

**Name of Work :- Resurfacing of Limdiya-Khanpur-Munpur-Limpur Road from  
Ch. 0/00 to 25/300 (S.H.) Dist. Mahisagar (CRIF-2025-26)**

**SPECIFICATION INDEX**

<b>It. No.</b>	<b>Description of Item</b>	<b>Applicable specification reference</b>
1	Clearing and grubbing road land including uprooting rank vegetation grass bushes, shrubs, sapling and trees girth up to 300 mm removal of stumps of trees cut earlier and disposal of unserviceable materials (B) By mechanical means in area of light jungle.	As per Separate Sheet attached.
2	Scarifying gravelled macadam or bitumen macadam surface 6 cm to 10 cm.depth including stacking useful materials on road side and disposing off remaining stuff.	As per Separate Sheet attached.
3	Box cutting the road surface to proper slope and camber for making a base for road work including removing the excavated stuff and depositing on the road side as directed within all lead and lift.	As per Separate Sheet attached.
4	Earthwork for embankment including breaking clods, dressing with all lead and lift and including watering rolling and consolidation of subgrade in layers at O.M.C. to required dry density including filling the depression which occur during the process using power roller 8T to 10T. (E) From Borrow area within all lead and lift. (Minimum CBR 10%)	As per Separate Sheet attached.
5	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam (Grade-I) (B.T. metal of size 45 mm to 90 mm) specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 80-100 kN static weight to proper grade and camber, applying and brooming, stone screening / binding materials to fill-up the interstices of coarse aggregate, watering and compacting etc. complete as per specification.	As per Separate Sheet attached.
6	Providing and laying compacted 100 mm thick of specified quarry spall in side shoulder including carriage of material and spreading on prepared base including compacting as per MOST specification etc. complete.	As per Separate Sheet attached.
7	Providing and laying bituminous prime coat SS1 emulsion @ 7.50 kg / 10 sqm. of slow curing emulsion as per MOST specifications including cost of materials, labours, labour equipment etc. complete.	As per Separate Sheet attached.
8	Providing and laying 60 mm thick Dense Bituminous Macadam (D.B.M.) with B.T. aggregate as per M.O.R.T.&H. specification and using bitumen VG-40 grade and for tack coat emulsion RS-1 as per IS 8887 @ 2.50 Kg. / 10 Sq.m. and for mixing VG-40 @ 45.00 Kg. / M.T. i.e. 4.50% by total weight of mix including heating and mixing the aggregate and asphalt in continuous of batch mix plant and transporting to site and spreading the same by sensor paver finisher and consolidation with vibratory roller as per M.O.R.T.&H specification including providing all materials equipments, tools and plants, fire wood, oil, kerosene, labour charges etc. complete using contractor's own machinery, batch mix plant and sensor paver finisher etc. complete.	As per Separate Sheet attached.

