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GOVERNMENT OF NEPAL
MINISTRY OF PHYSICAL INFRASTRUCTURE AND TRANSPORT
DEPARTMENT OF ROADS
BRIDGE BRANCH

STANDARD SUPERSTRUCTURE DRAWINGS FOR ROAD BRIDGES

25.0m Simply Supported Span, Cast - in - situ,

4 webbed Reinforced Concrete Slab - Deck

SKEW ANGLE : 0° to 15°

(CARRIAGE WIDTH - 7.5m WITH BOTH SIDE FOOTPATH - 1.75m = TOTAL WIDTH - 11.0m)

REFERENCE NOTES:

- All dimensions are in millimeters, unless stated otherwise.
- No dimension shall be scaled from the Drawings; only written dimensions shall be followed.
- Any doubtful Dimensions/Descriptions shall be brought to the attention of the Engineer in charge for any corrections (if any) before execution of work.
- Number of reinforcement bars shall not be counted from the Drawings. Only given spacing and specified numbers of bars, shall be provided.

All materials and workmanship shall be in accordance with these NOTES and those in the related Drawings and shall be generally in accord with the applicable Specifications and relevant Standards/Codes of Practice specified therein and Sound Engineering Practice, if that order.

This Bridge Superstructure is designed for One Lane of IRC Class 70R Loading, Two Lanes of IRC Class A Loading, and One Lane of IRC Class A Loading, whichever governs, in addition to a Footpath Live Load corresponding to 500 kg/m². 2' of Footpath area as per Clause 25.3 of IRC - 6 (2017). However, the present Footpath load has also been designed for a wheel load of 4 Times (distributed over a contact area of 300 mm dia.) as per clause 205.4 of IRC - 6 (2017), allowing 25% increase in stresses due to heavy.

The Contractor shall be responsible for constructing and maintaining all parts of the structure in stable, acceptable and serviceable condition, ensuring no part under construction is unduly stressed and unsafe.

CONSTRUCTION REQUIREMENT: Extra Deck (i.e. the Superstructure comprising the cast in situ Reinforced Concrete four wheel side) shall preferably be constructed in one operation in one day for one span. If this is not possible, then the four wheels shall be cast after the other and laid up to at least 150 mm below the top flange (at least 150 mm) if possible (otherwise on two successive days, one after the other, along with the Cross Girders), and then the side slab on the next day. This extra Deck must be cast in situ on staying in place formwork in one continuous run. See successive days.

CEMENT:
A. High strength Ordinary Portland Cement 53 Grade, conforming to IS: 12269 or 43 Grade conforming to IS: 8112, capable of achieving the required design concrete strength and durability, shall be used.

B. Cement shall be obtained from approved Manufacturers only.
C. Cement content in the Concrete Mix for Reinforced Concrete shall not be less than 350 kg/m³ and not more than 450 kg/m³.

COARSE AND FINE AGGREGATES:
A. Maximum size of Coarse Aggregate used shall be 20mm. Fineness Modulus of Sand (Fine Aggregate) shall not be less than 2.2. Both these Aggregates shall be of Approved Quality, from Approved Sources, and of Approved Gradations, as conforming to IS: 383 (1970), in zones of congestion in the structural sections. If absolutely necessary, 12 mm down sized Coarse Aggregates may be used (but the Mix shall then be re-designed to suit).

B. In zones of congestion in the structural sections, if absolutely necessary, 12 mm down sized Coarse Aggregate may be used (but the Mix shall then be re-designed to suit).

ADDITIONS: To further improve workability and increase initial setting time of concrete and cement grout, Admixtures conforming to IS: 9103, and ASTM C-494 Type F water-reducing, high range admixtures, shall be permitted at appropriate dosages, subject to their satisfactory proof use.

REINFORCEMENT:
A. All reinforcing steel bars shall be High Yield Strength Deformed type and 900 MPa Mechanically Treated having specified minimum 12 percent proof stress of 500 MPa conforming to IS: 1786.

B. Minimum lap-length of reinforcement bars shall be 55d where d is the dia. of the bar smaller bar to be lapped (unless otherwise specified).

C. Not more than 50 percent of reinforcement crossing a section shall be lapped at that location.

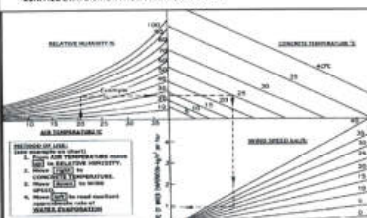
D. All gaps in reinforcement shall be properly staggered and minimum distance between the laps shall be 1.3 times the lap length.

