

September 19, 2024

File No. FOI 2024-18

VIA E-MAIL - **Redacted S.22**

**Redacted S.22**

Dear **S. 22**

Re: Request for Records  
Freedom of Information and Protection of Privacy Act

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The City of White Rock has reviewed your request for access to the following records pursuant to the Freedom of Information and Protection of Privacy Act (the "Act"):

- *Date of application for demolition and building permits as well as permits issues and all other documents related to this for 1407 Bishop Road, White Rock*

Access to these records is available. However, some of the information in the records is excepted from the disclosure requirements of the Act. I have severed the excepted information so that I could disclose to you the remaining information as attached.

The severed information is excepted from disclosure under sections 15 and 22 of the Act. Severing under section 15 is necessary to protect security of any property or system, including a building and severing under section 22 is necessary to avoid disclosing third-party personal information without permission.

Please contact our office if you have any questions or concerns.

Sincerely,



Tracey Arthur  
Director of Corporate Administration



If you believe that the City of White Rock has been unreasonable in its handling of your request, you may ask the Information and Privacy Commissioner to review our response. You have 30 days from receipt of this notice to request a review by writing to:

Office of the Information and Privacy Commissioner for British Columbia  
PO Box 9038 Stn. Prov. Govt.  
Victoria BC, V8W 9A4

Telephone 250-387-5629  
E-mail: [info@oipc.bc.ca](mailto:info@oipc.bc.ca)

Should you decide to request a review, please provide the Commissioner's office with:

1. your name, address and telephone number;
2. a copy of this letter;
3. a copy of your original request sent to the City of White Rock; and
4. the reasons or grounds upon which you are requesting the review.

**Debbie Johnstone**

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**From:** Jason Birkland  
**Sent:** Monday, June 10, 2024 3:47 PM  
**To:** Redaction S.22  
**Cc:** Gill Electric; Ajaib Gill  
**Subject:** 1407 Bishop - Demolition Application  
**Attachments:** Fee Slip - Demolition.pdf

Good afternoon owner/applicant,

With reference to the recent correspondence regarding your Lot Servicing last month, it appears that your Lot Servicing file is nearing its final stages of review soon. The purpose of this email is to inform you of what is required to approve/issue your Demolition Permit for the subject property.

Your application/file number is **#BP021502**

The City understands that you will have your own schedule as to when you would like to start the demolition process. Kindly refer to the items listed below for what is currently required prior to release the Demolition Permit for the subject property when you choose to proceed. Timeline for issuance of your Demolition Permit is entirely dependent on these items being completed. The required document(s) can be emailed to myself for review when you have them ready.

Prior to approval/issuance, we require the following to be completed:

- [Notice of Project](#) from WorkSafe BC for proposed abatement, or construction (demolition).  
Email copy of the Notice of Project from Work Safe BC is sufficient.
- **Approved Tree Management Permit (Demolition stage).**  
The City Tree Preservation Official is managing your Tree Permit application. You must ensure you have satisfied all the requirements of that application to support approval/issuance of the tree permit. Issuance of a tree permit (Demolition/protection stage) will occur concurrently with your demolition permit once approved.
- **Outstanding fees/deposit to be paid prior to issuance of your demolition permit.** Charges are broken down below for your reference with the fee slip attached.

**Folder: BP021502      Access Code: Redacted S.22**  
BUILDING PERMITS  
DEMOLITION PERMIT - DEM-SFD

Address: 1407 BISHOP RD

Description	Quantity	Amount	Description	Quantity
Appl Othr Permt	1.00	90.00	Bp Demo Sfd	1.00
En San Cap Off	1.00	153.00	En Strm Cap Off	1.00
Dep Rd&row	1.00	5,000.00		
<b>Summary</b>	<b>Amount</b>	<b>Received</b>	<b>Outstanding</b>	
Fees	1,606.00	90.00	1,516.00	
Deposit	5,000.00	0.00	5,000.00	
<b>TOTAL</b>	<b>\$6,606.00</b>	<b>\$90.00</b>	<b>\$6,516.00</b>	

Do not hesitate to get back to me if you have any questions and/or concerns moving forward with the demolition application process.

Regards,

**Jason T. Birkland**

**Assistant Plans Examiner, City of White Rock**

15322 Buena Vista Avenue, White Rock, BC V4B 1Y6

Tel: 604.541.2144 / [www.whiterockcity.ca](http://www.whiterockcity.ca)



The information transmitted, including attachments, is intended only for the individual(s) or entity to which it is addressed and may contain information that is confidential and/or privileged or exempt from disclosure under applicable law. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon this information by individual(s) or entities other than the intended recipient is prohibited. Thank you.

FEE SLIP



Folder: **BP021502** Access Code: **Redacted S.22**  
 BUILDING PERMITS  
 DEMOLITION PERMIT - DEM-SFD

Address: 1407 BISHOP RD

Description	Quantity	Amount	Description	Quantity	Amount
Appl Othr Permt	1.00	90.00	Bp Demo Sf/d	1.00	1,210.00
En San Cap Off	1.00	153.00	En Stm Cap Off	1.00	153.00
Dep Rd&row	1.00	5,000.00			
<b>Summary</b>			<b>Summary</b>		
Fees		1,606.00	Received		1,516.00
Deposit		5,000.00	Outstanding		5,000.00
<b>TOTAL</b>		<b>\$6,606.00</b>			<b>\$6,516.00</b>

CITY OF WHITE ROCK - FEE SLIP

15322 Buena Vista Ave  
 White Rock, BC V4B 1Y6



Folder: **BP021502** Access Code: **Redacted S.22**  
 BUILDING PERMITS  
 DEMOLITION PERMIT - DEM-SFD

Summary	Outstanding
Fees	1,516.00
Deposits	5,000.00
<b>TOTAL</b>	<b>\$6,516.00</b>

Credit Card Payments

The City accepts credit card payments for folder fees only. Credit cards are not accepted for deposits or DCC payments. Credit card payments are subject to a 2% fee. Payments can be made online at [www.whiterockcity.ca/online](http://www.whiterockcity.ca/online). Alternately, payments may also be made by cheque or debit.

**Debbie Johnstone**

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**From:** Miklos Zrinyi  
**Sent:** Tuesday, July 30, 2024 2:50 PM  
**To:** Redaction S.22  
**Cc:** City Permits  
**Subject:** 1407 BISHOP RD - BP021502  
**Attachments:** IMG\_2737.JPG; 570\_Division B - Section 8.2. Protection of the Public.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Hello,

Please have construction fencing installed as per attached and below:

### **8.2.1.3. Fencing, Boarding or Barricades**

- 1) When a construction or demolition activity may constitute a hazard from a *public way*, a strongly constructed fence, boarding or barricade not between the site and the *public way* or open sides of a construction site.
- 2) Barricades shall have a reasonably smooth surface facing the *public* those required for access.
- 3) Access openings through barricades shall be equipped with gates that
  - a) kept closed and locked when the site is unattended, and
  - b) maintained in place until completion of the construction or demolition

Demo deposit return will occur after the fence is installed.

Regards,

Miklos Zrinyi  
Engineering Inspector  
604-541-2196



**8.2.1.3. Fencing, Boarding or Barricades**

1) When a construction or demolition activity may constitute a hazard to the public and is located 2 m or more from a *public way*, a strongly constructed fence, boarding or barricade not less than 1.8 m high shall be erected between the site and the *public way* or open sides of a construction site.

2) Barricades shall have a reasonably smooth surface facing the *public way* and shall be without openings, except those required for access.

3) Access openings through barricades shall be equipped with gates that shall be

a) kept closed and locked when the site is unattended, and

b) maintained in place until completion of the construction or demolition activity.



## Section 8.2. Protection of the Public

### 8.2.1. Fencing and Barricades

#### 8.2.1.1. Covered Way Exceptions

1) Where the construction may constitute a hazard to the public, work shall not commence on the construction, alteration or repair of a *building* until a covered way has been provided as described in Article 8.2.1.2. to protect the public, except where

- a) the work is done within a solid enclosure,
- b) the *building* is at a distance of 2 m or more from a *public way* used by pedestrians, or
- c) site conditions warrant a distance greater than provided in Clause (b).

#### 8.2.1.2. Covered Way Construction

- 1) A covered way shall
  - a) have a clear height of not less than 2.5 m,
  - b) have a clear width of not less than 1.5 m or the width of the *public way*, whichever is the lesser,
  - c) be designed and constructed to support safely all loads that may be reasonably expected to be applied to it, but in no case less than 2.4 kPa on the roof,
  - d) have a weathertight roof sloped towards the site or, if flat, be equipped with a splash board not less than 300 mm high on the *street* side,
  - e) be totally enclosed on the site side with a structure having a reasonably smooth surface facing the *public way*,
  - f) have a railing 1 070 mm high on the *street* side where the covered way is supported by posts on the *street* side, and
  - g) be adequately lighted when the *public way* is lighted.

#### 8.2.1.3. Fencing, Boarding or Barricades

1) When a construction or demolition activity may constitute a hazard to the public and is located 2 m or more from a *public way*, a strongly constructed fence, boarding or barricade not less than 1.8 m high shall be erected between the site and the *public way* or open sides of a construction site.

2) Barricades shall have a reasonably smooth surface facing the *public way* and shall be without openings, except those required for access.

3) Access openings through barricades shall be equipped with gates that shall be

- a) kept closed and locked when the site is unattended, and
- b) maintained in place until completion of the construction or demolition activity.

#### 8.2.1.4. Special Hazards

1) Where any special hazard exists from which it is not possible to protect the public by other means, persons shall be employed to prevent the public from entering the danger zone at any time of the day or night.

#### 8.2.1.5. Work Shutdown

1) When work on a construction site is suspended or ceases so that it will not be occupied during normal working hours, the hazardous part of the construction site shall be protected by

- a) covering all windows, doors and other openings located within 3 m of the ground which may give access to the *building* with a securely fastened barricade, or
- b) a fence or barricade constructed according to the requirements of Article 8.2.1.3.

## **8.2.2. Excavation**

### **8.2.2.1. Water Removal**

- 1) *Excavations* shall be kept reasonably clear of water.

### **8.2.2.2. Protection of Adjoining Property**

- 1) If the stability of adjoining *buildings* may be endangered by the work of excavating, adequate underpinning, shoring and bracing shall be provided to prevent
  - a) damage to, or movement of, any part of the adjoining *building*, and
  - b) the creation of a hazard to the public.

## **8.2.3. Use of Streets or Public Property**

### **8.2.3.1. Safe Passage Past Site**

- 1) Except as provided in Article 8.2.3.2., provisions shall be made at all times for the safe passage of pedestrian and vehicular traffic past the site.
- 2) Material or equipment shall not be placed on any *street* or other public property except as authorized.
- 3) Except as provided in Sentence (4), where a sidewalk exists adjacent to the site it shall be kept clear of obstructions at all times.
- 4) Where construction operations necessitate the obstruction of a sidewalk, a temporary sidewalk shall be provided and it shall be kept clear of obstruction at all times.

### **8.2.3.2. Overhead Activities**

- 1) Operations such as the hoisting of major components onto a tall *building* or other overhead activities that constitute a hazard to pedestrians below from which the public cannot be protected by barricades, covered ways or similar means shall not be carried out until the *street* or other *public way* is closed.

### **8.2.3.3. Barricades**

- 1) *Excavations* in *streets* or public property shall
  - a) be adequately barricaded, and
  - b) have warning signs or lights installed on each section of the barricades referred to in Clause (a).

### **8.2.3.4. Restoration and Repair**

- 1) All sidewalks, *streets* or other public property that have been damaged shall be restored to a safe condition.
- 2) All obstructions on sidewalks, *streets* or other public property shall be removed when the need for such obstructions is ended.

### **8.2.3.5. Warning Lights**

- 1) Warning lights shall be placed and shall be in operation during the hours of darkness at all obstructions on *streets* or other *public ways*.

## **8.2.4. Direction of Vehicular Traffic**

### **8.2.4.1. Hazards to Vehicular Traffic**

- 1) Where a hazard to vehicular traffic on a *public way* is created by work on a construction site, the following shall be provided to direct the traffic:
  - a) one or more workers,
  - b) warning signs,
  - c) barriers,

- d) lane control devices, or
- e) flashing lights or flares located at a suitable distance from the hazard.

#### **8.2.4.2. Flags Used for Directing Traffic**

- 1) A flag used to direct traffic shall be
  - a) red,
  - b) not less than 450 mm by 500 mm,
  - c) mounted on a staff not less than 1 m long, with the long side of the flag attached securely to the staff along its entire length, and
  - d) maintained in a clean and untornd condition when being used.

#### **8.2.4.3. Signs Used for Directing Traffic**

- 1) A sign used to direct traffic shall be
  - a) diamond-shaped and of material not less rigid than 6 mm thick plywood,
  - b) not less than 450 mm by 450 mm in size and mounted at one corner on a substantial pole not less than 1.2 m long,
  - c) red on one side with black corner areas so that the red area is a regular 8-sided figure, and with the word “STOP” in clearly distinguishable white letters not less than 150 mm high located centrally on the sign,
  - d) yellow on the other side with the word “SLOW” in clearly distinguishable black letters not less than 150 mm high located centrally on the sign, or symbols recognized by the International Traffic Code, and
  - e) maintained in a clean condition when being used.

#### **8.2.4.4. Worker Directing Traffic**

- 1) A worker who is directing traffic shall
  - a) be equipped as required by Article 8.2.4.5.,
  - b) be instructed in the signals to be used in controlling traffic,
  - c) be provided with a copy of written instructions on the correct methods for traffic direction, and
  - d) direct traffic by using either a flag or sign.

#### **8.2.4.5. Clothing While Directing Traffic**

- 1) A worker while directing traffic shall wear the following clothing which shall be fluorescent and coloured either blaze orange or red:
  - a) a vest, or
  - b) sleeves that extend from above the elbow to the wrist.

### **8.2.5. Waste Material**

#### **8.2.5.1. Control of Waste Material**

- 1) Waste material or other material shall not be permitted to fall freely from one *storey* to another.

#### **8.2.5.2. Removal of Waste Material**

- 1) Waste material shall be removed as quickly as possible by means of
  - a) appropriate containers,
  - b) an enclosed shaft or chute conforming to Sentence 8.2.5.4.(1), or
  - c) a hoisting apparatus if large pieces or objects are involved.

**8.2.5.3. Enclosures for Waste Material**

- 1) Waste material cleared as provided in Sentence 8.2.5.2.(1) shall be deposited in an enclosure
  - a) so arranged as to prevent waste material from being projected beyond the confines of the enclosure, and
  - b) not accessible to the public.

**8.2.5.4. Chutes for Waste Material**

- 1) The chute described in Clause 8.2.5.2.(1)(b) shall be closed if it is inclined more than 45° to the horizontal.

## Debbie Johnstone

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**From:** Jesse Girgulis  
**Sent:** Tuesday, April 30, 2024 2:27 PM  
**To:** info@gillelectric.ca  
**Cc:** **Redaction S.22**  
**Subject:** BP021501 - 1407 Bishop road  
**Attachments:** General covenant registration process-revised-17Dec2020.docx; Terms of Instrument - Restrictive Covenant for Pumping - TEMPLATE.docx

Good Afternoon Ajaib and **s.22**

**Please confirm receipt of this email.** Digital revisions of drawings can be emailed to me for a quick review prior to printing in case there are other items of note to be corrected before printing.

**Permit Number: BP021501**  
**Project Address: 1407 Bishop road, White Rock, BC**  
**Date: April 30, 2024**

This is Jesse, Plans Examiner from the City of White Rock Building Department, contacting you regarding your building permit application.

Your project is under review and there are some outstanding documents & design items of note we require to issue a building permit, and they are listed below. Further review will be conducted once items mentioned in below email are addressed.

**Scope of Project:** To construct a single-family dwelling with a secondary suite and attached garage. Access and parking for the principal residence and suite will be from **Magdalen avenue and Bishop road.**

The following comments are to identify any issues that do not comply with BC Building Code 2024 and City of White Rock Zoning Bylaws, as well as to request clarification of information in the submitted documentation and drawings. All items must be addressed before issuance of the Permit.

### Documentation:

1. Pumping covenant will need to be registered on title. Please see attachments for process.
2. Geotechnical schedule B is missing CRP initials.

### Architectural Deficiencies:

3. Mechanical room will need a floor drain.
4. Please add smoke alarms to the theatre and office.
5. Will there be a dishwasher in the secondary suite?
6. Outdoor bar sink is required to have insulated lines to protect freezing.
7. Topographical survey list ANG as 68.826m making maximum build elevation 76.526m. Architectural plans should match.
8. Rear setback shows veranda posts encroaching on setback. This is considered part of the building. Revision in this area is needed. Perhaps cantilever or brace back to building?

9. It looks like there is a typo under lot coverage calculations regarding the veranda. Please revise.
10. Ensure minimum height clearance is achieved at the main stairs below the office.
11. Review South elevation spatial calculation as maximum permitted openings should be 14%. Not 16%.
12. Engineering will have to approve a 2<sup>nd</sup> driveway for the suite parking space.

**Note: Demolition of existing structure must be completed with DEMO and TMP permits before your BP can be issued. Follow up with Jason [jbirkland@whiterockcity.ca](mailto:jbirkland@whiterockcity.ca) regarding finalizing your Demo Permit.**

Tree Management Permit (TMP) department is separate from the Building Permits department, and as such they will have their own requirements to be addressed. Check your emails for their communication. Your Building Permit cannot be issued until a TMP has been approved for construction. For TMP See Email from [emix@whiterockcity.ca](mailto:emix@whiterockcity.ca). Additionally, the Engineering department is also separate from the Building department and they will have their own requirements that need to be addressed before our Building Permit can be issued. Check for emails from Alan - [amarkovic@whiterockcity.ca](mailto:amarkovic@whiterockcity.ca).

**Important:** For above, please provide an explanation (**pointwise written response**) as to how you have resolved these deficiencies and **indicate where within the revised drawing set these deficiencies are addressed – Revision Clouds\*\***.

If any further revisions are proposed for this project beyond what is listed above, they must be identified and communicated to the Building Official for additional review.

Thank you,

**Jesse Girgulis**  
**Building Official I | City of White Rock**  
15322 Buena Vista Avenue, White Rock, BC V4B 1Y6  
Tel 604.541.2295 | [www.whiterockcity.ca](http://www.whiterockcity.ca)



## Covenant Registration Process

1. The owner's solicitor prepares the covenant using the template(s) provided.
2. Please forward a draft copy of the prepared covenant - Form C and filled out covenant template(s) - to the Plans Examiner - **along with a signed cover letter for review.**
3. Once the Plans Examiner has reviewed the covenant with cover letter and provided confirmation the covenant is ready for final signatures, 3 copies of the signed covenant would be dropped off at City Hall with attention to Plans Examiner.
4. The documents then will be forwarded to the City Clerk's Department by the Plan Examiner after review.
5. The City Clerk's Department will contact the owner's solicitor directly. All further correspondence will be between the City Clerk's Department and the owner's solicitor.
6. The owner's solicitor is responsible for the registration of the covenant with the BC Land Title Office.
7. An **original registered document**, together with an **updated title search indicating a LTO registration number**, is required to be forwarded to the City Clerk's office for filing.
8. A **copy of the registered covenant** with an **updated title search indicating a LTO registration number** is required to be provided to the Plans Examiner prior to BP issuance.

**TERMS OF INSTRUMENT - PART 2**

**BETWEEN:**

(the "Developer")

**AND:**

**THE CORPORATION OF THE CITY OF WHITE ROCK,**  
a municipal corporation incorporated under the local government act,  
15322 Buena Vista Avenue, White Rock, British Columbia,  
V4B 1Y6

(the "Municipality")

**WHEREAS:**

- A. The Developer is the owner of or has an equity of redemption in that parcel of land and premises situate in the City of White Rock, in the Province of British Columbia, and more particularly described as:

Parcel Identifier:

Lot

(the "Lands")

- B. Section 219 of the *Land Title Act* provides, inter alia, that a covenant, whether of a negative or positive nature, in respect of the use of land or the use of a building on or to be erected on land, that land is or is not to be built on or that land is not to be subdivided except in accordance with the covenant, in favour of a Municipality or the Crown, may be registered as a charge against the title to the land; and
- C. The building constructed or to be constructed on the Lands is or is proposed to be constructed below the 100 year hydraulic grade line for the Municipality's storm drainage system and consequently may be subject to flooding and requires a pump system to bring

storm water and sanitary sewer flows from the building up to a level that will meet the municipal servicing by gravity.

**NOW THEREFORE THIS AGREEMENT WITNESSES** that pursuant to Section 219 of the *Land Title Act*, and in consideration of the premises and the sum of One Dollar (\$1.00) now paid to the Developer by the Municipality (the receipt and sufficiency whereof is hereby acknowledged by the Developer), the parties hereto covenant and agree each with the other as follows:

**1. THE DEVELOPER COVENANTS, ACKNOWLEDGES AND AGREES** with the Municipality that:

- (a) the Lands shall not be built on except in accordance with this Agreement;
- (b) the Developer will construct, or cause to be constructed, one or more pumps, or other pumping mechanisms and a backflow preventer (collectively called the "Pump System"), for storm water and sanitary sewer that have been designed and inspected by a professional engineer for connecting the sanitary sewer and storm sewer services to the municipal servicing, all at the Developer's sole cost;
- (c) the Pump System upon completion will remain in the ownership of the Developer, to be perpetually operated, maintained in good working order, repaired and replaced when necessary by the Developer, at no cost to the Municipality;
- (d) the Developer has been advised that:
  - (i) the Lands and proposed building are, or could reasonably be expected to be, subject to flooding; and,
  - (ii) the proposed building basement elevations are below the minimum basement elevation calculated from the 100 year hydraulic grade line for the Municipality's storm drainage system and specified by the Developer's engineer and the Municipality (the "minimum basement elevation") and consequently may be subject to flooding;
- (e) the Developer shall save harmless and effectually indemnify the Municipality against all actions and proceedings, costs, damages, expenses, claims and demands whatsoever and by whomever brought against the City by reason of
  - (i) the issuance of a building permit and approval of final inspection covering the Lands and the construction, reconstruction, alteration or placement of any building or structure upon the Lands;
  - (ii) any damages to the premises or their contents or any personal injury caused directly or indirectly by flooding or erosion resulting from the construction of any building on the Lands below the minimum basement elevation and

below the elevations for which the Municipality's storm drainage system was designed; or

- (iii) the granting or existence of this Agreement, the performance by the Developer of this Agreement, or any default of the Developer under or in respect of this Agreement;
- (f) in the event any person is injured, or the Lands, or any building or structure or any part or contents thereof located on the Lands is damaged, by flooding or erosion, the Developer shall not commence any legal proceedings or third party proceedings against the Municipality related to such injury or damage, AND the Developer hereby releases the Municipality from liability for any such claims which the Developer now has or hereafter may have;
- (g) the Developer will pay to the Municipality, immediately after execution of this Agreement, the legal fees incurred by the Municipality in the preparation and registration of this Agreement; and
- (h) the Developer will, at the expense of the Developer, do or cause to be done all acts reasonably necessary to grant priority to this Agreement over all charges and encumbrances which may have been registered against the title to the Lands in the New Westminster Land Title Office save and except those specifically approved in writing by the Municipality or in favour of the Municipality.

2. **IT IS MUTUALLY UNDERSTOOD**, agreed and declared by and between the parties hereto that:

- (a) nothing contained or implied herein shall prejudice or affect the rights and powers of the Municipality in the exercise of its functions under any public and private statutes, by-laws, orders and regulations, all of which may be fully and effectively exercised in relation to the Lands as if this Agreement had not been executed and delivered by the Developer;
- (b) the covenants set forth herein shall charge the Lands pursuant to Section 219 of the *Land Title Act* and shall be covenants the burden of which shall run with the Lands. It is further expressly agreed that the benefit of all covenants made by the Developer herein shall accrue solely to the Municipality and that this Agreement may be modified by agreement of the Municipality with the Developer, or discharged by the Municipality, pursuant to the provisions of Section 219(9) of the *Land Title Act*;
- (c) wherever the singular or masculine is used herein, the same shall be construed as meaning the plural, feminine or the body corporate or politic where the context or the parties so require; and, where the Developer consists of more than one person, the term "Developer" shall mean all such persons jointly and severally;
- (d) this Agreement shall endure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors and assigns;

- (e) this Agreement is the entire agreement between the parties with respect to its subject; and
- (f) the parties hereto shall do and cause to be done all things and execute and cause to be executed all documents which may be necessary to give proper effect to the intention of this Agreement.

As evidence of their agreement to be bound by the above terms, the parties have executed and delivered this Agreement by executing Part 1 of the *Land Title Act* Form C to which this Agreement is attached and which forms part of this Agreement.

MEMORANDUM AS TO ENCUMBRANCES, LIENS AND INTERESTS

Mortgage \_\_\_\_\_ (the "Charge") in favour of \_\_\_\_\_ (the "Lender")

CONSENT

IN CONSIDERATION of ONE (\$1.00) DOLLAR now paid to the Lender by the City (the receipt of which is hereby acknowledged), the Lender covenants and agrees with the City as follows:

The Lender, being the holder of the encumbrance or entitled to the lien or interest referred to in the memorandum above written, hereby consents to the registration of the within agreement. The Lender further covenants and agrees that the same will be binding upon its interest in or charge upon the applicable and will be an encumbrance upon the lot prior to the Charge and in the same manner and to the same effect as if it had been dated and registered prior to the Charge.

## Debbie Johnstone

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**From:** Alan Markovic  
**Sent:** Monday, July 8, 2024 2:31 PM  
**To:** Gill Electric  
**Cc:** **Redaction S.22**  
**Subject:** FW: 1407 Bishop Road - REQUEST FOR HARD COPIES  
**Attachments:** 1407 BISHOP RD Revised Drawings 2024-05-07.pdf; 2024-05-23\_G-2406\_1407 BISHOP RD.pdf; BC Hydro Connection Request Updated\_May 17.pdf; SANITARY CONNECTION PROFILE.pdf; SHEET 1.pdf; STORM CONNECTION PROFILE.pdf; WATER CONNECTION PROFILE.pdf

Hello,

Please provide (2) plan sized hard copies of each of the drawings attached to our office at 877 Keil Street. Civil drawings are to be signed and sealed. Profile drawings can be submitted in 11x17 format. Please let me know if you have any questions.

Regards,

**ALAN MARKOVIC**  
Technical Assistant, City of White Rock  
877 Keil Street, White Rock, BC V4B 4V6  
Tel: 604-541-2189 | [www.whiterockcity.ca](http://www.whiterockcity.ca)



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**From:** KWL Consultant <KWLconsultant@whiterockcity.ca>  
**Sent:** June 5, 2024 8:59 AM  
**To:** Alan Markovic <AMarkovic@whiterockcity.ca>  
**Subject:** 1407 Bishop Road - Final Lot Servicing Review

Hi Alan,

1407 Bishop Road is ready for final review. Please let me know if you have any questions!

Cheers,

Andrea



City of White Rock  
 15322 Buena Vista Ave  
 White Rock, BC V4B 1Y6  
 whiterockcity.ca

# Agent Authorization Form

Application Type(s):	New construction SFD
Site Address(es):	1407 Bishop RD White Rock, BC
PID(s):	003-353-516
Legal Description(s):	Lot 261 Section 9 TOWNSHIP 1 New Westminster District Plan 41968

This document shall serve to notify the City of White Rock ("City") that I am / we are the legal owner(s) of the property described above and do authorize the person indicated below ("Agent") to act on my / our behalf on all matters pertaining to the stated application type(s) for the above referenced property/ies. In addition, I / we have read and understood the application requirements for the above application(s) and authorize the Agent to act on our behalf.

All registered property owners shall sign this Authorization Form. Company-owned properties must be represented by Agents. Use additional sheets if necessary. Changes in ownership will require the submission of new Authorization Forms.

Name of Property Owner(s):	Redaction S.22	
If company-owned, please also provide a contact name:		
Mailing Address:	Redaction S.22	
Main & Cell Phone Number:	Redaction S.22	RECEIVED
E-Mail Address:	Redaction S.22	MAR 28 2024

Name of Agent:	Ajaib Gill	PLANNING & DEVELOPMENT CITY OF WHITE ROCK
Company Name (if applicable):		
Mailing Address:	Redaction S.22	
Main & Cell Phone Number:	Redaction S.22	
E-Mail Address:	info@gillelectric.ca	

I hereby consent ...	Please sign Below:	Date (YY/MM/DD)
Property Owner:	Redaction S.22	
Property Owner:	Redaction S.22	
Property Owner:	Redaction S.22	
Authorized Agent:	Redaction S.22	

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MAR 28 2024

# Application for Building Permit



PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

Planning and Development Services  
15322 Buena Vista Ave., White Rock, B.C. V4B 1Y6  
P: 604 541 2149 | F: 604 541 2153 | [www.whiterockcity.ca](http://www.whiterockcity.ca)

Folder # BP021501

Access Code # \_\_\_\_\_

Date: \_\_\_\_\_

Landslide Area:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Development Permit Area:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Board of Variance:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Floodplain:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Pumping Required	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Demolition Permit:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

I hereby apply under the provisions of "White Rock Building By-Law" and amendments thereto, for permission to build/alter the following address. Copy of Plans for the Proposed Building or Alteration to Accompany this Application.

### PROPERTY INFORMATION

Civic Address: 1407 Bishop RD White Rock, BC V4B 2P1

Zoning: RS-1 Usage of Property: SFD  Multi  LUC: Yes  No

Legal Description: Lot 261 Section 9 Township 1 Roll number: \_\_\_\_\_  
New Westminster District Plan 41968

Description of Work: New Construction Project Value: \$ 850,000

### OWNER INFORMATION

Name on Title: **Redaction S.22**

Address of Owner: **Redaction S.22**

Owner's Phone: **Redaction S.22** Owner's Email: **Redaction S.22**

### BUILDER INFORMATION

Name and address of builder or agent: Ajaib Gill (South Rock Custom Home Builders)

Phone: **s.22** Email: info@gillelectric.ca

Business Licence #: 24213

I agree to conform to all requirements of The City of White Rock Bylaws

Print Applicant Name: **Redaction S.22**

Signature of Applicant: **s.22**

The approval of the plans and the issuance of a permit shall not in any way relieve the owner of any building or structure from full responsibility for carrying out the work or having the work carried out in accordance with the requirements of all the applicable by-laws of the Corporation of the City of White Rock.

<b>Building Permit Fees</b>	
Building Permit	
Secondary Suite	
Microfiche	
<b>Total</b>	

<u><b>Plans Examiner Information</b></u>
<p><b>Maximum Building Height:</b> _____</p> <p><b>Angle of Containment:</b> _____</p> <p><b>Comments:</b> _____</p>



BC STEP CODE COMPLIANCE CHECKLIST PERFORMANCE PATHS FOR PART 9 BUILDINGS



A: PROJECT INFORMATION

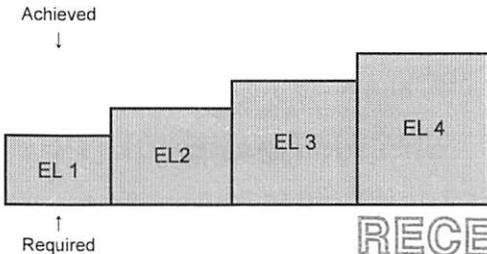
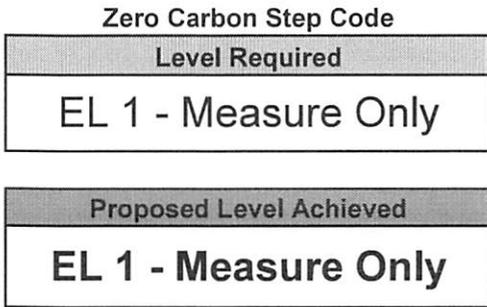
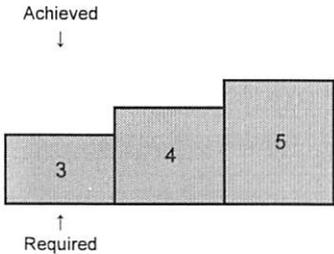
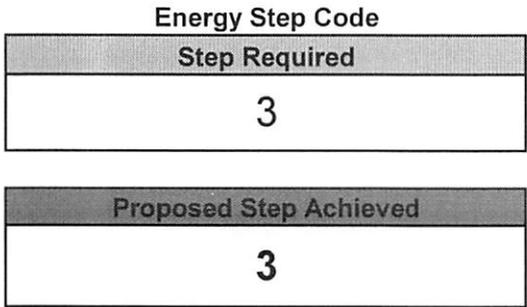
Building Permit #:	
Builder:	South Rock Home Builders Ltd
Project Address:	1407 Bishop Road
Municipality / District:	White Rock
Postal Code:	V4B3K4
PID or Legal Description:	003-353-516

Pre Construction

Building Type	Single Detached w/Secondary Suite
# of Dwelling Units:	2

B: CODE COMPLIANCE SUMMARY

BC Building Code Performance Compliance Path: 9.36.6. BC Energy Step Code ERS



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MAR 28 2024

PLANNING & DEVELOPMENT CITY OF WHITE ROCK

Based on info provided by the builder & the following drawings:

Plan Author	Plans By Design
Plan Version	Permit
Plan Date	1/20/2024

C: COMPLETED BY

Full Name (Print):	Satnam Singh	Date (YYYY-MM-DD):	1/24/2024
Company Name:	Cantech Energy Advisors Ltd	Service Organisation:	datech Energy Manager
Phone:	6049089044	Energy Advisor ID #:	3417
Address:	5135 184 Street, Surrey, BC V3Z1B5	CODECO placed in Field 8 of H2K x	
Email:	info@cantechenergy.ca		

P File # 3417P40035

**D: BUILDING CHARACTERISTICS SUMMARY**

	Details (Assembly / System Type / Fuel Type / Etc.)	Average Effective RSI		
<b>Roof / Ceilings</b>	Flat/Vault Roof: TJI/Truss @16" o.c. w/ R48 Batt	RSI 8.11		
	FlatDeckRoof: TJI/Truss @16" o.c. w/ R28 Batt	RSI 4.71		
	Suspended Slab: Metal channel@24" o.c. R28 Rigid insulation	RSI 4.86		
<b>Above Grade Walls</b>	2x6@16" o.c. R24 Batt, Rain Screen	RSI 3.45		
<b>Rim Joists / Floor Headers and Lintels</b>	Rim Joist, R24 Batt, Rain Screen	RSI 4.23		
<b>Floors Over Unheated Space</b>	11-7/8" TJI@16" o.c. w/ R28 Batt	RSI 5.37		
<b>Walls Below Grade</b>	FDN Walls: 8" Conc., 2x4@16-R14 Batt	RSI 1.93		
<b>Slabs</b>	R12 rigid insulation, below the entire slab and slab edge/end	RSI 2.11		
		<b>Performance Values</b>		
<b>Windows and glazed doors</b>	Double Glaze, Casement, LowE, Argon Gas	<b>USI</b>	<b>SHGC</b>	
		1.40	0.25	
<b>Doors</b>	Fiberglass, Foam core, U1.8 or lower	<b>USI</b>	1.80	
<b>Air Barrier System &amp; Location</b>	Interior-6mmPoly-sealed&taped	<b>ACH</b>	2.50	
		<b>NLA</b>	1.13	
		<b>NLR</b>	0.88	
<b>Space Heating/ Cooling</b>	Principal	N.GasCondensing BoilerRadiantHeat	<b>AFUE</b>	0.90
		Cooling: Air Source Heat Pump	<b>SEER</b>	14.00
	Supplementary	Suite: Radiant Heat	<b>AFUE</b>	0.90
			<b>HSPF</b>	8.20
<b>Domestic Hot Water</b>	Indirect Heat Water Tank	<b>%Eff</b>	0.82	
<b>Ventilation</b>	Suite: Passive Vent, No heat recovery	<b>% EFF</b>	<b>L/s</b>	
	HRV ventilation rate: 90cfm; 66% sensible heat recovery @ 0C	0.66	42.48	
<b>Other</b>				
<b>Fossil Fuels</b>	The building IS designed to use fossil fuels or has infrastructure for it			
	Natural Gas			

**E: 9.36.5. ENERGY PERFORMANCE COMPLIANCE**

Complete this section if using the Energy Performance Compliance Path in Subsection 9.36.5.