It. No.	Description of Item	Applicable specification reference
9	Providing and laying 40mm thick bituminous concrete on existing bituminous surface and using specification graded machine crushed with 5.40% bitumen VG-40 grade by weight of total mix as per specification MORTH including mixing of asphalt with B.T. chips in continuous batch mix plant transporting same as by paver finisher and consolidation the same with pair of 8 tonnes to 10 tonnes vibratory roller to achieve desired density and including VG-40 grade bitumen, cost of emulsion, cost of required tools, plants, all machineries, equipment, fire wood, oil, kerosene, labour charges etc. complete.	As per Separate Sheet attached.
10	Cautionary Warning Sign :- Providing and fixing sign boards made out of 2mm aluminium sheet / 4mm ACP (Aluminum composite panel) size 90 x 90 x 90 cms. equilateral triangle as per design of IRC-67-2012. Pre treated with phosphating process & acid etching, coated with one coat of epoxy primer and two coats of best quality epoxy paint reflectorised with Micro Prismatic grade retro reflective sheeting of Type-11 as per ASTM D-4956 and latest M.O.S.T. Specifications; 3.6mtr long stand post of 75 x 75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35 x 35 x 3mm; painted with best quality epoxy coatings in black and white bends. The details of symbol for each board shall be as per the instruction of engineer in charge. The fixing at site shall be in 1:2:4 CC block of size 45 x 45 x 60 cms. for each leg including excavation, curing etc. complete under the supervision of engineer in charge. A warranty for 10 years for the retro reflective sheeting from original manufacturer & a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor. (A) Class-C Type-11 Retro Reflective sheeting	As per Separate Sheet attached.
11	Facility Informatory Sign :- Providing and fixing sign boards made out of 2mm aluminium sheet / 4mm ACP (Aluminum composite panel) size 80 x 60 cms rectangular as per design of IRC-67-2012. Pre treated with phosphating process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint, reflectorised with Micro Prismatic Grade retro reflective sheeting of Type-11 as per ASTM D-4956 and latest M.O.S.T. Specifications; 3.6mtr long stand post of 75 x 75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35 x 35 x 3mm; painted with best quality epoxy coatings in black and white bends. The details of symbol for each board shall be as per the instruction of engineer in charge. The fixing at site shall be in 1:2:4 CC block of size 45 x 45 x 60 cms. for each leg including excavation, curing etc. complete under the supervision of engineer in charge. A warranty for 10 years for the retro reflective sheeting from original manufacturer & a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor. (A) Class-C Type-11 Retro Reflective sheeting	As per Separate Sheet attached.

It. No.	Description of Item	Applicable specification reference
12	<p>Regulatory / Mandatory Sign :- Providing and fixing sign boards made out of 2mm aluminium sheet / 4mm ACP (Aluminum composite panel) size 60 cms dia. circle as per design of IRC-67-2012. Pre treated with phospheting process &amp; acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint reflectorised with Micro Prismatic grade retro reflective sheeting of Type-11 as per ASTM D-4956 and latest M.O.S.T. specifications; 3.6mtr long stand post of 75 x 75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35 x 35 x 3mm; painted with best quality epoxy coatings in black and white bends. The details of symbol for each board shall be as per the instruction of engineer in charge. The fixing at site shall be in 1:2:4 CC block of size 45 x 45 x 60 cms. for each leg including excavation, curing etc. complete under the supervision of engineer in charge. A warranty for 10 years for the retro reflective sheeting from original manufacturer &amp; a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor.</p> <p>(A) Class-C Type-11 Retro Reflective sheeting</p>	As per Separate Sheet attached.
13	<p>STOP Sign :- Providing and fixing sign boards made out of 2mm aluminium sheet / 4mm ACP (Aluminum composite panel) size 90 cms. Octagonal as per design of IRC-67-2012. Pre treated with phospheting process &amp; acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint reflectorised with High Intensity Prismatic Grade retro reflective sheeting of Type-11 as per ASTM D-4956 and latest M.O.S.T. specifications 3.6mtr long stand post of iron angle 75 x 75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35 x 35 x 3mm, painted with best quality epoxy coatings in black and white bends. The details of symbol for each board shall be as per the instruction of engineer in charge. The fixing at site shall be in 1:2:4 CC block of size 45 x 45 x 60 cms. for each leg including excavation, curing etc. complete under the supervision of engineer in charge. A warranty for 10 years for the retro reflective sheeting from original manufacturer &amp; a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor. (A) Class-C Type-11 Retro Reflective sheeting.</p>	As per Separate Sheet attached.
14	<p>Providing and fixing precast C.C. M-150 Indicator stone with necessary reinforcement as per I.R.C. type design including painting and lettering etc. complete. (ii) Fixing in C.C. 1:5:10.</p>	As per Separate Sheet attached.
15	<p>Providing and fixing ordinary Kilometer stone of precast C.C. 1:2:4 including necessary reinforcement as per I.R.C. type design in C.C. 1:4:8 including letter and paints etc. complete. (For N.H., S.H. &amp; M.D.R.)</p>	As per Separate Sheet attached.