E. Bending of reinforcement bars shall be as per IS: 1592.

WATER: Water for concrete and for its curing shall be of potable quality and presence of any salts, sugars and poisons like chlorides, sulphates, alkalis, etc., shall be well within the limits specified in the relevant Specifications.

WATER-CEMENT RATIO: by weight, shall not exceed 0.45 for Reinforced Concrete.
B. MINIMUM CLEAR CONCRETE COVER to reinforcement bars shall be 40mm.
C. CONTROL OF SURFACE EVAPORATION

SURFACE EVAPORATION FROM PLASTIC CONCRETE



Use the graphical Figure below to estimate and control the loss of water through surface evaporation in the laid concrete one or more of the following actions shall be taken to reduce the surface evaporation, rate to not more than one kilogram of water per square meter of surface area per hour.

- Construct Windbreakers to effectively reduce the wind velocity (to suit) in the area of concrete placement. The construction of windbreakers or enclosures should not proceed without approval of the Engineer with respect to their structural design relative to safety, stability, adverse loads, and vibrations in the work.
- Install automatic Fog Sprayers upwind of the concreting operation to effectively increase the relative humidity in the area of concrete placement.
- When necessary, effectively reduce the temperatures of concrete to suit by cooling one or more of its components as well as lightly spray wet the slabs and the test reinforcement, i.e. if added to the mix-water, shall be completely melted prior to using that water.

D. GRADES OF CONCRETE
The structural concrete involved in this Bridge Deck shall be suitably designed as High Strength Concrete. Means having 38 days minimum water Cube Crushing Strength in Compression on 150 mm Standard Cubes as follows:

For the cast in situ (a) Reinforced Concrete A-Modified Deck Superstructure (i.e. for the Slabs/Cross Girders)	38 MPa (i.e. M-35 Grade Concrete)
For the Reinforced Concrete in: - Precast Footpath Slabs - Precast Piers and their Bases - Road Ribs	

E. CONSTRUCTION JOINTS

A. As far as possible the location of Construction Joints shall be as shown in the Drawings, but if not shown on the Drawings but found absolutely necessary, they shall be planned in advance and the placing of concrete carried out continuously from Joint to Joint.

B. A Construction Joint should not be located near the centroid level of the section as there transverse SHEAR stress is highest. The Joint should be nearly perpendicular to the principle lines of tensile stress and in general be located at points of minimum Shear and minimum Moment, as far as possible.

C. Where dowels, reinforcing bars, or other adequate ties are not shown at Construction Joints in the Drawings, 'keys' should be formed at reasonable spacing by embedding water soaked bunched timbers while the concrete is still soft.

D. These keys should be sized as may be shown in the details, or as directed by the Engineer, and these key-forming timbers shall be removed when the concrete has initially set.

E. In resuming concreting work, the surface of the concrete previously placed shall be thoroughly cleaned of dirt, loose laitance, loose protecting agencies and any other soft material, using wet brushes, and - if deemed necessary by the Engineer - by sand blasting.

F. The concrete surface shall be thoroughly soaked with clean water (just before further concreting) and the two water, etc. in-between areas, and the cleaned concrete surface painted with a thin layer of cement slurry, and only then further concrete poured.

vi. 'Wire mesh' and other similar items do not provide a proper construction joint, and they shall not be used.

F. SOLE JOINTS:

A. When a planned 'horizontal' placement of concrete in any structural member is interrupted or delayed, for any reason, for a period long enough for the previously partially placed concrete to take its initial set, the Engineer may decide that a joint as a Sole Joint and the Contractor shall immediately remove the previously partially placed concrete from the Forms.

B. However, when feasible, the previously partially placed concrete may instead be suitably and carefully hatched and it hatched end brought into low shear low moment zone as far as possible, and given shear key depressions after bringing it nearly perpendicular to the principal lines of tensile stress (for example brought to vertical or nearly vertical in a beam with principal reinforcement horizontal) and thereafter some treatment shall be given in a so to a Construction Joint and cry then the concreting resumed (making sure all reinforcement are as per the approved Drawings and the Shuttling has been brought in line and pump tightly).

