# Development Variance Permit DVP20-0067 

This permit relates to land in the City of Kelowna municipally known as

## 675 Central Avenue

and legally known as

## Lot 8 District Lot 9 ODYD Plan 3730


and permits the land to be used for the following development:

## Residential

The present owner and any subsequent owner of the above described land must comply with any attached terms and conditions.

| Date of Council Decision | February 2, 2021 |
| :--- | :--- |
| Decision By: | Council |
| Development Permit Area: | N/A |

This permit will not be valid if development has not commenced by February 2, 2023
Existing Zone: RU6 - Two Dwelling Housing
Future Land Use Designation: S2RES - Single / Two Unit Residential

## This is NOT a Building Permit.

In addition to your Development Permit, a Building Permit may be required prior to any work commencing. For further information, contact the City of Kelowna, Development Services Branch.

## NOTICE

This permit does not relieve the owner or the owner's authorized agent from full compliance with the requirements of any federal, provincial or other municipal legislation, or the terms and conditions of any easement, covenant, building scheme or agreement affecting the building or land.

Owner: Desiree Ann Brodhurst
Applicant: Jalal General Contractor

## Terry Barton

Development Planning Department Manager
Development Planning

Date

## 1. SCOPE OF APPROVAL

This Development Permit applies to and only to those lands within the Municipality as described above, and any and all buildings, structures and other development thereon.

This Development Permit is issued subject to compliance with all of the Bylaws of the Municipality applicable thereto, except as specifically varied or supplemented by this permit, noted in the Terms and Conditions below.

The issuance of a permit limits the permit holder to be in strict compliance with regulations of the Zoning Bylaw and all other Bylaws unless specific variances have been authorized by the Development Permit. No implied variances from bylaw provisions shall be granted by virtue of drawing notations that are inconsistent with bylaw provisions and that may not have been identified as required Variances by the applicant or Municipal staff.

## 2. CONDITIONS OF APPROVAL

a) The dimensions and siting of the building to be constructed on the land be in accordance with Schedule " A ";

## Section 13.6.6(g): RU6 - Two Dwelling Housing Development Regulations

To vary the minimum side yard setback for a 1 or $1^{1} / 2$ storey portion of a building from 2.0 m required to 1.61 m proposed.

This Development Permit is valid for two (2) years from the date of Council approval, with no opportunity to extend.

## 3. PERFORMANCE SECURITY

None required.

## 4. INDEMNIFICATION

Upon commencement of the works authorized by this Permit the Developer covenants and agrees to save harmless and effectually indemnify the Municipality against:
a) All actions and proceedings, costs, damages, expenses, claims, and demands whatsoever and by whomsoever brought, by reason of the Municipality said Permit.

All costs, expenses, claims that may be incurred by the Municipality where the construction, engineering or other types of works as called for by the Permit results in damages to any property owned in whole or in part by the Municipality or which the Municipality by duty or custom is obliged, directly or indirectly in any way or to any degree, to construct, repair, or maintain.

## The PERMIT HOLDER is the CURRENT LAND OWNER. Security shall ONLY be returned to the signatory of the Landscape Agreement or their designates.