Proposed House Energy Consumption (GJ/year)	
HVAC	
DHW Heating	
<b>SUM</b>	<b>0</b>

Reference House Rated Energy Target (GJ/year)	
HVAC	
DHW Heating	
<b>SUM</b>	<b>0</b>

The airtightness value used in the energy model calculations for the Proposed house is: \_\_\_\_\_  
 Or Testing Target: 2.50

The above calculation was performed in compliance with Subsection 9.36.5. of Division B: \_\_\_\_\_

**F: 9.36.6. ENERGY STEP CODE COMPLIANCE**

Proposed House Rated Energy Consumption (GJ/year): 36      Reference House Rated Energy Target (GJ/year): 72

			Proposed Calculations	
Proposed House Metrics	Unit	Proposed Step Requirement	Proposed House Result	Proposed House Pass or Fail
Step Code Level	Step 3, 4 or 5	<b>3</b>		
Mechanical Energy Use Intensity (MEUI)	kWh/(m <sup>2</sup> ·year)	55 (max)	27	Pass
% Improvement	%	20 (min)	50	
Thermal Energy Demand (TEDI)	kWh/(m <sup>2</sup> ·year)	33 (max)	33	Pass
% Heat Loss Reduction	%	10 (min)	10	
Airtightness in Air Changes per Hour at 50 Pa differential	ACH @ 50 Pa	2.5 (max)	2.50	Pass
Normalized Leakage Area (NLA <sub>10</sub> )	10 Pa (cm <sup>2</sup> /m <sup>2</sup> )	1.2 (max)	1.13	
Normalized Leakage Rate (NLR <sub>50</sub> )	L/s/m <sup>2</sup>	0.89 (max)	0.88	
<b>Step Code Requirements Met:</b>				<b>Yes</b>

Software Used: HOT2000

Version: 11.11b

Heated Floor Area (m<sup>2</sup>) 376.40

Climate Data (Location): White Rock

Building Volume (m<sup>3</sup>) 1126.61

Degree Days Below 18°C (HDD): 2644

Building Surface Area (m<sup>2</sup>) 892.59

FWDR: 17.9%

% Of Space Cooled More than 50%

**G: ZERO CARBON STEP CODE**

			Proposed Calculations	
Proposed House Metrics	Unit	Proposed Level Requirement	Proposed House Result	Proposed House Pass or Fail
Zero Carbon Step Code Level	EL-1 - EL-4	EL 1 - Measure Only		
Total GHG	kg CO <sub>2e</sub> / year	NA (max)	1097	Pass
CO <sub>2e</sub> per floor area with max	Per Floor area	kg CO <sub>2e</sub> /m <sup>2</sup> /year	2.9	Pass
	Max	kg CO <sub>2e</sub>	1097	
Prescriptive	Heating	NA	Carbon	Pass
	Hot Water	NA	Carbon	
	All building systems, equipment and appliances	NA	Carbon	
<b>Target Reached:</b>				<b>Yes</b>

To <b>Redaction S.22</b>	Date	04/02/2024	14:03:32
HOMEOWNER	From	04/02/2024 14:03:32	
Fax	Phone	1-888-822-6555	
Ticket No. <b>20241307737</b>	Pages	13	

This is your natural gas BC One Call ticket.

PLEASE CALL 1-888-822-6555 IF ADDITIONAL INFORMATION IS REQUIRED.

**021501**

### Your BC One Call Ticket

NOTICE OF INTENT TO EXCAVATE Reason Code:

STANDARD

Original Call Date: 3/27/2024 3:00:00 PM

REGULAR

Work To Begin Date: 4/3/2024

Company: HOMEOWNER

Contact Name: **Redaction S.22**

Contact Phone: **Redaction S.22**

Cell:

Pager:

Alternate Contact:

Email: **Redaction S.22**

Alternate Phone:

Fax Phone :

Place : **WHITE ROCK**

Comments:

Address At/From: Address To :

Street: **1407 BISHOP RD**

Nearest Intersecting Street: **MAGDALEN AVE**

Second Intersecting Street:

Additional Dig Information:

EXCAVATIONDEPTH>&GT;3M

EXCAVATIONSIZE>670 SQ M

PROPERTYTYPE>PRIVATE PROPERTY, PUBLIC PROPERTY

PROPERTYDETAIL>RESIDENTIAL, NONE

URBAN

WO/ JOB #

Type Of Work: CONSTRUCTION

DEPTH : 0

LENGTH : 0

WIDTH : 0

MECHANICAL EXCAVATION

**RECEIVED**

APR 04 2024

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

Work being done for: PRIVATE

Also Notified :

ACTIVITY>DEMOLITION

AREAMARKED>FALSE

LANDGRIDS>92G2

DEMO/NEW HOME CONST - ALL AROUND - MACHINE/HAND DIG

TICKET SENT TO :BCHFRV09, BCGDIS01

ATTENTION: DO NOT RELY ON THIS INFORMATION ALONE. You must manually dig to locate gas lines before using excavation machinery. All locations are shown approximate only & gas lines built after the date below are not in this information package. FortisBC will not accept responsibility for errors or omissions. Depth of gas line are not available due to possible change of grade.

MAIN ADDRESS SERVED: 1407 Bishop Road  
 SERVICE SIZE: 1/2 "SERVED OFF" MAIN ON: MAGDALENA AVE TAP SIZE: 5/8  
 TRUNK: \_\_\_\_\_ PSIG:  HIGH:  MEDIUM:   
 DISTRICT: White Rock TYPE OF PREMISES: SCO

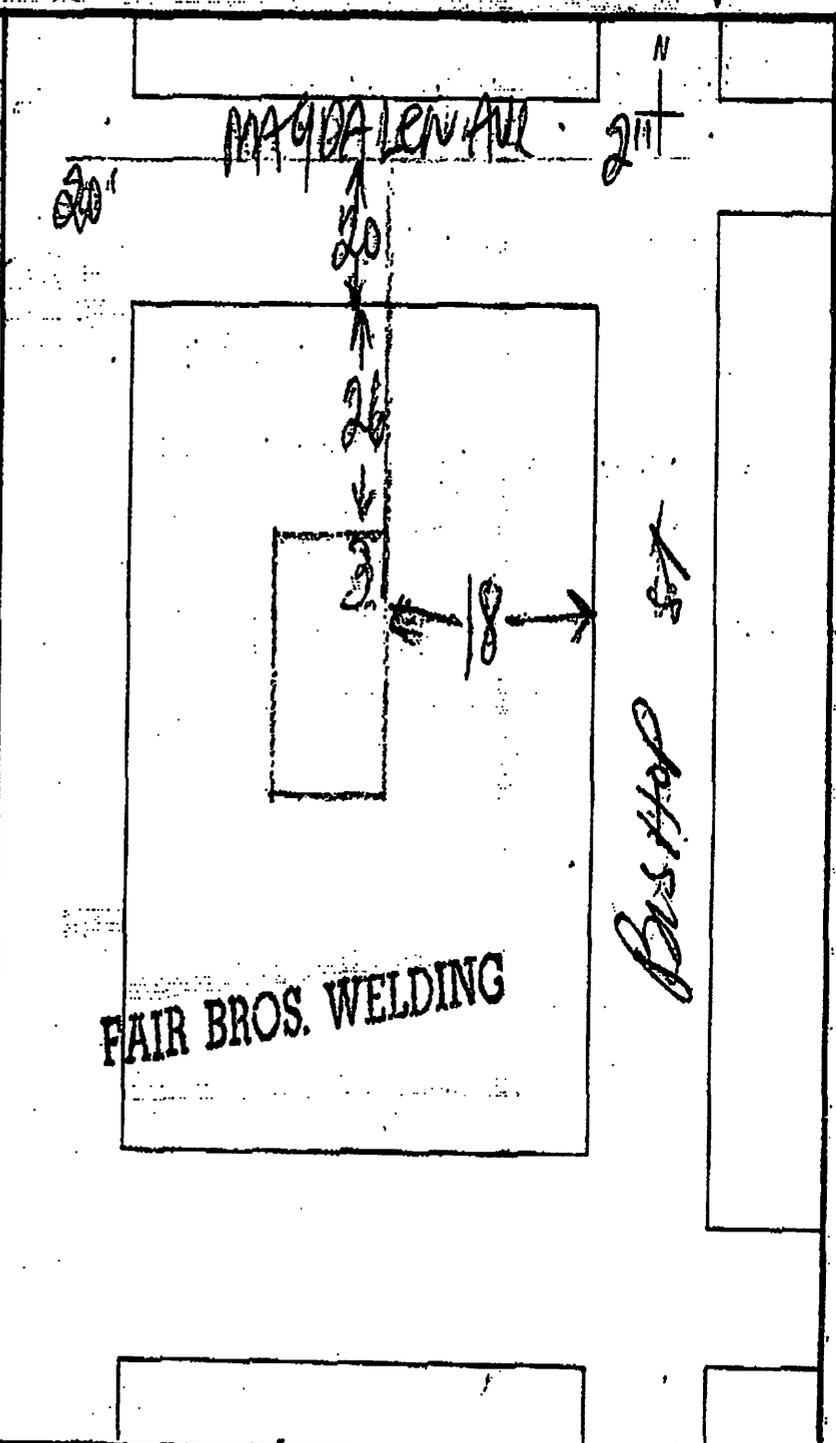
MAIN CORROSION YES  NO   
 SERVICE PIPE MATERIAL: \_\_\_\_\_  
 MAIN TO P.L.: 20 KIT #: 1A  
 VERTICAL FTGE (IF ANY): \_\_\_\_\_ INCLUDES CURB COCK YES  NO   
 P.L. TO BLDG: 26 INCLUDES MAG ANODE YES  NO   
 EXTENDED: \_\_\_\_\_ WEIGHT: \_\_\_\_\_ LBS.  
 RISER: \_\_\_\_\_ DRESSER/CURB COCK: \_\_\_\_\_  
 TOTAL: 52 LOCATION: 1 FT.  
 SCRAP: \_\_\_\_\_ P.L.: 9/5  
 (1/5 OR 0/5)

METER PROTECTION INSTALLED \_\_\_\_\_ POSTS \_\_\_\_\_  
 METER CAGE INSTALLED: YES  NO   
 OLD SERVICE CUT OFF: YES  NO   
 CUT AT MAIN  OTHER \_\_\_\_\_  
 METER(S) #: E 101738  
 INSTALLED  REMOVED  OUTSIDE  I/S   
 READING: 0000

INSPECTION RPT: I HEREBY CERTIFY THAT THE PIPING WAS INSTALLED IN ACCORDANCE WITH AUTHORITY STANDARD PRACTICES AND WAS EXAMINED UNDER AN AIR TEST OF \_\_\_\_\_ PSIG. FOR \_\_\_\_\_ MINS. AND THAT NO LEAKAGE WAS INDICATED.  
 DAY: 9 MONTH: 12 YEAR: 80

FOREMAN: [Signature] SUPVR: [Signature]  
 AUTH. CRFW  CONTRACTOR   
 FURTHER WORK REQUIRED YES  NO

EXPLAIN: \_\_\_\_\_  
 PERCENT CUT: YES  NO

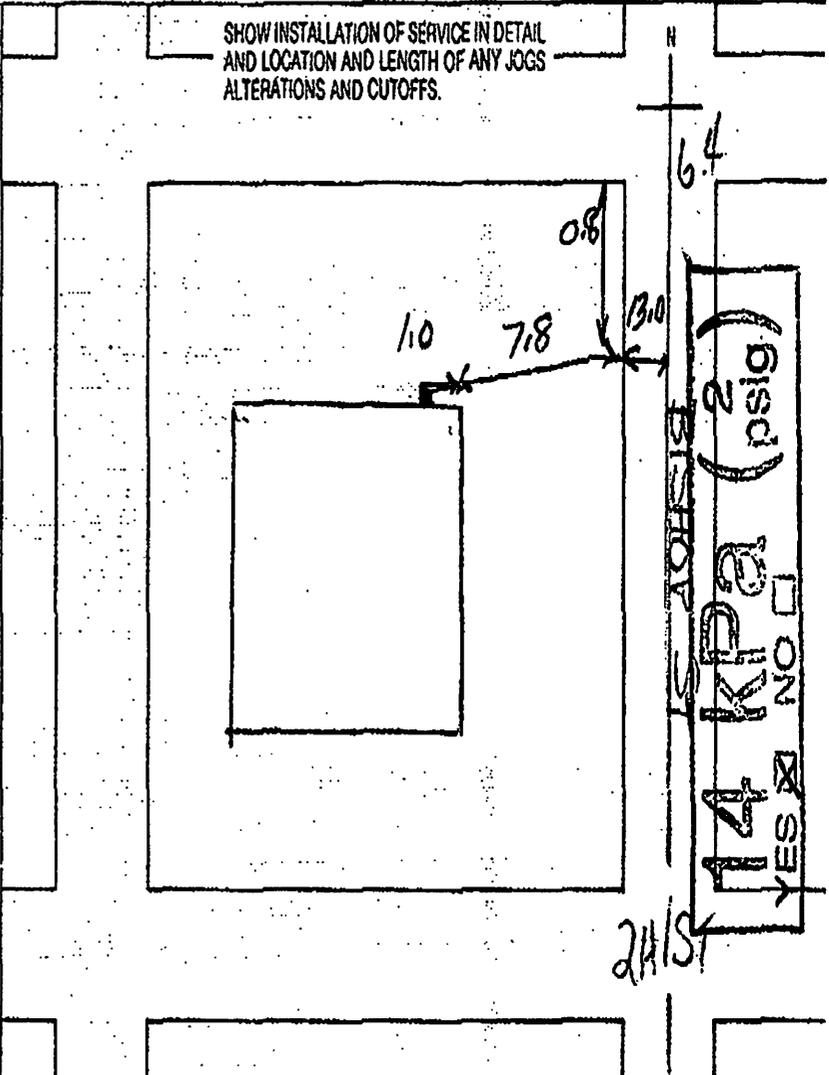


SIZE: 5' X 2' X 4'

ATTENTION: DO NOT RELY ON THIS INFORMATION ALONE. You must manually dig to locate gas lines before using excavation machinery. All locations are shown approximate only & gas lines built after the date below are not in this information package. FortisBC will not accept responsibility for errors or omissions. Depth of gasline are not available due to possible change of grade.

UNIT # \_\_\_\_\_ HOUSE # 1405 ST. DIR. \_\_\_\_\_ ST. NAME Bishop Rd. SUFFIX \_\_\_\_\_ MHC.P. \_\_\_\_\_  
 ADDRESS SERVED \_\_\_\_\_ 1405 Bishop Rd. \_\_\_\_\_ WRK TRANS  TRUNK  (2)  
 HIGH  MED.  LOW   
 MAIN SERVED FROM SIZE 2" OFFSET 6.4 FROM E SIDE OF BISHOP Rd MAT. ST.  CL.  PL.  PE.   
 SERVICE SIZE 1/2 LOC. 0.8 DIR. S FROM NE COR. OF 1405 METHOD OF THE HPSC MAT. ST.  CL.  PE.  TAP SIZE 5/16  
 CURB COCK NO  YES  LOC. \_\_\_\_\_ CASR NO  YES  LG. \_\_\_\_\_ MA. SIZE \_\_\_\_\_ BEL/GR. ENTRY  INSIDE METER

**SERVICE PIPE**  
 LENGTH 13.0 SIZE 1/2  
 PL. BLDG. 7.8  
 JOG \_\_\_\_\_  
 VERT. \_\_\_\_\_  
 EXT. PAST CURB 1.0  
 RISER \_\_\_\_\_  
 TOTAL RUN 2.18  
 SCRAP \_\_\_\_\_  
 INSULATED AT MAIN  PL.   
 TEST & TRANS.   
 NEWAL PART  COMP   
 NOT TAPPED   
 PRERUN TAPPED  WAIR   
 OLD SERVICE CUTOFF YES  NO   
 AT MAIN  OTHER \_\_\_\_\_  
 OLD PIPE REMOVED  NH. \_\_\_\_\_ US \_\_\_\_\_  
 PIPE ABAN. LGTH. \_\_\_\_\_ SIZE \_\_\_\_\_  
 METERS REMOVED \_\_\_\_\_  
 READING \_\_\_\_\_



UGIL \_\_\_\_\_ MA. SIZE \_\_\_\_\_ SLATER   
 CASING \_\_\_\_\_ POSTS \_\_\_\_\_  
 PAVEMENT: SAVED SIDEWALK \_\_\_\_\_ PAVEMENT \_\_\_\_\_  
 PAVE. CUT  TRENCH RUN CUT \_\_\_\_\_ BELL HOLE \_\_\_\_\_  
 NO. OF CUTS 1 AVG. THICKNESS \_\_\_\_\_ CALLED IN YES  NO   
 METER NO. RAZ 48942  
 METER INSTAL. LG. \_\_\_\_\_  
 READING \_\_\_\_\_

INSPECTION REPORT: I HEREBY CERTIFY THAT THE PIPING WAS INSTALLED IN ACCORDANCE WITH AUTHORITY STANDARD PRACTICES AND WAS EXAMINED UNDER AN AIR TEST OF 690 kPa FOR 3 MINS. AND THAT NO LEAKAGE WAS INDICATED.  
 FOREMAN: B. Zuehlke DATE: 9/11-26  
 FURTHER WORK REQ'D: YES  NO  WORK COMPLETED BY CONTRACTOR

PROV. HWY DEPTH CHECKED BY SP19 \_\_\_\_\_ m COVER \_\_\_\_\_  
 SUPERVISOR: [Signature]  
 P.E. INFO \_\_\_\_\_

NOTICE TO CONTRACTORS: B.C. HYDRO & POWER AUTHORITY DOES NOT ACCEPT ANY RESPONSIBILITY FOR ERRORS OR OMISSIONS IN THE LOCATIONS SHOWN FOR EXISTING UNDERGROUND UTILITIES AND STRUCTURES. ALL SUCH LOCATIONS SHOWN ARE APPROXIMATE ONLY AND MUST BE CONFIRMED BY THE USE OF PIPE LOCATOR AND MANUAL DIGGING.

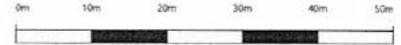
BC1 Ticket: 20241307737  
 Name: **Redaction S.22**  
 Company: HOMEOWNER  
 Phone No.: **Redaction S.22**  
 FAX No.:  
 Email: **Redaction S.22**

Address: 1407 BISHOP RD  
 City: WHITE ROCK

IF WORKZONE IS OUTSIDE OF POLYGON SET ON BC1C WEBSITE PLEASE CONTACT BC1C FOR A CORRECTION

2024-03-28

Scale: 1:1000



BC Hydro does not provide physical locates. Schematic represents BC Hydro owned underground plant only. Private plant is sole responsibility of Property Owner.



THIS PRINT IS PROVIDED FOR GENERAL INFORMATION ONLY

BC Hydro does not accept any responsibility for errors or omissions. The information provided is the most accurate information we have available. Beware that underground electrical systems may exist that have not been record "AS CONSTRUCTED" yet.

The onus is on the operator to hand dig to locate the actual underground utility before any mechanized digging proceeds.

Legend

- distribution underground [Gis]
- Main Switch
- Service Box
- U/G Secondary

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MAR 28 2024

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

November 23, 2023

## Redaction S.22

Re: Board of Variance Decision – November 22, 2023  
BOV23-018, 1407 Bishop Road, White Rock, BC

---

Your requested variance, as per the plans and information presented at the Board of Variance meeting on November 22, 2023, was as follows:

- i. To vary the exterior side lot line from 7.5m to 3.5m based on Section 6.1.6 of the Zoning Bylaw.

**Please be advised that the Board of Variance made the following decision:**

That the appeal be **APPROVED** for variance to Section 6.1.6 of White Rock Zoning Bylaw 2012, No. 2000 to reduce the exterior side lot line from 7.5m to 3.5m.

If you have any questions regarding the above, please contact the undersigned.

Sincerely,



Wayne Berg, RBO, CRBO  
Deputy Director of Planning & Development

cc: Sophia Bihari

**Planning and Development Services**

P: 604.541.2136 | F: 604.541.2153

**City of White Rock**

15322 Buena Vista Avenue, White Rock BC, Canada V4B 1Y6

**WHITE ROCK**  
*My City by the Sea!*

[www.whiterockcity.ca](http://www.whiterockcity.ca)



# Building Permit Application Checklist for New Single Family Dwelling, Duplex or Additions

An appointment is required with a Building Official in order to make a building permit application. To make an appointment please email [building@whiterockcity.ca](mailto:building@whiterockcity.ca) or call 604-541-2149.

RECEIVED

MAR 28 2024

Incomplete Building Permit applications cannot be accepted, it the responsibility of the applicant to ensure that they have all required documentation and submissions prepared for a complete application to be accepted.

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

Civic Address:	1407 Bishop Rd White Rock, BC
Building Permit Number:	

Required Associated Permits	YES	NO
These permits applications are required to be submitted in advance of the Building Permit Application		
Lot Servicing Application Has Been Submitted	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tree Management Permit Application Submitted	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Site Specific Permit Requirements	YES	NO
Property located within the Geotechnical Assessment Area If yes, a Geotechnical report is required that has been prepared in accordance with the "Guideline for Legislated Landslide Assessments for Proposed Residential Developments in BC" EGBC Professional Practice Guide. The submission must include an Appendix D. Landslide Assessment Assurance Statement.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Site located in the Flood Plain Development Permit Area If yes, a Development Permit is required see Official Community Plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Site located in the Ravine and Significant Trees Development Permit Area If yes, a Development Permit is required see Official Community Plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Site located in the Watercourse Development Permit Area If yes, a Development Permit is required see Official Community Plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Required Building Permit Application Documents	Included	N/A
Building Permit Application Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schedule 1 – "Owner's Acknowledgment of Responsibility and Undertakings"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Owner's Authorization Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Land Title Search (dated within 30 days of the date of application)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 original sealed topographical surveys (see next page on details for drawing requirements)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 Sets of architectural or design drawings (see next page on details for drawing)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pre-construction BC Energy Compliance Report (3 pgs). (see next page for more details)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 Sets of original sealed structural drawings	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 sets of original sealed sprinkler drawings with hydraulic calculations (See City of White Rock Fire Sprinkler System Bylaw # 1683 for details)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 sets of original sealed shoring and excavation plans (required if property is within Geotechnical Assessment Area and / or deep foundation excavation)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Original sealed Letters of Assurance (Schedule B for registered professional)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schedule 2 (Form B) – "Proof of Professional Liability Insurance" for each registered	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Certificate of Insurance for each registered professional	<input checked="" type="checkbox"/>	<input type="checkbox"/>
New Homes Registration Form from BC Housing (if applicable)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Original sealed Schedule A from Coordinating Registered Professional (if applicable)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Building Permit Application Fee	<input type="checkbox"/>	<input type="checkbox"/>

Re-Submit to 2024 BCBC

## **REQUIREMENTS OF SURVEY**

All topographical surveys submitted are required to be original sealed from a British Columbia Land Surveyor and are required to show the following:

1. The bearing, dimensions, and area of the parcel taken from the registered subdivision plan;
2. The legal description, civic address and lot area of the parcel;
3. The location and dimensions of all existing and proposed statutory rights of way, easements and setback requirements;
4. The location and dimensions of all existing and proposed buildings or structures on the parcel;
5. Setbacks to the natural boundary of any lake, swamp, pond or watercourse;
6. The existing and finished ground levels to an established datum at or adjacent to the site and the geodetic elevation of the underside of the floor system of a building or structure in floodplain areas;
7. The location, dimension and gradient of parking and driveway access;
8. The proposed building foundation footprint and the average natural grade; which is the average elevation that is determined by measuring at the midpoints of the walls of the four sides of the building or structure. For further clarification please see subsection 4.8 of City of White Rock Zoning Bylaw);
9. A statement on the plan from the British Columbia Land Surveyor that the elevations given on the property are, in the surveyors opinion, natural grades or their estimate of natural grade before a site was altered;
10. Top of wall and bottom of wall geodetic elevations every 10' along retaining walls;
11. The location, dimension of the existing driveway, driveway access, existing retaining walls and stairs on the City boulevard, hydro poles, fire hydrants, curbs, gutters and sidewalk, location of existing storm, sanitary and water connections; and
12. The location, size and type of all trees located on the property, City Boulevard or adjacent to the property in accordance with the City of White Rock Tree Protection Bylaw, 2021, No. 2407.

*"Tree Survey (Inventory)" means a plan illustrating all on-site and off-site trees, including the DBH, drip line, and natural grade elevation at the base of each tree, prepared by a BC Land Surveyor. The Plan must also include existing buildings, structures, service and utility locations, and the extent of any hardened surfaces such as driveways, decking, and stone patios.*

*"off-site tree" means a tree of any size within four (4) metres of the legal boundaries of the lot, including shared trees.*

## **REQUIREMENTS OF ARCHITECTURAL DRAWINGS FOR BUILDING PERMIT APPLICATION**

The purpose of the architectural drawings are to demonstrate compliance with City's Zoning Bylaw as well conformance with applicable construction regulations including the BC Building Code. The quality and detail of the building permit drawings are critical to ensure a timely review of your permit application. All permit drawings are to be **drawn in accordance with an architectural standard**. The following drawings are required for your building permit application and are to show the following (but not limited to):

### **Site Plan:**

1. Site plans are to be drafted to a minimum scale of 1/8" to 1'-0" (or equivalent Metric scale);
2. Show all easements, rights of ways or water courses;
3. Include overall building dimensions of the principle building, any additions and any accessory buildings;
4. Show all setbacks to property lines as well adjacent buildings/structures;
5. Details of decks, projections and/or cantilevers;
6. Top of wall and bottom of wall geodetic elevations every 10' along retaining walls;
7. Finished grades and top of foundation elevations at each corner of the building and finished grades for the side property lines;
8. Show trees and vegetation within four (4) metres of the property and City Boulevard. Including location of tree protection barriers and the location of trees proposed to be removed;
9. A table summarizing conformance of the Zoning Bylaw including (but not limited to): lot coverage calculations, residential gross floor area calculations, setback and proposed building height;
10. Secondary Suites to show 2.5 metres x 5.2 metres parking on site driveway; and
11. Back sloping driveways require a linear trench drain shown on plans connected to the storm system.

### **Civil Site and Details Plan:**

1. Civil Site plans are to be drafted to a minimum scale of 1/8" to 1'-0" (or equivalent Metric scale);
2. Show all easements, rights of ways or water courses;
3. Top of wall and bottom of wall geodetic elevations every 10' along retaining walls;
4. Grading and landscaping of City boulevard;
5. Show the location of the proposed driveway, including details to demonstrate the following:
  - a. Driveway crossing **minimum width 4.5m and maximum 6.0m**;
  - b. Driveway access to slope up minimum 2% from road edge to property line; and
  - c. Driveway from the property line to the garage slab has a maximum of 15% slope.
6. Elevation detail of the driveway from the road edge, property line to the proposed garage slab;
7. Include a centerline profile drawing of the crossing/driveway;
8. Show trees and vegetation within 10m of the property and City Boulevard. Including location of tree protection barriers and the location of trees proposed to be removed; and
9. Show the location of the proposed storm and sanitary service location, including the invert elevation and confirmation of gravity fed system.

### **Foundation and Floor Plans:**

1. Required to be drafted to a minimum scale of 1/4" to 1'-0" (or equivalent Metric scale);
2. Drawings to include foundations with the dimensions of the principle building/addition;
3. Indicate foundation wall thickness, size of footings including pad footings;
4. Show all partitions and bearing walls. Indicate finished/unfinished areas;
5. Label and identify all room uses and sizes, as well as adjacent rooms to the addition/alteration;
6. Show all windows/doors, including the sizes and door swings, and, if applicable, ratings;
7. Identify stairs showing direction of travel, stair dimensions and required handrails and/or guardrails;
8. Show all plumbing fixtures, appliances, hot water tank, fireplaces and heating system (include proposed method of heating, ventilation, and location of equipment);
9. Layout and sizes of all floor, ceiling and roof structural components, including beams and lintels. (If done by a structural engineer, a separate set of structural drawings is required.); and
10. Suites to be labelled on plans including but not limited to; own heating controls, heating type identified, own power panel (not in a fire separation wall), passive air intakes in all bedrooms and one in the living room/kitchen and primary exhaust fan in washroom (2 speed continuous running).

### **Elevations:**

1. Required to be drafted to a minimum scale of 1/4" to 1'-0" (or equivalent Metric scale);
2. Show exterior finish material;
3. All windows, doors, decks, guards, stairs and handrails;
4. Provide spatial separation calculations for each elevation abutting another property;
5. Proposed and existing grades and top of foundation elevations shown at each corner of the building;
6. Include dimensioning of overall building height, including dimensions of floor assemblies and height between floor and ceiling levels;
7. Roof slope - building height of principal & accessory building (elevation of peak & elevation of natural average grade in accordance with the City of White Rock Zoning Bylaw);
8. Show compliance with the angle of containment (45 degree angle drawn at 6.0m from *natural grade* at mid-point of the most southerly wall/ flood construction level) RS-2 & RS-3 Zones.

### **Cross Sections:**

1. Required to be drafted to a minimum scale of 1/4" to 1'-0" (or equivalent Metric scale);
2. Floor to ceiling height of all rooms including crawl/roof spaces;
3. Floor, ceiling, roof and wall assemblies;
4. Sloped / vaulted ceilings and roof decks indicating ventilation and insulation requirements;
5. Footings and foundation walls;
6. Building envelope details for the exterior cladding demonstrating compliance with 9.27 and 9.28 of the BC Building Code;
7. Finished grade, top of foundation, include Maximum Elevation Height as per the City of White Rock Zoning Bylaw; and
8. Proposed method of energy efficiency compliance including location of proposed air barrier.

### **Additional Required Construction Details:**

1. Details to demonstrate compliance with 9.27. of the BC Building Code for cladding assemblies is achieved, including but not limited to;
  - a. Wall to window detail;
  - b. Wall to door detail;
  - c. Wall transitions to different materials;
  - d. Walls intersecting horizontal assemblies such as a roof, balcony, deck etc;
  - e. Penetrations caused by vents, pipes, utility outlets etc.;
  - f. Flashing and caulking details where appropriate;
  - g. Material specifications; and
  - h. Specific code references.
2. Effective RSI calculations and values for assemblies, including wall, ceiling and roof assemblies, as well as suspended slabs are to be provided per Pre-construction report;
3. Demonstration continuity, location and material proposed for the air and vapour membranes; and
4. Wall assemblies with references to Fire Resistance Rating and Sound Transmission Classification Ratings (STC) – Preferable on the basement/suite page. Doors in firewalls to be rated or solid core and self closing.

### **BC Energy Step Code:**

1. Submit BC Energy Step Code Compliance Report – re-construction. (3 pages only);
2. Ensure all building assemblies – *including suspended slabs* – have detailed assembly details and RSI values;
3. **Do Not** submit Hot 2000 calculation sheets. Only submit the 3 pages BC Energy Step Code Compliance Report;
4. Including Reference House and Proposed House.

### **RELATED INFORMATION:**

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#### BC Energy Step Code Requirements | Energy Step Code

[BC Energy Step Code for New Buildings | White Rock, BC \(whiterockcity.ca\)](#)

White Rock Zoning and Development Requirements  
[www.whiterockcity.ca/336/Planning-Development](http://www.whiterockcity.ca/336/Planning-Development) [planning@whiterockcity.ca](mailto:planning@whiterockcity.ca)  
604-541-2136

Technical Safety BC  
Natural Gas & Electrical Inspections  
[www.technicalafetybc.ca/contact-us](http://www.technicalafetybc.ca/contact-us)  
1-866-566-7233

BC Building and Plumbing Codes, Province of B. C. (Free Online Access)  
[www.bccodes.ca](http://www.bccodes.ca)

BC Housing  
[licensinginfo@bchousing.org](mailto:licensinginfo@bchousing.org)

BC One Call [www.bc1c.ca/contractors/](http://www.bc1c.ca/contractors/)  
1-800-474-6886

White Rock Water [water@whiterockcity.ca](mailto:water@whiterockcity.ca) Utility billing inquiries:  
Financial Services Department 604-541-2100

BC Assessment Authority:  
[www.bcassessment.ca](http://www.bcassessment.ca)  
1-866-825-8322

BC Land Title Office  
Land Registrations, Easements, Rights-of-Way  
[www.ltsa.ca](http://www.ltsa.ca)  
604-630-9630 or 1-877-577-5872

BC Hydro [www.bchydro.com](http://www.bchydro.com)  
Call: 1 800 BCHYDRO (1-800-224-9376)

Ministry of Environment  
<http://www2.gov.bc.ca/gov>  
1-800-663-7867 or 604-660-2421

CSIO

**CERTIFICATE OF INSURANCE**

DATE (YY/MM/DD)

23/05/16

**BROKER**  
Axis Insurance Managers Inc.  
#400 - 555 Burrard Street,  
Box 275,  
Vancouver BC V7X 1M8

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policies below.

**BROKER'S CLIENT ID:** BANS&AS-01

**COMPANIES AFFORDING COVERAGE**

COMPANY  
**A** XL Specialty Insurance Company

COMPANY  
**B**

COMPANY  
**C**

COMPANY  
**D**

**INSURED'S FULL NAME AND MAILING ADDRESS**  
Bansal and Associates Consulting Engineer Inc.  
Unit 216, 12899 - 76 Avenue  
Surrey BC V3W 1E6

**COVERAGES**

This is to certify that the policies of insurance listed below have been issued to the insured named above for the policy period indicated, notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain. The insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.

**LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.**

TYPE OF INSURANCE	CO LTR	POLICY NUMBER	POLICY EFFECTIVE DATE (YY/MM/DD)	POLICY EXPIRATION DATE (YY/MM/DD)	LIMITS OF LIABILITY (Canadian dollars unless indicated otherwise)	
<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS MADE OR <input type="checkbox"/> OCCURRENCE PRODUCTS AND / OR COMPLETED OPERATIONS <input type="checkbox"/> EMPLOYER'S LIABILITY <input type="checkbox"/> CROSS LIABILITY <input type="checkbox"/> TENANT'S LEGAL LIABILITY <input type="checkbox"/> NON-OWNED <input checked="" type="checkbox"/> HIRED <input type="checkbox"/> POLLUTION LIABILITY EXTENSION					EACH OCCURRENCE	\$
					GENERAL AGGREGATE	\$
					PRODUCTS - COMP/OP AGG	\$
					PERSONAL INJURY	\$
					TENANT'S LEGAL LIABILITY	\$
					MED EXP (Any one person)	\$
					NON-OWNED AUTO	\$
					OPTIONAL POLLUTION LIABILITY EXTENSION	\$
					(Per Occurrence)	\$
					(Aggregate)	\$
<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> DESCRIBED AUTOMOBILES <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> LEASED AUTOMOBILES  <small>** ALL AUTOMOBILES LEASED IN EXCESS OF 30 DAYS WHERE THE INSURED IS REQUIRED TO PROVIDE INSURANCE</small>					BODILY INJURY PROPERTY DAMAGE COMBINED	\$
					BODILY INJURY (Per person)	\$
					BODILY INJURY (Per accident)	\$
					PROPERTY DAMAGE	\$
<b>EXCESS LIABILITY</b> <input type="checkbox"/> UMBRELLA FORM <input type="checkbox"/> OTHER THAN UMBRELLA FORM <small>(Specify)</small>					EACH OCCURRENCE	\$
					AGGREGATE	\$
<b>OTHER LIABILITY (SPECIFY)</b> Professional Liability Claims Made Basis	A	DPX9971021	23/05/28	24/05/28	Per Claim Annual Aggregate	1,000,000 1,000,000

**ADDITIONAL INSURED**  
N/A  
-  
---

**DESCRIPTION OF OPERATIONS/LOCATIONS/AUTOMOBILES/SPECIAL ITEMS**

**CERTIFICATE HOLDER**

To Whom It May Concern

**CANCELLATION**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 0 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

**SIGNATURE OF AUTHORIZED REPRESENTATIVE**



**PRINT NAME INCLUDING POSITION HELD**

Rob McLeod, CIP, CAIB

**FAX NUMBER**  
604-731-3137

**EMAIL ADDRESS**  
rob.mcleod@axisinsurance.ca

**COMPANY**  
Axis Insurance Managers Inc.

**DATE**  
23/05/16

CSIO CERT (6/00)



NAVACORD<sup>®</sup>

RECEIVED

CERTIFICATE OF INSURANCE

MAR 28 2024

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

Issued to: To Whom It May Concern

Professional Liability Insurance  
Policy CC0070721000

1. NAMED INSURED: SRC ENGINEERING CONSULTANTS LTD.

2. INSURED'S Address: 205-4180 LOUGHEED HWY  
BURNABY BC V5C 6A7

3. POLICY PERIOD: from 21 April 2023 to 21 April 2024  
at 00:01 local time at the INSURED'S address shown above without tacit renewal

4. Limits of Liability: \$ 1,000,000 per CLAIM  
\$ 2,000,000 per POLICY PERIOD

5. DEDUCTIBLE: \$ 50,000 per CLAIM  
\* All amounts shown in Canadian dollars

6. INSURERS: HDI Global Specialty SE Canadian Branch

This is to certify that the policies of insurance listed above have been issued to the insured named above for the policy period indicated, notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain. The insurance afforded by the policies described herein is subject to all terms, exclusions and conditions of such policies.

This Certificate is issued for convenience only. All of the terms and conditions of the policies referred to are contained in the original document which are not modified or amended by this Certificate. With respect to Liability Insurance coverages, where an Aggregate Limit applies, the Certificate Holder is advised that the limit shown may apply to Products & Completed Operations or projects other than shown on this Certificate and the limit may be reduced by Claims a/o Expenses

HDI Global Specialty SE Canadian Branch has duly authorized Waypoint Insurance Services Inc. to execute and sign this Certificate of Insurance.