G. CURING AND PROTECTION OF YOUNG CONCRETE

A. All structural concrete shall be cured for a period of time required to obtain the specified strength, but for not less than fourteen consecutive days (and nights) beginning immediately after initial setting of concrete (when it starts to lose its surface strength).

B. Curing (Membrane-curing or Water-curing) of laid concrete shall be carried out as generally specified below:

A. Membrane-Curing the Concrete:

- Except for a Construction Joints and surfaces sealed by Forms, liquid membrane curing compound can be used (for curing the concrete) as follows:
- On bridge deck top surface and other exposed surfaces, liquid membrane curing compound shall be applied soon after initial setting and when the Surface Shear has disappeared and the concrete is still slightly damp (not wet).
- On shored-in, formed vertical surfaces, Forms shall be stripped as soon as practicable (generally after 24 hours of casting) and liquid membrane curing compound applied immediately except in the areas that require rubbing or finishing during the curing period.
- These areas shall be kept water-tight until their finishing is completed, where after the liquid curing membrane shall be uniformly applied on them also when their work is done.
- White (pigmented) liquid membrane curing compound shall be used for all surfaces where the structural temperature during curing period is likely to reach about 35°C or more.

F. For bridge decks which are to receive an asphaltic overlay, residual curing membranes (after curing) shall be removed prior to the overlaying.

G. Removal methods and results should be approved by the Engineer.

H. The membrane curing compound used shall be of longer lasting duration and in accordance with the requirements specified for curing membranes related, AASHTO M 148 or the equivalent IS Specification.

I. The curing membrane shall be applied in two applications one immediately following the other.

J. The rate of each application of curing compound shall be as prescribed by the manufacturer, with a spreading rate per application of at least one liter of liquid per square meter of concrete surface.

K. If the concrete has dried up or has become dry, it shall be thoroughly wetted with water and the curing compound applied just to the surface film of water disappears and the surface is damp.

L. During curing operations any unpurged surfaces shall be kept cured with wetted Hessian cloth, and sprayed with the curing compound when the surface is damp (not wet).

M. Any curing membrane material on Construction Joints and/or on reinforcing steel shall be completely removed before the following concrete pour.

N. Hand operated spraying equipment shall be capable of applying concrete and uniform pressure to provide uniform and even distribution of the curing membrane at the sites required.

O. The curing compound shall be kept thoroughly mixed at all times during usage / application.

P. No traffic of any kind shall be permitted on the curing membrane until its curing period is completed, despite pitting.

Water-Curing the Concrete:

A. All concrete surfaces, unless still sealed by unremoved Forms (which shall be kept from heating up under ambient conditions) or submerged, shall be water-cured using unwatered concrete.

B. Water curing shall begin just after initial setting of concrete (which generally occurs by about 60 minutes of placement of unadorned concrete) and by about 120 to 180 minutes of placement of admixture concrete) and just after the surface water sheet has disappeared.

C. Surface water-cured shall be covered with wet sand, cotton mats, or double-thickness burlap (Jute/Jute) sheets.

D. The Hessian material shall be placed tightly under and behind any projecting reinforcing steel in order to completely cover the fresh concrete surface.

vi. The Hessian material shall be completely saturated with water and kept continuously saturated throughout the curing period.

vi. After the initial saturation, unless water is kept running, all surfaces shall be covered with thick polythene sheeting or other approved impervious material in order to protect/prevent drying up of concrete surface being cure continuously.

vi. The sheeting shall be weighted down or secured well to prevent moisture loss but the surfaces of the concrete shall be readily available for inspection of the Engineer (or his Representative).

vi. The sheeting material shall be in good repair.

vi. Sheetings that contain holes is otherwise damaged shall be repaired or replaced immediately.

vi. The Contractor shall be responsible for thoroughly inspecting and monitoring the concrete surfaces throughout the curing period to ensure continuous wet surface.

vi. Additional water shall be poured in any areas where saturation is reduced.

vi. Inspection of curing by the Contractor shall be conducted at least 12H times per day and night for the duration of the curing period - and even more often if ordered so by the Engineer.

vi. The Engineer shall be advised of the curing inspection schedule and he (or his Representative) may accompany the written to verify the acceptability of curing.

W. 'COLD-WEATHER' CURING:

A. When concrete is placed and the air temperature is expected to drop below 5°C during the curing period, the Contractor shall provide suitable measures such as straw, additional burlap or other suitable insulating materials and/or heating and artificial hot-air-curing to maintain the concrete temperature between 10°C and 32°C as measured on the surface of the concrete.

