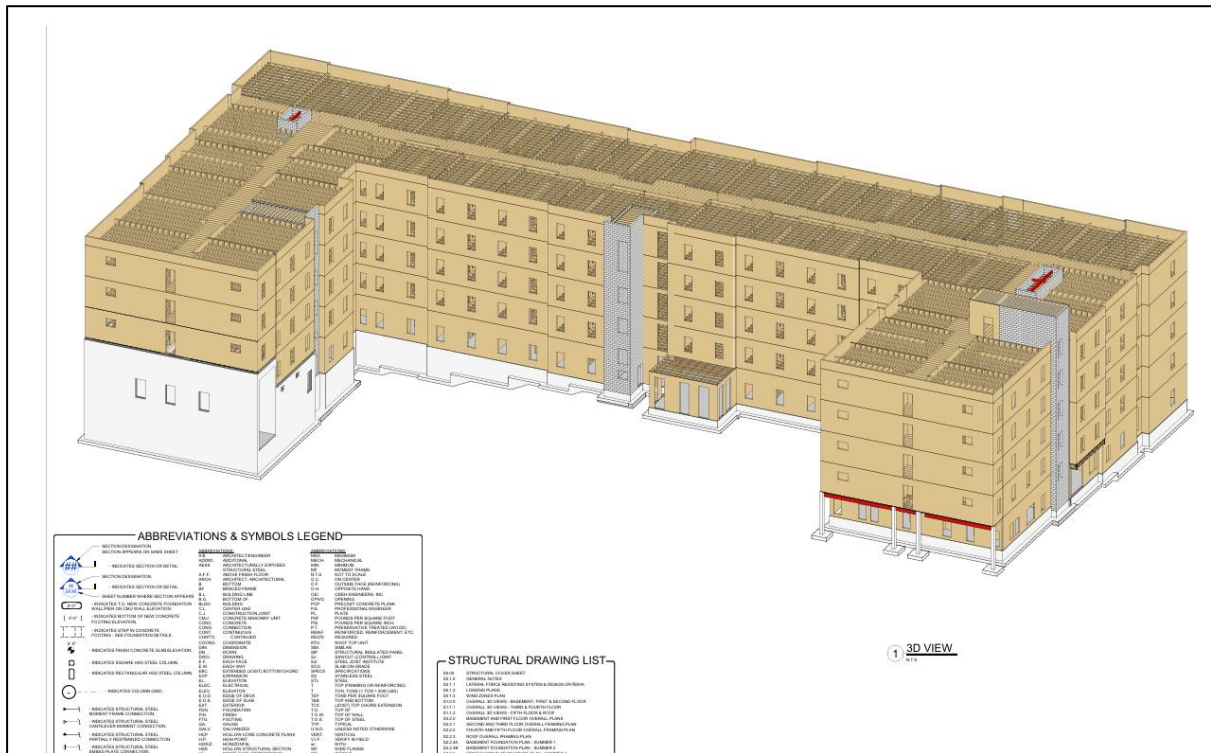


# Case Study- Estimation and Detailing

## A. Estimation for Crossroads Apartments

### 1. Review of the drawings provided and Setting the due date

- Evaluation of scope of work and to assess the availability of drawings  
For a complete estimation of a project, Structural, Civil, Electrical, Mechanical and Architectural drawings are required. To estimate the foundation rebar for Crossroads Apartments, structural drawings were provided by the client, a 3D view of the building is shown below from the same drawings.
- The estimate is to be submitted before the bid submission due date or as per the client. A week was given to complete the work but the team submitted the estimate in 5 days.
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### 2. Estimating the awarded scope in aSa or Excel

- As per the client requirement, estimate is either done in MS Excel or aSa software  
For this estimate there was no request for aSa, so it was completed in MS Excel.
- Cover Page Details
  - Job name
  - Job address
  - Drawings Issued Date
  - Assumption (If any missing reinforcement in drawings, the assumption made is listed here).
  - Inclusion (elements covered).
  - Exclusion (if any missing drawings sheets and elements scope off works).

B	C	D	E	F	G	H	I	J
<b>Rebar Estimation Cover Sheet</b>								
<b>CROSSROAD APARTMENTS</b>								
Estimation No : CBGS-027					Revision # : 00			
Bid Date: 8/25/2022					Bid Type : BASE BID			
<b>Architect:</b>		KITE Architects, Inc. One Central Street Providence, Rhode Island 02907						
<b>Structural:</b>		1223 MineralSpringAvenue North Providence,RI 02904						
<b>Drawing Issued Date:</b>		Str. Dwg. S0.00 to S7.0 Dated on 07/15/2022.						
<b>Addendum :</b>		-						
<b>Job Code:</b>								
CODE	ELEMENTS					WEIGHT IN LBS		
<b>BUILDING</b>								
103	ISOLATED FOOTING					1255.59		
104	CONTINUOUS FOOTING					27968.53		
105	MAT FOOTING					7123.51		
108	ELEVATOR PIT					4324.59		
109	CONCRETE PIER					415.64		
110	CONCRETE WALL					103034.22		
111	CONCRETE COLUMN					1231.25		
120	SLAB ON GRADE					29955.95		
150	SLAB ON DECK					1059.69		
190	CMU WALL					60482.48		
<b>TOTAL WEIGHT IN LBS</b>						<b>236851.43</b>		
<b>TOTAL WEIGHT IN TONS</b>						<b>118.43</b>		
<b>Assumptions :</b>		1.)We don't have reinforcement for mat footing (mark MFA) so we assumed #5 @12" Each at top & bottom per sheet S2.2.4A 2.)We don't have clear sump pit location so we assumed location.						
<b>Inclusion :</b>		<b>Building :</b> Isolated Footing, Continuous Footing, Mat Footing, Elevator Pit, Concrete Wall, Concrete Column, Slab On Grade, Slab On Deck & Masonry Wall						
<b>Exclusion:</b>		1.)All other pre-cast structures & weldable bars. 2.)Missing Drawing: Civil,Electrical,Mechnical,Architectural. 3.)As Per Section 5/S6.0 Continuous Rod - Tie Down (No Clear Location).						
<b>Notes :</b>		1.) All Bars Shall Conforms to ASTM A615 Grade 60 U.N.O. 2.) Buidling Lap Splice We Followed As Class B Lap 3.) Masonry Wall Lap Splice We Followed As 48 Bar Dia.						

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