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0. SITE PLAN

SITE ADDRESS = 675 CENTRAL AVE, KELOWNA, B.C.
LEGAL DESCRIPTION: LOT 8 DISTRICT LOT 90SOYOOS DIVISION YALE DISTRICT PLAN 3730
ZONING = RU6
LOT AREA $=6000$ SQF
SITE COVERAGE HOUSE $=1400$ SQF $(23.3 \% ~ 40 \%$ ALLOWABLE $)$
SITE COVERAGE CARRIAGE $=839$ SQF ( $78 \mathrm{M}^{\wedge} 2 \sim 90 \mathrm{M}^{\wedge} 2$ )
SITE COVERAGE HOUSE (1400 SQF) + CARRIAGE (839 SQF) = 2239 SQF (37.3\% ~ 40\% ALLOWABLE) SITE COVERAGE + PARKING/DRIVEWAYS = 2430 SQF ( $40.5 \% ~ ~ 50 \%$ ALLOWABLE)
HOUSE BASEMENT ELEVATION $=343.87 \mathrm{M}$
HOUSE MAIN FLOOR ELEVATION $=346.4 \mathrm{M}$
HOUSE UPPER FLOOR ELEVATION $=349.55 \mathrm{M}$
HOUSE ROOF PEAK ELEVATION $=352.96 \mathrm{M}$
LOT ELEVATION (FLAT) $=345.0 \mathrm{M}$
CARRIAGE MAIN FLOOR ELEVATION $=345 \mathrm{M}$
CARRIAGE ROOF PEAK ELEVATION $=348.66$ M (4.3 M LOWER THAN HOUSE ROOF)
MAX SITE COVERAGE CARRIAGE $=13.9 \%$ ( $14 \%$ ALLOWABLE)
MAX CARRIAGE UPPER FLOOR AREA TO FOOTPRINT = N/A
MAX NET FLOOR AREA OF CARRIAGE HOUSE $=70.73 \mathrm{M}^{\wedge} 2\left(90 \mathrm{M}^{\wedge} 2\right.$ ALLOWABLE)
PRIVATE OPEN SPACE FOR CARRIAGE $=73.75 \mathrm{M}^{\wedge} 2$ ( $30 \mathrm{M}^{\wedge} 2$ MINIMUM)
PRIVATE OPEN SPACE FOR PRINCIPAL HOUSE $=162.17 \mathrm{M}^{\wedge} 2\left(30 \mathrm{M}^{\wedge} 2\right.$ MINIMUM)
CARRIAGE AND PRINCIPAL WILL BOTH HAVE HRV
SITING OF PROPERTY IS FLAT
CARRIAGE HOUSE WILL BE MIN. 8.55 M AWAY FROM HOUSE
(HOUSE REAR SIDE AREA IS $82 \mathrm{M}^{\wedge} 2$ AND AREA OF UNPROTECTED OPENINGS IN HOUSE IS 31.8\%). MAXIMUM ALLOWED AS PER BCBC 9.10.14.4 IS 56\% AT 8M LIMITING DISTANCE. NO UNPROTECTED OPENINGS WILL BE ON REAR SIDE OF CARRIAGE.

## GENERAL NOTES

AL WORK IS TO CONFORM TOTHE LATEST EDITION OF THE B.C.
BULDING COOE, AND LOCAL BYLAWS WHICH MAY TAKE PRECEDENCE
WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALLED MEASUREMENTS.
The buldor shall verify and be responsible for allinformation, DIMENIINS, AND SPECIIICATTIO REGARDING THESE PLLANS PRIOR TO
CMMENC COMMENCEMENT OF CONSTRUCTION
 GRADELEVELS SHOWN ON THESE DRAWINGS ARE ESTMATES ONLY,
ADJUSTMENTS AS REQUIRED ARE TO BE MADE ONSTE.


UPPER GROSS AREA
$\square 1330$ SF


MAIN GROSS AREA
$\square 1392$ S


BASEMENT GROSS AREA

## CONSTRUCTION NOTES

1. ALL CONSTRUCTION, MATERALS \& WORKMANSHP TO BE B.C. BULLING B.C. BULDING CODE, PLUMBING CODEE ELECTRICAL
COE, \&ALOTHER CODES, ZONING AND BYLAWS THAT MAY APPLY.
2. The contractor and al subtades are

 DISCREPANCIES THAT AFFECT DESIGN
ZMT CONTRACTING IMMEDATELY.
 ALL RRAMIN HAS SOBE MIN 6 "FROM GRADE AS PER
B.C. BULLINGG CODE OO18 4. CONCRETE FOOTINGS AND WALLS TO BE MINMUM
28MPA 28 DAYS: FLOOR SLABS AND SIDWWALKS TO BE

3. ALL CONCRETE FOOTINGS TO BE PLACED ON ORIGINAL
UNDISTURBED
GROUND, FREE OF ALL ORGANIC, RROZEN UNDISTURBEDGROUND,
OR FROSTY MATERIAL.
4. DAMPPROOF FOUNDATION WALLS BELOW GRADE WITH 2
COATS OF BITUMINOUS MATERRAL.