It. No.	Description of Item	Applicable specification reference
16	<p>Chevron Sign :- Providing and fixing sign boards made out of 1.5mm aluminium sheet / 3 mm ACP (Aluminium composite panel) size 60 x 50 cm as per design of IRC-67-2012. Pre treated with phospheting process &amp; acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint; reflectorised with Micro Prismatic grade retro reflective sheeting of Type-11 as per ASTM D-4956 and latest M.O.S.T. specifications, 3.3 mtr. long stand post of 75 x 75 x 6mm / 65 NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 50 x 50 x 5mm; painted with best quality epoxy coatings in black and white bends. the details symbol or inscription / numerals for each board shall be per the instruction of engineer in charge. The fixing at site shall be in 1:2:4 CC block of size 45 x 45 x 60 cms. for each leg including excavation, curing etc. complete under the supervision of engineer in charge. A warranty for 10 years for the retro reflective sheeting from original manufacturer &amp; a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor.</p> <p>(A) Class-C Type-11 Retro Reflective Sheeting.</p>	As per Separate Sheet attached.
17	<p>Hazard Marker Sign :- Providing and fixing sign boards made out of 2mm aluminium sheet / 4mm ACP (Aluminum composite panel) size 90 x 30 cms. rectangular as per design of IRC-67-2012. Pre treated with phospheting process &amp; acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint reflectorised with Micro Prismatic Grade retro reflective sheeting of Type-11 as per ASTM D-4956 and latest M.O.S.T. specifications; 1.8mtr long stand post of 75 x 75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35 x 35 x 3mm; painted with best quality epoxy coatings in black and white bends. The details of symbol for each board shall be as per the instruction of engineer in charge. The fixing at site shall be in 1:2:4 CC block of size 45 x 45 x 60 Cms. for each leg including excavation, curing etc. complete under the supervision of engineer in charge. A warranty for 10 years for the retro reflective sheeting from original manufacturer &amp; a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor.</p> <p>(A) Class-C Type-11 Retro Reflective sheeting</p>	As per Separate Sheet attached.
18	<p>Tree Guard sign :- Providing &amp; fixing sign board made out of 2mm aluminium sheet / 3mm ACP (Aluminum composite Panel) size 30cms diameter circle, pretreated with phospheting process and acid etching, painted with one coat of epoxy primer and two coats of best quality epoxy paint reflectorised with retro reflective sheeting as per latest M.O.S.T. specifications. A warranty for 10 years for the retro reflective sheeting from original manufacturer &amp; a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor. (A) Class-C Type-11 Retro Reflective sheeting.</p>	As per Separate Sheet attached.
19	<p>Providing and fixing precast C.C. M-150 Hectometer stone with necessary reinforcement as per I.R.C. type design including painting and lettering etc. complete. (ii) Fixing in C.C. 1:5:10.</p>	As per Separate Sheet attached.
20	<p>Providing and fixing 5th Kilometer stone of precast C.C. 1:2:4 including necessary reinforcement as per I.R.C. type design in C.C. 1:4:8 including letter and paints etc. complete. (For N.H., S.H. &amp; M.D.R.)</p>	As per Separate Sheet attached.

