

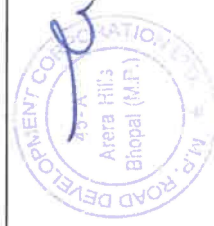
MADHYA PRADESH ROAD DEVELOPMENT CORPORATION LIMITED

No. 15069/664/Proc./MPRDC/NDB/CW/2024 Date: 24/02/2025

Reply of Pre-bid queries for Upgradation of Civil Work Packages 10, 11, 12 & 13 under proposed NDB Loan in the state of Madhya Pradesh

NIT No. 12513/664/Proc./MPRDC/NDB/CW/2024 Dated 24.12.2024

S.No	Page No./Clause	As per Document	Queries/Request	Reply of MPRDC
1	Schedule-B Cl 7. Design of Structures	-	The span arrangement has been provided in Section 7 of the EPC Agreement. However, based on site conditions, the span arrangement may need to be changed. Can it be modified during execution/	As per Schedule B & Schedule D of the agreement.
2	Schedule-B Cl 7. Design of Structures	-	Further, the GAD's of Major Bridge are missing in the tender documents	Please refer S. No.-2 of Addendum-3
3	RFP document Clause 1.2.4	-	With reference of the MoRTH Circular no. NH-24028/14/2014-H(Vol-II) (E-134863) dated 31.05.2023, the Hon'ble Minister (RT&H) has issued the approval of inclusions of provisions of Surety Bonds as 'Bid Security' and 'Performance Security' in the EPC Project. Therefore, the provision of Surety Bonds as 'Bid Security' shall be included in the RFP documents.	Not Accepted
4	Schedule-H	-	As per MoRTH Circular dated 11 th October, 2024, the competent Authority has accorded approval for the 'Amendment in Schedule H of the MCA for EPC projects'. Does the amendment is applicable for the Schedule-H	Please refer S. No.-1 of Addendum-3



MADHYA PRADESH ROAD DEVELOPMENT CORPORATION LIMITED

S.No	Page No./Clause	As per Document	Queries/Request	Reply of MPRDC
5	-	-	<p>We are writing with regard to the above-mentioned subject. We kindly request clarification on whether the latest circular issued by the Government of Madhya Pradesh, bearing reference number F-53/02/2011/Yo/19/524, dated 14.02.2025, will be applicable to the referenced work.</p> <p>Specifically, we seek confirmation on whether the conditions outlined in the circular will apply to this project, as this will enable us to prepare our bid accordingly, the circular is attached with this letter for your reference.</p> <p>Additionally, we respectfully request an extension of the bid submission deadline by 15 days to ensure fair participation.</p>	Not accepted
6	-	-		Please refer S. No.-3 of Addendum-3



Chief Engineer
(Procurement)
MPRDC Bhopal



M.P. Road Development Corporation Ltd.

(M.P. State Highway Authority)

(Govt. of M.P. Undertaking)

45-A, Arera Hills, Bhopal-462011

☎ : 0755-2597290 / 2765205 Fax : 0755-2572643, Website : mprdc.gov.in

No. 15069 /664/Procu./MPRDC/NDB/CW/2024

Date 24 /02/2025

ADDENDUM-3

NIT No. 12513/664/Procu./MPRDC/NDB/CW/2024 Dated 24.12.2024

Upgradation of Civil Work Packages 10, 11, 12 & 13 under proposed NDB Loan in the state of Madhya Pradesh

1. The Schedule H of Package No. 10, 11, 12 & 13 are hereby replaced with Revised Schedule H, which is enclosed herewith.
2. The GAD for Minor Bridge at Ch. 31+480 & GAD of Major Bridge at Ch. 19+695 for Package No. 10: Upgradation of Gadasarai-Pandariya Road (CG Border) are enclosed herewith.
3. The following key dates for Package No. 10, 11, 12 & 13 are hereby extended as mentioned below:

The End Date & Time of Document Sale : 4th March 2025 upto 15:30 Hrs IST

The End Date & Time of Bid Submission : 4th March 2025 upto 15:30 Hrs IST

The Date & Time for opening of Technical Bid : 5th March 2025 at 15:30 Hrs IST

This Addendum – 3 shall take precedence over the previously issued Addenda and Bid documents. This Addendum – 3 shall form part of the contract agreement.

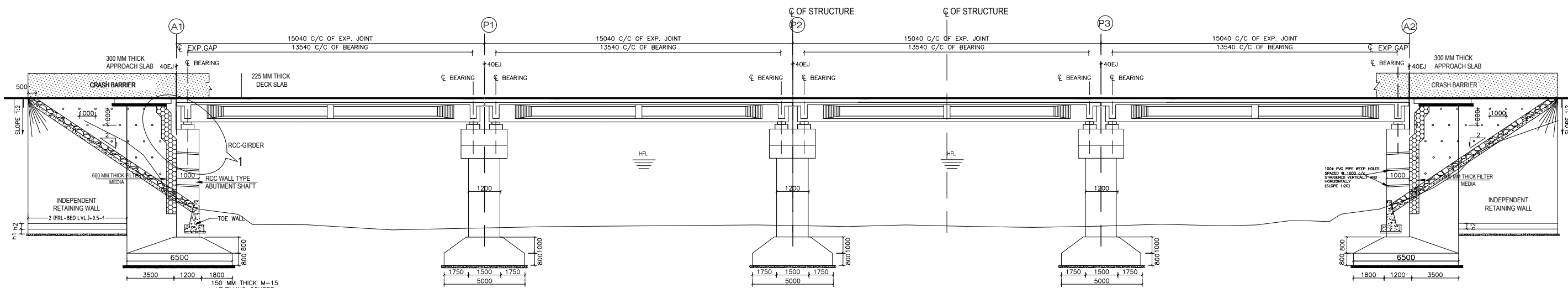
Encl: As Above.

**Chief Engineer
(Procurement)**

MPRDC, Bhopal

Tel: 0755-2597216

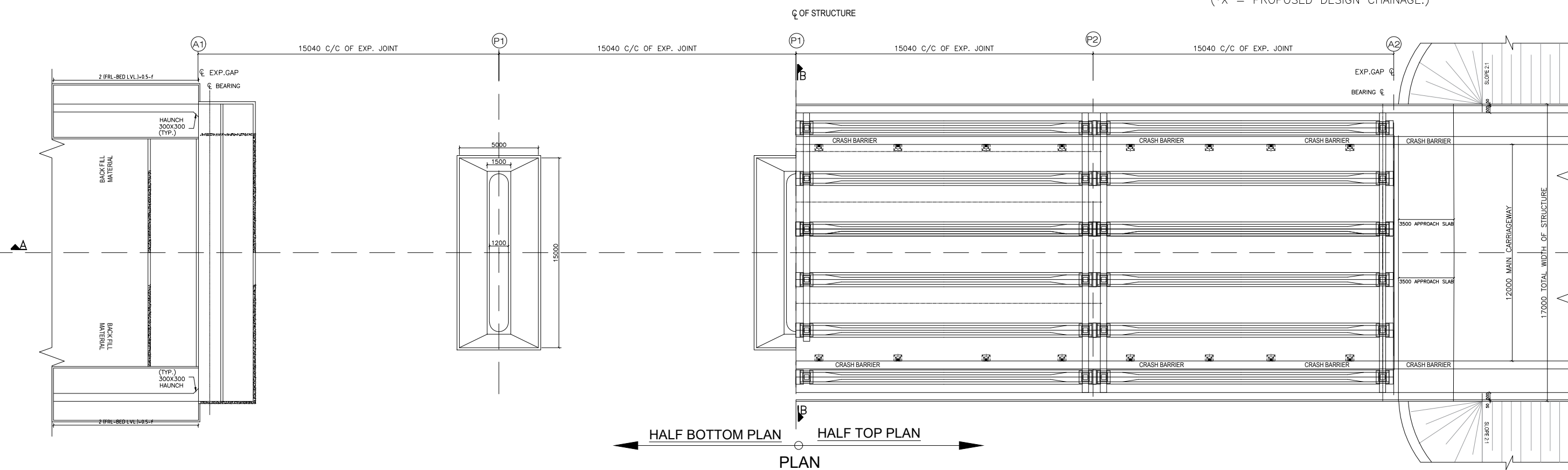
Email: procu-mprdc@mp.gov.in



LONGITUDINAL ELEVATION

FRL (IN M)	774.314	774.314	774.314	774.314	774.314
GROUND LEVEL	770.991	769.466	768.200	769.987	770.159
FOUNDING LEVEL	766.300	766.300	766.300	766.300	766.300
CHAINAGE (M.)	X-30.00	X-15.00	X=0.00	X+15.00	X+30.00

(*X = PROPOSED DESIGN CHAINAGE.)



PLAN

NOTES:-

ALL CHAINAGES AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.

PROJECT:

CONSULTANCY SERVICES FOR PREPARATION OF FEASIBILITY / DETAILED PROJECT REPORT FOR 2-LANE WITH PAVED SHOULDER OF GADASARAI - PANDARIYA ROAD SH-44 UNDER PKG-E IN THE STATE OF MADHYA PRADESH (DESIGN LENGTH- 47.320 KM).

DRAWN BY SM

APPROVED BY RM

REVISION - R0

SHEET- 01 OF 02

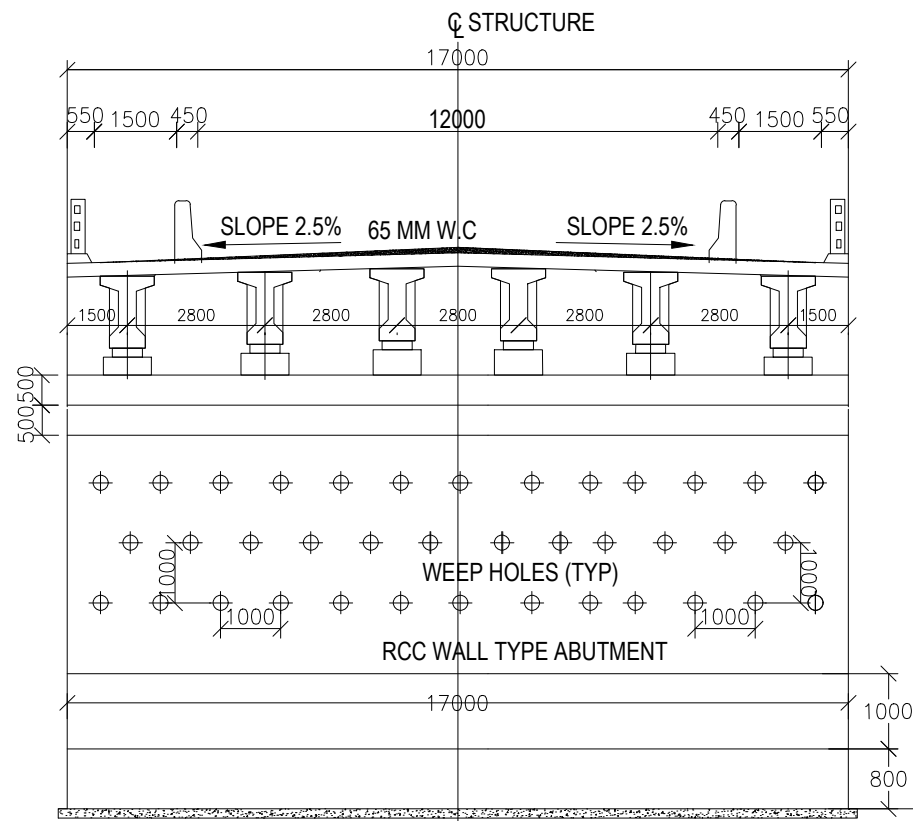
JUL- 2024

SIZE - A3

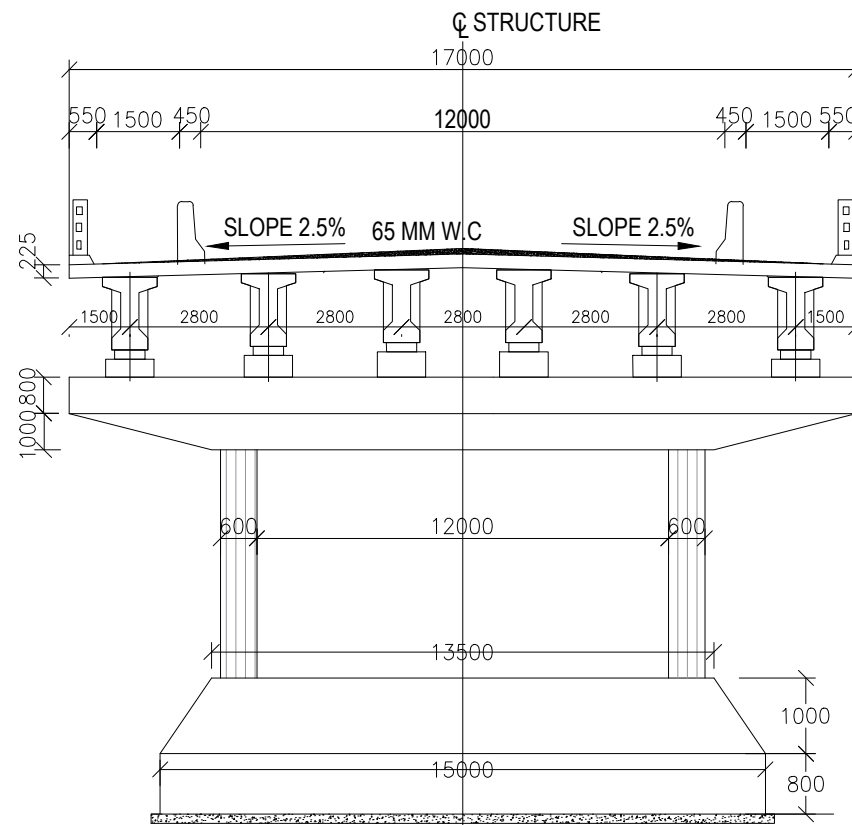
DRG. NO.- MPRDC/GADASARAI-PANDARIYA/PKG-E/GAD/MJB/1

TITLE:-

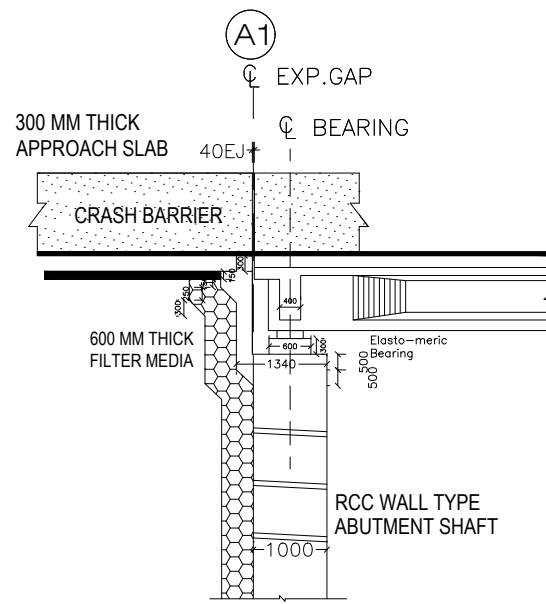
GENERAL ARRANGEMENT DRAWING OF MAJOR BRIDGE OF SPAN 4X15.0M AT DE. CH. 19+695



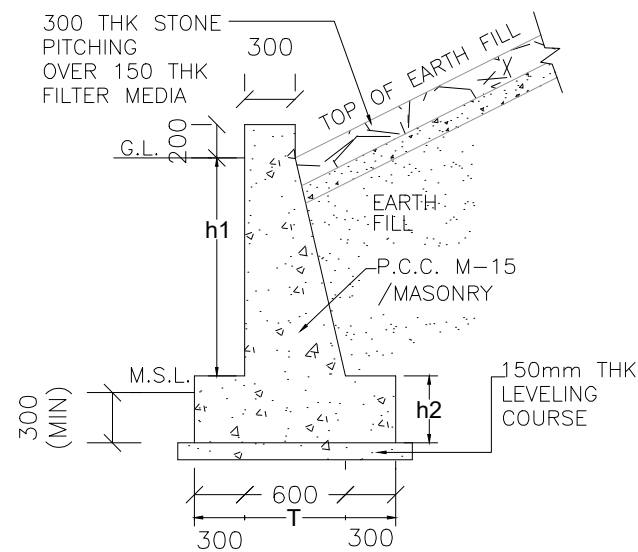
SECTION OF ABUTMENT- A-A



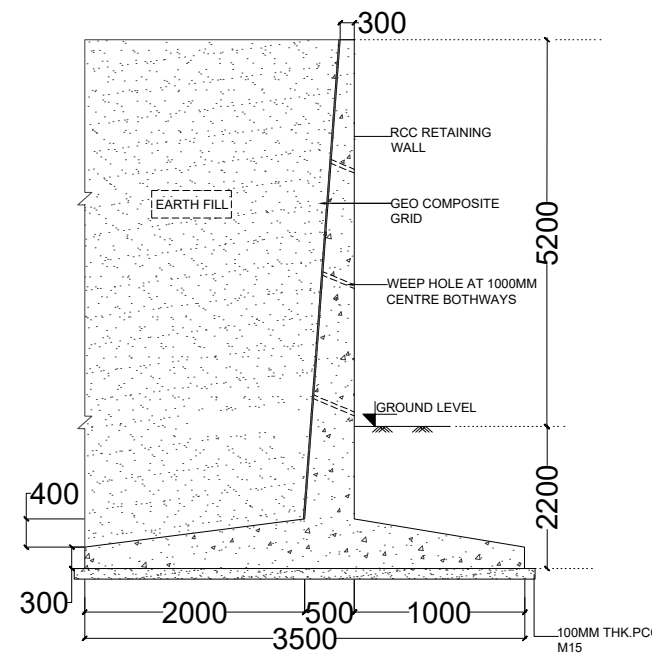
SECTION OF PIER B-B



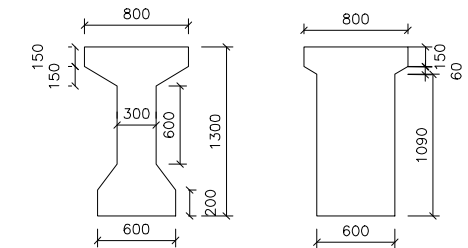
DETAIL OF 1



TOE WALL SECTION



RETAINING WALL DIMENTION DETAIL



AT MID AT SUPPORT
DETAILS OF RCC GIRDER
(SCALE 1:30)

NOTES:-

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED. LEVELS ARE IN METERS.
- DIMENSIONS ARE NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
- SAFE LOAD CARRYING CAPACITY AT FOUNDING LEVEL SHALL BE NOT BE LESS THAN 35T/M
- GRADE OF CONCRETE :
PCC LEVELING COURSE M-15 SLAB/GIRDER M-35
SUB STRUCTURE M-35 CRASH BARRIER M-40
ABUTMENT CAP M-35 RETURN WALL M-35
PIER CAP M-35 APPROACH SLAB M-30
PIER M-35
DIRT WALL M-35
- REINFORCEMENT H.Y.S.D. BARS CONFORMING TO IS:1786 GRADE Fe 500D.
- THE BRIDGE HAS BEEN DESIGNED FOR CLASS A-2 LANE OR CLASS 70R W/T CLASS A LOADING WHICH EVER PRODUCE WORST EFFECT.
- WEEP HOLES AT 1000 C/C BOTH HORIZONTALLY & VERTICALLY IN A STAGGERED MANNER IN ABUTMENT AND RETURN WALLS FROM BED LEVEL TO ABUTMENT CAP LEVEL.
- BACK FILL PARAMETERS ASSUMED ARE $c=0$, $\phi > 30^\circ$. DRY DENSITY = 20 kN/m^3
- CLEAR COVER TO ANY REINFORCEMENT
IN FOUNDATION = 75mm
IN SUB STRUCTURE = 50mm
IN SUPERSTRUCTURE = 40mm
- WEARING COAT SHALL BE 65mm THK BITUMINOUS CONCRETE.
- FRL, CAMBER/ SUPERELEVATION & LAYOUT SHALL BE FOLLOWED AS PER LATEST PLAN & PROFILE DRAWING.
- THE 600 mm TH. FILTER MEDIA BEHIND ABUTMENT SHALL BE MINIMUM 500 mm BELOW EXISTING GROUND LEVEL.
- DRAINAGE SPOUT SHALL BE PROVIDED IN DECK SLAB AS PER MORTH.
- BACK FILLING BEHIND ABUTMENT SHALL BE COMPLETED BEFORE RESTING THE SUPERSTRUCTURE.
- DEPTH OF FOUNDATION SHALL BE VARY AS PER CONFIRMATIVE BORE LOG CONDUCTED BY EXECUTED AGENCY.
- DIMENSIONS SHOWN ARE TENTATIVE, MAY LIKELY TO CHANGE DURING DETAIL DESIGN.
- TAR PAPER BEARING SHALL BE PROVIDED BELOW APPROACH SLAB/MAIN SLAB RESTING ON BRACKET.
- BEARING TYPE : ELASTOMERIC BEARING.
- 20 mm THK. STRIP SEAL EXPANSION JOINT SHALL BE PROVIDED IN BETWEEN APPROACH SLAB & DIRT WALL.
- FRL, BED, SHALL BE VERIFIED AS PER APPROVED PLAN AND PROFILE BEFORE CONSTRUCTION.
- ANGULAR FILLING SHOULD BE PROVIDED IF FOUNDATION REST IN HARD ROCK CUTTING.