 ROCK OR OTHER MATERAL SLITITABLE
RADON GAS UNDER INTERIOR SLABS
5. ALL FOUNDATION DRAINS TO BE 4 P PERFORATED P.V.C. WITH FILTER CLOTHAND MNMMUM 6 " R RAIN ROCK,
DRAINED TOMUNIIIAL DRAINEDTOMUNCLIPA
LOCALSTANDARDS
6. GRADE TO BE SLOPED AWAY FROM BULLDING AT ALL
7. ALL TRUSSES, I-JOISTSS, BEAMS OR OTHER
STRUCTURALMEMBERS NOT COVERED BULDDING CODE TOBEDESIIGNED AND ENGINEERED TRUSS MANUFACTURERORSTRUCTURAL ENGIIEEE
8. CONTRACTOR TO VERIFY ALL PROPERTY \& FOUNDATION LINES WWTHALLEGALLAND SURVEVOR
PRIOR TO PLACING FOOTINGS OR RUNNING SEVVICES PRIOR RTO PLACING FOOTINGS
WITHIN NULLOING ENVELOPE.
9. ALL ROOF SPACES TOBE VENTLATED WITH SOFFFIT
AND ROOF VENTS WITHA MINIMUM DISTRIBUTION AREA OF $1 / 300 . \operatorname{AMINMUMOE}$ 25\% OF VENTSTO AREAOF $1 /$ /300. A MNMMM OF 25\% OF VENTS TOBE
LOCATEDTR ROOF, ANO MNIMUM 25\% TO BE LOCATED AT SOFFIT
10. DOOR FRAMES AT ENTRANCES AND EXTERIOR SPACES
TO OWELLING UNITS SHALL BE SOLIDLY BLOCKED
 THE DEADBOLT TO RESIST SPREADING
 12"OFFNILHED
11. RANWATER LEADERS NOT SHOWN ONPLAN.
CONTRACTOR TO DETERMNE EXACT LOCATION

12. ELECTRICAL LOCATIONS TOO BE DETERMINED BY


13. APPROVED SMOKE ALARMSTOBE INSTALLED WITH
LOCATION APPROVED BY APPROPRIITELOCAL MUNAIIIPALITY
14. REEFR TOLAYOUTS AND SPECIIIICATIONS FROM STRUCTURAL ENGINEER, FLOOR JOIST SUPPLIER AND
ROOF TRUSS MANUFACTURER FOR BEAM. POST AND ROOF TRUSS MANUFACTURER ROR BEAM, POST AN
FOOTTN LOCATIONS AND SIZES AND ENSURE
 ANY STRUCTURAL LPECLIFICATIONS SHOWN ONZMT
CONTRACTING PLANS ARE ESTMATES ONLY AND MAY NOT ACCURATELY REPRESENT LOADING
ANO SIZING OR MAY NOT INCLUDE POINT LOADS O TRUCTURAL MEMBERS DESIINED BY OTHERS.
15. ZMT CONTRACTING ACCEPTS NOLIABLITY AND
SHALL NOT BE HELO RESPONSIBLE FOR ERRORS OR
 NEEATTVELL AFFECCT CONSTRUCTION.
IF ERRORS ARE FOUND. PLEASE CONTACT


PRIME BUILDING DESIGN

310531 Ave, Unit G, Vernon, BC hilipp@primebuildingdesign.com primebuildingdesign.com


Brodhurst Residence

675 Central Ave.
Kelowna, B.C.

SITE PLAN
GENERAL NOTES

| Project Number | $18-111$ |
| :--- | ---: |
| Date | $18 / 06 / 2020$ |
| Designed By | PW |

A01



1 LEFT FRONT VIEW


2 LEFT REAR VIEW


Brodhurst Residence

675 Central Ave.
Kelowna, B.C

Title Page
$\begin{array}{lr} & 18-111 \\ \text { Project Number } & 18 / 06 / 2020 \\ \text { Date } & \end{array}$
A03

## 6 MAIN HOUSE FRONT



## nho

PRIME BUILDING DESIGN

310531 Ave, Unit G, Vernon, BC
305 +1 (250) 540-3449
philipp@primebuildingdesign.com
primebuildingdesign.com


Plamer
lintalas
AF
City of
Kelowna


675 Central Ave.
Kelowna, B.C.

ELEVATIONS FRONT, REAR

|  |  |
| :--- | ---: |
| Project Number | $18-111$ |
| ade | $18 / 06 / 2020$ |
| Designeed By | PW |

A04

PRIME BUILDING DESIGN

310531 Ave, Unit G, Vernon, BC
+1 (250) 540-3449
philipp@primebuildingdesign.com
primebuildingdesign.com

ATTACHMENT This forms part of applio

| $\substack{\text { Planner } \\ \text { lnitis }}$ | AF |
| :--- | :--- |$\quad$| City of |
| :--- |
| Kelowna |


| No. | Descrition |
| :---: | :---: |
| 01 | Issued For Variance |

Brodhurst Residence

675 Central Ave. Kelowna, B.C

ELEVATIONS LEFT RIGHT

| Project Number | 18-111 |
| :---: | :---: |
| Date | 18/06/2020 |
| Designed By | PW |