Dated: April 18, 2023

  
\_\_\_\_\_

Waypoint Insurance Services  
Authorized Representative

# CERTIFICATE OF INSURANCE



**Policy Number** 45165  
**Name of Insured** Oculus Engineering Ltd  
**Registered Business Address** 235 - 970 Burrard St  
 Vancouver  
 BC  
 V6Z 2R4  
**Profession** Engineering Contractors  
**Sub Profession** Refer to Endorsement 1 for all sub-professions

**Period of Insurance**

**Effective Date** 14 July 2023  
**Expiry Date** 13 July 2024 both dates inclusive  
 (both dates inclusive and any subsequent period for which a premium is accepted by the **underwriter**)  
**Retroactive Date** Section 1: Unlimited  
**Territorial Limits** Worldwide  
**Jurisdiction** Worldwide excluding USA

RECEIVED

MAR 28 2024

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

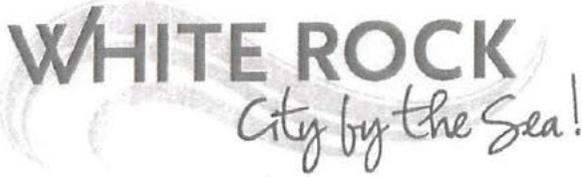
The Limit(s) applicable for each section or Extension are as specified below:-

Section/Extension	Limits of Liability
<b>Section 1: Professional Liability</b>	\$2,000,000 any one claim and in the aggregate during any one period of insurance
<b>Section 2: Commercial General Liability and Products Liability</b>	Not Included
<b>Section 3: Directors and Officers Liability</b>	Not Included
<b>Section 4: Cyber and Privacy Liability</b>	Not Included

The Deductible(s) applicable for each Section or Extension are as specified below:-

Section/Extension	Deductible
<b>Section 1: Professional Liability</b>	\$250 each and every claim
<b>Section 2: Commercial General Liability and Products Liability</b>	Not Included
<b>Section 3: Directors and Officers Liability</b>	Not Included
<b>Section 4: Cyber and Privacy Liability</b>	Not Included

 <b>For and on behalf of Rogers Insurance Ltd</b>	Coverholder on behalf of Certain Underwriters at Lloyds under Unique Market Reference Number (UMR) B079923PR721680 Date: 13 June 2023
<p>All correspondence in relation to this <b>policy</b>, including the notification of any <b>claim, occurrence, loss</b> or circumstance which could reasonably be foreseen to give rise to a <b>claim</b> should be provided in the first instance to; Rogers Insurance Ltd. at the following address:</p> <p><b>Rogers Insurance Ltd.</b>          800-1331 MacLeod Trail          SE Calgary          AB T2G 0K3          Main 403.296.2400   Fax 403.520.7258   Toll Free 1.800.565.8132</p>	



# Application for Demolition Permit

Planning and Development Services  
15322 Buena Vista Ave., White Rock, B.C. V4B 1Y6  
Phone: 604 541 2149 Fax: 604 541 2153  
Website: [www.whiterockcity.ca](http://www.whiterockcity.ca)

Folder # BPOZ1502  
Access # \_\_\_\_\_

### PROPERTY INFORMATION

Address of Demolition: 1407 Bishop Rd Roll Number: \_\_\_\_\_

Owner: **Redaction S.22**

Agent: Ayoub Gill Phone: **Redaction S.22**

Email: **Redaction S.22**

### CONTRACTOR INFORMATION

Demolition Contractor: BSS Excavating LTD Phone: 778-882-7917

Business Licence #: 106425

### SECURITY DEPOSIT

Name of Person/Company who paid deposit: **Redaction S.22**

*Note: All returnable security deposits are issued to the name of the person or company whose name is on the original cheque when payment was made. (as above) It is the responsibility of this person(s) to request any potentially refundable deposits with the Engineering Department AFTER the passed Demolition Final.*

### TYPE OF DEMO

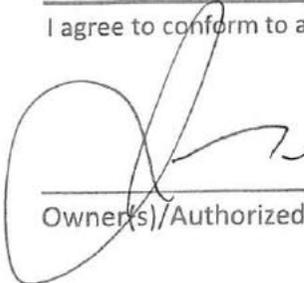
- Demolition SFD/Duplex
- Demolition Commercial/Multi Family Demolition
- Accessory Building
- Moving Building
- Underground Storage Tank Removal
- Pool Removal

RECEIVED

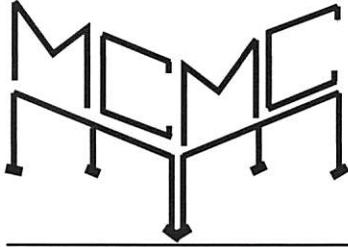
I agree to conform to all requirements of The City of White Rock Bylaws

MAR 28 2024

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

  
\_\_\_\_\_  
Owner(s)/Authorized Agent's Signature

\_\_\_\_\_  
Application Date



**MAINLAND ENGINEERING DESIGN  
CORPORATION**

Suite No. # 206 - 8363 - 128 Street, SURREY, BC V3W 4G1

Email : [civil@mainlandeng.com](mailto:civil@mainlandeng.com)

Tel : (604) 543 - 8044 Fax : (604) 543 - 8104

**ENGINEER'S CERTIFICATION**

To: The City of White Rock  
15322 Buena Vista Ave  
White Rock, BC V48 1Y6

RECEIVED

MAR 28 2024

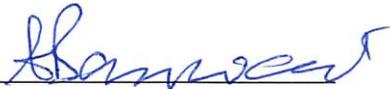
PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

Dear Sir or Madam:

Re: Site Servicing/ Grading Plan for 1407 Bishop Road, White Rock, B.C.

I Avnash Banwait, Professional Engineer, in good standing in and for the Province of British Columbia, hereby certify that the proposed service connection works as herein set out on the Attached Drawings (Mainland Engineering project G-2406 dated: 2024-02-23) have been designed to good engineering standards and in accordance with the City of White Rock's Engineering Standards, Street and Traffic Bylaw.

Yours truly,

Signature: 

Name Print: Avnash Banwait

Date: Feb 26, 2024



Professional Seal (if applicable)



# CITY OF WHITE ROCK

15322 BUENA VISTA AVENUE, WHITE ROCK, BC V4B 1Y6  
Building: 604.541.2149 | E: building@whiterockcity.ca  
Planning: 604.541.2136 | E: planning@whiterockcity.ca  
Engineering: 604.541.2181 | E: engpermits@whiterockcity.ca



FEE SLIP

Folder: BP021501 Access Code: [Redacted]  
BUILDING PERMITS  
RESIDENTIAL PERMIT (SFD/DUP) - SFD-NEW

Address: 1407 BISHOP RD

Description	Quantity	Amount	Description	Amount	Quantity	Amount
Appl New Sfd	1.00	796.00	Bid Permit Crp	796.00	1.00	12,684.88
Bp Scan Fee	27.00	162.00	Bp Ss Fee W Bp	162.00	1.00	265.00
Bp Strm O/s Sfd	1.00	88.00	Bp Swr O/s Sfd	88.00	1.00	88.00
Bp Wtr O/s Sfd	1.00	88.00	Sump/mh/cb	88.00	3.00	225.00
<b>Summary Fees</b>		<b>14,396.88</b>	<b>Received</b>	<b>796.00</b>		
<b>TOTAL</b>		<b>\$14,396.88</b>	<b>Outstanding</b>	<b>13,600.88</b>		



Pay to the order of

City of White Rock

Thirteen Thousand Six hundred - 88

TD CANADA TRUST  
15110 NORTH BLUFF RD  
WHITE ROCK, BC V4B 3E5

Memo Building Permit fees

s.22

s.22

001

DATE 2024-07-31  
Y Y Y Y M M D D

\$ 13600.88

100 Dollars

SECURITY FEATURES INCLUDED. DETAILS ON BACK.



City of White Rock  
15322 Buena Vista Ave  
White Rock BC V4B 1Y6

Receipt: 33461/8

Jul. 31, 2024

Dated: Jul 29, 2024

09:16:07 AM

Station: CASH 4/CAITLIN

CDPMT BP021501 13,600.88

Total CH0001 [Redacted] 13,600.88

CHEQUE [Redacted] -13,600.88

Thank You for Your Payment

FEE SLIP



Folder: BP021501  
BUILDING PERMITS  
RESIDENTIAL PERMIT (SFD/DUP) - SFD-NEW

Access Code: **S.22**

Address: 1407 BISHOP RD

Description  
Appl New Sfd2f

Description	Quantity	Amount	Description	Quantity	Amount
	1.00	796.00			
Summary		796.00	Outstanding		796.00
Fees		\$0.00			
<b>TOTAL</b>		<b>\$796.00</b>			<b>\$796.00</b>

City of White Rock  
15322 Buena Vista Ave  
White Rock BC V4B 1Y6

Receipt: 32092714  
Date: Mar 28, 2024  
Station: CASH 4/CASH/CLIN

Mar 28, 2024  
09:55:30 AM

CDPMT	BP021501	796.00
CDPMT	BP021502	90.00
CDPMT	L3000332	59.00
CC RECOVERY FEE VISA	<b>Redaction S.22</b>	17.92
CC RECOVERY FEE VISA	<b>Redaction S.22</b>	1.30
CC RECOVERY FEE VISA	<b>Redaction S.22</b>	1.13
<b>Total</b>	<b>Redaction S.22</b>	963.90
VISA	<b>Redaction S.22</b>	-963.90

Thank You for Your Payment

CITY OF WHITE  
ROCK-PERMITS  
15322 BUENA VISTA LOWER  
L  
WHITE ROCK BC

CARD \*\*\*\*\*2057  
CARD TYPE VISA  
DATE 2024/03/28  
TIME 0410 09:55:30  
RECEIPT NUMBER  
C85054343-001-002-013-0

PURCHASE  
TOTAL  
**\$963.90**

VISA CREDIT  
A0000000031010  
B6AD6671E9199609  
8080008000-6800  
F5FB642F775566D4

APPROVED



# Proof of Professional Liability Insurance

Planning and Development Services Department  
15322 Buena Vista Ave., White Rock, B.C. V4B 1Y6  
Phone: 604 541 2136 Fax: 604 541 2153  
Website: [www.whiterockcity.ca](http://www.whiterockcity.ca)

RECEIVED

## Form "B"

MAR 28 2024

RE: Address: 1407 Bishop road, White Rock

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

Building Permit Application No.: \_\_\_\_\_

The undersigned hereby gives assurance that:

- a) I have fulfilled my obligation to obtain a subsisting policy of professional liability or errors and omissions insurance as outlined in the City of White Rock **Building Bylaw**.
- b) I have enclosed a copy of my certificate of insurance indicating the particulars of such coverage.
- c) I am a registered professional as defined under Section 1.4 of the British Columbia Building Code.
- d) I will notify the Building Official immediately if this insurance coverage is reduced, expired or terminated at any time during construction.

Signed this 28th March 2024

Bill Khangura, P. Eng.

Print Name of Registered Professional

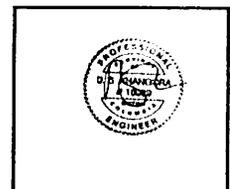
Signature of Registered Professional

Plumbing

Professional's Discipline EGBC PERMIT NUMBER: 10012

Professional's seal

or



Signed this \_\_\_\_\_ day of \_\_\_\_\_

Witness Signature

**From:** [Jason Birkland](#)  
**To:** [Jesse Girgulis](#)  
**Subject:** FW: An Inspection has been completed for Permit: BP021502 (1407 BISHOP RD)  
**Date:** Tuesday, July 30, 2024 10:58:00 AM  
**Attachments:** [image001.png](#)

---

FYI...

**Jason T. Birkland**

**Assistant Plans Examiner, City of White Rock**

15322 Buena Vista Avenue, White Rock, BC V4B 1Y6

Tel: 604.541.2144 / [www.whiterockcity.ca](http://www.whiterockcity.ca)



The information transmitted, including attachments, is intended only for the individual(s) or entity to which it is addressed and may contain information that is confidential and/or privileged or exempt from disclosure under applicable law. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon this information by individual(s) or entities other than the intended recipient is prohibited. Thank you.

---

**From:** noreply@whiterockcity.ca <noreply@whiterockcity.ca>

**Sent:** Tuesday, July 30, 2024 10:38 AM

**To:** info@gillelectric.ca; gillelectric@hotmail.com; gillelectric@hotmail.com, **Redaction S.22**

**Subject:** An Inspection has been completed for Permit: BP021502 (1407 BISHOP RD)

## City of White Rock

15322 Buena Vista Ave Phone: (604) 541-2149  
White Rock, BC V4B 1Y6 Fax: (604) 541-2153

---

### FINAL INSPECTION - DEMOLITION

**Address:** 1407 BISHOP RD

**Permit:** BP021502 - FINAL INSPECTION - DEMOLITION

**Date:** Jul 30, 2024

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**Status:** APPROVED

**THE BUILDER MUST ENSURE THE FOLLOWING ITEMS ARE COMPLETED**

**Building Official:** GUY GAREAU

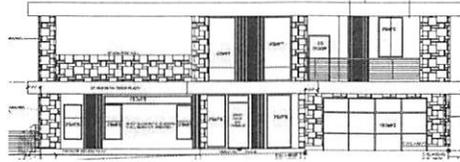
- Disclaimer: Neither the granting of a building permit nor the approval of the relevant drawings and specifications nor inspections made by the Authority Having Jurisdiction shall in any way relieve the owner of such building from full responsibility for carrying out the work or having the work carried out in full accordance with the requirements of the British Columbia Building Code.

[Email Reference #160016](#)

# HOMEOWNER INFORMATION SHEET

# ENERGUIDE

Your EnerGuide\* rating and this report are based on data collected and, where necessary, presumed from your evaluation. Rating calculations are made using standard operating conditions.



**Rating: 67** gigajoules per year (GJ/year)

Heated floor area: 376.4 m<sup>2</sup> (4051.5 ft<sup>2</sup>)

Rated energy intensity: 0.18 GJ/m<sup>2</sup>/year

Evaluated by: Satnam Singh

Quality assured by: Verditech Energy Management and C

File number: 3417P40035

Data collected: January 24, 2024

Year built: 2024

[NRCan.gc.ca/myenerguide](http://NRCan.gc.ca/myenerguide)

## HOW YOUR RATING IS CALCULATED:

- I. Rated annual energy consumption 67 GJ/year
  - II. Minus renewable energy contribution - 0 GJ/year
  - = 67 GJ/year**
- Equals your **EnerGuide rating**

I. Your rated annual energy consumption is the total amount of energy your building would use in a year based on the EnerGuide Rating System standard operating conditions. For your building, this includes 17.2 GJ of passive solar gain.

Energy Sources	Rated Consumption (GJ/year)	Equivalent Units (per year)	Greenhouse Gas Emissions (tonnes/year)
Electricity	48	13327 kWh	0.2
Natural gas	19	505 m <sup>3</sup>	1.0
<b>Total</b>	<b>67</b>		<b>1.2</b>

II. On-site renewable power generation systems can offset some or even all of your energy consumption. Renewable energy contributions are factored differently for your rating and your greenhouse gas emissions calculations.<sup>1</sup>

On-Site Renewable Energy	Estimated Contribution (GJ/year)	Equivalent Units (per year)	Offset Greenhouse Gas Emissions (tonnes/year)
Electricity	0	0 kWh	0.0
Solar water heating	0	0	0.0
<b>Total</b>	<b>0</b>		<b>0.0</b>

## HOW YOUR CONSUMPTION COMPARES:

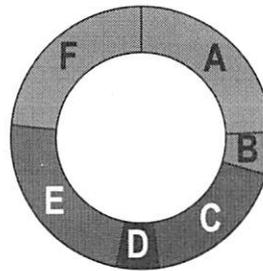
Compared to a typical new building, your building uses:

35.0% less energy;

50.2% less energy, when excluding the estimated energy consumption of lighting, appliances and electronics.

## HOW YOUR RATED ENERGY IS USED:

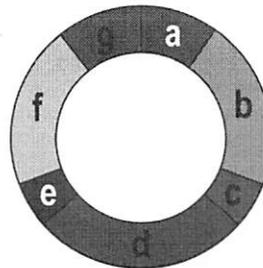
The chart below represents the breakdown of rated annual energy consumption in your building under standard operating conditions. You can use these figures as a guide to help identify where you can lower energy costs through proper maintenance, efficient operation, energy efficiency renovations or equipment replacement.



- A. Space heating 28%
- B. Space cooling 3%
- C. Water heating 21%
- D. Ventilation 2%
- E. Lights & appliances 27%
- F. Other electrical 19%

## WHERE YOUR BUILDING LOSES HEAT:

Buildings lose heat through their exterior shell, or building envelope. The chart below shows where and how your building loses heat. The quality and upkeep of your building can have a major impact on the amount of energy your heating and cooling systems use annually.



- a. Attic/Ceiling 10%
- b. Main Walls 22%
- c. Exposed floors 3%
- d. Windows 28%
- e. Exterior doors 5%
- f. Basement/Foundation 21%
- g. Air leakage/ventilation 11%

\*EnerGuide is an official mark of Natural Resources Canada. Refer to the glossary section for an explanation of relevant terms.

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MAR 28 2024

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

## BUILDING DETAILS

## BUILDING ENVELOPE

## ATTIC/CEILING

TYPE	INSULATION VALUE		AREA m <sup>2</sup> (ft <sup>2</sup> )
	Nominal RSI (R)	Effective RSI (R)	
Ceiling - Flat Deck: Flat	4.93 (28.0)	4.71 (26.7)	71.7 (772)
Ceiling - Sus. Slab: Flat	6.68 (37.9)	4.86 (27.6)	51.1 (550)
Ceiling01: Flat	8.46 (48.0)	8.11 (46.0)	108.7 (1170)

## MAIN WALLS

TYPE	INSULATION VALUE		AREA m <sup>2</sup> (ft <sup>2</sup> )
	Nominal RSI (R)	Effective RSI (R)	
Wall - Garage Buffer Wall: 38x140 mm (2x6 in) Wood frame	4.23 (24.0)	3.42 (19.4)	23.2 (250)
Main floor: 38x140 mm (2x6 in) Wood frame	4.23 (24.0)	3.45 (19.6)	119.3 (1284)
Second level: 38x140 mm (2x6 in) Wood frame	4.23 (24.0)	3.47 (19.7)	129.1 (1390)

## EXPOSED FLOORS

TYPE	INSULATION VALUE		AREA m <sup>2</sup> (ft <sup>2</sup> )
	Nominal RSI (R)	Effective RSI (R)	
Floor: Exp Floor-01	4.93 (28.0)	5.37 (30.5)	56.8 (612)

## WINDOWS

#	TYPE	U-factor W/m <sup>2</sup> · °C (Btu/h · ft <sup>2</sup> · °F)	RSI (R)
1	East0001	1.4 (0.25)	0.69 (3.9)
1	East0002	1.4 (0.25)	0.70 (4.0)
2	North0004	1.4 (0.25)	0.71 (4.0)
12	South0001	1.4 (0.25)	0.71 (4.1)
4	East0001	1.4 (0.24)	0.72 (4.1)
1	North0002	1.4 (0.24)	0.73 (4.2)
4	North0001	1.3 (0.24)	0.74 (4.2)
1	Window - 6	1.3 (0.23)	0.75 (4.3)
3	West0001	1.3 (0.23)	0.76 (4.3)
1	North0003	1.3 (0.22)	0.79 (4.5)
1	Window - 5	1 (0.18)	0.96 (5.4)
Total window area: 67.27 m <sup>2</sup> (724.1 ft <sup>2</sup> )			

## EXTERIOR DOORS

#	TYPE	U-factor W/m <sup>2</sup> · °C (Btu/h · ft <sup>2</sup> · °F)	RSI (R)
8	Fibreglass medium density spray foam core	1 (0.18)	0.98 (5.6)
Total door area: 15.42 m <sup>2</sup> (166 ft <sup>2</sup> )			

## BASEMENT/FOUNDATION

TYPE	INSULATION VALUE		AREA m <sup>2</sup> (ft <sup>2</sup> )
	Nominal RSI (R)	Effective RSI (R)	
Foundation - 1 concrete walls: exterior	N/A	N/A	123 (1324)
Foundation - 1 concrete walls: interior	2.46 (14.0)	1.93 (11.0)	123 (1324)
Foundation - 1 header	4.23 (24.0)	4.23 (24.0)	12.7 (137)
Foundation - 1 Pony Wall	6.76 (38.4)	6.03 (34.0)	29.7 (320)
Foundation - 1 slab	2.11 (12.0)	2.11 (12.0)	157.3 (1693)

## AIRTIGHTNESS

Air leakage rate at 50 pascals	2.4 air changes/hour
Equivalent leakage area	1009.6 cm <sup>2</sup> (156 in <sup>2</sup> )
Normalized leakage area	1.1 cm <sup>2</sup> /m <sup>2</sup> (1.6 in <sup>2</sup> /100 ft <sup>2</sup> )

## MECHANICAL SYSTEMS

Mechanical systems displayed may not reflect actual systems as some of them may have been combined for simulation purposes.

## SPACE HEATING

TYPE	OUTPUT SIZE	EFFICIENCY
Condensing natural gas heater	10.5 kW 36000 BTU/h	90% AFUE
Air-source heat pump	5.91 kW 20500 BTU/h	8.2HSPF
Design heating load: 9.20 kW – refer to glossary for details		

## SPACE COOLING

TYPE	OUTPUT SIZE	EFFICIENCY
Air-source heat pump	5.91 kW 20500 BTU/h	14 SEER
Design cooling load: 4.73 kW		

## WATER HEATING

TYPE	TANK VOLUME	EFFICIENCY
Provided by Combo Heating/DHW System	151L (40 USG)	0.82 EF

## BUILDING DETAILS

### PRINCIPAL VENTILATION

TYPE	AIR FLOW RATE	EFFICIENCY
Heat recovery ventilator	42.48 L/s (90 cfm)	66%

### HEATED FLOOR AREA

Above-grade area	219.1 m <sup>2</sup> (2358 ft <sup>2</sup> )
Below-grade area	157.3 m <sup>2</sup> (1693 ft <sup>2</sup> )

## GLOSSARY

**A typical new building**

is a reference point on your label against which to compare your rating. It shows the estimated energy consumption of a building that is the same size, type and in the same location as yours. The typical new building is based on the energy efficiency requirements of the National Building Code.

**Airtightness**

describes how well the building envelope resists air leakage and is measured in air changes per hour at 50 pascals (ACH@50 Pa). The fewer air changes per hour, the more airtight the building envelope is. Equivalent leakage area is another way of describing the airtightness of the building envelope. It represents the size of a single hole in your building envelope if all the individual air leakage holes or gaps were added together. The smaller the equivalent leakage area, the less energy you will need to control the temperature of your building (but you will still need to ensure that you have adequate ventilation).

**Design heating/cooling loads**

provide an estimate of the capacity of the heating and cooling equipment needed to maintain your building at 22 °C in the winter and 24 °C in the summer and are provided for guidance only. Before having a new heating/cooling system installed, your heating/cooling contractor should perform an independent, detailed heat loss/heat gain calculation in order to select the appropriate equipment.

**Gigajoule (GJ)**

is a unit of energy. It can be used as a measure of any type of energy that is consumed or produced. Specifically, one GJ is the equivalent of 278 kWh of electricity, 27m<sup>3</sup> of natural gas, 26 L of oil, 39 L of propane, or 947 817 BTUs. One GJ is roughly equal to the energy from two standard barbecue propane tanks or 30 litres of gas in a car's gas tank.

**Greenhouse gas emissions**

are the amounts of carbon dioxide, methane and nitrous oxide that are produced directly, by burning fossil and solid fuels, or indirectly, through the production of electricity. Greenhouse gas emissions are expressed in carbon dioxide equivalent units. Greenhouse gas emissions are calculated by multiplying the quantity of fuel or electricity used in your building by the emission factors for the particular energy source. Electricity factors vary by province/territory because there are different emissions associated with the method used to produce electricity. One tonne of greenhouse gas emissions is equivalent to the CO<sub>2</sub> emissions produced by driving an average efficiency mid-size vehicle from Toronto to Vancouver.

**Heated floor area**

represents the total useable area of your building that is heated, measured at the interior of the outer walls or of the walls attached to other buildings.

**Insulation values**

are expressed in RSI (m<sup>2</sup> • °C/W) or R-value (h • ft<sup>2</sup> • °F/Btu) and represent the resistance to the flow of heat of a given thickness of insulation or construction assembly. The higher the RSI-value (R-value), the better the performance. The nominal value represents

the resistance to the flow of heat of just the insulation while the effective value represents the resistance to the flow of heat of the entire wall, ceiling or floor assembly considering the structure, insulation, framing, sheathing and all finishing.

**On-site renewable energy contributions**

are subtracted from the rated annual energy consumption to calculate the EnerGuide rating. For the calculation of the rated greenhouse gas emissions, on-site electricity generation only offsets emissions associated with electricity consumption, whereas a solar water heater reduces the emissions that would have been produced from the source of energy used to heat water.

**Passive solar gain**

is the heat from the sun that influences your building's heating and cooling requirements. Generally, south facing windows provide more solar gain.

**Rated energy intensity**

is calculated by dividing your rated annual energy consumption by your building's heated floor area. It allows you to compare the annual energy use of buildings of different sizes on a "per square metre" basis.

**Standard operating conditions**

have been used to calculate your building's EnerGuide Rating. The rating assumes a standard number of occupants and energy use patterns. This allows for comparison of energy use across buildings so that the building is rated and not its operation by the occupants. The values are:

- Two adults, at home 50% of the time;
- Hot water use of 103-129 L/unit/day, variable depending on incoming ground water temperature and year the house was built;
- Thermostat settings of 21°C for daytime heating, 18°C for nighttime heating and 25°C for cooling; and
- Lighting, appliance and other electrical loads of 11.7 kWh/day.

**U-factor**

measures heat transferred through windows and doors, expressed in W/m<sup>2</sup> • °C (BTU/h • ft<sup>2</sup> • °F). The lower the U-factor, the better the energy efficiency of a window. The inverse of U-factor (1/U-factor) identifies the resistance to the flow of heat, expressed in RSI. The higher the RSI, the better the window is at resisting heat loss. You can use these values to choose more energy efficient windows.

For more details and additional terms, please visit [NRCan.gc.ca/myenerguide](http://NRCan.gc.ca/myenerguide).

1407 BISHOP RD,  
WHITE ROCK, BRITISH COLUMBIA, V4B 3K4

# ENERGUIDE

Data collected: January 24, 2024  
File number: 3417P40035  
Evaluated by: Satnam Singh

**67** This duplex  
GJ/year

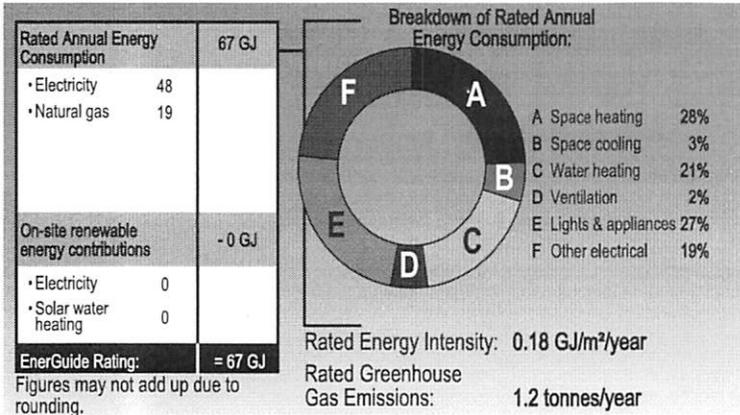


▲ 0 GJ/year  
Best energy performance

▲ 103 GJ/year  
A typical new building

Uses most energy

One gigajoule (GJ) equals the energy from two BBQ propane tanks



The energy consumption indicated on your utility bills may be higher or lower than your EnerGuide rating. This is because standard assumptions have been made regarding how many people live in your house and how the home is operated. Your rating is based on the condition of your house on the day it was evaluated.

Quality assured by: Verdatch Energy Management and Consulting Inc.

Visit [NRCan.gc.ca/myenerguide](https://www.nrcan.gc.ca/myenerguide)



## NEXT STEPS

If you have had a Renovation Upgrade Service, refer to your report for the roadmap to making your building more energy efficient. If you have not yet had a Renovation Upgrade Service, why not contact your service organization to learn what you can do to save on energy costs, reduce greenhouse gas emissions and improve comfort?

Everyone uses energy in their building differently. This report was developed using standard operating conditions as explained in the glossary. Therefore, your EnerGuide rating will not match your utility bills.

## UPGRADE CONSIDERATIONS

Before undertaking upgrades or renovations, find out about appropriate products and installation techniques, and ensure that all renovations meet local building codes and by-laws. Natural Resources Canada does not endorse the services of any contractor, nor any specific product, and accepts no liability in the selection of materials, products, contractors nor performance of workmanship.

Where your energy advisor has identified a potential health or safety concern such as insufficient outdoor air, risk of combustion fumes entering your building or risk of exposure to asbestos, they have endeavoured to provide a warning in this report. However, energy advisors are not required to have expertise in health and safety matters, and building owners are solely responsible for consulting a qualified professional to determine potential hazards before undertaking any upgrades or renovations.

Visit us today at:

[NRCan.gc.ca/myenerguide](https://www.nrcan.gc.ca/myenerguide)



**File:** 3417P40035.h2k  
ERS reference house

**Weather Library:** C:\HOT2000 v11.11b21119\Dat\Wth2020.dir  
**Weather Data for:** WHITE ROCK, BRITISH COLUMBIA

**RECEIVED**

FEB 28 2024

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

**Builder Code:** 3417P40035  
**Data Entry by:** Satnam Singh  
**Date of entry:** 1/24/2024  
**Company:** Verdatech Energy  
Management and

**Client name:** Redaction S.22  
**Street address:** S. 22  
**City:** S. 22  
**Postal code:** S. 22

**Region:** BRITISH COLUMBIA  
**Telephone:** Redaction S.22

**Mailing address:** 1407 BISHOP RD  
**City:** WHITE ROCK  
**Postal Code:** V4B 3K4

**Region:** BRITISH COLUMBIA

---

## GENERAL HOUSE CHARACTERISTICS

**House type:** N/A  
**Number of storeys:** Two storeys  
**Plan shape:**  
**Front orientation:** North  
**Year House Built:** 2024

<b>Wall colour:</b>	Default	<b>Absorptivity:</b>	0.40
<b>Roof colour:</b>	Default	<b>Absorptivity:</b>	0.40
<b>Soil Condition:</b>	Normal conductivity (dry sand, loam, clay)		
<b>Water Table Level:</b>	Normal (7-10m/23-33ft)		
<b>House Thermal Mass Level:</b>	(A) Light, wood frame		
<b>Effective mass fraction</b>	1.000		

**Occupants :** Redaction S.22

## Redaction S.22

**Sensible Internal Heat  
Gain From Occupants:**

3.20 kWh/day

---

## HOUSE TEMPERATURES

### Heating Temperatures

<b>Main Floor</b>	<b>Daytime Setpoint:</b>	21.0 °C
	<b>Nighttime Setpoint:</b>	18.0 °C
	<b>Nighttime Setback</b>	8.0 Hours
	<b>Duration:</b>	
	<b>24 Hour Average:</b>	20.0 °C
<b>Basement</b>	<b>Setpoint:</b>	19.0 °C
	<b>TEMP. Rise from 20.0 °C:</b>	5.5 °C

**Cooling Temperature: Main Floor + 25.00 °C**  
**Basement:**

<b>Basement is- Heated:</b> Yes	<b>Cooled:</b> Yes	<b>Separate T/S:</b> No
<b>Fraction of internal gains released in basement :</b>		0.150
<b>Indoor design temperatures for equipment sizing</b>		
<b>Heating:</b>		22.0 °C
<b>Cooling:</b>		24.0 °C

---

## WINDOW CHARACTERISTICS

Label	Location	#	Overhang Width (m)	Header Height (m)	Tilt deg	Curtain Factor	Shutter (RSI)
<b>South</b>							
<b>Window</b>	Foundation - 1	1	0.00	0.20	90.0	1.00	0.00
<b>Window</b>	Wall	1	0.00	0.20	90.0	1.00	0.00
<b>East</b>							
<b>Window</b>	Foundation - 1	1	0.00	0.20	90.0	1.00	0.00
<b>Window</b>	Wall	1	0.00	0.20	90.0	1.00	0.00
<b>North</b>							
<b>Window</b>	Foundation - 1	1	0.00	0.20	90.0	1.00	0.00
<b>Window</b>	Wall	1	0.00	0.20	90.0	1.00	0.00
<b>West</b>							
<b>Window</b>	Foundation - 1	1	0.00	0.20	90.0	1.00	0.00
<b>Window</b>	Wall	1	0.00	0.20	90.0	1.00	0.00

Label	Type	#	Window Width (m)	Window Height (m)	Total Area (m <sup>2</sup> )	Window RSI	SHGC	ER*
<b>South</b>								

<b>Window</b>	NBC 9.36 window	1	1.46	1.46	2.14	0.552	0.2613	13.7
<b>Window</b>	NBC 9.36 window Code 7	1	3.61	3.61	13.04	0.613	0.2820	20.3
<b>East</b>								
<b>Window</b>	NBC 9.36 window Code 4	1	1.46	1.46	2.14	0.552	0.2613	13.7
<b>Window</b>	NBC 9.36 window Code 8	1	3.61	3.61	13.04	0.613	0.2820	20.3
<b>North</b>								
<b>Window</b>	NBC 9.36 window Code 5	1	1.46	1.46	2.14	0.552	0.2613	13.7
<b>Window</b>	NBC 9.36 window Code 9	1	3.61	3.61	13.04	0.613	0.2820	20.3
<b>West</b>								
<b>Window</b>	NBC 9.36 window Code 6	1	1.46	1.46	2.14	0.552	0.2613	13.7
<b>Window</b>	NBC 9.36 window Code 10	1	3.61	3.61	13.04	0.613	0.2820	20.3

\*ER Window Energy Rating (ER 2009) estimated for actual dimensions, and Air tightness type: CSA - A1; Leakage rate = 1.86 L/s.m<sup>2</sup>

Above grade fraction of wall area occupied by windows: 18.1 %

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**\*\*\* TYPE 2 USER DEFINED WINDOW CODES \*\*\***

<b>Code Label</b>	<b>Description</b>	<b>Glazing Type</b>	<b>Fill Gas</b>	<b>Thermal Resistance</b>	<b>SHGC</b>	<b>Window Style</b>	<b>Low -E Coating</b>	<b>Frame Height</b>
NBC 9.36 window	NBC 9.36 window	Double/double with 1 coat	Argon	0.5435 RSI	0.2600	Picture	Soft Coat	18.00
NBC 9.36 window Code 7	NBC 9.36 window Code 7	Double/double with 1 coat	Argon	0.5435 RSI	0.2600	Picture	Soft Coat	41.00
NBC 9.36 window Code 4	NBC 9.36 window Code 4	Double/double with 1 coat	Argon	0.5435 RSI	0.2600	Picture	Soft Coat	18.00
NBC	NBC 9.36 window	Double/double	Argon	0.5435 RSI	0.2600	Picture	Soft	41.00

9.36 window Code 8		with 1 coat		RSI		Coat	
NBC 9.36 window Code 5	NBC 9.36 window	Double/double Argon with 1 coat		0.5435 RSI	0.2600	Picture Soft Coat	18.00
NBC 9.36 window Code 9	NBC 9.36 window	Double/double Argon with 1 coat		0.5435 RSI	0.2600	Picture Soft Coat	41.00
NBC 9.36 window Code 6	NBC 9.36 window	Double/double Argon with 1 coat		0.5435 RSI	0.2600	Picture Soft Coat	18.00
NBC 9.36 window Code 10	NBC 9.36 window	Double/double Argon with 1 coat		0.5435 RSI	0.2600	Picture Soft Coat	41.00

## BUILDING PARAMETER DETAILS

### CEILING COMPONENTS

	Construction Type	Code Type	Roof Slope	Heel Ht. (m)	Section Area (m <sup>2</sup> )	R. Value (RSI)
Ceiling - Flat Deck	Flat	User specified	0.000/12	0.00	71.68	4.67
Ceiling - Sus. Slab	Flat	User specified	0.000/12	0.00	51.10	4.67
Ceiling01	Flat	User specified	0.000/12	0.13	108.68	4.67

### MAIN WALL COMPONENTS

Label	Lintel Type	Fac. Dir	Number of Corn.	Number of Inter.	Height (m)	Perim. (m)	Area (m <sup>2</sup> )	R. Value (RSI)
Wall Type: User specified	N/A	N/A	4	0	2.77	101.67	281.62	2.78

### EXPOSED FLOORS

Label	Floor Code Type	Area (m <sup>2</sup> )	R. Value (RSI)
Exp Floor-01	User specified	56.83	4.67

### DOORS

Label	Type	Height (m)	Width (m)	Gross Area (m <sup>2</sup> )	R. Value (RSI)
-------	------	------------	-----------	------------------------------	----------------

