OFFICE OF THE ENGINEER-IN-CHIEF

P.W.D. NIRMAN BHAVAN, NAYA RAIPUR (CHHATISGARH)

AMMENDMENT NO. 03

No. 65010/335 /SOR/ Naya Raipur, Dated 08/11 /2017

The following amendments are hereby issued in the items mentioned below in S.O.R. for Bridge Works (with effect from 01-01-2015)

(A). Chapter-II FOUNDATIONS

Item No. 2.22 is added as given below.

Item No.	Descriptions	Unit	Rate (Rs)
2.22	Cement concrete for reinforced concrete in pile cap complete as per drawing and Technical Specifications per clause 1100,1500 and 1700.		
A	Using concrete mixer		
(iv)	RCC Grade M40	cum	6231.00
(v)	RCC Grade M45	cum	6523.00
(vi)	RCC Grade M50	cum	6732.00
B	With Batching Plant, Transit Mixer and Concrete Pump		
(iv)	RCC Grade M40	cum	6294.00
(v)	RCC Grade M45	cum	6586.00
(vi)	RCC Grade M50	cum	6795.00

(B). Chapter-III SUB-STRUCTURE

Item No. 3.6 & 3.18 (a), (b), (c) is added as given below.

Item No.	Descriptions	Unit	Rate (Rs)
3.6	Providing and laying Plain/Reinforced cement concrete in sub-structure complete as per drawing and technical specifications section 1500, 1700 and 2200 (Newly laid concrete shall be covered by gunny bags).		

D	Height upto 5m		
(a)	Using concrete Mixer		
(v)	R.C.C. Grade M-40	cum	6576.00
(vi)	R.C.C. Grade M-45	cum	6884.00
(vii)	R.C.C. Grade M-50	cum	7105.00
(viii)	R.C.C. Grade M-55	cum	7450.00
(b)	**With Batching Plant, Transit Mixer and Concrete Pump**		
(v)	R.C.C. Grade M-40	cum	6843.00
(vi)	R.C.C. Grade M-45	cum	7161.00
(vii)	R.C.C. Grade M-50	cum	7389.00
(viii)	R.C.C. Grade M-55	cum	7745.00
E	Height 5m to 10m		
(a)	Using concrete Mixer		
(v)	R.C.C. Grade M-40	cum	6690.00
(vi)	R.C.C. Grade M-45	cum	6972.00
(vii)	R.C.C. Grade M-50	cum	7163.00
(viii)	R.C.C. Grade M-55	cum	7477.00
(b)	**With Batching Plant, Transit Mixer and Concrete Pump**		
(v)	R.C.C. Grade M-40	cum	6961.00
(vi)	R.C.C. Grade M-45	cum	7252.00
(vii)	R.C.C. Grade M-50	cum	7450.00
(viii)	R.C.C. Grade M-55	cum	7773.00
F	Height above 10m		
(a)	Using concrete Mixer		
(v)	R.C.C. Grade M-40	cum	6905.00
(vi)	R.C.C. Grade M-45	cum	7072.00
(vii)	R.C.C. Grade M-50	cum	7266.00
(viii)	R.C.C. Grade M-55	cum	7586.00

(b)	**With Batching Plant, Transit Mixer and Concrete Pump**		
(v)	R.C.C. Grade M-40	cum	7185.00
(vi)	R.C.C. Grade M-45	cum	7357.00
(vii)	R.C.C. Grade M-50	cum	7557.00
(viii)	R.C.C. Grade M-55	cum	7886.00
3.18 (a)	Casting and jacking precast R.C.C box of M-35 grade controlled concrete of approved design mix below Railway tracks under running traffic conditions by pushing technique including providing thrust bed as per design providing drag sheet of mild steel in front and rear shield in end of box segment and providing intermediate jacking stations etc., complete in all respect including the cost of necessary excavation (including all types of soils & rock), lead, lift, all temporary works (including dewatering), making the joints of boxes water tight by synthetic base mechinically mixed epoxy grouting with all plant and machinery with all his labour and material including cost of cement and steel, structural steel, binding wire as required for RCC box thrust bed and for temporary works etc., complete in all respect as per approved designe and drawing including curing etc. Epoxy paintings of approved make in two coats on outer 3 surfaces of entire Pre-cast box.	Cum	21875.00
3.18 (b)	Supply and spreading of machine broken clean hard angular and durable stone ballast to latest Railways specification and stacking at suitable location near at site and as approved by the Engineer-in-charge at site. (The rate will include all lead and lift, loading and unloading, providing tools and plants, labour and screen of approved mesh and dimensions required for inspection and passing at the time of measurement). The contractor should make ground level to enable levels being taken by Engineer-in-charge at site prior to stacking. The rate shall also include spreading uniformly in specified depth and width and maintaining profile including all operations like dressing of formation as required and as directed by Engineer-in-charge.	Cum	1451.00
3.18 (c)	Providing & fixing in position high density polyethylene pipe of approved quality to fit around the dowel bars of 32 mm dia. left at the end of expansion joints duly grease inside the pipe and around the bars, and the pipe duly capped at the end with glass wool and cap as directed. (The HDPE pipe shall be 30 cms in length)	Nos.	31.00

(C). Chapter-IV SUPER-STRUCTURE

Item No. 4.8 (a), Item No. 4.29 (a) & (b), Item No. 4.30 (a), (b), (c) is added as given below.