LEGEND:-

- E.J. - EXPANSION JOINT
- LVL. - LEVEL
- FRL. - FINISHED ROAD LEVEL
- THK. - THICK
- GL. - GROUND LEVEL
- C.J. - CONSTRUCTION JOINT
- HFL. - HIGH FLOOD LEVEL
- U/S - UP STREAM
- D/S - DOWN STREAM

NOTES:-

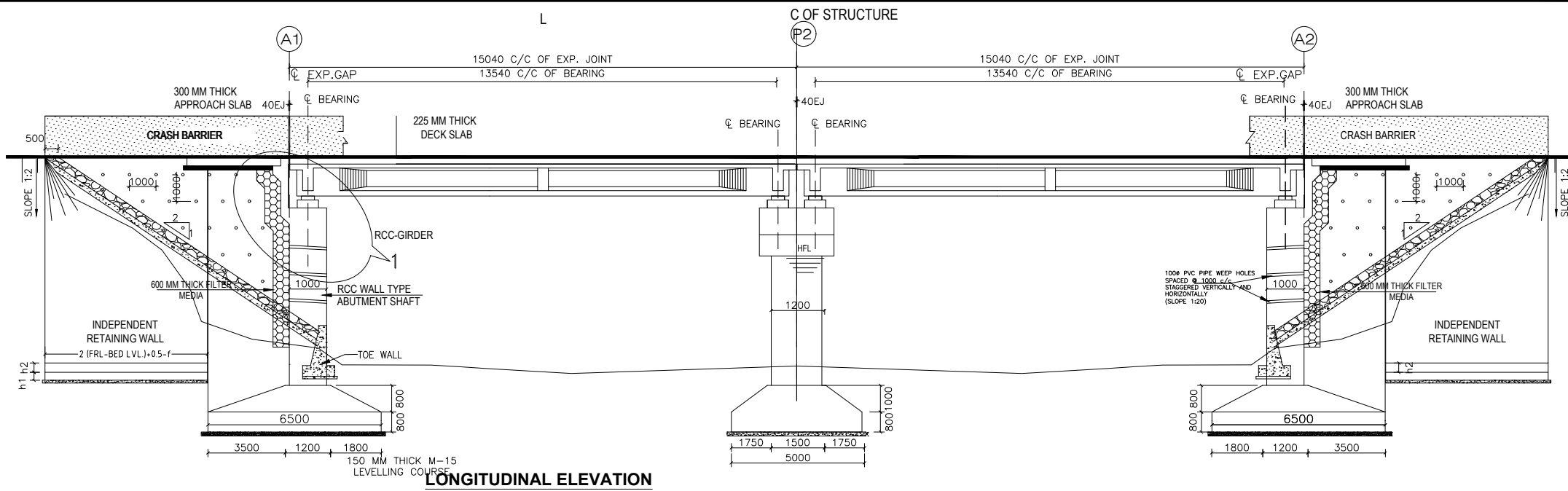
ALL CHAINAGES AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.

PROJECT:

CONSULTANCY SERVICES FOR PREPARATION OF FEASIBILITY / DETAILED PROJECT REPORT FOR 2-LANE WITH PAVED SHOULDER OF GADASARAI - PANDARIYA ROAD SH-44 UNDER PKG-E IN THE STATE OF MADHYA PRADESH (DESIGN LENGTH- 47.320 KM).

DRAWN BY	SM
APPROVED BY	RM

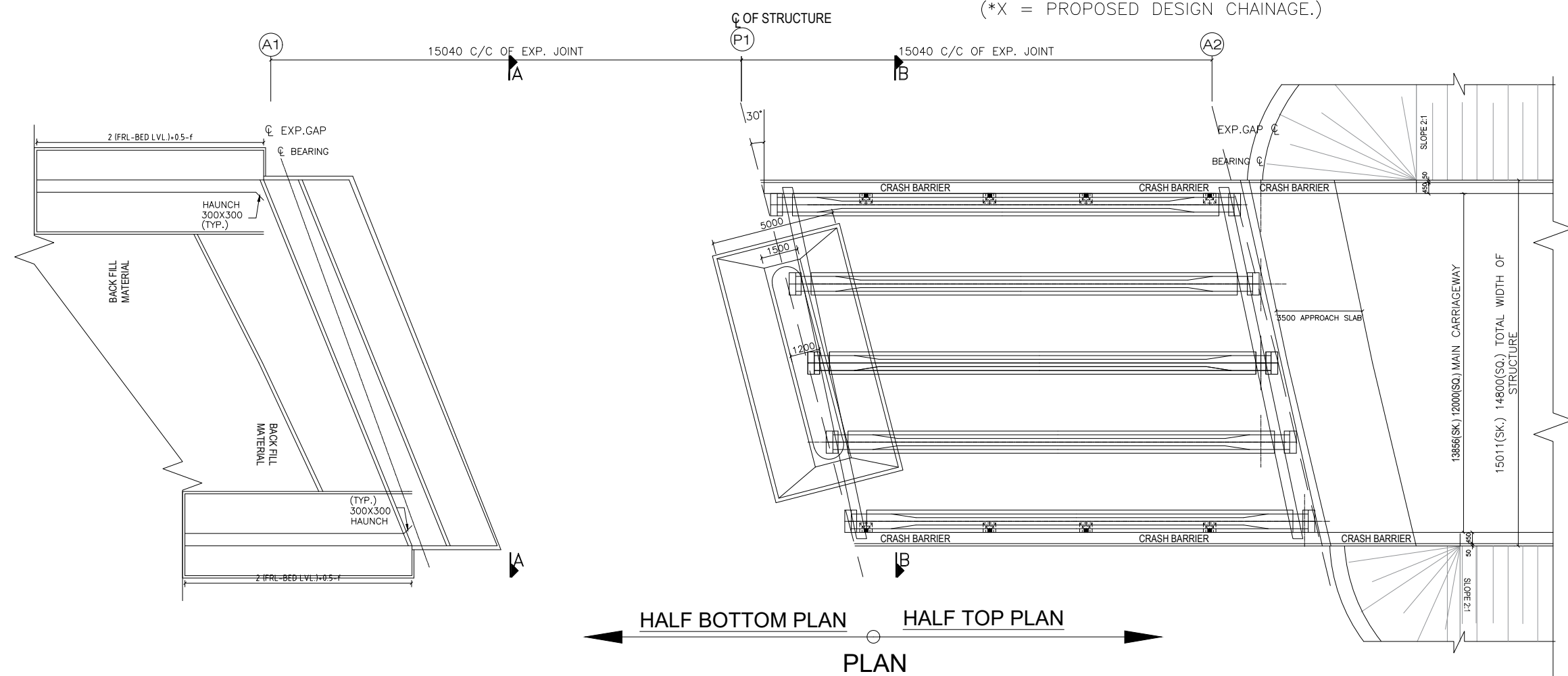
REVISION - R0	TITLE:-
SHEET- 02 OF 02	GENERAL ARRANGEMENT DRAWING OF MAJOR BRIDGE OF SPAN 4X15.0M AT DE. CH. 19+695
DEC- 2024	
SIZE - A3	
DRG. NO.- MPRDC/GADASARAI-PANDARIYA/PKG-E/GAD/MJB/1	



LONGITUDINAL ELEVATION

FRL (IN M)	863.987	864.131	864.301
GROUND LEVEL	861.273	859.591	863.427
FOUNDING LEVEL	856.300	856.500	856.620
CHAINAGE (M.)	X-15.00	X+0.00	X+15.00

(*X = PROPOSED DESIGN CHAINAGE.)



PLAN

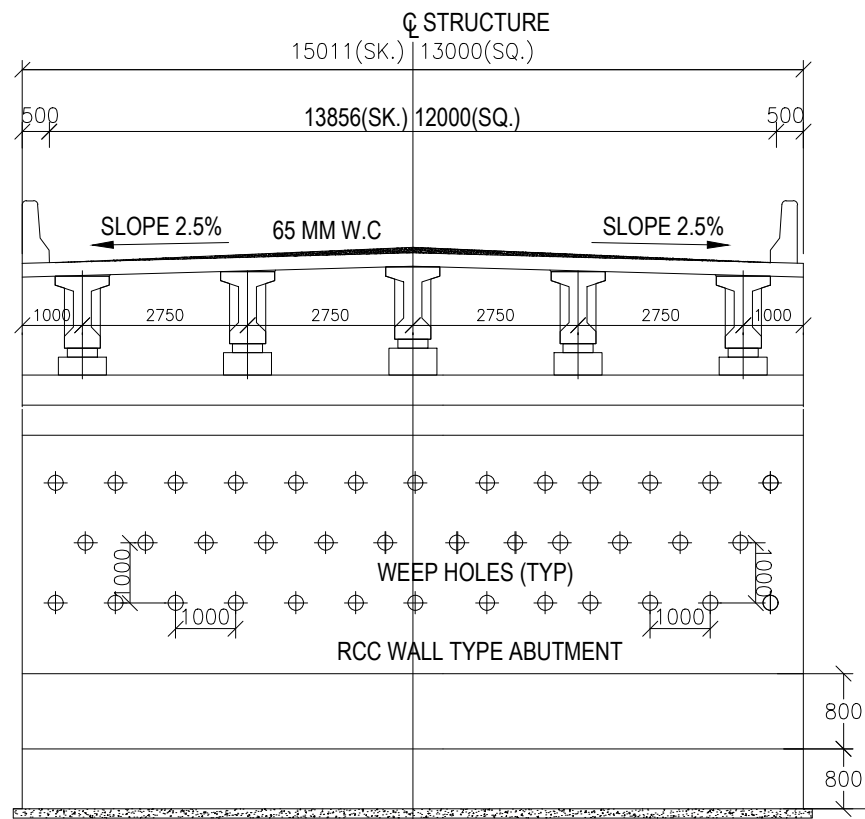
NOTES:-
ALL CHAINAGES AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.

PROJECT:
CONSULTANCY SERVICES FOR PREPARATION OF FEASIBILITY / DETAILED PROJECT REPORT FOR 2-LANE WITH PAVED SHOULDER OF GADASARAI - PANDARIYA ROAD SH-44 UNDER PKG-E IN THE STATE OF MADHYA PRADESH (DESIGN LENGTH- 47.320 KM).

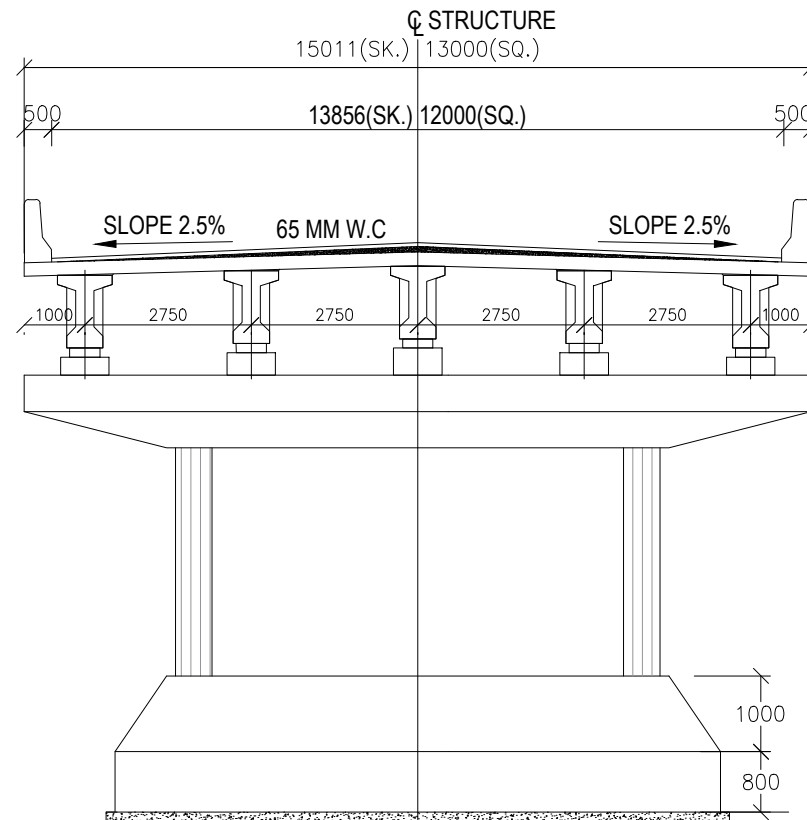
DRAWN BY SM
APPROVED BY RM

REVISION - R0
SHEET- 01 OF 02
JUL- 2024
SIZE - A3

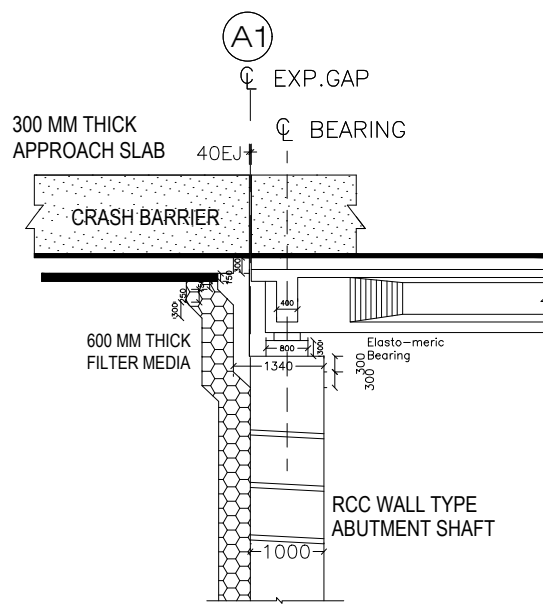
TITLE:-
GENERAL ARRANGEMENT DRAWING OF MINOR BRIDGE OF SPAN 2X15.0M OF 30° SKEW AT DE. CH. 31+480
DRG. NO.- MPRDC/GADASARAI-PANDARIYA/PKG-E/GAD/MNB/2



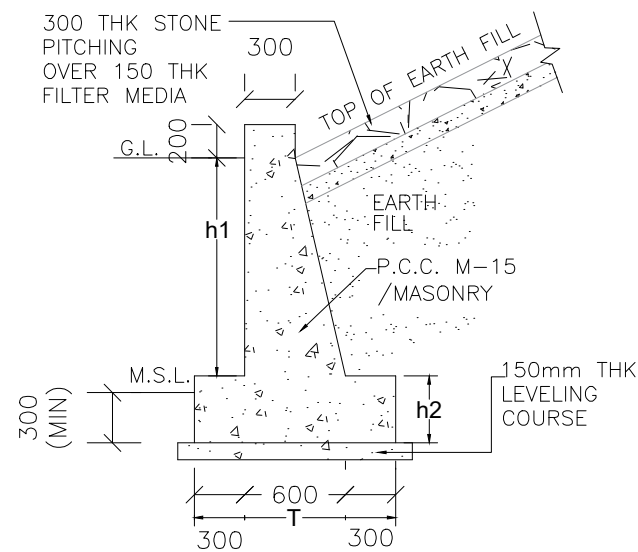
SECTION OF ABUTMENT- A-A



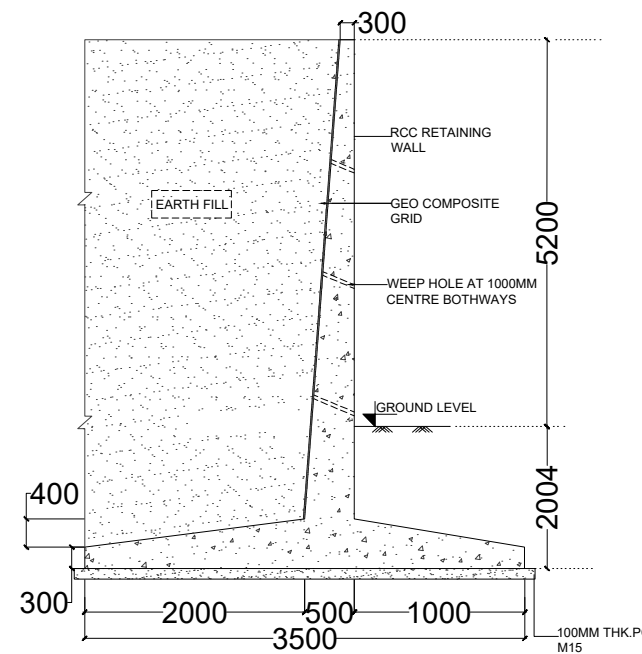
SECTION OF ABUTMENT- A-A



DETAIL OF 1



TOE WALL SECTION



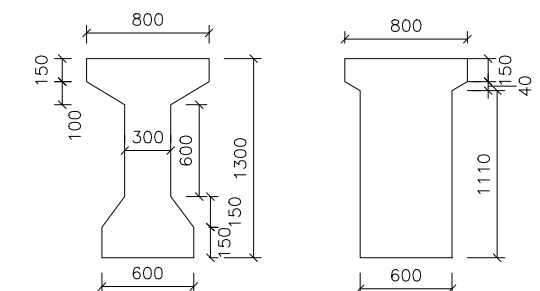
RETAINING WALL DIMENTION DETAIL

NOTES:-

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED. LEVELS ARE IN METERS.
- DIMENSIONS ARE NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
- SAFE LOAD CARRYING CAPACITY AT FOUNDING LEVEL SHALL BE NOT BE LESS THAN 35T/M
- GRADE OF CONCRETE :
 PCC LEVELING COURSE M-15 SLAB/GIRDER M-35
 SUB STRUCTURE M-35 CRASH BARRIER M-40
 ABUTMENT CAP M-35 RETURN WALL M-35
 PIER CAP M-35 APPROACH SLAB M-30
 PIER M-35
 DIRT WALL M-35
- REINFORCEMENT H.Y.S.D. BARS CONFORMING TO IS:1786 GRADE Fe 500D.
- THE BRIDGE HAS BEEN DESIGNED FOR CLASS A-2 LANE OR CLASS 70R W/T CLASS A LOADING WHICH EVER PRODUCE WORST EFFECT.
- WEEP HOLES AT 1000 C/C BOTH HORIZONTALLY & VERTICALLY IN A STAGGERED MANNER IN ABUTMENT AND RETURN WALLS FROM BED LEVEL TO ABUTMENT CAP LEVEL.
- BACK FILL PARAMETERS ASSUMED ARE $c=0$, $\phi > 30^\circ$.
 DRY DENSITY = $20kN/m^3$
- CLEAR COVER TO ANY REINFORCEMENT
 IN FOUNDATION = 75mm
 IN SUB STRUCTURE = 50mm
 IN SUPERSTRUCTURE = 40mm
- WEARING COAT SHALL BE 65mm THK BITUMINOUS CONCRETE.
- FRL, CAMBER/ SUPERELEVATION & LAYOUT SHALL BE FOLLOWED AS PER LATEST PLAN & PROFILE DRAWING.
- THE 600 mm TH. FILTER MEDIA BEHIND ABUTMENT SHALL BE MINIMUM 500 mm BELOW EXISTING GROUND LEVEL.
- DRAINAGE SPOUT SHALL BE PROVIDED IN DECK SLAB AS PER MORTH.
- BACK FILLING BEHIND ABUTMENT SHALL BE COMPLETED BEFORE RESTING THE SUPERSTRUCTURE.
- DEPTH OF FOUNDATION SHALL BE VARY AS PER CONFIRMATIVE BORE LOG CONDUCTED BY EXECUTED AGENCY.
- DIMENSIONS SHOWN ARE TENTATIVE, MAY LIKELY TO CHANGE DURING DETAIL DESIGN.
- TAR PAPER BEARING SHALL BE PROVIDED BELOW APPROACH SLAB/MAIN SLAB RESTING ON BRACKET.
- BEARING TYPE : ELASTOMERIC BEARING.
- 20 mm THK. STRIP SEAL EXPANSION JOINT SHALL BE PROVIDED IN BETWEEN APPROACH SLAB & DIRT WALL.
- FRL, BED, SHALL BE VERIFIED AS PER APPROVED PLAN AND PROFILE BEFORE CONSTRUCTION.
- ANGULAR FILLING SHOULD BE PROVIDED IF FOUNDATION REST IN HARD ROCK CUTTING.

LEGEND:-

- E.J. - EXPANSION JOINT
- LVL. - LEVEL
- FRL. - FINISHED ROAD LEVEL
- THK. - THIK
- GL - GROUND LEVEL
- C.J. - CONSTRUCTION JOINT
- HFL - HIGH FLOOD LEVEL
- U/S - UP STREAM
- D/S - DOWN STREAM



AT MID AT SUPPORT
DETAILS OF RCC GIRDER

NOTES:-

ALL CHAINAGES AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.

PROJECT:

CONSULTANCY SERVICES FOR PREPARATION OF FEASIBILITY / DETAILED PROJECT REPORT FOR 2-LANE WITH PAVED SHOULDER OF GADASARAI - PANDARIYA ROAD SH-44 UNDER PKG-E IN THE STATE OF MADHYA PRADESH (DESIGN LENGTH- 47.320 KM).

DRAWN BY	SM
APPROVED BY	RM

REVISION - R0	TITLE:-
SHEET- 02 OF 02	GENERAL ARRANGEMENT DRAWING OF
DEC- 2024	MINOR BRIDGE OF SPAN 2X15.0M OF 30° SKEW
SIZE - A3	AT DE. CH. 31+480
DRG. NO.- MPRDC/GADASARAI-PANDARIYA/PKG-E/GAD/MNB/2	

Revised Schedule-H for Package-10
(See Clauses 10.1 (iv) and 19.3)
Contract Price Weightages

- 1.1 The Contract Price for this Agreement is Rs Cr.
- 1.2 Proportions of the Contract Price for different stages of Construction of the Project Highway shall be as specified below:

Table 1.2.1

Item	Weightage in % of Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
I. Road works including Culverts, widening and repair of culverts.	55.70%	A- Widening and strengthening of existing road	
		(1) Earthwork up to top of the embankment	0.00%
		(2) Sub-Grade	0.00%
		(3) Sub-Base Course	0.00%
		(4) Non-Bituminous Base Course	0.00%
		(5) Bituminous Base Course (OTI work)	0.00%
		(6) Wearing Coat (OTI work)	0.00%
		(7) Conventional White topping (OTI work)	0.00%
		(8) Widening and repair of culverts	0.03%
		B.1- Reconstruction/ New realignment/ bypass (Flexible pavement)	
		(1) Earthwork up to top of the embankment	1.73%
		(2) Sub-Grade	3.44%
		(3) Sub-Base Course	6.59%
		(4) Non-Bituminous Base Course	11.14%
		(5) Bituminous Base Course	24.51%
		(6) Wearing Coat	12.70%
		(7) Earthen Shoulder	0.59%
		(8) PCC M-20 Shoulder	1.09%
		B.2- Reconstruction/ New realignment/ bypass (Rigid Pavement)	
		(1) Earthwork up to top of the embankment	0.47%
		(2) Sub-Grade	0.94%
		(3) Sub-Base Course	1.81%

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Item	Weightage in % of Contract Price	Stage for Payment	Percentage weightage
		(4) Dry Lean Concrete (DLC) Course	3.93%
		(5) Pavement Quality Control (PQC) Course	21.96%
		C.1- Reconstruction/ New service/ slip road (Flexible pavement)	
		(1) Earthwork up to top of the embankment	0.00%
		(2) Sub-Grade	0.00%
		(3) Sub-Base Course	0.00%
		(4) Non Bituminous Base Course	0.00%
		(5) Bituminous Base Course	0.00%
		(6) Wearing Coat	0.00%
		C.2- Reconstruction/ New Service/ slip road (Rigid Pavement)	
		(1) Earthwork up to top of the embankment	0.00%
		(2) Sub-Grade	0.00%
		(3) Sub-Base Course	0.00%
		(4) Dry Lean Concrete (DLC) Course	0.00%
		(5) Pavement Quality Control (PQC) Course	0.00%
		D -Re-Construction and New Culvert on existing road, realignment, bypass.	
		Culvert (length < 06 m)	9.07%
II. Minor Bridges/ Underpasses/ overpasses	2.18%	A.1 Widening and Repair of Minor Bridges (length > 06 m and < 60 m)	
		Minor bridges	
		(1) Foundation: On completion of the foundation work of abutments and piers	10.94%
		(2) Sub-structure: On completion of abutments and piers with abutment/ pier cap.	1.66%
		(3) Super-structure: On completion of the super-structure in all respects including wearing coat, bearings, expansion joints, handrails, crash barriers, road signs and markings, tests on completion etc. complete in all respect.	8.76%

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Item	Weightage in % of Contract Price	Stage for Payment	Percentage weightage
		(4) Approaches: On completion of approaches including wing walls/ return walls, Retaining walls, stone pitching, protection works for floor, embankment slope, etc. complete in all respect and fit for use.	0.00%
		A.2- New Minor bridges (length >6 and <60 m.)	
		(1) Foundation: On completion of the foundation work of abutments and piers	26.25%
		(2) Sub-structure: On completion of abutments and piers with abutment/ pier cap.	23.06%
		(3) Super-structure: On completion of the super-structure upto deck slab including bearings.	18.24%
		(4) Miscellaneous Works : On completion of wearing coat, expansion joint, crash barrier, railings, protection works and any remaining work associated to bridge including tests on bridge.	7.31%
		(5) Approaches: On completion of approaches including wing walls/ return walls, Retaining walls, stone pitching, protection works for floor, embankment slope etc. complete in all respect and fit for use.	3.78%
		(6) Guide Bunds and River Training Works: On completion of Guide Bunds and river Training Works complete in all respects	0.00%
		B.1 Widening and Repair of underpass/overpass	
		Underpasses/ Overpasses	0.00%
		B.2- New underpasses/ overpasses	
		(1) Foundation: On completion of the foundation work of abutments and piers	0.00%
		(2) Sub-structure : On completion of abutments and piers with abutment/ pier cap.	0.00%
		(3) Super-structure: On completion of the super-structure upto deck slab including bearing.	0.00%

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Item	Weightage in % of Contract Price	Stage for Payment	Percentage weightage
		(4) Miscellaneous Works : On completion of wearing coat, expansion joint, crash barrier, railings and any remaining work associated to bridge including tests on bridge.	0.00%
		(5) Approaches: On completion of approaches including Wing walls/ Return walls, Retaining walls/ Reinforced Earth walls, stone pitching, protection works complete in all respect and fit for use.	0.00%
III. Major Bridge(length > 60 m.) works and ROB/RUB/ elevated sections/flyovers including viaducts, if any	1.36%	A.1- Widening and repairs of Major Bridges	
		(1) Foundation	0.00%
		i) Pile Foundation	
		ii) Open Foundation	
		(2) Sub-structure	0.00%
		(3) Super structure (including Bearings)	0.00%
		(4) Wearing coat including expansion joints	0.00%
		(5) Miscellaneous items like (hand rails, crash barriers, road marking etc.)	0.00%
		(6) Wing wall/return wall	0.00%
		(7) Guide bunds, River Training work etc.	0.00%
		(8) Approach (including Retaining walls, stone pitching and protection works for floor, embankment slope etc.)	0.00%
		A.2- New Major Bridges	
		(1) Foundation	33.22%
		(i) Well Foundation	
		(ii) Pile Foundation	
		(iii) Open Foundation	
		(2) Sub-structure	29.26%
		(3) Super structure (including bearing)	27.92%
		(4) Wearing Coat including expansion joints.	4.29%
		(5) Miscellaneous items (like hand rails, crash barriers, road marking etc.)	2.31%
(6) wing wall/return wall	0.00%		

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Item	Weightage in % of Contract Price	Stage for Payment	Percentage weightage
		(7) Guide bunds, River Training work etc.	0.00%
		(8) Approaches (including Retaining walls, stone pitching and protection works for floor, embankment slope, etc.)	3.00%
		B.1-Widening and repair of	
		a)ROB	
		b)RUB	
		(1) Foundation	0.00%
		i) Pile Foundation	
		ii) Open Foundation	
		(2) Sub-structure	0.00%
		(3) Super structure (including bearing)	0.00%
		(4) Wearing Coat: (a) in case of ROB-wearing coat including expansion joints complete in all respects as specified and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified.	0.00%
		(5) Miscellaneous items like (hand rails, crash barriers, road marking etc.)	0.00%
		(6) wing wall/return wall	0.00%
		(7) Approach (including Retaining walls, stone pitching and protection works)	0.00%
		B.2 New ROB/RUB	
		a)ROB	
		b)RUB	
		(1) Foundation	0.00%
		(i) Well Foundation	
		(ii) Pile Foundation	
		(iii) Open Foundation	
		(2) Sub-structure	0.00%
		(3) Super structure (including bearing)	0.00%
		(4) Wearing Coat: (a) in case of ROB-wearing coat including expansion joints complete in all respects as specified and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified.	0.00%

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Item	Weightage in % of Contract Price	Stage for Payment	Percentage weightage
		(5) Miscellaneous items like (hand rails, crash barriers, road marking etc.)	0.00%
		(6) wing wall/return wall	0.00%
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%
		C.1-Widening and repair of Elevated section /flyovers/Grade Separators	
		(1) Foundation	0.00%
		i) Pile Foundation	
		ii) Open Foundation	
		(2) Sub-structure	0.00%
		(3) Super structure (including bearing)	0.00%
		(4) Wearing Coat including expansion joints	0.00%
		(5) Miscellaneous items like (hand rails, crash barriers, road marking etc.)	0.00%
		(6) wing wall/return wall	0.00%
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%
		C.2-New Elevated Section/Flyovers/Grade Separators	
		(1) Foundation	0.00%
		(i) Well Foundation	
		(ii) Pile Foundation	
		(iii) Open Foundation	
		(2) Sub-structure	0.00%
		(3) Super-structure (including bearings)	0.00%
		(4) Wearing Coat including expansion joints	0.00%
		(5) Miscellaneous items like (hand rails, crash barriers, road marking etc.)	0.00%
		(6) wing wall/return wall	0.00%
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Item	Weightage in % of Contract Price	Stage for Payment	Percentage weightage
IV. Other Works	33.36%	(i) Toll Plaza	0.00%
		(ii) Road side drains	
		(a) Drain	0.59%
		(b) Cover Slab (RCC/PCC Drain)	14.42%
		(iii) Road signs, markings, km stones, safety devices etc.	8.24%
		(iv) Overhead gantry mounted signs	0.61%
		(v) Project facilities	
		(a) Bus Bays	11.11%
		(b) Truck lay-byes	0.00%
		(c) Rest areas	0.00%
		(d) others	
		(1) Highway Lighting	5.40%
		(2) Rain Water Harvesting	1.88%
		(3) Utility Ducts across the road	1.62%
		(vi) Road side plantation	4.80%
		(vii) Protection works# other than approaches to the bridges, elevated sections/ flyovers/grade separators and ROB/RUBs.	
		(a) Thrie Beam Crash Barrier	29.50%
		(b) Retaining /Toe Wall	9.59%
		(c) Breast Wall	4.41%
		(viii) Paver Blocks	2.21%
(ix) Junction improvement	2.69%		
(x) Safety and traffic management during construction	2.93%		
V. Shifting of Utility Services	7.41%	(a) Electrical Utilities	62.50%
		(b) Public Health utilities (Water Pipelines & Sewage Lines)	37.50%

1.3 Procedure of estimating the value of work done.

1.3.1 Road works

Procedure for estimating the value of road work done shall be as follows:

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Table 1.3.1

Stage of Payment	Percentage-weightage	Payment Procedure
A- Widening and strengthening of existing road		Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in a length of not less than 10 (ten) percent of the total length or 500m whichever is less
(1) Earthwork up to top of the embankment	0.00%	
(2) Sub-Grade	0.00%	
(3) Sub-Base Course	0.00%	
(4) Non-Bituminous Base Course	0.00%	
(5) Bituminous Base Course (OTI work)	0.00%	
(6) Wearing Coat (OTI work)	0.00%	
(8) Widening and repair of culverts	0.03%	Cost of completed culverts shall be determined pro rata basis with respect to the total no. of culverts. The payment shall be made on the completion of atleast one culvert. 75% of the cost will be payable on completion of box/ abutments and slab/ pipe and head wall. Remaining 25% will become payable on completion of protection works including return/ wing walls and any other work associated with culverts.
B.1- Reconstruction/New realignment/bypass (Flexible pavement)		Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 500 m length, whichever is less.
(1) Earthwork up to top of the embankment	1.73%	
(2) Sub-Grade	3.44%	
(3) Sub-Base Course	6.59%	
(4) Non-Bituminous Base Course	11.14%	
(5) Bituminous Base Course	24.51%	
(6) Wearing Coat	12.70%	
(7) Earthen Shoulder	0.59%	
(8) PCC M-20 Shoulder	1.09%	
B.2- Reconstruction/New realignment/bypass (Rigid pavement)		Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 500 m length, whichever is less.
(1) Earthwork up to top of the embankment	0.47%	
(2) Sub-Grade	0.94%	
(3) Sub base course	1.81%	
(4) Dry lean concrete (DLC) Course	3.93%	
(5) Pavement Quality Control (PQC) Course	21.96%	
C.1- Reconstruction/ New service road (Flexible pavement)		Unit of measurement is linear length. Payment of each stage shall be made

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1) Earthwork up to top of the embankment	0.00%	on pro rata basis on completion of a stage in full length or 500 m length, whichever is less.
(2) Sub-Grade	0.00%	
(3) Sub-Base Course	0.00%	
(4) Non-Bituminous Base Course	0.00%	
(5) Bituminous Base Course	0.00%	
(6) Wearing Coat	0.00%	
C.2- Reconstruction/ New service road (Rigid pavement)		
(1) Earthwork up to top of the embankment	0.00%	Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 500 m length, whichever is less.
(2) Sub-Grade	0.00%	
(3) Sub-Base Course	0.00%	
(4) Dry Lean Concrete (DLC) Course	0.00%	
(5) Pavement Quality Control (PQC) Course	0.00%	
D- Re-Construction and New culverts on existing road, realignments, bypasses:		
(1) Culverts (length < 6m)	9.07%	Cost of each culvert shall be determined on pro rata basis with respect to the total number of culverts. Payment shall be made on the completion of atleast one culvert. 75% of the cost will be payable on completion of box/ abutments and slab/ pipe and head wall. Remaining 25% will become payable on completion of protection works including return/ wing walls and any other work associated with culverts.

@ For example, if the total length of bituminous work to be done is 100 km, the cost per km of bituminous work shall be determined as follows:

$$\text{Cost per km} = P \times \text{weightage for road work} \times \text{weightage for bituminous work} \times (1/L)$$

Where P = Contract Price

L = Total length in km

Similarly, the rates per km for other stages shall be worked out accordingly.

Note: The length affected due to law and other problems or litigation during execution due to which the contractor is unable to execute the work, may be deducted from the total project length for the payment purposes. The total length calculated here is only for payment purposes and will not affect and referred in other clauses of the Contract Agreement.

1.3.2 Minor Bridges and Underpass/Overpasses.

Procedure for estimating the value of Minor Bridge and Underpasses/Overpasses shall be as stated in table 1.3.2:

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Table 1.3.2

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
A.1-Widening and repair of minor bridges (length > 6m and < 60m)		Cost of each minor bridge shall be determined on pro rata basis with respect to the total linear length (m) of the minor bridges.
(1) Foundation: On completion of the foundation work of abutments and piers	10.94%	(i) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of at least two foundations of each bridge. In case where load testing is specified for foundation, the trigger of first payment shall include load testing also.
(2) Sub-structure: On completion of abutments and piers with abutment/ pier cap.	1.66%	(ii) Sub - structure – Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.
(3) Super-structure: On completion of the super-structure in all respects including wearing coat, bearings, expansion joints, handrails, crash barriers, road signs and markings, tests on completion etc. complete in all respect.	8.76%	(iii) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e., completion of super-structure of at least one span in all respects as specified in the column of "Stage of Payment" in this sub-clause.
(4) Approaches: On completion of approaches including wing walls/ return walls, Retaining walls, stone pitching, protection works for floor, embankment slope, etc. complete in all respect and fit for use.	0.00%	(iv) Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing walls/ return walls, retaining walls, stone pitching in all respect as specified in the column of "Stage of Payment" in this sub-clause for each bridge.
A.2- New minor Bridge		Cost of each minor bridge shall be determined on pro rata basis with respect to the total linear length (m) of the minor bridges. For reconstruction of bridge the cost of dismantling is to be added in the percentage weightage of foundation works.
(i) Foundation: On completion of the foundation work of abutments and piers.	26.25%	(i) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage completion of atleast two foundations of each bridge. In case where load testing is specified for foundation, the trigger of first payment shall include load testing also.

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(ii) Sub – structure:	23.06%	(ii) Sub - structure – Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.
(iii) Super-structure: On completion of the super-structure upto deck slab including bearings.	18.24%	(iii) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e., completion of super-structure of at least one span upto deck slab including bearing as specified in the column of "Stage of Payment" in this sub-clause. If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(iv) Miscellaneous Works:	7.31%	(iv) Miscellaneous Works: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of wearing coat, expansion joint, crash barrier, railing, protection works, drainage and any other remaining work associated to bridge including tests on bridge for each bridge
(v) Approaches: On completion of approaches including Retaining walls, stone pitching, protection works for floor, embankment slope etc. complete in all respect and fit for use.	3.78%	(v) Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing walls/ return walls, retaining walls, stone pitching in all respect as specified in the column of “Stage of Payment” in this sub-clause for each bridge.
(vi) Guide Bunds and River Training Works: On completion of Guide Bunds and river Training Works complete in all respects	0.00%	(vi) Guide Bunds and River Training Works: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of Guide Bunds and River training Works in all respects as specified for each bridge.
B.1-Widening and repair of underpasses/ overpasses	0.00%	Cost of each underpass/overpass shall be determined on pro rata basis with respect to the total linear length of the underpasses/overpasses. Payment shall be made on the completion of widening & repair works of a underpass/overpass.

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
B.2- New underpasses/overpasses		Cost of each Underpass/Overpass shall be determined on pro rata basis with respect to the total linear length (m) of the Underpasses/Overpasses.
(i) Foundation: On completion of the foundation work including foundations, of abutments and piers	0.00%	(i) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of foundation(s) of each underpass/overpass. In case where load testing is specified for foundation, the trigger of first payment shall include load testing also.
(ii) Sub-structure:	0.00%	(ii) Sub-structure: Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.
(iii) Super-structure: On completion of the super-structure upto deck slab,	0.00%	(iii) Super-structure: Payment shall be made on pro-rata basis on completion of a stage 'i.e. completion of super-structure of at least one span upto deck slab including bearing as specified in the column of "Stage of Payment" in this sub-clause: If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(iv) Miscellaneous Works:	0.00%	(iv) Miscellaneous Works: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of wearing coat, expansion joint, crash barrier, railing, protection works and any other remaining work associated to bridge including tests on bridge for each bridge.
v) Approaches: On completion of approaches including wing wall/ return wall, Retaining walls/ Reinforced Earth walls, stone pitching, protection works complete in all respect and fit for use.	0.00%	(v) Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing wall/ return wall, retaining walls, Reinforced Earth walls, stone pitching, protection works complete in all respect for each bridge.

Note: In case of reconstruction of any existing structure, cost of dismantling is included in the Percentage- weightage of foundation works.

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

1.3.3 Major Bridge Works, ROB/RUB & Structures

Procedure for estimating the value of Major Bridge Works, ROB/RUB & Structures shall be as stated in table 1.3.3:

Table 1.3.3

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
A.1- Widening and repairs of Major Bridges		Cost of each Major Bridge shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridges.
(1) Foundation	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the major Bridge as specified hereinunder.
(i) Pile Foundation (a) Piling – On completion of pile upto bottom of pile cap (b) Pile Cap : On completion of pile cap		(i) Pile Foundation (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorate basis. (b) Pile Cap : Payment of 30% on pro-rata basis shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) Open Foundation		(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	0.00%	(2) Sub-Structure:. Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the major bridge.

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(3) Super-structure (including bearings)	0.00%	(3)Super-structure: Payment shall be made on prorata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under: If pre-cast RCC/PSC/Steel girders/segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints	0.00%	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each major bridge.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each major bridge.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each major bridge.
(7) Guide Bunds, River Training works etc.	0.00%	(7) Guide Bunds, River Training works: Payments shall be made on completion of all guide bunds/river training works etc. complete in all respects as specified for each major bridge.
(8) Approaches (including Retaining walls, stone pitching and protection works)	0.00%	(8) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified for each major bridge.
A.2- New Major Bridges		Cost of each Major Bridge shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridge.

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(1) Foundation	33.22%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the major Bridge as specified here in under:
(i) Well Foundation (a) On completion of Cutting Edge + Well Curb (b) Wellsteining : On completion of well steining upto bottom of well cap. (c) On completion of bottom plug + top plug (if provisioned as per design) + well cap		(i) Well Foundation (a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb. (b) Well steining: Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof. (c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.
(ii) Pile Foundation (a) Piling – On completion of pile upto bottom of pile cap (b) Pile Cap : On completion of pile cap		(ii) Pile Foundation (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorota basis. (b) Pile Cap : Payment of 30% shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(iii) Open Foundation		(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	29.26%	(ii) Sub-Structure: Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the major bridge.

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(3) Super-structure (including bearings)	27.92%	<p>(3) Super-structure: Payment shall be made on prorata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under:</p> <p>If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.</p> <p>(For cable stayed bridge and suspension cable bridge, detailed payment stage may be included on case to case basis)</p>
(4) Wearing Coat including expansion joints	4.29%	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each major bridge.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	2.31%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each major bridge.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each major bridge.
(7) Guide Bunds, River Training works etc.	0.00%	(7) Guide Bunds, River Training works: Payments shall be made on completion of all guide bunds/river training works etc. complete in all respects as specified for each major bridge.
(8) Approaches (including Retaining walls, stone pitching and protection works for floor, embankment slope etc.)	3.00%	(8) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified for each major bridge.

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
B.1 -Widening and repairs of (a) ROB (b) RUB		Cost of each ROB/RUB shall be determined on pro rata basis with respect to the total linear length (m) of the ROB/RUBs.
(1) Foundation	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the ROB/RUB as specified here in under.
(i) Pile Foundation (a) Piling – On completion of pile upto bottom of pile cap (b) Pile Cap : On completion of pile cap		(i) Pile Foundation (a) Piling: Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorata basis. (b) Pile Cap: Payment of 30% on pro-rata basis shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) Open Foundation		(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	0.00%	(2) Sub-Structure: Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the ROB/RUB.
(3) Super- structure (including bearing)	0.00%	(3) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under: If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(4) Wearing Coat including expansion joints in case of ROB. In case of RUB, rigid pavement under RUB including drainage facility as specified.	0.00%	(4) Wearing Coat: Payment shall be made on completion of (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified for each of the ROB and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified for each of the RUB.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the ROB/ RUB.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the ROB/ RUB.
(7) Approaches (including Retaining walls, stone pitching and protection works)	0.00%	(7) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified for each of the ROB/ RUB.
B.2- (a) New (b) RUB		Cost of each ROB/RUB shall be determined on pro rata basis with respect to the total linear length (m) of the ROB/RUBs.
(1) Foundation	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the ROB/RUB as specified here in under:

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
<p>(i) Well Foundation</p> <p>(a) On completion of Cutting Edge + Well Curb</p> <p>(b) Wellsteining : On completion of well steining upto bottom of well cap.</p> <p>(c) On completion of bottom plug + top plug (if provisioned as per design) + well cap</p>		<p>(i) Well Foundation</p> <p>(a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb.</p> <p>(b) Well steining: Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof.</p> <p>(c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.</p>
<p>(ii) Pile Foundation</p> <p>(a) Piling – On completion of pile upto bottom of pile cap</p> <p>(b) Pile Cap : On completion of pile cap</p>		<p>(ii) Pile Foundation</p> <p>(a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorota basis.</p> <p>(b) Pile Cap : Payment of 30% shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.</p>
<p>(iii) Open Foundation</p>		<p>(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.</p>
<p>(2) Sub-structure</p>	0.00%	<p>(2) Sub-Structure: Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the ROB/RUB.</p>
<p>(3) Super- structure (including bearing)</p>	0.00%	<p>(3)Super-structure: Payment shall be made on prorata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under:</p> <p>If pre-cast girders/ segments are used, interim payments shall be made at 75%</p>

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
		of the cost of that element, as derived from MoRTH Data Book. Applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints in case of ROB. In case of RUB, rigid pavement under RUB including drainage facility as specified.	0.00%	(4) Wearing Coat: Payment shall be made on completion of (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified for each of the ROB and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified for each of the RUB.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the ROB/RUB.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the ROB/RUB.
(7) Approaches (Retaining wall stone pitching and protection works)	0.00%	(7) Approaches: Payments shall be made on completion of both approaches of each ROB including stone pitching, protection works, etc. complete in all respects as specified here in under : If reinforced soil wall is used with facia panel/blocks, interim payment shall be made @75% of the Cost of that element as derived from MoRTH data Book. Applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
C.1- Widening and repairs of Elevated Section/Flyovers/ Grade Separators		Cost of each structure shall be determined on pro rata basis with respect to the total linear length (m) of the structures.
(1) Foundation	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the structure as specified here in under :

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(i) Pile Foundation (a) Piling – On completion of pile upto bottom of pile cap (b) Pile Cap : On completion of pile cap		(i)Pile Foundation (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorata basis. (b) Pile Cap : Payment of 30% on prorata basis shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) Open Foundation		(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	0.00%	(2) Sub-Structure:. Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the structure.
(3) Super- structure (including bearing)	0.00%	(3)Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure upto deck slab including bearings of at least one span as specified here in under : If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints	0.00%	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each of the structure.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the structure.

