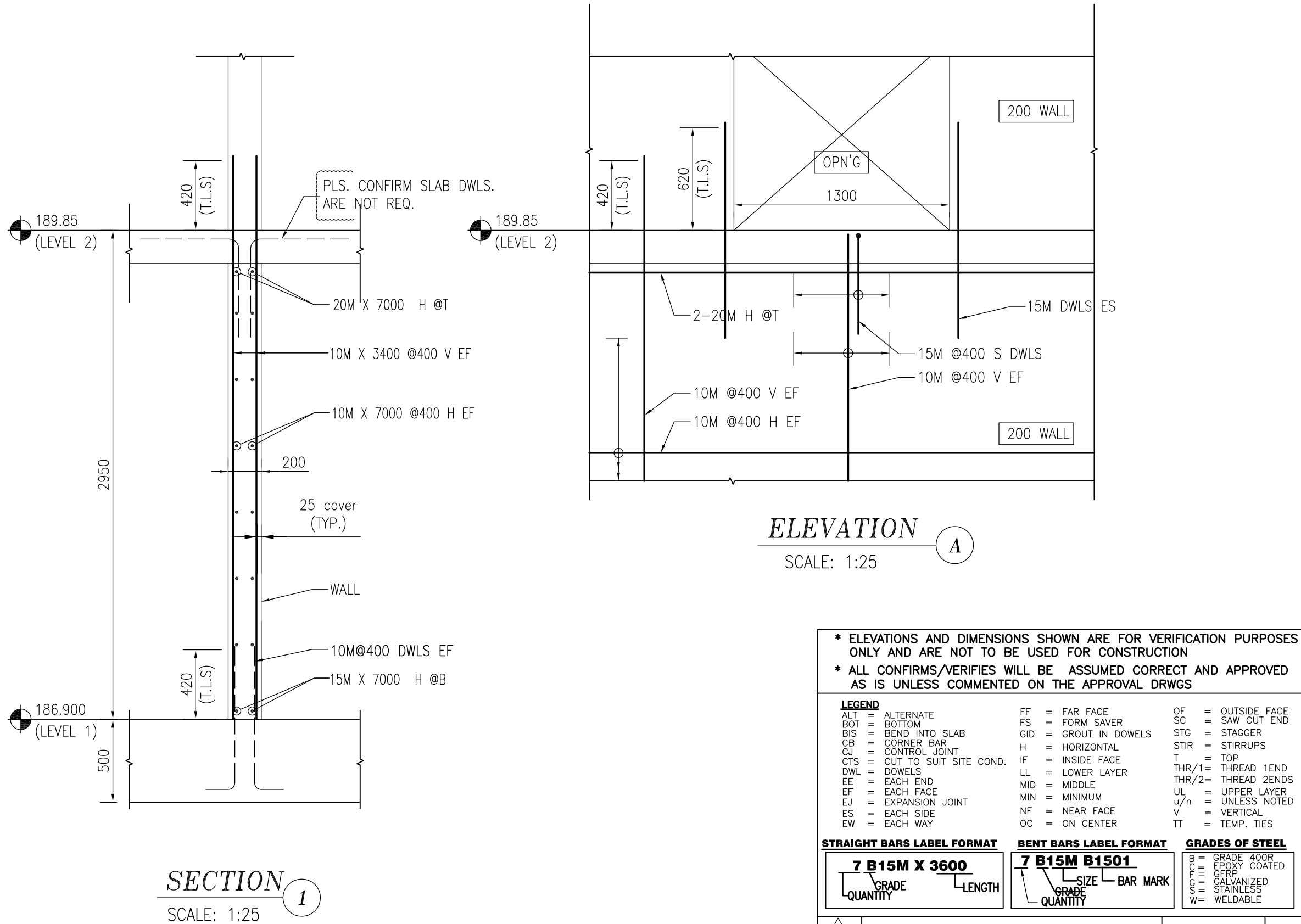
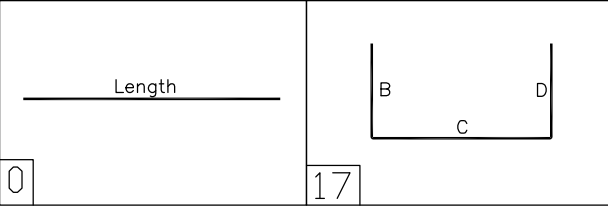


Release Code: R7-0 SW L1-L2 P#1					BENDING DETAILS.												
Bar Mark	Qty	Size	Total length	Type	'a'	'b'	'c'	'd'	'e'	'f'	'g'	'h'	'j'	'k'	'l'	'm'	
	248	10M	3400			3400											
	72	10M	7000				7000										
	12	20M	7000			7000											
	4	20M	3140				3140										
	12	10M	3140			3140											
	98	10M	2920				2920										
	12	15M	1900				1900										
	12	15M	7000				7000										
	4	20M	2220					2220									
	12	10M	2220				2220										
1004	96	10M	1030	17		450		130		450							
1517	16	15M	1430	17		650		130		650							
2020	16	20M	860	17		850		160		850							
1516	33	15M	1200	17		600		600									

DRAWING REVIEW			
This review of this drawing does not in any way relieve the contractor of responsibility for its accuracy or for compliance with the contract documents.			
	No comment	✓	See comment
	Amend & Resubmit		Rejected See Remarks
Submission No. _____			
Project No. _____		19066	
By _____		AF	
Date _____		28 May 2021	
JABLONSKY, AST AND PARTNERS Consulting Engineers 3 Concorde Gate, North York, ON M3C 4H5			



ELEVATIONS AND DIMENSIONS SHOWN ARE FOR VERIFICATION PURPOSES ONLY AND ARE NOT TO BE USED FOR CONSTRUCTION

- ALL CONFORMS/VERIFIES WILL BE ASSUMED CORRECT AND APPROVED AS LONG AS FULLY COMMENTED ON THE APPROVAL FORMS

LEGEND

ALT = ALTERNATE	FT = FEET	GT = OUTSIDE FACE
B = BEND	FS = FURF SAEVER	HC = SAW CUT END
BK = BEND INTO FLAMB	GD = GROUND IN DOWELS	ST = STAGER
BT = BOTTNER	GR = GROUND	TH = THROAT
CC = CONTROL JOINT	IG = INSIDE FACE	T = TOP
CD = CONTROL JOINT	LL = LOWER LAYER	THR/2 = THROAT 1/2 NO
DWL = DOWELS	M = MIDDLE	THR/2 = THROAT 1/2 NO
ED = EACH FACE	MM = MINIMUM	UL = UPPER LAYER
EJ = EACH FACE JOINT	NP = NEAR FACE	V = VERTICAL
ES = EACH SIDE	OC = ON CENTER	W/T = WELD TIES
ET = EACH TIE		

STRAIGHT BARS LABEL FORMAT

7 15M X 3600

GRADE QUANTITY

LENGTH

BENT BARS LABEL FORMAT

7 15M B1501

GRADE QUANTITY


SIZE BAR MARK

GRADES OF STEEL

B = BEND
C = CONTROL JOINT
D = DOWELS
E = EACH FACE
F = FURF SAEVER
G = GROUND
H = HOLE
I = INSIDE FACE
J = JOINT
K = KNOT
L = LOWER LAYER
M = MIDDLE
N = NEAR FACE
O = ON CENTER
P = PERMANENT
Q = QUANTITY
R = RADIUS
S = SAW CUT END
T = TOP
U = UPPER LAYER
V = VERTICAL
W = WELDABLE
X = EXTENSION
Y = YIELD
Z = ZINC COATED

△				
△				
△				
△				
△				
0	FOR APPROVAL		MAY/19/21	JJ
ISSUE	REMARKS		DATE	BY


MANSTEEL



REBAR

MANSTEEL REBAR

105 Industrial Road, Richmond Hill,
Ontario L4C 2Y4 Canada
Phone: 905-737-0797
Fax: 905-737-0704
Email: info@mansteelrebar.com

PROJECT		FORESTSIDE TOWNHOUSES -BRAMPTON, ON	
PART OF STRUCTURE			
SHEAR WALLS L1-L2 P#1			
CUSTOMER :		Project no. 2177	
ROYAL PINE HOMES		SCALE AS SHOWN	
		DRAWING No.	
DESIGNED BY: JU	BAR LIST No.	R7.0	
CHECKED BY:			
			

