ROADS AND ROAD STRUCTURES CHECK LIST 2026

CIVIL ENGINEERING APPRAISAL

S#	Items	Descriptions / What is required	Page No.
1	Title of PC-I	PSDP Number / Source of funding, Nomenclature as per PSDP, Name of Tehsil (s) / District(s), Name of Scheme / Project, Cost in Rs. Million	
2	Cost Summary / General Abstract of Cost	Matching with Title of PC-I, Componential Breakup, Overhead Charges such as BST, Contingency, Consultancy (Design, Supervision), Price Adjustment, Land / Property Compensation, Shifting of Utilities	
3	Page Numbering	Pages are numbered for ease of reference during scrutiny and approval process	
4	Status of Land	Free of Cost or charged, District Administration concurrence in case of charged. If Free of Cost , the land owner must give an affidavit showing willingness duly signed with 2 witnesses to be attached	
5	Basis of Rates in Detail Estimates	Composite Schedule of Rates (CSR) / Non-Schedule Rate (NSR), Applicable Premium (if any)	
6	Source of NSR (if applicable)	Rate analysis on pattern of CSR Volume II, 2 or 3 reputed Firm quotations in respect of major (by cost) NSR, Non-application of Premium, To ascertain basis of estimation	
7	Provision of PMU (in case cost is in excess of Rs. 3 Billion)	Tabular estimation of Staff on Man Month Basis	
8	Feasibility Report (in case cost exceeds Rs. 500 Million or cost contains 30% Infrastructure Component)	Report as submitted when Feasibility was carried out	
9	Background History (in case of Improvement, Rehabilitation, Reconstruction, Augmentation etc.)	Including Year of Construction, Cost, Reason(s) of deterioration, Designed Population, Target Population, Proposed changes in Design	
10	Contingency	In the permissible range as per Planning Commission guidelines	
11	Vehicles	Justification as per Planning Manual Clause 2.47	
12	Consultancy (Design)	Percentage cost of Civil Works as awarded to the Consultant	
13	Consultancy (Supervision)	Tabular estimation of Staff based on Man Month Basis as awarded to the Consultant	
14	Price Adjustment	Calculated as per Planning Manual Clause 2.62xviii on yearly allocation basis (to be incurred)	
15	Signatures	On GAOC, at end of each Detail Estimate, Drawings, Designs, Site Plan, Comparative Statement (in case of Revised / Modified PC-I) duly by concerned SDO and XEN	
16	Site Plan	Showing location of Road with respect to other topographic features. Surrounding Roads also so as to	

		ascertain connectivity	
17	Comparative Statement (in case of Modified / Revised PC-I)	Columns of Approved (Component, Quantity, Amount) Modified / Revised (Component, Quantity, Amount) Difference, Componential Remarks (to justify change in cost in terms of technical parameters)	
18	Non Duplication Certificate	Certificate to the effect that the proposed work in PC-I is not part of any other Scheme or has been executed in the past	
19a	Item Description used in Detail Estimate	(in case item is present in CSR) Item description as per CSR (in case item is absent in CSR) Item description containing the required specs	
19b	Rates used in Detail Estimate	(in case item is present in CSR) correct CSR Reference, Rate as per CSR Book) Unit of measurement as per CSR Book (in case item is absent in CSR) rate as obtained in rate analysis, Unit of measurement as per conventional practice	
19c	Quantity in Detail Estimate	Quantity Description (name of Road, Street), Entry of Length, Breadth and Height in corresponding columns), Detail Measurement Sheet (if separately attached)	
19d	Amount in Detail Estimate	Mathematically correct result of (Quantity x Rate)	
19e	Total Cost of Detail Estimate	Mathematically correct sum of all items	
20	Certificate of Quantities obtained from Drawings	Certificate to the effect that Quantities are obtained from Drawings, duly signed by XEN concerned	
21	Cut and Fill quantities / Earthwork Sheet	Calculated on basis of Earthwork Sheet containing columns of RD, NSL, PRL, H, Area, Mean Area, Length, Volume	
22	L Section	Plotted between PRL / NSL (y axis) and RD (x axis), to be used in Earthwork Sheet	
23	X Section	Containing RL of NSL, PRL at specified RD (to be used in Earthwork Sheet), HFL marked	
24	Classification of Rock (if applicable)	Certificate duly signed by SE concerned containing Rock Classification by percentage	
25	Classification of Soil	Certificate duly signed by SE concerned containing Soil Classification by percentage	
26	Hydrological Design	Peak Discharge of Stream / Creek across which Structure is proposed, Capacity Discharge of Structure. Rainfall in Halcrow-ULG or HFL in Manning Formula containing readings obtained in 2022 Flood	[redacted]
26a	Bridge (each length / location separately)	For each size /span separately, Capacity Discharge is ought to be greater than Peak Discharge (each case separately)	
26b	Culvert (each Type and Size separately)	For each type and size separately, Capacity Discharge is ought to be greater than Peak Discharge (each case separately)	
26c	Drain (each size separately)	For each size separately, Outflow is ought to be greater than Peak Inflow	
26d	Sewerage	Inflow vs Outflow Hydrological Design Sheets (separately for inflow based on population and GPD	

		and outflow based on dia of pipe), Capacity Outflow is ought to be a bit greater than Inflow, location marked on Google Map in shape of line, Disposal point marked on Map	
26e	Sewerage + Drain	Inflow vs Outflow Hydrological Design Sheets based on c and d, Disposal point marked on Map	
27	Design of thickness of Sub Base Course (in case thickness more than 6 inch), Base Course (in case thickness more than 6 inch) and Wearing Course (in case thickness more than 2 inch)	Based on Vehicular Type, AADT, Annual Traffic, Growth Rate, Total Traffic for Design Life, ESAs, ESALs, S_N including Coefficient and Drainage Coefficient	
28	Bar Bending Schedule	In respect of quantity of steel proposed for Box Culvert (each size separately)	
29	Incorporation of Structure Works	To avoid losses to Road because of Water. Justification if absent / not proposed	
30	Width of Carriageway	Multiple of 6 feet (Half Lane Width), Reason(s) if not followed	
31	Width of Shoulder	Multiple of 3 feet (Quarter Lane Width), Reason(s) if not followed	
32	Drawings (Plans and Sections)	Legible, Dimensioned Drawings so as to relate with Quantity Details in Detail Estimate or Detail Measurement Sheet	
33a	Stability Design Sheet for Retaining Wall (if applicable)	Containing checks against Overturning and Sliding	
33b	Scour Depth Design Sheet (if Protection Wall is proposed)	Containing calculations of safe Depth against Scouring	
34	Linear Plan	Containing RD wise location of Structures	
35	Pavers	Location in Site Plan or Google Map in shape of line, Length and Width separately mentioned in Detail Estimate, No PCC is allowed below Pavers as per CSR Volume III	
36	Street Lights	Names of Streets, Center to Center distance, Design Lux (lumens per square meter) {Design Lux is ought to be 10-20 for streets, 20-50 for main roads, 50-100 for highways}	
37	Lead Chart (if applicable)	Contains mechanism of rate calculation as per CSR Book	
38	Certificate of shortest distance (if applicable)	Certificate to the effect that the distance(s) as taken in PC-I are the shortest distance(s) available for site to quarry, duly signed by concerned XEN	

Note: Row 26 is to be left blank in all cases.