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the structure.
(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%	(7) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects of each structure.
C.2 -New Elevated Section/Flyovers/ Separators Grade		Cost of each structure shall be determined on pro rata basis with respect to the total linear length (m) of the structures.
(1) Foundation	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the structure as specified here in under :
(i) Well Foundation (a) On completion of Cutting Edge + Well Curb (b) Wellsteining : On completion of well steining upto bottom of well cap. (c) On completion of bottom plug + top plug (if provisioned as per design) + well cap		(i)Well Foundation (a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb. (b) Well steining: Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof. (c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.
(ii) Pile Foundation (a) Piling – On completion of pile upto bottom of pile cap (b) Pile Cap : On completion of pile cap		(ii) Pile Foundation (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on pro-rata basis. (b) Pile Cap : Payment of 30% shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(iii) Open Foundation		(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	0.00%	(2) Sub-Structure: Payment against Sub- structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the structure.
(3) Super- structure (including bearing)	0.00%	(3)Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super-structure upto deck slab including bearings of at least one span as specified here in under: If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints	0.00%	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each of the structure.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the structure.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the structure.

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%	(7)Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified here in under: If reinforced soil wall is used with facia panel/blocks, interim payment shall be made @75% of the Cost of that element as derived from MoRTH data Book. Applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.

Note: In case of reconstruction of any existing structure, cost of dismantling is included in the Percentage- weightage of foundation works.

1.3.4 Other works.

Procedure for estimating the value of other works done shall be as stated in table 1.3.4:

Table 1.3.4

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(1) Toll Plaza	0.00%	Unit of measurement is each completed toll plaza. Payment for each toll plaza shall be made on pro rata basis with respect to the total of all toll plazas as specified here in under :
(a) DLC(LHS)		(a) DLC (LHS) : Payment of 12.5% on pro-rata basis shall be made on completion of a stage i.e. completion of DLC on LHS.
(b) DLC(RHS)		(b) DLC (RHS) : Payment of 12.5% on pro-rata basis shall be made on completion of a stage i.e. completion of DLC on LHS.
(c) PQC(LHS)		(c) PQC(LHS): Payment of 25% on pro-rata basis shall be made on completion of a stage i.e. completion of PQC on LHS.
(d) PQC(RHS)		(d) PQC(RHS): Payment of 25% on pro-rata basis shall be made on completion of a stage i.e. completion of PQC on RHS.
(e) Admin Building		(e) Admin Building: Payment of 10% on pro-rata basis shall be made on completion of a stage i.e. completion of Admin Building and miscellaneous works.

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(f) Toll Booth, canopy, safety items and all other associated works		(f) Toll Booth, canopy, safety items and all other associated works: Payment of 15% on pro-rata basis shall be made on completion of a stage i.e. completion of Toll Booth, canopy, safety items and all other associated works.
(ii) Road side drains		
(a) Drains	0.59%	a) Drains: Unit of measurement is linear length in metre. Payment shall be made on pro rata basis on completion of a stage in a length of not less than 100 m on one side.
(b) Cover Slabs (RCC/PCC Drain)	14.42%	(b) Cover slabs: Unit of measurement is linear length in metre. Payment shall be made on pro rata basis on completion of a stage in a length of not less than 100 m on one side.
(iii) Road signs, markings, km stones, safety devices, ...	8.24%	Unit of measurement is linear length in km. Payment shall be made on pro rata basis on completion of a stage in a length of not less than one Km on both sides.
(iv) Overhead gantry mounted signs	0.61%	Unit of measurement is each number. Payment shall be made on pro-rata basis on completion of each overhead gantry mounted sign
4) Project facilities		Unit of measurement is each number. Payment shall be made on pro rata basis for completed facilities.
(a) Bus Bays	11.11%	
(b) Truck lay-byes	0.00%	
(c) Rest areas	0.00%	
(d) others		
(1) Highway Lighting	5.40%	
(2) Rain Water Harvesting	1.88%	
(3) Utility Ducts across the road	1.62%	
(vi) Roadside plantation	4.80%	Unit of measurement is linear length in Km. Payment shall be made on pro rata basis on completion of one Km.
(vii) Protection works other than approaches to the bridges, elevated sections/ flyovers/grade separators and ROBs/ RUBs		Unit of measurement is linear length. Payment against items (a), (b) & (c) shall be made on pro rata basis on completion of a stage in a length of not less than 10% (ten per cent) of the total length and 100 m whichever is less.
(a) Thrie Beam Crash Barrier	29.50%	
(b) Retaining /Toe Wall	9.59%	
(c) Breast Wall	4.41%	

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(viii) Paver Blocks	2.21%	
(ix) Junction improvement	2.69%	
(x) Safety and traffic management during construction	2.93%	Payment shall be made on prorata basis every six months.

1.3.5 Electrical Utilities and public Health Utilities (Water pipelines and sewage lines)

Stage of Payment	Weightage	Payment Procedure
(i) Electrical Utilities:	62.50%	
(a) EHT line		(a) Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rate basis as per its weightage with reference to total cost of EHT line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is (i) Erection of Poles-20%, (ii) Conductor stringing including laying of cable-30%, (iii) DTR erection (if involved)-15% and (iv) Charging of line including dismantling and site clearance-35% (with DTR) and 50% without DTR).
(b) EHT crossings		Cost of each crossing shall be determined on pro-rata basis with reference to total no. of crossings. Payment shall be made for not less than 25% of the crossings subject to a minimum of 4 crossings.
(c) HT / LT line (including transformers if any)		Cost of each crossing shall be determined on pro-rata basis with reference to total no. of crossings. Payment shall be made for not less than 25% of the crossings subject to a minimum of 10 crossings
(d) HT / LT crossings		(d) Cost of each crossing shall be determined on pro-rata basis with reference to total no. of crossings. Payment shall be made for not less than 25% of the crossings subject to a minimum of 10 crossings.
(ii) Public Health Utilities (Water pipe lines and sewage lines):	37.50%	
(a) Handpumps & Tube wells		Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis for each handpump & tubewell.
(a) Water pipeline		Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis as per its weightage with reference to total cost of pipe line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is laying of pipe-50%, Charging of line including all miscellaneous works and dismantling and site clearance- 50%)

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Weightage	Payment Procedure
(b) Water pipeline Crossings		Cost of each crossing shall be determined on pro-rata basis with reference to total no. of crossings. Payment shall be made for not less than 25% of the crossings subject to a minimum of 8 crossings.
(c) Sewage lines		Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis as per its weightage with reference to total cost of pipe line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is laying of pipe-50%, Charging of line including all miscellaneous works and dismantling and site clearance- 50%)
(d) Sewage Line Crossings		Cost of each crossing shall be determined on pro-rata basis with reference to total no. of crossings. Payment shall be made for completed activity. (The average weightage of major activities in shifting work is laying pipe-50%, Charging of line including all miscellaneous works and dismantling and site clearance- 50%)

2. (a) In order to maintain cash flow in the project, the Authority shall also make interim monthly payments to the Contractor for the work done during the month for which the corresponding stage, as mentioned in Schedule-H, has not been achieved. Such work shall be measured, in a length, number or area as specified in corresponding stage of Schedule-H and valued in accordance with the proportion of the weightage of Contract Price assigned to that stage in Schedule-H. '90% of value of such work shall be paid as an 'Interim Monthly Payment' under clause 19.3 (i) of Contract Agreement.

(b) For Pre cast/ pre-fabricated elements to be used in permanent works, interim payments to be made @ 75% of cost of that element (to be derived from MoRT&H data book) as per schedule H.

(C) Upon completion of the defined 'stage', a reconciliation of the interim payments shall be carried out, and any balance amount shall be paid. For the avoidance of doubt, it is clarified that the interim monthly payments are made solely to maintain cash flow in the project. In the event of termination of the project, under Clause 23.1, 23.2 or 23.3, as the case may be, such interim payments shall be dealt with as per Clause 23.5 (i) (b) of the Contract Agreement.

3. Procedure for payment for Maintenance

3.1 The cost for maintenance shall be as stated in Clause 14.1.1.

3.2 Payment for Maintenance shall be made in quarterly installments in accordance with the Provisions of Clause 19.7.

Upgradation and reconstruction of Gadasarai Pandariya (Chhatisgarh Border) Road from Design Ch. 00+000 to Design Ch. 47+320 Km in the State of Madhya Pradesh Total length 47.320 km, Two lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Revised SCHEDULE – H for Package-11
See Clauses 10.1 (iv) and 19.3
Contract Price Weightages

1.1 The Contract Price for this Agreement is Rs. *****

1.2 Proportions of the Contract Price for different stages of Construction of the Project Highway shall be as specified below:

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
Road works including culverts, widening and repair of culverts.	57.369%	<u>A- Widening and strengthening of existing road (For Service Road)</u>	
		(1) Earthwork up to top of the embankment	0.00%
		(2) Sub-Grade	0.00%
		(3) Sub-Base Course	0.00%
		(4) Non-Bituminous Base Course	0.00%
		(5) Bituminous Base Course	0.00%
		(6) Wearing Coat	0.00%
		(7) Widening and repair of culverts	0.00%
		<u>B.1- Reconstruction/ New realignment/ bypass (Flexible pavement)</u>	
		(1) Earthwork up to top of the sub-grade & BC Soil Replacement	15.91%
		(2) Construction of Shoulders	1.11%
		(3) Sub Base Course	7.05%
		(4) Non-Bituminous Base Course	10.26%
		(5) Bituminous Base Course	21.71%
		(6) Wearing Coat	8.06%
		<u>B.2- Reconstruction/ New realignment/ bypass (Rigid Pavement)</u>	
		(1) Earthwork up to top of the embankment	0.77%
		(2) Sub-Grade	0.00%
		(3) Sub Base Course	2.78%
		(4) Dry Lean Concrete (DLC) Course	4.12%
		(5) Pavement Quality Control (PQC) Course	19.92%
		<u>C.1- Reconstruction/ New service road (Flexible pavement)</u>	
		(1) Earthwork up to top of the embankment	0.00%
		(2) Sub-Grade	0.00%
		(3) Sub Base Course	0.00%
(4) Non-Bituminous Base Course*	0.00%		
(5) Bituminous Base Course	0.00%		
(6) Wearing Coat	0.00%		

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		C.2- Reconstruction/ New Service Road (Rigid Pavement)	
		(1) Earthwork up to top of the embankment	0.00%
		(2) Sub-Grade	0.00%
		(3) Sub Base Course	0.00%
		(4) Dry Lean Concrete (DLC) Course	0.00%
		(5) Pavement Quality Control (PQC) Course	0.00%
		D- Re-Construction and New culverts on existing road, realignments, bypasses:	
Culverts (length < 6 m)	8.30%		
II. Minor Bridges/ Under passes/ Overpasses	10.442%	A.1- Widening and Repair of Minor bridges (length > 6 m and < 60 m)	
		Minor bridges	
		(1) Foundation: On completion of the foundation work of abutments and piers.	0.00%
		(2) Sub-structure: On completion of abutments and piers with abutment/ pier cap.	0.00%
		(3) Super-structure: On completion of the super-structure in all respects including wearing coat, bearings, expansion joints, handrails, crash barriers, road signs and markings, tests on completion etc. complete in all respect.	0.00%
		(4) Approaches: On completion of approaches including wing walls/ return walls, retaining walls, stone pitching, protection works for floor, embankment slope, etc. complete in all respect and fit for use.	0.00%
		A.2- New Minor bridges (length >6 and <60 m.)	
		(1) Foundation: On completion of the foundation work of abutments and piers.	0.00%
		(2) Sub-structure: On completion of abutments and piers with abutment/ pier cap.	0.00%
		(3) Super-structure: On completion of the super-structure upto deck slab including bearings.	0.00%
		(4) Miscellaneous Works: On completion of wearing coat, expansion joint, crash barrier, railings, protection works and any remaining work associated to bridge including tests on bridge.	0.00%
		(5) Approaches: On completion of approaches including wing walls/ return walls, retaining walls, stone pitching, protection works for floor, embankment slope etc. complete in all respect and fit for use.	0.00%
(6) Guide Bunds and River Training Works: On completion of Guide Bunds and river Training Works complete in all respects.	0.00%		

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		A.3- Reconstruction of Minor bridges (length >6 and <60 m.)	
		(1) Foundation + Sub-Structure: On completion of the foundation work including foundations for wing and return walls, abutments, piers up to the abutment/pier cap.	68.96%
		(2) Super-structure: On completion of the super-structure in all respects including wearing coat, bearings, expansion joints, hand rails, crash barriers, road signs & markings, tests on completion etc. complete in all respect.	27.00%
		(3) Approaches: On completion of approaches including Retaining walls, stone pitching, protection works complete in all respect and fit for use.	4.03%
		(4) Guide Bunds and River Training Works: On completion of Guide Bunds and river Training Works complete in all respects	0.00%
		B.1- Widening and Repair of underpasses/ Overpasses	
		Underpasses/ Overpasses	0.00%
		B.2- New underpasses/ overpasses	
		(1) Foundation: On completion of the foundation work of abutments and piers.	0.00%
		(2) Sub-structure: On completion of abutments and piers with abutment/ pier cap.	0.00%
		(3) Super-structure: On completion of the super-structure upto deck slab including bearing.	0.00%
		(4) Miscellaneous Works: On completion of wearing coat, expansion joint, crash barrier, railings and any remaining work associated to bridge including tests on bridge.	0.00%
		(5) Approaches: On completion of approaches including Wing walls/ Return walls, retaining walls/ Reinforced Earth walls, stone pitching, protection works complete in all respect and fit for use.	0.00%
III. Major Bridge (length > 60 m.) works and ROB/ RUB/ elevated Sections/ flyovers including	9.5631%	A.1- Widening and repairs of Major Bridges	
		(1) Foundation	0.00%
		i) Pile Foundation	
		ii) Open Foundation	
		(2) Sub-structure	0.00%
		(3) Super-structure (including bearings)	0.00%
		(4) Wearing Coat including expansion joints	0.00%
		(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.)	0.00%
		(6) Wing walls/return walls	0.00%

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
viaducts, if any		(7) Guide Bunds, River Training works etc.	0.00%
		(8) Approaches (including Retaining walls, stone pitching and protection works for floor, embankment slope etc.)	0.00%
		A.2- New Major Bridges	
		(1) Foundation	27.44%
		(i) Well Foundation	
		(ii) Pile Foundation	
		(iii) Open Foundation	
		(2) Sub-structure	7.98%
		(3) Super-structure (including bearings)	20.22%
		(4) Wearing Coat including expansion joints	1.24%
		(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.)	0.69%
		(6) Wing walls/return walls	0.00%
		(7) Guide Bunds, River Training works etc.	0.00%
		(8) Approaches (including Retaining walls, stone pitching and protection works for floor, embankment slope, etc.)	0.36%
		A.3- Reconstruction of Major Bridges	
		(1) Foundation	21.54%
		(2) Sub-structure	4.58%
		(3) Super-structure (including bearings)	14.29%
		(4) Wearing Coat including expansion joints	0.90%
		(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.)	0.50%
		(6) Wing walls/return walls	0.00%
		(7) Guide Bunds, River Training works etc.	0.00%
		(8) Approaches (including Retaining walls, stone pitching and protection works)	0.26%
		B.1- Widening and repair of	
		(a) ROB	
		(b) RUB	
		(1) Foundation	0.00%
		i) Pile Foundation	
		ii) Open Foundation	
		(2) Sub-structure	0.00%
	(3) Super-structure (including bearings)	0.00%	
	(4) Wearing Coat: (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified.	0.00%	

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.)	0.00%
		(6) Wing walls/return walls	0.00%
		(7) Approaches (including Retaining walls, stone pitching and protection works)	0.00%
		B.2- New ROB/RUB	
		(a)ROB	
		(b) RUB	
		(1) Foundation	0.00%
		(i) Well Foundation	
		(ii) Pile Foundation	
		(iii) Open Foundation	
		(2) Sub-structure	0.00%
		(3) Super-structure (including bearings)	0.00%
		(4) Wearing Coat: (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified.	0.00%
		(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.)	0.00%
		(6) Wing walls/return walls	0.00%
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%
		C.1- Widening and repair of Elevated Section/Flyovers/ Grade Separators	
		(1) Foundation	0.00%
		i) Pile Foundation	
		ii) Open Foundation	
		(2) Sub-structure	0.00%
		(3) Super-structure (including bearings)	0.00%
		(4) Wearing Coat including expansion joints	0.00%
		(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.)	0.00%
		(6) Wing walls/return walls	0.00%
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%
		C.2-New Elevated Section/Flyovers/Grade Separators	
		(1) Foundation	0.00%
		(i) Well Foundation	
		(ii) Pile Foundation	
		(iii) Open Foundation	
		(2) Sub-structure	0.00%

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage		
1	2	3	4		
		(3) Super-structure (including bearings)	0.00%		
		(4) Wearing Coat including expansion joints	0.00%		
		(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.)	0.00%		
		(6) Wing walls/return walls	0.00%		
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%		
IV. Other works	17.354%	(i) Toll Plaza	0.00%		
		(ii) Road side Drain			
		(a) PCC Drain	0.00%		
		(b) RCC Cover Drain	34.27%		
		(c) Unlined surface drains	1.08%		
		(iii) Road signs, markings, km stones, safety devices etc.	12.74%		
		(iv) Junction Improvement	11.61%		
		(v) Rain Water Harvesting	1.67%		
		(vi) Overhead gantry mounted signs	6.01%		
		(vii) Project facilities (a) Bus Bays (b) Truck lay-byes (c) Rest areas (d) others	2.95%		
		(viii) Highway Lighting & High Mast Light including generator facilities	13.81%		
		(ix) Interlocking Paver Block & Railing	8.88%		
		(x) Road side plantation	0.17%		
		(xi) Protection works other than approaches to the bridges, elevated sections/ flyovers/grade separators and ROBs/RUBs. (a) W Beam Crash Barrier (b) Retaining Wall (c) Breast Wall	2.42%		
		(xii) Safety and traffic management during construction.	0.00%		
		(xiii) Utility Duct	2.44%		
		(xiv) others	1.94%		
		Electrical utilities and public health utilities (Water pipe line and sewage lines)	5.272%	(i) Electrical Utilities: [(a) EHT line (b) EHT crossings (c) HTI LT line (d) HTI LT Crossings]	81.58%
				(ii) Public Health Utilities: [(a) Water pipeline (b) Water pipeline Crossings]	18.42%

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		(c) Sewage lines (d) Sewage line Crossings]	

*Note- In case of CTB and AIL layer, this stage may be modified suitably to permit separate weightages for each of these layers.

#Note - For specific type of protection work detailed stages can be included.

1.3 Procedure of estimating the value of work done

1.3.1 Road works.

Procedure for estimating the value of road work done shall be as follows:

Table 1.3.1

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
A-Widening and strengthening of existing road		Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in a length of not less than 10 (ten) percent of the total length or 500m whichever is less.
(1) Earthwork up to top of the embankment	0.00%	
(2) Sub-Grade	0.00%	
(3) Sub-Base Course	0.00%	
(4) Non-Bituminous Base Course	0.00%	
(5) Bituminous Base Course	0.00%	
(6) Wearing Coat	0.00%	
(7) Widening and repair of culverts	0.00%	Cost of completed culverts shall be determined pro rata basis with respect to the total no. of culverts. The payment shall be made on the completion of atleast one culvert. 75% of the cost will be payable on completion of box/ abutments and slab/ pipe and head wall. Remaining 25% will become payable on completion of protection works including return/ wing walls and any other work associated with culverts.
B.1- Reconstruction/New realignment/bypass (Flexible pavement)		Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 500 m length, whichever is less.
(1) Earthwork up to top of the sub-grade & BC Soil Replacement	15.91%	
(2) Construction of Shoulders	1.11%	
(3) Sub Base Course	7.05%	
(4) Non-Bituminous Base Course	10.26%	
(5) Bituminous Base Course	21.71%	
(6) Wearing Coat	8.06%	

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
B.2- Reconstruction/New realignment/ bypass (Rigid pavement)		Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 500 m length, whichever is less.
(1) Earthwork up to top of the embankment	0.77%	
(2) Sub-Grade		
(3) Sub Base Course	2.78%	
(4) Dry Lean Concrete (DLC) Course	4.12%	
(5) Pavement Quality Control (PQC) Course	19.92%	
C.1- Reconstruction/ New service road (Flexible pavement)		Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 500 m length, whichever is less.
(1) Earthwork up to top of the embankment	0.00%	
(2) Sub-Grade	0.00%	
(3) Sub Base Course	0.00%	
(4) Non-Bituminous Base Course	0.00%	
(5) Bituminous Base Course	0.00%	
(6) Wearing Coat	0.00%	
C.2- Reconstruction/ New service road (Rigid pavement)		Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 500 m length, whichever is less.
(1) Earthwork upto top of the embankment	0.00%	
(2) Sub-Grade	0.00%	
(3) Sub Base Course	0.00%	
(4) Dry Lean Concrete (DLC) Course	0.00%	
(5) Pavement Quality Control (PQC) Course	0.00%	
D- Re-Construction and New culverts on existing road, realignments, bypasses:(1) Culverts (length < 6m)	8.30%	Cost of each culvert shall be determined on pro rata basis with respect to the total number of culverts. Payment shall be made on the completion of atleast one culvert. 75% of the cost will be payable on completion of box/ abutments and slab/ pipe and head wall. Remaining 25% will become payable on completion of protection works including return/wing walls and any other work associated with culverts.

*Note- In case of CTB and AIL layer, this stage may be modified suitably to permit separate weightages for each of these layers.

@. For example, if the total length of bituminous work to be done is 100 km, the cost per km of bituminous work shall be determined as follows:

Cost per km = P x weightage for road work x weightage for bituminous work x (1/L)

Where P= Contract Price

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

L = Total length in km

Similarly, the rates per km for other stages shall be worked out accordingly.

Note: The length affected due to law-and-order problems or litigation during execution due to which the Contractor is unable to execute the work, may be deducted from the total project length for payment purposes. The total length calculated here is only for payment purposes and will not affect and referred in other clauses of the Contract Agreement.

