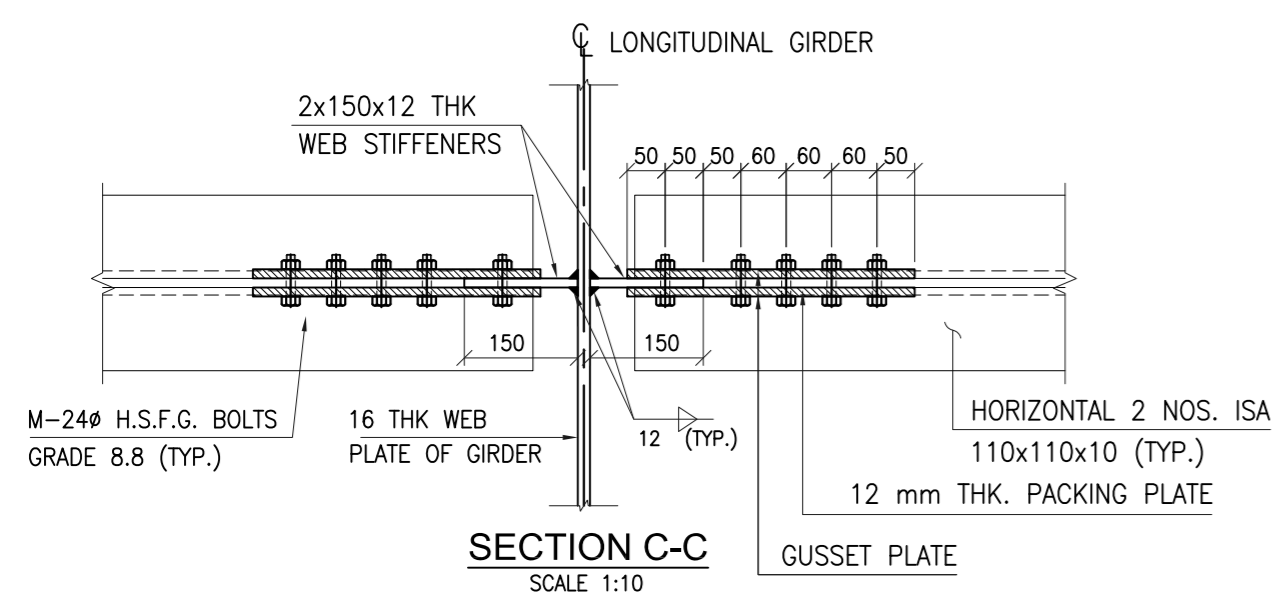
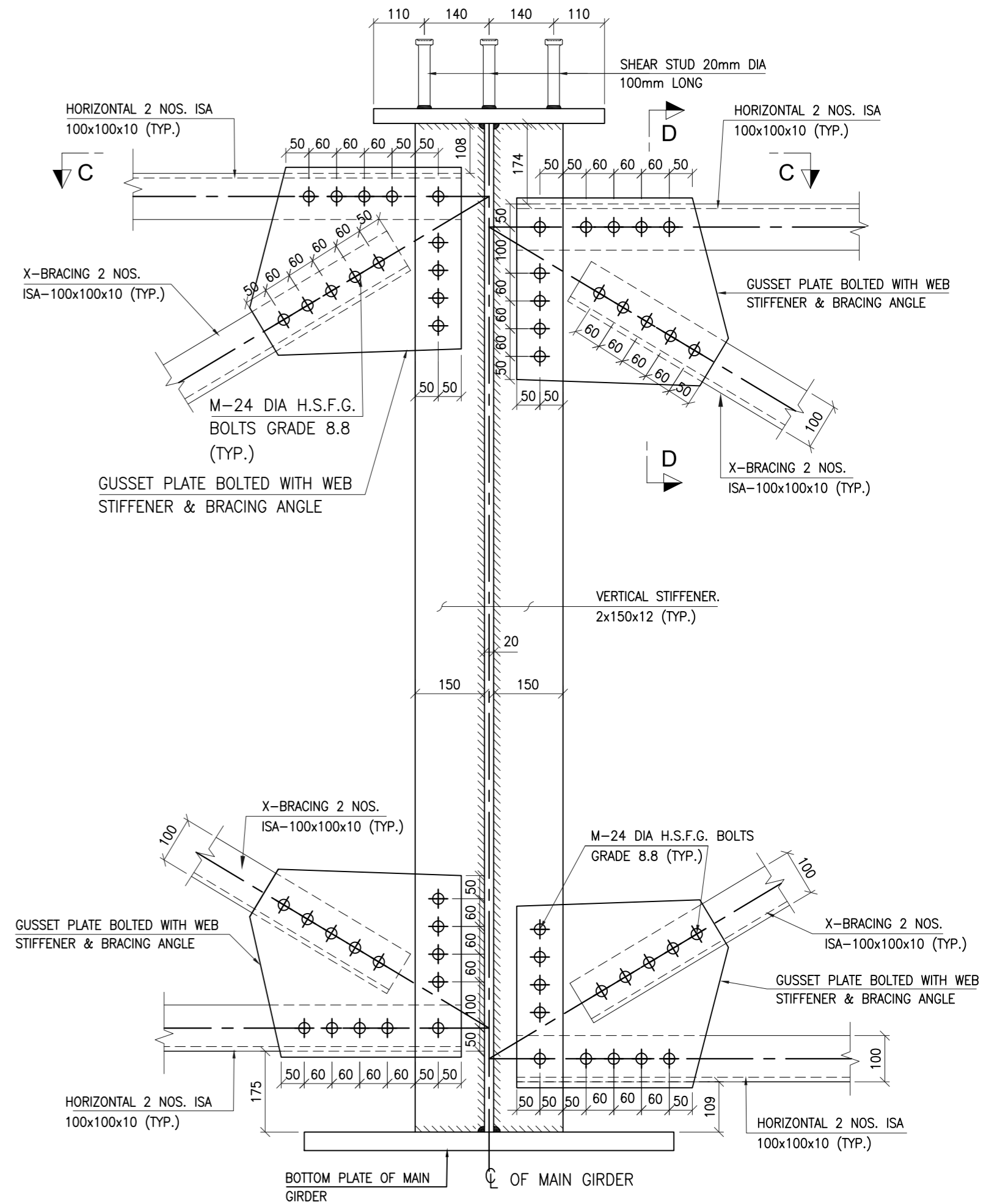