<b>Door</b> <b>Loc: Foundation - 1</b>	User specified	2.07	2.43	5.03	0.54
<b>Door</b> <b>Loc: Wall</b>	User specified	2.07	3.87	8.02	0.54

## FOUNDATIONS

<b>Foundation Name:</b>	Foundation - 1	<b>Volume:</b>	316.1 m <sup>3</sup>
<b>Foundation Type:</b>	Basement	<b>Opening to Main Floor:</b>	1.56 m <sup>2</sup>
<b>Data Type:</b>	Library		
<b>Total Wall Height:</b>	2.01 m	<b>Non-Rectangular</b>	
<b>Depth Below Grade:</b>	2.01 m	<b>Floor Perimeter:</b>	55.66 m
		<b>Floor Area:</b>	157.28 m <sup>2</sup>
<b>Interior wall type:</b>	User Specified	<b>R-value:</b>	1.87 RSI
<b>Exterior wall type:</b>	User specified	<b>R-Value:</b>	0.00 RSI
<b>Number of corners :</b>	4		
<b>Lintel type:</b>	Bsmnt Lintel		
<b>Added to slab type :</b>	N/A	<b>R-Value:</b>	2.26 RSI
<b>Floors Above</b>	4231000660	<b>R-Value:</b>	0.71 RSI
<b>Found.:</b>			

**Exposed areas for:** Foundation - 1  
**Exposed Perimeter:** 55.66 m

Configuration: BCCB\_4

- concrete walls and floor
- interior surface of wall insulated over full-height
- exterior surface of wall insulated over full-height
- sub-surface of floor slab fully insulated but no insulation under footings
- thermal-break between walls and floor slab
- any first storey construction type

## FOUNDATION CODE SCHEDULE

### Floors Above Foundation

Name	Internal Code	Description (Structure, typ/size, Spacing, Insul1, 2, Int., Sheathing, Exterior, Drop Framing)
4231000660	4231000660	Wood frame, 38x235 mm (2x10 in), 400 mm (16 in), None, None, None, Plywood/Particle board 15.5 mm (5/8 in), Wood, No

### PONY WALL COMPONENTS

Label	Lintel Type	Fac. Dir	Number of Corn.	Number of Inter.	Height (m)	Perim. (m)	Area (m <sup>2</sup> )	R. Value (RSI)
Foundation	100	N/A	4	2	0.73	55.66	40.83	2.78

- 1

Type: User specified

**FOUNDATION FLOOR HEADER COMPONENTS**

<b>Label</b>	<b>Lintel Type</b>	<b>Fac. Dir</b>	<b>Number of Corn.</b>	<b>Number of Inter.</b>	<b>Height (m)</b>	<b>Perim. (m)</b>	<b>Area (m<sup>2</sup>)</b>	<b>R. Value (RSI)</b>
<b>BW hdr-01</b> (Location:Foundation - 1) Type: User specified	N/A	N/A	4	4	0.23	55.65	12.72	2.78

**Lintel Code Schedule**

<b>Name</b>	<b>Code</b>	<b>Description ( Type, Material, Insulation )</b>
<b>Bsmnt Lintel</b>	100	Double, Wood, None

**ROOF CAVITY INPUTS**

<b>Sloped Roof</b>		<b>Total Area:</b>	0.00 m <sup>2</sup>
<b>Sheathing Material</b>	Plywood/Part. bd 12.7 mm (1/2 in)		0.11 RSI
<b>Exterior Material:</b>	Asphalt shingles		0.08 RSI
<b>Total Cavity Volume:</b>	0.0 m <sup>3</sup>	<b>Ventilation Rate:</b>	0.50 ACH/hr

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## BUILDING ASSEMBLY DETAILS

Label	Construction Code	Nominal (RSI)	System (RSI)	Effective (RSI)
<b>FLOORS ABOVE BASEMENTS</b>				
Foundation - 1	4231000660	0.00	0.71	0.71

---

## BUILDING PARAMETERS SUMMARY

### ZONE 1 : Above Grade

Component	Area m <sup>2</sup> Gross	Area m <sup>2</sup> Net	Effective (RSI)	Heat Loss MJ	% Annual Heat Loss
Ceiling	231.46	231.46	4.67	11278.68	10.91
Main Walls	281.62	221.45	2.78	21226.73	20.52
Doors	8.02	8.02	0.54	4366.10	4.22
Exposed floors	56.83	56.83	4.67	3253.89	3.15
South Windows	13.04	13.04	0.61	6295.10	6.09
East Windows	13.04	13.04	0.61	6295.10	6.09
North Windows	13.04	13.04	0.61	6295.10	6.09
West Windows	13.04	13.04	0.61	6295.10	6.09
<b>ZONE 1 Totals:</b>				<b>65305.80</b>	<b>63.15</b>

### INTER-ZONE Heat Transfer : Floors Above Basement

Area m <sup>2</sup> Gross	Area m <sup>2</sup> Net	Effective (RSI)	Heat Loss MJ
157.28	157.28	0.706	9796.66

### ZONE 2 : Basement

Component	Area m <sup>2</sup> Gross	Area m <sup>2</sup> Net	Effective (RSI)	Heat Loss MJ	% Annual Heat Loss
Walls above grade	0.06	0.06	-	8.15	0.01
Doors	5.03	5.03	0.54	2447.29	2.37
South windows	2.14	2.14	0.55	1023.94	0.99
East windows	2.14	2.14	0.55	1023.94	0.99
North windows	2.14	2.14	0.55	1023.94	0.99
West windows	2.14	2.14	0.55	1023.94	0.99
Basement floor header	12.72	12.72	2.78	1254.71	1.21
Pony walls	40.83	27.25	2.78	2687.19	2.60
Below grade foundation	269.08	269.08	-	13765.37	13.31
<b>ZONE 2 Totals:</b>				<b>24258.47</b>	<b>23.46</b>

**Air Leakage and Mechanical Ventilation**

<b>House Volume</b>	<b>Air Change</b>	<b>Heat Loss MJ</b>	<b>% Annual Heat Loss</b>
1126.61 m <sup>3</sup>	0.113 ACH	13855.400	13.40

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## AIR LEAKAGE AND MECHANICAL VENTILATION

**Building Envelope Surface Area:** 892.59 m<sup>2</sup>

**Air Leakage Test Results at 50 Pa.** 2.50 ACH  
(0.2 in H<sub>2</sub>O) =

**Equivalent Leakage Area @ 10 Pa** 1051.68 cm<sup>2</sup>  
=

### Terrain Description

		Height (m)
@ Weather Station :	Open flat terrain, Anemometer: grass	10.0
@ Building site :	Suburban, forest Height of the highest ceiling:	5.5

### Local Shielding:

<b>Walls:</b>	Heavy
<b>Flue :</b>	Light

### Leakage Fractions-

<b>Ceiling:</b>	0.200
<b>Walls:</b>	0.650
<b>Floors:</b>	0.150

**Normalized Leakage Area @ 10 Pa:** 1.1782 cm<sup>2</sup>/m<sup>2</sup>

**Estimated Airflow to cause a 5 Pa Pressure Difference:** 168 L/s

**Estimated Airflow to cause a 10 Pa Pressure Difference:** 263 L/s

---

## F326 VENTILATION REQUIREMENTS

Kitchen, Living Room, Dining Room	3 rooms @ 5.0 L/s: 15.0 L/s
Utility Room	1 rooms @ 5.0 L/s: 5.0 L/s
Bedroom	1 rooms @ 10.0 L/s: 10.0 L/s
Bedroom	2 rooms @ 5.0 L/s: 10.0 L/s
Bathroom	2 rooms @ 5.0 L/s: 10.0 L/s
Other	2 rooms @ 5.0 L/s: 10.0 L/s
Basement Rooms	0.0 L/s

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## SECONDARY FANS & OTHER EXHAUST APPLIANCES

Control	Supply (L/s)	Exhaust (L/s)
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<b>Other Fans</b>	Continuous	12.03	19.53
<b>Dryer</b>	Continuous	-	2.98

Dryer is vented outdoors

**Rated Fan Power** 45.32 Watts

## **NEW ERS VENTILATION DATA**

### **Whole House Systems**

**Air Distribution/circulation type:** Forced air heating ductwork  
**Air Distribution/circulation fan power:** 100.00 Watts  
**Operation schedule:** 480.00 min/day

**System # 1 Type:** HRV  
**Manufacturer:** Heat recovery ventilator (HRV)  
**Model:** Wizard HRV mod  
**Airflow Supply Rate:** 42.48 L/s  
**Exhaust:** 42.48 L/s  
**Fan Power:** 98.54 Watts

### **Supplementary Systems**

**System # 1 Type:** Dryer  
**Manufacturer:**  
**Model:**  
**Airflow Supply Rate:** 0.00 L/s  
**Exhaust:** 76.00 L/s  
**Fan Power:** 0.00 Watts  
**Operation schedule:** 56.53 min/day

**System # 2 Type:** Range hood  
**Manufacturer:**  
**Model:**  
**Airflow Supply Rate:** 0.00 L/s  
**Exhaust:** 100.00 L/s  
**Fan Power:** 232.00 Watts  
**Operation schedule:** 72.00 min/day

**System # 3 Type:** Bathroom  
**Manufacturer:**  
**Model:**  
**Airflow Supply Rate:** 0.00 L/s  
**Exhaust:** 50.00 L/s  
**Fan Power:** 116.00 Watts  
**Operation schedule:** 72.00 min/day

---

## **AIR LEAKAGE AND MECHANICAL VENTILATION SUMMARY**

<b>F326 Required continous ventilation:</b>	60.000 L/s (0.19 ACH)
<b>Other Continuous Supply Flow Rates:</b>	12.035 L/s (0.04 ACH)
<b>Other Continuous Exhaust Flow Rates:</b>	19.535 L/s (0.06 ACH)
<b>Total house ventilation is Balanced</b>	
<b>Gross Air Leakage and Mechanical Ventilation Energy Load:</b>	12490.207 MJ
<b>Seasonal Heat Recovery Ventilator Efficiency:</b>	0.000 %
<b>Estimated Ventilation Electrical Load: Heating Hours:</b>	0.000 MJ
<b>Estimated Ventilation Electrical Load: Non-Heating Hours:</b>	0.000 MJ
<b>Net Air Leakage and Mechanical Ventilation Load:</b>	13855.398 MJ

---

## **VENTILATION REQUIREMENTS**

<b>Use:</b>	Flow rate
<b>ACH:</b>	0.13
<b>Supply:</b>	89.00 L/s
<b>Exhaust:</b>	89.00 L/s

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## **SPACE HEATING SYSTEM**

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### **COMBO SPACE + DHW HEATING SYSTEM**

<b>PRIMARY Heating Fuel:</b>	Natural Gas
<b>Equipment:</b>	Condensing heater
<b>Manufacturer:</b>	Wizard SPH man
<b>Model:</b>	

<b>Calculated* Output Capacity:</b>	11.50 kW
-------------------------------------	----------

\* Design Heat loss X 1.10 + 0.5 kW

<b>AFUE:</b>	90.00
<b>Steady State Efficiency:</b>	91.84
<b>Fan Mode:</b>	Auto
<b>ECM Motor:</b>	No
<b>Low Speed Fan Power:</b>	0 watts
<b>High Speed Fan Power:</b>	223 watts
<b>Water Heater Temperature:</b>	55.0 °C
<b>Water Heating Energy Factor:</b>	0.6
<b>Tank Capacity:</b>	0.0 Litres
<b>Tank Blanket Insulation:</b>	20.0 RSI
<b>Tank Location:</b>	Basement

<b>ECM Circulation Pump Motor?</b>	No
<b>Circulation Pump (Calculated):</b>	92.0 watts

**Radiant heating selected, but NOT defined**

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## **AIR CONDITIONING SYSTEM**

<b>System Type:</b>	Central split system
<b>Manufacturer:</b>	

<b>Model:</b>			
<b>Capacity:</b>	6685 Watts		
<b>SEER</b>	14.50	<b>Rated COP</b>	3.095
<b>Sensible Heat Ratio:</b>	0.76		
<b>Indoor Fan Flow Rate:</b>	451.05 L/s	<b>Fan Power (watts)</b>	349.57
<b>Ventilator Flow Rate:</b>	0.00 L/s	<b>Crankcase Heater Power (watts):</b>	60.00
<b>Fraction of windows Openable:</b>	0.000	<b>ECM Motor:</b>	No
<b>Cooling system capacity sizing factor:</b>	1.000		
<b>Economizer control:</b>	N/A	<b>Indoor Fan Operation:</b>	Auto

**Air Conditioner is integrated with the Heating System**

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### **ANNUAL DOMESTIC WATER HEATING SUMMARY**

<b>Daily Hot Water Consumption:</b>	206.3 Litres
<b>Hot Water Temperature:</b>	55.0 °C
<b>Estimated Domestic Water Heating Load:</b>	13710 MJ
<b>Primary Domestic Water Heating Energy Consumption:</b>	13710 MJ
<b>Primary System Seasonal Efficiency:</b>	100.0%

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### **ANNUAL SPACE HEATING SUMMARY**

<b>Gross Space Heat Loss:</b>	103420 MJ
<b>Gross Space Heating Load:</b>	100723 MJ
<b>Usable Internal Gains:</b>	29768 MJ
<b>Usable Internal Gains Fraction:</b>	28.8 %
<b>Usable Solar Gains:</b>	21113 MJ
<b>Usable Solar Gains Fraction:</b>	20.4 %
<b>Auxiliary Energy Required:</b>	49842 MJ
<b>Space Heating System Load:</b>	49842 MJ
<b>Furnace/Boiler Seasonal efficiency:</b>	82.1 %
<b>Furnace/Boiler Annual Energy Consumption:</b>	52821 MJ

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## DESIGN SPACE HEATING AND COOLING LOADS

Design Heat Loss\* at -4.0 °C (9.22 Watts / 10385 Watts  
m3):

Design Cooling Load\* for July at (24.5 °  
C): 6220 Watts

\* Please refer to notes at the end of this  
report.

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## ANNUAL SPACE COOLING SUMMARY

Design Sensible Heat Ratio: 0.769  
Estimated Annual Space Cooling Energy: 888.16 kWh  
Seasonal COP ( May to October): 2.088

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## BASE LOADS SUMMARY

	kwh/day	Annual kWh
Interior Lighting	3.40	1241.00
Appliances	10.36	3781.19
Other	8.80	3212.00
Exterior Use	0.80	292.00
<b>HVAC Fans</b>		
HRV/Exhaust	1.09	397.01
Space Heating	1.01	369.24
Space Cooling	0.33	119.01
<b>Total Average Electrical Load</b>	<b>25.78</b>	<b>9411.45</b>

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## FAN OPERATION SUMMARY (kWh)

Hours	HRV/Exhaust Fans	Space Heating	Space Cooling
Heating	261.5	369.2	0.0
Neither	60.4	0.0	0.0
Cooling	75.0	0.0	119.0
<b>Total</b>	<b>397.0</b>	<b>369.2</b>	

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## ENERGY CONSUMPTION SUMMARY REPORT

**Estimated Annual Space Heating Energy Consumption** = 54149.79 MJ = 15041.61 kWh  
**Ventilator Electrical Consumption: Heating Hours** = 0.00 MJ = 0.00 kWh  
**Estimated Annual DHW Heating Energy Consumption** = 13709.53 MJ = 3808.20 kWh  
**ESTIMATED ANNUAL SPACE + DHW ENERGY CONSUMPTION** = 67859.31 MJ = 18849.81 kWh

**Estimated Greenhouse Gas Emissions** 11.628 tonnes/year

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## ESTIMATED ANNUAL FUEL CONSUMPTION SUMMARY

Fuel	Space Heating	Space Cooling	DHW Heating	Baseloads	Ventilation	Total
Natural Gas (m3)	1417.7	0.0	368.0	0.0	0.0	1785.6
Electricity (kWh)	369.2	888.2	0.0	8526.2	397.0	10180.6

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## ESTIMATED ANNUAL FUEL CONSUMPTION COSTS

Fuel Costs Library = Embedded

RATE	Electricity (YVR1)	Natural Gas (YVR1)	Oil (Ottawa08)	Propane (Ottawa08)	Wood (Sth Ont)	Total
\$	1152.15	734.40	0.00	0.00	0.00	1886.54

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## Fuel Costs Library Listing

Filename = Embedded

**Record # 1** Fuel: Electricity  
 Rate ID = YVR1 Vancouver Jan 2018

Rate Block	kWhr	Dollars Per kWhr	Charge (\$)
Minimum	0.0		7.910
1	688.0	0.0950	

2	99999.0	0.1418	
<b>Record # 2</b>	Fuel: Natural Gas		
Rate ID = YVR1	Fortis Jan 2018		
Rate Block		Dollars	Charge
	GJ	Per GJ	(\$)
Minimum	0.0		12.300
1	99999.0	8.8200	
<b>Record # 3</b>	Fuel: Oil		
Rate ID = Ottawa08	Oil Rate Block		
Rate Block		Dollars	Charge
	Litre	Per Litre	(\$)
Minimum	0.0		0.000
1	99999.0	1.1750	
<b>Record # 4</b>	Fuel: Propane		
Rate ID = Ottawa08	Propane Rate Block		
Rate Block		Dollars	Charge
	Litre	Per Litre	(\$)
Minimum	0.0		0.000
1	99999.0	0.7200	
<b>Record # 5</b>	Fuel: Wood		
Rate ID = Sth Ont	Cord Rate		
Rate Block		Dollars	Charge
	Cord	Per Cord	(\$)
Minimum	0.0		0.000
1	99999.0	210.0000	

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**MONTHLY ENERGY PROFILE**

<b>Month</b>	<b>Energy Load (MJ)</b>	<b>Internal Gains (MJ)</b>	<b>Solar Gains (MJ)</b>	<b>Aux. Energy (MJ)</b>	<b>HRV Eff. %</b>
<b>Jan</b>	14170.0	2727.0	1416.1	10026.8	0.0
<b>Feb</b>	12006.9	2458.1	2083.9	7464.9	0.0
<b>Mar</b>	11690.1	2726.9	2798.7	6164.5	0.0
<b>Apr</b>	9080.9	2653.7	3205.9	3221.3	0.0
<b>May</b>	6613.7	2762.7	2933.5	917.4	0.0
<b>Jun</b>	3362.3	2166.7	1195.6	0.0	0.0
<b>Jul</b>	1905.0	1645.6	259.4	0.0	0.0
<b>Aug</b>	2079.3	1746.1	333.2	0.0	0.0
<b>Sep</b>	4878.7	2681.8	2053.2	143.8	0.0
<b>Oct</b>	8581.9	2783.6	2217.5	3580.8	0.0
<b>Nov</b>	11847.8	2673.7	1462.0	7712.1	0.0
<b>Dec</b>	14506.7	2742.2	1153.9	10610.6	0.0
<b>Ann</b>	100723.3	29768.2	21113.0	49842.1	0.0

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**FOUNDATION ENERGY PROFILE**

<b>Month</b>	<b>Heat Loss (MJ)</b>				<b>Total</b>
	<b>Crawl Space</b>	<b>Slab</b>	<b>Basement</b>	<b>Walkout</b>	
<b>Jan</b>	0.0	0.0	1441.3	0.0	1441.3
<b>Feb</b>	0.0	0.0	1071.7	0.0	1071.7
<b>Mar</b>	0.0	0.0	884.8	0.0	884.8
<b>Apr</b>	0.0	0.0	462.0	0.0	462.0
<b>May</b>	0.0	0.0	131.8	0.0	131.8
<b>Jun</b>	0.0	0.0	0.0	0.0	0.0
<b>Jul</b>	0.0	0.0	0.0	0.0	0.0
<b>Aug</b>	0.0	0.0	0.0	0.0	0.0
<b>Sep</b>	0.0	0.0	20.7	0.0	20.7
<b>Oct</b>	0.0	0.0	513.8	0.0	513.8
<b>Nov</b>	0.0	0.0	1107.1	0.0	1107.1
<b>Dec</b>	0.0	0.0	1523.3	0.0	1523.3
<b>Ann</b>	0.0	0.0	7156.5	0.0	7156.5

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**FOUNDATION TEMPERATURES & VENTILATION PROFILE**

<b>Month</b>	<b>Temperature (Deg °C)</b>			<b>Air Change Rate</b>		<b>Heat Loss (MJ)</b>
	<b>Crawl Space</b>	<b>Basement</b>	<b>Walkout</b>	<b>Natural</b>	<b>Total</b>	

Jan	0.0	19.0	0.0	0.065	0.137	2105.0
Feb	0.0	18.9	0.0	0.062	0.134	1748.3
Mar	0.0	18.9	0.0	0.056	0.128	1643.3
Apr	0.0	18.9	0.0	0.046	0.118	1201.9
May	0.0	18.9	0.0	0.032	0.104	790.5
Jun	0.0	19.3	0.0	0.021	0.093	444.8
Jul	0.0	19.8	0.0	0.013	0.085	256.0
Aug	0.0	19.6	0.0	0.013	0.085	266.2
Sep	0.0	19.1	0.0	0.023	0.095	515.3
Oct	0.0	18.9	0.0	0.040	0.112	1053.6
Nov	0.0	19.0	0.0	0.057	0.129	1663.3
Dec	0.0	19.0	0.0	0.067	0.139	2167.2
Ann	0.0	19.1	0.0	0.041	0.113	13855.4

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### SPACE HEATING SYSTEM PERFORMANCE

Month	Space Heating Load (MJ)	Furnace Input (MJ)	Pilot Light (MJ)	Indoor Fans (MJ)	Heat Pump Input (MJ)	Total Input (MJ)	System Cop
Jan	10026.8	10626.0	0.0	267.4	0.0	10893.4	0.920
Feb	7464.9	7911.0	0.0	199.1	0.0	8110.0	0.920
Mar	6164.5	6532.9	0.0	164.4	0.0	6697.3	0.920
Apr	3221.3	3413.8	0.0	85.9	0.0	3499.7	0.920
May	917.4	972.3	0.0	24.5	0.0	996.7	0.920
Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.000
Jul	0.0	0.0	0.0	0.0	0.0	0.0	0.000
Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.000
Sep	143.8	152.4	0.0	3.8	0.0	156.2	0.920
Oct	3580.8	3794.8	0.0	95.5	0.0	3890.3	0.920
Nov	7712.1	8172.9	0.0	205.7	0.0	8378.6	0.920
Dec	10610.6	11244.6	0.0	283.0	0.0	11527.6	0.920
Ann	49842.1	52820.5	0.0	1329.3	0.0	54149.8	0.821

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### AIR CONDITIONING SYSTEM PERFORMANCE

Month	Sensible Load (MJ)	Latent Load (MJ)	AirCond Energy (kWh)	Fan Energy (kWh)	Ventilator Energy (kWh)	Crankcase Heater (kWh)	Total Energy (kWh)	COP	Av.RH %
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<b>May</b>	265.9	36.4	28.0	5.6	0.0	38.0	71.6	1.2	43.1
<b>Jun</b>	962.1	148.5	101.0	20.0	0.0	24.7	145.8	2.1	44.0
<b>Jul</b>	2198.3	385.9	231.4	45.5	0.0	12.0	288.9	2.5	44.7
<b>Aug</b>	1749.3	357.4	189.6	37.3	0.0	15.9	242.8	2.4	45.7
<b>Sep</b>	452.5	109.6	52.5	10.3	0.0	30.7	93.4	1.7	47.4
<b>Oct</b>	7.8	3.1	1.1	0.2	0.0	44.3	45.6	0.1	49.7
<b>Ann</b>	5636.0	1040.9	603.5	119.0	0.0	165.6	888.2	2.1	45.1

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**MONTHLY ESTIMATED ENERGY CONSUMPTION BY DEVICE (MJ)**

<b>Month</b>	<b>Space Heating</b>		<b>DHW Heating</b>		<b>Lights &amp; Appliances</b>	<b>HRV &amp; FANS</b>	<b>Air Conditioner</b>
	<b>Primary</b>	<b>Secondary</b>	<b>Primary</b>	<b>Secondary</b>			
<b>Jan</b>	10626.0	0.0	1269.6	0.0	2606.9	388.8	0.0
<b>Feb</b>	7911.0	0.0	1161.3	0.0	2354.6	308.7	0.0
<b>Mar</b>	6532.9	0.0	1269.6	0.0	2606.9	285.8	0.0
<b>Apr</b>	3413.8	0.0	1185.9	0.0	2522.8	203.4	0.0
<b>May</b>	972.3	0.0	1165.1	0.0	2606.9	166.0	237.8
<b>Jun</b>	0.0	0.0	1069.1	0.0	2522.8	189.6	452.7
<b>Jul</b>	0.0	0.0	1060.6	0.0	2606.9	285.3	876.2
<b>Aug</b>	0.0	0.0	1044.4	0.0	2606.9	255.7	739.7
<b>Sep</b>	152.4	0.0	1026.4	0.0	2522.8	158.4	299.3
<b>Oct</b>	3794.8	0.0	1104.7	0.0	2606.9	217.6	163.3
<b>Nov</b>	8172.9	0.0	1127.5	0.0	2522.8	323.1	0.0
<b>Dec</b>	11244.6	0.0	1225.4	0.0	2606.9	404.4	0.0
<b>Ann</b>	52820.5	0.0	13709.5	0.0	30694.3	3186.9	2768.9

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**ESTIMATED FUEL COSTS (Dollars)**

<b>Month</b>	<b>Electricity</b>	<b>Natural Gas</b>	<b>Oil</b>	<b>Propane</b>	<b>Wood</b>	<b>Total</b>
<b>Jan</b>	93.71	117.22	0.00	0.00	0.00	210.93
<b>Feb</b>	80.62	92.32	0.00	0.00	0.00	172.94
<b>Mar</b>	89.65	81.12	0.00	0.00	0.00	170.77
<b>Apr</b>	83.09	52.87	0.00	0.00	0.00	135.96
<b>May</b>	94.30	31.15	0.00	0.00	0.00	125.45
<b>Jun</b>	100.38	21.73	0.00	0.00	0.00	122.11
<b>Jul</b>	124.15	21.65	0.00	0.00	0.00	145.80
<b>Aug</b>	117.60	21.51	0.00	0.00	0.00	139.11
<b>Sep</b>	93.11	22.70	0.00	0.00	0.00	115.81
<b>Oct</b>	93.40	55.51	0.00	0.00	0.00	148.91

<b>Nov</b>	87.81	94.33	0.00	0.00	0.00	182.14
<b>Dec</b>	94.32	122.29	0.00	0.00	0.00	216.61
<b>Ann</b>	1152.15	734.40	0.00	0.00	0.00	1886.54

**The calculated heat losses and energy consumptions are only estimates, based upon the data entered and assumptions within the program. Actual energy consumption and heat losses will be influenced by construction practices, localized weather, equipment characteristics and the lifestyle of the occupants.**

THE CORPORATION OF THE CITY OF WHITE ROCK

# BUILDING PERMIT

This Permit must be posted in a conspicuous place on site of construction

DATE OF ISSUANCE: Jul 31, 2024

BUILDING PERMIT No: BP021501

ROLL No: 000423.000

PROJECT ADDRESS: 1407 BISHOP RD

LEGAL DESCRIPTION: LT 261/ SEC 9/ NWD/ PL NWP41968/ TWP 1

ZONE: RS-1

**DESCRIPTION OF PROJECT:**

New Construction of a SFD + Suite

OWNER: Redaction S.22

Phone: s.22

Redaction S.22

Phone: s.22

ADDRESS: Redaction S.22

BUILDER: AJAIB GILL

Phone: Redaction S.22

SOUTH ROCK CUSTOM HOME BUILDERS LTD.

Phone: s.22

ADDRESS: Redaction S.22

*JESSE GARGULLIS*

Building Official

**In Accordance with Building Bylaw No. 1928:**

The City of White Rock, in issuing this permit, has relied upon (a) Registered Professional(s) for certification to the B. C. Building Regulations for the plans or aspects of the plans. Neither the issuance of a permit under this Bylaw nor the acceptance or review of plans, drawings, specifications or supporting documents, nor any inspections made by or on behalf of the City constitute in any way a representation, warranty, assurance or statement that the Building Code, this Bylaw or any other applicable enactments have been complied with or in any way relieve the owner (and where the owner is acting through a representative, the representative) from full and sole responsibility to perform the work in respect of which the permit was issued in strict accordance with the Building Code, this Bylaw, and any other applicable enactments.

OCCUPANY / FINAL GRANTED: .....

Date: .....

THE CORPORATION OF THE CITY OF WHITE ROCK

# BUILDING PERMIT

This Permit must be posted in a conspicuous place on site of construction

PERMIT FEES:	Project Value:	
BP SCAN FEE	27.00	162.00
BP SS FEE W BP	1.00	265.00
BLD PERMIT CRP	912,235.00	12,684.88
APPL NEW SF/2F	1.00	796.00
BP SWR O/S SF/D	1.00	88.00
SUMP/MH/CB	3.00	225.00
BP STM O/S SF/D	1.00	88.00
BP WTR O/S SF/D	1.00	88.00
<b>Total:</b>		<b>\$14,396.88</b>

**CONDITIONS:**

ALL CONSTRUCTION TO CONFORM TO THE 2024 BC BUILDING CODE.
TREE REPORT ON FILE FROM HUCKLEBERRY LANDSCAPE DESIGN. 604-720-4455.
491149
COORDINATING REGISTERED PROFESSIONAL SCHEDULE A ON FILE FROM NORTHWEST ENGINEERS. 778-885-0551.
FIRE SUPPRESSION SCHEDULE B ON FILE FROM OCULUS ENGINEERING. 778-968-1945.
GEO-TECHNICAL SCHEDULE B ON FILE FROM BANSAL AND ASSOCIATES CONSULTING ENGINEERS. 604-501-7788.
INSPECTION IS REQUIRED PRIOR TO COVERING ANY WORK. CALL 604-541-2135 FOR INSPECTION BOOKINGS.
INSPECTION IS REQUIRED PRIOR TO COVERING ANY WORK. CALL 604-541-2135 FOR INSPECTION BOOKINGS.
PLUMBING SCHEDULE B ON FILE FROM SRC ENGINEERING CONSULTANTS. 604-268-9091.
JOB SITE MUST REMAIN CLEAN AND FREE OF HAZARDS.
SAFE AND SECURE CONSTRUCTION FENCING AROUND THE PERIMETER OF THE PROPERTY IS REQUIRED THROUGHOUT THE ENTIRE PROJECT
STRUCTURAL SCHEDULE B ON FILE FROM NORTHWEST ENGINEERS. 778-885-0551.
TREE MANAGEMENT PERMIT NO. 00709 ISSUED.ALL TREE PROTECTION BARRIERS TO REMAIN IN PLACE AND IN GOOD CONDITION THROUGHOUT CONSTRUCTION.

OCCUPANY / FINAL GRANTED: .....

Date: .....

THE CORPORATION OF THE CITY OF WHITE ROCK

# DEMOLITION PERMIT

This Permit must be posted in a conspicuous place on site of construction

DATE OF ISSUANCE: Jul 02, 2024

DEMOLITION PERMIT No: BP021502

ROLL No: 000423.000

PROJECT ADDRESS: 1407 BISHOP RD

LEGAL DESCRIPTION: LT 261/ SEC 9/ NWD/ PL NWP41968/ TWP 1

ZONE: RS-1

**DESCRIPTION OF PROJECT:**

Demolition of an SFD

OWNER: Redaction S.22

Phone: s.22

Redaction S.22

Phone s.22

ADDRESS: Redaction S.22

BUILDER: AJAIB GILL

Phone: s.22

SOUTH ROCK CUSTOM HOME BUILDERS LTD.

Phone: s.22

ADDRESS: Redaction S.22

DEMO CONTRACTOR: BSS EXCAVATING

Phone: 778-882-7917

ADDRESS: 5228 157 ST SURREY BC V3Z 1G2

*JASON BIRKLAND*

City Staff

**In Accordance with Building Bylaw No. 1928:**

The City of White Rock, in issuing this permit, has relied upon (a) Registered Professional(s) for certification to the B. C. Building Regulations for the plans or aspects of the plans. Neither the issuance of a permit under this Bylaw nor the acceptance or review of plans, drawings, specifications or supporting documents, nor any inspections made by or on behalf of the City constitute in any way a representation, warranty, assurance or statement that the Building Code, this Bylaw or any other applicable enactments have been complied with or in any way relieve the owner (and where the owner is acting through a representative, the representative) from full and sole responsibility to perform the work in respect of which the permit was issued in strict accordance with the Building Code, this Bylaw, and any other applicable enactments.