Item No.	Descriptions	Unit	Rate (Rs)
4.8 (a)	Providing and Fixing in position channel post and 48.4mm outer dia lighter type class "A" G.I. Pipe Railing including 2 coats panting etc. complete including cost of cement but excluding end concrete post as per approved department drawing & specifications.	Rm	1723.00
4.29 (a)	Fabrication of steel girders as per approved drawings for composite structure i.e. (Steel + RCC) of superstructure of the Road Over Bridge with mild steel confirming to IS:2062-2011 with all rivets, nuts bolts etc. with materials, fabrication, machinery, templates, masterplates, jig, fixtures, equipment's tools and of approval quality, ISI mark paint, transportation, skilled/ unskilled labour, i/c all taxes, all leads & lifts, descent, loading, unloading, crossing one or more Railway track if required etc. complete and as per technical specifications section 1900 of MORT&H. The rate is inclusive of transportation of fabricated girder parts to site by all means and cost. The rate shall also be inclusive of cold straightening of deformed and bent girder parts before their assembly and painting, 1st priming coat zinc chromate yellow (IS 104 latest revision) After fabrication in workshop first primer coat zinc chrome yellow (IS 104 latest revision) will be applied to all parts except flooring system. The rate shall also be inclusive of sand blasting and metalizing as per IRS BI-2001 Appendix VIII IS 6585. and the 2nd primer coat of zinc chrome red oxide IS 2074 and 1st finishing coat of Aluminium paints to IS 2339 will be applied on the girder parts before transportation of girder in all respect.	MT	125000.00
	NOTE :- • The Girder shall be fabricated by the approved vendors of RDSO only and as per approved QAP & WPSS. from Railways • All weld are to be made by approved welder using approved welding procedures. • The rates are deemed to include cost of rivets, drifts, bolts & nuts reverting/welding etc.		

	• The rate shall be inclusive of any temporary arrangement strengthening of members if required in connection with launching of girders and restoring it back as per original standard drawing. • On completion of work the contractor shall clear all temporary staging and other arrangements, obstruction and restore it to its original position. • Contractor has to ensure proper camber as per drawing, irrespective of launching scheme. • The rate are deemed to include all labour, tools, plant, equipment, machinery, cranes etc. all leads lifts. fuel electric charge etc. complete for all materials unless specified otherwise. • All butt welds are to be examined radio graphically. All other welds may be examined by radiographic or any other non-destructive flaw detection method or by magnetic particle flaw detection method as per IS 3658 and 3703. • Detailed launching scheme along with design of form work should be got done from a reputed design consultant having past experience of similar type of work and to be submitted to the railways approval and nothing extra will be paid on this account. • All layers of painting should be separately got approved as per approved QAP & WPSS nominated representatives. • All Structural steel shall confirm to Grade 'B' specifications except for rolled sections (Angles, Channels, I-sections). For Rolled sections Grade 'A' steel may be used.		
4.29 (b)	Assembling, riveting, wherever required with all rivet materials, weld materials, bolts, service bolts, erection and launching of Steel girder span to Railways approved drawings with other ancillary steel structures fixed to the girder where necessary in proper level and alignment and as per technical specifications section 1900 of MORT&H. The rate shall be inclusive of supply, erection and dismantling of staging and scaffolding and other temporary arrangements required for the purpose of assembly, erection and launching of girders. The rate shall be inclusive of cold straightening of deformed and bent girder parts before/ after their assembly. All the Girder parts will be given 2nd finishing coat of aluminium paint (IS:2339 latest revision) after assembling and erection at the site and after touching up the primer and finishing coat if damaged in transit with all labours, tools and plants, materials, paint and primer etc. complete as required.	MT	26400.00

4.30 (a)	Providing & Fixing in position Anodizing Aluminum Profile as per detailed drawing and specifications 3mm thick i/c all fittings complete (Frame to be paid separately).	Sqm.	2603.00
4.30 (b)	Add extra for Job work for Laser Cutting on Aluminium sheet for 3mm thick as per approved design & pattern.	Sqm.	3107.00
4.30 (c)	Add extra for Job work for Laser Cutting on Aluminium Composite panels 4mm thick as per approved design & pattern.	Sqm.	1045.00

The amendments shall be applicable with immediate effect.

Engineer-in-chief
P.W.D. Naya Raipur (C.G.)

Endt. No. 65010/335 /SOR/ Naya Raipur, Dated 08/11/2017

Copy to the

1. P.A. to honorable Minister of P.W.D.C.G. Govt. Raipur.
2. Secretary, C.G. Govt. P.W.D. Raipur.
3. Secretary, Finance Department C.G. Govt. Raipur
4. All Chief Engineers. P.W.D. Chhattisgarh.
5. All Superintending Engineer, P.W.D. Chhattisgarh.
6. Chief Technical Examiner (V) C.G. Raipur
7. Accountant General, C.G. Raipur
8. All Collectors, Chhattisgarh.
9. All Executive Engineer, P.W.D. Chhattisgarh.
10. Website Public Works Department http://www.cg.nic.in/pwdraipur.

Engineer-in-chief
P.W.D. Naya Raipur (C.G.)