R0

10.07.2014

Construction Document Submission & Approval Process

These will need to get incorporated into the tender and contract document for all MEP+OEMS and Façade contracts. However, sections highlighted in yellow are for internal use only and not to be included in external contracts.

1. Construction Documents (CD) include any of the following which are applicable for the execution of the relevant contract:
    a. Shop Drawings
    b. Material Submittal
    c. Method Statement
    d. Design Calculations (if any)
    e. RFI (request for information)
    f. Logs
2. Maximum Timeline for submission and approval of CDs:
    MEP+OEMS Contracts:

	Final CD Submission* (weeks from date of LOI/WO (whichever is earlier)	**CD Approval****
Low rise/Mid rise (upto 70 m above ground)	Residential – not applicable (detailed VFC will be issued by Lodha Design and Contractor shall execute as per the same[#]) Non-Residential - 8	+ 8 weeks from submission of full CD set (includes period for any revision/rework as may be needed, in opinion of Lodha Design/CM)
High Rise (70 m – 150 m)	12	
Super High Rise (150 m+)	16	

Façade Contracts:

	Final PMU approval* (weeks from date of LOI/WO (whichever is earlier)	**Final CD Submission* (weeks from date of LOI/WO (whichever is earlier)**	**CD Approval****
Low rise/Mid rise (upto 70 m above ground)	NA	8	+ 4 weeks from submission of full CD set (includes period for any revision/rework as
High Rise (70 m – 150 m)	20	26	

Super High Rise (150 m+)	20	30	may be needed, in opinion of Lodha Design/CM)

* Contractor is responsible ** Contractor is responsible along with Lodha CM and Design. # - Contractor shall continue to be responsible for the system performance.

3. Consequences of non-compliance:
    a. If contractor fails to meet the deadlines (outer limits stated above, earlier targets may be mutually agreed between Contractor, Lodha CM and Lodha Design within 21 days of issue of LOI/WO (whichever is earlier)) of any of the aforesaid milestones, following consequences shall follow:
        i. Delayed CD Penalty: Tolerance of 2 weeks per contract cumulatively shall be available for the contractor. Thereafter, Delayed CD penalty of 0.5% of contract value per week for any of the aforesaid milestones which are missed shall apply, subject to a maximum of 3% of the contract value. This penalty is in addition to any penalty that may be levied for non-compliance with overall project schedule and does not form part of any cap on the same. If delay is > 10 weeks cumulatively for a given contract, Lodha CM may choose to terminate the contract with all consequential costs and risks being to the Contractor. Lodha CM STPI shall have impact as per STPI policy
        ii. [Internal Circulation Only] Lodha Design team: If VFC issuance (for residential buildings <= 70 m) or 'CD approval' milestone is missed, impact on STPI as per STPI policy and timelines stated in 'Performance Pay for External Consultants' policy.
        iii. [Internal Circulation Only] Lodha CM team: If 'CD approval' milestone is missed, impact on STPI as per STPI policy.
        iv. In case of any dispute on the cause of delay in milestone 'CD approval', the decision of Lodha's COO shall be binding on all concerned.
4. Protocol for submission of MEP+OEMS:
    a. Each contractor is responsible for submitting CDs covering all of the following disciplines which fall under its scope:
        i. Electrical system
        ii. Plumbing works
        iii. Fire fighting system
        iv. AC system
        v. Fire alarm
        vi. Ventilation
        vii. ELV system
        viii. STP / WTP
        ix. Water bodies
    b. Drawings shall be accepted in two stages only:
        i. Stage 1: Schematics and plant room drgs
        ii. Stage 2: Floor Plans
    c. The contractor is expected to ensure that its CDs are technically correct and also comprehensive and have adequate competent resources for the preparation/review of the same. If any CD does not stand finalized after 3

rounds of comments from Lodha, the same will deem to be delayed submission and penalty shall be applied based on manpower costs of Lodha teams required to review additional submissions (after 3 rounds). Such penalty shall be applied at following rates and shall be in addition to any other contractual penalty:

Additional Time spend by Level	Rate Per Man Hour (Rs.)
0	2250
1	1700
2	800
3 and below	450

To be revised upwards by 7.5% on 1st April of each FY starting 1st April 2015

Process

a. **Kick-off meeting:** Once the tender has been awarded and contractor is on-board, Contractor shall coordinate with Procurement to schedule a kick-off meeting with Lodha's CM team (presence of concerned Lodha Design is also desirable) wherein a schedule for submission of CDs shall be mutually agree, subject to the outer limit of the timelines stated in clause 2 hereinabove. Contractor shall be responsible for ensuring that the kick-off meeting is held within 14 days of LOI/WO (whichever is earlier) being issued and a detailed schedule for submission of CDs is agreed at the said meeting. The target dates for the milestones stated hereinabove (viz. final CMU approval (Façade only), Final CD submission, CD approval) shall be put into the DMS by the CM head of the project (level 2 or higher). If the meeting is not held or agreement is not reached on the schedule within 21 days of LOI/WO (whichever is earlier), the dates as stated in clause 2 hereinabove shall be deemed to be the approved schedule.
b. **Major changes:** Any changes to the project post issue of the LOI/WO (whichever is earlier) shall be classified as Major or Minor change based on Lodha's Major Change Policy. Major changes can push out timelines for submission of the CD impacted by such major change. The quantum of impact on timelines will need to be agreed between Lodha CM team (level 2 or higher from concerned package) and the Contractor within 2 weeks of the occurance of a major change being identified.[Internal Circulation Only] The timeline impact can vary by each contract impacted but in no case should it exceed 8 weeks wrt overall timelines for CD approval (per incident of major change/group of major changes which occur simultaneously).
c. [Internal Circulation Only]**Lodha's approval process for CDs:**
    a. Contractor to submit to CM team at site.
    b. The CM MEP/ façade teams shall then forward the relevant drawings to Design MEP/ Facade team based on the scope bifurcation between the design and CM MEP/facade teams for the review of the CDs submitted on principles mentioned below:
        i. In case of MEP drawings, the split of the CDs review responsibilities between the CM-MEP and Design MEP teams would be as mentioned in Annexure 1.