NOTES

- 1, ALL STEEL TO BE GRADE 400W
2, STRENGTH OF CONCRETE
35MPa - SLAB
35MPa - INTERIOR COLUMNS & WALLS

3, CONCRETE COVER WALLS

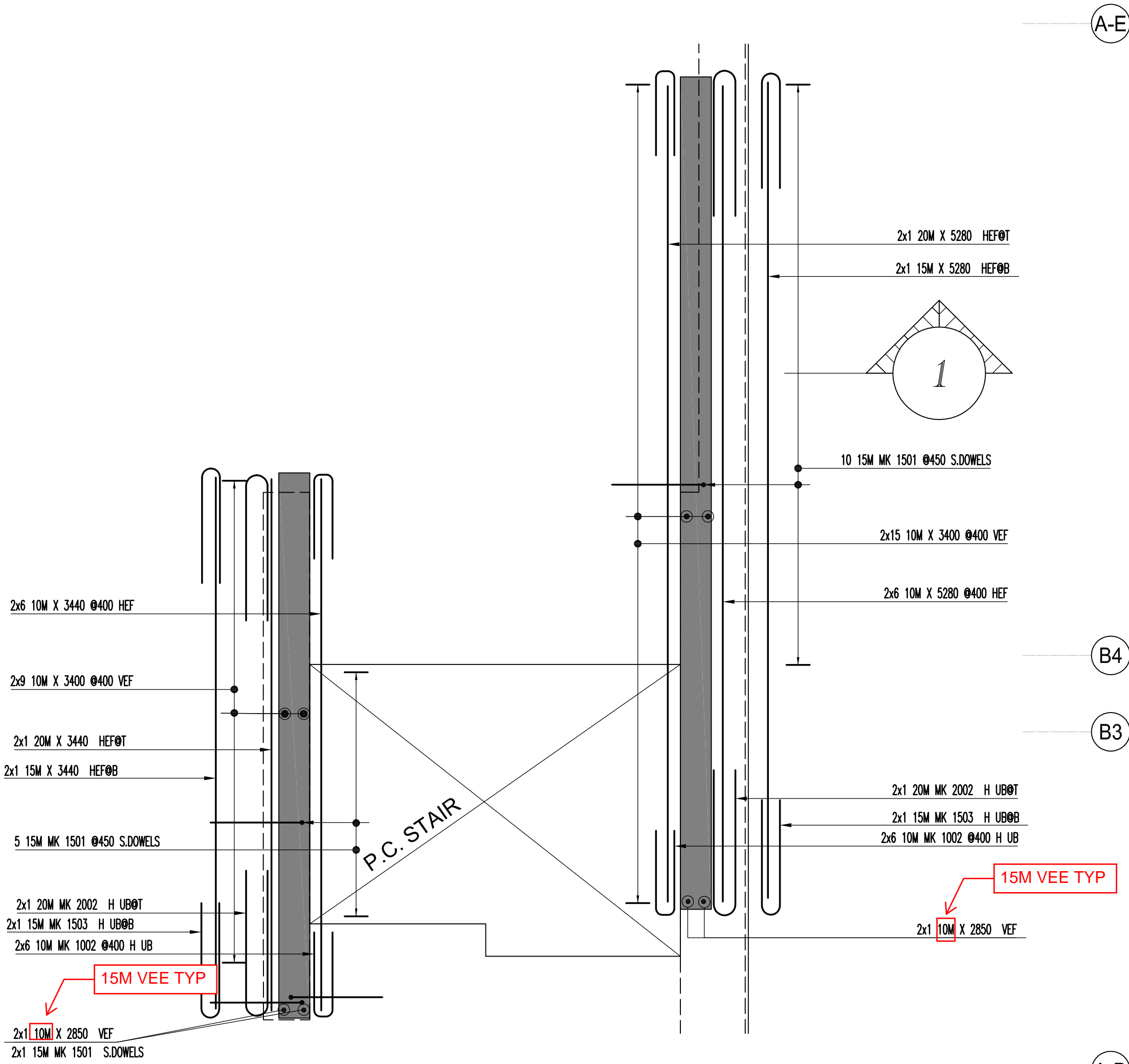
-- 25mm

BAR SIZE	STANDARD LAP (mm)
10M	300
15M	440
20M	590
25M	730
30M	880
35M	1030

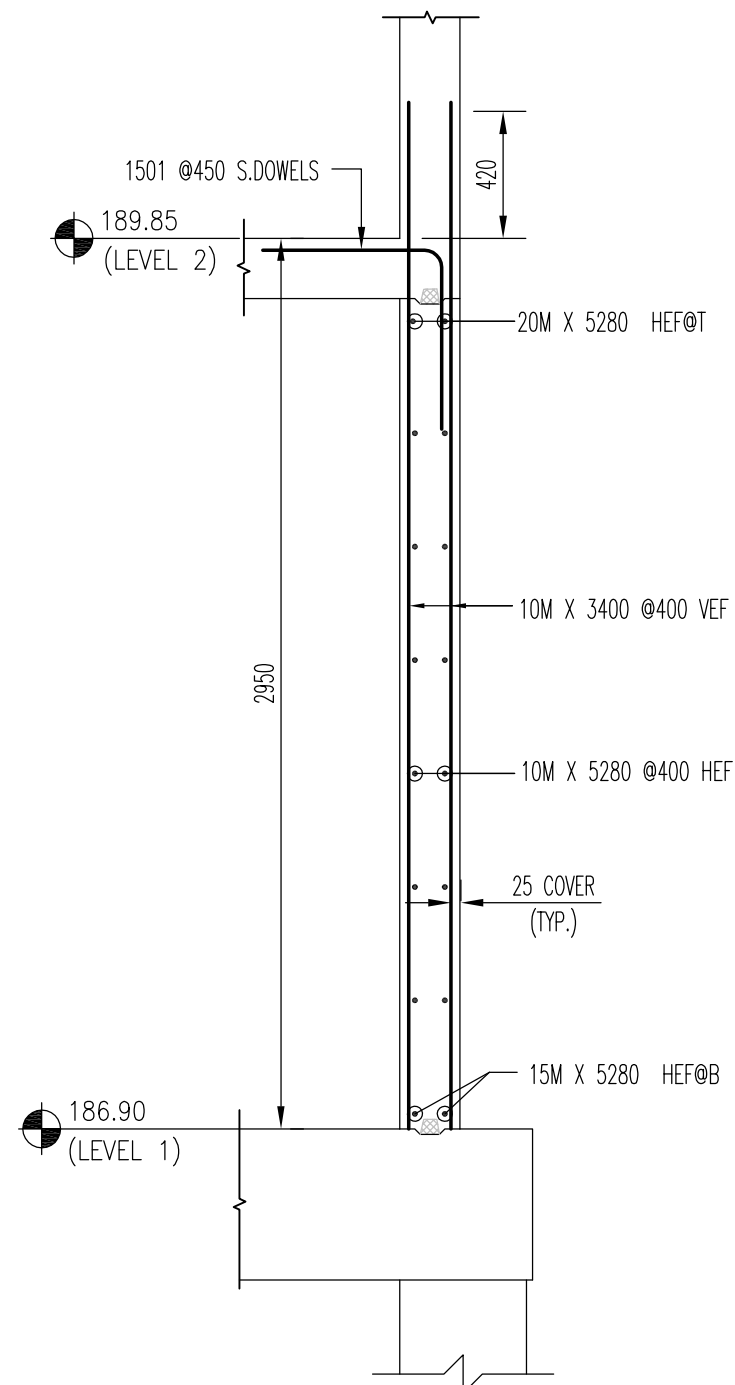
4. COMPRESSION LAP SPLICE

BAR SIZE	fc=25		fc=30		fc=35	
	L.S	L.d	L.S	L.d	L.S	L.d
10M	490	380	450	350	420	320
15M	740	570	670	520	620	480
20M	980	750	890	690	830	640
25M	1530	1170	1390	1070	1290	990
30M	1830	1410	1670	1290	1550	1190
35M	2130	1640	1950	1500	1800	1390

5. TENSION LAP SPLICE (L.S) & DEVELOPMENT LENGTH (L_d)



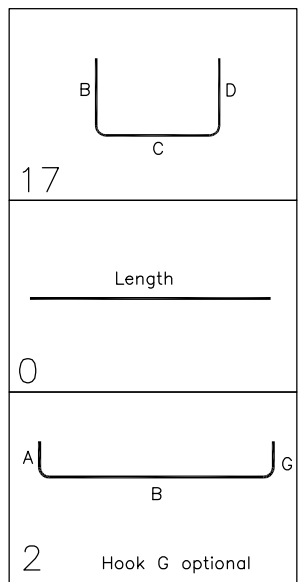
BUILDING-A
STAIR WALL PLAN L1-L2
SCALE: 1:25 (POUR-1; POUR#4 SIM.)
(2 NOS REQUIRED)



SECTION 1
SCALE: 1:25

Release Code: R7.1 STAIR SW L1-L2 P# BENDING DETAILS.														
Bar Mark	Qty	Size	Total length	Type	A'	B'	C'	D'	E'	F'	G'	H'	I'	J'
1002	24	10M	1230	17			550	130	550					
2002	4	20M	2060	17			950	160	950					
1503	4	15M	1630	17			750	130	750					
1501	17	15M	1200	17			600	600						

Release Code: R7.1 STAIR SW L1-L2 P# BENDING DETAILS.														
Bar Mark	Qty	Size	Total length	Type	A'	B'	C'	D'	E'	F'	G'	H'	I'	J'
1002	24	10M	1230	17			550	130	550					
2002	4	20M	2060	17			950	160	950					
1503	4	15M	1630	17			750	130	750					
1501	17	15M	1200	17			600	600						



DRAWING REVIEW

This review of this drawing does not in any way relieve the contractor of responsibility for its accuracy or for compliance with the contract documents.