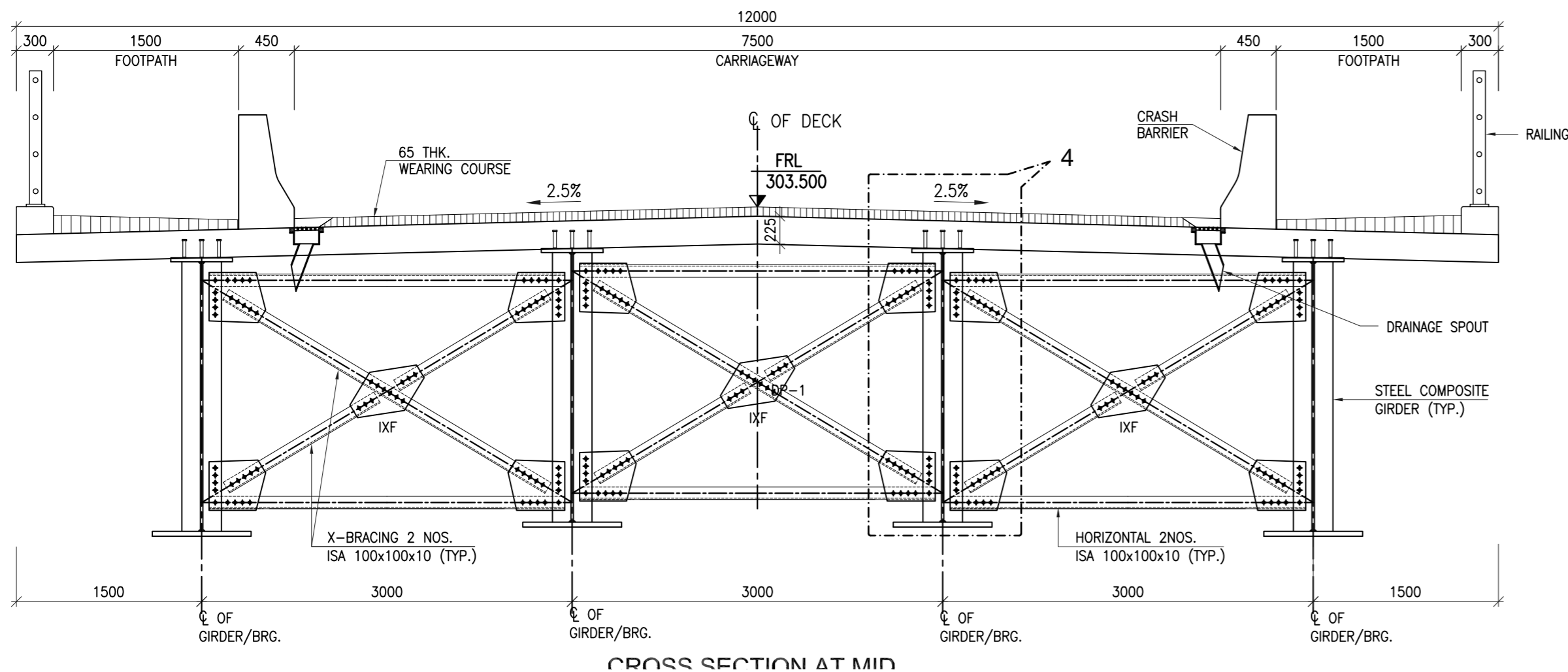
Revision	By	Date	Suffix