1.3.2 Minor Bridges and Underpasses/Overpasses.

Procedure for estimating the value of Minor bridge and Underpasses/Overpasses shall be as stated in table 1.3.2:

Table 1.3.2

Stage of Payment	Percentage Weightage	Payment Procedure
1	2	3
A.1-Widening and repair of minor bridges (length > 6m and < 60m)		Cost of each minor bridge shall be determined on pro rata basis with respect to the total linear length (m) of the minor bridges.
(i) Foundation: On completion of the foundation work of abutments and piers.	0.00%	(i) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e completion of atleast two foundations of each bridge. In case where load testing is specified for foundation, the trigger of first payment shall include load testing also.
(ii) Sub – structure:	0.00%	(ii) Sub - structure – Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.
(iii) Super-structure: On completion of the super-structure in all respects including wearing coat, bearings, expansion joints, hand rails, crash barriers, road signs & markings, tests on completion etc. complete in all respect.	0.00%	(iii) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e., completion of super-structure of at least one span in all respects as specified in the column of "Stage of Payment" in this sub-clause.
(iv) Approaches: On completion of approaches including Retaining walls, stone pitching, protection works for floor, embankment slope etc. complete in all respect and fit for use.	0.00%	(iv) Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing walls/ return walls, retaining walls, stone pitching in all respect as specified in the column of “Stage of Payment” in this sub- clause for each bridge.
A.2- New minor bridges		
(i) Foundation: On completion of the foundation work of abutments and piers.	0.00%	Cost of each minor bridge shall be determined on pro rata basis with respect to the total linear length (m) of the minor bridges. (i) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage completion of atleast two foundations of each bridge. In case where load testing is specified for foundation,

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Stage of Payment	Percentage Weightage	Payment Procedure
1	2	3
		the trigger of first payment shall include load testing also.
(ii) Sub – structure:	0.00%	(ii) Sub - structure – Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.
(iii) Super-structure: On completion of the super-structure upto deck slab including bearings.	0.00%	(iii) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e., completion of super-structure of at least one span upto deck slab including bearing as specified in the column of "Stage of Payment" in this sub- clause. If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(iv) Miscellaneous Works:	0.00%	(iv) Miscellaneous Works: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of wearing coat, expansion joint, crash barrier, railing, protection works, drainage and any other remaining work associated to bridge including tests on bridge for each bridge
v) Approaches: On completion of approaches including Retaining walls, stone pitching, protection works for floor, embankment slope etc. complete in all respect and fit for use.	0.00%	(v) Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing walls/ return walls, retaining walls, stone pitching in all respect as specified in the column of "Stage of Payment" in this sub- clause for each bridge.
(vi) Guide Bunds and River Training Works: On completion of Guide Bunds and river Training Works complete in all respects	0.00%	(vi) Guide Bunds and River Training Works: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of Guide Bunds and River training Works in all respects as specified for each bridge.
A.3-Reconstruction of minor bridges*		
(i) Foundation +Sub- Structure: On completion of the foundation work including foundations for wing and return walls, abutments, piers upto the abutment/pier cap.	68.964%	(i) Foundation +Sub- Structure: Cost of each minor bridge shall be determined on pro rata basis with respect to the total linear length (m) of the minor bridges. Payment against foundation + sub-structure shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of foundation +sub- structure of each bridge subject to completion of at least two foundations along with sub-structure upto abutment/pier cap level of each bridge. In case where load testing is required for foundation, the

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Stage of Payment	Percentage Weightage	Payment Procedure
1	2	3
		trigger of first payment shall include load testing also where specified.
(ii) Super-structure: On completion of the super- structure in all respects including wearing coat, bearings, expansion joints, hand rails, crash barriers, road signs & markings, tests on completion etc. complete in all respect.	27.003%	(ii) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of superstructure including bearings of at least one span in all respects as specified excluding any payment made in pursuance to here in under: If precast girders/segments are used, on casting of all such girders and segments for at least one span and on submission of Indemnity Bond by the Contractor, 40% of the actual cost of such precast girders/segments determined based on SoR prevalent on the Base date within 30 days of submission of the bill therefor. In case the Contract Price is lower/ higher than the Estimated Project Cost as per RFP, then the SOR rates shall be reduced/ increased in the same proportion accordingly. Balance payment shall be after erection of / launching of these elements as per stage payment stipulations.
(iii) Approaches: On completion of approaches including Retaining walls, stone pitching, protection works complete in all respect and fit for use.	4.033%	(iii) Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches in all respect as specified in the column of "Stage of Payment" in this sub-clause.
(iv) Guide Bunds and River Training Works: On completion of Guide Bunds and river Training Works complete in all respects	0.000%	(iv) Guide Bunds and River Training Works: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of Guide Bunds and River training Works in all respects as specified.
B.1-Widening and repair of underpasses/overpasses	0.00%	Cost of each underpass/overpass shall be determined on pro rata basis with respect to the total linear length of the underpasses/overpasses. Payment shall be made on the completion of widening & repair works of a underpass/overpass.
B.2- New Underpasses/ Overpasses:		
(i) Foundation: On completion of the foundation work including foundations, of abutments and piers	0.00%	(i) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of foundation(s) of each underpass/overpass. In case where load testing is specified for foundation, the trigger of first payment shall include load testing also.
(ii) Sub-structure:	0.00%	(ii) Sub-structure: Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Stage of Payment	Percentage Weightage	Payment Procedure
1	2	3
(iii) Super-structure: On completion of the super-structure upto deck slab,	0.00%	(iii) Super-structure: Payment shall be made on pro-rata basis on completion of a stage 'i.e. completion of super-structure of at least one span upto deck slab including bearing as specified in the column of "Stage of Payment" in this sub-clause: If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(iv) Miscellaneous Works:	0.00%	(iv) Miscellaneous Works: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of wearing coat, expansion joint, crash barrier, railing, protection works and any other remaining work associated to bridge including tests on bridge for each bridge.
v) Approaches: On completion of approaches including wing wall/ return wall, retaining walls/ Reinforced Earth walls, stone pitching, protection works complete in all respect and fit for use.	0.00%	(v) Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing wall/ return wall, retaining walls, Reinforced Earth walls, stone pitching, protection works complete in all respect for each bridge.

Note: In case of reconstruction of any existing structure, cost of dismantling is included in the Percentage- weightage of foundation works.

1.3.3 Major Bridge works, ROB/RUB and Structures.

Procedure for estimating the value of Major Bridge works, ROB/RUB and Structures shall be as stated in table 1.3.3:

Table 1.3.3

Stage of Payment	Percentage Weightage	Payment Procedure
1	2	3
A.1- Widening and repairs of Major Bridges		Cost of each Major Bridge shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridges.
(1) Foundation	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the major Bridge as specified hereinunder.
(i) Pile Foundation (a) Piling: On completion of pile upto		(i) Pile Foundation (a) Piling: Payment of 70% shall be made on completion of piling upto bottom of pile cap for

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Stage of Payment	Percentage Weightage	Payment Procedure
1	2	3
bottom of pile cap (b) Pile Cap: On completion of pile cap		each pile on prorata basis. (b) Pile Cap: Payment of 30% on pro- rata basis shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) Open Foundation		(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	0.00%	(2) Sub-Structure: Payment against Sub-structure shall be made on pro- rata basis on completion of a stage i.e. completion of atleast one sub- structure of abutments/piers upto abutment/pier cap level of each of the major bridge.
(3) Super-structure (including bearings)	0.00%	(3) Super-structure: Payment shall be made on prorata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under: If pre-cast RCC/PSC/Steel girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints	0.00%	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each major bridge.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each major bridge.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each major bridge.
(7) Guide Bunds, River Training works etc.	0.00%	(7) Guide Bunds, River Training works: Payments shall be made on completion of all guide bunds/river training works etc. complete in all respects as specified for each major bridge.
(8) Approaches (including Retaining walls, stone pitching and protection works)	0.00%	(8) Approaches: Payments shall be made on completion of both approaches including stone pitching, all respects as specified for each major bridge.

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Stage of Payment	Percentage Weightage	Payment Procedure
1	2	3
A.2- New Major Bridges		Cost of each Major Bridge shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridge.
(1) Foundation	31.85%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the major Bridge as specified here in under:
(i) Well Foundation (a) On completion of Cutting Edge + Well Curb (b) Wellsteining: On completion of well steining upto bottom of well cap. (c) On completion of bottom plug + top plug (if provisioned as per design) + well cap		(i) Well Foundation (a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb. (b) Well steining: Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof. (c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.
(ii) Pile Foundation (a) Piling – On completion of pile upto bottom of pile cap (b) Pile Cap: On completion of pile cap		(ii) Pile Foundation (a) Piling: Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorota basis. (b) Pile Cap: Payment of 30% shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing
(iii) Open Foundation		(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	10.56%	(2) Sub-Structure: Payment against Sub-structure shall be made on pro- rata basis on completion of a stage i.e. completion of atleast one sub- structure of abutments/piers upto abutment/pier cap level of each of the major bridge.
(3) Super-structure (including bearings)	53.99%	(3) Super-structure: Payment shall be made on prorata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under: If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Stage of Payment	Percentage Weightage	Payment Procedure
1	2	3
		element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon. (For cable stayed bridge and suspension cable bridge, detailed payment stage may be included on case to case basis)
(4) Wearing Coat including expansion joints	1.75%	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each major bridge.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	1.32%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each major bridge.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each major bridge.
(7) Guide Bunds, River Training works etc.	0.00%	(7) Guide Bunds, River Training works: Payments shall be made on completion of all guide bunds/river training works etc. complete in all respects as specified for each major bridge.
(8) Approaches (including Retaining walls, stone pitching, backfilling and protection works)	0.54%	(8) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified for each major bridge.
A.3- Reconstruction of Major Bridges		Cost of each Major Bridge shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridges.
(1) Foundation	21.54%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the major Bridge as specified hereinunder.
(i) Pile Foundation (a) Piling: On completion of pile upto bottom of pile cap (b) Pile Cap: On completion of pile cap		(i) Pile Foundation (a) Piling: Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorata basis. (b) Pile Cap: Payment of 30% on pro- rata basis shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) Open Foundation		(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Stage of Payment	Percentage Weightage	Payment Procedure
1	2	3
(2) Sub-structure	4.58%	(2) Sub-Structure: Payment against Sub-structure shall be made on pro- rata basis on completion of a stage i.e. completion of atleast one sub- structure of abutments/piers upto abutment/pier cap level of each of the major bridge.
(3) Super-structure (including bearings)	14.29%	(3) Super-structure: Payment shall be made on prorata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under: If pre-cast RCC/PSC/Steel girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints	0.90%	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each major bridge.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.50%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each major bridge.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each major bridge.
(7) Guide Bunds, River Training works etc.	0.00%	(7) Guide Bunds, River Training works: Payments shall be made on completion of all guide bunds/river training works etc. complete in all respects as specified for each major bridge.
(8) Approaches (including Retaining walls, stone pitching and protection works)	0.26%	(8) Approaches: Payments shall be made on completion of both approaches including stone pitching, all respects as specified for each major bridge.
B.1 -Widening and repairs of		Cost of each ROB/RUB shall be determined on pro rata basis with respect to the total linear length (m) of the ROB/RUBs.
(a) ROB		
(b) RUB		
(1) Foundation	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the ROB/RUB as specified here in under.

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Stage of Payment	Percentage Weightage	Payment Procedure
1	2	3
(i) Pile Foundation (a) Piling: On completion of pile upto bottom of pile cap (b) Pile Cap: On completion of pile cap		(i) Pile Foundation (a) Piling: Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorata basis. (b) Pile Cap: Payment of 30% on pro- rata basis shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) Open Foundation		(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	0.00%	(2) Sub-Structure:. Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub- structure of abutments/piers upto abutment/pier cap level of each of the ROB/RUB.
(3) Super-structure (including bearings)	0.00%	(3) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under: If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints in case of ROB. In case of RUB, rigid pavement under RUB including drainage facility as specified.	0.00%	(4) Wearing Coat: Payment shall be made on completion of (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified for each of the ROB and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified for each of the RUB.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the ROB/ RUB.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the ROB/ RUB.

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Stage of Payment	Percentage Weightage	Payment Procedure
1	2	3
(7) Approaches (including Retaining walls, stone pitching and protection works)	0.00%	(7) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified for each of the ROB/ RUB.
B.2- New ROB/RUB		Cost of each ROB/RUB shall be determined on pro rata basis with respect to the total linear length (m) of the ROB/RUBs.
(a) ROB		
(b) RUB		
(1) Foundation	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the ROB/RUB as specified here in under:
(i) Well Foundation (a) On completion of Cutting Edge + Well Curb (b) Wellsteining: On completion of well steining upto bottom of well cap. (c) On completion of bottom plug + top plug (if provisioned as per design) + well cap		(i) Well Foundation (a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb. (b) Well steining: Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof. (c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.
(ii) Pile Foundation (a) Piling – On completion of piling upto bottom of pile cap (b) Pile Cap: On completion of pile cap		(ii) Pile Foundation (a) Piling: Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorota basis. (b) Pile Cap: Payment of 30% shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(iii) Open Foundation		(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	0.00%	(2) Sub-Structure: Payment against Sub-structure shall be made on pro- rata basis on completion of a stage i.e. completion of atleast one sub- structure of

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Stage of Payment	Percentage Weightage	Payment Procedure
1	2	3
		abutments/piers upto abutment/pier cap level of each of the ROB/RUB.
(3) Super-structure (including bearings)	0.00%	(3) Super-structure: Payment shall be made on prorata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under: If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book. Applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints in case of ROB. In case of RUB, rigid pavement under RUB including drainage facility as specified.	0.00%	(4) Wearing Coat: Payment shall be made on completion of (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified for each of the ROB and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified for each of the RUB.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the ROB/RUB.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the ROB/ RUB.
(7) Approaches (including Retaining walls, stone pitching and protection works)	0.00%	(7) Approaches: Payments shall be made on completion of both approaches of each ROB including stone pitching, protection works, etc. complete in all respects as specified here in under: If reinforced soil wall is used with facia panel/blocks, interim payment shall be made @75% of the Cost of that element as derived from MoRTH data Book. Applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
C.1- Widening and repairs of Elevated Section/Flyovers/ Grade Separators		Cost of each structure shall be determined on pro rata basis with respect to the total linear length (m) of the structures.
(1) Foundation	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the structure as specified here in under:
(i) Pile Foundation (a) Piling – On completion of pile upto		(i) Pile Foundation (a) Piling: Payment of 70% shall be made on

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Stage of Payment	Percentage Weightage	Payment Procedure
1	2	3
bottom of pile cap (b) Pile Cap: On completion of pile cap		completion of piling upto bottom of pile cap for each pile on prorata basis. (b) Pile Cap: Payment of 30% on pro-rata basis shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) Open Foundation		(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	0.00%	(2) Sub-Structure: Payment against Sub-structure shall be made on pro- rata basis on completion of a stage i.e. completion of atleast one sub- structure of abutments/piers upto abutment/pier cap level of each of the structure.
(3) Super-structure (including bearings)	0.00%	(3) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super-structure upto deck slab including bearings of at least one span as specified here in under: If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints	0.00%	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each of the structure.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the structure.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the structure.
(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%	(7) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects of each structure.
C.2 -New Elevated Section/Flyovers/ Grade Separators		Cost of each structure shall be determined on pro rata basis with respect to the total linear length (m) of the structures.
(1) Foundation	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Stage of Payment	Percentage Weightage	Payment Procedure
1	2	3
		i.e. completion of atleast one foundation of each of the structure as specified here in under:
(i) Well Foundation (a) On completion of Cutting Edge + Well Curb (b) Wellsteining: On completion of well steining upto bottom of well cap. (c) On completion of bottom plug + top plug (if provisioned as per design) + well cap		(i) Well Foundation (a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb. (b) Well steining: Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof. (c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.
(ii) Pile Foundation		(ii) Pile Foundation (a) Piling: Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on pro-rata basis. (b) Pile Cap: Payment of 30% shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(iii) Open Foundation		(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	0.00%	(2) Sub-Structure: Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the structure.
(3) Super-structure (including bearings)	0.00%	(3) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super-structure upto deck slab including bearings of at least one span as specified here in under: If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Stage of Payment	Percentage Weightage	Payment Procedure
1	2	3
(4) Wearing Coat including expansion joints	0.00%	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each of the structure.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the structure.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the structure.
(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%	(7) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified here in under: If reinforced soil wall is used with facia panel/blocks, interim payment shall be made @75% of the Cost of that element as derived from MoRTH data Book. Applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.

Note: In case of reconstruction of any existing structure, cost of dismantling is included in the Percentage- weightage of foundation works.

1.3.4 Other works.

Procedure for estimating the value of other works done shall be as stated in table 1.3.4.

Table 1.3.4

Stage of Payment	Percentage Weightage	Payment Procedure
1	200.00%	3
(i) Toll Plaza	0.00%	Unit of measurement is each completed toll plaza. Payment for each toll plaza shall be made on pro rata basis with respect to the total of all toll plazas as specified here in under:
(a) DLC(LHS)		(a) DLC (LHS): Payment of 12.5% on pro-rata basis shall be made on completion of a stage i.e. completion of DLC on LHS.
(b) DLC (RHS)		(b) DLC (RHS): Payment of 12.5% on pro-rata basis shall be made on completion of a stage i.e. completion of DLC on LHS.

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Stage of Payment	Percentage Weightage	Payment Procedure
1	200.00%	3
(c) PQC(LHS)		(c) PQC (LHS): Payment of 25% on pro-rata basis shall be made on completion of a stage i.e. completion of PQC on LHS.
(d) PQC(RHS)		(d) PQC (RHS): Payment of 25% on pro-rata basis shall be made on completion of a stage i.e. completion of PQC on RHS.
(e) Admin Building		(e) Admin Building: Payment of 10% on pro-rata basis shall be made on completion of a stage i.e. completion of Admin Building and miscellaneous works.
(f) Toll Booth, canopy, safety items and all other associated works		(f) Toll Booth, canopy, safety items and all other associated works: Payment of 15% on pro-rata basis shall be made on completion of a stage i.e. completion of Toll Booth, canopy, safety items and all other associated works.
(ii) Road side Drain		
(a) PCC Drain	0.00%	a) PCC Drains: Unit of measurement is linear length in metre. Payment shall be made on pro rata basis on completion of a stage in a length of not less than 100 m on one side.
(b) RCC Cover Drain	34.27%	(b) Cover slabs: Unit of measurement is linear length in metre. Payment shall be made on pro rata basis on completion of a stage in a length of not less than 100 m on one side.
(c) Unlined surface drains	1.08%	(c) Unlined Drain: Unit of measurement is linear length in metre. Payment shall be made on pro rata basis on completion of a stage in a length of not less than 100 m on one side.
(iii) Road signs, markings, km stones, safety devices, etc	12.74%	Unit of measurement is linear length in km. Payment shall be made on pro rata basis on completion of a stage in a length of not less than one Km on both sides.
(iv) Junction Improvement	11.61%	Payment shall be made on pro rata basis for completed facilities on completion of a stage of not less than 10% of the total quantity.
(v) Rain Water Harvesting	1.67%	Payment shall be made for completed facilities.
(vi) Overhead gantry mounted signs	6.01%	Unit of measurement is each number. Payment shall be made on pro-rata basis on completion of each overhead gantry mounted sign
(vii) Project Facilities	2.95%	Unit of measurement is each number. Payment shall be made on pro rata basis for completed facilities.
(a) Bus bays		
(b) Truck lay-byes		
(c) Rest areas		
(d) others		
(viii) Highway Lighting & High Mast Light including generator facilities	13.807%	Payment shall be made on pro rata basis for completed facilities on completion of a stage of not less than 10% of the total quantity.

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Stage of Payment	Percentage Weightage	Payment Procedure
1	200.00%	3
(ix) Interlocking Paver Block & Railing	8.882%	Payment shall be made on pro rata basis for completed facilities on completion of a stage of not less than 10% of the total quantity.
(x) Roadside plantation	0.168%	Unit of measurement is linear length in Km. Payment shall be made on pro rata basis on completion of one Km.
(xi) Protection works other than approaches to the bridges, elevated sections/ flyovers/grade separators and ROBs/ RUBs		Unit of measurement is linear length. Payment against items (a), (b) & (c) shall be made on pro rata basis on completion of a stage in a length of not less than 10% (ten per cent) of the total length and 100 m whichever is less.
(a) W Beam Crash Barrier	2.42%	
(b) Retaining wall	0.00%	
(c) Breast wall	0.00%	
(xii) Safety and traffic management during construction	0.00%	Payment shall be made on prorata basis every six months.
(xiii) Utility Duct	2.44%	Payment shall be made on pro rata basis for completed facilities on completion of a stage of not less than 10% of the total quantity.
(xiv) others	1.94%	Payment shall be made on pro rata basis for completed facilities on completion of a stage of not less than 10% of the total quantity.

1.3.5 Utility works.

Procedure for estimating the value of Utility works done shall be as stated in table 1.3.5.

Table 1.3.5

Stage of Payment	Percentage Weightage	Payment Procedure
1	2	3
(i) Electrical Utilities: (a) EHT line (b) EHT crossings (c) HTI LT line (d) HTI LT Crossings]	81.582%	(a) Unit of measurement is as per completed activities. Cost per activity shall be determined on Pro-rate basis as per its weightage with reference to total cost of EHT line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is (i) Erection of Poles 20%, (ii) Conductor stringing including laying of cable-30%, (iii) OTR erection (if involved) - 15% and (iv) Charging of line including dismantling and site clearance-35% (with OTR) and 50% without OTR). (b) Cost of each crossing shall be determined on pro-rate basis with reference to total no. of crossings. Payment shall be made for not less than 25% of the crossings subject to a minimum of 4 crossings.

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

Stage of Payment	Percentage Weightage	Payment Procedure
1	2	3
		<p>(c) Unit of measurement is as per completed activities. Cost per activity shall be determined on Pro-rate basis as per its weightage with reference to total cost of EHT line. Payment shall be made for completed activity. (The average weightage of major activities (only for purpose) in shifting work (i) Erection of Poles - Conductor stringing including laying of cable - 30%, (iii) OTR erection (if involved) - 10% and (iv) Charging of line including dismantling and site clearance - 40% (with and 50% without OTR)</p> <p>(d) Cost of each crossing shall be determined on pro-data basis with reference to total no. of crossings. Payment shall be made for not less than 25% of the crossings subject to a minimum of 10 crossings.</p>
<p>(ii) Public Health Utilities: [(a)Water pipeline (b)Water pipeline Crossings (c) Sewage lines (d) Sewage line Crossings]</p>	18.418%	<p>(a) Unit of measurement is as per completed activities. Cost per activity shall be determined on Pro-rate basis as per its weightage with reference to total cost of EHT line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is laying of pipe - 50%, charging of line including all miscellaneous works and dismantling and site clearance - 50%)</p> <p>(b) Cost of each crossing shall be determined on pro-rate basis with reference to total no. of crossings. Payment shall be made for not less than 25% of the crossings subject to a minimum of 8 crossings</p> <p>(c) Unit of measurement is as per completed activities. Cost per activity shall be determined on Pro-rate basis as per its weightage with reference to total cost of EHT line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is laying of pipe - 50%, charging of line including all miscellaneous works and dismantling and site clearance - 50%)</p> <p>(d) Unit of measurement is as per completed activities. Cost per activity shall be determined on Pro-rate basis as per its weightage with reference to total cost of EHT line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is laying of pipe - 50%, charging of line including all miscellaneous works and dismantling and site clearance - 50%)</p>

Note: (1) In case of innovative Major Bridge Projects like cable suspension/cable stayed and exceptionally long span bridges, the schedule may be modified as per site requirements before bidding with due approval of Competent Authority.

