

# INFRASTRUCTURE PLANNING DEPARTMENT

# Procedure for Subdivision Assessment & Approval

January 2019



وزارة البــلديـة والـبيئة

ادارة تخطيط البنية التحتية

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# **1.0 INTRODUCTION**

Due to the rapid Urbanization and land development in the State of Qatar and the need to streamline the approval process for land development especially of the New Subdivisions, the Infrastructure Planning Department of the Ministry of Municipality and Environment (IPD – MME) has put together this procedure and checklist to organize and clarify the process. The procedure aims to optimize and assist the Urban Planning Department (UPD-MME) in the approval process for the New Subdivision proposals, hence avoiding any potential issues at a later stage after it is handed over to Ashghal for implementation.

This procedure shall be followed on a case by case basis. The procedure is exclusively for the government subdivisions. The following are a brief of the steps that are to be followed when IPD receives a New Subdivision for review and approval from the UPD.

# **1.1 Acronyms and Terminology:**

- UPD : Urban Planning Department at MME
- IPD : Infrastructure Planning Department at MME
- MME : Ministry of Municipality and Environment
- ROW: Right Of Way
- QHDM: Qatar Highway Design Manual
- IM-P: Implementation Planning Section
- IN-P : Infrastructure Planning Section
- CRA: Communication Regulatory Authority

# 2.0 STEPS

- I. Site Location Approval : UPD sends the location of the proposed New Subdivision to IPD for Location Approval
  - a. IPD reviews the feasibility of the proposed location from an infrastructure point of view and advices on the best locations for the facilities based on the site analysis, opportunities and constraints.
  - b. IPD also coordinates with the Environmental Sector MME to obtain their No Objection to develop the land.

An approval or rejection is then provided to the UPD to continue with the Subdivision Design or selection of an alternate site in case of rejection.



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- II. Subdivision Layout Approval : UPD sends the layout for the New Subdivision to the IPD for review and approval. IPD Director forwards the request at the same time to the two sections under IPD – Implementation Planning Section (IM-P) for services coordination with all the concerned agencies and Ministries, and to the Infrastructure Planning Section (IN-P) for internal technical review and approval.
  - a. IM-P assigns a case number for the proposal and sends to all the agencies via the IPD coordination system. The time stipulated to receive feedback from all the agencies is generally two weeks. The result of the coordination is in a summarized form with a grading from each agency along with attachments if any. The grading is either Affected, Not Affected, or Conditional.
  - b. IN-P section reviews and technically evaluates the subdivision proposal to ensure that the Infrastructure requirements are met and are generally in the following disciplines:
    - i. General Planning
    - ii. Electrical
    - iii. Drainage
    - iv. Geotechnical
    - v. Telecommunication

Following is a brief procedure/guidelines followed by the assessment team:

# 2.1 General Planning

The following criteria is used to evaluate the general planning of the New Subdivisions:

- a. Integration with the Natural Environment Ensure that steep slopes and other important natural features are avoided. Natural vegetation and topography of the land has to be maintained as far as practicable to encourage the effective use of natural resources. Study if the entire site is appropriate for development
- b. Verify that the proposed development is consistent with the Municipal Spatial Development Plan (MSDP) developed by the Qatar National Master Plan
- c. Check Zoning compatibility in terms of the land use
- d. ROW widths Standards for the Right Of Ways (ROW) must be met. The standards include ROW widths, future roads expansions or upgrades, intersections, length of culde-sacs etc. The placement of new streets should conform to the specifications as per the Qatar Highway Design Manual (QHDM). The street hierarchy have to be established as per the functional classification of the streets. Each classification of streets serve different functions and has different design requirements to insure sufficient capacity, traffic volumes, future expansions, etc.
- e. Proximity to any proposed metro stations or any other critical facilities that may influence it must be studied and integrated if applicable
- f. Configuration of Blocks and Lots -



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- Blocks shall have sufficient width to provide for two tiers of lots of appropriate depth
- Sikkas may be required to be established through blocks that are over 180 m in length to accommodate utilities, or pedestrian walkways. Sikkas must not be too wide or too narrow. The sikka width should be as specified in the QHDM
- Lot dimensions shall comply with the minimum standards of the zoning regulation; corner lots shall have extra width sufficient to permit required front and side building lines
- Blocks should be ideally oriented to minimize exposure to harsh sun and wind
- g. Lots shall not generally derive access exclusively from an arterial or major collector street. Service roads must be provided in such cases
- Parks and Open Space Must follow the minimum required standards as specified in the MSDP developed by the Qatar National Master Plan. Parks and other open areas should be preferably located in the low lying areas of the land for natural drainage. Parks are also to be centrally located to provide maximum access to the residents. At some instances the neighborhood parks may also be used for underground storage tanks for surface/ground water drainage.
- i. Community facilities such as the schools, mosques etc. are located away from the low points that may be prone to flooding and the distribution of the facilities in general
- j. Storm water Management Natural drainage paths must be maintained as far as practicable. Low points must be reserved if applicable
- k. Public Utilities The placement of the public utilities such as substations, pump stations etc. have to be considered in the plan
- 1. Integration with the existing road network must be considered
- m. Interaction with the neighboring uses must be evaluated and necessary action taken in case of incompatibility.