THE CORPORATION OF THE CITY OF WHITE ROCK

# DEMOLITION PERMIT

This Permit must be posted in a conspicuous place on site of construction

**PERMIT FEES:**

BP DEMO SF/D  
EN SAN CAP OFF  
EN STM CAP OFF  
APPL OTHR PERMT  
DEP RD&ROW

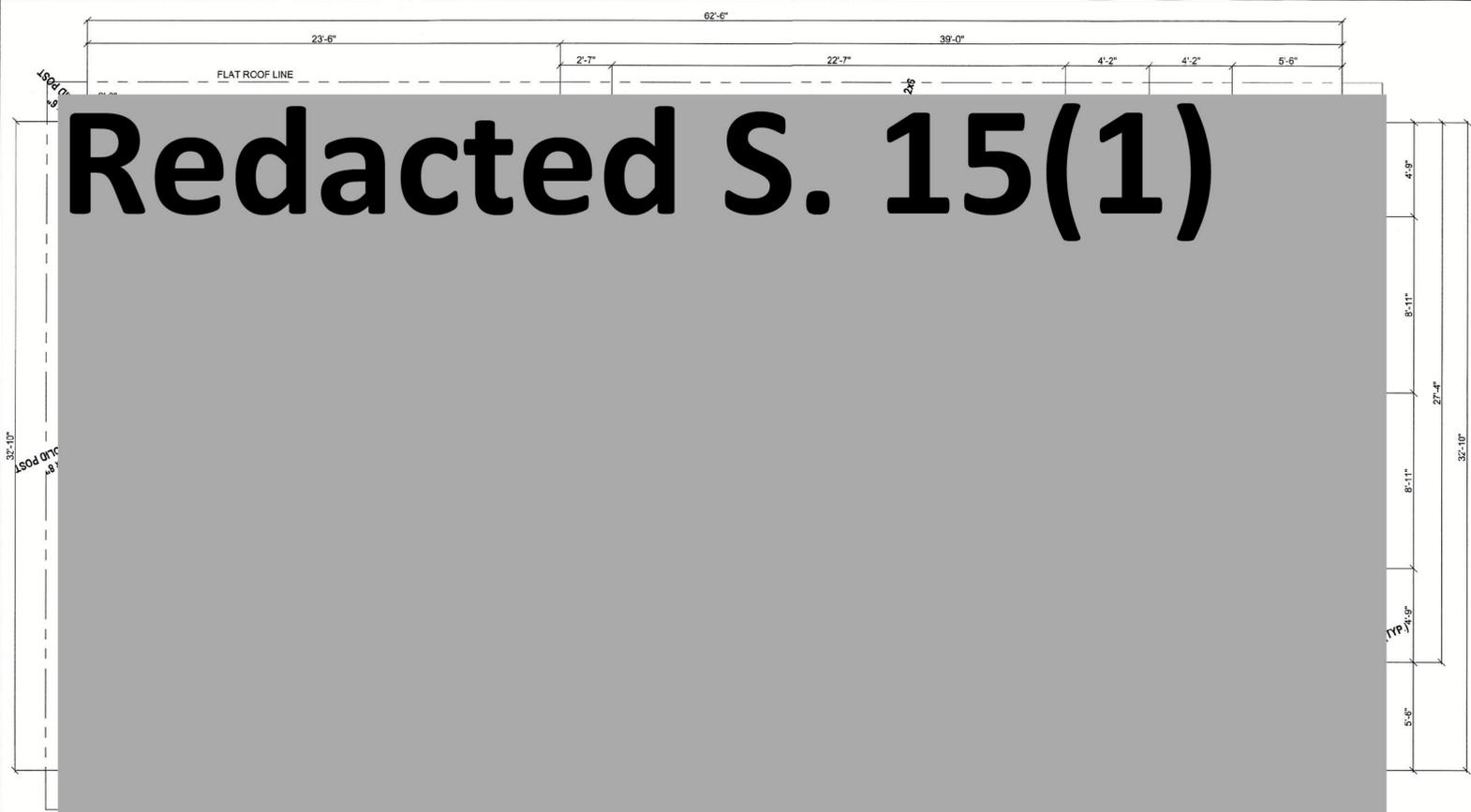
**Project Value:**

1.00	1,210.00
1.00	153.00
1.00	153.00
1.00	90.00
1.00	5,000.00
<b>Total:</b>	<b>\$6,606.00</b>

**CONDITIONS:**

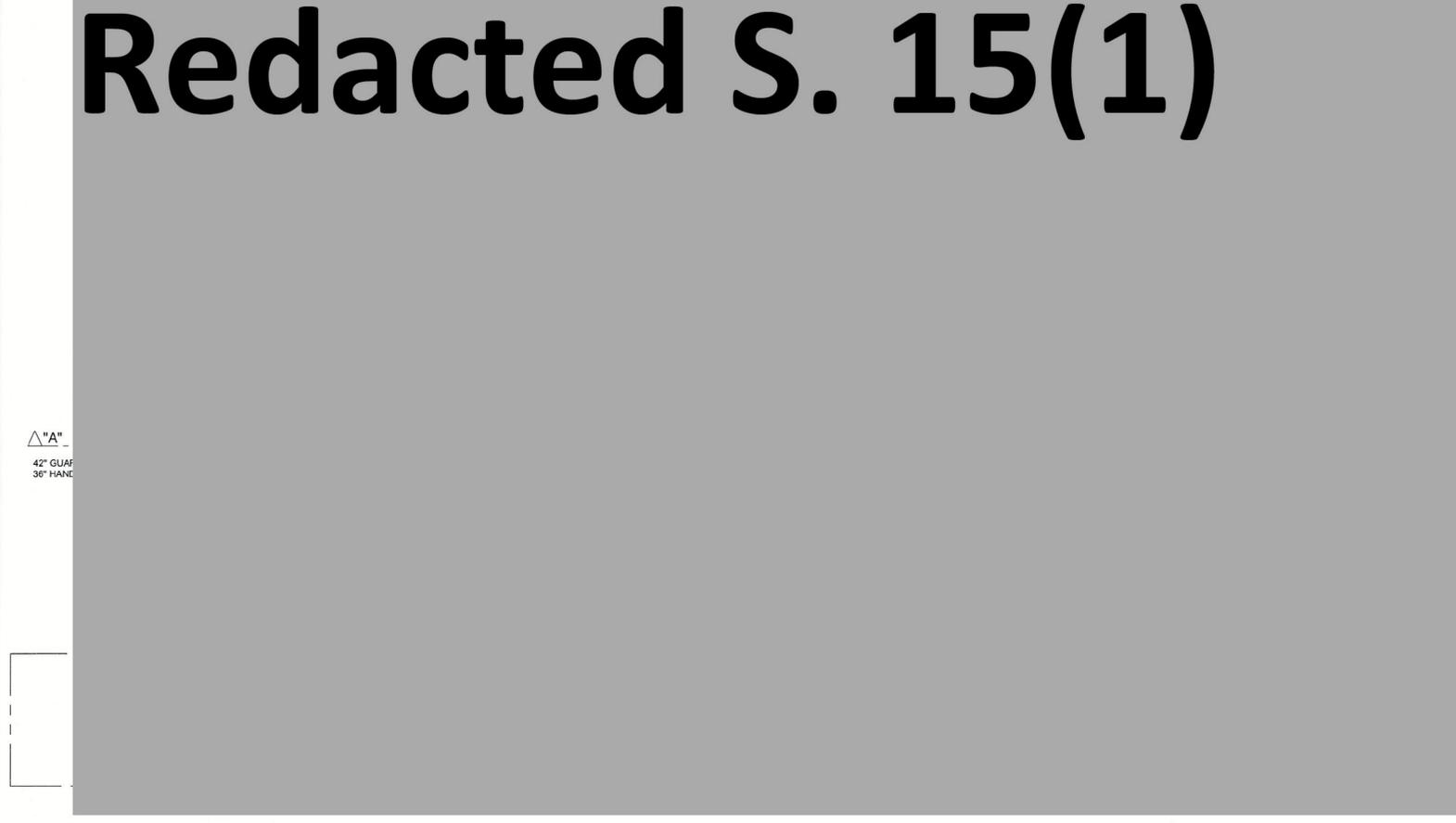
WATER SERVICE DISCONNECTION MUST OCCUR PRIOR TO DEMOLITION. APPLY AT: <a href="http://WWW.WHITEROCKCITY.CA/313/WATER-SERVICE-DISCONNECTION">WWW.WHITEROCKCITY.CA/313/WATER-SERVICE-DISCONNECTION</a> TO BEGIN THE PROCESS.
CAP OFF OF SANITARY AND DRAINAGE SERVICES MUST OCCUR PRIOR TO DEMOLITION. AN APPLICANT MUST: MATERIAL ENTERS THE CITY'S DRAINAGE AND SANITARY SYSTEMS THROUGHOUT THE DEMOLITION PROCESS AND SANITARY CONNECTIONS AT THE PROPERTY LINE PROPER BENCHING/SHORING BEFORE SCHEDULING AN APPOINTMENT CALL THE CITY'S OPERATIONS DEPARTMENT AT 604-541-2181 TO SCHEDULE A CAP OFF APPOINTMENT.
ONCE GAS IS DISCONNECTED, THE SERVICE MARKER STAKE AND TRACER WIRE MUST REMAIN IN PLACE AND VISIBLE.
WORKSAFEBC, AND OCCUPATIONAL HEALTH & SAFETY REGULATIONS, TO BE ADHERED TO BEFORE & DURING THE DEMOLITION PROCESS.
WORK IS TO STOP IF HAZARDOUS MATERIALS, NOT NOTED IN THE HAZARDOUS MATERIALS REPORT SUBMITTED TO THE CITY, ARE ENCOUNTERED DURING THE DEMOLITION PROCESS & PROPER ABATEMENT MEASURES ARE TO BE INITIATED AND COMPLETED PRIOR TO COMMENCING.
DEMOLITION INSPECTION IS REQUIRED. CALL THE BUILDING INSPECTION LINE AT 604-541-2135 WHEN THE DEMOLITION IS COMPLETED TO SCHEDULE A DEMOLITION INSPECTION OF THE SITE. *NOTE - ENSURE CAPPING OF THE OLD SERVICE(S) ARE COMPLETED PRIOR TO SCHEDULING DEMOLITION INSPECTION
DEMOLITION PERMIT IS ISSUED IN CONJUNCTION WITH THE TREE PERMIT # TMP00709 (DEMO. STAGE). REFERENCE YOUR ISSUED TREE MANAGEMENT PERMIT FOR FURTHER INFORMATION INTO HOW THE TREES ON/OFF THE SITE MUST BE MANAGED.

Redacted S. 15(1)



UPPER FLOOR PLAN / ROOF FRAMING PLAN

Redacted S. 15(1)



MAIN FLOOR PLAN / UPPER FLOOR FRAMING PLAN

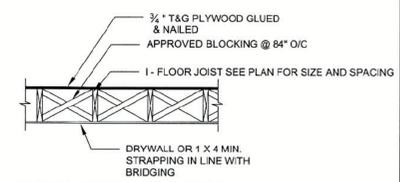
NOTE:  
ML = MICROLAM LVL or EQUIVALENT [1.9E] MIN.  
PSL = PARALAM SCL or EQUIVALENT [2.2E] MIN.  
TSL = TIMBER STRAND LSL [1.55E] or EQUIVALENT

SHEARWALL SCHEDULE  
SIW: SHEAR WALL NAILING 2 1/2" x 4" NAIL @ 0.331' @ 4" ON PANEL EDGES AND 12" AT INTERIOR SUPPORTS  
NOTE: NO FINGER JOINTS SHALL BE USED IN THE CONSTRUCTION OF SHEARWALLS

- Gravity force resistance system (GFSR) of structure is designed in accordance with CAN/CSA O86.1-19 Engineering design in Wood, CAN/CSA-A23.3-19 Design of Concrete Structures and part 4 and part 9 of BC Building Code 2024 Edition.  
- for SFRC (seismic force resistance system) lateral loads are calculated as per part 4 of BCBC 2024.

All Shearwalls noted on floor/roof plans shall be constructed as SW refer S1 (UNO)

NOTE:  
ML = MICROLAM LVL or EQUIVALENT [1.9E] MIN.  
PSL = PARALAM SCL or EQUIVALENT [2.2E] MIN.  
TSL = TIMBER STRAND LSL [1.55E] or EQUIVALENT

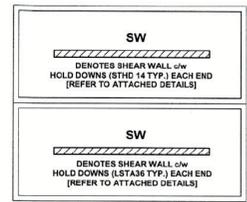


FLOOR ASSEMBLY DETAILS

Structural components of this proposed dwelling are sufficient to support 0.24kPa load for the entire roof area in addition to snow, associated rain loads and dead loads. Truss manufacturer shall design the trusses taking into considerations the additional loads accordingly.

- FLOOR LOADS:  
D.L. = 40 PSF  
D.L. = 30 PSF (1 1/2" CONCRETE TOPPING, RADIANT HEAT ALLOWED)  
- ALL HEADER/LINTEL TO BE AT LEAST 2-2X10 OR BETTER PROVIDE AT LEAST 2-STUDS AT EACH END OF EVERY BEAM OR HEADER/LINTEL (U.N.O.)  
- ALL THE COLUMNS SHALL COME DOWN TO BASEMENT  
- PROVIDE POINT LOAD TRANSFER BLOCKS UNDER AXIAL LOADS  
- BASEMENT BEARING WALLS SHALL BE 2"x8" @ 16" O/C  
- FOR JOIST SPANS THAT EXCEED 15.5 FT., USE IBS 2000  
- GROSS BRIDGING BETWEEN JOISTS  
- SUBFLOORS SHOULD BE GLUED AND NAILED TO JOISTS  
- ASSUMED SOIL BEARING CAPACITY = 1500 PSF  
- FOR STRUCTURAL NOTES SEE DWG. S1  
North-West Eng.

- TJI FLOOR JOISTS SHALL BE DESIGNED BY MANUFACTURER/SUPPLIER AND INSTALLED AS ON THE PLAN SUBMIT TO NORTHWEST ENGINEERS FOR REVIEW BEFORE INSTALLATION.  
- JOISTS SHALL BE GLUED AND NAILED TO THE SUB-FLOOR  
- FLOOR ASSEMBLY SHOWN ON THESE DRAWINGS IS FOR GUIDANCE VERIFICATION BY MANUFACTURER/SUPPLIER OF TJI JOISTS IS NEEDED.



City of White Rock Building Approvals  
City review of documents stamped:

Permit No: 021501-01

1. does not relieve the Owner of Lands referred to in this document from full responsibility for work being carried out in compliance with City and Provincial enactments;
2. is subject to terms and conditions printed on the permit and prescribed in the City bylaws.

Reviewed by: [Signature] Date: May 13, 2024

REVISED ON MAY 08, 2024

THIS STRUCTURAL PLAN SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL PLAN. WINDOWS, DOOR OPENINGS AND ALL DIMENSIONS ON ARCHITECTURAL PLAN SHALL BE GIVEN PREFERENCE.

BUILDER / FRAMER SHALL VERIFY THE STRUCTURAL DWG BEFORE STARTING THE WORK. IF ANY DISCREPANCY FOUND PLEASE BRING TO THE NOTICE OF NORTHWEST ENGINEERS

NOTE:  
ALL PSL, LVL TSL OR BUILTUP BEAM SHALL NOT BE CUT, WEDGE OR DRILLED BY ANY CREW MEMBER



RECEIVED  
MAY 09 2024  
PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

EGBC PERMIT TO PRACTICE  
PERMIT NUMBER: 1000645

021501-01

Northwest Engineers Inc.  
Suite #304-8356 Scott Road  
Surrey, B.C. V3W 3N4  
Phone: (604) 592-0714  
Fax: (604) 592-0734



PROJECT: SINGLE FAMILY DWELLING  
1407 BISHOP RD, WHITE ROCK, BC  
SHEET TITLE: UPPER FLOOR STRUCTURAL PLAN

Table with columns for CLIENT, ARCHITECT, and other project details.

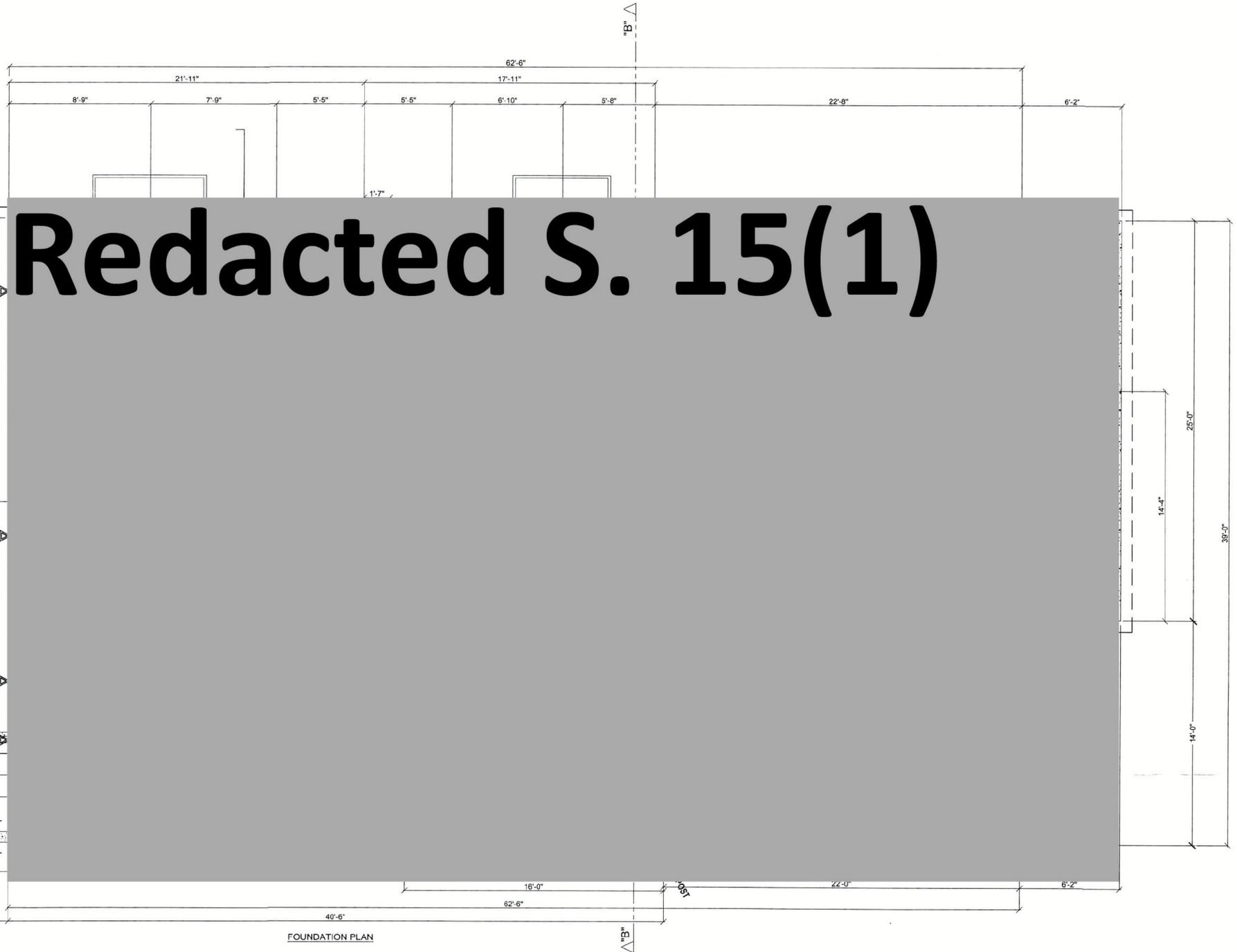
Table with columns for CLIENT, ARCHITECT, and other project details.

Table with columns for CLIENT, ARCHITECT, and other project details.

Table with columns for REVISIONS, DATE, and other project details.

Table with columns for DATE, DRAWN BY, CHECKED BY, and other project details.

# Redacted S. 15(1)



FOUNDATION PLAN

**ON PLAN**

**NOTE:**  
 ML = MICROLAM LVL or EQUIVALENT [1.9E] MIN.  
 PSL = PARALAM SCL or EQUIVALENT [2.2E] MIN.  
 TSL = TIMBER STRAND LSL [1.55E] or EQUIVALENT

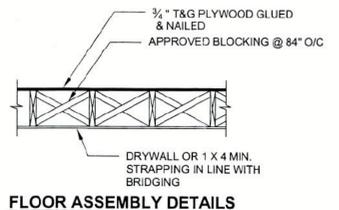
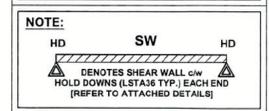
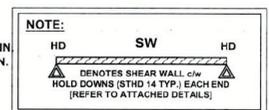
All Shearwalls noted on floor/roof plans shall be constructed as SW refer S1 (UNO)

**SHEARWALL SCHEDULE**  
 SW-SHEAR WALL NAILING 2 1/2" NAIL @ 0.1317' @ 4" ON PANEL EDGES AND 12" AT INTERIOR SUPPORTS  
 NOTE: NO FINGER JOINTS SHALL BE USED IN THE CONSTRUCTION OF SHEARWALLS

**NOTE:**  
 ML = MICROLAM LVL or EQUIVALENT [1.9E] MIN.  
 PSL = PARALAM SCL or EQUIVALENT [2.2E] MIN.  
 TSL = TIMBER STRAND LSL [1.55E] or EQUIVALENT

- Gravity force resistance system (GFSR) of structure is designed in accordance with CAN/CSA O86.1-19 Engineering design in Wood, CAN/CSA-A23.3-19 Design of Concrete Structures and part 4 and part 9 of BC Building Code 2024 Edition.  
 - for SFRC (siesmic force resistance system) lateral loads are calculated as per part 4 of BCBC 2024.

ALL SHEAR-WALLS SHALL BE BLOCKED AT PANEL EDGES AS NOTED ON (SHEAR-WALL SCHEDULE) PAGE S2



**REVISED ON MAY 08,2024**

THIS STRUCTURAL PLAN SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL PLAN. WINDOWS, DOOR OPENINGS AND ALL DIMENSIONS ON ARCHITECTURAL PLAN SHALL BE GIVEN PREFERENCE.

BUILDER / FRAMER SHALL VERIFY THE STRUCTURAL DWG BEFORE STARTING THE WORK IF ANY DISCREPANCY FOUND PLEASE BRING TO THE NOTICE OF NORTHWEST ENGINEERS

**NOTE:**  
 ALL PSL, LVL, TSL OR BUILT UP BEAM SHALL NOT BE CUT, WEDGE OR DRILLED BY ANY CREW MEMBER



RECEIVED

MAY 09 2024

PLANNING & DEVELOPMENT CITY OF WHITE ROCK

EGBC PERMIT TO PRACTICE PERMIT NUMBER: 1000646

Northwest Engineers Inc.  
 Suite #304-8356 Scott Road  
 Surrey, B.C. V3W 3N4  
 Phone: (604) 592-0714  
 Fax: (604) 592-0734



PROJECT: SINGLE FAMILY DWELLING  
 1407 BISHOP RD, WHITE ROCK, BC  
 SHEET TITLE: BASEMENT & FOUNDATION PLAN

SEAL:

CLIENT:  
 ARCHITECT:

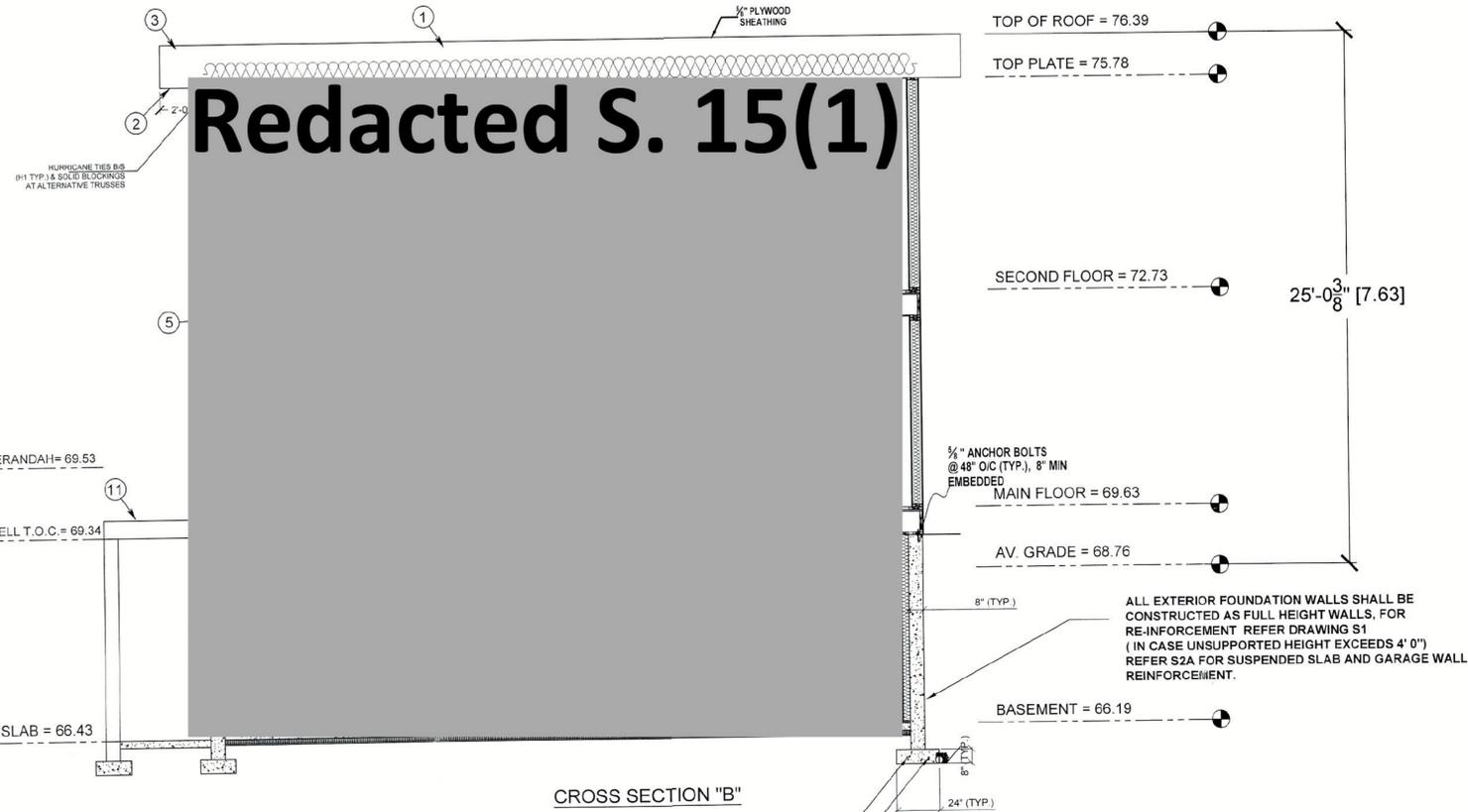
REVISIONS	DATE	BY

DATE	DESIGNED: ROY	FRAMER: ROY	CHECK:	JOB NO.:

LAST MODIFIED: S4  
 DRAWING NO. S4

021501-01





ALL EXTERIOR FOUNDATION WALLS SHALL BE CONSTRUCTED AS FULL HEIGHT WALLS, FOR RE-INFORCEMENT REFER DRAWING S1 (IN CASE UNSUPPORTED HEIGHT EXCEEDS 4' 0") REFER S2A FOR SUSPENDED SLAB AND GARAGE WALL REINFORCEMENT.

**DESIGN CRITERIA**

ALL DESIGNS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE 2024 BC BUILDING CODE PART 4 & 9 AND THE LOCAL BYLAWS  
Based on notes A-9.4.2.1 and A-9.4.2.2 of BC BC 2024 specified snow loads are

Location: 1407 BISHOP RD., WHITE ROCK  
 $S_s = 2.0 \text{ kPa}$   $S_r = 0.2 \text{ kPa}$   
 $C_b = 0.55$   
 Specified Snow Load  
 $S = 1.2 \text{ kPa}$  (25.08 psf)  
 Roof Dead Load = 15 psf + 5 psf for solar panels  
 WIND PRESSURE:  $q_{(H)} = 0.34 \text{ kPa}$   
 $q_{(Z)} = 0.44 \text{ kPa}$   
 FLOOR: Live Load = 40 psf  
 Dead load = 30 psf for floors with 1.5" conc. topping (15 psf otherwise)

**Seismic Data for**

Equivalent Static Method (BCBC 2024 & NBC 2020)  
 Location: 1407 BISHOP RD., WHITE ROCK  
 Latitude: 49.02765  
 Longitude: -122.83059  
 Ground Motions  
 Probability of exceedance in 50 years = 2%  
 $V_s30 = 760 \text{ m/s}$   
 $Sa(0.2) = 0.874$   
 $Sa(0.5) = 0.53$   
 $Sa(1.0) = 0.301$   
 $PGA = 0.387$   
 $Sa(2.0) = 0.188$   
 $Sa(5.0) = 0.0511$   
 $Sa(10.0) = 0.0238$   
 $PGV = 0.329$   
 Computed Site class from  $V_s30 = C$



THIS STRUCTURAL PLAN SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL PLAN, WINDOWS, DOOR OPENINGS AND ALL DIMENSIONS ON ARCHITECTURAL PLAN SHALL BE GIVEN PREFERENCE.  
 BUILDER / FRAMER SHALL VERIFY THE STRUCTURAL DWG BEFORE STARTING THE WORK. IF ANY DISCREPANCY FOUND PLEASE BRING TO THE NOTICE OF NORTHWEST ENGINEERS

RECEIVED  
 MAR 28 2024  
 PLANNING & DEVELOPMENT  
 CITY OF WHITE ROCK

NOTE:  
 ALL PSL, LVL TSL OR BUILTUP BEAM SHALL NOT BE CUT, WEDGE OR DRILLED BY ANY CREW MEMBER

EGBC PERMIT TO PRACTICE  
 PERMIT NUMBER: 1000645

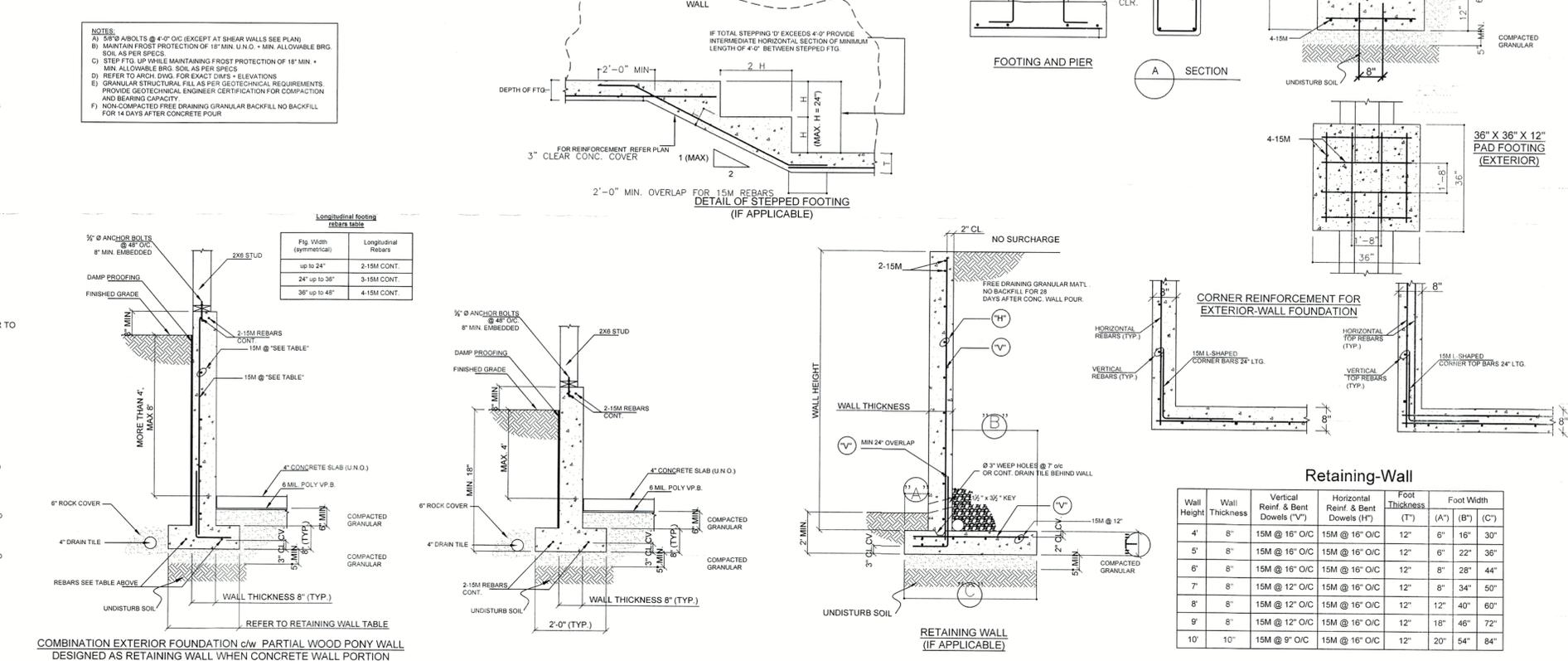
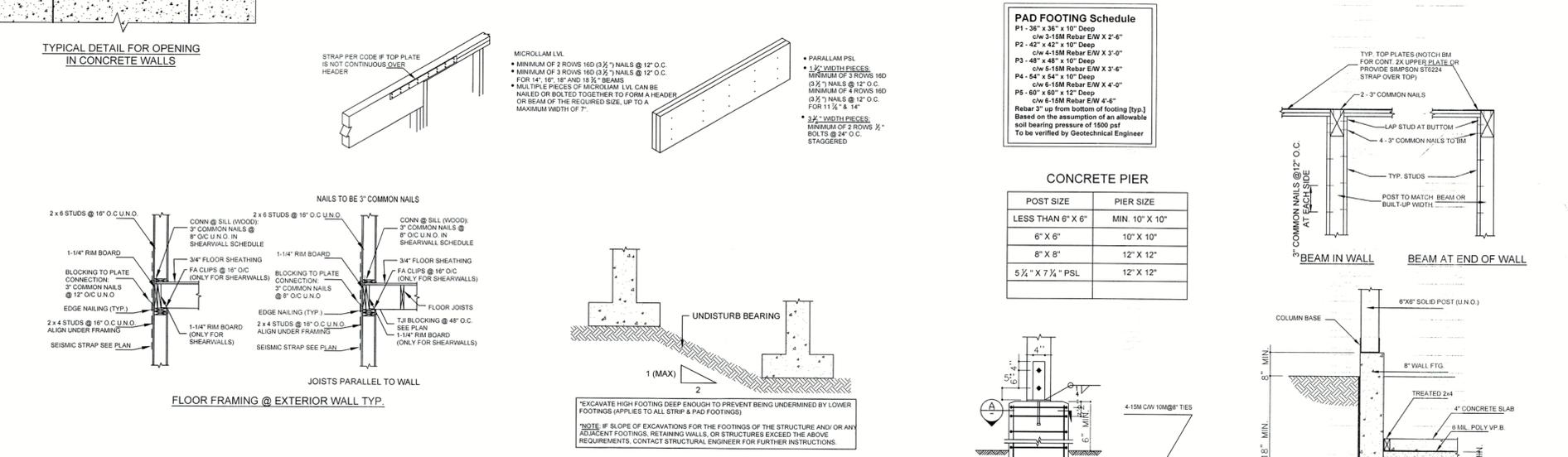
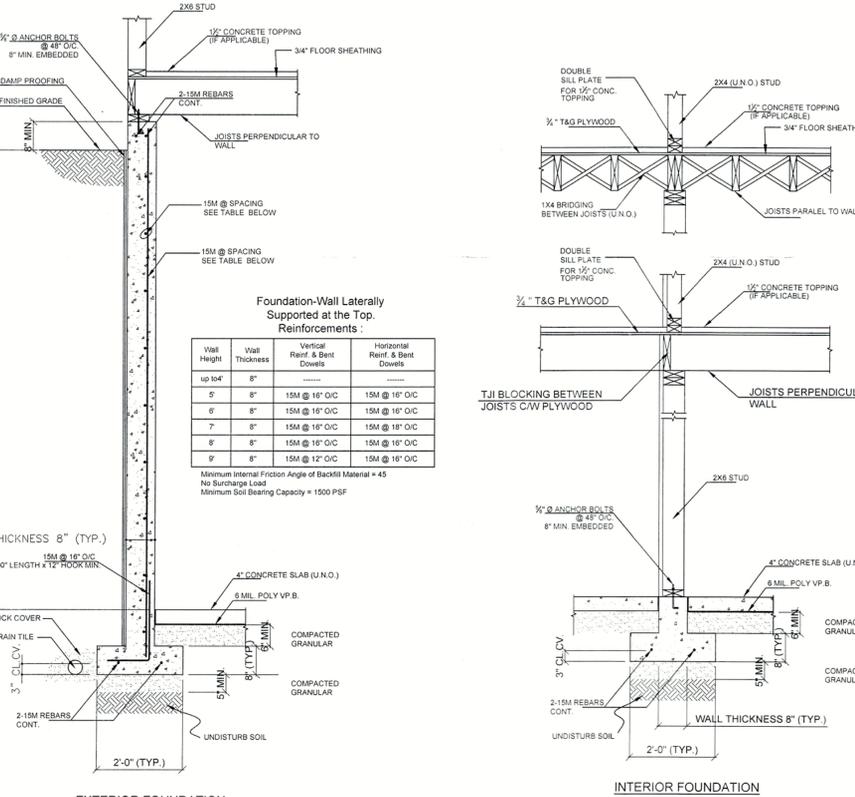
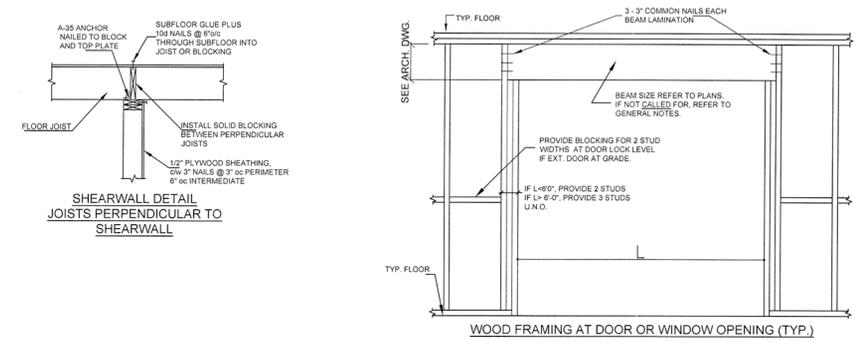
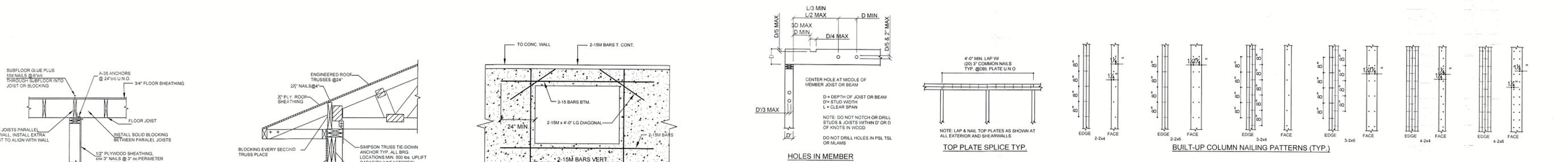
021501

Northwest Engineers Inc.  
 Suite #304-8356 Scott Road  
 Surrey, B.C. V3W 3N4  
 Phone: (604) 592-0714  
 Fax: (604) 592-0734

PROJECT: SIMONE FAMILY DWELLING  
 1407 BISHOP RD WHITE ROCK BC  
 SHEET TITLE: FOUNDATION WALL SECTION  
 ARCHITECT: [Redacted]

DATE	REVISIONS

EGBC PERMIT TO PRACTICE  
 PERMIT NUMBER: 1000645



NOTE: FOOTING & WALL SIZE SHOULD BE VERIFIED ON SITE BY NORTHWEST ENGINEERS INC.

NOTE: RETAINING WALL SIZE SHOULD BE VERIFIED ON SITE BY THE NORTHWEST ENGINEERS

EGBC PERMIT TO PRACTICE  
 PERMIT NUMBER: 1100645  
 MAR 28 2024  
 PLANNING & DEVELOPMENT  
 CITY OF WHITE ROCK

021501



# New Home Registration Form

The purpose of this form is to certify, for the purpose of section 30 of the Homeowner Protection Act, that a proposed new home is covered by home warranty insurance and built by a licensed residential builder.

Form: 491149

---

**A. BUILDER INFORMATION**

---

Licence Number: 37621

Expiry Date: September 30, 2024

Company Name: South Rock Custom Home Builders Ltd.