(2) The Schedule for exclusive Tunnel Projects may be prepared as per site requirements before

UPGRADATION OF BACHHON-CHANDLA-SARWAI-GORIHAR-CHANDRAPURA ROAD (UP-MP BORDER) FROM DESIGN CH. 0+000 TO DESIGN CH.57+640 KM IN THE STATE OF MADHYA PRADESH TOTAL LENGTH 57.64 KM, TWO LANE WITH PAVED SHOULDER CONFIGURATION IN THE STATE OF MADHYA PRADESH ON EPC MOD

bidding with due approval of Competent Authority.

- (3) (a) In order to maintain cash flow in the project, the Authority shall also make interim monthly payments to the Contractor for the work done during the month for which the corresponding stage, as mentioned in Schedule-H, has not been achieved. Such work shall be measured, in a length, number or area as specified in corresponding stage of Schedule-H and valued in accordance with the proportion of the weightage of Contract Price assigned to that stage in Schedule-H. '90% of value of such work shall be paid as an 'Interim Monthly Payment' under clause 19.3 (i) of Contract Agreement.
- (b) For Pre cast/ pre-fabricated elements to be used in permanent works, interim payments to be made @ 75% of cost of that element (to be derived from MoRT&H data book) as per schedule H.
- (C) Upon completion of the defined 'stage', a reconciliation of the interim payments shall be carried out, and any balance amount shall be paid. For the avoidance of doubt, it is clarified that the interim monthly payments are made solely to maintain cash flow in the project. In the event of termination of the project, under Clause 23.1, 23.2 or 23.3, as the case may be, such interim payments shall be dealt with as per Clause 23.5 (i) (b) of the Contract Agreement.

Revised Schedule-H for Package-12
(See Clauses 10.1 (iv) and 19.3)
Contract Price Weightages

- 1.1 The Contract Price for this Agreement is Rs Cr.
- 1.2 Proportions of the Contract Price for different stages of Construction of the Project Highway shall be as specified below:

Table 1.2.1

Item	Weightage in % of Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
I. Road works including Culverts, widening and repair of culverts.	55.70%	A- Widening and strengthening of existing road	
		(1) Earthwork up to top of the embankment	0.00%
		(2) Sub-Grade	0.00%
		(3) Sub-Base Course	0.00%
		(4) Non-Bituminous Base Course	0.00%
		(5) Bituminous Base Course (OTI work)	0.00%
		(6) Wearing Coat (OTI work)	0.00%
		(7) Conventional White topping (OTI work)	0.00%
		(8) Widening and repair of culverts	4.45%
		B.1- Reconstruction/ New realignment/ bypass (Flexible pavement)	
		(1) Earthwork up to top of the embankment	1.19%
		(2) Sub-Grade	3.21%
		(3) Sub-Base Course	4.61%
		(4) Non-Bituminous Base Course	6.89%
		(5) Bituminous Base Course	20.36%
		(6) Wearing Coat	16.35%
		(7) Earthen Shoulder	0.74%
		B.2- Reconstruction/ New realignment/ bypass (Rigid Pavement)	
		(1) Earthwork up to top of the embankment	0.51%
		(2) Sub-Grade	1.10%
		(3) Sub-Base Course	2.03%
		(4) Dry Lean Concrete (DLC) Course	5.94%
		(5) Pavement Quality Control (PQC) Course	30.13%

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Item	Weightage in % of Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		C.1- Reconstruction/ New service/ slip road (Flexible pavement)	
		(1) Earthwork up to top of the embankment	0.00%
		(2) Sub-Grade	0.00%
		(3) Sub-Base Course	0.00%
		(4) Non Bituminous Base Course	0.00%
		(5) Bituminous Base Course	0.00%
		(6) Wearing Coat	0.00%
		C.2- Reconstruction/ New Service/ slip road (Rigid Pavement)	
		(1) Earthwork up to top of the embankment	0.00%
		(2) Sub-Grade	0.00%
		(3) Sub-Base Course	0.00%
		(4) Dry Lean Concrete (DLC) Course	0.00%
		(5) Pavement Quality Control (PQC) Course	0.00%
		D -Re-Construction and New Culvert on existing road, realignment, bypass.	
Culvert (length < 06 m)	2.49%		
II. Minor Bridges/ Underpasses/ overpasses	2.18%	A.1 Widening and Repair of Minor Bridges (length > 06 m and < 60 m)	
		Minor bridges	
		(1) Foundation: On completion of the foundation work of abutments and piers	4.85%
		(2) Sub-structure: On completion of abutments and piers with abutment/ pier cap.	3.68%
		(3) Super-structure: On completion of the super-structure in all respects including wearing coat, bearings, expansion joints, handrails, crash barriers, road signs and markings, tests on completion etc. complete in all respect.	2.82%
		(4) Approaches: On completion of approaches including wing walls/ return walls, retaining walls, stone pitching, protection works for floor, embankment slope, etc. complete in all respect and fit for use.	1.02%

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Item	Weightage in % of Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		A.2- New Minor bridges (length >6 and <60 m.)	
		(1) Foundation: On completion of the foundation work of abutments and piers	29.78%
		(2) Sub-structure: On completion of abutments and piers with abutment/ pier cap.	27.70%
		(3) Super-structure: On completion of the super-structure upto deck slab including bearings.	17.28%
		(4) Miscellaneous Works : On completion of wearing coat, expansion joint, crash barrier, railings, protection works and any remaining work associated to bridge including tests on bridge.	7.45%
		(5) Approaches: On completion of approaches including wing walls/ return walls, Retaining walls, stone pitching, protection works for floor, embankment slope etc. complete in all respect and fit for use.	5.42%
		(6) Guide Bunds and River Training Works: On completion of Guide Bunds and river Training Works complete in all respects	0.00%
		B.1 Widening and Repair of underpass/overpass	
		Underpasses/ Overpasses	0.00%
		B.2- New underpasses/ overpasses	
		(1) Foundation: On completion of the foundation work of abutments and piers	0.00%
		(2) Sub-structure : On completion of abutments and piers with abutment/ pier cap.	0.00%
		(3) Super-structure: On completion of the super-structure upto deck slab including bearing.	0.00%
		(4) Miscellaneous Works : On completion of wearing coat, expansion joint, crash barrier, railings and any remaining work associated to bridge including tests on bridge.	0.00%

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Item	Weightage in % of Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		(5) Approaches: On completion of approaches including Wing walls/ Return walls, Retaining walls/ Reinforced Earth walls, stone pitching, protection works complete in all respect and fit for use.	0.00%
III. Major Bridge(length > 60 m.) works and ROB/RUB/ elevated sections/flyovers including viaducts, if any	1.36%	A.1- Widening and repairs of Major Bridges	
		(1) Foundation	0.00%
		i) Pile Foundation	
		ii) Open Foundation	
		(2) Sub-structure	0.00%
		(3) Super structure (including Bearings)	0.00%
		(4) Wearing coat including expansion joints	0.00%
		(5) Miscellaneous items like (hand rails, crash barriers, road marking etc.)	0.00%
		(6) Wing wall/return wall	0.00%
		(7) Guide bunds, River Training work etc.	0.00%
		(8) Approach (including Retaining walls, stone pitching and protection works for floor, embankment slope etc.)	0.00%
		A.2- New Major Bridges	
		(1) Foundation	30.44%
		(i) Well Foundation	
		(ii) Pile Foundation	
		(iii) Open Foundation	
		(2) Sub-structure	21.24%
		(3) Super structure (including bearing)	33.60%
		(4) Wearing Coat including expansion joints.	3.32%
		(5) Miscellaneous items (like hand rails, crash barriers, road marking etc.)	4.19%
(6) wing wall/return wall	0.50%		
(7) Guide bunds, River Training work etc.	0.00%		
(8) Approaches (including Retaining walls, stone pitching and protection works for floor, embankment slope, etc.)	6.71%		

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Item	Weightage in % of Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		B.1-Widening and repair of	
		a)ROB	
		b)RUB	
		(1) Foundation	0.00%
		i) Pile Foundation	
		ii) Open Foundation	
		(2) Sub-structure	0.00%
		(3) Super structure (including bearing)	0.00%
		(4) Wearing Coat: (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified.	0.00%
		(5) Miscellaneous items like (hand rails, crash barriers, road marking etc.)	0.00%
		(6) wing wall/return wall	0.00%
		(7) Approach (including Retaining walls, stone pitching and protection works)	0.00%
		B.2 New ROB/RUB	
		a) ROB	
		b) RUB	
		(1) Foundation	0.00%
		(i) Well Foundation	
		(ii) Pile Foundation	
		(iii) Open Foundation	
		(2) Sub-structure	0.00%
		(3) Super structure (including bearing)	0.00%
		(4) Wearing Coat: (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified.	0.00%
		(5) Miscellaneous items like (hand rails, crash barriers, road marking etc.)	0.00%
		(6) wing wall/return wall	0.00%

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Item	Weightage in % of Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%
		C.1-Widening and repair of Elevated section /flyovers/Grade Separators	
		(1) Foundation	0.00%
		i) Pile Foundation	
		ii) Open Foundation	
		(2) Sub-structure	0.00%
		(3) Super structure (including bearing)	0.00%
		(4) Wearing Coat including expansion joints	0.00%
		(5) Miscellaneous items like (hand rails, crash barriers, road marking etc.)	0.00%
		(6) wing wall/return wall	0.00%
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%
		C.2-New Elevated Section/Flyovers/ Grade Separators	
		(1) Foundation	0.00%
		(i) Well Foundation	
		(ii) Pile Foundation	
		(iii) Open Foundation	
		(2) Sub-structure	0.00%
		(3) Super-structure (including bearings)	0.00%
		(4) Wearing Coat including expansion joints	0.00%
		(5) Miscellaneous items like (hand rails, crash barriers, road marking etc.)	0.00%
		(6) wing wall/return wall	0.00%
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%
IV. Other Works	33.36%	(i) Toll Plaza	0.00%
		(ii) Road side drains	
		(a) Drain	0.55%

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Item	Weightage in % of Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		(b) Cover Slab (RCC/PCC Drain)	22.43%
		(iii) Road signs, markings, km stones, safety devices etc.	10.86%
		(iv) Overhead gantry mounted signs	0.69%
		(v) Project facilities	
		(a) Bus Bays	5.56%
		(b) Truck lay-byes	0.00%
		(c) Rest areas	0.00%
		(d) others	
		(1) Highway Lighting	5.94%
		(2) Rain Water Harvesting	1.77%
		(3) Utility Ducts across the road	1.68%
		(vi) Road side plantation	2.35%
		(vii) Protection works# other than approaches to the bridges, elevated sections/ flyovers/grade separators and ROB/RUBs.	
		(a) New Jersey Crash Barrier in median	24.96%
		(b) Thrie Beam Crash Barrier	8.11%
		(c) Single Roller Crash Barrier	6.17%
		(viii) Paver Blocks	0.37%
		(ix) Junction improvement	6.08%
		(x) Safety and traffic management during construction	2.48%
V. Shifting of Utility Services	7.41%	(a) Electrical Utilities	28.47%
		(b) Public Health utilities (Water Pipelines & Sewage Lines)	71.53%

1.3 Procedure of estimating the value of work done.

1.3.1 Road works

Procedure for estimating the value of road work done shall be as follows:

Table 1.3.1

Stage of Payment	Percentage-weightage	Payment Procedure
A- Widening and strengthening of existing road		Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in a length of not less than 10
(1) Earthwork up to top of the embankment	0.00%	
(2) Sub-Grade	0.00%	

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(3) Sub-Base Course	0.00%	(ten) percent of the total length or 500m whichever is less
(4) Non-Bituminous Base Course	0.00%	
(5) Bituminous Base Course (OTI work)	0.00%	
(6) Wearing Coat (OTI work)	0.00%	
(8) Widening and repair of culverts	4.45%	Cost of completed culverts shall be determined pro rata basis with respect to the total no. of culverts. The payment shall be made on the completion of atleast one culvert. 75% of the cost will be payable on completion of box/ abutments and slab/ pipe and head wall. Remaining 25% will become payable on completion of protection works including return/ wing walls and any other work associated with culverts.
B.1- Reconstruction/New realignment/bypass (Flexible pavement)		
(1) Earthwork up to top of the embankment	1.19%	Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 500 m length, whichever is less.
(2) Sub-Grade	3.21%	
(3) Sub-Base Course	4.61%	
(4) Non-Bituminous Base Course	6.89%	
(5) Bituminous Base Course	20.36%	
(6) Wearing Coat	16.35%	
(7) Earthen Shoulder	0.74%	
B.2- Reconstruction/New realignment/bypass (Rigid pavement)		
(1) Earthwork up to top of the embankment	0.51%	Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 500 m length, whichever is less.
(2) Sub-Grade	1.10%	
(3) Sub base course	2.03%	
(4) Dry lean concrete (DLC) Course	5.94%	
(5) Pavement Quality Control (PQC) Course	30.13%	
C.1- Reconstruction/ New service road (Flexible pavement)		
(1) Earthwork up to top of the embankment	0.00%	Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 500 m length, whichever is less.
(2) Sub-Grade	0.00%	
(3) Sub-Base Course	0.00%	
(4) Non-Bituminous Base Course	0.00%	
(5) Bituminous Base Course	0.00%	
(6) Wearing Coat	0.00%	

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
C.2- Reconstruction/ New service road (Rigid pavement)		Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 500 m length, whichever is less.
(1) Earthwork up to top of the embankment	0.00%	
(2) Sub-Grade	0.00%	
(3) Sub-Base Course	0.00%	
(4) Dry Lean Concrete (DLC) Course	0.00%	
(5) Pavement Quality Control (PQC) Course	0.00%	
D- Re-Construction and New culverts on existing road, realignments, bypasses:		Cost of each culvert shall be determined on pro rata basis with respect to the total number of culverts. Payment shall be made on the completion of atleast one culvert. 75% of the cost will be payable on completion of box/ abutments and slab/ pipe and head wall. Remaining 25% will become payable on completion of protection works including return/ wing walls and any other work associated with culverts.
(1) Culverts (length < 6m)	2.49%	

@ For example, if the total length of bituminous work to be done is 100 km, the cost per km of bituminous work shall be determined as follows:

$$\text{Cost per km} = P \times \text{weightage for road work} \times \text{weightage for bituminous work} \times (1/L)$$

Where P = Contract Price

L = Total length in km

Similarly, the rates per km for other stages shall be worked out accordingly.

Note: The length affected due to law and other problems or litigation during execution due to which the contractor is unable to execute the work, may be deducted from the total project length for the payment purposes. The total length calculated here is only for payment purposes and will not affect and referred in other clauses of the Contract Agreement.

1.3.2 Minor Bridges and Underpass/Overpasses.

Procedure for estimating the value of Minor Bridge and Underpasses/Overpasses shall be as stated in table 1.3.2:

Table 1.3.2

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
A.1-Widening and repair of minor bridges (length > 6m and < 60m)		Cost of each minor bridge shall be determined on pro rata basis with respect to the total linear length (m) of the minor bridges.

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(1) Foundation: On completion of the foundation work of abutments and piers	4.85%	(i) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e completion of atleast two foundations of each bridge. In case where load testing is specified for foundation, the trigger of first payment shall include load testing also.
(2) Sub-structure: On completion of abutments and piers with abutment/ pier cap.	3.68%	(ii) Sub - structure – Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.
(3) Super-structure: On completion of the super-structure in all respects including wearing coat, bearings, expansion joints, handrails, crash barriers, road signs and markings, tests on completion etc. complete in all respect.	2.82%	(iii) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e., completion of super-structure of at least one span in all respects as specified in the column of "Stage of Payment" in this sub-clause.
(4) Approaches: On completion of approaches including wing walls/ return walls, Retaining walls, stone pitching, protection works for floor, embankment slope, etc. complete in all respect and fit for use.	1.02%	(iv) Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing walls/ return walls, retaining walls, stone pitching in all respect as specified in the column of “Stage of Payment” in this sub-clause for each bridge.
A.2- New minor Bridge		Cost of each minor bridge shall be determined on pro rata basis with respect to the total linear length (m) of the minor bridges.
(i) Foundation: On completion of the foundation work of abutments and piers.	29.78%	(i) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage completion of atleast two foundations of each bridge. In case where load testing is specified for foundation, the trigger of first payment shall include load testing also.
(ii) Sub – structure:	27.70%	(ii) Sub - structure – Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(iii) Super-structure: On completion of the super-structure upto deck slab including bearings.	17.28%	(iii) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e., completion of super-structure of at least one span upto deck slab including bearing as specified in the column of "Stage of Payment" in this sub-clause. If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(iv) Miscellaneous Works:	7.45%	(iv) Miscellaneous Works: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of wearing coat, expansion joint, crash barrier, railing, protection works, drainage and any other remaining work associated to bridge including tests on bridge for each bridge
(v) Approaches: On completion of approaches including Retaining walls, stone pitching, protection works for floor, embankment slope etc. complete in all respect and fit for use.	5.42%	(v) Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing walls/ return walls, retaining walls, stone pitching in all respect as specified in the column of "Stage of Payment" in this sub-clause for each bridge.
(vi) Guide Bunds and River Training Works: On completion of Guide Bunds and river Training Works complete in all respects	0.00%	(vi) Guide Bunds and River Training Works: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of Guide Bunds and River training Works in all respects as specified for each bridge.
B.1-Widening and repair of underpasses/ overpasses	0.00%	Cost of each underpass/overpass shall be determined on pro rata basis with respect to the total linear length of the underpasses/overpasses. Payment shall be made on the completion of widening & repair works of a underpass/overpass.
B.2- New underpasses/ overpasses		Cost of each Underpass/Overpass shall be determined on pro rata basis with respect to the total linear length (m) of the Underpasses/Overpasses.

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(i) Foundation: On completion of the foundation work including foundations, of abutments and piers	0.00%	(i) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of foundation(s) of each underpass/overpass. In case where load testing is specified for foundation, the trigger of first payment shall include load testing also.
(ii) Sub-structure :	0.00%	(ii) Sub-structure: Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.
(iii) Super-structure: On completion of the super-structure upto deck slab,	0.00%	(iii) Super-structure: Payment shall be made on pro-rata basis on completion of a stage 'i.e. completion of super-structure of at least one span upto deck slab including bearing as specified in the column of "Stage of Payment" in this sub-clause: If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(iv) Miscellaneous Works:	0.00%	(iv) Miscellaneous Works: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of wearing coat, expansion joint, crash barrier, railing, protection works and any other remaining work associated to bridge including tests on bridge for each bridge.
v) Approaches: On completion of approaches including wing wall/ return wall, Retaining walls/ Reinforced Earth walls, stone pitching, protection works complete in all respect and fit for use.	0.00%	(v) Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing wall/ return wall, retaining walls, Reinforced Earth walls, stone pitching, protection works complete in all respect for each bridge.

Note: In case of reconstruction of any existing structure, cost of dismantling is included in the Percentage- weightage of foundation works.

1.3.3 Major Bridge Works, ROB/RUB & Structures

Procedure for estimating the value of Major Bridge Works, ROB/RUB & Structures shall be as stated in table 1.3.3:

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Table 1.3.3

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
A.1- Widening and repairs of Major Bridges		Cost of each Major Bridge shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridges.
(1) Foundation	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the major Bridge as specified hereinunder.
(i) Pile Foundation (a) Piling – On completion of pile upto bottom of pile cap (b) Pile Cap : On completion of pile cap		(i) Pile Foundation (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorata basis. (b) Pile Cap : Payment of 30% on pro-rata basis shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) Open Foundation		(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	0.00%	(2) Sub-Structure: Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the major bridge.
(3) Super-structure (including bearings)	0.00%	(3)Super-structure: Payment shall be made on prorata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under: If pre-cast RCC/PSC/Steel girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(4) Wearing Coat including expansion joints	0.00%	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each major bridge.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each major bridge.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each major bridge.
(7) Guide Bunds, River Training works etc.	0.00%	(7) Guide Bunds, River Training works: Payments shall be made on completion of all guide bunds/river training works etc. complete in all respects as specified for each major bridge.
(8) Approaches (including Retaining walls, stone pitching and protection works)	0.00%	(8) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified for each major bridge.
A.2- New Major Bridges		Cost of each Major Bridge shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridge.
(1) Foundation	30.44%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the major Bridge as specified here in under:

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
<p>(i) Well Foundation</p> <p>(a) On completion of Cutting Edge + Well Curb</p> <p>(b) Wellsteining : On completion of well steining upto bottom of well cap.</p> <p>(c) On completion of bottom plug + top plug (if provisioned as per design) + well cap</p>		<p>(i) Well Foundation</p> <p>(a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb.</p> <p>(b) Well steining : Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof.</p> <p>(c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.</p>
<p>(ii) Pile Foundation</p> <p>(a) Piling – On completion of pile upto bottom of pile cap</p> <p>(b) Pile Cap : On completion of pile cap</p>		<p>(ii) Pile Foundation</p> <p>(a) Piling: Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorota basis.</p> <p>(b) Pile Cap: Payment of 30% shall be made on completion of pile cap.</p> <p>In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.</p>
<p>(iii) Open Foundation</p>		<p>(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.</p>
<p>(2) Sub-structure</p>	21.24%	<p>(ii) Sub-Structure: Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the major bridge.</p>
<p>(3) Super-structure (including bearings)</p>	33.60%	<p>(3) Super-structure: Payment shall be made on prorata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under:</p> <p>If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.</p> <p>(For cable stayed bridge and suspension cable bridge, detailed payment stage may be included on case to case basis)</p>

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(4) Wearing Coat including expansion joints	3.32%	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each major bridge.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	4.19%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each major bridge.
(6) Wing walls/return walls	0.50%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each major bridge.
(7) Guide Bunds, River Training works etc.	0.00%	(7) Guide Bunds, River Training works: Payments shall be made on completion of all guide bunds/river training works etc. complete in all respects as specified for each major bridge.
(8) Approaches (including Retaining walls, stone pitching and protection works for floor, embankment slope etc.)	6.71%	(8) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified for each major bridge.
B.1 -Widening and repairs of (a) ROB (b) RUB		Cost of each ROB/RUB shall be determined on pro rata basis with respect to the total linear length (m) of the ROB/RUBs.
(1) Foundation	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the ROB/RUB as specified here in under.
(i) Pile Foundation (a) Piling – On completion of pile upto bottom of pile cap (b) Pile Cap : On completion of pile cap		(i) Pile Foundation (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorata basis. (b) Pile Cap : Payment of 30% on pro-rata basis shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) Open Foundation		(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(2) Sub-structure	0.00%	(2) Sub-Structure: Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the ROB/RUB.
(3) Super- structure (including bearing)	0.00%	(3) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under : If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints in case of ROB. In case of RUB, rigid pavement under RUB including drainage facility as specified.	0.00%	(4) Wearing Coat: Payment shall be made on completion of (a) in case of ROB-wearing coat including expansion joints complete in all respects as specified for each of the ROB and (b) in case of RUB-rigid pavement under RUB including drainage facility complete in all respects as specified for each of the RUB.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the ROB/ RUB.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the ROB/ RUB.
(7) Approaches (including Retaining walls, stone pitching and protection works)	0.00%	(7) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified for each of the ROB/ RUB.
B.2-New (a)ROB (b) RUB		Cost of each ROB/RUB shall be determined on pro rata basis with respect to the total linear length (m) of the ROBs/RUBs.