B. The surface of the concrete shall be kept moist and warm by the use of an approved warm moisture barrier such as straw and burlap/straw.

C. The moisture barrier shall be maintained in intimate surface contact with the concrete surface throughout the curing period.

D. After the completion of the curing during the entire required curing period, the Contractor shall stop the curing and remove the protection in such a manner that rapid curing of the concrete will be prevented.

E. When concrete is placed in subfreezing and subsequently flooded with ground water, the above curing measures shall be used, provided the surface of the water is not permitted to freeze.

M. 'CONCRETING' IN 'ADVERSE WEATHER' CONDITIONS:

1. Concreted in 'Cold' Weather:

A. Concrete that freezes soon after placing, gains neither low strength and some permanent damage is certain to occur. Therefore, such concrete shall be removed and replaced immediately.

B. Planning for Protection of their concrete during placement, and until it has attained the minimum properties required for the environment and the loading to which it will be exposed, shall be done well in advance of concreting and approved by the Engineer.

C. Appropriate equipment shall be made available in time for heating the concrete materials, for constructing enclosures and for maintaining favorable temperatures even after the concrete is placed.

D. Concrete shall never be placed in cold Forms and cold steel.

E. When the temperature of the concrete falls below 5°C, the Contractor shall use means to raise the temperature to above 10°C.

F. When faced with prolonged cold temperatures, all aggregates, or mixing water, or both, shall be heated to about 5°C to 32°C.

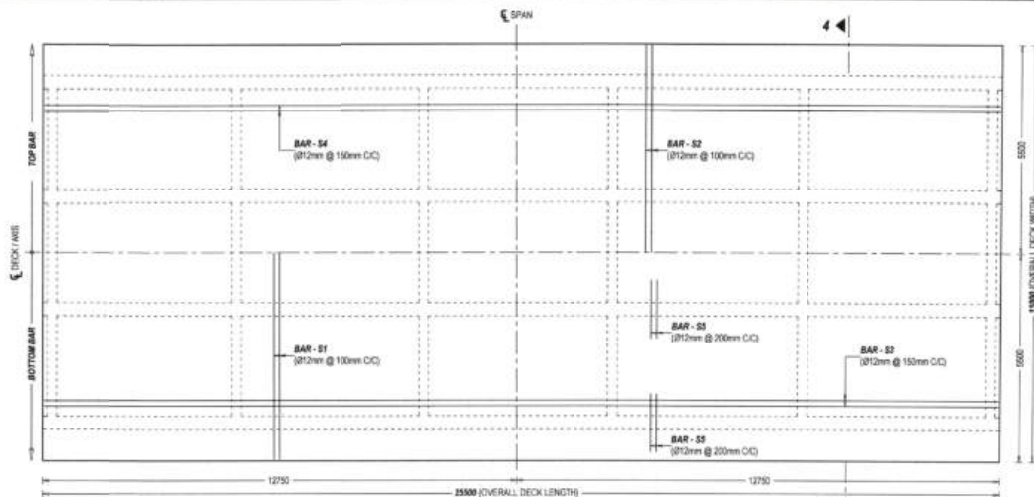
G. At temperatures at least 10°C above freezing, it is seldom necessary to heat the Aggregates.

H. At temperatures below or at freezing, often only the Fine Aggregate is heated to produce concrete of the required temperature, provided the Coarse Aggregate is free of frozen lumps and the Temperature of Water for the Mix is at least 10°C.

I. If aggregate temperatures are above freezing, the desired concrete temperature usually can be obtained by heating only the mixing water.