No comment	See comment
Amend & Resubmit	Rejected See Remarks

Submission No. 19066

Project No. 19066

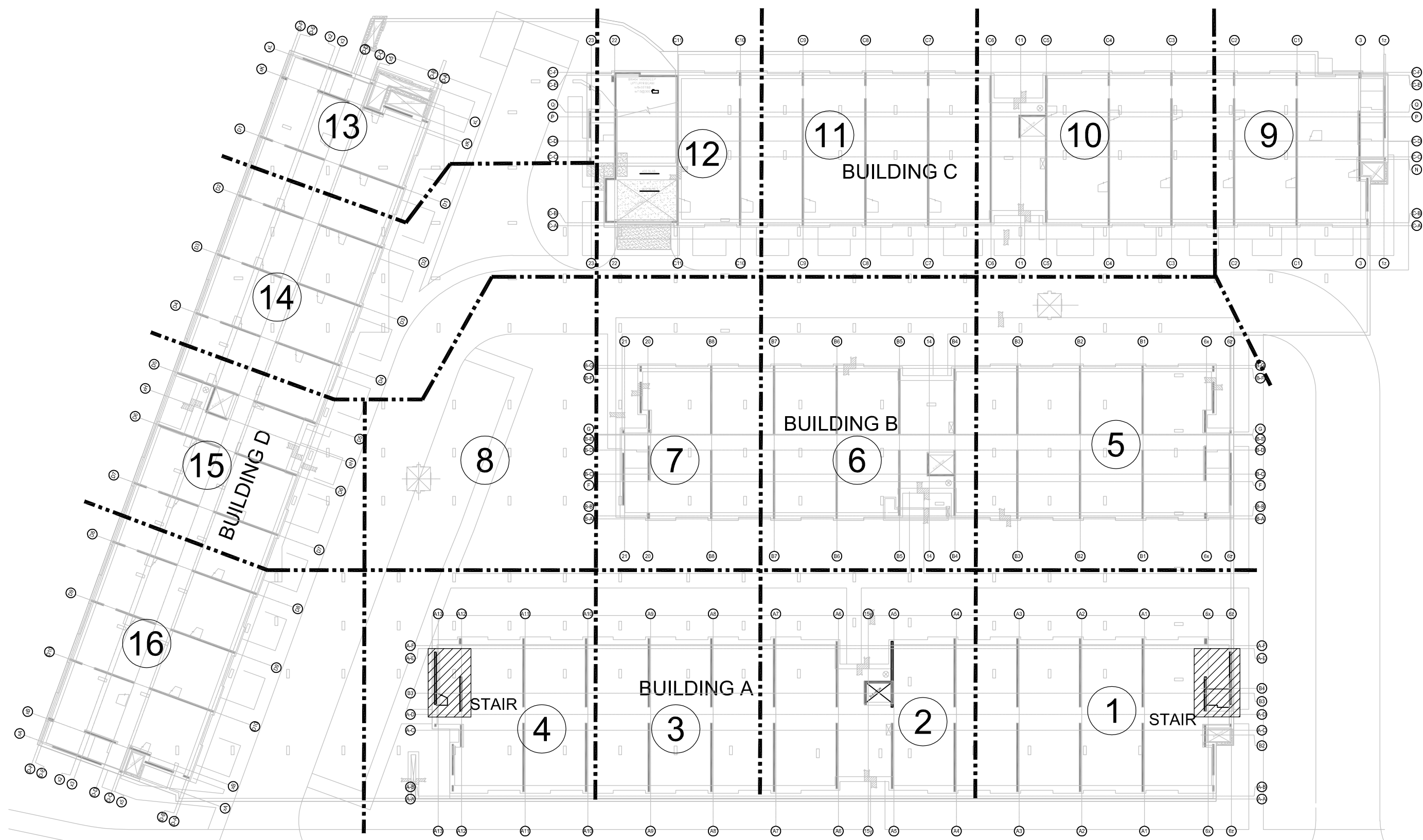
By: A.P.

Date: 28 May 2021

JABLONSKY, AST AND PARTNERS

Consulting Engineers

3 Concorde Gate, North York, ON M3C 4H8



KEY PLAN

SCALE: NTS

NOTES

1. ALL STEEL TO BE GRADE 400W
2. STRENGTH OF CONCRETE 35MPa - INTERIOR COLUMNS & WALLS

3. CONCRETE COVER: VERTICALS

--- 25mm

4. COMPRESSION LAP SPICE

BAR SIZE	STANDARD LAP (mm)
10M	300
15M	440
20M	590
25M	730
30M	880
35M	1030

5. TENSION LAP SPICE (L.S.) & DEVELOPMENT LENGTH (Ld) (FOR WALL OR COL & Ld IN CAP OR FTG.)

BAR SIZE	fc=25		fc=30		fc=35	
	L.S	L.d	L.S	L.d	L.S	L.d
10M	490	380	450	350	420	320
15M	740	570	670	520	620	480
20M	980	750	890	690	830	640
25M	1530	1170	1390	1070	1290	990
30M	1830	1410	1670	1290	1550	1190
35M	2130	1640	1950	1500	1800	1390

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- * ALL CONFIRMS/VERIFIES WILL BE ASSUMED CORRECT AND APPROVED AS IS UNLESS COMMENTED ON THE APPROVAL DRWGS

LEGEND		
ALT = ALTERNATE	FF = FAR FACE	OF = OUTSIDE FACE
BOT = BOTTOM	FS = FORM SAYER	SC = SAW CUT END
BIS = BEND INTO SLAB	GID = GROUT IN DOWELS	STG = STAGGER
CB = CORNER BAR	H = HORIZONTAL	STR = STRIPS
CJ = CONTROL JOINT	IF = INSIDE FACE	T = TOP
CJS = CUT TO SUIT SITE COND.	LL = LOWER LAYER	THR/1 = THREAD LENG
DWL = DOWELS	MD = MIDDLE	THR/2 = THREAD ZENDS
EE = EACH END	MIN = MINIMUM	UL = UPPER LAYER
EF = EACH FACE	NF = NEAR FACE	V = VERTICAL
EJ = EXPANSION JOINT	OC = ON CENTER	TT = TYP. TIES
ES = EACH SIDE		
EW = EACH WAY		

STRAIGHT BARS LABEL FORMAT		BENT BARS LABEL FORMAT		GRADES OF STEEL	
7 B15M X 3600	QUANTITY	7 B15M B1501	QUANTITY	B = GRADE 400W	COATED
				C = CP60	
				S = GALVANIZED	
				W = WELDABLE	

0	FOR APPROVAL	MAY/19/21	JJ
ISSUE	REMARKS	DATE	BY

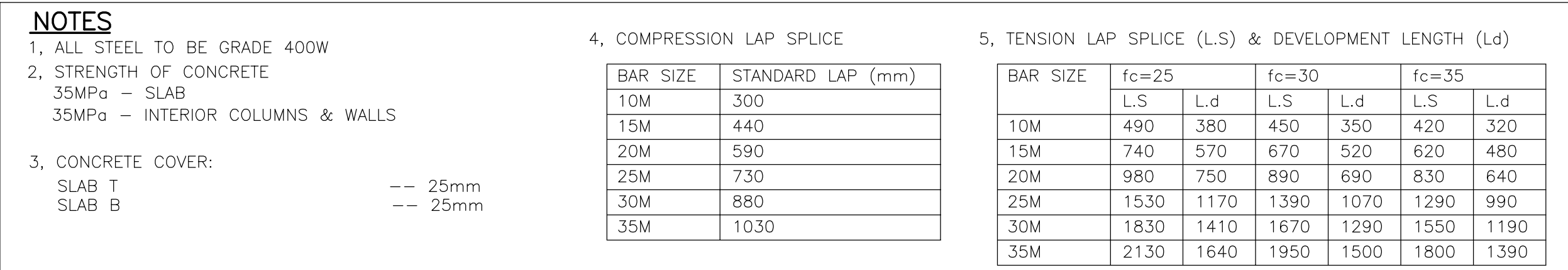
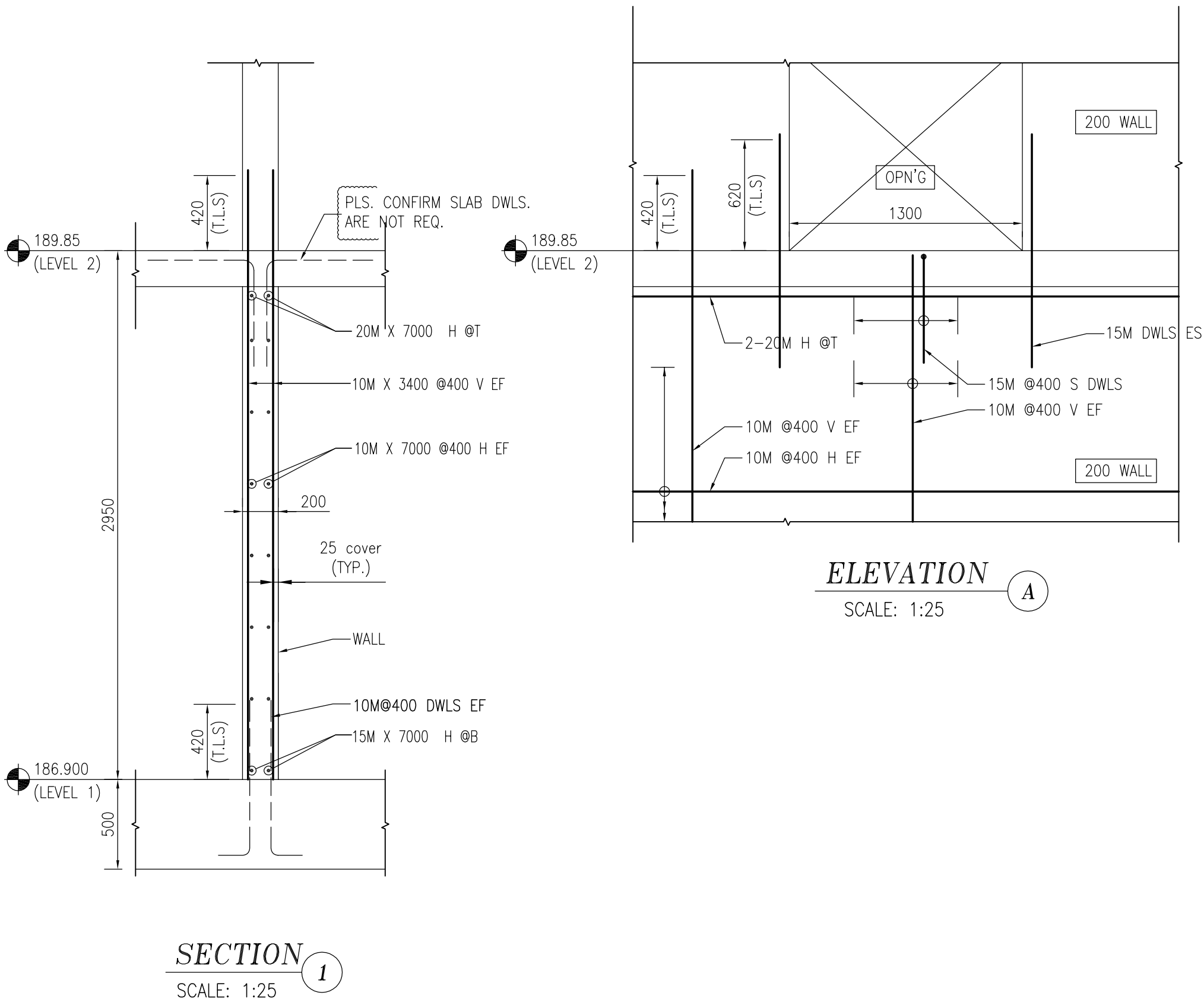
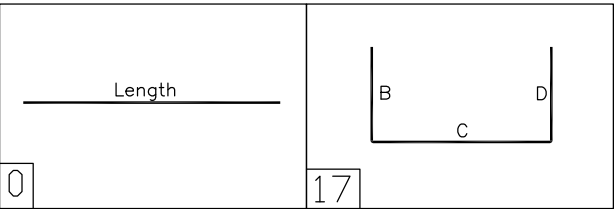
MANSTEEL REBAR	MANSTEEL REBAR 105 Industrial Road, Richmond Hill, Ontario L4C 2Y4 Canada Phone: 905-737-9797 Fax: 905-737-9704 Email: info@mansteelrebar.com
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PROJECT FORESTSIDE TOWNHOUSES -BRAMPTON, ON	
PART OF STRUCTURE STAIR SHEAR WALLS L1-L2 P#1&4	

CUSTOMER : ROYAL PINE HOMES	Project no. 2177
DETAILED BY: JJ	SCALE: AS SHOWN

CHECKED BY:	BAR LIST No.	DRAWING No. R7.1
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0

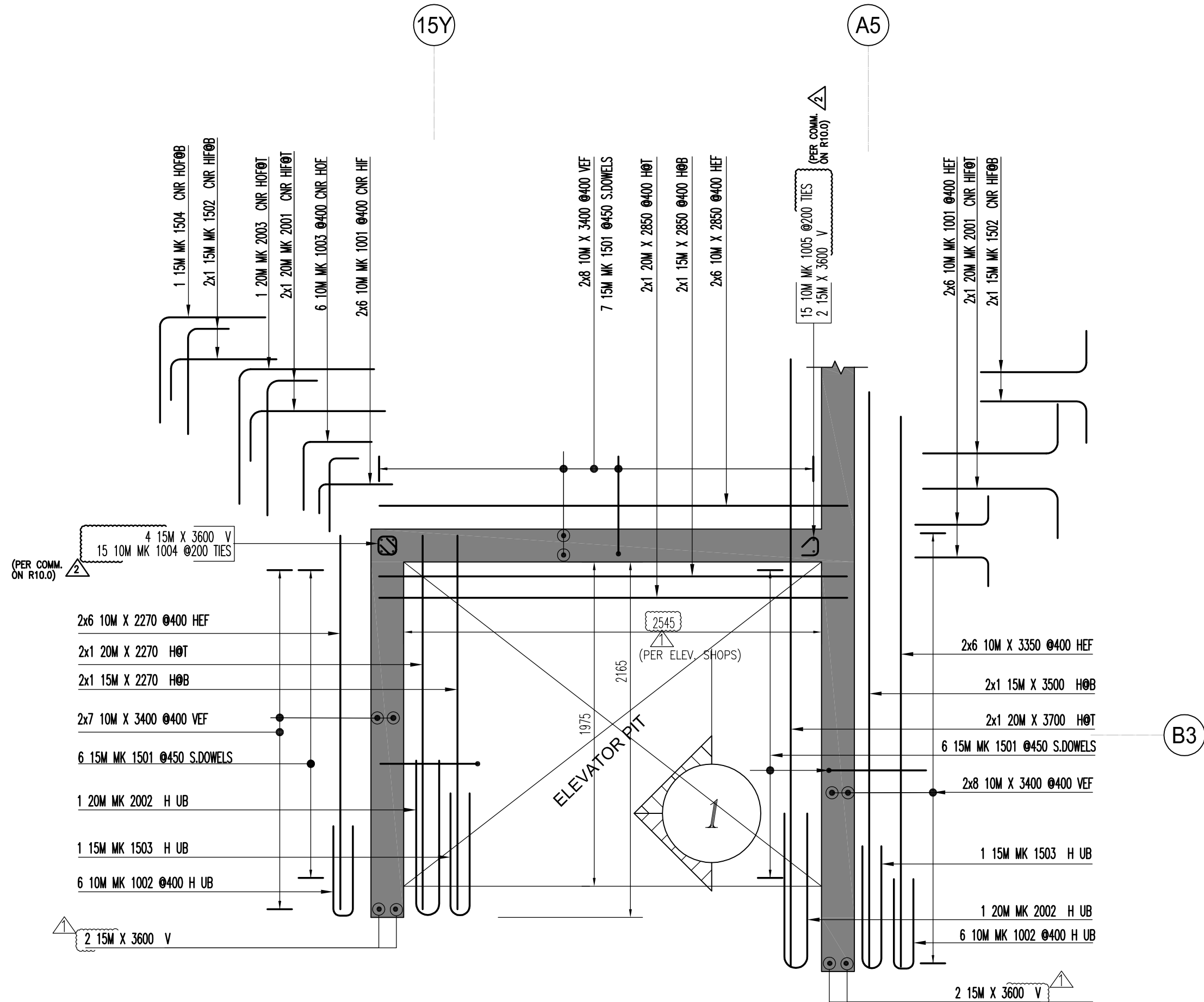
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DRAWING REVIEW			
This review of this drawing does not in any way relieve the contractor of responsibility for its accuracy or for compliance with the contract documents.			
	No comment	✓	See comment
	Amend & Resubmit		Rejected See Remarks

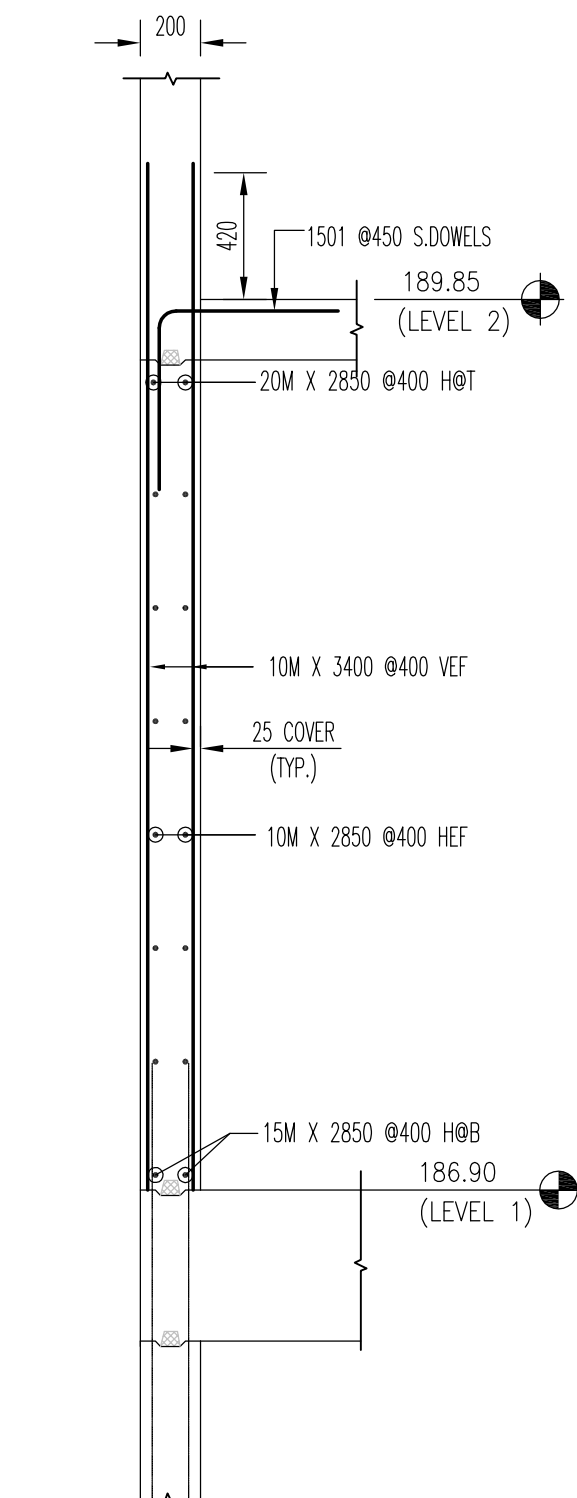
Submission No. _____
 Project No. 19066
 By AF
 Date 28 May 2021

JABLONSKY, AST AND PARTNERS
 Consulting Engineers
 3 Concorde Gate, North York, ON M3C 4H9

ELEVATIONS AND DIMENSIONS SHOWN ARE FOR VERIFICATION PURPOSES ONLY AND ARE NOT TO BE USED FOR CONSTRUCTION			
* ALL CONFIRMS/VERIFIES MUST BE ASSUMED CORRECT AND APPROVED AS IS UNLESS COMMENTED ON THE APPROVAL DRWS			
LEGEND ALT = ALTERNATE BOT = BOTTOM BS = BEND INTO SLAB C = CORNER BAR CT = CONTROL JOINT CS = CUT TO SHIRT SIDE COND. DSW = DOWELS ES = EACH END ET = EACH FACE EJ = EXPANSION JOINT ES = EACH SIDE EW = EACH WAY		FF = FAR FACE FS = FORM SAWER GD = GROUT IN DOWELS H = HORIZONTAL IF = INSIDE FACE L = LOWER LAYER MD = MIDDLE MN = MINIMUM NF = NEAR FACE OC = ON CENTER	
OF = OUTSIDE FACE SC = SAW CUT END STG = STAGGER STR = STRIPUPS T = TOP THR/1 = THREAD 1 END THR/2 = THREAD 2 ENDS UL = UPPER LAYER UN = UNLESS NOTED V = VERTICAL TT = TOP TO TEST		W = WELDABLE	
STRAIGHT BARS LABEL FORMAT		BENT BARS LABEL FORMAT	
FOR APPROVAL		MAY/19/21	
ISSUE	REMARKS	DATE	BY
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: left;"> REBAR </div> <div style="text-align: right;"> MANSTEEL REBAR 101 Industrial Road, Richmond Hill, Ontario L4C 2Y4 Canada Phone: 905-737-9797 Fax: 905-737-9704 Email: info@mansteelrebar.com </div> </div>			
PROJECT FORESTSIDE TOWNHOUSES -BRAMPTON, ON			
PART OF STRUCTURE SHOWER WALLS L1-L2 P#2			
CUSTOMER :		Project no. 2177	
ROYAL PINE HOMES		SCALE: AS SHOWN	
DRAWING No.		R7.2	
CREATED BY: JU		BAR LIST No.	
DRAWN BY:		0	



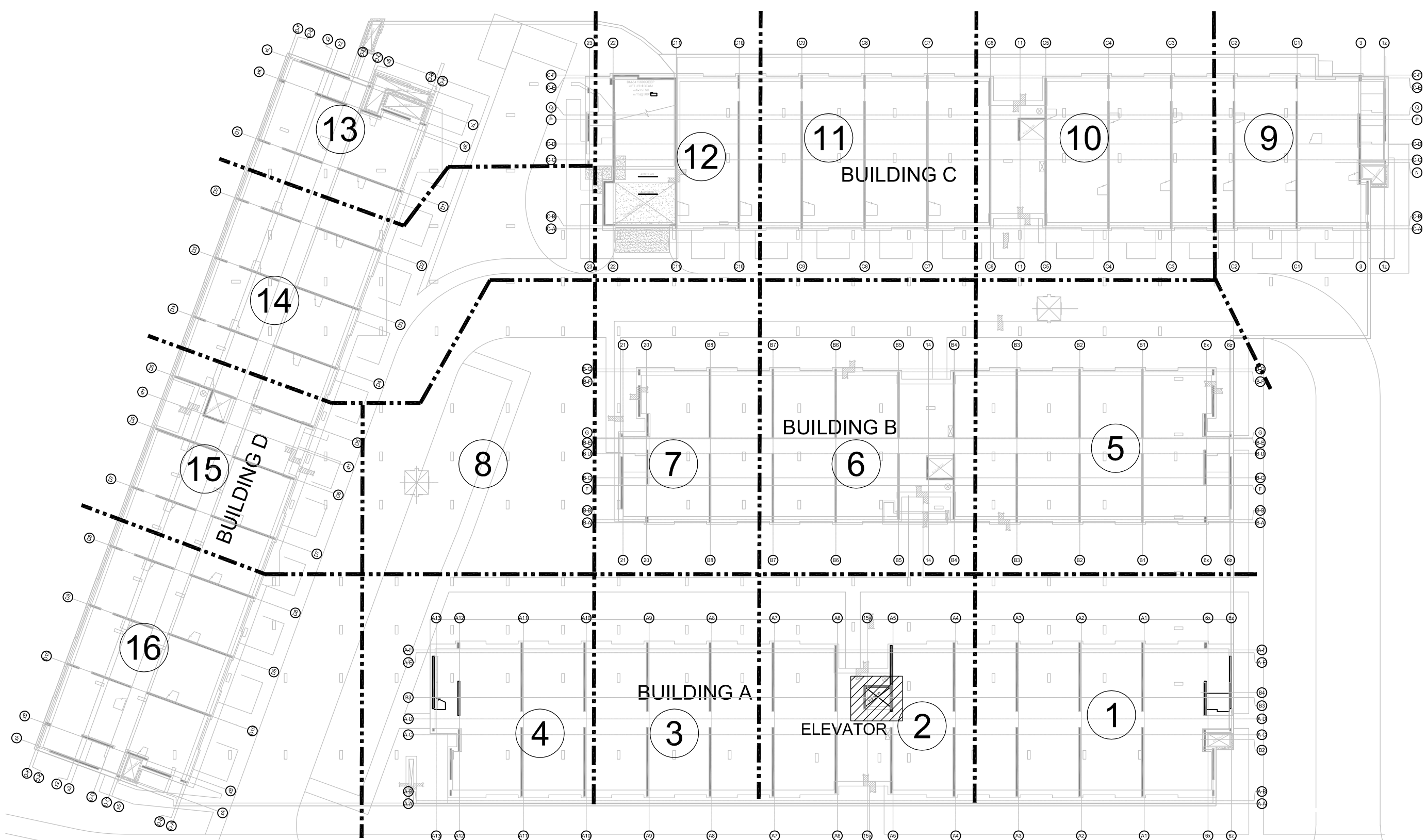
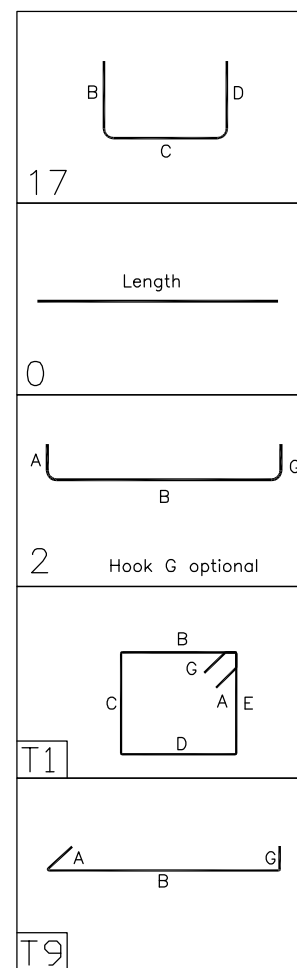
BUILDING-A
ELEVATOR WALL PLAN L1-L2
SCALE: 1:25
(POUR-2)



SECTION 1
SCALE: 1:25

Release Code: R7.3 ELEV SW L1-L2 P#2 BENDING DETAILS.													
Bar Mark	Qty	Size	Total length	Type	'A'	'b'	'c'	'D'	'E'	'F'	'G'	'H'	'J'
12 10M	2270					2270							
4 6 10M	3400					3400							
12 10M	2850					2850							
2 20M	2850					2850							
2 15M	2850					2850							
2 15M	2270					2270							
2 20M	2270					2270							
2 15M	3500					3500							
2 20M	3700					3700							
12 10M	3350					3350							
4 15M	3600					3600							
1003	6 10M	840	17			420							
1001	24 10M	630	17		180	450							
1002	12 10M	1230	17			550	130	550					
2003	1 20M	1660	17			830	830						
1501	19 15M	1200	17			600	600						
1503	2 15M	1630	17			750	130	750					
2002	2 20M	2060	17			950	160	950					
1504	1 15M	1300	17			650	650						
2001	4 20M	1140	2			310	830						
1502	4 15M	910	2			260	650						

Release Code: R7.3 ELEV L1-L2 P#2 PABENDING DETAILS.													
Bar Mark	Qty	Size	Total length	Type	'A'	'b'	'c'	'D'	'E'	'F'	'G'	'H'	'J'
1005	15 10M	320	19		100	120					100		
1004	15 10M	680	11		100	120	120	120	120		100	70	



KEY PLAN
SCALE: NTS

- NOTES
1. ALL STEEL TO BE GRADE 400W
 2. STRENGTH OF CONCRETE
35MPa - INTERIOR COLUMNS & WALLS
 3. CONCRETE COVER:
VERTICALS

-- 25mm

4. COMPRESSION LAP SPICE	
BAR SIZE	STANDARD LAP (mm)
10M	300
15M	440
20M	590
25M	730
30M	880
35M	1030

5. TENSION LAP SPICE (L.S.) & DEVELOPMENT LENGTH (Ld) (FOR WALL OR COL & Ld IN CAP OR FTG.)						
BAR SIZE	fc=25		fc=30		fc=35	
	L.S	L.d	L.S	L.d	L.S	L.d
10M	490	380	450	350	420	320
15M	740	570	670	520	620	480
20M	980	750	890	690	830	640
25M	1530	1170	1390	1070	1290	990
30M	1830	1410	1670	1290	1550	1190
35M	2130	1640	1950	1500	1800	1390

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- * ALL CONFIRMS/VERIFIES WILL BE ASSUMED CORRECT AND APPROVED AS IS UNLESS COMMENTED ON THE APPROVAL DRWS

LEGEND		
ALT = ALTERNATE	FF = FAR FACE	OF = OUTSIDE FACE
BOT = BOTTOM	FS = FORM SAVER	SC = SAW CUT END
BIS = BEND INTO SLAB	GID = GROUT IN DOWELS	STG = STAGGER
CB = CORNER BAR	H = HORIZONTAL	STR = STRIPS
CS = CONTROL JOINT	IF = INSIDE FACE	T = TOP
CUT TO CUT SITE COND.	LL = LOWER LAYER	THR/1 = THREAD LEND
DWL = DOWELS	LL = LOWER LAYER	THR/2 = THREAD ZENDS
EE = EACH END	MID = MIDDLE	UL = UPPER LAYER
EF = EACH FACE	MIN = MINIMUM	U/N = UNLESS NOTED
EJ = EXPANSION JOINT	NF = NEAR FACE	V = VERTICAL
ES = EACH SIDE	OC = ON CENTER	TT = TYP. TIES
EW = EACH WAY		

STRAIGHT BARS LABEL FORMAT		
7 B15M X 3600	QUANTITY	LENGTH

BENT BARS LABEL FORMAT		
7 B15M B1501	QUANTITY	LENGTH

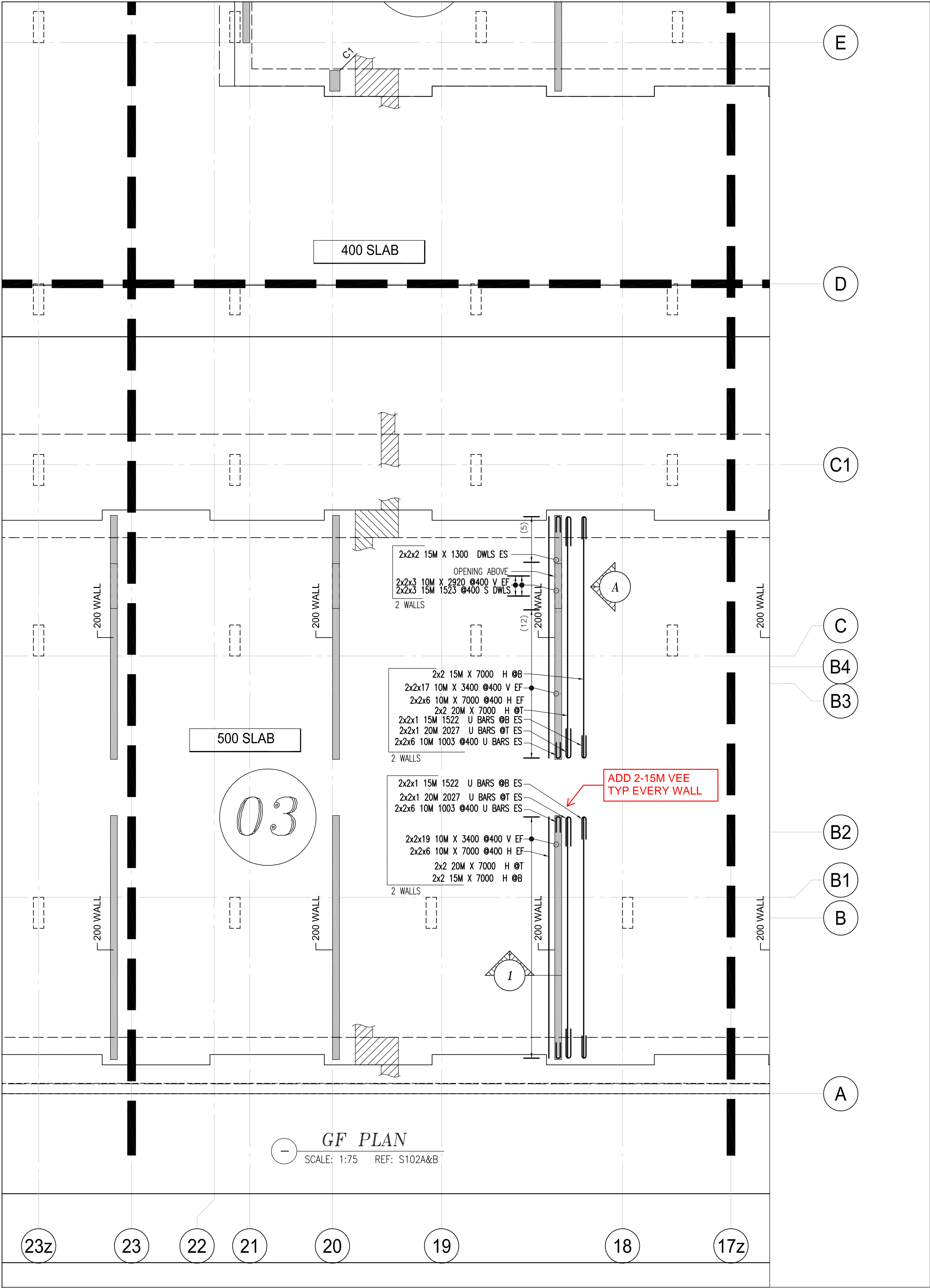
GRADES OF STEEL		
B = GRADE 400W	C = COATED	
F = FR60	G = GALVANIZED	
S = STAINLESS	W = WELDABLE	

ISSUE	REMARKS	DATE	BY
2	REV PER COMM. ON R10.0 (ADDED ZONE BARS)	JUN/09/21	JU
1	REV. PER COMM. & FINAL ELEV. SHOPS - FOR FAB.	MAY/31/21	JU
0	FOR APPROVAL	MAY/19/21	JU

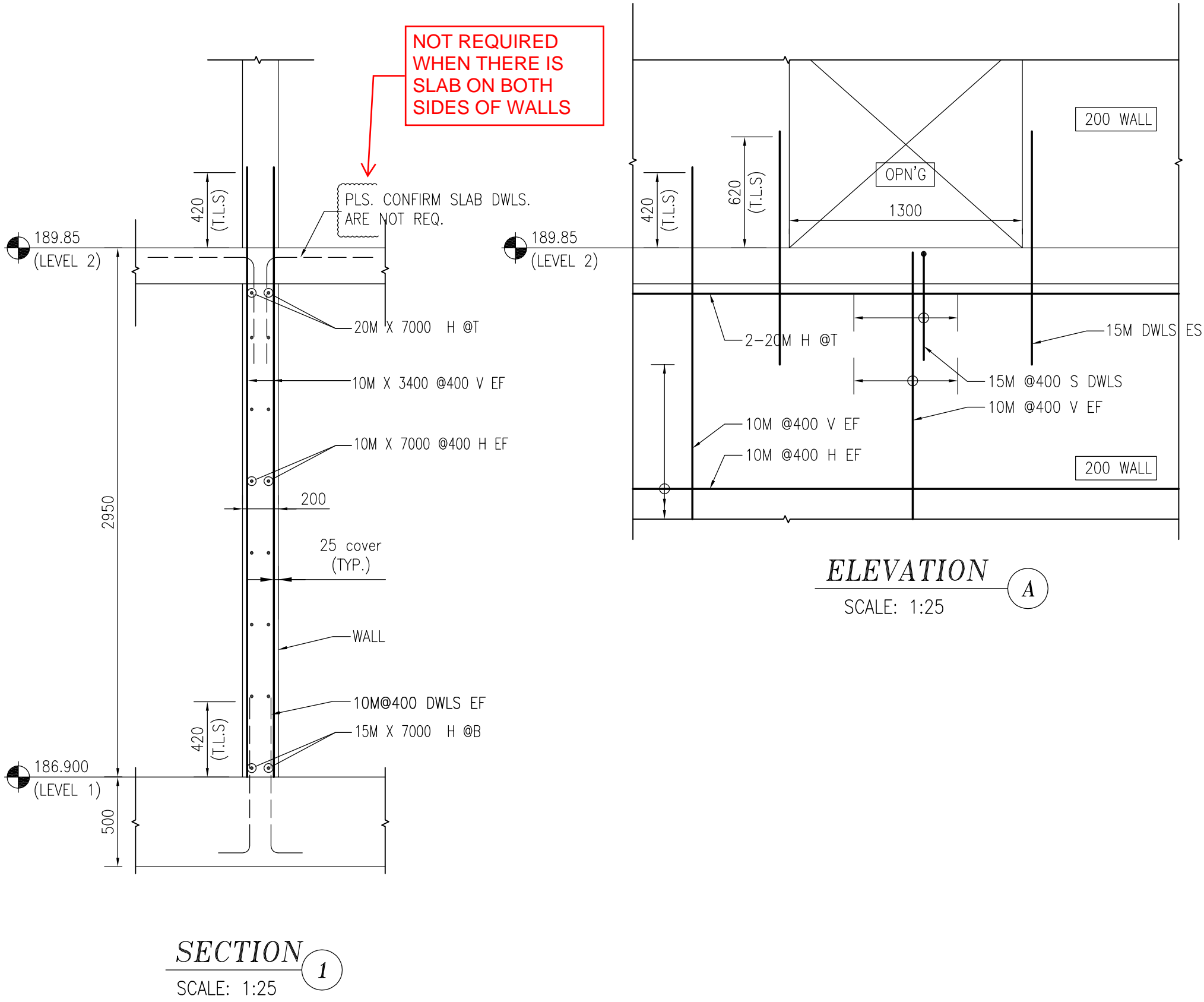
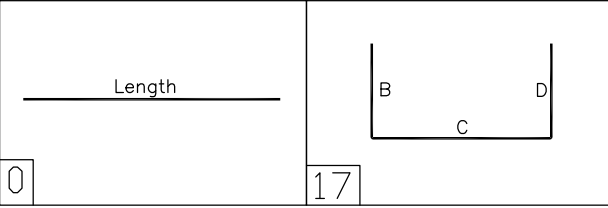
MANSTEEL REBAR	
105 Industrial Road, Richmond Hill, Ontario L4C 2Y4 Canada Phone: 905-737-9797 Fax: 905-737-9704 Email: info@mansteelrebar.com	

FORESTSIDE TOWNHOUSES - BRAMPTON, ON	
PART OF STRUCTURE	

CUSTOMER :		Project no.	2177
ROYAL PINE HOMES		SCALE	AS SHOWN
DETAILED BY: JU		DRAWING No.	R7.3
CHECKED BY:		BAR LIST No.	



Release Code: R7.4 SW L1-L2 P#3										BENDING DETAILS.									
Bar Mark	Qty	Size	Total length	Type	'A'	'B'	'C'	'D'	'E'	'F'	'G'	'H'	'J'	'K'	'O'	'P'			
14.4	10M	3400			3400														
12	10M	2920			2920														
8	15M	7000			7000														
4.8	10M	7000			7000														
8	20M	7000			7000														
8	15M	1300			1300														
1003	4.8	10M	1030	17		450	130	450											
2027	8	20M	1860	17		850	160	850											
1522	8	15M	1430	17		650	130	650											
1523	12	15M	1200	17		600	600												



DRAWING REVIEW	
This review of this drawing does not in any way relieve the contractor of responsibility for its accuracy or for compliance with the contract documents.	
No comment	See comment
Amend & Resubmit	Rejected See Remarks
Submission No. Project No. 19066	
By: JAT	
Date: 28 May 2021	
JABLONSKY, AST AND PARTNERS Consulting Engineers 3 Concorde Gate, North York, ON M3C 4H8	

* ELEVATIONS AND DIMENSIONS SHOWN ARE FOR VERIFICATION PURPOSES ONLY AND ARE NOT TO BE USED FOR CONSTRUCTION		
* ALL CONFIRMS/VERIFIES WILL BE ASSUMED CORRECT AND APPROVED AS IS UNLESS COMMENTED ON THE APPROVAL DRWS		
LEGEND		
ALT = ALTERNATE	FF = FAR FACE	OF = OUTSIDE FACE
BOT = BOTTOM	FS = FORM SAVER	SC = SAW CUT END
BIS = BEND INTO SLAB	GID = GROUT 'N DOWELS	STG = STAGGER
CB = CORNER BAR	H = HORIZONTAL	STR = STRIPS
CJ = CONTROL JOINT	IF = INSIDE FACE	T = TOP
CUT = CUT TO SUIT SITE COND.	LL = LOWER LAYER	THR/1 = THREAD LENG
DWL = DOWELS	MD = MIDDLE	THR/2 = THREAD ZENUS
EE = EACH END	MIN = MINIMUM	UL = UPPER LAYER
EF = EACH FACE	NF = NEAR FACE	V = VERTICAL
EJ = EXPANSION JOINT	OC = ON CENTER	TT = TEMPL. TIES
ES = EACH SIDE		
EW = EACH WAY		
STRAIGHT BARS LABEL FORMAT		
7 B15M X 3600	7 B15M B1501	GRADES OF STEEL
GRADE	SIZE - BAR MARK	B = GRADE 400W
QUANTITY	LENGTH	C = CRACK COATED
		F = F660
		G = GALVANIZED
		S = STAINLESS
		W = WELDABLE

FOR APPROVAL	MAY/19/21	JU
ISSUE	REMARKS	DATE
DATE	BY	

MANSTEEL REBAR	MANSTEEL REBAR
105 Industrial Road, Richmond Hill, Ontario L4C 2Y4 Canada Phone: 905-737-9797 Fax: 905-737-9704 Email: info@mansteelrebar.com	

PROJECT	
FORESTSIDE TOWNHOUSES -BRAMPTON, ON	
PART OF STRUCTURE	
SHEAR WALLS L1-L2 P#3	
CUSTOMER :	
ROYAL PINE HOMES	
DETAILED BY: JU	
CHECKED BY:	
Project no. 2177	
SCALE: AS SHOWN	
DRAWING No.	
R7.4	

NOTES		4. COMPRESSION LAP SPLICE		5. TENSION LAP SPLICE (L.S.) & DEVELOPMENT LENGTH (Ld)	
1. ALL STEEL TO BE GRADE 400W		BAR SIZE		BAR SIZE	
2. STRENGTH OF CONCRETE		STANDARD LAP (mm)		f _c =25	
35MPa - SLAB		10M		L.S	
35MPa - INTERIOR COLUMNS & WALLS		15M		L.d	
3. CONCRETE COVER:		20M		f _c =30	
SLAB T		25M		L.S	
SLAB B		30M		L.d	
		35M		f _c =35	
				L.S	
				L.d	



Release Code: R7.5 SW L1-L2 P#4					BENDING DETAILS											
Bar Mark	Qty	Size	length	Type	'A'	'B'	'C'	'D'	'E'	'F'	'G'	'H'	'J'	'K'	'O'	'P'
	12	10M	2920			2920										
	8	15M	1300													
	176	10M	3400			3400										
	48	10M	7000			7000										
	8	20M	7000			7000										
	8	15M	7000			7000										
	4	20M	3140			3140										
	12	10M	3140			3140										
	4	20M	2220			2220										
	12	10M	2220			2220										
1001	72	10M	1030	17		450	130	450								
1501	26	15M	1200	17		600	600									
1502	12	15M	1430	17		650	130	650								
2001	12	20M	1860	17		850	160	850								

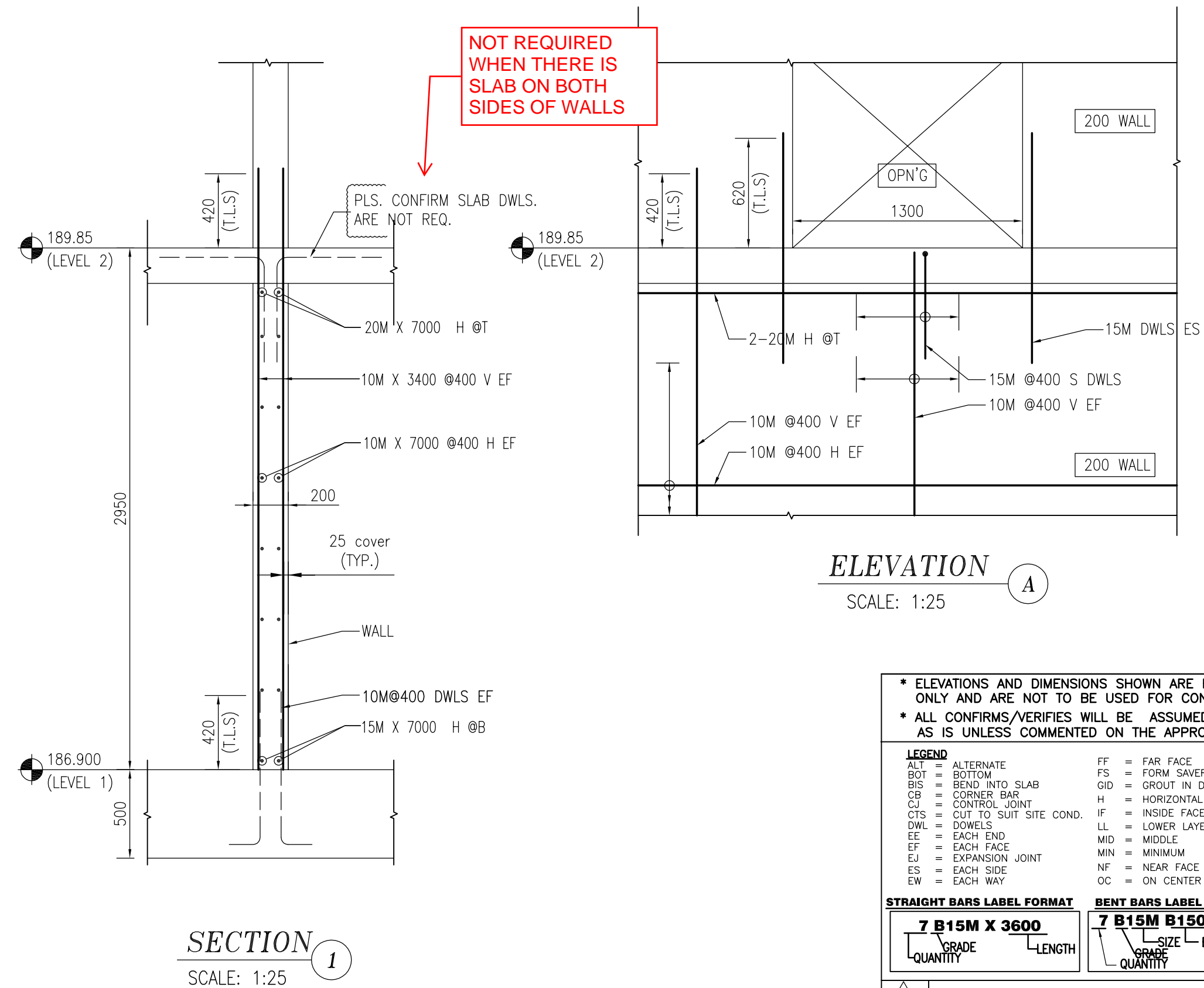
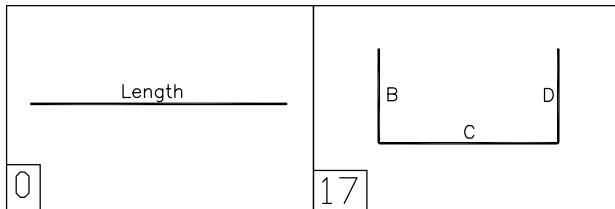
DRAWING REVIEW

This review of this drawing does not in any way relieve the contractor of responsibility for its accuracy or for compliance with the contract documents.

No comment	<input checked="" type="checkbox"/>	See comment
Amend & Resubmit	<input type="checkbox"/>	Rejected See Remarks

Submission No.
Project No. 19066
By AF
Date 28 May 2021

JABLONSKY, AST AND PARTNERS
 Consulting Engineers
 3 Concord Gate, North York, ON M3C 4H9



<p>ELEVATIONS AND DIMENSIONS SHOWN ARE FOR VERIFICATION PURPOSES ONLY AND ARE NOT TO BE USED FOR CONSTRUCTION</p> <p>ALL CONFORMS/VERIFIES WILL BE ASSUMED CORRECT AND APPROVED AS IS UNLESS COMMENTED ON THE APPROVAL DRAWINGS</p>			
LEGEND			
ALT = ALTERNATE	PS = PARTIAL	OF = OUTSIDE FACE	
BRT = BENT TO SLAB	FG = GRAD FACE	SC = SAW CUT	
BND = BEND INTO FLANGE	GR = GRAD IN DOWELS	STG = STAG OUT	
BOR = BORDER	INT = INTERNAL		
CB = CONTROL JOINT	IF = INSIDE FACE	T = TOP	
CD = CUT SURT SITE COND.	LL = LOWER LAYER	THR = THRU	
DWL = DOWEL	M = MIDDLE	THR2 = THRU 2 ENDS	
ED = EACH FACE	MIN = MINIMUM	UL = UPPER LAYER	
EJ = EACH FACE JOINT	NP = NEAR POINT	ULN = ULT. NOSTR.	
ES = EACH SIDE	OC = ON CENTER	UT = UTILITY	
ESJ = EACH SIDE JOINT			

STRAIGHT BARS LABEL FORMAT

Diagram illustrating the Straight Bars Label Format. The label consists of a rectangular bar. On the left side, the number '7' is positioned above '15M'. On the right side, the number '3600' is positioned. Below the bar, the word 'GRADE' is on the left and 'LENGTH' is on the right.

BENT BARS LABEL FORMAT

Diagram illustrating the Bent Bars Label Format. The label consists of a rectangular bar. On the left side, the number '7' is positioned above '15M'. On the right side, the text 'B1501' is positioned. Below the bar, the words 'GRADE', 'LENGTH', 'SIZE', and 'BAR MARK' are arranged from left to right.

GRADES OF STEEL

△			
△			
△			
△			
0	FOR APPROVAL	MAY/19/21	JJ
ISSUE	REMARKS	DATE	BY

MANSTEEL

REBAR

MANSTEEL REBAR
105 Industrial Road, Richmond Hill,
Ontario L4C 2Y4 Canada
Phone: 905-737-9797
Fax: 905-737-9704
Email: info@mansteelrebar.com

PROJECT

FORESTSIDE TOWNHOUSES
-BRAMPTON, ON

PART OF STRUCTURE

SHEAR WALLS L1-L2 P#4

CUSTOMER :		Project no.	2177
ROYAL PINE HOMES		SCALE:	AS SHOWN
		DRAWING No.	 R7.5
DETAILED BY:	JU	BAR LIST No.	
CHECKED BY:			

NOTES

- 1, ALL STEEL TO BE GRADE 400W
- 2, STRENGTH OF CONCRETE
35MPa - SLAB
35MPa - INTERIOR COLUMNS & WALLS

BAR SIZE	STANDARD LAP (mm)
10M	300
15M	440
20M	590
25M	730
30M	880
35M	1030

TENSION LAP SPLICE (L.S.) & DEVELOPMENT LENGTH (Ld)						
BAR SIZE	fc=25		fc=30		fc=35	
	L.S	Ld	L.S	Ld	L.S	Ld
10M	490	380	450	350	420	320
15M	740	570	670	520	620	480
20M	980	750	890	690	830	640
25M	1530	1170	1390	1070	1290	990
30M	1830	1410	1670	1290	1550	1190
35M	2130	1640	1950	1500	1800	1390