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(1) Foundation	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the ROB/RUB as specified here in under:
(i) Well Foundation (a) On completion of Cutting Edge + Well Curb (b) Wellsteining : On completion of well steining upto bottom of well cap. (c) On completion of bottom plug + top plug (if provisioned as per design) + well cap		(i) Well Foundation (a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb. (b) Well steining: Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof. (c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.
(ii) Pile Foundation (a) Piling – On completion of pile upto bottom of pile cap (b) Pile Cap : On completion of pile cap		(ii) Pile Foundation (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorota basis. (b) Pile Cap : Payment of 30% shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(iii) Open Foundation		(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	0.00%	(2) Sub-Structure: Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the ROB/RUB.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(3) Super- structure (including bearing)	0.00%	(3)Super-structure: Payment shall be made on prorata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under : If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book. Applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints in case of ROB. In case of RUB, rigid pavement under RUB including drainage facility as specified.	0.00%	(4) Wearing Coat: Payment shall be made on completion of (a) in case of ROB-wearing coat including expansion joints complete in all respects as specified for each of the ROB and (b) in case of RUB-rigid pavement under RUB including drainage facility complete in all respects as specified for each of the RUB.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the ROB/RUB.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the ROB/RUB.
(7) Approaches (Retaining wall stone pitching and protection works)	0.00%	(7) Approaches: Payments shall be made on completion of both approaches of each ROB including stone pitching, protection works, etc. complete in all respects as specified here in under : If reinforced soil wall is used with facia panel/blocks, interim payment shall be made @75% of the Cost of that element as derived from MoRTH data Book. Applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
C.1- Widening and repairs of Elevated Section/Flyovers/ Grade Separators		Cost of each structure shall be determined on pro rata basis with respect to the total linear length (m) of the structures.

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(1) Foundation	0.00%	(1) Foundation : Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the structure as specified here in under :
(i) Pile Foundation (a) Piling – On completion of pile upto bottom of pile cap (b) Pile Cap : On completion of pile cap		(i) Pile Foundation (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorata basis. (b) Pile Cap : Payment of 30% on pro-rata basis shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) Open Foundation		(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	0.00%	(2) Sub-Structure: Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the structure.
(3) Super- structure (including bearing)	0.00%	(3)Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure upto deck slab including bearings of at least one span as specified here in under: If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints	0.00%	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each of the structure.

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the structure.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the structure.
(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%	(7) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects of each structure.
C.2 -New Elevated Section/Flyovers/ Separators Grade		Cost of each structure shall be determined on pro rata basis with respect to the total linear length (m) of the structures.
(1) Foundation	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the structure as specified here in under :
(i) Well Foundation (a) On completion of Cutting Edge + Well Curb (b) Wellsteining : On completion of well steining upto bottom of well cap. (c) On completion of bottom plug + top plug (if provisioned as per design) + well cap		(i) Well Foundation (a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb. (b) Well steining : Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof. (c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.
(ii) Pile Foundation (a) Piling – On completion of pile upto bottom of pile cap (b) Pile Cap : On completion of pile cap		(ii) Pile Foundation (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on pro-rata basis. (b) Pile Cap : Payment of 30% shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(iii) Open Foundation		(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	0.00%	(2) Sub-Structure: Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the structure.
(3) Super- structure (including bearing)	0.00%	(3) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure upto deck slab including bearings of at least one span as specified here in under: If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints	0.00%	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each of the structure.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the structure.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the structure.
(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%	(7) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified here in under: If reinforced soil wall is used with facia panel/blocks, interim payment shall be made @75% of the Cost of that element as derived from MoRTH data Book. Applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.

Note: In case of reconstruction of any existing structure, cost of dismantling is included in the Percentage- weightage of foundation works.

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

1.3.4 Other works.

Procedure for estimating the value of other works done shall be as stated in table 1.3.4:

Table 1.3.4

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(1) Toll Plaza	0.00%	Unit of measurement is each completed toll plaza. Payment for each toll plaza shall be made on pro rata basis with respect to the total of all toll plazas as specified here in under:
(a) DLC(LHS)		(a) DLC (LHS): Payment of 12.5% on pro-rata basis shall be made on completion of a stage i.e. completion of DLC on LHS.
(b) DLC(RHS)		(b) DLC (RHS): Payment of 12.5% on pro-rata basis shall be made on completion of a stage i.e. completion of DLC on LHS.
(c) PQC(LHS)		(c) PQC(LHS): Payment of 25% on pro-rata basis shall be made on completion of a stage i.e. completion of PQC on LHS.
(d) PQC(RHS)		(d) PQC(RHS): Payment of 25% on pro-rata basis shall be made on completion of a stage i.e. completion of PQC on RHS.
(e) Admin Building		(e) Admin Building: Payment of 10% on pro-rata basis shall be made on completion of a stage i.e. completion of Admin Building and miscellaneous works.
(f) Toll Booth, canopy, safety items and all other associated works		(f) Toll Booth, canopy, safety items and all other associated works: Payment of 15% on pro-rata basis shall be made on completion of a stage i.e. completion of Toll Booth, canopy, safety items and all other associated works.
(ii) Road side drains		
(a) Drains	0.55%	a) Drains: Unit of measurement is linear length in metre. Payment shall be made on pro rata basis on completion of a stage in a length of not less than 100 m on one side.
(b) Cover Slabs (RCC/PCC Drain)	22.43%	(b) Cover slabs: Unit of measurement is linear length in metre. Payment shall be made on pro rata basis on completion of a stage in a length of not less than 100 m on one side.

Stage of Payment	Percentage-weightage	Payment Procedure
(1)	(2)	(3)
(iii) Road signs, markings, km stones, safety devices, ...	10.86%	Unit of measurement is linear length in km. Payment shall be made on pro rata basis on completion of a stage in a length of not less than one Km on both sides.
(iv) Overhead gantry mounted signs	0.69%	Unit of measurement is each number. Payment shall be made on pro-rata basis on completion of each overhead gantry mounted sign
4) Project facilities		Unit of measurement is each number. Payment shall be made on pro rata basis for completed facilities.
(a) Bus Bays	5.56%	
(b) Truck lay-byes	0.00%	
(c) Rest areas	0.00%	
(d) others		
(1) Highway Lighting	5.94%	
(2) Rain Water Harvesting	1.77%	
(3) Utility Ducts across the road	1.68%	
(vi) Roadside plantation	2.35%	Unit of measurement is linear length in Km. Payment shall be made on pro rata basis on completion of one Km.
(vii) Protection works other than approaches to the bridges, elevated sections/ flyovers/grade separators and ROBs/ RUBs		Unit of measurement is linear length. Payment against items (a), (b) & (c) shall be made on pro rata basis on completion of a stage in a length of not less than 10% (ten per cent) of the total length and 100 m whichever is less.
(b) New Jersey Crash Barrier in median	24.96%	
(b) Thrie Beam Crash Barrier	8.11%	
(c) Single Roller Crash Barrier	6.17%	
(d) Retaining /Toe Wall	0.00%	
(e) Breast Wall	0.00%	
(viii) Paver Blocks	0.37%	
(ix) Junction improvement	6.08%	
(x) Safety and traffic management during construction	2.48%	Payment shall be made on prorata basis every six months.

1.3.5 Electrical Utilities and public Health Utilities (Water pipelines and sewage lines)

Stage of Payment	Weightage	Payment Procedure
(i) Electrical Utilities:	28.47%	

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Weightage	Payment Procedure
(a) EHT line		(a) Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rate basis as per its weightage with reference to total cost of EHT line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is (i) Erection of Poles-20%, (ii) Conductor stringing including laying of cable 30%, (iii) DTR erection (if involved)-15% and (iv) Charging of line including dismantling and site clearance-35% (with DTR) and 50% without DTR).
(b) EHT crossings		Cost of each crossing shall be determined on pro-rata basis with reference to total no. of crossings. Payment shall be made for not less than 25% of the crossings subject to a minimum of 4 crossings.
(c) HT / LT line (including transformers if any)		Cost of each crossing shall be determined on pro-rata basis with reference to total no. of crossings. Payment shall be made for not less than 25% of the crossings subject to a minimum of 10 crossings
(d) HT / LT crossings		(d) Cost of each crossing shall be determined on pro-rata basis with reference to total no. of crossings. Payment shall be made for not less than 25% of the crossings subject to a minimum of 10 crossings.
(ii) Public Health Utilities (Water pipe lines and sewage lines):	71.53%	
(a) Handpumps & Tube wells		Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis for each handpump & tubewell.
(a) Water pipeline		Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis as per its weightage with reference to total cost of pipe line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is laying of pipe-50%, Charging of line including all miscellaneous works and dismantling and site clearance- 50%)
(b) Water pipeline Crossings		Cost of each crossing shall be determined on pro-rata basis with reference to total no. of crossings. Payment shall be made for not less than 25% of the crossings subject to a minimum of 8 crossings.
(c) Sewage lines		Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis as per its weightage with reference to total cost of pipe line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is laying of pipe-50%, Charging of line including all miscellaneous works and dismantling and site clearance- 50%)

Upgradation and reconstruction of Ujjain Maksi Road from Design Ch. 00+000 to Design Ch. 38+950 Km in the State of Madhya Pradesh Total length 38.950 km, Four lane with paved shoulder configuration in the state of Madhya Pradesh on EPC Mode.

Stage of Payment	Weightage	Payment Procedure
(d) Sewage Line Crossings		Cost of each crossing shall be determined on pro-rata basis with reference to total no. of crossings. Payment shall be made for completed activity. (The average weightage of major activities in shifting work is laying pipe-50%, Charging of line including all miscellaneous works and dismantling and site clearance- 50%

2. (a) In order to maintain cash flow in the project, the Authority shall also make interim monthly payments to the Contractor for the work done during the month for which the corresponding stage, as mentioned in Schedule-H, has not been achieved. Such work shall be measured, in a length, number or area as specified in corresponding stage of Schedule-H and valued in accordance with the proportion of the weightage of Contract Price assigned to that stage in Schedule-H. '90% of value of such work shall be paid as an 'Interim Monthly Payment' under clause 19.3 (i) of Contract Agreement.
- (b) For Pre cast/ pre-fabricated elements to be used in permanent works, interim payments to be made @ 75% of cost of that element (to be derived from MoRT&H data book) as per schedule H.
- (C) Upon completion of the defined 'stage', a reconciliation of the interim payments shall be carried out, and any balance amount shall be paid. For the avoidance of doubt, it is clarified that the interim monthly payments are made solely to maintain cash flow in the project. In the event of termination of the project, under Clause 23.1, 23.2 or 23.3, as the case may be, such interim payments shall be dealt with as per Clause 23.5 (i) (b) of the Contract Agreement.
3. **Procedure for payment for Maintenance**
 - 3.1 The cost for maintenance shall be as stated in Clause 14.1.1.
 - 3.2 Payment for Maintenance shall be made in quarterly installments in accordance with the Provisions of Clause 19.7.

SCHEDULES

Revised Schedule-H for Package-13*(See Clauses 10.1 (iv) and 19.3)***Contract Price Weightages**

1.1 The Contract Price for this Agreement is.....

1.2 Proportions of the Contract Price for different stages of Construction of the Project Highway shall be as specified below:

Table 1.2.1

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
I. Road works including culverts, widening and repair of culverts.	53.41%	A- Widening and strengthening of existing road	
		(1) Earthwork up to top of the embankment	1.67%
		(2) Sub-Grade	2.29%
		(3) Sub-Base Course	8.87%
		(4) Non Bituminous Base Course	11.20%
		(5) Bituminous Base Course	46.92%
		(6) Wearing Coat	0.00%
		(7) Widening and repair of culverts	0.30%
		B.1- Reconstruction/ New realignment/ bypass (Flexible pavement)	
		(1) Earthwork up to top of the embankment	0.48%
		(2) Sub-Grade	2.11%
		(3) Sub Base Course	3.16%
		(4) Non-Bituminous Base Course*	4.43%
		(5) Bituminous Base Course	13.84%
		(6) Wearing Coat	0.00%
		B.2- Reconstruction/ New realignment/ bypass (Rigid Pavement)	
		(1) Earthwork up to top of the embankment	0.00%
		(2) Sub-Grade	0.00%
		(3) Sub Base Course	0.00%
		(4) Dry Lean Concrete(DLC) Course	0.55%
		(5) Pavement Quality Control (PQC) Course	2.30%
		C.1- Reconstruction/ New service road (Flexible pavement)	
		(1) Earthwork up to top of the embankment	0.00%
		(2) Sub-Grade	0.00%
		(3) Sub Base Course	0.00%
		(4) Non-Bituminous Base Course*	0.00%
		(5) Bituminous Base Course	0.00%
		(6) Wearing Coat	0.00%
		C.2- Reconstruction/ New Service road (Rigid Pavement)	
		(1) Earthwork up to top of the embankment	0.00%
		(2) Sub-Grade	0.00%
		(3) Sub Base Course	0.00%
		(4) Dry Lean Concrete(DLC) Course	0.00%
(5) Pavement Quality Control (PQC) Course	0.00%		
D- Re-Construction and New culverts on existing road, realignments, bypasses :			
Culverts (length < 6 m)	1.86%		
II. Minor Bridges/ Underpasses / Overpasses	6.57%	A.1- Widening and Repair of Minor bridges (length > 6 m and < 60 m)	
		Minor bridges	
		(1) Foundation: On completion of the foundation work of	0.00%

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		abutments and piers	
		(2) Sub-structure: On completion of abutments and piers with abutment/ pier cap.	0.00%
		(3) Super-structure: On completion of the super- structure in all respects including wearing coat, bearings, expansion joints, handrails, crash barriers, road signs and markings, tests on completion etc. complete in all respect.	0.00%
		(4) Approaches: On completion of approaches including wing walls/ return walls, Retaining walls, stone pitching, protection works for floor, embankment slope, etc. complete in all respect and fit for use.	0.00%
		A.2- New Minor bridges (length >6 and <60 m.)	
		(1) Foundation: On completion of the foundation work of abutments and piers	33.10%
		(2) Sub-structure: On completion of abutments and piers with abutment/ pier cap.	22.86%
		(3) Super-structure: On completion of the super-structure upto deck slab including bearings.	26.74%
		(4) Miscellaneous Works : On completion of wearing coat, expansion joint, crash barrier, railings, protection works and any remaining work associated to bridge including tests on bridge.	17.30%
		(5) Approaches: On completion of approaches including wing walls/ return walls, Retaining walls, stone pitching, protection works for floor, embankment slope etc. complete in all respect and fit for use.	0.00%
		(6) Guide Bunds and River Training Works: On completion of Guide Bunds and river Training Works complete in all respects	0.00%
		B.1- Widening and Repair of underpasses/ overpasses	
		Underpasses/ Overpasses	0.00%
		B.2- New underpasses/ overpasses	
		(1) Foundation: On completion of the foundation work of abutments and piers	0.00%
		(2) Sub-structure : On completion of abutments and piers with abutment/ pier cap.	
		(3) Super-structure: On completion of the super-structure upto deck slab including bearing.	0.00%
		(4) Miscellaneous Works : On completion of wearing coat, expansion joint, crash barrier, railings and any remaining work associated to bridge including tests on bridge	
		(5) Approaches: On completion of approaches including Wing walls/ Return walls, Retaining walls/ Reinforced Earth walls, stone pitching, protection works complete in all respect and fit for use.	0.00%
		III. Major Bridge (length > 60 m.) works and ROB/RUB/ elevated sections/flyovers including viaducts, if any	4.26%
(1) Foundation	0.00%		
i) Pile Foundation			
ii) Open Foundation			
(2) Sub-structure	0.00%		
(3) Super-structure (including bearings)	0.00%		
(4) Wearing Coat including expansion joints	0.00%		
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.)	0.00%		
(6) Wing walls/return walls	0.00%		
(7) Guide Bunds, River Training works etc.	0.00%		

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		(8) Approaches (including Retaining walls, stone pitching and protection works for floor, embankment slope etc.)	0.00%
		A.2- New Major Bridges	
		(1) Foundation	0.00%
		(i) Well Foundation	0.00%
		(ii) Pile Foundation	42.89%
		(iii) Open Foundation	0.00%
		(2) Sub-structure	21.13%
		(3) Super-structure (including bearings)	34.51%
		(4) Wearing Coat including expansion joints	0.00%
		(5) Miscellaneous Items (like hand rails, crash barriers, road markings etc.)	0.00%
		(6) Wing walls/return walls	0.00%
		(7) Guide Bunds, River Training works etc.	0.00%
		(8) Approaches (including Retaining walls, stone pitching and protection works for floor, embankment slope, etc.)	1.47%
		B.1- Widening and repair of (a) ROB (b) RUB	
		(1) Foundation	0.00%
		i) Pile Foundation	0.00%
		ii) Open Foundation	0.00%
		(2) Sub-structure	0.00%
		(3) Super-structure (including bearings)	0.00%
		(4) Wearing Coat: (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified.	0.00%
		(5) Miscellaneous Items (like hand rails, crash barriers, road markings etc.)	0.00%
		(6) Wing walls/return walls	0.00%
		(7) Approaches (including Retaining walls, stone pitching and protection works)	0.00%
		B.2- New ROB/RUB	
		(a)ROB	
		(b) RUB	
		(1) Foundation	
		(i) Well Foundation	0.00%
		(ii) Pile Foundation	0.00%
		(iii) Open Foundation	0.00%
		(2) Sub-structure	0.00%
		(3) Super-structure (including bearings)	0.00%
		(4) Wearing Coat: (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified.	0.00%
		(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.)	0.00%
		(6) Wing walls/return walls	0.00%
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%
		C.1- Widening and repair of Elevated Section/Flyovers/ Grade Separators	
		(1) Foundation	
		i) Pile Foundation	0.00%

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage		
1	2	3	4		
		ii) Open Foundation	0.00%		
		(2) Sub-structure	0.00%		
		(3) Super-structure (including bearings)	0.00%		
		(4) Wearing Coat including expansion joints	0.00%		
		(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.)	0.00%		
		(6) Wing walls/return walls	0.00%		
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%		
		C.2-New Elevated Section/Flyovers/ Grade Separators			
		(1) Foundation	0.00%		
		(i) Well Foundation	0.00%		
		(ii) Pile Foundation	0.00%		
		(iii) Open Foundation	0.00%		
		(2) Sub-structure	0.00%		
		(3) Super-structure (including bearings)	0.00%		
		(4) Wearing Coat including expansion joints	0.00%		
		(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.)	0.00%		
		(6) Wing walls/return walls	0.00%		
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%		
		IV. Other works	29.39%	(i) Toll Plaza	
				(ii) Road side drains	
				(a) Drain	14.27%
(b) Cover Slab	0.00%				
(iii) Road signs, markings, km stones, safety devices etc.	5.13%				
(iv) Overhead gantry mounted signs	0.37%				
(v) Project facilities					
(a) Bus Bays	0.45%				
(b) Truck lay-byes	0.00%				
(c) Rest areas	0.00%				
(d) Junctions	27.21%				
(e) Paver Block Shoulder	1.23%				
(f) Cable duct across the road	0.67%				
(g) Rain water harvesting	1.12%				
(vi) Road side plantation	2.68%				
(vi) Tree transplantation	0.09%				
(vii) Protection works other than approaches to the bridges, elevated sections/ flyovers/grade separators and ROBs/RUBs.					
(a) Crash Barrier (MBCB)	5.12%				
(b) Retaining Wall	25.37%				
(c) Breast Wall	0.00%				
(viii) Safety and traffic management during construction	0.00%				
(ix) Site Clearance	0.34%				
(x) Inspection Vehicle	1.44%				
(xi) Street Lighting (Double Arm, Single Arm, Solar light and High Mast)	13.83%				
(xii) Canal Gate	0.67%				
utilities and public health utilities (Water pipe lines and sewerage)	6.37%	(i) EHT line	0.00%		
		(ii) EHT Crossings	0.00%		
		(iii) HT/LT line	20.43%		
		(iv) HT/LT crossings	48.46%		
		(v) Water pipeline	31.12%		

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		(vi) Water pipeline crossings	0.00%
		(vii) Sewage lines	0.00%
		(viii) Sewage line crossings	0.00%

1.3 Procedure of estimating the value of work done.

1.3.1 Road works

Procedure for estimating the value of road work done shall be as follows:

Table 1.3.1

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
A-Widening and strengthening of existing road		Unit of measurement is linear length. Payment of each stage shall be made on pro data basis on completion of a stage in a length of not less than 10 (ten) percent of the total length or 500m whichever is less
(1) Earthwork up to top of the embankment	1.67%	
(2) Sub-Grade	2.29%	
(3) Sub-Base Course	8.87%	
(4) Non Bituminous Base Course*	11.20%	
(5) Bituminous Base Course	46.92%	
(6) Wearing Coat	0.00%	
(7) Widening and repair of culverts	0.30%	Cost of completed culverts shall be determined pro data basis with respect to the total no. of culverts. The payment shall be made on the completion of atleast one culvert. 75% of the cost will be payable on completion of box/ abutments and slab/ pipe and head wall. Remaining 25% will become payable on completion of protection works including return/ wing walls and any other work associated with culverts.
B.1- Reconstruction/New realignment/bypass (Flexible pavement)		Unit of measurement is linear length. Payment of each stage shall be made on pro data basis on completion of a stage in full length or 500 m length, whichever is less.
(1) Earthwork up to top of the embankment	0.48%	
(2) Sub-Grade	2.11%	
(3) Sub Base Course	3.16%	
(4) Non-Bituminous Base Course*	4.43%	
(5) Bituminous Base Course	13.84%	
(6) Wearing Coat	0.00%	
B.2- Reconstruction/New realignment/bypass (Rigid pavement)		Unit of measurement is linear length. Payment of each stage shall be made on pro data basis on completion of a stage in full length or 500 m length, whichever is less.
(1) Earthwork up to top of the embankment	0.00%	
(2) Sub-Grade	0.00%	
(3) Sub Base Course	0.00%	
(4) Dry Lean Concrete (DLC)	0.55%	

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
Course		
(5) Pavement Quality Control (PQC) Course	2.30%	
C.1- Reconstruction/ New service road (Flexible pavement)		Unit of measurement is linear length. Payment of each stage shall be made on pro data basis on completion of a stage in full length or 500 m length, whichever is less.
(1) Earthwork up to top of the embankment	0.00%	
(2) Sub-Grade	0.00%	
(3) Sub Base Course	0.00%	
(4) Non-Bituminous Base Course*	0.00%	
(5) Bituminous Base Course	0.00%	
(6) Wearing Coat	0.00%	
C.2- Reconstruction/ New service road (Rigid pavement)		Unit of measurement is linear length. Payment of each stage shall be made on pro data basis on completion of a stage in full length or 500 m
(1) Earthwork up to top of the embankment	0.00%	length, whichever is less.
(2) Sub-Grade	0.00%	
(3) Sub Base Course	0.00%	
(4) Dry Lean Concrete (DLC) Course	0.00%	
(5) Pavement Quality Control (PQC) Course	0.00%	
D- Re-Construction and New culverts on existing road, realignments, bypasses:		Cost of each culvert shall be determined on pro data basis with respect to the total number of culverts. Payment shall be made on the completion of atleast one culvert. 75% of the cost will be payable on completion of box/ abutments and slab/ pipe and head wall. Remaining 25% will become payable on completion of protection works including return/ wing walls and any other work associated with culverts.
(1) Culverts (length < 6m)	1.86%	

@ For example, if the total length of bituminous work to be done is 100 km, the cost per km of bituminous work shall be determined as follows:

Cost per km = P x weightage for road work x weightage for bituminous work X (1/L)

Where P = Contract Price

L = Total length in km

Similarly, the rates per km for other stages shall be worked out accordingly.