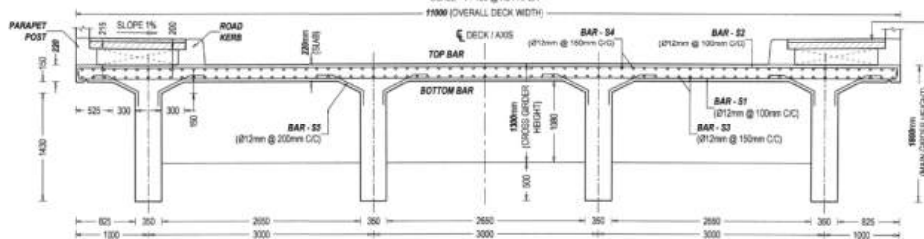
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GOVERNMENT OF NEPAL MINISTRY OF PHYSICAL INFRASTRUCTURE AND TRANSPORT DEPARTMENT OF ROADS BRIDGE DIVISION		
STANDARD SUPERSTRUCTURE DRAWING FOR ROAD BRIDGES		
Bridge Construction: Multi-Tier 12m with 2 Footpaths 1.5m wide	Coverall Deck Width: 13.0 m	
Reinforced Concrete, M30 or M25 (as per design)	Live Load: IRC 1 Lane of 15T or 12T + 2 Lanes of Class A, whichever governs (Reference Concrete Code)	
Dwg. No.: 117 of A-Modified RC-Slab Deck 23.0 m SS Span		
Dwg. Title: REFERENCE NOTES (1 Sheet) Sheet 10		
Reviewed by: Asst. Engineer (Civil) (Engineer, Civil)	For: Forwarded by: (S.O. Civil)	Date: 2075-01-01
Recommended by: District Engineer (DDO, Civil)	Approved by: Asst. Engineer (Civil) (Asst. Engg.)	Signature: [Signature]



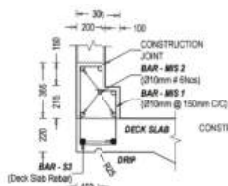
REINFORCEMENT DETAILS OF DECK - PLAN VIEW

SCALE - 1:100 @ A3 PAPER



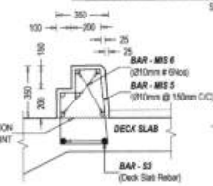
REINFORCEMENT DETAILS OF DECK - SECTIONAL VIEW (SEC 4-4)

SCALE - 1:50 @ A3 PAPER



REINFORCEMENT DETAILS OF PARAPET POST - SECTIONAL VIEW

SCALE - 1:25 @ A3 PAPER



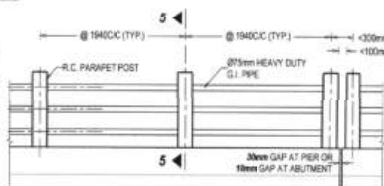
REINFORCEMENT DETAILS OF ROAD KERB - SECTIONAL VIEW

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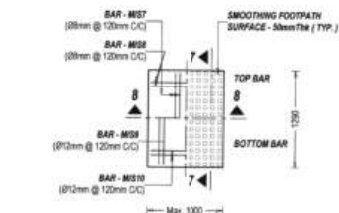
SECTIONAL VIEW OF POST (SECS-5)

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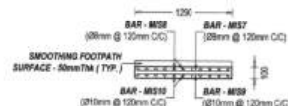
ELEVATION VIEW OF PARAPET POST

SCALE - 1:50 @ A3 PAPER



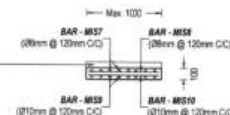
HALF SECTIONAL PLAN VIEW OF PRECAST R.C. FOOTPATH SLAB

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SECTIONAL DETAIL (SEC 7-7)

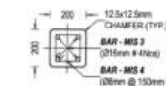
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SECTIONAL DETAIL (SEC 8-8)

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Concrete Terra Stone Pavestone
400x400x30mm (URBAN AREA) OR
M15 / 50 mm THK Concrete Flooring
(SMOOTHING FOOTPATH SURFACE)