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21	Type - B, "THRIE" : Metal Beam Crash Barrier (Providing and erecting a "Thrie" metal beam crash barrier comprising of 3 mm thick corrugated sheet metal beam rail, 85 cm above road/ground level, fixed on ISMC series channel vertical post, 150 x 75 x 5 mm spaced 2 m centre to centre, 2 m high with 1.15 m below ground level, all steel parts and fittings to be galvanised by hot dip process, all fittings to conform to IS:1367 and IS:1364, metal beam rail to be fixed on the vertical post with a space of channel section 150 x 75 x 5 mm, 546 mm long complete as per clause 811)	As per Separate Sheet attached.
22	Route Marker sign :- Providing and fixing sign boards made out of 1.5mm aluminium sheet / 3mm ACP (Aluminum composite panel) size 60 x 45 cm rectangular plus 30 x 25cm additional plate as per design of IRC-67-2012. Pre treated with phosphating process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint, reflectorised with Micro Prismatic Grade retro reflective sheeting of Type-11 as per ASTM D-4956 and latest M.O.S.T. Specifications; 3.6 mtr long stand post of 75 x 75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35x 35 x 3mm; painted with best quality epoxy coatings in black and white bends. the details of symbol or inscription / numerals for each board shall be as per the instruction of engineer in charge. The fixing at site shall be in 1:2:4 CC block of size 45 x 45 x 60 cms. for each leg including excavation, curing etc. complete under the supervision of engineer in charge. A warranty for 10 years for the retro reflective sheeting from original manufacturer & a certified copy of 3 year outdoor exposure test report for the product offered shall be submitted by contractor. (A) Class-C Type-11 Retro Reflective sheeting.	As per Separate Sheet attached.
23	Village Name Sign :- Providing and fixing sign boards made out of 2mm aluminium sheet / 4mm ACP (Aluminum composite Panel) size 90 x 60 cms. rectangular as per design of IRC-67-2012. Pre treated with phosphating process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint, reflectorised with Micro Prismatic Grade retro reflective sheeting of Type-11 as per ASTM D-4956 and latest M.O.S.T. Specifications; 3.3mtr long stand post of 75 x 75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35 x 35 x 3mm; painted with best quality epoxy coatings in black and white bends. The details of symbol or inscription/letters / numerals for each board shall be as per the instruction of engineer in charge. The fixing at site shall be in 1:2:4 CC block of size 45 x 45 x 60 Cms. for each leg including excavation, curing etc. complete under the supervision of engineer in charge. A warranty for 10 years for the retro reflective sheeting from original manufacturer & a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor. (A) Class-C Type-11 Retro Reflective sheeting	As per Separate Sheet attached.

It. No.	Description of Item	Applicable specification reference
24	Supplying and applying rumble strip road marking with hot applied thermoplastic paints with reflectorising glass beads on bitumen surface providing and laying a hot applied thermoplastic compound 8mm thick including reflectorising glass beads @ 250 gms per sqm area thickness of 7.5 mm is excluding of surface applied glass beads as per IRC 35: 2015. The finished surface to be level, uniform and free from streaks and holes.	As per Separate Sheet attached.
25	Road marking with hot applied thermoplastic paints with reflectorising glass beads on bitumen surface providing and laying a hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250gms per sqm area, thickness of 2.5mm is excluding of surface applied glass beds as per IRC:35-2015. The finished surface to be level, uniform and free from streaks and holes. zebra patta /bump patta lane/center line/ edge line/cut patta. The white color marking should provide luminance coefficient on cement road shall be min 130 mcd/m2/lux and Asphalt road shall be min 100 mcd/m2/lux during the service life during the day time. The marking should meet the performance criteria for night time reflectivity, wet reflectivity and skid resistance as mentioned in the section-15 of IRC 35-2015.	As per Separate Sheet attached.
26	Cat Eye / Road Stud / RPM : Supplying of Molded Twin Shanks Raised Pavement Markers made of polycarbonate and ABS moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 13635 kgs. tested in accordance to ASTM D 4280 Type H and complying to Specifications of Category A of MORTH Circular No RW/NH/33023/10-97 DO III Dt 11.06.1997. The height, width and length shall not exceed 20 mm, 130 mm and 130 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 +/- 5 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 +/- 2 mm and height not less than 30+/- 2 mm) from the body is to be a minimum value of 500 Kgf. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturers recommendation and the color of the marker should be as per the IRC 35-2015 and as directed by Engineer-in-charge.	As per Separate Sheet attached.
27	Standard Delineator : Providing and fixing of Standard Metal Delineator consisting of minimum retro reflective unit exposed area of 330 cm2 white color, full cube corner micro prismatic non-metallic retro reflective sheeting on each side conforming with IRC 67 2012 and meeting the coefficient of retro reflection values as per ASTM D 4956 Type XI table specification. The delineator shall be painted with powder coat of minimum 40 microns thickness, on top of which retro reflective sheeting shall be pasted on both sides. The structure shall be manufactured in roll forming process and shall have height not less than 800 mm above the ground, width not less than 100 mm and shall extend not more than 300mm below the ground while being installed. height of sheeting should be minimum 150mm whereas width of sheeting should not be less than 75mm (should be placed every alternative 15cm).	As per Separate Sheet attached.