---

**B. PROPERTY INFORMATION**

---

Civic Address: 1407 Bishop Road

City/Town: White Rock

Province: British Columbia

Postal Code: V4B 3K4

PID: 003-353-516

Legal Description: Lot 261 Section 9 Township 1 NWD Plan 41968

Owner(s) of the Property: **Redaction S.22**

---

**C. CONSTRUCTION INFORMATION**

---

Number of Dwelling Units: 1

Type of New Home: Single

---

**D. PROOF OF HOME WARRANTY INSURANCE**

---

*Certified and sealed by warranty provider:*

Seal:

Warranty Provider: Trisura Guarantee Insurance Company

Builder Warranty No.: SOUT181

Insurance No.: 50-188320

Warranty Provider Seal Date: April 04, 2024



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**E. BUILDING PERMIT INFORMATION**

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*To be completed by municipality or regional district and returned to the Licensing & Consumer Services Branch:*

Municipality or Regional District:

Permit issued to:

Date issued: (month/day/year)

Permit No.:

Correction to civic address, type of new home or other information, if applicable:

Address: 1407 Bishop rd Date: April 30, 2024  
 Plans Examiner: Jesse Girgulis Building Permit: \_\_\_\_\_ # of Sumps: \_\_\_\_\_

### Permit Characteristics

Part 9/Part 3 Application: P9 / P3 Secondary Suite: Y / N  
 Covenants, Easements, ROW's, LUC's: \_\_\_\_\_  
 Geotechnical Landslide Area: Y / N Flood Plain Area: Y / N Development Permit Area: Y / N

### Zoning Review

Zone: RS1 Lot Area: 465.109 m<sup>2</sup> (5006.4 ft<sup>2</sup>)  
 ANG: \_\_\_\_\_ m ( \_\_\_\_\_ ft) Max Permitted Height: \_\_\_\_\_ m ( \_\_\_\_\_ ft)  
 Angle of Containment Required: \_\_\_\_\_ South Elevation start of AOC: \_\_\_\_\_ m

Setbacks	Front	Rear	Side (Interior/Exterior) W   E	Side (Interior/Exterior) W   E
(Principal Building) Required:	<u>7.5m</u>	<u>3.8m</u>	<u>1.5m</u>	<u>3.5m (BOV Decision)</u>
(Principal Building) Proposed:	<u>7.59m</u>	<u>3.84m</u>	<u>1.56m</u>	<u>3.51m</u>
Combined Front & Rear Setback Req.			-	-
(Ancillary Structures) Required:	-			
(Ancillary Structures) Proposed:	-			

Lot Coverage Allowable: 45 % 225288 ft<sup>2</sup> 209.29 m<sup>2</sup>  
 Lot Coverage Proposed: \_\_\_\_\_ % \_\_\_\_\_ ft<sup>2</sup> \_\_\_\_\_ m<sup>2</sup>  
 RGFA Allowable: \_\_\_\_\_ % 2503 ft<sup>2</sup> \_\_\_\_\_ m<sup>2</sup>  
 RGFA Proposed: \_\_\_\_\_ % 2501 ft<sup>2</sup> \_\_\_\_\_ m<sup>2</sup>

	Main	Upper	Basement	Garage	Suite
Floor Area	<u>1330</u> ft <sup>2</sup>	<u>1171</u> ft <sup>2</sup>	<u>1880</u> ft <sup>2</sup>	<u>550</u> ft <sup>2</sup>	<u>696</u> ft <sup>2</sup>
Gross Floor Area	<u>4380</u> ft <sup>2</sup>			<u>4931</u> ft <sup>2</sup>	For Fees

80% Rule Required: Y / N 80% Rule Main: \_\_\_\_\_ ft<sup>2</sup> Upper Allowable: \_\_\_\_\_ ft<sup>2</sup>

## Debbie Johnstone

---

**From:** Jesse Girgulis  
**Sent:** Monday, May 13, 2024 2:05 PM  
**To:** **Redaction S.22**  
**Subject:** RE: BP021501 - 1407 Bishop road

Hi **S. 22**

I have completed my review of the architectural plan set and have approved them for construction.

The pumping covenant is the last item remaining from my original deficiency list.

**Note: Demolition of existing structure must be completed with DEMO and TMP permits before your BP can be issued.**

**Follow up with Jason [jbirkland@whiterockcity.ca](mailto:jbirkland@whiterockcity.ca) regarding finalizing your Demo Permit.** Tree Management Permit (TMP) department is separate from the Building Permits department, and as such they will have their own requirements to be addressed. Check your emails for their communication. Your Building Permit cannot be issued until a TMP has been approved for construction. For TMP Email [Evan emix@whiterockcity.ca](mailto:Evan.emix@whiterockcity.ca). Additionally, the Engineering department is also separate from the Building department and they will have their own requirements that need to be addressed before our Building Permit can be issued. Check for emails from Alan - [amarkovic@whiterockcity.ca](mailto:amarkovic@whiterockcity.ca).

Regards,

Jesse Girgulis  
Building Official I | City of White Rock  
15322 Buena Vista Avenue, White Rock, BC V4B 1Y6  
Tel 604.541.2295 | [www.whiterockcity.ca](http://www.whiterockcity.ca)



**From:** **Redaction S.22**  
**Sent:** Monday, May 13, 2024 10:45 AM  
**To:** Jesse Girgulis <[JGirgulis@whiterockcity.ca](mailto:JGirgulis@whiterockcity.ca)>  
**Subject:** Re: BP021501 - 1407 Bishop road

*CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.*

Excellent, keep me posted if you need anything else.

Thanks,

Redaction S.22

Sent from my iPhone

On May 13, 2024, at 9:13 AM, Jesse Girgulis <[JGirgulis@whiterockcity.ca](mailto:JGirgulis@whiterockcity.ca)> wrote:

Mornings.22 ,

Yes, I have received the drawings in my mailbox.

Regards,

**Jesse Girgulis**

**Building Official I | City of White Rock**

15322 Buena Vista Avenue, White Rock, BC V4B 1Y6

Tel 604.541.2295 | [www.whiterockcity.ca](http://www.whiterockcity.ca)

<image001.png>

**From:** Redaction S.22

**Sent:** Monday, May 13, 2024 8:56 AM

**To:** Jesse Girgulis <[JGirgulis@whiterockcity.ca](mailto:JGirgulis@whiterockcity.ca)>

**Subject:** Re: BPO21501 - 1407 Bishop road

*CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.*

Good Morning Jessie,

I just dropped off two sets of drawings this morning. Can you please confirm that you have received them?

Thanks,

s.22

Sent from my iPhone

On May 10, 2024, at 10:09 AM, Jesse Girgulis <[JGirgulis@whiterockcity.ca](mailto:JGirgulis@whiterockcity.ca)> wrote:

Hi s.22

Yes, I received the revised structural plans and the signed schedule B. Both those deficiencies have been marked off.

I took a look at the digital architectural plans and have approved of the changes.

Feel free to drop off 2 sets of the revised plans at your convenience for my final review.

Regards,

**Jesse Girgulis**  
**Building Official I | City of White Rock**  
15322 Buena Vista Avenue, White Rock, BC V4B 1Y6  
Tel 604.541.2295 | [www.whiterockcity.ca](http://www.whiterockcity.ca)  
<image001.png>

**From:** Redaction S.22  
**Sent:** Thursday, May 9, 2024 10:06 PM  
**To:** Jesse Girgulis <[JGirgulis@whiterockcity.ca](mailto:JGirgulis@whiterockcity.ca)>  
**Cc:** info plansbydesign.ca <[info@plansbydesign.ca](mailto:info@plansbydesign.ca)>  
**Subject:** Re: BP021501 - 1407 Bishop road

*CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.*

Hi Jesse

Thank you for reviewing our file. Our builder, Ajaib dropped off the signed schedule B with our CRP initials and updated drawings from our structural engineer. Attached are revised drawings that incorporates all the feedback you provided. I have also provided the template and request to my solicitor for the pump covenant registration, they are currently working on it and we should have an update mid next week.

Please have a review and let me know if you have any questions.

On Mon, May 6, 2024 at 8:43 AM Jesse Girgulis <[JGirgulis@whiterockcity.ca](mailto:JGirgulis@whiterockcity.ca)> wrote:

Good morning Redaction S.22

Yes, I can leave the Schedule B at the front desk.

Regards,

**Jesse Girgulis**

**Building Official I | City of White Rock**

15322 Buena Vista Avenue, White Rock, BC V4B 1Y6

Tel 604.541.2295 | [www.whiterockcity.ca](http://www.whiterockcity.ca)

<image001.png>

**From:** Redaction S.22  
**Sent:** Sunday, May 5, 2024 3:50 PM  
**To:** Jesse Girgulis <[JGirgulis@whiterockcity.ca](mailto:JGirgulis@whiterockcity.ca)>  
**Subject:** Re: BP021501 - 1407 Bishop road

*CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.*

Hi Jessie

Thanks for the update, we are working through the items and will provide an update soon.

In regards to the Geotechnical schedule B that needs the CRP initials, can I come by tomorrow to pick this up?

Thanks,

Redaction S.22

On Tue, Apr 30, 2024 at 2:26 PM Jesse Girgulis <[JGirgulis@whiterockcity.ca](mailto:JGirgulis@whiterockcity.ca)> wrote:

Good Afternoon Ajaib and s.22,

**Please confirm receipt of this email.** Digital revisions of drawings can be emailed to me for a quick review prior to printing in case there are other items of note to be corrected before printing.

**Permit Number: BP021501**

**Project Address: 1407 Bishop road, White Rock, BC**

**Date: April 30, 2024**

This is Jesse, Plans Examiner from the City of White Rock Building Department, contacting you regarding your building permit application.

Your project is under review and there are some outstanding documents & design items of note we require to issue a building permit, and they are listed below. Further review will be conducted once items mentioned in below email are addressed.

**Scope of Project:** To construct a single-family dwelling with a secondary suite and attached garage. Access and parking for the principal residence and suite will be from **Magdalen avenue and Bishop road.**

The following comments are to identify any issues that do not comply with BC Building Code 2024 and City of White Rock Zoning Bylaws, as well as to request clarification of information in the submitted documentation and drawings. All items must be addressed before issuance of the Permit.

**Documentation:**

1. Pumping covenant will need to be registered on title. Please see attachments for process.
2. Geotechnical schedule B is missing CRP initials.

**Architectural Deficiencies:**

1. Mechanical room will need a floor drain.
2. Please add smoke alarms to the theatre and office.
3. Will there be a dishwasher in the secondary suite?
4. Outdoor bar sink is required to have insulated lines to protect freezing.
5. Topographical survey list ANG as 68.826m making maximum build elevation 76.526m. Architectural plans should match.

6. Rear setback shows veranda posts encroaching on setback. This is considered part of the building. Revision in this area is needed. Perhaps cantilever or brace back to building?
7. It looks like there is a typo under lot coverage calculations regarding the veranda. Please revise.
8. Ensure minimum height clearance is achieved at the main stairs below the office.
9. Review South elevation spatial calculation as maximum permitted openings should be 14%. Not 16%.
10. Engineering will have to approve a 2<sup>nd</sup> driveway for the suite parking space.

**Note: Demolition of existing structure must be completed with DEMO and TMP permits before your BP can be issued. Follow up with Jason [jbirkland@whiterockcity.ca](mailto:jbirkland@whiterockcity.ca) regarding finalizing your Demo Permit.**

Tree Management Permit (TMP) department is separate from the Building Permits department, and as such they will have their own requirements to be addressed. Check your emails for their communication. Your Building Permit cannot be issued until a TMP has been approved for construction. For TMP See Email from [emix@whiterockcity.ca](mailto:emix@whiterockcity.ca). Additionally, the Engineering department is also separate from the Building department and they will have their own requirements that need to be addressed before our Building Permit can be issued. Check for emails from Alan - [amarkovic@whiterockcity.ca](mailto:amarkovic@whiterockcity.ca).

**Important:** For above, please provide an explanation (pointwise written response) as to how you have resolved these deficiencies and indicate where within the revised drawing set these deficiencies are addressed – Revision Clouds\*\*.

If any further revisions are proposed for this project beyond what is listed above, they must be identified and communicated to the Building Official for additional review.

Thank you,

**Jesse Girgulis**

**Building Official I | City of White Rock**

15322 Buena Vista Avenue, White Rock, BC V4B 1Y6

**From:** [Jason Birkland](#)  
**To:** Redaction S.22  
**Subject:** RE: 1407 Bishop - Demolition Application  
**Date:** Monday, July 29, 2024 2:41:00 PM  
**Attachments:** [image001.png](#)

---

Hello,

I believe the phone lines have had technical issues for the last few days, which our IT Dept. is still working on.

I would recommend calling the inspection line again (604-541-2135) & leave another inspection request VM. Usually, we can perform next day inspections.

Regards,

**Jason T. Birkland**

**Assistant Plans Examiner, City of White Rock**

15322 Buena Vista Avenue, White Rock, BC V4B 1Y6

Tel: 604.541.2144 / [www.whiterockcity.ca](http://www.whiterockcity.ca)



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---

**From:** Redaction S.22  
**Sent:** Monday, July 29, 2024 2:04 PM  
**To:** Jason Birkland <[JBirkland@whiterockcity.ca](mailto:JBirkland@whiterockcity.ca)>  
**Cc:** Gill Electric <[info@gillelectric.ca](mailto:info@gillelectric.ca)>; Ajaib Gill <[gillelectric@hotmail.com](mailto:gillelectric@hotmail.com)>  
**Subject:** Re: 1407 Bishop - Demolition Application

*CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.*

Hi Jason

Hope all is well. We have ordered the demolition inspection last week. Do you have any update on when the inspection will take place?

Thanks,

**s.22**

Sent from my iPhone

On Jun 10, 2024, at 3:47 PM, Jason Birkland

<[JBirkland@whiterockcity.ca](mailto:JBirkland@whiterockcity.ca)> wrote:

<image001.gif>

Good afternoon owner/applicant,

With reference to the recent correspondence regarding your Lot Servicing last month, it appears that your Lot Servicing file is nearing its final stages of review soon. The purpose of this email is to inform you of what is required to approve/issue your Demolition Permit for the subject property.

Your application/file number is **#BP021502**

The City understands that you will have your own schedule as to when you would like to start the demolition process. Kindly refer to the items listed below for what is currently required prior to release the Demolition Permit for the subject property when you choose to proceed. Timeline for issuance of your Demolition Permit is entirely dependent on these items being completed. The required document(s) can be emailed to myself for review when you have them ready.

Prior to approval/issuance, we require the following to be completed:

1. [Notice of Project](#) from WorkSafe BC for proposed abatement, or construction (demolition).  
Email copy of the Notice of Project from Work Safe BC is sufficient.
2. Approved Tree Management Permit (Demolition stage).  
The City Tree Preservation Official is managing your Tree Permit application. You must ensure you have satisfied all the requirements of that application to support approval/issuance of the tree permit. Issuance of a tree permit (Demolition/protection stage) will occur concurrently with your demolition permit once approved.
3. Outstanding fees/deposit to be paid prior to issuance of your demolition permit.  
Charges are broken down below for your reference with the fee slip attached.

<image004.png>

Do not hesitate to get back to me if you have any questions and/or concerns moving forward with the demolition application process.

Regards,

**Jason T. Birkland**

**Assistant Plans Examiner, City of White Rock**

15322 Buena Vista Avenue, White Rock, BC V4B 1Y6

Tel: 604.541.2144 / [www.whiterockcity.ca](http://www.whiterockcity.ca)

<image003.jpg>

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## Debbie Johnstone

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**From:** Alan Markovic  
**Sent:** Monday, July 8, 2024 2:31 PM  
**To:** Gill Electric  
**Cc:** s.22  
**Subject:** FW: 1407 Bishop Road - REQUEST FOR HARD COPIES  
**Attachments:** 1407 BISHOP RD Revised Drawings 2024-05-07.pdf; 2024-05-23\_G-2406\_1407 BISHOP RD.pdf; BC Hydro Connection Request Updated\_May 17.pdf; SANITARY CONNECTION PROFILE.pdf; SHEET 1.pdf; STORM CONNECTION PROFILE.pdf; WATER CONNECTION PROFILE.pdf

Hello,

Please provide (2) plan sized hard copies of each of the drawings attached to our office at 877 Keil Street. Civil drawings are to be signed and sealed. Profile drawings can be submitted in 11x17 format. Please let me know if you have any questions.

Regards,

**ALAN MARKOVIC**  
Technical Assistant, City of White Rock  
877 Keil Street, White Rock, BC V4B 4V6  
Tel: 604-541-2189 | [www.whiterockcity.ca](http://www.whiterockcity.ca)



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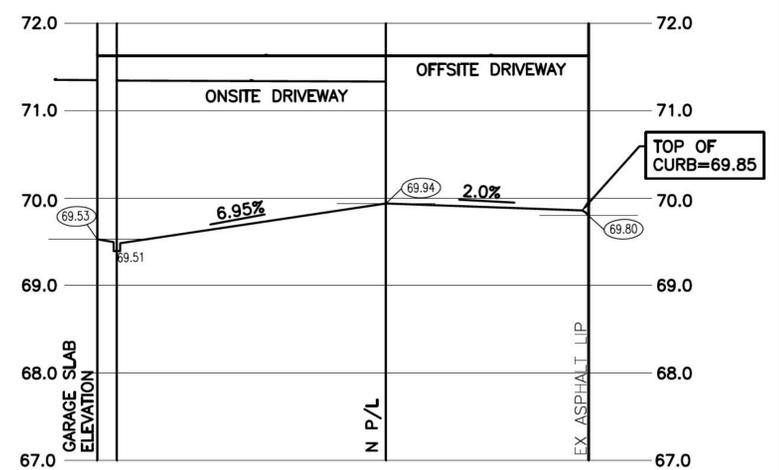
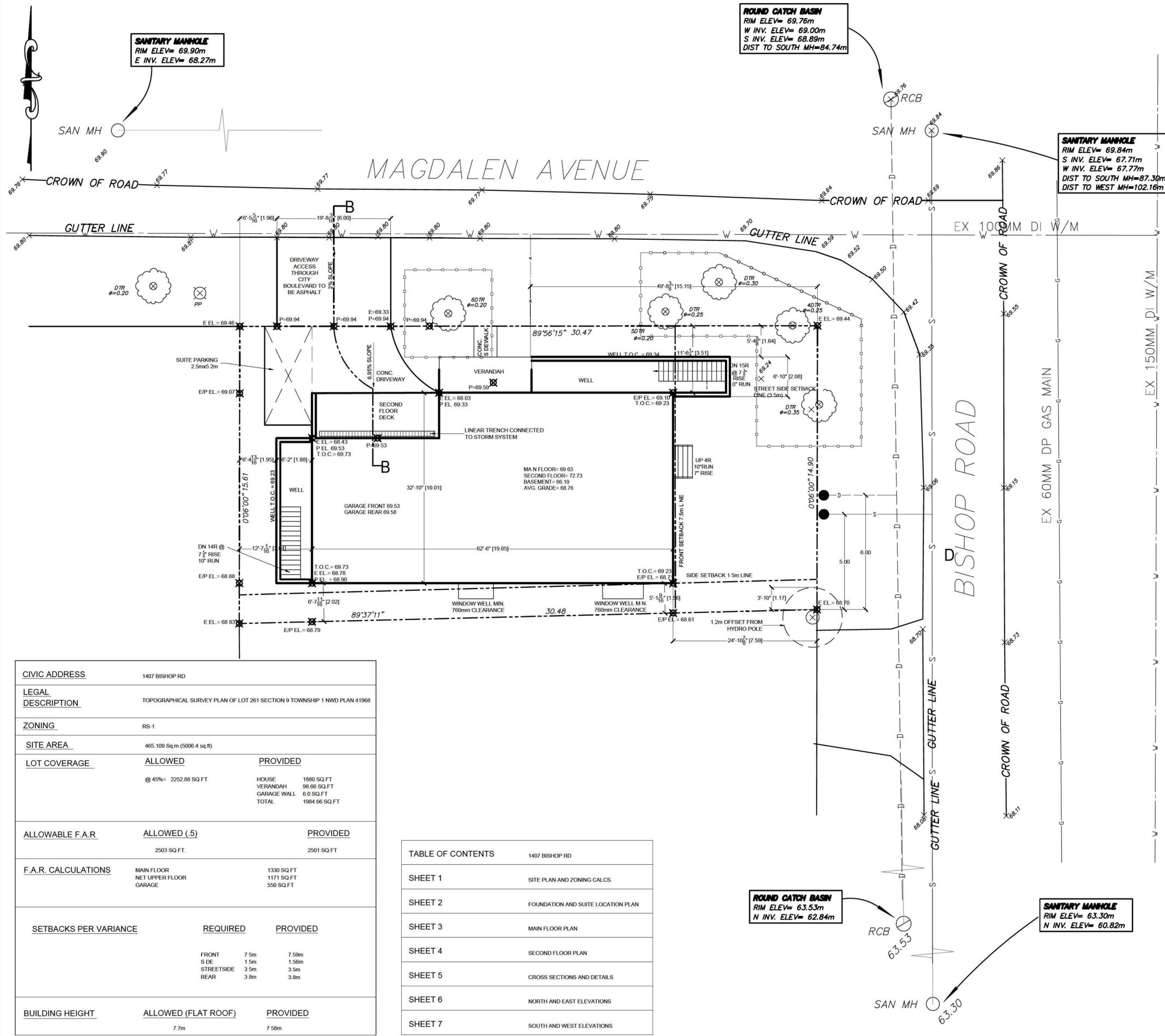
**From:** KWL Consultant <KWLconsultant@whiterockcity.ca>  
**Sent:** June 5, 2024 8:59 AM  
**To:** Alan Markovic <AMarkovic@whiterockcity.ca>  
**Subject:** 1407 Bishop Road - Final Lot Servicing Review

Hi Alan,

1407 Bishop Road is ready for final review. Please let me know if you have any questions!

Cheers,

Andrea



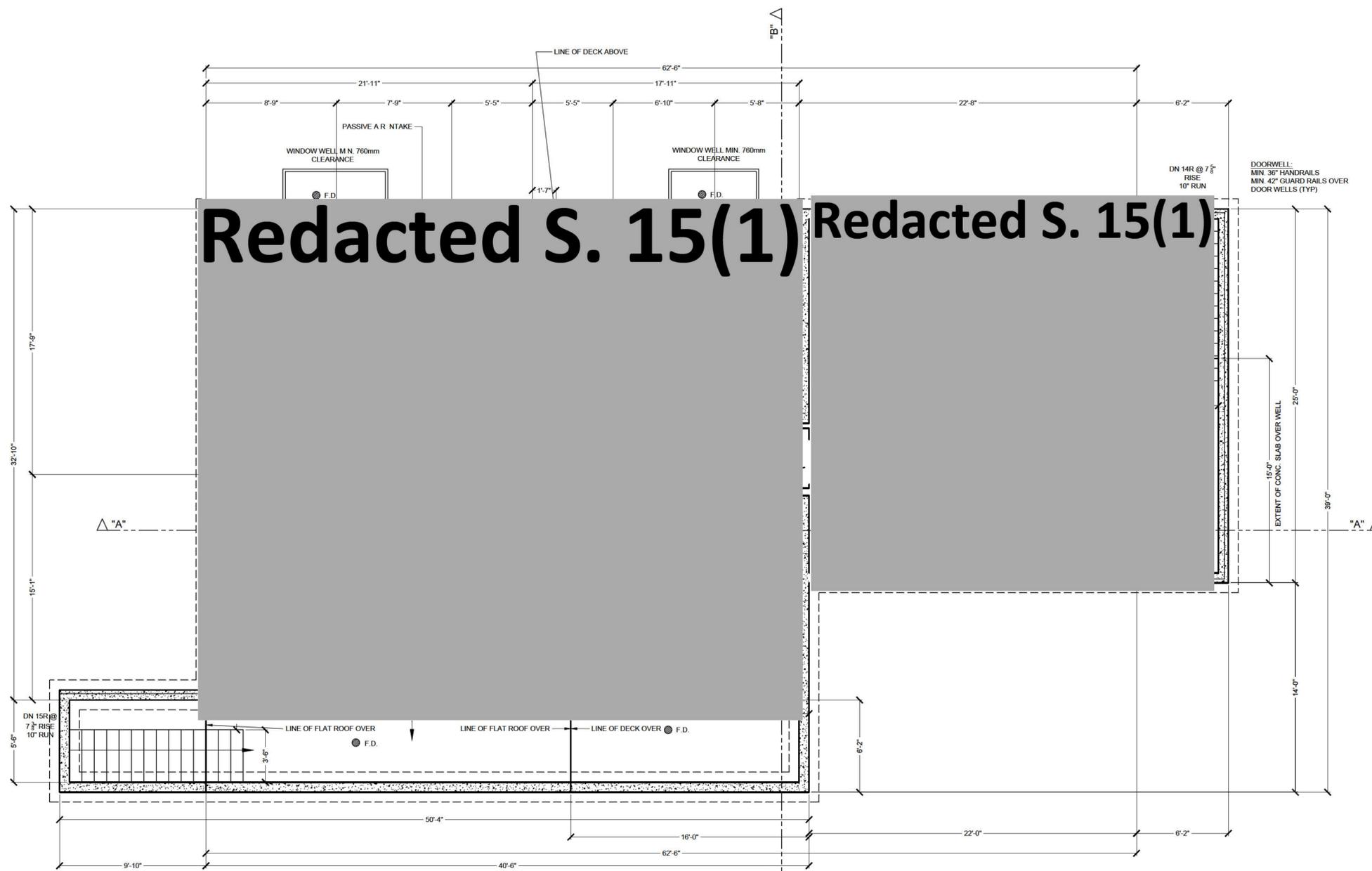
**\*SEE CIVIL DRAWING FOR DRIVEWAY SECTIONS**

<b>CIVIC ADDRESS</b>	1407 BISHOP RD	
<b>LEGAL DESCRIPTION</b>	TOPOGRAPHICAL SURVEY PLAN OF LOT 261 SECTION 9 TOWNSHIP 1 NWD PLAN 41968	
<b>ZONING</b>	RS-1	
<b>SITE AREA</b>	465.109 Sq.m (5006.4 sq.ft)	
<b>LOT COVERAGE</b>	<b>ALLOWED</b>	<b>PROVIDED</b>
	@ 45%= 2252.88 SQ.FT	HOUSE 1880 SQ.FT VERANDAH 98.66 SQ.FT GARAGE WALL 6.0 SQ.FT TOTAL 1984.66 SQ.FT
<b>ALLOWABLE F.A.R</b>	<b>ALLOWED (.5)</b>	<b>PROVIDED</b>
	2503 SQ.FT.	2501 SQ.FT
<b>F.A.R. CALCULATIONS</b>		
	MAIN FLOOR 1330 SQ.FT NET UPPER FLOOR 1171 SQ.FT GARAGE 550 SQ.FT	
<b>SETBACKS PER VARIANCE</b>	<b>REQUIRED</b>	<b>PROVIDED</b>
	FRONT 7.5m S DE 1.5m STREETSIDE 3.5m REAR 3.8m	7.50m 1.56m 3.5m 3.8m
<b>BUILDING HEIGHT</b>	<b>ALLOWED (FLAT ROOF)</b>	<b>PROVIDED</b>
	7.7m	7.58m

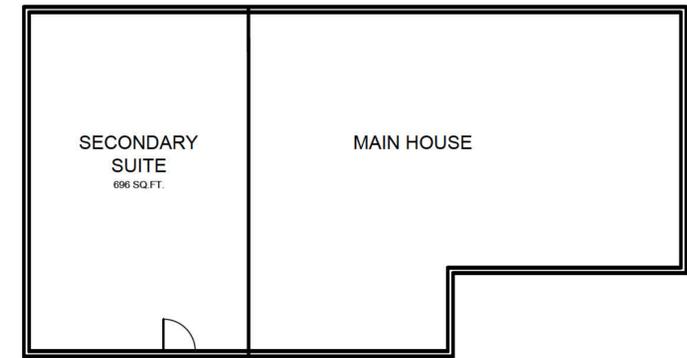
<b>TABLE OF CONTENTS</b>	1407 BISHOP RD
SHEET 1	SITE PLAN AND ZONING CALCS.
SHEET 2	FOUNDATION AND SUITE LOCATION PLAN
SHEET 3	MAIN FLOOR PLAN
SHEET 4	SECOND FLOOR PLAN
SHEET 5	CROSS SECTIONS AND DETAILS
SHEET 6	NORTH AND EAST ELEVATIONS
SHEET 7	SOUTH AND WEST ELEVATIONS

THESE DRAWINGS HAVE BEEN PREPARED TO CONFORM TO THE 2024 B.C. BUILDING CODE

PLANS BY DESIGN LTD. B.L.# 139618 DATE: 2024-05-06	PROJECT: 1407 BISHOP RD WHITE ROCK SITE PLAN
SCALE: 1/8"=1'-0" U.O.	
SHEET 1	



FOUNDATION PLAN  
1880 SQ.FT.



SUITE LOCATION PLAN  
SCALE: 1/4"=1'-0"

**Redacted S. 15(1) Redacted S. 15(1)**

DOORWELL:  
MIN. 36" HANDRAILS  
MIN. 42" GUARD RAILS OVER  
DOOR WELLS (TYP)

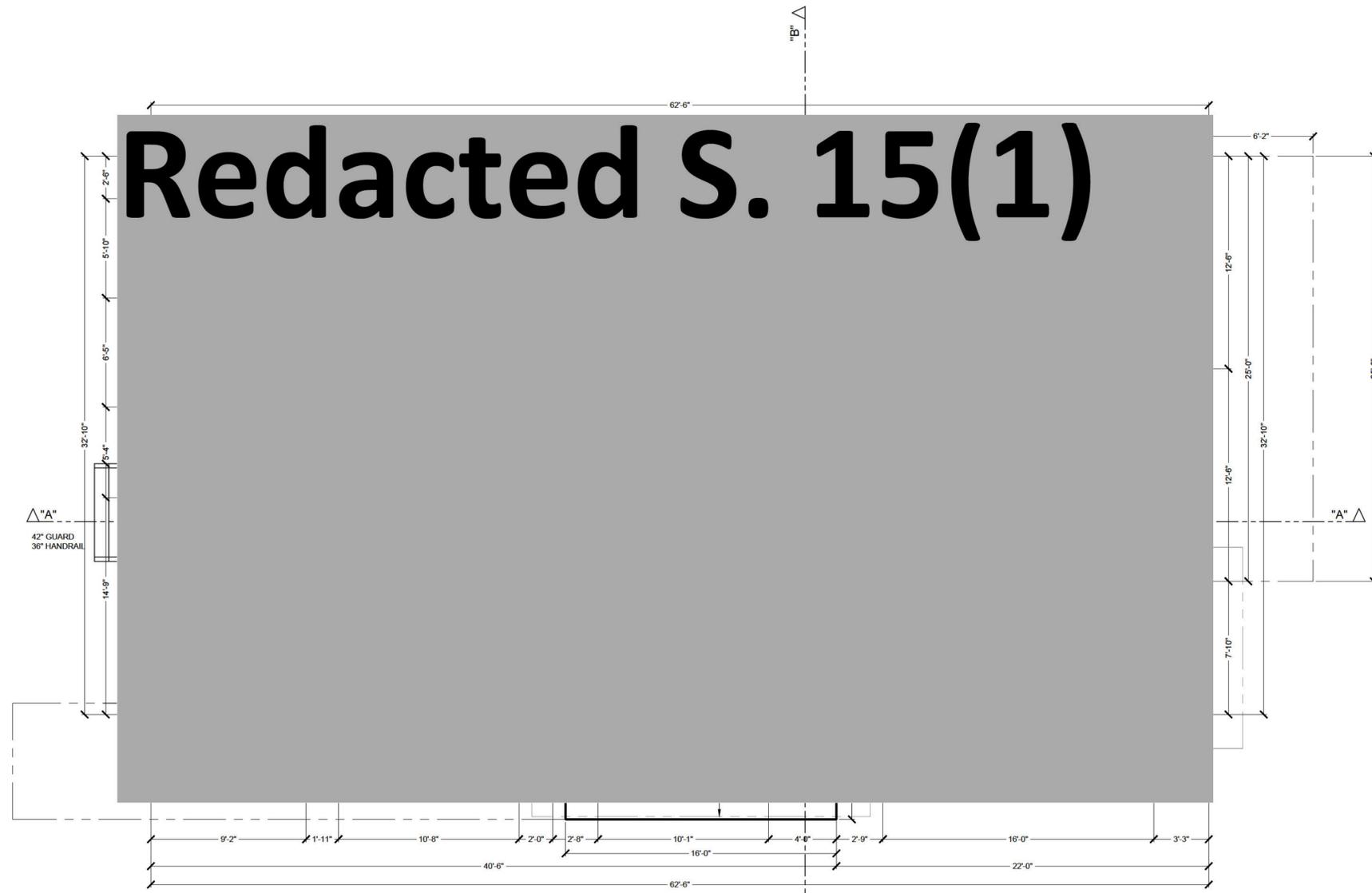
SAFETY GLASS TO BE USED WITHIN 3'  
OF DOOR ENTRY LOCKS, AT  
ENTRANCE DOORS AND SKYLIGHTS,  
NEAR BATHTUBS AND JACUZZIS

NOTE: BUILDING TO  
BE SPRINKLERED  
TO NFPA 13D  
ENHANCED

DESIGN BY: PLANS BY DESIGN 604.517.3379 BL# 130618	PROJECT: 1407 BISHOP RD WHITE ROCK, B.C.
DATE: 2024-05-07	
SCALE: 1/4"=1'-0"	FOUNDATION PLAN
SHEET 2	

THESE DRAWINGS HAVE BEEN PREPARED TO CONFORM TO THE 2024 B.C. BUILDING CODE

# Redacted S. 15(1)



"A"  
42" GUARD  
36" HANDRAIL

SAFETY GLASS TO BE USED WITHIN 3'  
OF DOOR ENTRY LOCKS, AT  
ENTRANCE DOORS AND SKYLIGHTS,  
NEAR BATHTUBS AND JACUZZIS

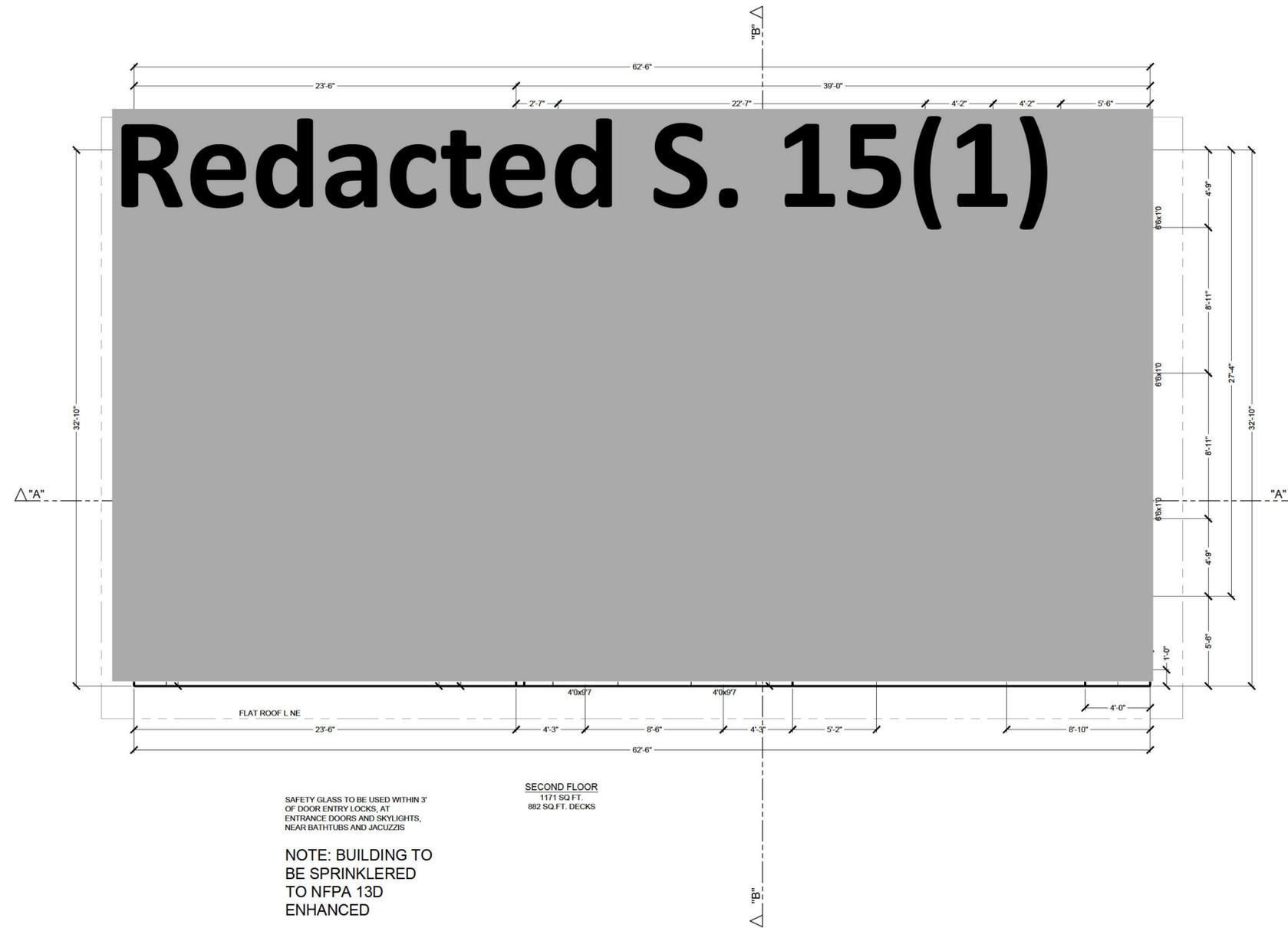
MAIN FLOOR  
1330 SQ. FT.  
550 SQ. FT. GARAGE  
TOTAL - 1880 SQ. FT.