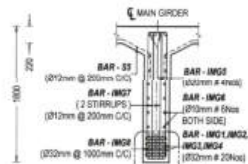
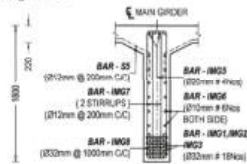
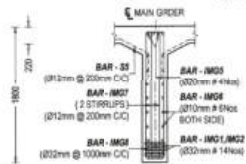
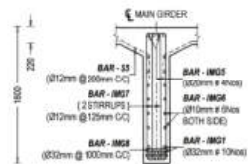
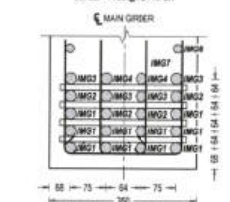
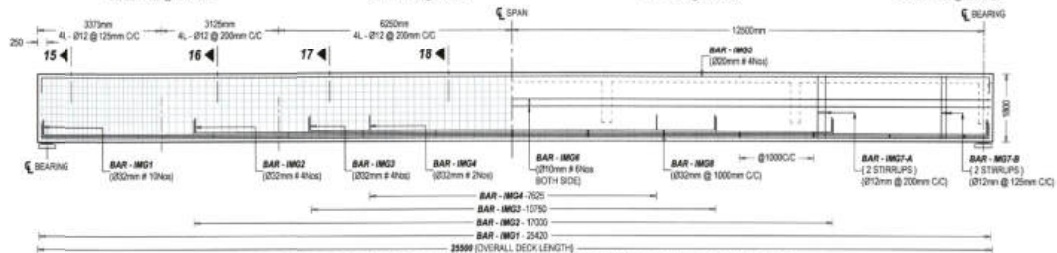
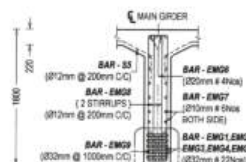
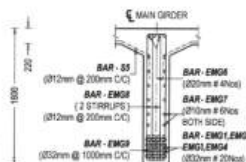
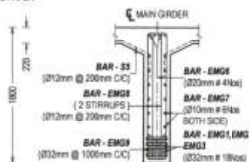
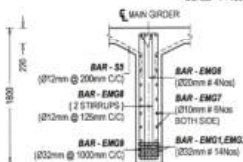
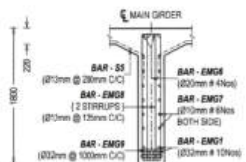
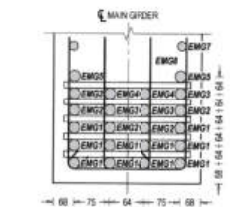
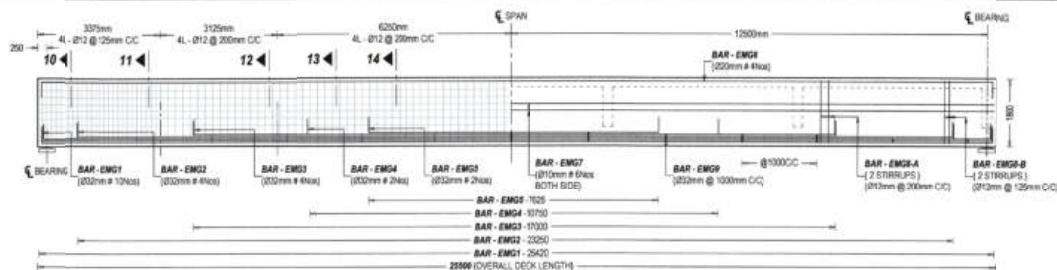
SECTIONAL REINFORCEMENT DETAILS OF PARAPET POST (SEC 6-6)

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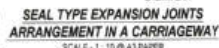
NOTES:

- Corroded boring tiles on footpaths in urban area and bituminous approach road. In other regions 50 mm thick M20 Concrete flooring above concrete precast slab can be provided for smooth surface in footpaths.
- Maximum width of footpath slab is 1.0m and footpath slab shall be of appropriate size.

GOVERNMENT OF NEPAL MINISTRY OF PHYSICAL INFRASTRUCTURE AND TRANSPORT DEPARTMENT OF ROADS BRIDGE BRANCH			
STANDARD SUPERSTRUCTURE DRAWING FOR ROAD BRIDGES			
Road Bridge Span: 7.50m with 2 Footpaths each 1.50m wide		Overall Deck Width: 11.00m	
Effective Simply Supported Span (Center to Center of Bearings) 25.1m Reinforced Concrete Deck (per 30.75m)		Lane Load: IRC 1 Lane of 100kN or 1 2 Lanes of Class A, whichever governs, and Footpath Loading	
Dwg. No.: 417 of 4-Webbed RC-Deck 25.1m x 8.50m Span			
Reviewed by: Amit Kumar Verma (Engineer, DWR)	Forwarded by: Jyoti Mishra (SCD, DWR)	Date: June, 2021	
Recommended by: Dipak Shrestha (DDG, DWR)	Approved by: [Signature] (DDG, DWR)	Remarks: [Signature] [Signature]	