It. No.	Description of Item	Applicable specification reference
	The front and back faces of the delineator should be curved with a radius of not more than 200 mm and with delta angle (or central angle of curve) lying between 20o and 30o, to increase the visibility of the delineator for vehicles moving in continuous curves. The delineator shall have grooves across the length to make the reflective sheets vandal-proof. The delineator is meant for application on gaps in median, traffic islands, dangerous bends, roundabouts, narrow bridges etc. or as desired by site engineer	
28	Direction (Junction) Sign :- Providing and fixing sign boards made out of 2mm aluminium sheet / 4mm ACP (Aluminum composite panel) size 244 x 122 cms. rectangular as per design of IRC-67-2012. Pre treated with phosphating process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint ;reflectorised with Micro Prismatic grade retro reflective sheeting of Type-11 as per ASTM D-4956 and latest M.O.S.T. Specifications; 4.0mtr long (2 Nos.) stand post of 75 x 75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 50 x 50 x 5mm; painted with best quality epoxy coatings in black and white bends. The details of symbol for each board shall be as per the instruction of engineer in charge. The fixing at site shall be in 1:2:4 CC block of size 45 x 45 x 60 cms. for each leg including excavation, curing etc. complete under the supervision of engineer in charge. A warranty for 10 years for the Retro reflective sheeting from original manufacturer & a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor. (A) Class-C Type-11 Retro Reflective sheeting	As per Separate Sheet attached.
29	Excavation for foundation in sand, gravel, clay soft soils and murrum etc. including shoring, strutting dewatering as necessary and disposing of the excavated stuff as directed. (A) Depth upto 3.0 M. and lead upto 100m for 10 Cum.	As per Separate Sheet attached.
30	Providing and casting in situ ordinary cement concrete M-150 for R.C.C. Raft and cut-off walls including necessary shuttering, laying, vibrating, ramming and curing complete.	As per Separate Sheet attached.
31	Providing and casting in situ controlled cement concrete M-200 for R.C.C. return as per drawing including centering, shuttering, scaffolding where necessary laying, vibrating, curing and finishing complete (A) Height from 0.00 to 5.0 Mt (1) Piers (2) Abutments (3) R.C.C. return.	As per Separate Sheet attached.
32	Supplying and fixing ISI reinforced concrete heavy duty non- pressure pipes with collars for culverts including setting and joining the pipes in C.M 1:2 watering and laying (to level or slopes) of IS 458/1971 Class NP4 casted by vertically vibrated technology of following internal diameter. (V) 1200 mm dia.	As per Separate Sheet attached.
33	Supplying and fixing ISI reinforced concrete heavy duty non- pressure pipes with collars for culverts including setting and joining the pipes in C.M 1:2 watering and laying (to level or slopes) of IS 458/1971 Class NP4 casted by vertically vibrated technology of following internal diameter. (iv) 900 mm dia.	As per Separate Sheet attached.
34	Providing and laying in position I.S.I. Fe-500D T.M.T. bar reinforcement including cutting, bending, hooking and tying complete as per detailed drawings for the following (A) Piers (B) Abutments (C) R.C.C. Returns.	As per Separate Sheet attached.