NOTE: BUILDING TO  
BE SPRINKLERED  
TO NFPA 13D  
ENHANCED

THESE DRAWINGS HAVE BEEN PREPARED TO CONFORM TO THE 2024 B.C. BUILDING CODE

DESIGN BY: PLANS BY DESIGN 604-517-3879 BL# 139618	PROJECT : 1407 BISHOP RD WHITE ROCK, B.C.
DATE : 2024-05-07	
SCALE: 1/4"=1'-0"	MAIN FLOOR PLAN
SHEET 3	

# Redacted S. 15(1)



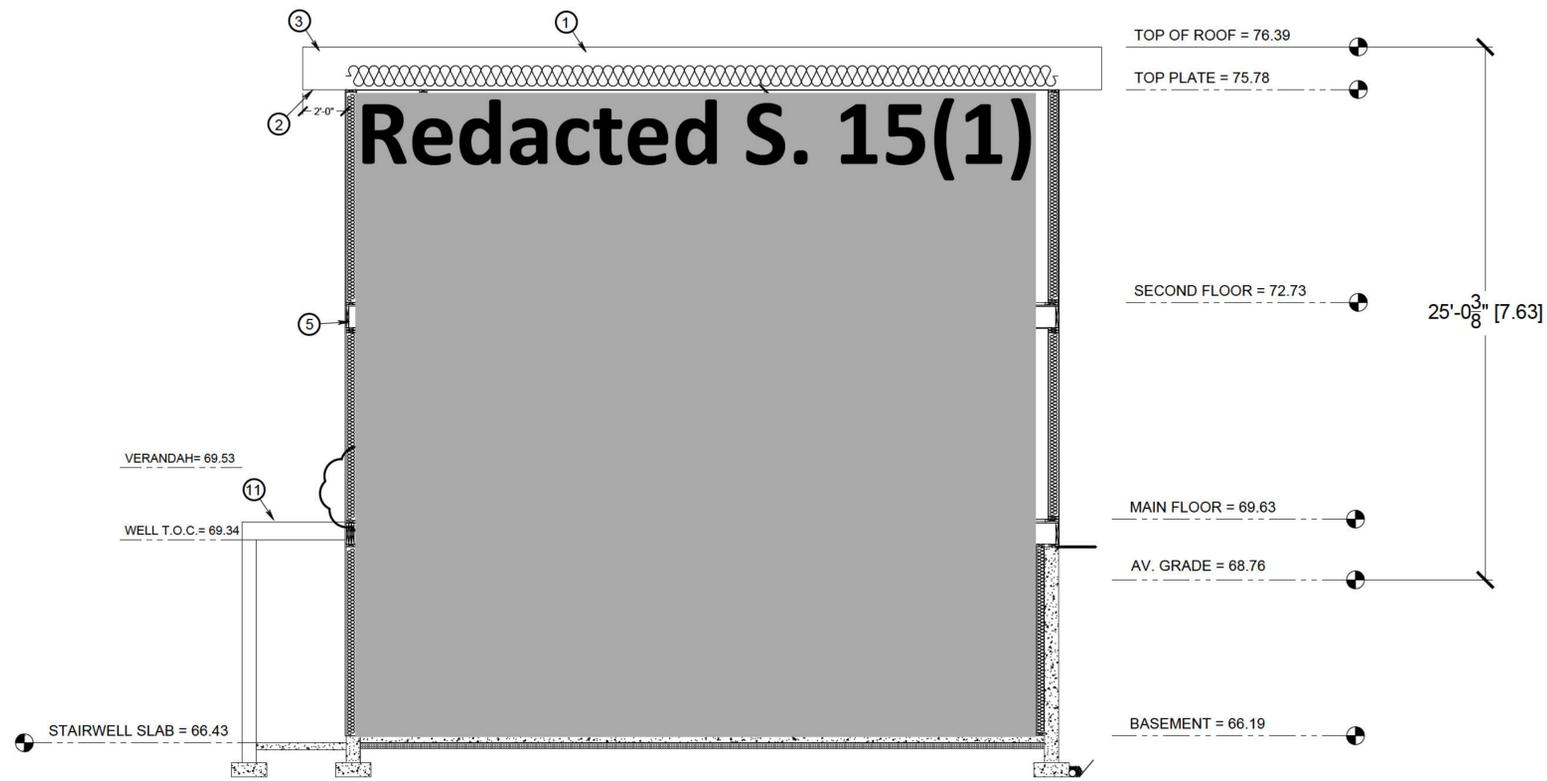
SAFETY GLASS TO BE USED WITHIN 3'  
OF DOOR ENTRY LOCKS, AT  
ENTRANCE DOORS AND SKYLIGHTS,  
NEAR BATHTUBS AND JACUZZIS

NOTE: BUILDING TO  
BE SPRINKLERED  
TO NFPA 13D  
ENHANCED

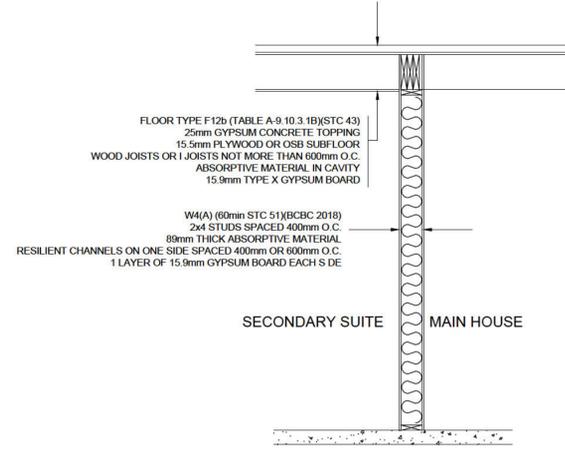
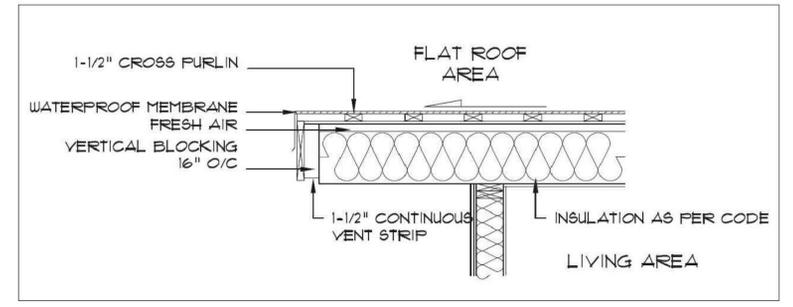
SECOND FLOOR  
1171 SQ.FT.  
882 SQ.FT. DECKS

THESE DRAWINGS HAVE BEEN PREPARED TO CONFORM TO THE 2024 B.C. BUILDING CODE

DESIGN BY: PLANS BY DESIGN 604.517.3879 BL# 139618	PROJECT : 1407 BISHOP RD WHITE ROCK, B.C.
DATE : 2024-05-07	
SCALE: 1/4"=1'-0"	SECOND FLOOR PLAN
SHEET 4	

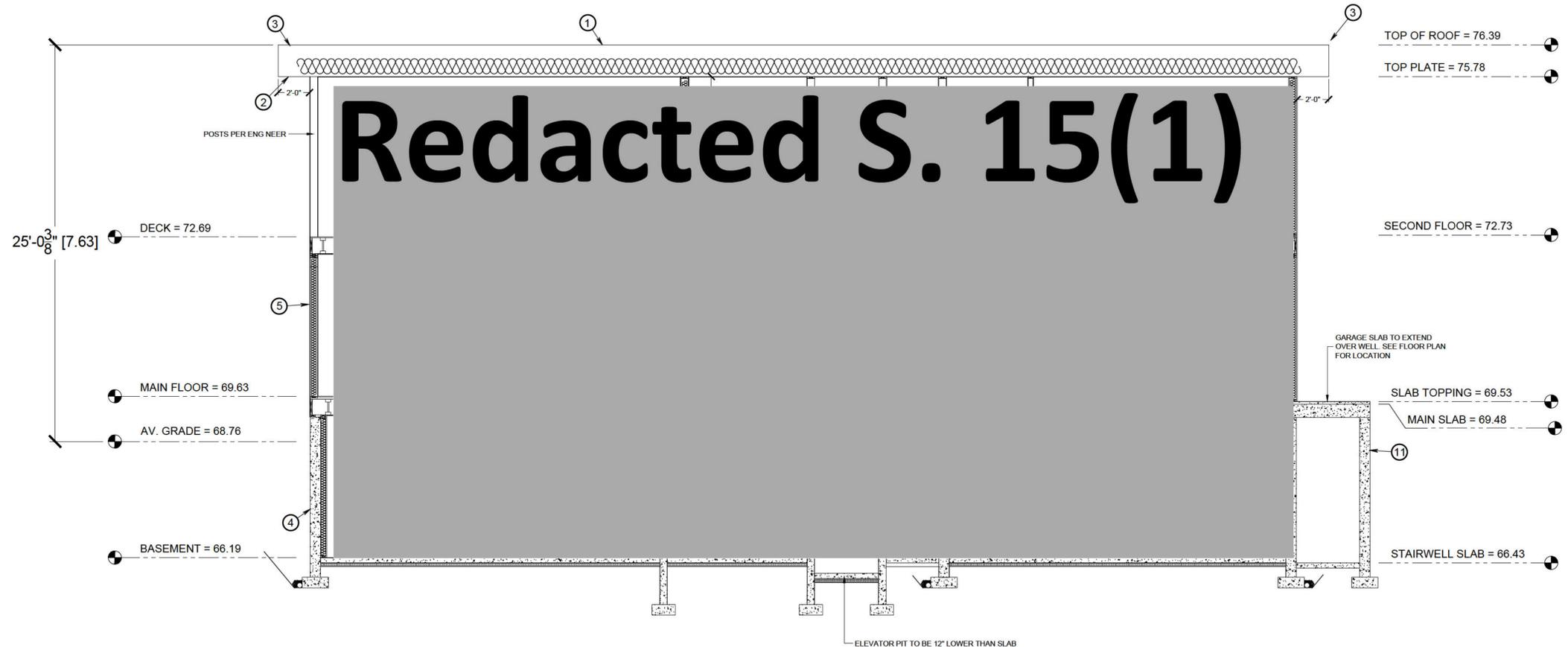


CROSS SECTION "B"



FIRE SEPARATION CROSS-SECTION N.T.S.

- SECONDARY SUITE REQUIREMENTS**
- SEPARATED HEATING SYSTEM
  - INTERCONNECTING PHOTO-ELECTRIC SMOKE ALARM SYSTEM REQUIRED
  - R20 INSULATION @ WALLS
  - 30 MIN. FIRE SEPARATION REQUIRED BETWEEN SUITE AND MAIN HOUSE
  - ALL LOAD BEARING WALLS TO BE 1 HR. FRR
  - FIRE SEPARATIONS TO BE CONTINUOUS BEHIND CABINETS, FIXTURES, TUBS, APPLIANCES AND HVAC
  - ALL WALL SUPPORTING THE FIRE RATED CEILING TO BE THE SAME RATING.
  - SMOKE ALARMS TO COMPLY WITH B.C.B.C.

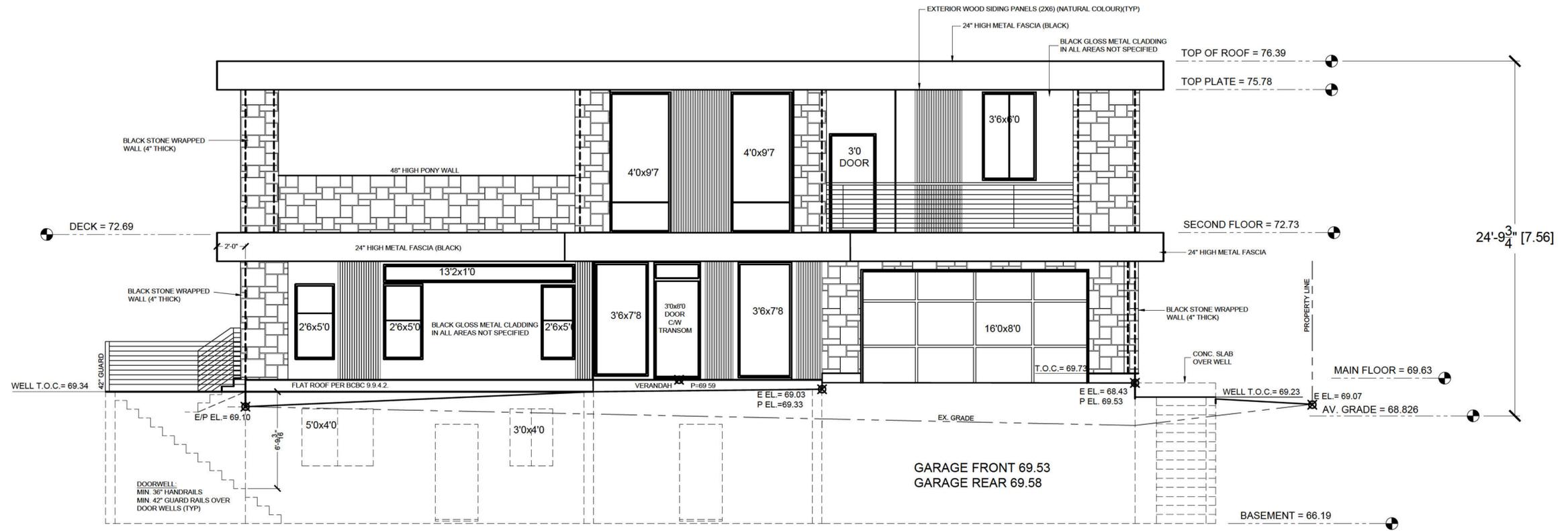


CROSS SECTION "A"

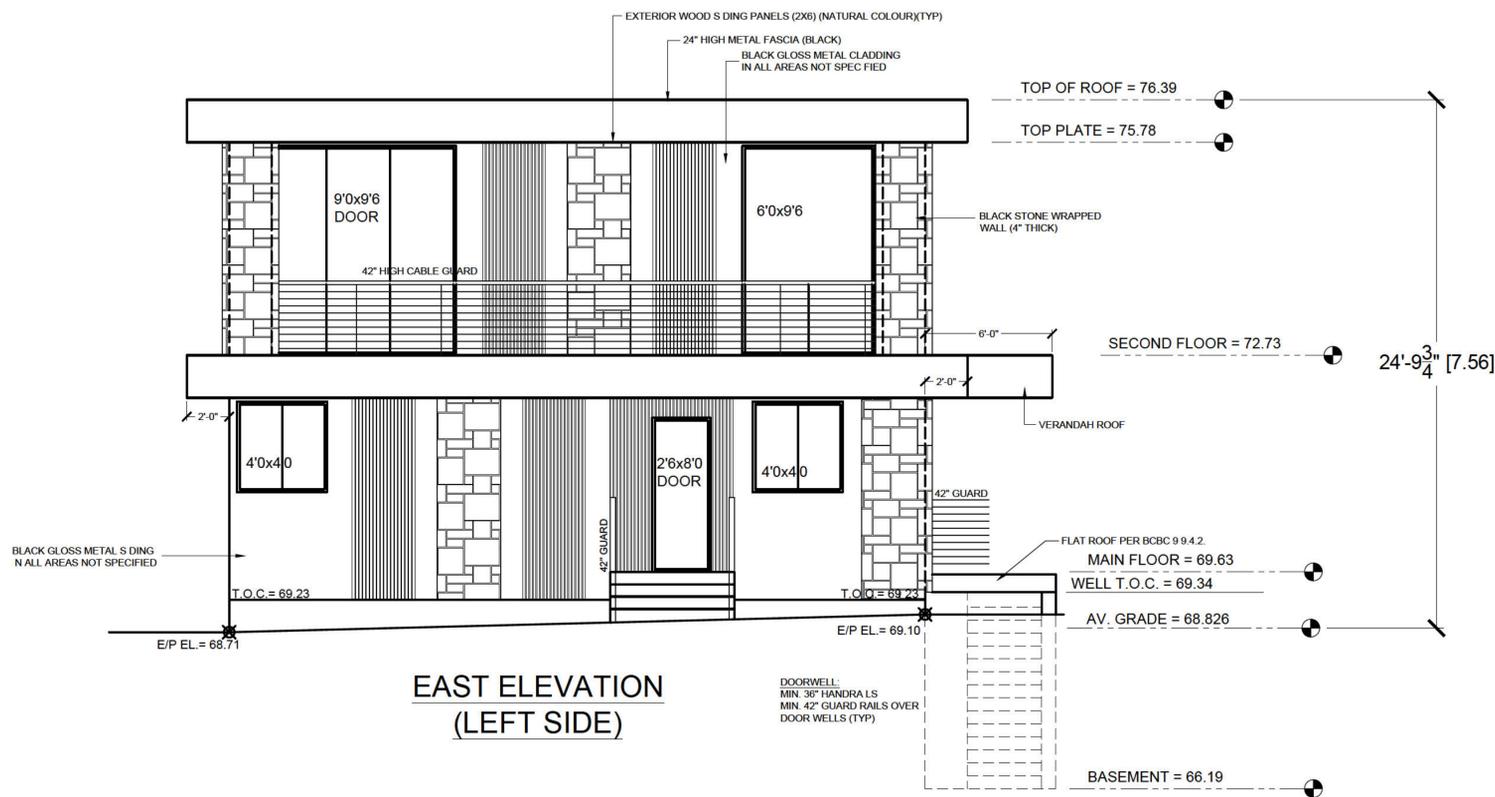
- ROOF:**  
TORCH ON ROOF  
FELT UNDERLAY  
5/8" PLYWOOD SHEATHING  
ENG'D ROOF JOISTS @ 24" O.C.  
R-48 BATT INSULATION  
6 MIL POLY V.B.  
1/2" CEILING BOARD
- ROOF VENTILATION:**  
INSULATION STOPS  
2" CLEARANCE OVER  
1/300 SCREENED VENTING
- TYPICAL GUTTER:**  
HIDDEN GUTTER C/W RAIN WATER LEADERS TO SEPARATE DRAIN TILE WITH EAVE PROTECTION TO MIN. 12" PAST INSIDE FACE OF STUD LINE
- FOUNDATION:**  
2x4 INTERIOR WALL WITH R14 BATT  
8" CONCRETE FOUNDATION WALL (TYP) ON 2 COATS ASPHALT EMULSION BELOW GRADE  
18"x6" CONTINUOUS CONCRETE FOOTING (TYP)  
R-12 INSULATION TO 2'-0" MIN. BELOW FINISHED GRADE  
4" DRAIN TILE
- EXTERIOR WALLS:**  
STUCCO  
RAINSCREEN  
1/2" PLYWOOD OR OSB SHEATHING  
2x6 STUDS @ 16" O.C.  
R-24 HD BATT INSULATION  
6 MIL POLY V.B.  
1/2" GYPSUM WALL BOARD
- INTERIOR WALLS (TYP.):**  
2x4 STUDS @ 16" O.C. (NON-BEARING)  
1/2" GYPSUM WALL BOARD BOTH SIDES
- FLOOR:**  
FINISH FLOORING  
CONC. TOPPING  
3/4" PLYWOOD  
TJI JOISTS AS PER ENGINEER  
1/2" CEILING BOARD
- BASEMENT SLAB:**  
4" CONCRETE SLAB FLOOR  
3" EPS (R12) INSULATION UNDER SLAB  
6 MIL POLY V.B.  
5" MIN. COMPACT GRANULAR FILL
- INTERIOR FOUNDATION WALL:**  
2x6 STUDS @ 16" O.C.  
6" CONC. CURB  
18"x6" CONCRETE FOOTING
- GARAGE SLAB:**  
SEE STRUCTURAL DRAWINGS FOR SUSPENDED SLAB  
GARAGE SLAB TO BE COVERED IN 2 LAYERS OF TORCH ON WATERPROOF MEMBRANE COVERED WITH 2" CONCRETE TOPPING METAL CHANNEL @ 24" O.C. R28 RIGID INSULATION
- STAIRWELL ROOF:**  
TORCH ON ROOF  
FELT UNDERLAY  
1/2" PLYWOOD SHEATHING  
2x10 JOISTS @ 16" O.C.  
VINYL SOFFITS
- DECK FLOOR:**  
FINISH FLOORING  
3/4" PLYWOOD  
TJI JOISTS AS PER ENGINEER  
R28 RIGID INSULATION  
1/2" CEILING BOARD

THESE DRAWINGS HAVE BEEN PREPARED TO CONFORM TO THE 2024 B.C. BUILDING CODE

DESIGN BY: PLANS BY DESIGN 604-517-3879 BL# 139618	PROJECT: 1407 BISHOP RD WHITE ROCK, B.C.
DATE: 2024-05-07	
SCALE: 1/4"=1'-0"	CROSS SECTIONS AND DETAILS
SHEET 5	



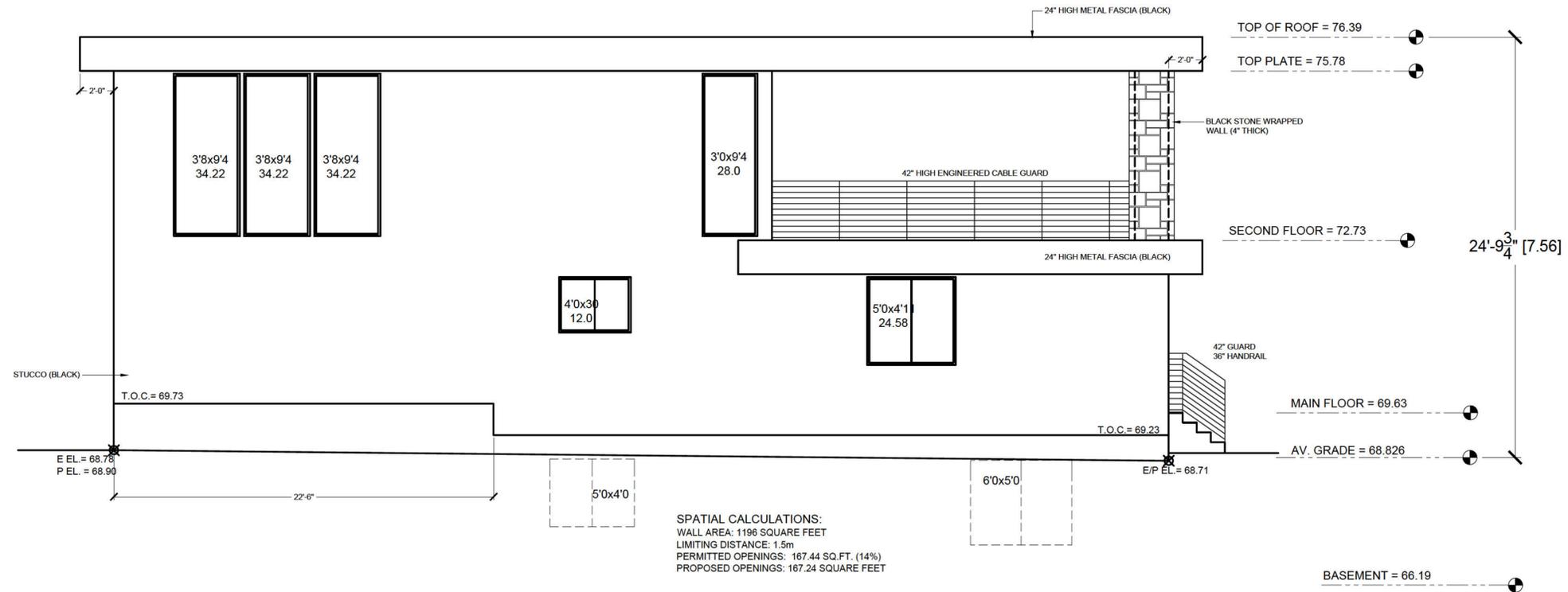
NORTH ELEVATION  
(FRONT)



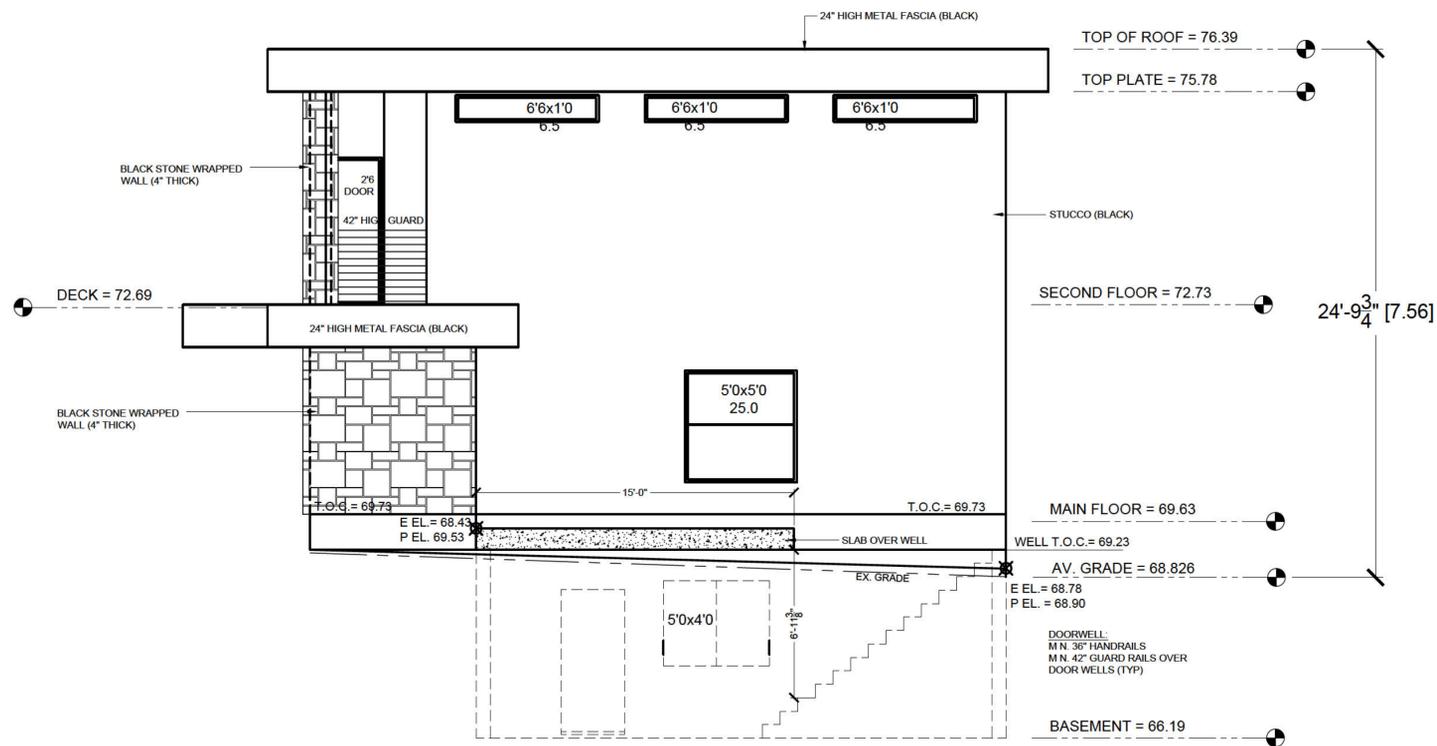
EAST ELEVATION  
(LEFT SIDE)

THESE DRAWINGS HAVE BEEN PREPARED TO CONFORM TO THE 2024 B.C. BUILDING CODE

DESIGN BY: PLANS BY DESIGN 604-517-3879 BL# 139618	PROJECT: 1407 BISHOP RD WHITE ROCK, B.C.
DATE: 2024-05-07	
SCALE: 1/4"=1'-0"	NORTH AND EAST ELEVATIONS
SHEET 6	



**SOUTH ELEVATION  
(BACK)**



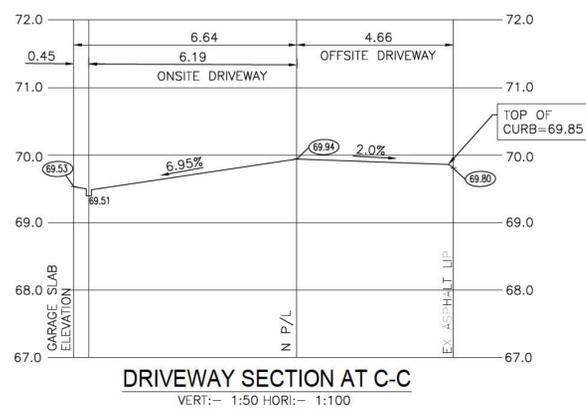
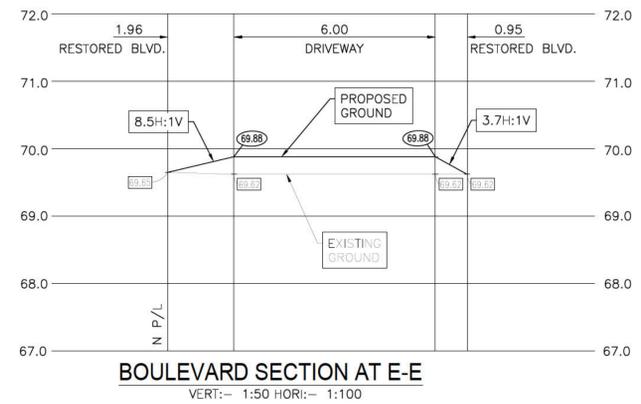
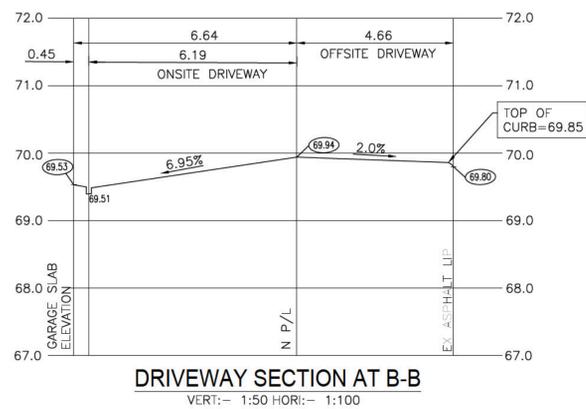
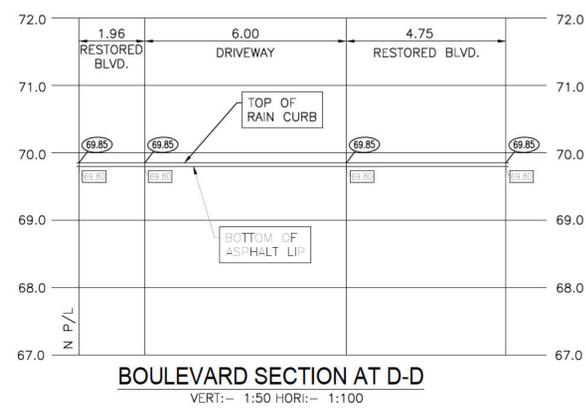
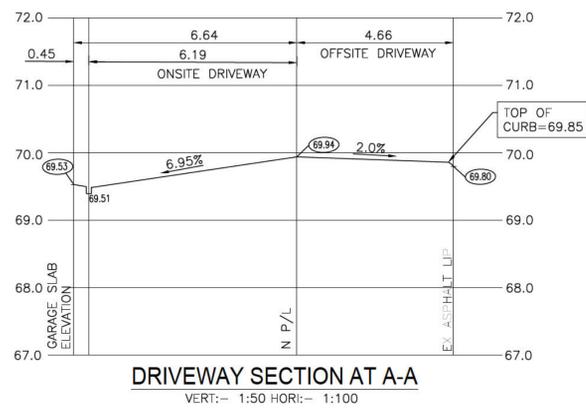
**WEST ELEVATION  
(RIGHT SIDE)**

SPATIAL CALCULATIONS:  
 WALL AREA: 663 SQUARE FEET  
 LIMITING DISTANCE: 3.8m  
 PERMITTED OPENINGS: 303.72 SQ.FT. (45.81%)  
 PROPOSED OPENINGS: 44.5 SQUARE FEET

THESE DRAWINGS HAVE BEEN PREPARED TO CONFORM TO THE 2024 B.C. BUILDING CODE

DESIGN BY: PLANS BY DESIGN 604.517.3879 BL# 139618	PROJECT: 1407 BISHOP RD WHITE ROCK, B.C.
DATE: 2024-05-07	
SCALE: 1/4"=1'-0"	NORTH AND EAST ELEVATIONS
SHEET 7	





INFORMATION SHOWN ON THIS DRAWING REGARDING EXISTING UTILITIES IS COMPILED FROM DIVERSE SOURCES AND MAY NOT BE COMPLETE OR ACCURATE. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXPOSE AND CONFIRM THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES, AND ADVISE THE ENGINEER OF ANY POTENTIAL CONFLICTS.

BENCHMARK:  
ELEVATIONS ARE GEODETIC DERIVED FROM CITY OF WHITE ROCK CONTROL MONUMENT NO. 88H3896 ELEVATION=69.344M DATUM CVD28GVRD 2018  
SURVEY BY:  
GREWAL & ASSOCIATES PROFESSIONAL LAND SURVEYORS UNIT 204, 15299-88TH AVENUE SURREY, B.C. V3S 2C1 TEL: 604-597-8567 EMAIL: OFFICE@GREWALSURVEYS.COM

LEGAL DESCRIPTION:				
LOT 261 SECTION 9 TOWNSHIP 1 NWD PLAN 41968				
NO.	YY/MM/DD	DRN	CH.	REVISION
1	24/05/23	AS	RM	REVISED AS PER CITY COMMENTS
0	24/02/23	AS	RM	ISSUED FOR COORDINATION

**MAINLAND ENGINEERING DESIGN CORPORATION**  
UNIT 206 8363 128TH STREET SURREY, B.C. V3W 4G1  
TEL: (604) 543 8044 FAX: (604) 543 8104  
EMAIL: civil@mainlandeng.com

DEVELOPMENT/SITE LOCATION  
#1407 BISHOP ROAD WHITE ROCK, B.C.

DWG. NAME  
**SECTIONS**

SEAL  
PRACTICE PERMIT NUMBER:1003021

SCALE	AS NOTED	WHITEROCK PROJECT NO.	DRAWING NO.
DESIGNED	RM		2
DRAWN	AS		OF 2
CHECKED	RM	MAINLAND PROJECT NO. G-2406	REV. 1
APPROVED	AB	DATE 24/05/23	

# Connection Request Details

**Request Number:** 4994165 – New Connection – Permanent

**Address**

1407 Bishop Road White Rock, BC V4B 3K4

**Request Status**

Request started

## Customer & Electrical Contractor Information

### Customer information

**Name**

Redaction S.22

**Home phone number**

**Work phone number**

Ext

**Mobile phone number**

s.22

## Mailing address

**Address**

Redaction S.22

### Electrical contractor information

**Contractor name**

AJAIB GILL

**Company**

GILL ELECTRIC CO LTD

Work phone number

Redaction S.22

Mobile phone number

## Electrical Service Detail

### Proposed service characteristics

Phase

1

Mainswitch voltage

120/240

Mainswitch amperage

200

Building heated by

Gas

EV Charging

No

Number of meters to install

1

Meter work only

No

Service type

Underground

Closest transformer ID number

Total estimated duct length  
(meter base to stub off in metres)

## Declaration

### Permit/contractor authorization form

Meter base location is in accordance with the reference guide.

Installer has confirmed the designation point of the electrical connection to the BC Hydro system. If from a service box, the lid is exposed and accessible.

Service address is permanently affixed to the house or premise.

Approved duct is installed in accordance with the reference guide.

Customer duct is coupled to the BC Hydro service duct, stubbed off at the street.

Main switch is locked in the off position.

Approved pull string is installed.

[Go to Request Summary](#)



[./content/BCHydro/en/mobile.html](#)

[Contact us](#)

[\(/content/BCHydro/en/toolbar/contact.html\)](#)

[Chat support \(/chat.html\)](#)

[My Hydro \(/sso/UI/Login?realm=bch-](#)

[ps&goto=https%3A%2F%2Fapp.bchydro.com%3A443%2FBCHCustomerPortal%2Fweb%2Flogin\)](#)

[Get help with my bill](#)

[\(/content/BCHydro/en/accounts-billing/bill-payment.html\)](#)

[Outages \(/content/BCHydro/en/safety-outages.html\)](#)

[About us](#)

[\(/content/BCHydro/en/toolbar/about.html\)](#)

[Careers](#)

[\(/content/BCHydro/en/toolbar/careers.html\)](#)

[Community](#)

[\(/content/BCHydro/en/community.html\)](#)

[eNewsletters](#)

[\(/content/BCHydro/en/toolbar/newsletters.html\)](#)



“ ” ‘ ’ ”

Copyright © BC Hydro.