GOVERNMENT OF NEPAL MINISTRY OF PHYSICAL INFRASTRUCTURE AND TRANSPORT DEPARTMENT OF ROADS BRIDGE BRANCH		
STANDARD SUPERSTRUCTURE DRAWINGS FOR ROAD BRIDGES		
Road Configuration: WB+7, 7 Lanes with 7 Parapet on each 3.5m side	Overall Deck Width: 11.80 m	
Effective Span Supported Span (as per design of Spanning) 105 m Reinforced Concrete Deck (RCC)	LIVE LOAD: IRC 2 Lanes of TSS-1 at 25 m of Deck, a wheelbarrow and a Freeway Loading	
Proj. No. 5/7 of a Modified RC-Sub-Deck 25 m x 65 m Span		
REINFORCEMENT DETAILS OF LONGITUDINAL GIRDER		
Reviewed by: Arun Kumar Varmia (Engineer, Civil)	Formulated by: Mahendra Malla (S.D.O., Civil)	Date: June 2019
Recommendation by: Dipan Bishwakarma (S.D.O., Civil)	Assessed by: Arjun Jung Thapa (S.D.O., Civil)	अनुमोदित ०८



GOVERNMENT OF NAGAL MINISTRY OF PHYSICAL INFRASTRUCTURE AND TRANSPORT DEPARTMENT OF ROAD BRIDGE BRANCH		
STANDARD SUPERSTRUCTURE DRAWING FOR ROAD BRIDGE		
Road Carriageway Width: 15.00 m or 1 Footpath each 5.00 m wide	Overall Deck Width: 15.00 m	
Effective Span Supported Span (order to order of Piercap) 20.00 Reinforced Concrete Deck (as PERM)	LIVE LOADS: RCI - Lane of 7000 or 12 kN/m ² of Deck Area, all influence factors, and Toppack Loading	
Drg. No. : 67 of A-Webbed RC-Slab Deck 25.0 m SS Span		
REINFORCEMENT DETAILS OF CROSS GIRDER & MISCELLANEOUS DETAILS		
Reviewed by: Arul Kumar Varma (Engineer, Civil)	Forwarded by: Jacobina Mathra (SSE, Civil)	Date: June 2021
Recommended by: Dipak Shrivastava (DDO, Civil)	Approved by: Arjun Singh Tripathi (SSE, Civil)	Received by: Arjun Singh Tripathi (SSE, Civil)

BAR BENDING SCHEDULE OF EXTERIOR MAIN GIRDER (1NO)							
S.No.	Bar Mark	Shape of Bar (Not to scale) Dimensions are in mm	Dia. of Bar (mm)	Length of each Bar (mm)	No. of Bars	Total Length of Bars (m)	Weight (kg)
1	EMG 1		32	26220	10	262.20	169.27
2	EMG 2		32	24050	4	96.20	60.31
3	EMG 3		32	17800	4	71.20	44.40
4	EMG 4		32	11950	2	23.90	14.80
5	EMG 5		32	9425	2	18.85	10.37
6	EMG 6		20	26220	4	104.88	25.53
7	EMG 7		10	25420	12	305.04	18.21
8	EMG 8		12	7880	149	1174.12	104.62
9	EMG 9		32	245	98	24.01	15.58
Total Weight (KG)							480.31

BAR BENDING SCHEDULE OF INTERIOR MAIN GIRDER (1NO)							
S.No.	Bar Mark	Shape of Bar (Not to scale) Dimensions are in mm	Dia. of Bar (mm)	Length of each Bar (mm)	No. of Bars	Total Length of Bars (m)	Weight (kg)
1	IMG 1		32	26220	10	262.20	169.27
2	IMG 2		32	17800	4	71.20	44.40
3	IMG 3		32	11950	4	46.20	29.56
4	IMG 4		32	9425	2	18.85	10.37
5	IMG 5		20	26220	4	104.88	25.53
6	IMG 6		10	25420	12	305.04	18.21
7	IMG 7		12	7880	149	1174.12	104.62
8	IMG 8		32	245	98	24.01	15.58
Total Weight (KG)							414.83

BAR BENDING SCHEDULE OF DECK SLAB (1NO)							
S.No.	Bar Mark	Shape of Bar (Not to scale) Dimensions are in mm	Dia. of Bar (mm)	Length of each Bar (mm)	No. of Bars	Total Length of Bars (m)	Weight (kg)
1	S1		12	11120	256	2846.72	257.89
2	S2		12	11120	256	2846.72	257.89
3	S3		12	25620	74	1895.88	160.54
4	S4		12	25620	74	1895.88	160.54
5	S5		12	1700	516	877.20	78.95
Total Weight (KG)							920.81