It. No.	Description of Item	Applicable specification reference
35	Providing and laying weep hole in abutment and returning by using A.C. pipe / P.V.C. pipes of 100 mm dia. including laying in proper grade and joining etc. complete as per detailed specification.	As per Separate Sheet attached.
36	Dismantling the existing structure including removing and stacking the dismantled materials as and where directed. (A) R.C.C. work.	As per Separate Sheet attached.
37	Providing and laying rubble for apron (each stone weighting not less than 40Kg.) including and packing and filling in the interstices with quarry spalls.	As per Separate Sheet attached.
38	Providing rubble pitching of 300 mm average thickness including pointing mortar with C.M. 1:3 (1 cement : 3 sand) etc. complete.	As per Separate Sheet attached.
39	Numbering the C.D. work with approved paint including all materials for painting etc. complete.	As per Separate Sheet attached.
40	Providing Yellow and Black Patta (three coat) including distempering (three coats) with oil bound distemper of approved brand and manufacture and of required shade on wall surfaces to give an even shade, over and including a priming coat with distemper primer of approved brand and manufacture after thoroughly brushing the surface free from mortar dropping and other foreign matter and also including preparing the surface even and sand papered smooth as per instruction of Engineer in charge.	As per Separate Sheet attached.
41	Excavation for foundation upto 1.5 M depth including sorting out and stacking of useful materials and disposing of the excavated stuff as directed. (B) Dense or hard soil.	As per Separate Sheet attached.
42	Providing and filling in foundation with ordinary cement concrete M-100 mix and providing necessary vertical pin headers including formwork, vibrating, ramming and curing complete.	As per Separate Sheet attached.
43	Manufacture supply and delivery of chemical fabricated R.C.C. precast chamber with top cover as per specification and drawing attached with tender for size as mention herewith. Delivery includes chamber with clamps, nuts, bolts and locking arrangement is to be made on site the rates, loading, carting, unloading, stacking size 120 x 120 x 145 deep with foot rest and 120 x 120 size chamber cover.	As per Separate Sheet attached.
44	Supplying and fixing ISI reinforced concrete heavy duty non- pressure pipes with collars for culverts including setting and joining the pipes in C.M 1:2 watering and laying (to level or slopes) of IS 458/1971 Class NP4 of following internal diameter. (iv) 900 mm dia.	As per Separate Sheet attached.
45	Supplying RCC collars for R.C.C. pipes including all taxes, carting, loading, unloading etc. complete.	As per Separate Sheet attached.
46	Refilling the pipeline trenches including ramming, watering, consolidating disposal of surplus stuff as directed by Engineer in charge.	As per Separate Sheet attached.
47	Lowering, laying and jointing R.C.C. pipes in C.M. 1:1 1/2 of following diameters in proper position, grade and alignment at all level as directed by Engineer in charge including conveyance from stores to site of work, labour giving hydraulic testing as per ISI code.	As per Separate Sheet attached.
48	Excavation for pipe in gauge portion including sorting out and stacking of useful materials and disposing of the excavated stuff upto all lead (A) Loose or soft soil.	As per Separate Sheet attached.



It. No.	Description of Item	Applicable specification reference
49	Supplying and fixing reinforced concrete heavy duty non-pressure pipes with collars for culverts carrying heavy traffic as per IS 458-1991 specifications including setting the pipes in C.M. 1:2 watering and laying (to level of slops) of Class NP3 of following internal diameter. (v) 900mm dia.	As per Separate Sheet attached.
50	Diversion Sign board :- Providing and fixing sign boards made out of 2mm aluminium sheet size 180 x 60cms. rectangle as per the attached drawing pre treated with phospheting process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint; reflectorised with retro reflective sheeting as per latest MOST specification; Letters and numerals should be as per IRC-30-1968, 3.1m long (2 nos.) stand post and frame fabricated from iron angle of 35 x 35 x 3mm, 50 x 50 x 5mm painted with best quality epoxy coatings in black and white bends. The fixing at site shall be in 1:2:4 CC block of size 45 x 45 x 60cms. for each leg including excavation, curing etc. complete under the supervision of engineer in charge. (A) Engineer grade (VR)	As per Separate Sheet attached.
51	Construction of 200 mm thick compacted granular sub base (Grade-I, Crushed B.T. materials of 53mm to 9.5 mm @ 50%, 9.5 mm to 2.36 mm @ 20%, Below 2.36 mm @ 30%) by providing close graded material, mixing in a mechanical mix plant at OMC, carriage of a mix material to work site, spreading uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve desire density , complete clause as per 401.	As per Separate Sheet attached.
52	Clearing and grubbing road land including uprooting rank vegetation grass bushes, shrubs, sapling and trees girth up to 300 mm removal of stumps of trees cut earlier and disposal of unserviceable materials (B) By manual in area of thorny jungle.	As per Separate Sheet attached.

Dy. Executive Engineer  
Lunawada (R & B) Sub Division,  
Lunawada

Executive Engineer  
Mahisagar (R & B) Division  
Lunawada