# 2.2 Electrical

The following are the planning considerations and requirements for locating Electrical Substations within the New Subdivisions:

- a. The dictated load for each parcel must consider 350A/210kW, which is one (1) feeder per plot.
- b. Spare outgoing feeders from each proposed substations shall be considered.
- c. Allow extra plots and ensure available government land for future substations in case needed.
- d. Satisfy the Infrastructure Network requirements with correlation to width of the proposed right of way and the utility corridor it possess based on 2014 street cross sections.



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- e. Avoid allocating an unpleasant substation plot next to a residential plot that may lead to future relocation of the assigned substation plot.
- f. Avoid allocating a Double Indoor in a narrow right of way or multiple substations within a confined space.
- g. Allow even distribution of LV cables considering 350m maximum length.
- h. Avoid reducing and eliminating the numbers of proposed residential plots as much as possible while locating the substations.
- i. Avoid allocating an excessive numbers of substation plots for no reason.
- j. All Primary Substation plots shall have a buffer and a sikka around it.

The following criteria is used as part of reviewing process for the New Subdivisions:

IPD DICTATED LOAD				
PLOT SIZE	PLOTS / FEEDER	ALLOWABLE CUTOUT		
500 +/- SQ.M	4	150A/90kW		
501 SQ.M - 1500 +/- SQ.M	2	200A/120kW		
1501 SQ.M - 3000 +/- SQ.M	1	350A/210kW		

Note:

A single indoor substation consists of two (2) transformers with maximum feeders of 12 but IPD considered only 10 feeders to allow spares.

# 2.3 Drainage

- a. Study the potential for flooding in the subdivision area and the surrounding infrastructures (existing and planned) to determine the most effective place, if needed, for an EFA or Attenuation tank/s.
- b. Study the existing or proposed drainage systems and the means of connecting to them.
- c. Study the existing or proposed sewer network or pumping stations or sewage treatment plants and look at the means to connect to them.
- d. Comments and advice.

# 2.4 Geotechnical

Subdivision by UPD is assessed technically for geotechnical, groundwater and geological hazard.

For Geotechnical review, the following is the standard procedure:

a. Check location on utility planners portal for

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- Proximity to Qatar Rail structure and protection zone
- Coastal zone
- Known potential cavity areas
- Environmental & heritage protection areas
- Assess the platform and check the contours at the subdivision location
- b. Refer to Geological Earth and Satellite Imagery for availability of borehole or piezometer data.
- c. Refer to IPD geotechnical database, geological map and location on Satellite Images for geologic, groundwater and geotechnical aspect. (Records: borelogs and groundwater levels)
- d. Extract relevant borehole from the IPD data base to assess geotechnical related problems.
- e. Check with known or suspect cavity areas based on knowledge of known areas.
- f. Carryout site reconnaissance survey visit if the engineer is not familiar with the proposed subdivision area.
- g. Refer to Ashghal groundwater monitoring portal for the groundwater regime in the site area.
- h. Refer IPD's flood portal for flood risk assessment advise on platform level
- i. Comments and advice

# **2.5** Telecommunication

- a. Ensure that utilities plots, or parks are available to ensure full coverage (500 m radius).
- III. Once all the disciplines have reviewed and logged the comments, the comments are evaluated for any major risks to the proposed subdivision and then compiled as a response to send to UPD along with the response letter.
- IV. After receiving the service providers comments and internal evaluation, IN-P makes any necessary updates/modifications to the CAD file provided by UPD in terms of siting of the infrastructure elements such as electrical, drainage and telecommunication components.
- V. In case of any road related comments from MOTC or Ashghal Roads, IPD will review the comments and will call for a meeting with UPD to resolve any conflict and make a decision regarding the comments received whether to accept or amend the plans accordingly.



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- VI. Upon completion of this above process: IPD will issue the decision to UPD as per one of the following scenarios :
  - a. **Approval** If approval is granted, then UPD can proceed to finalize and fix the subdivision in the policy plan.
  - b. **Conditional approval** This means that either the UPD makes necessary changes to the subdivision before finalizing or the implementing agency takes into consideration the conditions that was put with the approval.
  - c. **Rejection** if the subdivision is not approved, then UPD has to revise the same and send it back to IPD to start the approval process all over again.
- VII. After UPD makes the necessary edits to the plans, the final plan is issued. The new subdivision shall be included in the Policy Plan after which the final PDF and CAD files of the New Subdivision are sent to IPD.
- VIII. IPD then sends the request to start the design process to Ashghal which is to be completed in 36 months as per the signed agreement between MME and Ashghal, after which it is to be handed over for construction. IPD informs all the other agencies namely Kahramaa Water and Electricity, Communications Regulatory Authority (CRA) and Ministry of Transportation and Communications (MOTC) about the handing over of the Subdivision for Implementation to enable them to be prepared with their design work.

# 3.0 DISCLAIMER

Under no circumstances does IPD-MME warrant or certify the analysis to be free of errors or deficiencies of any kind. The use of IPD 's approval, does not relieve the requesting agency from its responsibilities, nor does it entitle the implementing agency (or anyone who acts on its behalf) to claim any kind of compensation for damages or losses during construction or thereafter.

IPD should not be held responsible for any liability or responsibility during construction or thereafter for the structures, properties and any investment on the properties.

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# 4.0 PROCEDURE FLOW CHART:

