## BOARD OF VARIANCE

INSPIRED BY NATURE ... CAPTURED BY THE IMAGINATION

THOUGHTFUL CREATIONS FOR LONGEVITY



DATE: JULY 31 ST 2017

TO: BOARD OF VARIANCE - CITY OF BURNABY RE: HEIGHT RELAXATION OF 1'- 5"

ON BEHALF OF OUR CLIENTS EMILY WONG AND DAVID NG, CMTC ARCHITECT INC. IS REQUESTING TO THE BOARD OF VARIANCE FOR A HEIGHT RELAXATION OF 1'-5".

EMILY WONG AND DAVID NG HAVE LIVED AT 3917 LOZELLS AVE FOR THE PAST 15 YEARS. IN THIS TIME THEY HAD THREE CHILDREN ALL OF WHOM KNOWS ONLY THIS TO BE THEIR FAMILY HOME. THEY LOVE THE NEIGHBOURHOOD THAT THEY LIVE IN, AS IT IS VERY CLOSE KNIT AND EVERYONE KNOWS EACH OTHER WELL; A REAL SENSE OF COMMUNITY THAT WE DON'T OFTEN FIND LIVING IN THE CITY. THEY HAVE SINCE MADE MANY FRIENDS WITHIN THE NEIGHBOURHOOD AND HAVE INVESTED TIME AND MONEY WITHIN THE LOCAL COMMUNITY. THE KIDS ENJOY ATTENDING SEAFORTH ELEMENTARY SCHOOL, AND BURNABY MOUNTAIN SECONDARY SCHOOL, WHILE ATTENDING A PLETHORA OF SPORTING ACTIVITIES AT 8 RINKS. BILL COPELAND, EILEEN DAILY POOL, BURNABY DANCE EXPRESS, PIANO CLASSES DOWN THE STREET AND ATTENDING THE WILLINGDON CHURCH. ALL OF WHICH ARE JUST MINUTES AWAY FROM THEIR CURRENT RESIDENCE.

DURING THE TIME THAT THE NG'S HAVE RESIDED AT THIS CURRENT LOCATION, THE SEWER HAS BACKED UP ON NUMEROUS OCCASIONS, DUE TO PUMP FAILURES AND OR POWER OUTAGES. THE MOST RECENT PUMP FAILURE WAS IN 2015 WHEN THE POWER WAS OUT FOR TWO DAYS. THE BASEMENT LEVEL BECAME UNINHABITABLE DUE TO THE FOUL ODOUR OF RAW SEWAGE. EVEN AFTER THE POWER WAS RESTORED THE ODOUR SMELL OF SEWER STILL LINGERED ON FOR MONTHS.

AS THE FAMILY HAS OUTGROWN THIS 1960 HOUSE, EMILY AND DAVID HAD RETAINED OUR FIRM TO DESIGN A NEW HOUSE FOR THEIR GROWING FAMILY'S NEEDS.

AFTER 6 MONTHS OF DESIGN CONSULTATIONS, WE SUBMITTED FOR A BUILDING PERMIT ON APRIL 3RD OF 2017 WITH THE HEIGHT OF THE BASEMENT SET AT 143'-6". AT THIS SLAB ELEVATION THE BUILDING WOULD HAVE COMPLIED WITH THE CURRENT ZONING HEIGHT RESTRICTION.

AT THIS TIME, A DECISION WAS MADE BY EMILY AND DAVID TO HAVE EMILY'S AILING PARENTS RESIDE WITH THEM AFTER THE NEW HOME WAS BUILT. BUT THE HISTORY OF SEWER BACK UP PROBLEMS STILL LINGERS IN EMILY AND DAVID'S MINDS AND THEY COULD NOT BEAR TO ENVISION PUTTING EMILY'S MOTHER INTO AN ENVIRONMENT THAT HAS A HISTORY OF ISSUES THAT COULD BE FATAL TO MRS. WONG'S LIFE.

WE SET FORTH TO WORK WITH THE ENGINEERING DEPARTMENT TO RELOCATE THE SEWER CONNECTION LINE, BUT WERE UNSUCCESSFUL DUE TO EXISTING SITE CONDITIONS. IN ORDER FOR

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US TO ELIMINATE THE SUMP PUMP ALTOGETHER, THE CONNECTION POINT OF THE SEWER LINE WOULD NEED TO BE PHYSICALLY MOVED TO THE SOUTH WEST CORNER OF THE PROPERTY; HOWEVER THERE ARE A CLUSTER OF CONIFEROUS TREES, IN AND AROUND THAT AREA, AND THE PARKS BOARD WILL NOT PERMIT US TO REMOVE ANY OF THESE TREES IN ORDER TO MAKE THE NEW CONNECTION. THE FURTHEST WE CAN MOVE THE CONNECTION LINE IS 9M (29.5') SOUTH OF THE NORTH PROPERTY LINE. MOVING IT TO THIS LOCATION MEANT THAT THE NEW SEWER LINE WAS ONLY GOING TO BE LOWERED BY 3" FROM THE CURRENT CONNECTION ELEVATION. (REFER TO OUR CORRESPONDENCE WITH THE CITY OF BURNABY'S ENGINEERING DEPARTMENT DATE ON JUNE 20TH 2017)

SINCE THERE WAS ONLY A LOWERING OF 3" THIS IS NOT ENOUGH TO ELIMINATE THE SUMP PUMP FROM THE PLUMBING DESIGN. WE THEREFORE HAD NO CHOICE BUT TO RAISE THE BASEMENT ELEVATION FROM 104.5' TO THE CURRENT PROPOSED ELEVATION OF 107'5" IN ORDER TO ALLOW THE ELIMINATION OF THE SUMP PUMP; THIS ALSO, ELIMINATED A SERIES OF EXTERIOR STAIRS THAT WERE ORIGINALLY DESIGNED TO ALLOW ACCESS INTO THE BASEMENT SUITE FROM THE OUTSIDE. WITH THIS CHANGE IN THE BASEMENT SLAB ELEVATION, EMILY AND DAVID ARE MORE AT PEACE, KNOWING THAT THE SUMP PUMP FAILURE IS NO LONGER A POSSIBILITY, AS WELL AS ELIMINATING STAIRS MEANT THAT MRS. WONG WOULD BE ABLE TO CIRCUMVENT HER NEW SURROUNDINGS MORE EASILY, MAKING HER QUALITY OF LIFE THAT MUCH BETTER.

IN ADDITION WE REDESIGNED THE PITCH OF THE ROOF TO REDUCE IT'S OVERALL HEIGHT, WHILE MAINTAINING THE INTEGRITY OF THE ARCHITECTURAL VOCABULARY AS WELL AS MEETING ZONING'S DEFINITION OF A PITCHED ROOF. WE REDUCED THE PITCH OF THE MAIN ROOF FROM 5/12 TO 4/12 THE LOWEST PITCH THAT WILL STILL ENABLE US TO UTILIZE THE HEIGHT ALLOWANCE OF 9M (29.52')

#### IN CONCLUSION:

WE HAVE DONE EVERYTHING WE POSSIBLY CAN FROM AN ARCHITECTURAL PERSPECTIVE TO RETAIN THE ARCHITECTURAL VOCABULARY OF THE NEW HOUSE DESIGN, AS WELL AS, TRYING TO WORK WITH THE ENGINEERING DEPARTMENT TO RELOCATE THE SANITARY LINE. HOWEVER, WE ARE REQUIRED TO RAISE THE BASEMENT LEVEL TO 107'5" IN ORDER TO ELIMINATE THE SUMP PUMP AND HAVE THE SEWER CONNECTION LINE BE GRAVITY FEED. IN DOING ALL OF THIS WE EXCEED THE CURRENT ZONING HEIGHT REQUIREMENT BY 1'-5" (THE VERY TIP OF THE UPPER MOST ROOF, A MINUTE FRACTION OF THE OVERALL MASSING OF THE BUILDING)

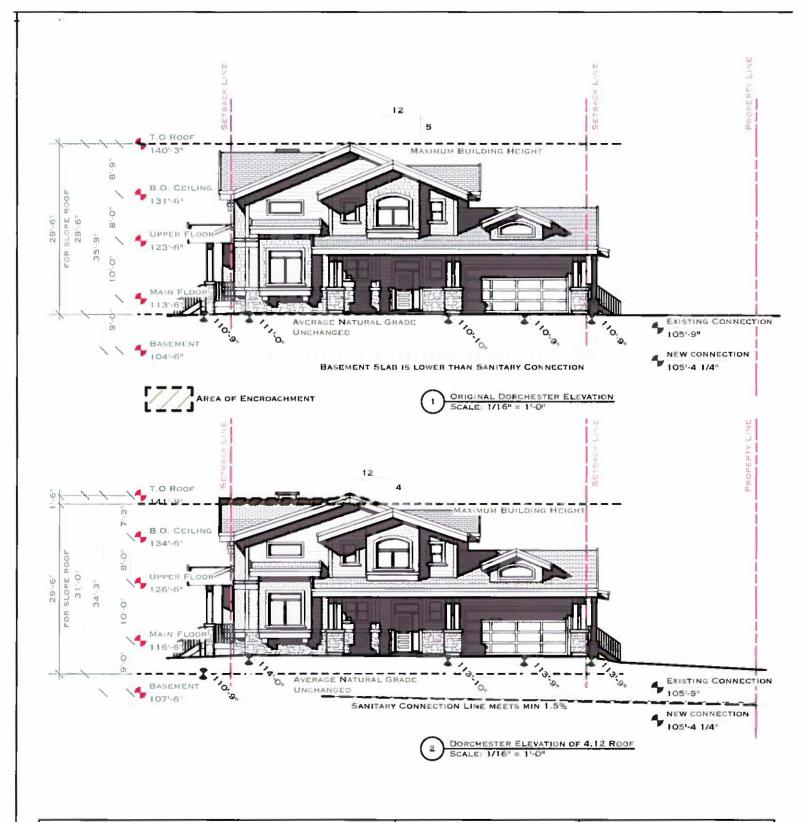
WE ARE ASKING THE BOARD TO REALIZE AND SYMPATHIZE WITH THE HARDSHIP THAT EMILY AND DAVID ARE FACING DUE TO SITE CONDITIONS AS WELL AS THEIR PERSONAL CIRCUMSTANCES THAT HAS ARISEN DURING THE COURSE OF THE BUILDING PERMIT PROCESSES.

WE THANK THE BOARD FOR THEIR TIME AND EFFORT IN MAKING THE RIGHT DECISION ON THIS CASE.

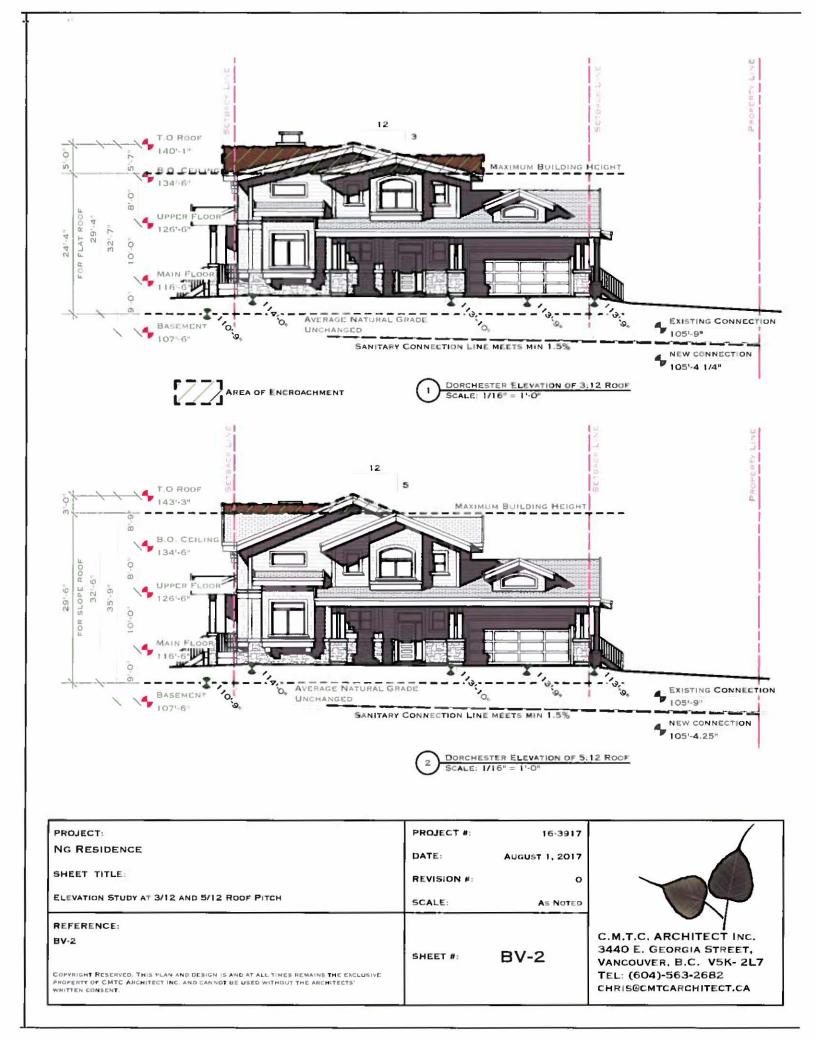
RESPECTFULLY SUBMITTED

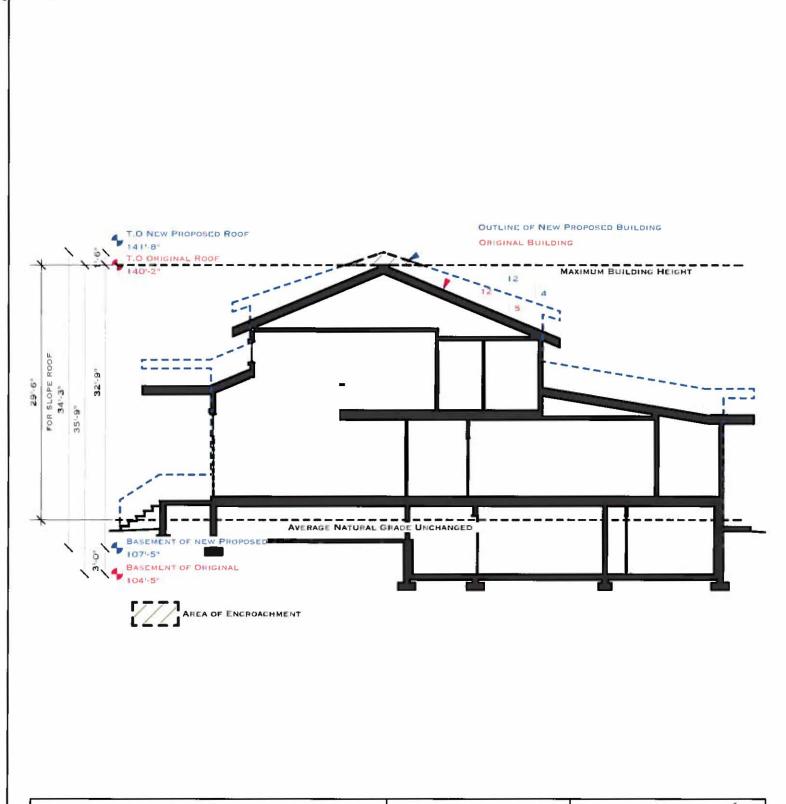
CHRIS M.T. CHUNG PRINCIPAL IN CHARGE CMTC ARCHITECT INC.

PAGE 2 OF 2



PROJECT #:	16-3917	/
DATE	AUGUST 1, 2017	
REVISION #	o	
SCALE	AS NOTED	
		VY
SHEET #	BV-1	C.M.T.C. ARCHITECT INC. 3440 E. GEORGIA STREET, VANCOUVER, B.C. V5K- 2L7
		TEL: (604)-563-2682 CHRIS@CMTCARCHITECT.CA
	DATE: REVISION #: SCALE:	DATE: AUGUST 1, 2017 REVISION #: O SCALE: AS NOTED





PROJECT #:	16-3917	
DATE	AUGUST 1, 2017	
REVISION #	o	6
SCALE:	AS NOTED	
SHEET #:	BV-3	C. 34 VA
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	DATE: REVISION #: SCALE:	DATE: AUGUST 1, 2017 REVISION #: O SCALE: AS NOTED



(604)-563-2682 IS@CMTCARCHITECT.CA

#### Hi Chris,

This is in response to your service lowering request for 3917 Lozells Avenue. We can provide a new service connection at the following location and depth:

- Storm: The theoretical invert elevation (at the PL) of a re-laid service 1.00m north of the south property line, off Lozells Av, is 32.08m [105.25'].
- Sanitary: The theoretical invert elevation (at the PL) of a re-laid service 9.00m south of the north property line (just north of the dripline), off the SROW, is 32.11m [105.36'].

Disclaimer: The City cannot guarantee new connections will be at the above location or invert elevation due to the possible presence of buried obstructions from boulders, non-City owned utilities or roots requiring a rerouting of the service.

Please see the attached survey summary sheets (revised) for more detail.

Please review the findings with your designer, and if you are able to modify your designs, and wish for the work to go ahead, you will be required to provide:

- A bond of \$8,100 for the estimated cost of the storm service work.
- A bond of \$6,900 for the estimated cost of the sanitary service work.

The City will then carry out the realignment and deduct the cost of the work from the bond. Once the work is completed, and costs reconciled, you will be refunded the remaining monies or invoiced for the additional cost.

Reminder that it is the responsibly of the owner to ensure that the building's drain tiles, roof drains, and plumbing fixtures can connect to city services with sufficient grade, as dictated by Burnaby and BC building codes and standards, for gravity feed. If not, an on-site pump system is required.

This is the **final** revision for this site. We will not adjust our connection locations from those noted above.

### Regards,

## Vince

Vince Dias | Project Manager | Infrastructure & Development City of Burnaby | City Hall – 4th Floor | 4949 Canada Way, Burnaby BC V5G 1M2 www.burnaby.ca | Vicente.Dias@burnaby.ca | Office 604-293-6513

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From: Dias, Vicente Vicente Dias@burnaby.ca Subject: 3917 Lozells Av Lowering Date: May 29, 2017 at 11:26 AM To: chris@cmtcarchitect ca

#### Hello,

This is in response to your service lowering request for 3917 Lozells Avenue. We can provide a new service connection at the following location and depth:

- Storm: The theoretical invert elevation (at the PL) of a re-laid service 1.00m north of the south property line, off Lozells Av, is 32.08m [105.25'].
- Sanitary: The theoretical invert elevation (at the PL) of a re-laid service 1.00m north of the south property line, off the SROW, is 31.76m [104.20']. Note: There are trees around this proposed location, more than likely crew will site connection further north to avoid dripline, resulting in a higher service invert elevation.

Disclaimer: The City cannot guarantee new connections will be at the above location or invert elevation due to the possible presence of buried obstructions from boulders, non-City owned utilities or roots requiring a rerouting of the service.

Please see the attached survey summary sheet for more detail.

Please review the findings with your designer, and if you are able to modify your designs, and wish for the work to go ahead, you will be required to provide:

- A bond of \$8,100 for the estimated cost of the storm service work.
- A bond of \$6,900 for the estimated cost of the sanitary service work.

The City will then carry out the realignment and deduct the cost of the work from the bond. Once the work is completed, and costs reconciled, you will be refunded the remaining monies or invoiced for the additional cost.

Reminder that it is the responsibly of the owner to ensure that the building's drain tiles, roof drains, and plumbing fixtures can connect to city services with sufficient grade, as dictated by Burnaby and BC building codes and standards, for gravity feed. If not, an on-site pump system is required.

Regards,

## Vince

Vince Dias | Project Manager | Infrastructure & Development City of Burnaby | City Hall – 4th Floor | 4949 Canada Way, Burnaby BC V5G 1M2 www.burnaby.ca | Vicente.Dias@burnaby.ca | Office 604-293-6513

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# Sanitary Sewer Survey Results

Please note that the invert elevations provided for new connections have been calculated from a field survey and are <u>not</u> to be used for design purposes. Actual constructed invert elevations may differ from the calculated information.

It is the responsibility of the applicant to determine if the new connection invert elevation will suit the project requirements. The City cannot make that determination.

Address: 3917 LOZELLS KUE
Date of Survey: MAY 25/17
Horizontal location of the existing connection:
Was the existing connection exposed? <u>NO</u>
Existing connection invert elevation:
The existing connection was exposed at: D property line
Building slab elevation: (From design) 31.852 M (104.5)
Was the slab elevation surveyed? NO (OLD HOUSE STILL ON LUT)
Surveyed slab elevation:
Horizontal location of the proposed new connection: 47 NORTH OF SUE LOT COPENER (SR/O)
Calculated min. invert elevation of the proposed new connection at the property line: 34.76++ 32. 119 m
Vertical datum: CGVD28 (GVRD 2005) / Local / Other AS NOTED ON WONG & ASSOC. TOPO PLAN JAN 20/17
Reference survey monument used: ISA Mon#_94H1505 Elevation (m): 32.077 M
Onsite TBM (Description): LEND PLUG IN CURB @ NW LOT CORNER
Elevation (m): $112.91'$ (34.415 M)
Surveyed by:
Prepared by: DD, RP Checked by: RP
Summary and Estimator's Comments: - Changed location to avoid thees bust north of dripline Mow) - UD
- Brilder raising slab to avoid pump apparently

## Storm Sewer Survey Results

Please note that the invert elevations provided for new connections have been calculated from a field survey and are <u>not</u> to be used for design purposes. Actual constructed invert elevations may differ from the calculated information.

It is the responsibility of the applicant to determine if the new connection invert elevation will suit the project requirements. The City cannot make that determination.

Address: 3917 LOZELLS AVE
Date of Survey: MAT 25 / 17
Horizontal location of the existing connection;
Was the existing connection exposed? $\bigwedge \bigcirc$
Existing connection invert elevation:
The existing connection was exposed at: D property line
Building slab elevation: (From design) 31.852 M (104.5')
Was the slab elevation surveyed? NO (OLD HOUSE STILL ON WT)
Surveyed slab elevation:
Horizontal location of the proposed new connection: 1 M NORH OF SELOTCOPNER (LUZZELS)
Calculated min. invert elevation of the proposed new connection at the property line: $32.08$ M
Vertical datum: CGVD28 (GVRD 2005) V Local / Other AS NOTED ON WONGA ASSOC. TOPO PLAN SANZO/17 Reference survey monument used: ISA Mon#_94H:1505 Elevation (m): 32.077 M Onsite TBM (Description): LEAD PLOG IN CURB C. NW LOT CORNER Elevation (m): 112.91 (34.415 M)
Surveyed by: D   Prepared by: D   R Checked by:
Prepared by: DD, RP Checked by: RP
Summary and Estimator's Comments:
- no adjustments required