Project Title :
Consultancy Services for Identification & Preparation of Detailed Project Report for Slope Protection work on Hill & Valley Side, Sinking Zones and Bridges in between Km 368.000 to Km 468.000 (NH-07), in the State of Uttarakhand

Client :

NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
Ministry of Road Transport & Highways, Government of India


Drawing Title :
DIMENSION DETAILS OF SUPER STRUCTURE (STEEL COMPOSITE GIRDER)
Drawing Number :
VKSIMPL/P-135/NHIDCL/MNB-01/04 (SH. 2 OF 4)
Scale :
AS SHOWN
Drawn By : SKG
Designed By : AK
Checked By : ARK
Date : June, 2022

Design Consultant :
 **VKS INFRASTRUCTURE MANAGEMENT PVT. LTD.**
Consulting Engineers, Planners & Managers
Raghunath Bhawan, B-17/882, Block-B, Opp Prachin Shiv Mandir, New Ashok Nagar, Delhi - 110096
(Ph: 011-45061563)



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 - THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET 1, 2 & 4 OF 4 OF THIS DRAWING.

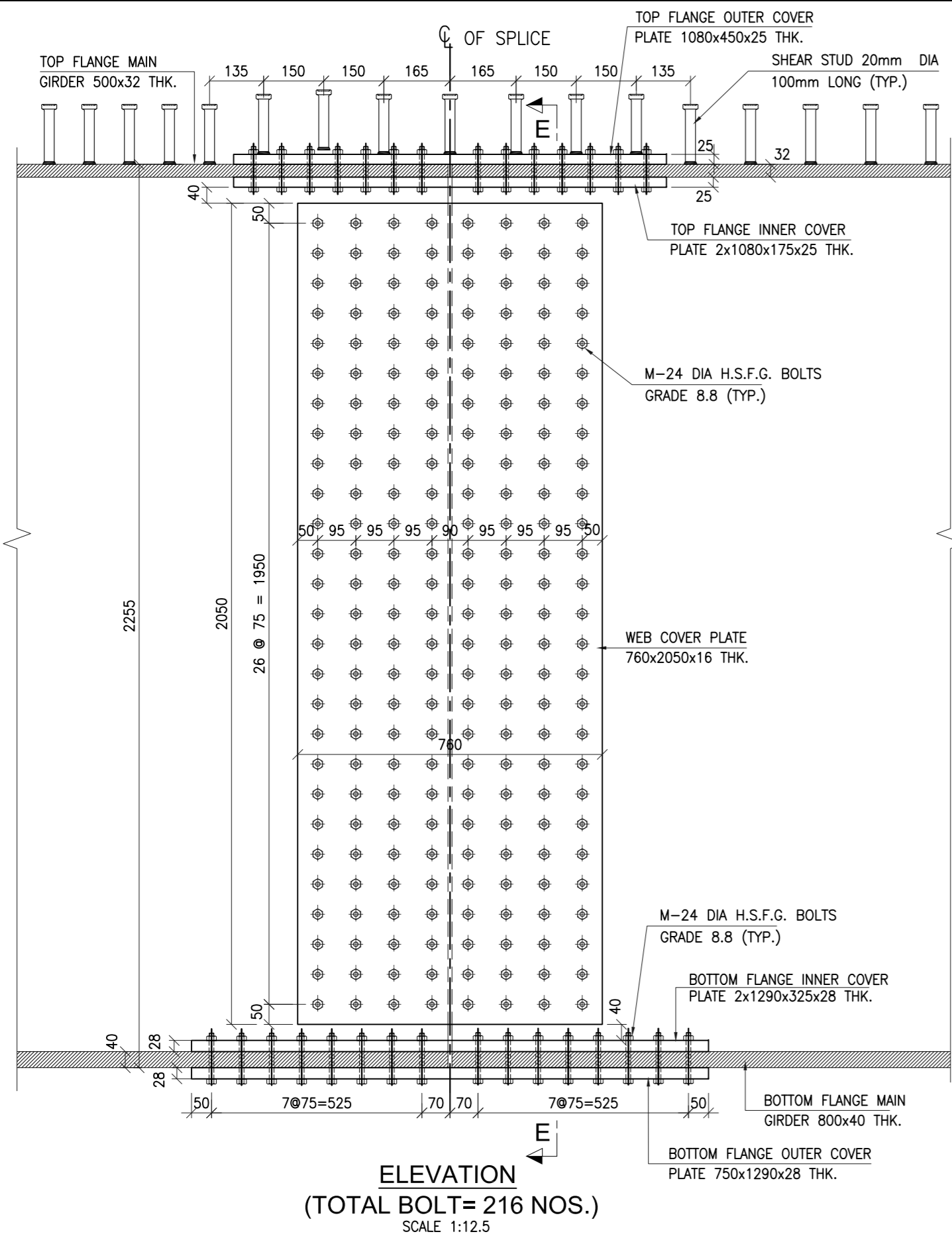
Project Title :
Consultancy Services for Identification & Preparation of Detailed Project Report for Slope Protection work on Hill & Valley Side, Sinking Zones and Bridges in between Km 368.000 to Km 468.000 (NH-07), in the State of Uttarakhand