A05


1 1.2 BASEMENT LEVEL
$3 / 8^{\prime \prime}=1^{\prime}-0{ }^{\prime \prime}$


ATTACHMENT This forms part of application \# DVP20-0067

$\qquad$ Kelowna

Brodhurst Residence

675 Central Ave. Kelowna, B.C.

## BASEMENT PLAN



(4) 1.4 UPPER FLOOR

PRIME BUILDING DESIGN

310531 Ave, Unit G, Vernon, BC +1 (250) 540-3449

## primebuildingdesign.com



Brodhurst Residence

675 Central Ave.
Kelowna, B.C.

UPPER FLOOR

| Project Number | $18-111$ |
| :--- | ---: |
| סate | $18 / 06 / 2020$ |
| Designed By |  |
|  | PW |
|  | AO8 |
|  |  |
| Scale | $3 / 8^{\prime \prime}=1^{\prime}-0^{\prime \prime}$ |



## Cubit Consulting LTD.

Structural Engineering Services
310531 Ave Unit G, Vernon, BC V1T 2G9
Contact: Peter Ackermann P.Eng., Principal
Email: peter@cubitconsulting.ca
Phone: (250) 317-9714
Project \#: S20-130
September 08, 2020

Brodhurst Residence


675 Central Ave.
Kelowna BC, V1Y 7M2
Attention: Robin Brodhurst

## Brodhurst Residence, 675 Central Ave. - Foundation Review for Variance Permit

## Introduction:

Cubit Consulting Ltd. (Cubit) was retained by Robin Brodhurst to provide a structural review of the existing foundations for the residence located at 675 Central Ave. Kelowna, in order to determine whether the existing foundations are suitable for the proposed addition per drawings issued by Prime Building Design dated September 8, 2020. Cubit visited the site on August $27^{\text {th }}, 2020$ and inspected the existing foundations.

## Scope:

The review of the existing foundation is limited to a visual review of exposed perimeter foundation walls in order to assess the existing concrete wall condition as well as a preliminary gravity analysis in order to determine suitability of the existing strip footings to support the additional loads proposed by this renovation. A lateral analysis considering backfill pressure on perimeter walls has not been performed and is outside of this scope.

## Perimeter Foundation Walls:

The existing perimeter foundation walls are $8^{\prime \prime}$ wide by $7 \prime-8 \prime \prime$ tall and are backfilled to approximately $3^{\prime}-6^{\prime \prime}$ above the basement slab on grade. The backfill height for the proposed renovation will not change from the existing backfill height and thus the soil lateral pressure onto the existing foundation wall is expected to remain of similar magnitude. Cubit inspected exposed sections of interior and exterior foundation walls. Most of the foundation wall surfaces are concealed. Exposed surfaces show minimal cracking in the concrete walls, most of which are hairline cracks. It was noted that cracking is typically occurring at corners of window headers where upgrades to the headers would be required.

## Perimeter Footings:

The condition of the existing perimeter strip footings could not be verified as they were concealed. The original architectural drawings dated January 14, 1957 indicate the footings to be 8 " deep by 18 " wide. Based on preliminary gravity load analysis, strip footings of $8^{\prime \prime}$ deep by $18^{\prime \prime}$ wide would generally be sufficient to support the new loads from the proposed addition when assuming an unfactored soil bearing capacity of 2000psf. Localized footing upgrades may be required to support new concentrated point loads that will bear on the existing foundation walls and the interior basement floor.

Differential settlement of foundation walls and footings were not observed.

## Conclusion:

Cubit performed a visual review of exposed surfaces of the existing foundations and performed a preliminary gravity load analysis considering proposed additional gravity loading. The existing foundations appear generally suitable for the new renovation and only localized upgrades would be expected for strip footings supporting new large concentrated point loads as well as cracked existing concrete headers would need to repaired. The gravity load analysis confirmed that based on the assumed footing dimensions of 8" deep by $18 "$ wide, a minimum unfactored soil bearing capacity of 2000 psf would be required.

Should you have any questions with regards to this letter, please do not hesitate to contact us.
Sincerely,


Report by:
Philipp Wambold, E.I.T.

Reviewed by:
Peter Ackermann, P.Eng.


