

INDUSTRIAL SUBMITTAL CHECKLIST

Industry Name: _____
 Subject: _____
 Document Number: _____

Reference Number: _____
 SHAMEL Request No: _____
 Revision 0
 Date: __/__/____

Notes: Industry should provide this Checklist completed with the submittal.

Submittal Stage: Conceptual Design (CD)
 Detailed Design (DD)

Item	Y	N*	N/A	Typically Required?	Justifications / Notes (* Required if "N")
I General					
1				CD & DD	Submittals shall be submitted as: - hardcopy of legible size 'D or C' with drawing number & revision. - softcopy of drawings in AutoCAD and PDF
2				CD & DD	Provide previously issued comments with responses on the Excel sheet of the RC standard comments format in hard and soft copies.
II Drawing - General					
Drawing should be in accordance with the RC requirements such as:					
3				CD & DD	Drawing must follow- coordinate system listed below: a. For RC-Jubail (RCJ Local Grid). b. For Ras Al-Khair (UTM39N Ain Al Abd).
4				CD & DD	Drawing should have: Legend, Title block, North direction, Scale bar and RC Plant Grid coordinates for the requested area.
5				CD & DD	Key Location Map to show the General Site Location relative to Jubail Industrial City.
6				CD & DD	Site Location Map to show the specific Site Location relative to surrounding roadway network.
7				CD & DD	Work area shall be large enough to include associated work and equipment in order to accomplish the expected work.
8				CD & DD	Provide clearly the Limit of Work.
9				CD & DD	RC boundary should be reflected on the main drawing if applicable.

10	Provide drawing showing the topographic survey for the proposed work area, including existing, infrastructure, utilities and appurtenances.				CD & DD
11	The Plan must show lot boundary lines, adjacent lots, all existing infrastructure and utilities in the surrounding proposed work area.				DD
12	Provide drawing showing the proposed work area imposed on the LAR plan.				DD
13	The LAR drawing should have table of Easting and Northing Coordinates in meters of the requested area.				DD
III	Typical Cross Sections				
14	Coordination with Site Plans.				DD
15	Right of Way.				DD
16	Utilities locations, if applicable.				DD
17	Cross Section to show existing ground interface with proposed work, i.e. building outside wall face, sidewalk, pavement, slopes and other pertinent information.				DD
IV	Plan Layout - Road Design				
18	<i>Design should be in compliance with the RC Guiding Engineering Manual</i> on relevant items such as width of lanes & shoulders pavement width & thickness, side slope treatment and protection, use of roadside devices, etc.				DD
19	Provide Traffic Management Plans for emergency use in case of pavement failure due to the proposed works.				DD
20	In case of road failure due to the process, all pavement reconstruction, excavation and backfill within RC Jurisdiction shall be in accordance with RC specifications.				DD
21	Provide the demolitions items (where applicable). Identify the salvageable items and disposable items.				DD
22	Proposed pavement sections shall be in accordance with RC requirements to match with existing pavement layers.				DD
23	Sign boards mounted on RC roads shall be in accordance with RC standards.				DD
24	Provide the signage and lane marking drawing.				DD
25	Provide Profile Grade lines and Pivot Points (PG and PP).				DD
26	Lanes and Shoulders markings shall be in accordance with RC standards.				DD
27	Provide Ditch / Channels / Drainage canals locations.				DD
28	Clarify the embankment \ Side slope with protection on plan and section.				DD

29	Show curb and its type and provide details.				DD	
V	Plan Layout - Access Road					
30	<i>Design of access should be in compliance with the RC Guiding Engineering Manual</i> on relevant items such as parameters and calculations for the geometric elements (with dimensions) including curves, radii, islands, channelization, merging and diverging segments, medians, pavement, pavement markings, signs, drainage, lighting poles, utilities crossing, modifications to the existing culverts, etc.				DD	
31	Clarify the road names from the existing road network which the proposed access roads are being tied to.				CD & DD	
32	Provide details map showing the tie-in of the proposed access road with the adjacent public road; including the cross-road intersection(s) showing the alignment.				DD	
33	If the Access Road to the lot crosses a drainage channel, culvert must be provided. Structural drawings must be submitted for RC review.				DD	
34	Clarify the basis for the proposed deceleration and acceleration lengths.				DD	
35	When the Access Road crosses existing utilities, encasement must be provided to protect the utilities.				DD	
VI	Site Utilities Design (Pipes Routing & Interface Points)					
36	In case of utilities crossing, provide cross sections at critical locations to ensure utility cover requirements are met and to avoid any conflicts.				DD	
37	Follow the design parameters (i.e. spacing and clearances (horizontal and vertical), etc). Refer to RC Guiding Engineering Manual .				DD	
38	Identify the location, size and materials of existing & proposed utilities.				DD	
39	Identify the utilities conflicts and resolution of conflicts.				DD	
40	Make sure that the sanitary wastewater and potable water horizontal and vertical requirements are met and provide calculations.				DD	
41	Utilities Details are prepared and are matching with plans.				DD	
42	Provide Easting and Northing Coordinates of all bends and Valve chambers.				DD	
43	Show detail of piping through the valve chambers.				DD	

44	Interface point (Tie-in) must reflect coordinates and depth of connection. As-built information indicated if applicable on the plans (i.e. Contract no, pipe size, material, slope, I.E., top level, etc)				CD & DD
45	For interface points (Tie-in), details shall clarify the existing ground and proposed work. Show excavation envelope.				CD & DD
46	Ensure that the Utilities Coordination plans are included; potential conflict and pipes crossings locations are identified. Top of lower pipe and invert of higher pipe are shown to check the cover. Provide finished grade level.				DD
VII	Plan Layout – Grading & Drainage (where applicable)				
47	Provide Drainage Details and match with plans. Use RC Standard Details as appropriate.				DD
48	Provide latest survey drawing showing how the site topography matching adjacent sites (existing and proposed). Clearly identify lot boundary, with coordinates.				CD & DD
49	Provide site contours of both existing and proposed grades. Show that the proposed grading are matching with the adjacent site grading.				CD & DD
50	Ensure that the toe of foundation \ side slope shall be within lot boundary.				DD
51	Make sure that all existing utilities are identified and shown.				CD & DD
52	Identify and show any conflict with existing utilities and proposed solution.				DD
53	Identify and show the location of existing and proposed open channel flow elements (ditches and canals).				CD & DD
54	Identify and show the design of underground drainage system (closed), culverts and overland system (ditches, channels, canals, etc), as applicable.				DD
55	Provide cross sections for the drainage channels.				DD
56	Drainage boundaries and flow paths identified.				DD
57	For buildings construction, provide finished floor level to ensure the proposed grade level is at least 150 mm below finished floor level.				DD
58	Provide treatment of cut areas and slopes.				DD

Others					
59	Submittal should be in compliance with RC Design Guidelines, Standards and Specifications.				CD & DD
60	Obtain third parties approval is required.				DD
61	Provide calculations for all infrastructure and utilities, if applicable				DD