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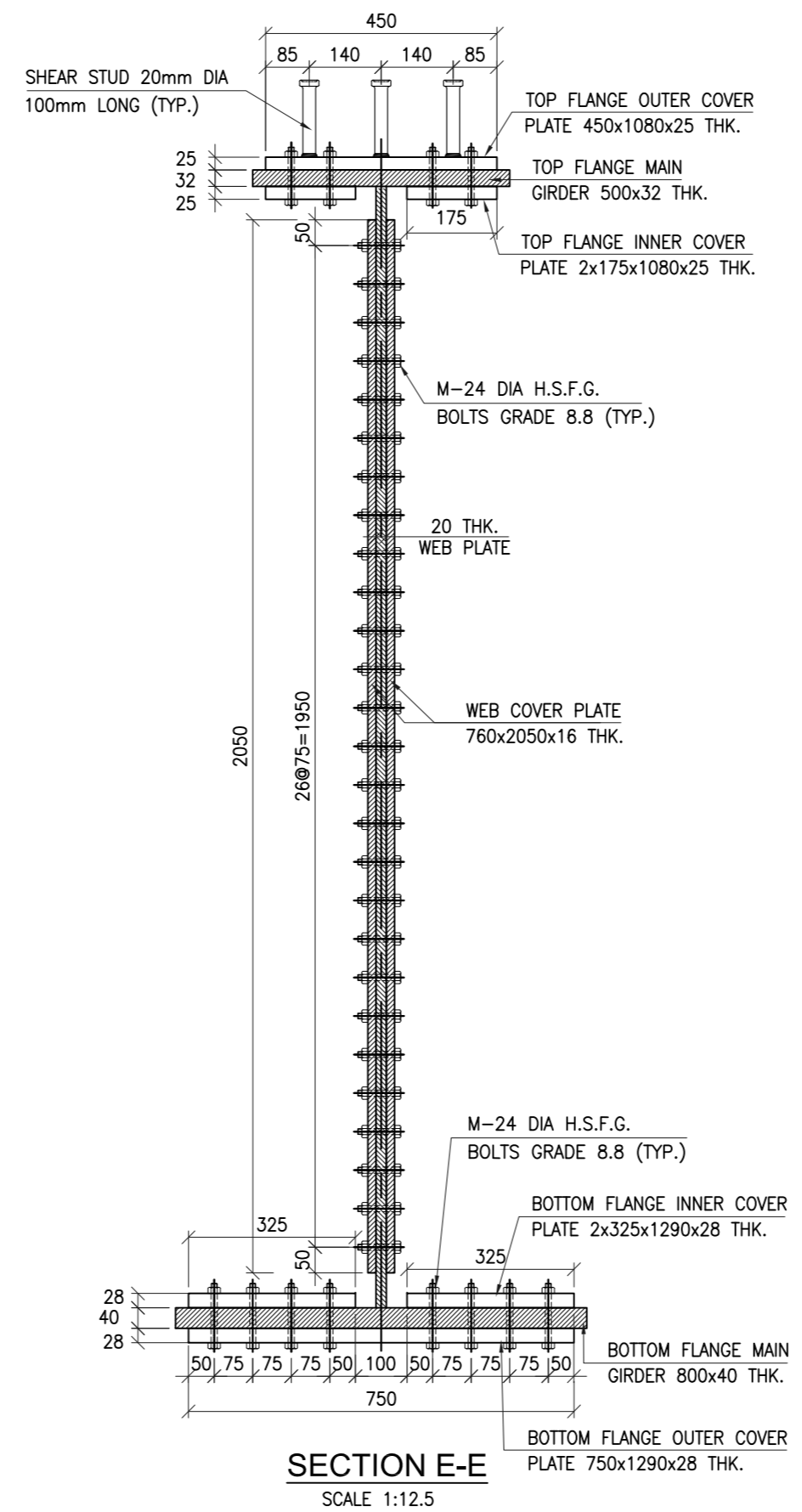
Drawing Title :
DIMENSION DETAILS OF SUPER STRUCTURE (STEEL COMPOSITE GIRDER)
 Drawing Number :
VKSIMPL/P-135/NHIDCL/MNB-01/04 (SH. 3 OF 4)
 Scale :
AS SHOWN
 Drawn By : SKG Designed By : AK Checked By : ARK Date : June, 2022

Design Consultant :
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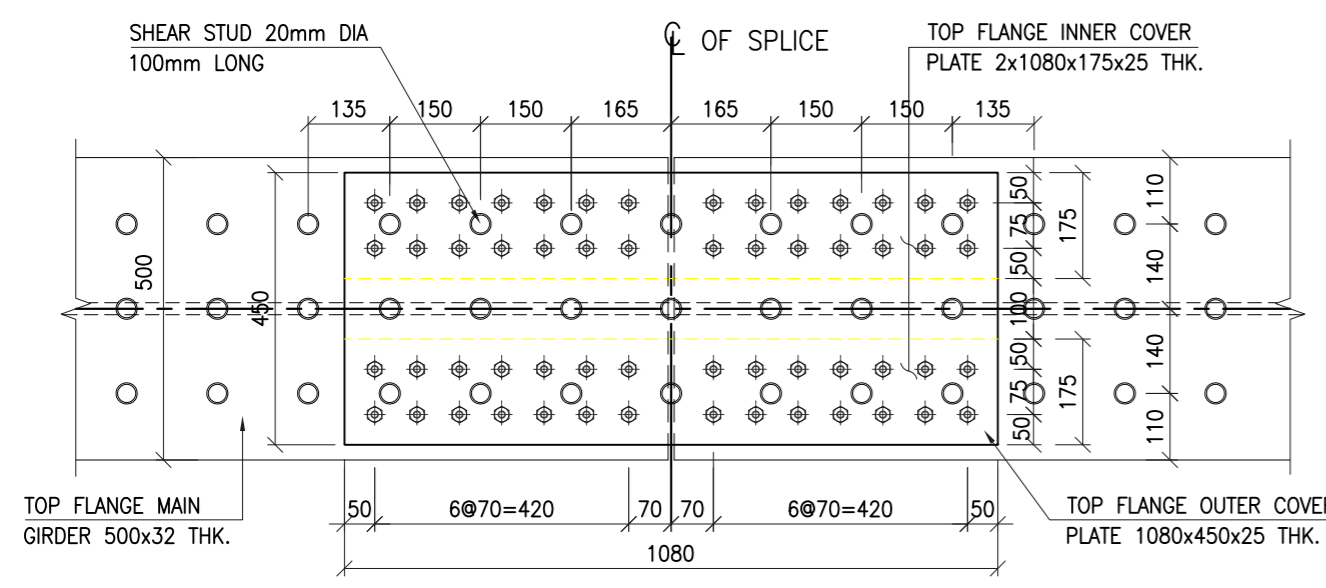
Revision	By	Date	Suffix



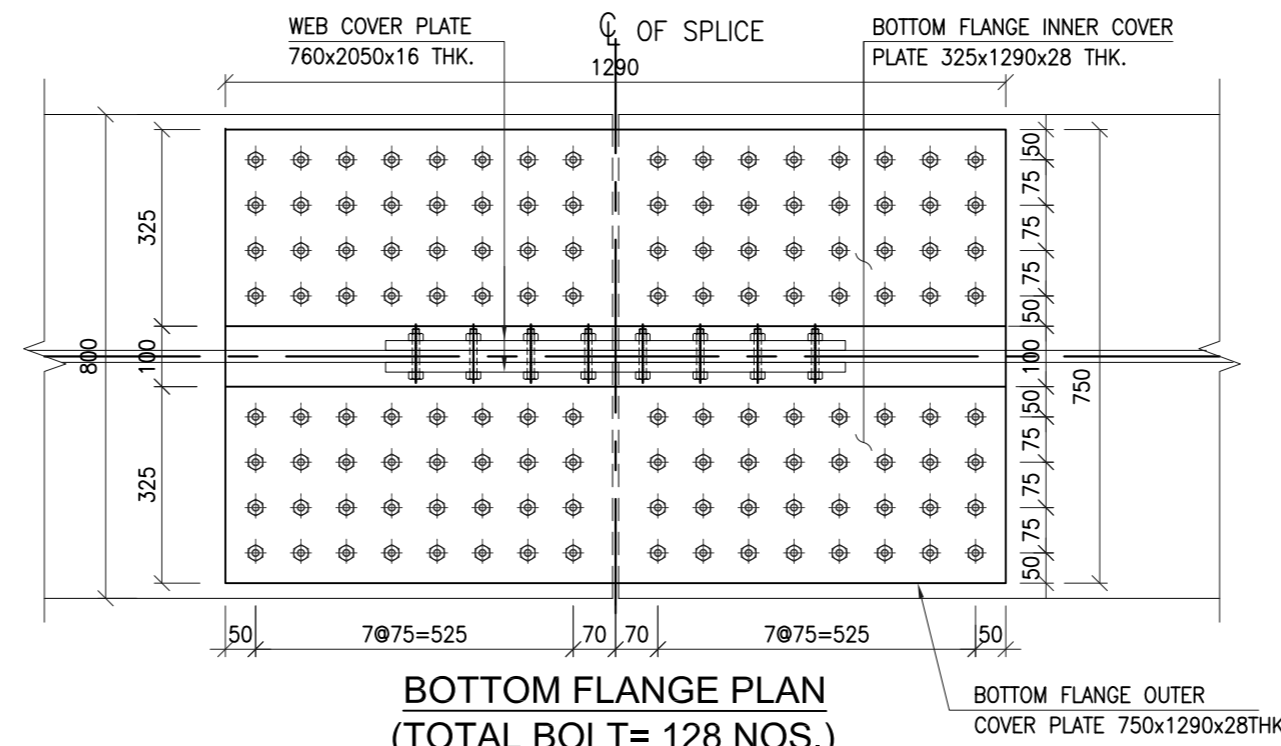
ELEVATION
(TOTAL BOLT= 216 NOS.)
SCALE 1:12.5



SECTION E-E
SCALE 1:12.5



TOP FLANGE PLAN
(TOTAL BOLT= 56 NOS.)
SCALE 1:12.5



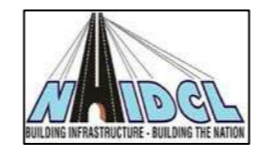
BOTTOM FLANGE PLAN
(TOTAL BOLT= 128 NOS.)
SCALE 1:12.5

NOTES:-
COMPOSITE SUPERSTRUCTURE :

- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS IN METERS.
- DIMENSIONS ARE NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
- STRUCTURE STEEL
 - STEEL PLATE GIRDER HIGH STRENGTH STEEL (GRADE E-350 (Fe490) BO CONFORMING TO IS : 2062 - 2011)
 - STIFFENERS & BRACING HIGH STRENGTH STEEL GREATER THAN OR EQUAL TO PARENT METAL CONFORMING TO IS : 2062 - 2011)
- DECK SLAB SHALL BE OF CONCRETE GRADE M-40 MIX.
- POT-PTFE BEARINGS SHALL BE USED.
- BOLTS:-
 - FOR SPlicing - 24φ BOLTS.
 - FOR BRACINGS & STIFFENERS - 24φ BOLTS
- BOLTS ACTING IN FRICTION
 - HSFG - BOLTS, ACTING IN FRICTION TO CONFORM WITH BS:5400-3. THE NOMENCLATURE OF THESE BOLTS, WHILST BEING DESCRIBED IN DRAWINGS IS TO FOLLOW IS : 4000 - 1992.
 - SLIP FACTORS FOR FAYING SURFACES TO CONFORM TO BS : 5400 PART 3.
- BOLTS ACTING IN TENSION
 - HSFG - BOLTS, NOT ACTING IN FRICTION BUT PRE STRESSED TO PREVENT LOOSENING OF BOLTS/NUTS DUE TO VIBRATION TO CONFORM TO IS : 3757-1985. GR 8.8 BOLTS. DESIGN TO CONFORM TO BS : 5400 PART-3. BUT AT ULS ONLY.
- WELDING CONSUMABLES
 - THE WELDING CONSUMABLES TO CONFORM TO IS : 814-1991 AND OF STRENGTH REQUIREMENTS APPROPRIATE FOR PREHEATED HT STEEL OR UN-HEATED MILD STEEL.
- ALL FILLET WELDS ARE TO BE EXAMINED BY DYE PENETRANT TEST OR ANY EQUALLY EFFECTIVE NON DESTRUCTIVE TEST METHOD.
- ALL WELDS TO BE MADE BY WELDERS USING APPROVED WELDING PROCEDURES.
- MEMBERS SHALL BE RIGIDLY SECURED IN JIGS & FIXTURES WITH TEMPORARY BOLTS DURING WELDING TO AVOID DISTORTION.
- DURING WELDING POSITION OF MEMBERS AND ASSEMBLY SHOULD BE SUCH THAT OVERHEAD WELDING SHALL BE AVOID/ MINIMISED.
- FABRICATION SHALL BE DONE AS PER IRC: 24, IS: 816 & IS: 1024.
- ALL THE MEMBERS MEETING AT A JOINTS SHOULD BE CONNECTED AS PER DETAILS.
- ALL STRUCTURAL ROLLED SECTIONS & BUILT UP SECTIONS STEEL SHALL CONFORM TO IS: 2062.
- ALL BRACING GUSSETS SHALL BE 12 THICK UNLESS SPECIFIED OTHERWISE.
- PAINTING OF STEEL STRUCTURE SHOULD BE DONE IN ACCORDANCE WITH MORTH SPECIFICATIONS FOR ROADS & BRIDGES REVISION IV.
- ALL OBTUSE ANGLE CUTTING SHOULD BE DONE IN PROPER SHAPE AND WITHOUT DAMAGE.
- OVERHANGING MEMBER TO BE SUITABLY SUPPORTED TO AVOID DISTORTION DURING TRANSPORTATION.
- IN CASE THE MEMBERS OF SPECIFIED LENGTH ARE NOT AVAILABLE, SPLICE JOINTS TO BE PROVIDED AFTER PRIOR APPROVAL OF ENGINEER IN-CHARGE.
- MILD STEEL SHEAR STUD ARE PROPOSED.
- THE GRADE OF THE ELECTRODE SHALL BE GREATER THAN OR EQUAL TO THE PARENT METAL.
- ALL DIMENSIONS SHALL BE VERIFIED BEFORE EXECUTION OF WORK & RECONCILED AT SITE.
- THE DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET 1, 2 & 3 OF 4 OF THIS DRAWING.

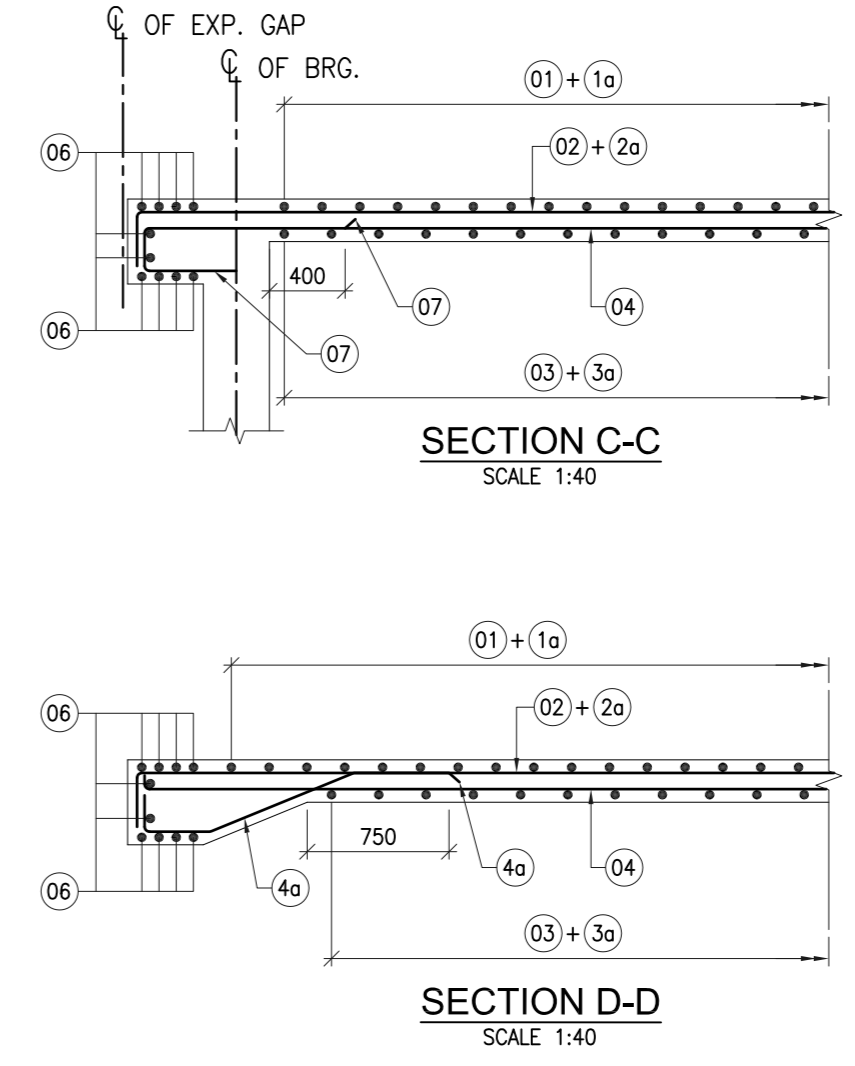
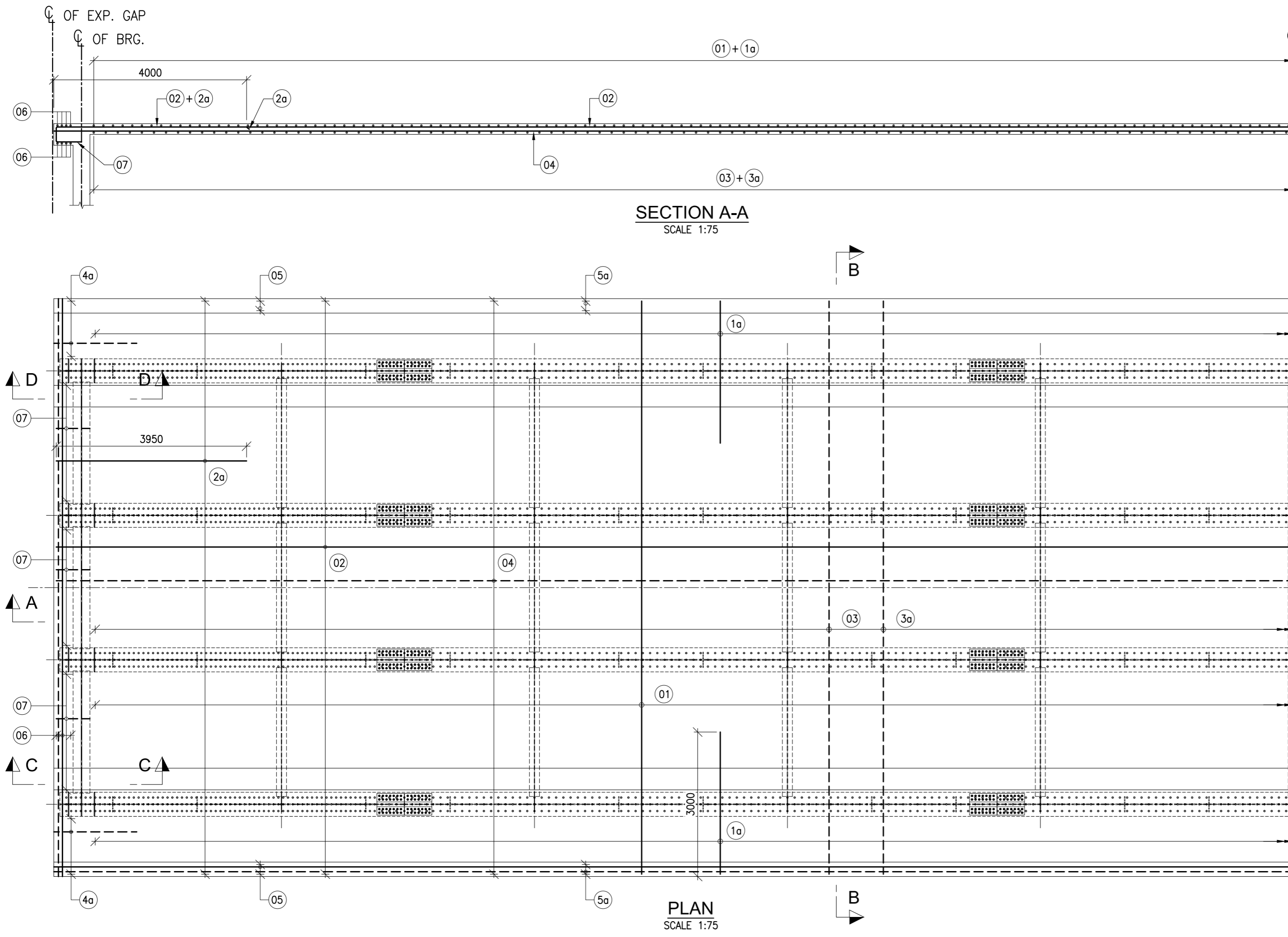
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Project Title :
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Client :