BAR BENDING SCHEDULE OF MID CROSS GIRDER (1NO)							
S.No.	Bar Mark	Shape of Bar (Not to scale) Dimensions are in mm	Dia. of Bar (mm)	Length of each Bar (mm)	No. of Bars	Total Length of Bars (m)	Weight (kg)
1	MC1		20	9570	5	57.42	141.90
2	MC2		20	9570	4	38.28	94.40
3	MC3		10	2650	47	133.55	62.65
4	MC4		10	9570	5	74.16	43.78
5	MC5		20	220	18	3.96	2.44
Total Weight (KG)							356.84

BAR BENDING SCHEDULE OF END CROSS GIRDER (1NO)							
S.No.	Bar Mark	Shape of Bar (Not to scale) Dimensions are in mm	Dia. of Bar (mm)	Length of each Bar (mm)	No. of Bars	Total Length of Bars (m)	Weight (kg)
1	EC1		20	9570	5	57.42	141.90
2	EC2		20	9570	4	38.28	94.40
3	EC3		10	2650	47	133.55	62.65
4	EC4		10	9570	5	74.16	43.78
5	EC5		20	220	18	3.96	5.77
6	EC6		10	1500	3	4.50	2.99
Total Weight (KG)							424.33

BAR BENDING SCHEDULE OF PARAPET POST BASE (1 SIDE)							
S.No.	Bar Mark	Shape of Bar (Not to scale) Dimensions are in mm	Dia. of Bar (mm)	Length of each Bar (mm)	No. of Bars	Total Length of Bars (m)	Weight (kg)
1	MS1		10	1470	176	249.96	154.15
2	MS2		10	25420	6	152.52	94.10
BAR BENDING SCHEDULE OF RAILING POST (1 SIDE = 14Nos)							
S.No.	Bar Mark	Shape of Bar (Not to scale) Dimensions are in mm	Dia. of Bar (mm)	Length of each Bar (mm)	No. of Bars	Total Length of Bars (m)	Weight (kg)
3	MS3		16	2195	55	122.92	195.07
4	MS4		8	550	98	54.88	21.68
Total Weight (KG)							405.94

BAR BENDING SCHEDULE OF ROAD KERB (1 SIDE)							
S.No.	Bar Mark	Shape of Bar (Not to scale) Dimensions are in mm	Dia. of Bar (mm)	Length of each Bar (mm)	No. of Bars	Total Length of Bars (m)	Weight (kg)
1	MS5		10	1690	170	286.50	173.07
3	MS6		10	25420	6	152.52	94.10
Total Weight (KG)							267.17

BAR BENDING SCHEDULE OF FOOTPATH PRE CAST SLAB (1NO)							
S.No.	Bar Mark	Shape of Bar (Not to scale) Dimensions are in mm	Dia. of Bar (mm)	Length of each Bar (mm)	No. of Bars	Total Length of Bars (m)	Weight (kg)
1	MS7		8	1150	9	10.35	4.09
2	MS8		8	860	11	5.46	3.74
3	MS9		10	1150	9	10.35	8.39
4	MS10		10	860	11	9.46	5.84
Total Weight (KG)							20.06

GOVERNMENT OF NEPAL MINISTRY OF PHYSICAL INFRASTRUCTURE AND TRANSPORT DEPARTMENT OF ROADS BRIDGE BRANCH		
STANDARD SUPERSTRUCTURE DRAWING FOR ROAD BRIDGES		
Based on: Nepalese Roads 7/2015 with 2 Footpaths each 1.5m wide	Overall Deck Width: 11.00 m	
Effective Single Spanned Span (Refer to order of Drawings) 25.1 m Reinforced Concrete Deck (for 2015)	LIVE LOAD: IRC 1 Lane of 70K or 1 or 2 Lane of Class A, whichever governs, and Fullwidth Loading	
Draw. No.: 777 of 4-Webbed RC-Slab-Deck 25.0 m-55 Span		
BAR BENDING SCHEDULE		
Reviewed by: Arjun Kumar Verma (Engineer, DOB)	Forwarded by: Anand Kumar (S.D.O., DOB)	Date: June, 2021
Recommended by: Dinesh Shrestha (DOB, DOB)	Approved by: Anand Kumar (S.D.O., DOB)	Remarks: # अनुरोधित बाधा महानगरपालिका