ii. In case of Facade drawings, Design-Facade team would be responsible for reviewing all the submitted CDs.

c. Following activities shall then be carried out:
   i. Design MEP/facade team shall provide a copy of the documents to the Lodha Project Architect to get these reviewed by external Architect/Structural engineer (as needed).
   ii. Design MEP/facade team shall review the documents and the get the same reviewed by MEP/Facade consultant.
   iii. In case of CDs being reviewed by the CM-MEP team, all documents which will require MEP consultant and/or external Architect/Structural engineer review shall be sent directly by CM-MEP team to respective consultants.
   iv. Based on (i), (ii) and (iii) above, detailed feedback and comments shall be collated and sent back to CM team, who in turn shall pass it onto the Contractor.

d. Based on point b. above, the CDs shall be marked as one of the following by Design MEP/Façade team (and Site CM-MEP team wherever applicable) and sent back to Site MEP/ façade team for intimating the vendor.
   i. Code A – Reviewed [Works can proceed on site with drawings]
   ii. Code B – Reviewed as modified (i.e. Vendor to Revise and resubmit.) [Works can proceed on site with drawings]
   iii. Code C – Revise and Resubmit. (i.e. Vendor to Revise and resubmit immediately.) [Works CAN NOT proceed on site with drawings]
   iv. Code D – Not Reviewed i.e. Rejected, Vendor to revise and resubmit immediately) [Works CAN NOT proceed on site with drawings]

e. Lodha CM+Design has to ensure that first feedback to Contractor as per c. hereinabove is given within 5 weeks for MEP CDs and 3 weeks for Façade CDs after submission of CDs (covering entire stage 1 or 2, as per pt. 4 hereinabove) for a given stage as per by contractor – however, based on specific circumstances, Lodha should not wait for full CD submission to start review since primary intent is to ensure timely response to and approval of CDs.

d. All contracts which involve submission of 'shop drawings' shall contain the following clauses:

"*Shop drawings shall be submitted by the Contractor for review by the Owners/its consultants prior to execution of the related works. Such drawings shall be reviewed by* the *Owners/its consultants and comments/suggestions are to be incorporated by the Contractor into its design. However, it is clarified that in all such cases, the Contractor is responsible for the design and execution of the works and any review/approval by the Owners/its consultants shall be a limited review and the Contractor shall be solely responsible for the successful execution and operations of the works in its scope. The Owners/its consultants shall have no responsibility whatsoever for the said works or their technical correctness/safety/execution process etc."*

e. **Quantities:** The items contained in the BOQ are the only payment items required to be paid for the completion of the scope of work stated in this tender/contract. No additional payment items shall be accepted by the Owner for the said scope of work, unless the same is agreed upon prior to the submission of the bid. The quantities in the BOQ are indicative and the contractor is required to ensure that any changes to these quantities are approved in writing by duly authorized representative of Employer on/before CD approval. The quantities as stated in the BOQ (or as amended in writing by Owner on/before CD approval) shall be the maximum quantity payable for each item and no increase beyond that quantity shall be payable, except in case of major changes as defined in the 'major change' policy. In case of any major change in the scope of work the payment items and quantities related to such change shall need to similarly agreed upon within 60 days of the intimation of such change in the scope of work. All such major changes in the scope of work and related quantity changes should be agreed upon in writing. No amendments in BOQ items or quantities thereto will be entertained after execution on site (even if shop drawings are approved by Lodha Design team). Final payable quantity shall be the lower of the following:

    a. Actuals, subject to physical measurement
    b. Approved quantity at time of CD approval (if no such approval is taken or granted, tender quantity).

[Internal Circulation Only] If the CD quantities for the key items exceed the BOQ quantities in the originally awarded contract, approval for the same should be taken from Cost Mgmt by Design-MEP.

Annexure 1

[Internal Circulation Only]

S. No.	Construction Documents	Review & approval by
1	**Shop drawings**[+]	
1.1	Floor plans , schematics , Panel GA drgs.	Design –MEP
1.2	Equipment foundation details	CM –MEP
2	**Material submittals**[+]	
2.1	First fix materials (Conduits , Back Boxes , Sleeves, supports , Pipes& fittings , ducts & flanges)	CM MEP
2.2	Second fix materials	Design-MEP
2.3	Final fix materials	Design-MEP (shall obtain consent of Project Architect)
2.4	Equipments and Plants	Design-MEP

+ All material submittals and shop drawings where contractor is proposing alternative materials or design changes shall be reviewed by Design-MEP.