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Drawing Title :
DIMENSION DETAILS OF SUPER STRUCTURE (STEEL COMPOSITE GIRDER)
Drawing Number :
VKSIMPL/P-135/NHIDCL/MNB-01/04 (SH. 4 OF 4)
Scale :
AS SHOWN
Drawn By : SKG
Designed By : AK
Checked By : ARK
Date : June, 2022

Design Consultant :
 **VKS INFRA TECH MANAGEMENT PVT. LTD.**
Consulting Engineers, Planners & Managers
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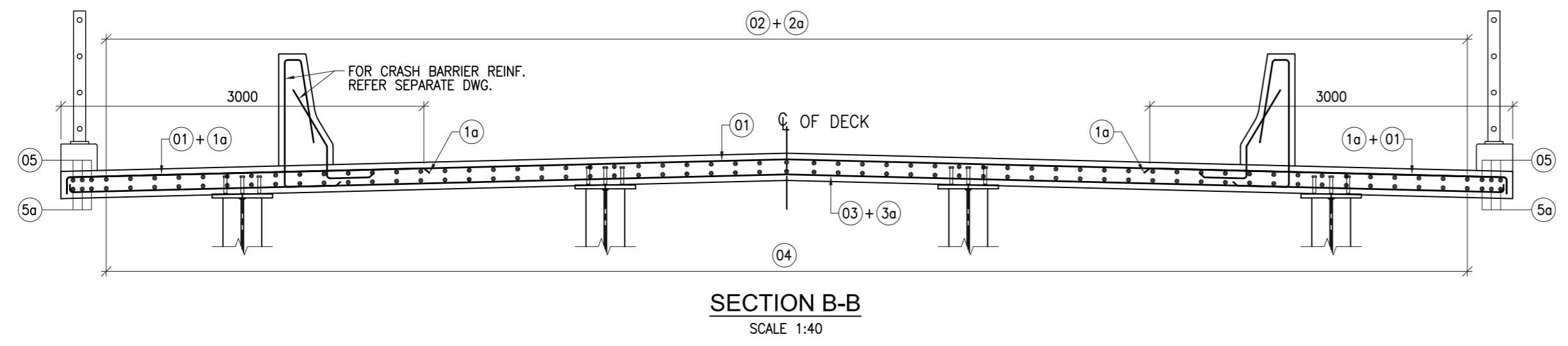
SCHEDULE OF REINFORCEMENT

BAR MARK	SHAPE	DESCRIPTION
01		Φ16@200c/c ALTERNATE WITH 01a
1a		Φ10@200c/c ALTERNATE WITH 01
02		Φ10@200c/c ALTERNATE WITH 02a
2a		Φ12@200c/c ALTERNATE WITH 02
03		Φ10@250c/c
3a		Φ16@250c/c
04		Φ12@250c/c
4a		Φ12@200c/c
05		4 NOS-Φ16
5a		4 NOS-Φ16
06		10 NOS-Φ16 LENGTH AND SHAPE VARIES
07		Φ10@200c/c

LEGEND:-

TOP REINFORCEMENT	
BOTTOM REINFORCEMENT	

- NOTES:-**
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
 - DIMENSIONS ARE NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
 - CONCRETE SHALL BE DESIGN MIX WITH A MINIMUM 28 DAYS CHARACTERISTIC STRENGTH OF:
 - DECK SLAB M35
 - THE REINFORCING BARS SHALL BE OF THERMO MECHANICALLY TREATED TMT HYSD BARS GRADE DESIGNATION Fe-500D.
 - CLEAR COVER TO OUTERMOST STEEL IS 45 mm.
 - BARS SHALL BE LAPPED IN SUCH A WAY THAT NOT MORE THAN 50% OF THE BARS ARE LAPPED AT ANY SECTION FOR LAP LENGTH. MINIMUM LAP LENGTH FOR REINFORCEMENT SHALL BE 52XD FOR FAVOURABLE BOND CONDITION AND 64XD FOR UNFAVOURABLE BOND CONDITION. WHERE 'D' IS THE DIAMETER OF SMALLER BAR. FAVOURABLE AND UNFAVOURABLE BOND CONDITION SHALL BE AS PER CLAUSE 15.2.3 OF IRC:112.



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Client :

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 Ministry of Road Transport & Highways, Government of India

Drawing Title :
REINFORCEMENT DETAILS OF DECK SLAB
 Drawing Number :
 VKSIMPL/P-135/NHIDCL/MNB-01/05
 Scale :
 AS SHOWN
 Drawn By : SKG Designed By : AK Checked By : ARK Date : June, 2022

Design Consultant :

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