Note: The length affected due to law and other problems or litigation during execution due to which the contractor is unable to execute the work, may be deducted from the total project length for the payment purposes. The total length calculated here is only for payment purposes and will not affect and referred in other clauses of the Contract Agreement.

1.3.2 Minor Bridges and Underpass/Overpasses.

Procedure for estimating the value of Minor Bridge and Underpasses/Overpasses shall be as stated in table 1.3.2:

Table 1.3.2

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
A.1-Widening and repair of minor bridges (length > 6m and < 60m)		Cost of each minor bridge shall be determined on pro data basis with respect to the total linear length (m) of the minor bridges.
(i) Foundation: On completion of the foundation work of abutments and piers	0.00%	(i) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e completion of atleast two foundations of each bridge. In case where load testing is specified for foundation, the trigger of first payment shall include load testing also.
(ii) Sub – structure:	0.00%	(ii) Sub - structure – Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.
(iii) Super-structure: On completion of the super-structure in all respects including wearing coat, bearings, expansion joints, hand rails, crash barriers, road signs & markings, tests on completion etc. complete in all respect.	0.00%	(iii) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e., completion of super-structure of at least one span in all respects as specified in the column of "Stage of Payment" in this sub-clause.
(iv) Approaches: On completion of approaches including Retaining walls, stone pitching, protection works for floor, embankment slope etc. complete in all respect and fit for use.	0.00%	(iv) Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing walls/ return walls, retaining walls, stone pitching in all respect as specified in the column of "Stage of Payment" in this sub- clause for each bridge.
A.2- New minor bridges		Cost of each minor bridge shall be determined on pro data basis with respect to the total linear length (m) of the minor bridges.
(i) Foundation: On completion of the foundation work of abutments and piers.	33.10%	(i) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage completion of atleast two foundations of each bridge. In case where load testing is specified for foundation, the trigger of first payment shall include load testing also.
(ii) Sub – structure:	22.86%	(ii) Sub - structure – Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.
(iii) Super-structure: On completion of the super-structure upto deck slab including bearings.	26.74%	(iii) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e., completion of super-structure of at least one span upto deck slab including bearing as specified in the column of "Stage of Payment" in this sub- clause. If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(iv) Miscellaneous Works:	17.30%	(iv) Miscellaneous Works: Payment shall be

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
		made on pro-rata basis on completion of a stage i.e. completion of wearing coat, expansion joint, crash barrier, railing, protection works, drainage and any other remaining work associated to bridge including tests on bridge for each bridge
(v) Approaches: On completion of approaches including Retaining walls, stone pitching, protection works for floor, embankment slope etc. complete in all respect and fit for use.	0.00%	(v) Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing walls/ return walls, retaining walls, stone pitching in all respect as specified in the column of "Stage of Payment" in this sub- clause for each bridge.
(vi) Guide Bunds and River Training Works: On completion of Guide Bunds and river Training Works complete in all respects	0.00%	(vi) Guide Bunds and River Training Works: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of Guide Bunds and River training Works in all respects as specified for each bridge.
B.1-Widening and repair of underpasses/ overpasses	0.00%	Cost of each underpass/overpass shall be determined on pro data basis with respect to the total linear length of the underpasses/overpasses. Payment shall be made on the completion of widening & repair works of a underpass/overpass.
B.2- New Underpasses/ Overpasses:		Cost of each Underpass/Overpass shall be determined on pro data basis with respect to the total linear length (m) of the Underpasses/Overpasses.
(i) Foundation : On completion of the foundation work including foundations, of abutments and piers	0.00%	(i) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of foundation(s) of each underpass/overpass. In case where load testing is specified for foundation, the trigger of first payment shall include load testing also.
(ii) Sub-structure :	0.00%	(ii) Sub-structure: Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.
(iii) Super-structure: On completion of the super-structure upto deck slab,	0.00%	(iii) Super-structure: Payment shall be made on pro-rata basis on completion of a stage 'i.e. completion of super-structure of at least one span upto deck slab including bearing as specified in the column of "Stage of Payment" in this sub- clause: If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(iv) Miscellaneous Works:	0.00%	(iv) Miscellaneous Works: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of wearing coat, expansion joint, crash barrier, railing, protection works and any other remaining work associated to bridge including tests on bridge for each bridge.

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
(v) Approaches: On completion of approaches including wing wall/ return wall, Retaining walls/ Reinforced Earth walls, stone pitching, protection works complete in all respect and fit for use.	0.00%	(v) Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing wall/ return wall, retaining walls, Reinforced Earth walls, stone pitching, protection works complete in all respect for each bridge.

Note:- In case of reconstruction of existing structure, demolition of existing structure is included in the cost of foundation work.

1.3.3 Major Bridge Works, ROB/RUB & Structures

Procedure for estimating the value of Major Bridge Works, ROB/RUB & Structures shall be as stated in table 1.3.3:

Table 1.3.3

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
A.1- Widening and repairs of Major Bridges		Cost of each Major Bridge shall be determined on pro data basis with respect to the total linear length (m) of the Major Bridges.
(1) Foundation (i) Pile Foundation (a) Piling – On completion of pile upto bottom of pile cap (b) Pile Cap : On completion of pile cap	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the major Bridge as specified hereunder. (i) Pile Foundation (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorata basis. (b) Pile Cap : Payment of 30% on pro- rata basis shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) Open Foundation	0.00%	(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	0.00%	(2) Sub-Structure:.. Payment against Sub-structure shall be made on pro- rata basis on completion of a stage i.e. completion of atleast one sub- structure of abutments/piers upto abutment/pier cap level of each of the major bridge.
(3) Super-structure(in cluding bearings)	0.00%	(3) Super-structure: Payment shall be made on pro data basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under : If pre-cast RCC/PSC/Steel girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
		Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints	0.00%	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each major bridge.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each major bridge.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each major bridge.
(7) Guide Bunds, River Training works etc.	0.00%	(7) Guide Bunds, River Training works: Payments shall be made on completion of all guide bunds/river training works etc. complete in all respects as specified for each major bridge.
(8) Approaches (including Retaining walls, stone pitching and protection works)	0.00%	(8) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified for each major bridge.
A.2- New Major Bridges		Cost of each Major Bridge shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridge.
(1) Foundation (i) Well Foundation (a) On completion of Cutting Edge + Well Curb (b) Wellsteining : On completion of well steining upto bottom of well cap. (c) On completion of bottom plug + top plug (if provisioned as per design) + well cap	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the major Bridge as specified here in under: (i) Well Foundation (a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb. (b) Well steining : Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof. (c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.
(ii) Pile Foundation (a) Piling – On completion of pile upto bottom of pile cap (b) Pile Cap : On completion of pile cap	42.89%	(ii) Pile Foundation (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorota basis. (b) Pile Cap : Payment of 30% shall be made on

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
		completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(iii) Open Foundation	0.00%	(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	21.13%	(ii) Sub-Structure: Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the major bridge.
(3) Super-structure(including bearings)	34.51%	(3) Super-structure: Payment shall be made on pro data basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under: If pre-cast girders/segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon. (For cable stayed bridge and suspension cable bridge, detailed payment stage may be included on case to case basis)
(4) Wearing Coat including expansion joints	0.00%	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each major bridge.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each major bridge.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each major bridge.
(7) Guide Bunds, River Training works etc.	0.00%	(7) Guide Bunds, River Training works: Payments shall be made on completion of all guide bunds/river training works etc. complete in all respects as specified for each major bridge.
(8) Approaches (including Retaining walls, stone pitching and protection works for floor, embankment slope etc.)	1.47%	(8) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified for each major bridge.
B.1 - Widening and repairs of (a) ROB (b) RUB		Cost of each ROB/RUB shall be determined on pro data basis with respect to the total linear length (m) of the ROB/RUBs.
(1) Foundation	0.00%	(1) Foundation: Payment against foundation

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
(i) Pile Foundation (a) Piling – On completion of pile upto bottom of pile cap (b) Pile Cap : On completion of pile cap		shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the ROB/RUB as specified here in under. (i) Pile Foundation (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on pro data basis. (b) Pile Cap : Payment of 30% on pro- rata basis shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) Open Foundation	0.00%	(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	0.00%	(2) Sub-Structure:. Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub- structure of abutments/piers upto abutment/pier cap level of each of the ROB/RUB.
(3) Super-structure (including bearings)	0.00%	(3) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under : If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints in case of ROB. In case of RUB, rigid pavement under RUB including drainage facility as specified.	0.00%	(4) Wearing Coat: Payment shall be made on completion of (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified for each of the ROB and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified for each of the RUB.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the ROB/ RUB.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the ROB/ RUB.
(7) Approaches (including Retaining walls, stone pitching and protection works)	0.00%	(7) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified for each of

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
		the ROB/ RUB.
B.2- New (a) ROB (b) RUB		Cost of each ROB/RUB shall be determined on pro data basis with respect to the total linear length (m) of the ROB/RUBs.
(1) Foundation (i) Well Foundation (a) On completion of Cutting Edge + Well Curb (b) Wellsteining : On completion of well steining upto bottom of well cap. (c) On completion of bottom plug + top plug (if provisioned as per design) + well cap	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the ROB/RUB as specified here in under: (i) Well Foundation (a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb. (b) Well steining : Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof. (c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.
(ii) Pile Foundation (a) Piling – On completion of pile upto bottom of pile cap (b) Pile Cap : On completion of pile cap	0.00%	(ii) Pile Foundation (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorota basis. (b) Pile Cap : Payment of 30% shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(iii) Open Foundation	0.00%	(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
2) Sub-structure	0.00%	(2) Sub-Structure: Payment against Sub-structure shall be made on pro- rata basis on completion of a stage i.e. completion of atleast one sub- structure of abutments/piers upto abutment/pier cap level of each of the ROB/RUB.
(3) Super-structure (including bearings)	0.00%	(3) Super-structure: Payment shall be made on pro data basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under : If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book. Applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
(4) Wearing Coat including expansion joints in case of ROB. In case of RUB, rigid pavement under RUB including drainage facility as specified.	0.00%	(4) Wearing Coat: Payment shall be made on completion of (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified for each of the ROB and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified for each of the RUB.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the ROB/RUB.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the ROB/RUB.
(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	0.00%	(7) Approaches: Payments shall be made on completion of both approaches of each ROB including stone pitching, protection works, etc. complete in all respects as specified here in under : If reinforced soil wall is used with facia panel/blocks, interim payment shall be made @75% of the Cost of that element as derived from MoRTH data Book. Applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
C.1- Widening and repairs of Elevated Section /Flyovers/ Grade Separators		Cost of each structure shall be determined on pro data basis with respect to the total linear length (m) of the structures.
(i) Foundation (i) Pile Foundation (a) Piling – On completion of pile upto bottom of pile cap (b) Pile Cap : On completion of pile cap	0.00%	(1) Foundation : Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the structure as specified here in under : (i) Pile Foundation (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorata basis. (b) Pile Cap : Payment of 30% on pro- rata basis shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) Open Foundation	0.00%	(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	0.00%	(2) Sub-Structure:.. Payment against Sub-structure shall be made on pro- rata basis on completion of a stage i.e. completion of atleast one sub- structure of abutments/piers upto abutment/pier cap level of each of the structure.
(3) Super-structure (including	0.00%	(3) Super-structure: Payment shall be made on

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
bearings)		pro-rata basis on completion of a stage i.e. completion of super- structure upto deck slab including bearings of at least one span as specified here in under : If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints	0.00%	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each of the structure.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the structure.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the structure.
(7) Approaches (including Retaining walls /Reinforced Earth wall, stone pitching and protection works)	0.00%	(7) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects of each structure.
C.2 -New Elevated Section/Flyovers/ Grade Separators		Cost of each structure shall be determined on pro data basis with respect to the total linear length (m) of the structures.
(1) Foundation (i) Well Foundation (a) On completion of Cutting Edge + Well Curb (b) Well steining : On completion of well steining upto bottom of well cap. (c) On completion of bottom plug + top plug (if provisioned as per design) + well cap	0.00%	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the structure as specified here in under : (i) Well Foundation (a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb. (b) Well steining : Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof. (c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.
(ii) Pile Foundation (a) Piling – On completion of pile upto bottom of pile cap	0.00%	(ii) Pile Foundation (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
(b) Pile Cap : On completion of pile cap		each pile on pro-rata basis. (b) Pile Cap : Payment of 30% shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(iii) Open Foundation	0.00%	(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	0.00%	(2) Sub-Structure: Payment against Sub-structure shall be made on pro- rata basis on completion of a stage i.e. completion of atleast one sub- structure of abutments/piers upto abutment/pier cap level of each of the structure.
(3) Super-structure (including bearings)	0.00%	(3) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure upto deck slab including bearings of at least one span as specified here in under: If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints	0.00%	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each of the structure.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	0.00%	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the structure.
(6) Wing walls/return walls	0.00%	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the structure.
(7) Approaches (including Retaining walls/ Reinforced Earth wall, stone pitching and protection works)	0.00%	(7) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified here in under : If reinforced soil wall is used with facia panel/blocks, interim payment shall be made @75% of the Cost of that element as derived from MoRTH data Book. Applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.

Note:- In case of reconstruction of existing structure, demolition of existing structure is included in the cost of foundation work.

1.3.4 Other works.

Procedure for estimating the value of other works done shall be as stated in table 1.3.4:

Table 1.3.4

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
(i) Toll plaza	0.00%	Unit of measurement is each completed toll plaza. Payment for each toll plaza shall be made on pro data basis with respect to the total of all toll plazas as specified here in under :
(a) DLC(LHS)		(a) DLC (LHS) : Payment of 12.5% on pro-rata basis shall be made on completion of a stage i.e. completion of DLC on LHS.
(b) DLC (RHS)		(b) DLC (RHS) : Payment of 12.5% on pro-rata basis shall be made on completion of a stage i.e. completion of DLC on LHS.
(c) PQC(LHS)		(c) PQC(LHS): Payment of 25% on pro-rata basis shall be made on completion of a stage i.e. completion of PQC on LHS.
(d) PQC(RHS)		(d) PQC(RHS): Payment of 25% on pro-rata basis shall be made on completion of a stage i.e. completion of PQC on RHS.
(e) Admin Building		(e) Admin Building: Payment of 10% on pro-rata basis shall be made on completion of a stage i.e. completion of Admin Building and miscellaneous works.
(f) Toll Booth, canopy, safety items and all other associated works		(f) Toll Booth, canopy, safety items and all other associated works: Payment of 15% on pro-rata basis shall be made on completion of a stage i.e. completion of Toll Booth, canopy, safety items and all other associated works.
(ii) Road side drains	0.00%	
(a) Drains	14.27%	a) Drains: Unit of measurement is linear length in metre . Payment shall be made on pro data basis on completion of a stage in a length of not less than 100 m on one side.
(b) Cover Slabs	0.00%	(b) Cover slabs: Unit of measurement is linear length in metre. Payment shall be made on pro data basis on completion of a stage in a length of not less than 100 m on one side.
(iii) Road signs, markings, km stones, safety devices,	5.13%	Unit of measurement is linear length in km. Payment shall be made on pro data basis on completion of a stage in a length of not less than one Km on both sides.
(iv) Overhead gantry mounted signs	0.37%	Unit of measurement is each number. Payment shall be made on pro-rata basis on completion of each overhead gantry mounted sign
(v) Project Facilities		Unit of measurement is each number.Payment shall be made on pro data basis for completed facilities.
(a) Bus bays	0.45%	
(b) Truck lay-byes	0.00%	
(c) Rest areas	0.00%	
(d) Junctions	27.21%	
(e) Paver Block Shoulder	1.23%	
(f) Cable duct across the road	0.67%	
(g) Rain water harvesting	1.12%	
(vi) Road side plantation	2.68%	Unit of measurement is linear length in Km. Payment shall be made on pro data basis on completion of one Km.
(vii) Tree transplantation	0.09%	60% of the above rates may be paid after the

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
		transplantation of tree. If the tree does not survive after maintenance period, remaining 40% shall not be payable. The remaining 40% shall be paid after the expiry of maintenance period i.e. 4 months.
(ix) Protection works other than approaches to the bridges, elevated sections/ flyovers/grade separators and ROBs/ RUBs		Unit of measurement is linear length. Payment against items (a), (b) & (c) shall be made on pro data basis on completion of a stage in a length of not less than 10% (ten per cent) of the total length and 100 m whichever is less.
(a) Crash- Barrier (MBCB)	5.12%	
(b) Retaining wall	25.37%	
(c) Breast wall	0.00%	
(viii) Safety and traffic management during construction	0.00%	Payment shall be made on pro data basis every six months.
(ix) Site Clearance	0.34%	Payment shall be made on pro rata basis for completed facilities.
(xi) Inspection Vehicle	1.44%	Payment shall be made on pro rata basis for completed facilities.
(xi) Street Lighting (Double Arm, Single Arm, Solar light and High Mast)	13.83%	Payment shall be made on pro rata basis for completed facilities.
(x) Canal Gate	0.67%	Payment shall be made on pro rata basis for completed facilities.

1.3.5 Electrical Utilities and public Health Utilities (Water pipelines and sewage lines)*:-

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
(i) EHT line	0.00%	Unit of measurement is as per completed activities. Cost per activity shall be determined on Pro-rata basis as per its weightage with reference to total cost of EHT line. Payment shall be made for completed activity. (The average weightage of major activities (Only for payment purpose) in shifting work is (i) Erection of poles-20%, (ii) Conductor stringing including laying of cable-30%, (iii) DTR erection (if involved)-15% and (iv) charging of line including dismantling and site clearance-35% (With DTR) and 50% (without DTR).
(ii) EHT Crossings	0.00%	Cost of each crossing shall be determined on pro-data basis with reference to total no. of crossings. Payment shall be made for not less than 25% of the crossings subject to a minimum of 4 crossings.
(iii) HT/LT line	20.43%	Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis as per its weightage with reference to total cost of LT/HT line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is (i) Erection of Poles-20%, (ii) Conductor stringing including laying of cable-30%. (iii) DTR erection (if involved)-10% and (iv) Charging of line including dismantling and site clearance-40% (with DTR) and 50% (without DTR)
(iv) HT/LT crossings	48.46%	Cost of each crossing shall be determined on pro-rata basis with reference to total no. of crossings. Payment shall be made for not less than 25% of the crossings subject to a minimum of 10 crossings.
(v) Water pipeline	31.12%	Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis as per its weightage with reference to total cost of pipe line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is laying of pipe-50%, Charging of line including all miscellaneous works and dismantling and site clearance-50%)
(vi) Water pipeline crossings	0.00%	Cost of each crossing shall be crossing determined on pro-rata basis with reference to total no. of crossings. Payment shall be made for not

Stage of Payment	Percentage weightage	Payment Procedure
1	2	3
		less than 25% of the crossings subject to a minimum of 8 crossings.
(vii) Sewage lines	0.00%	Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis as per its weightage with reference to total cost of pipe line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is laying of pipe-50%, Charging of line including all miscellaneous works and dismantling and site clearance-50%)
(viii) Sewage line crossings	0.00%	Cost of each crossing shall be determined on pro-rata basis with reference to total no. of crossings. Payment shall be made for completed activity. (The average weightage of major activities in shifting work is laying pipe-50%, Charging of line including all miscellaneous works and dismantling and site clearance-50%)

2. Procedure for payment for Maintenance

2.1 The cost for maintenance shall be as stated in Clause 14.1.1.

2.2 Payment for Maintenance shall be made in quarterly installments in accordance with the Provisions of Clause 19.7.