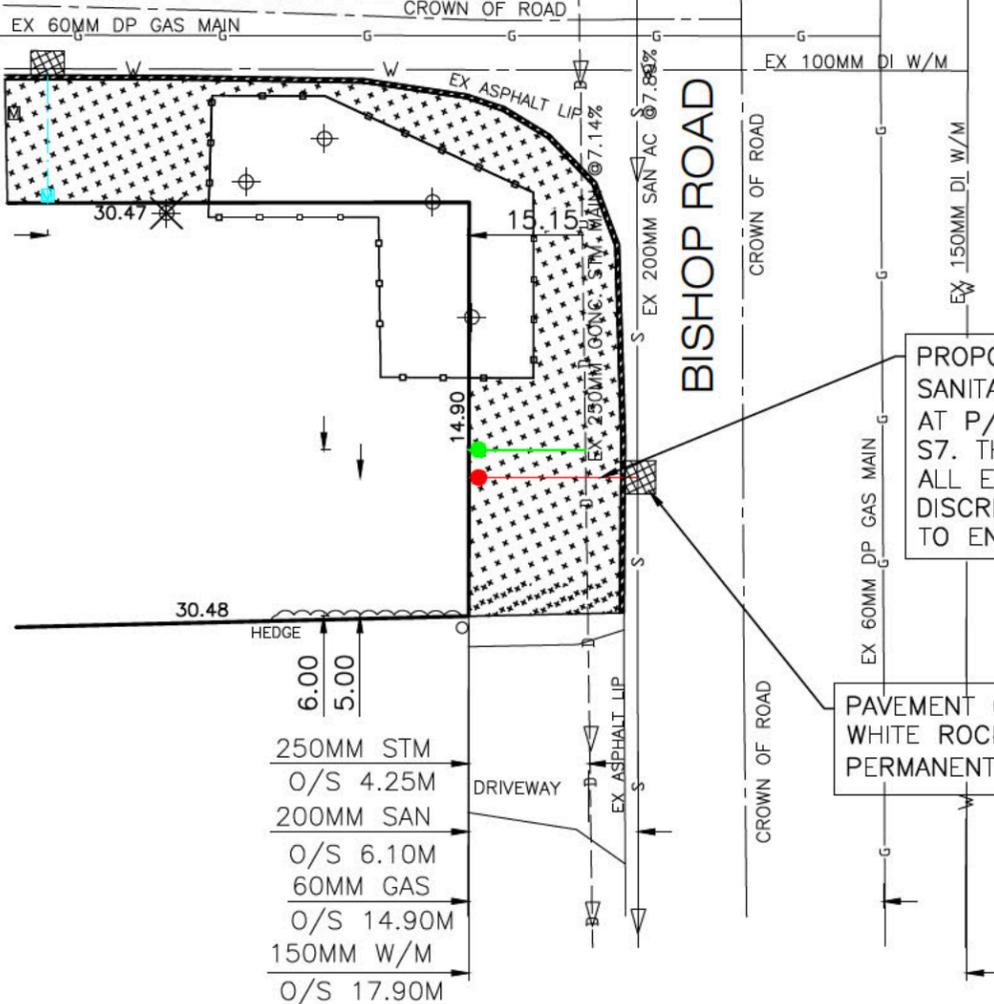
All rights reserved

[Legal \(/siteinfo/legal.html\)](#) | [Privacy statement \(/siteinfo/privacy.html\)](#)

[View desktop site \(https://app.bchydro.com/connectionrequest/web/details/all.html?requestid=12EDD4132FB7D3BEE0632B53F20A6AFA\)](#)



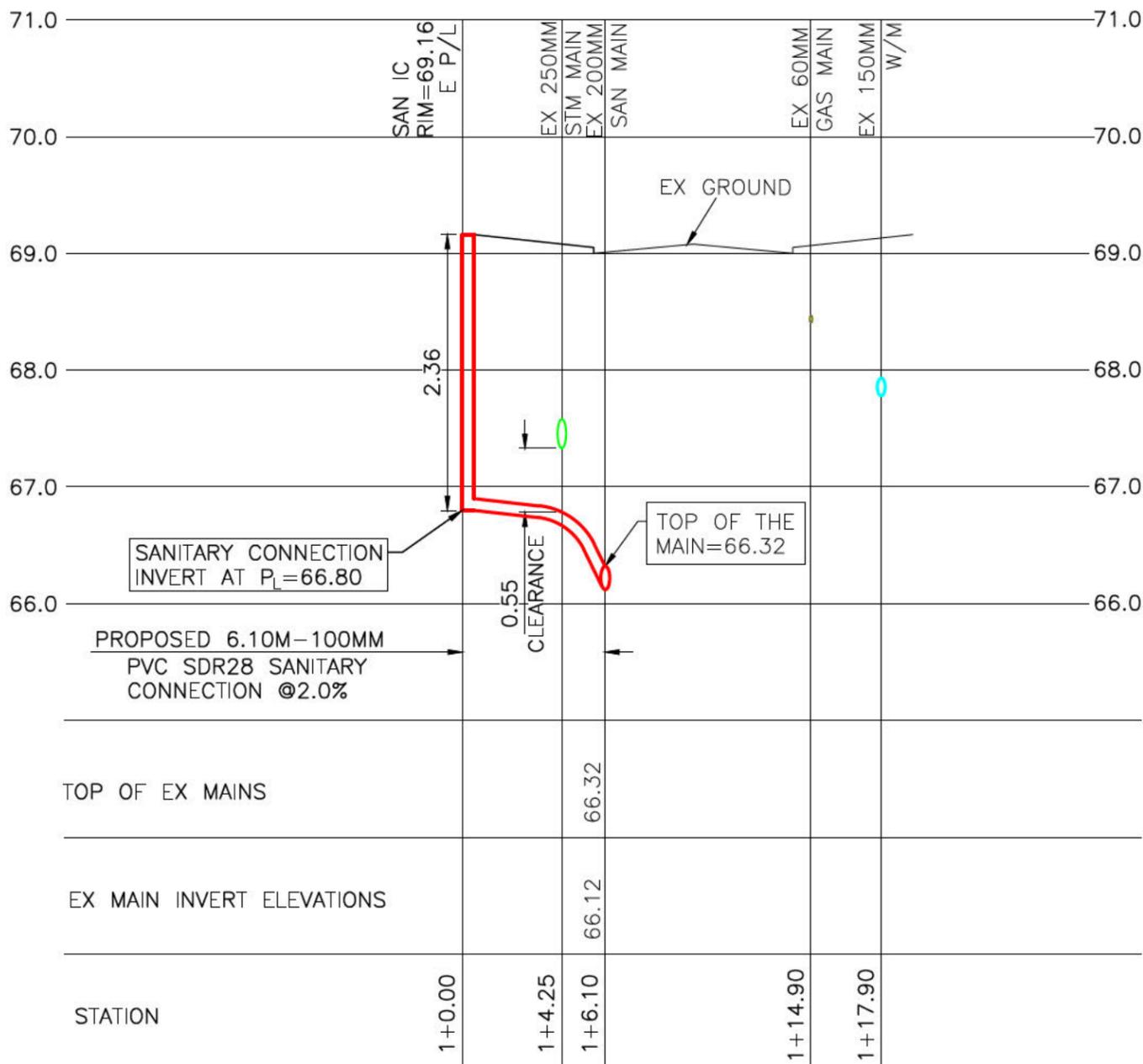
# MAGDALEN AVENUE



PROPOSED 100MM PVC SDR28 SANITARY CONNECTION @ 2.0% C/W IC AT P/L BY CITY CREWS AS PER MMCD S7. THE CONTRACTOR SHALL CONFIRM ALL ELEVATIONS IN FIELD AND ANY DISCREPANCIES SHALL BE REPORTED TO ENGINEER-IN-CHARGE.

PAVEMENT CUT POLICY AS PER CITY OF WHITE ROCK AND MMCD G4 AND G5 PERMANENT TRENCH RESTORATION (TYPICAL)

NOTE:  
THE CONTRACTOR SHALL CONFIRM ELEVATION IN FIELD. IF ANY DISCREPANCIES EXIST, REPORT TO ENGINEER-IN-CHARGE



## SANITARY CONNECTION PROFILE

SCALE: HORIZ. 1:250 VERT. 1:50

SEAL

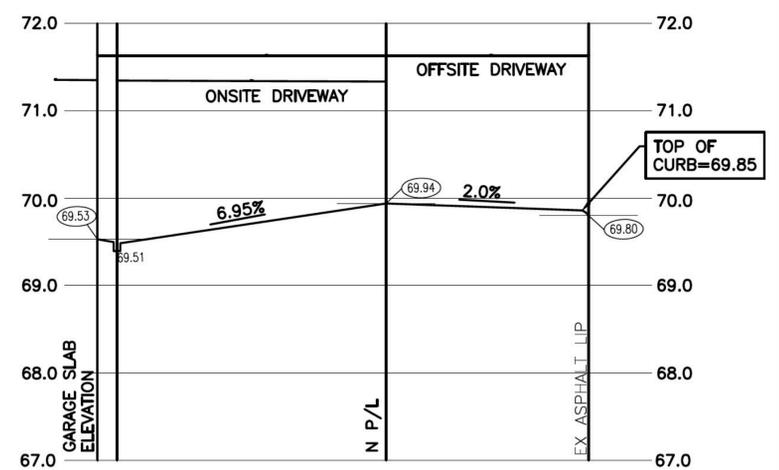
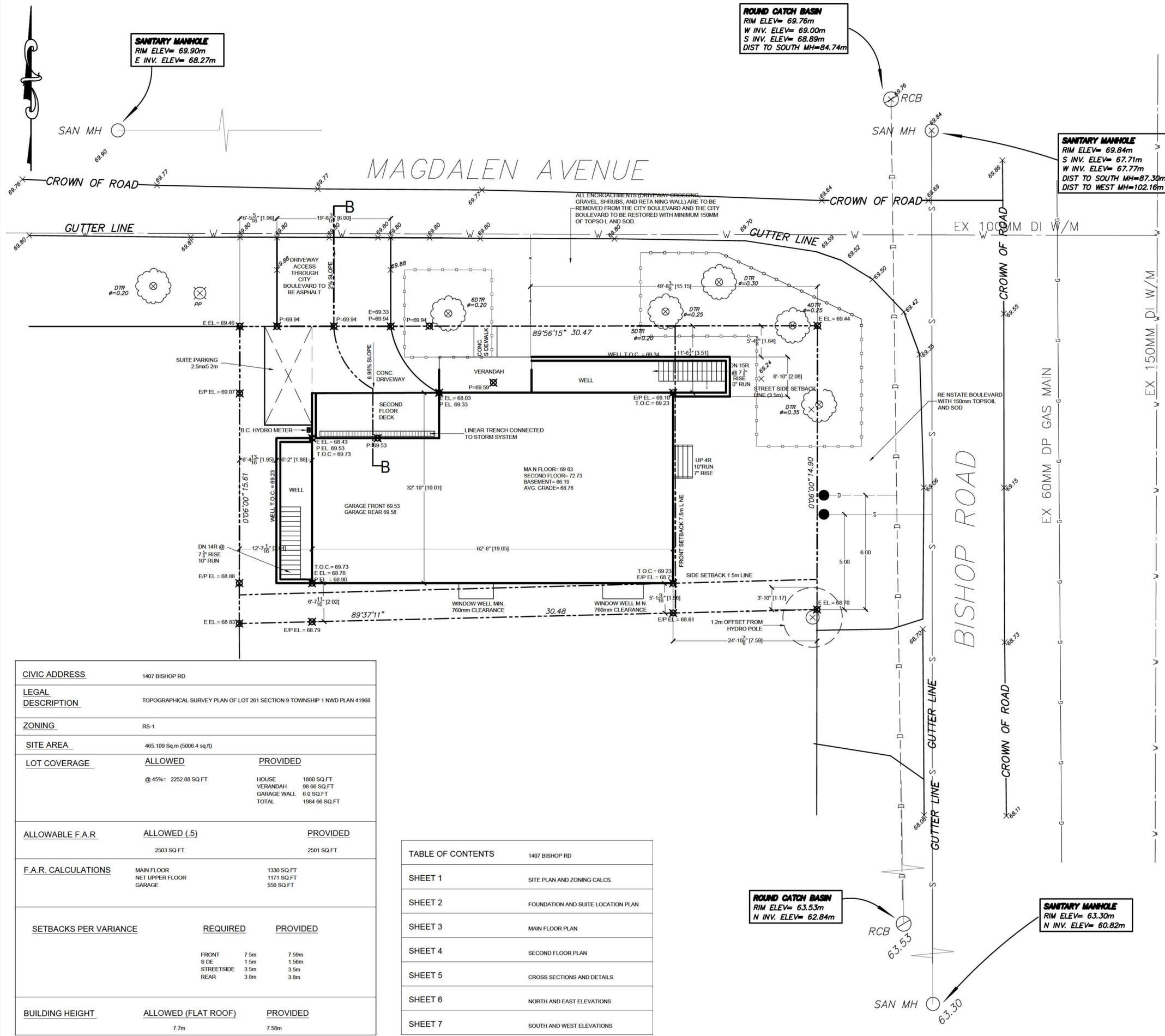


NO.	YY/MM/DD	DRN.	CH.	REVISION
1	2024/05/23	AS	RM	REVISED AS PER CITY COMMENTS
0	2024/02/23	AS	RM	ISSUED FOR APPROVAL

DEVELOPMENT/SITE LOCATION  
#1407 BISHOP ROAD, WHITE ROCK, B.C.  
DWG. NAME  
SANITARY CONNECTION PROFILE

MAINLAND ENGINEERING DESIGN CORPORATION  
UNIT 206 8363 128TH STREET  
SURREY, B.C. V3W 4G1  
TEL: (604) 543 8044 FAX: (604) 543 8104  
EMAIL: civil@mainlandeng.com

MAINLAND PROJECT NUMBER  
G-2406



**DRIVEWAY SECTION AT B-B**  
VERT:- 1:50 HORI:- 1:100

**\*SEE CIVIL DRAWING FOR DRIVEWAY SECTIONS**

<b>CIVIC ADDRESS</b>	1407 BISHOP RD	
<b>LEGAL DESCRIPTION</b>	TOPOGRAPHICAL SURVEY PLAN OF LOT 261 SECTION 9 TOWNSHIP 1 NWD PLAN 41968	
<b>ZONING</b>	RS-1	
<b>SITE AREA</b>	465.109 Sq.m (5006.4 sq.ft)	
<b>LOT COVERAGE</b>	<b>ALLOWED</b>	<b>PROVIDED</b>
	@ 45% = 2252.88 SQ.FT	HOUSE 1880 SQ.FT VERANDAH 98.66 SQ.FT GARAGE WALL 6.0 SQ.FT TOTAL 1984.66 SQ.FT
<b>ALLOWABLE F.A.R</b>	<b>ALLOWED (.5)</b>	<b>PROVIDED</b>
	2503 SQ.FT.	2501 SQ.FT
<b>F.A.R. CALCULATIONS</b>	MAIN FLOOR NET UPPER FLOOR GARAGE	1330 SQ.FT 1171 SQ.FT 550 SQ.FT
<b>SETBACKS PER VARIANCE</b>	<b>REQUIRED</b>	<b>PROVIDED</b>
	FRONT 7.5m SIDE 1.5m STREETSIDE 3.5m REAR 3.8m	7.50m 1.56m 3.5m 3.8m
<b>BUILDING HEIGHT</b>	<b>ALLOWED (FLAT ROOF)</b>	<b>PROVIDED</b>
	7.7m	7.58m

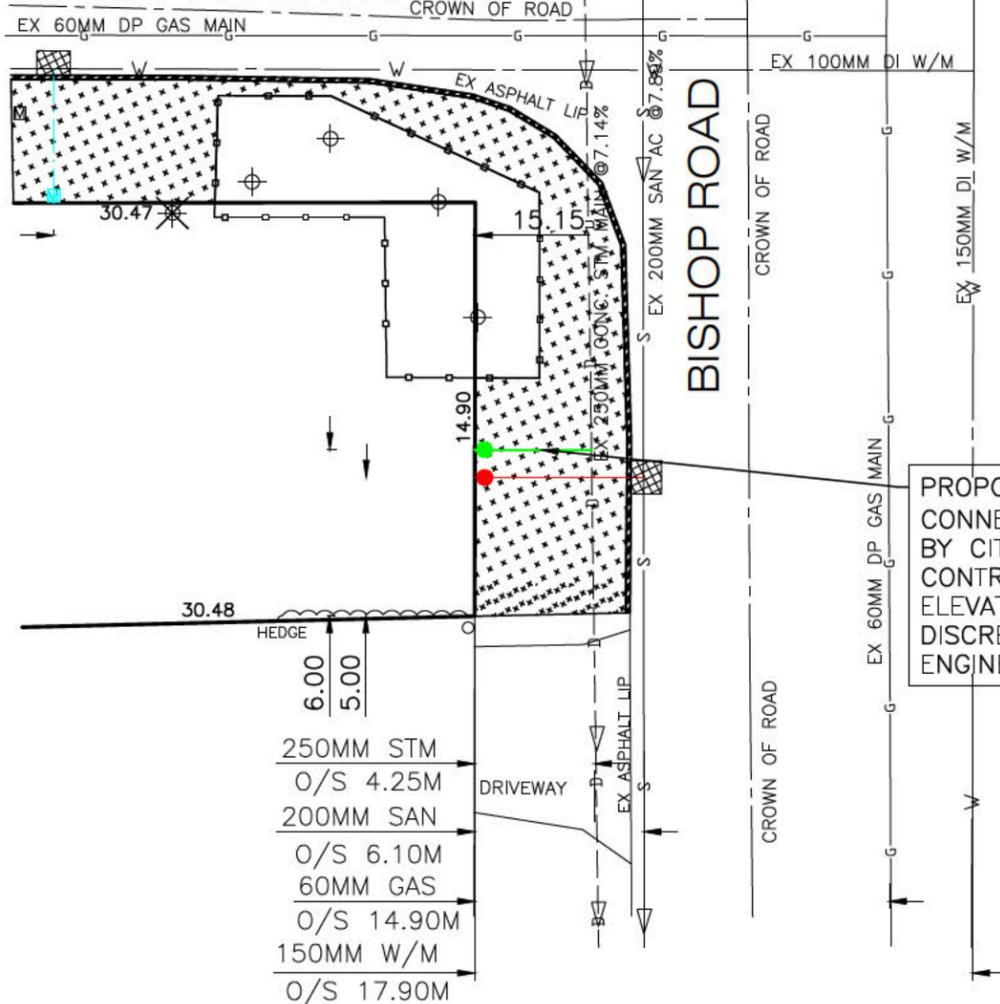
<b>TABLE OF CONTENTS</b>	1407 BISHOP RD
SHEET 1	SITE PLAN AND ZONING CALCS.
SHEET 2	FOUNDATION AND SUITE LOCATION PLAN
SHEET 3	MAIN FLOOR PLAN
SHEET 4	SECOND FLOOR PLAN
SHEET 5	CROSS SECTIONS AND DETAILS
SHEET 6	NORTH AND EAST ELEVATIONS
SHEET 7	SOUTH AND WEST ELEVATIONS

THESE DRAWINGS HAVE BEEN PREPARED TO CONFORM TO THE 2024 B.C. BUILDING CODE

PLANS BY DESIGN LTD. B.L.# 139618 DATE: 2024-05-06	PROJECT: 1407 BISHOP RD WHITE ROCK SITE PLAN
SCALE: 1/8"=1'-0" U.O.	
SHEET 1	

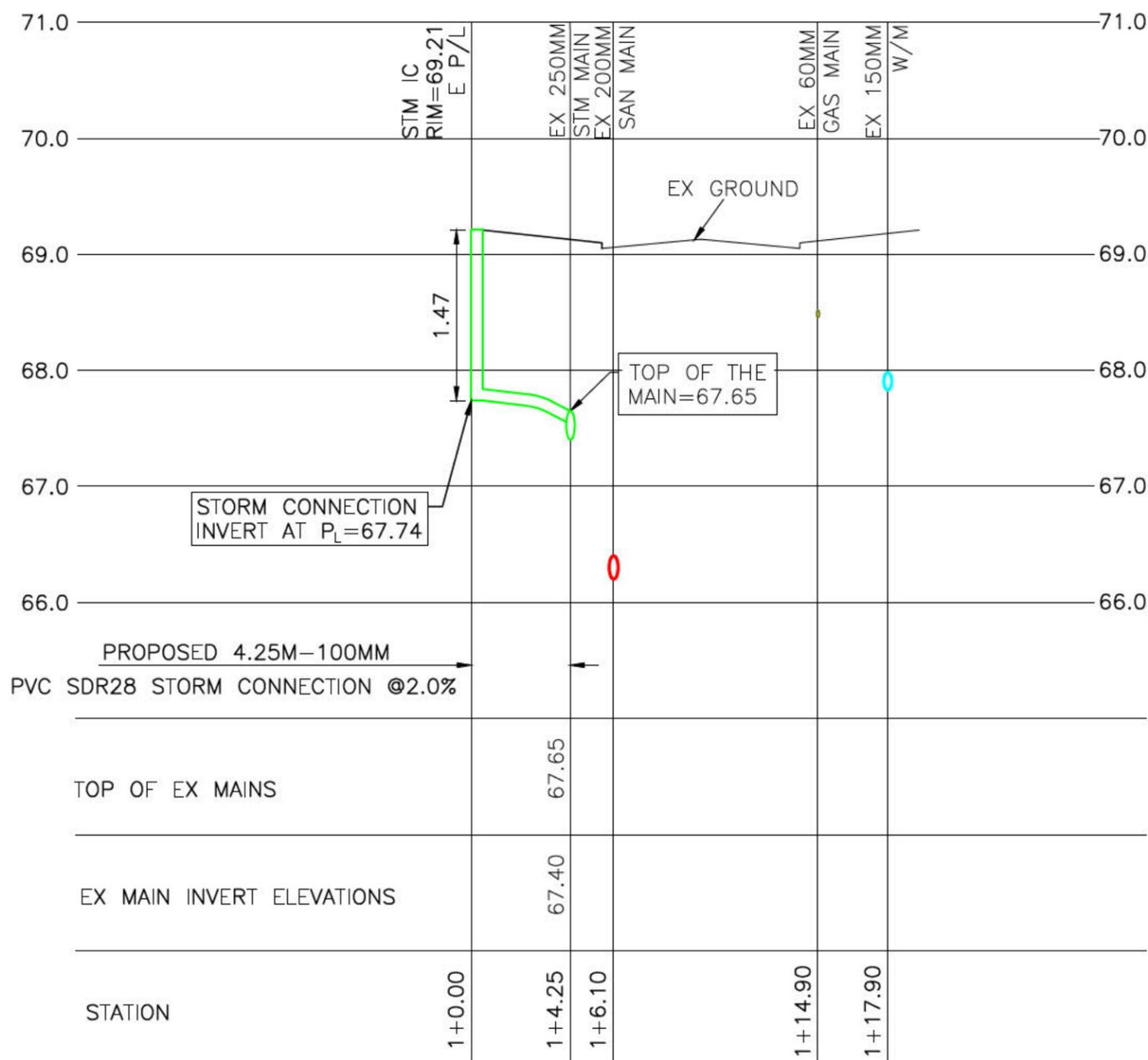


# MAGDALEN AVENUE



PROPOSED 100MM PVC SDR28 STORM CONNECTION @ 2.0% C/W IC AT P/L BY CITY CREWS AS PER MMCD S8. THE CONTRACTOR SHALL CONFIRM ALL ELEVATIONS IN FIELD AND ANY DISCREPANCIES SHALL BE REPORTED TO ENGINEER-IN-CHARGE.

NOTE:  
THE CONTRACTOR SHALL CONFIRM ELEVATION IN FIELD. IF ANY DISCREPANCIES EXIST, REPORT TO ENGINEER-IN-CHARGE



## STORM CONNECTION PROFILE

SCALE: HORIZ. 1:250 VERT. 1:50

SEAL



NO.	YY/MM/DD	DRN.	CH.	REVISION
1	2024/05/23	AS	RM	REVISED AS PER CITY COMMENTS
0	2024/02/23	AS	RM	ISSUED FOR APPROVAL

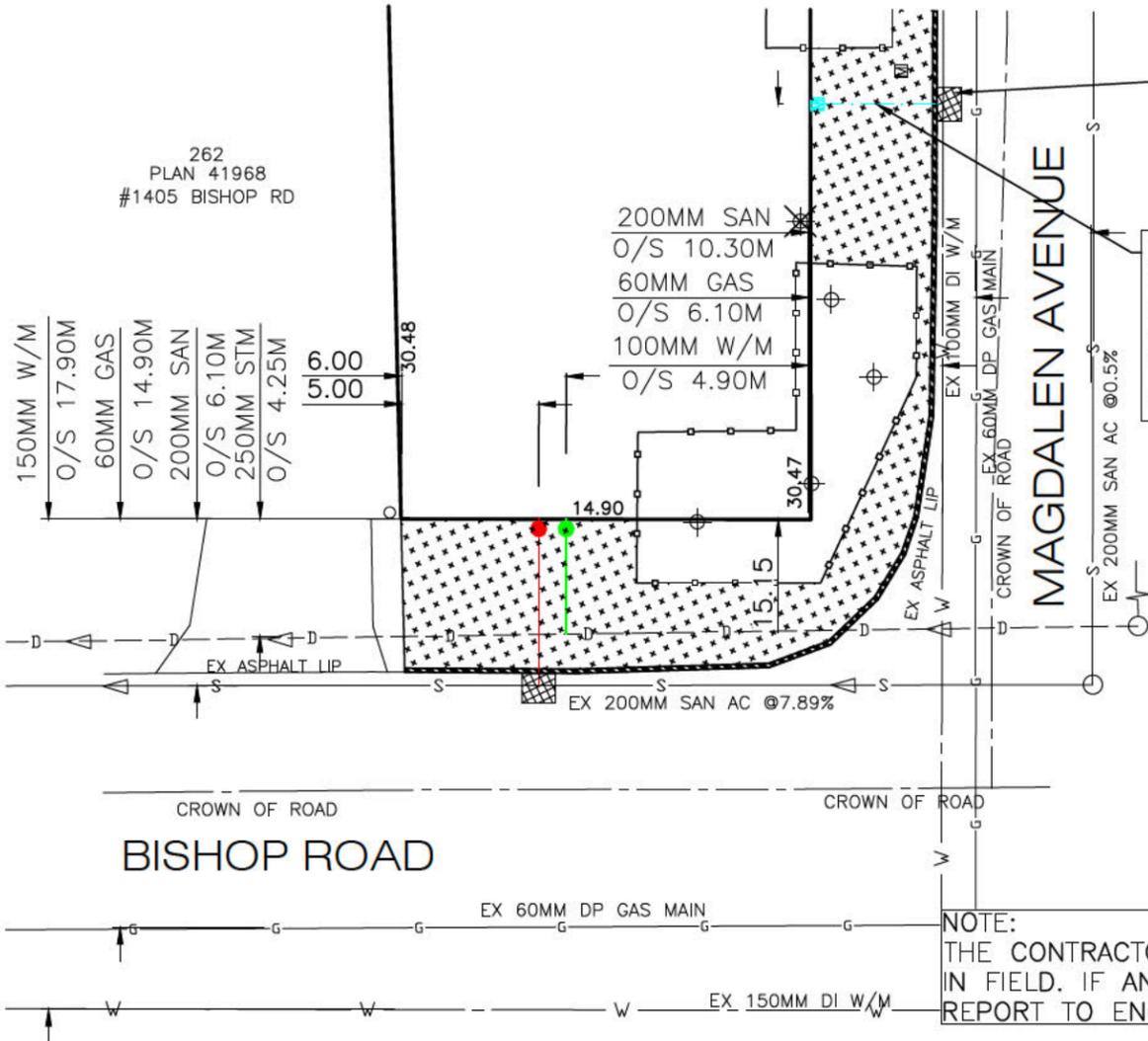
DEVELOPMENT/SITE LOCATION  
#1407 BISHOP ROAD, WHITE ROCK, B.C.  
DWG. NAME  
STORM CONNECTION PROFILE

MAINLAND ENGINEERING DESIGN CORPORATION  
UNIT 206 8363 128TH STREET  
SURREY, B.C. V3W 4G1  
TEL: (604) 543 8044 FAX: (604) 543 8104  
EMAIL: civil@mainlandeng.com

MAINLAND PROJECT NUMBER  
G-2406



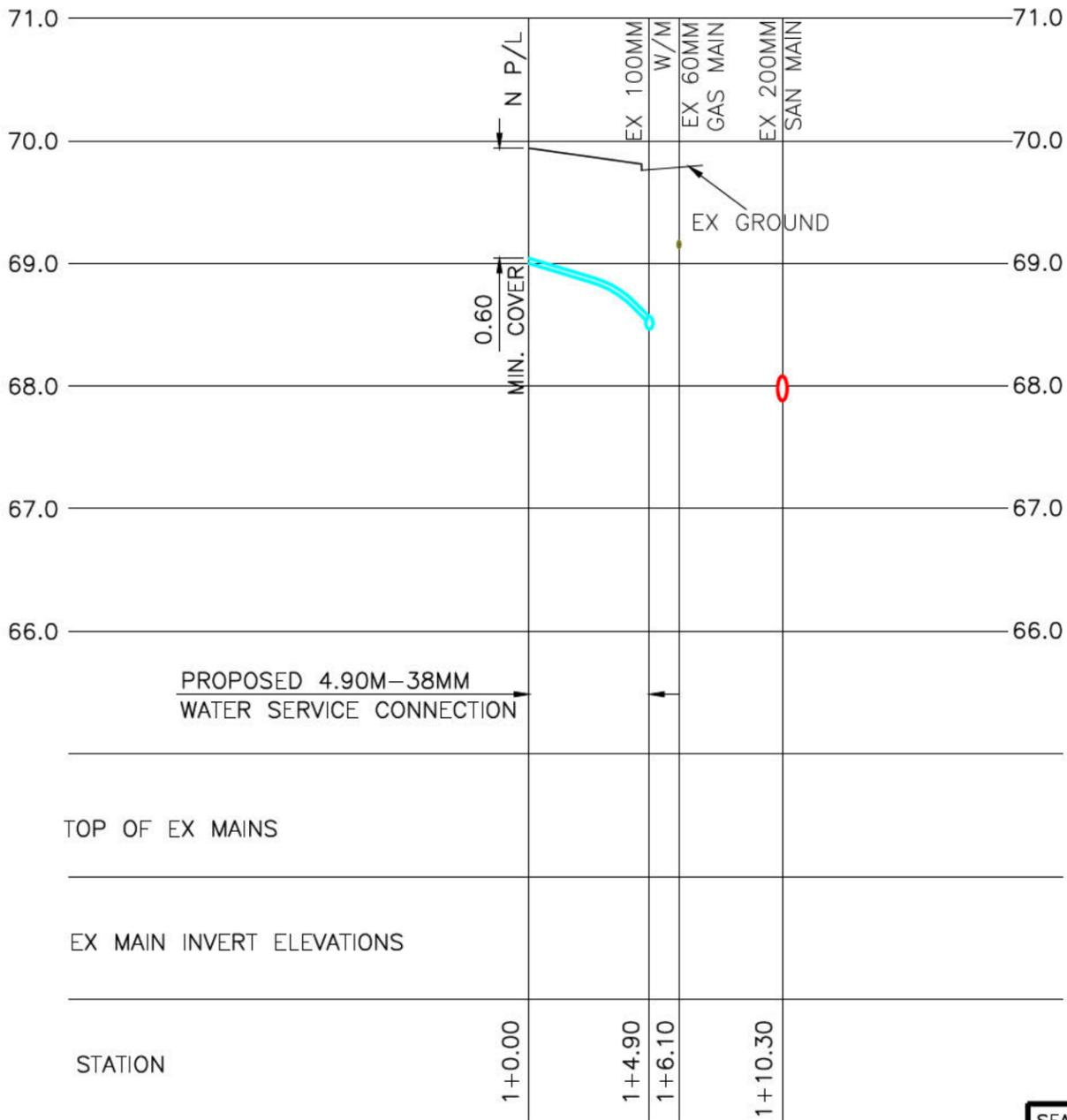
262  
PLAN 41968  
#1405 BISHOP RD



PAVEMENT CUT POLICY AS PER CITY OF WHITE ROCK AND MMCD G4 AND G5 PERMANENT TRENCH RESTORATION (TYPICAL)

PROPOSED 38MM WATER CONNECTION BY CITY  
OWNER/BUILDER TO INSTALL METER BOX AND SETTER, CITY TO SUPPLY & INSTALL METER UNDER PLUMBING PERMIT.

NOTE:  
THE CONTRACTOR SHALL CONFIRM ELEVATION IN FIELD. IF ANY DISCREPANCIES EXIST, REPORT TO ENGINEER-IN-CHARGE



### WATER CONNECTION PROFILE

SCALE: HORIZ. 1:250 VERT. 1:50

SEAL



				DEVELOPMENT/SITE LOCATION		MAINLAND ENGINEERING DESIGN CORPORATION		MAINLAND PROJECT NUMBER	
				#1407 BISHOP ROAD, WHITE ROCK, B.C.		UNIT 206 8363 128TH STREET		SURREY, B.C. V3W 4G1	
				DWG. NAME		TEL: (604) 543 8044		FAX: (604) 543 8104	
				WATER CONNECTION PROFILE		EMAIL: civil@mainlandeng.com		G-2406	
1	2024/05/23	AS	RM	REVISED AS PER CITY COMMENTS					
0	2024/02/23	AS	RM	ISSUED FOR APPROVAL					
NO.	YY/MM/DD	DRN.	CH.	REVISION					



# Owner's Acknowledgement of Responsibility and Undertakings

Planning and Development Services Department  
15322 Buena Vista Ave., White Rock, B.C. V4B 1Y6  
Phone: 604 541 2136 Fax: 604 541 2153  
Website: [www.whiterockcity.ca](http://www.whiterockcity.ca)

RECEIVED

## SCHEDULE "1"

MAR 28 2024

### FORM A – Owner's Acknowledgement of Responsibility and Undertakings

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

RE: Address: 1407 Bishop Rd White Rock, BC V4B 2P1

Building Permit Application No.: \_\_\_\_\_

1. I am the owner of the land and premises located at 1407 Bishop Rd, White Rock, B.C.
2. I understand and acknowledge that I am fully responsible for carrying out the work, or having the work carried out, in accordance with the requirements of the **Building Code**, the Building Bylaw No. 1928 and all other bylaws of the City of White Rock.
3. I will comply with, or cause those whom I employ to comply with, the **Building Code** and all bylaws of the City of White Rock and other statutes and regulations relating to the development, work, undertaking or permission in respect of which this application is made.
4. I understand and acknowledge that neither the issuance of a permit under Building Bylaw No. 1928, the review of plans and supporting documents, nor inspections by a building official shall in any way constitute a representation, warranty, or statement that the **Building Code**, Building Bylaw No. 1928, or any other bylaw of the City of White Rock has been complied with.
5. If the material submitted in support of the application for this Building Permit included certification provided by Registered Professionals as referred to in the **Building Code**, I understand and acknowledge that the City of White Rock and its **Building Officials** have relied on those letters of assurance as certification that the design and plans to which they relate comply with the **Building Code** and other applicable enactments.
6. In particular, I understand and acknowledge that the **City** has relied on the letters of "Assurance of Professional Design and Commitment for Field Review" provided by:

(Insert the name of the Registered Professionals where applicable)	
Architectural	
Building Envelope	
Structural	Vishnu Suresh
Mechanical	
Plumbing	Bill Khangura
Fire Suppression Systems	Shoaib Khan
Electrical	
Geotechnical – temporary	Jugraj S Brar
Geotechnical – permanent	Jugraj S Brar

in reviewing the plans and supporting documentation submitted with this application for a Building Permit.

7. I am authorized to make this acknowledgement of responsibility and give these undertakings to the City of White Rock.
  
8. I understand that it would be prudent for me to seek independent legal advice with respect to the responsibilities I am assuming upon the granting of a Building Permit by the City of White Rock pursuant to this application and in respect of the execution of this acknowledgment.

Signed this \_\_\_\_\_ day of \_\_\_\_\_.

**Redaction S.22**

\_\_\_\_\_  
 Print Name of **Owner** (or signing officer if the owner is a corporation)

**S.22**

\_\_\_\_\_  
 Signature of **Owner** (or signing officer if the owner is a corporation)

Signed this \_\_\_\_\_ day of \_\_\_\_\_.

\_\_\_\_\_  
 Print **Witness Name**

\_\_\_\_\_  
**Witness Signature**

\_\_\_\_\_  
 Occupation



# Proof of Professional Liability Insurance

Planning and Development Services Department  
15322 Buena Vista Ave., White Rock, B.C. V4B 1Y6  
Phone: 604 541 2136 Fax: 604 541 2153  
Website: [www.whiterockcity.ca](http://www.whiterockcity.ca)

## SCHEDULE "2"

RECEIVED

MAR 23 2024

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

### FORM B – Proof of Professional Liability Insurance

RE: Address: 1407 BISHOP RD., WHITE ROCK, BC

Building Permit Application No.: \_\_\_\_\_

The undersigned hereby gives assurance that:

- a) I have fulfilled my obligation to obtain a subsisting policy of professional liability or errors and omissions insurance as outlined in section 16 of the City of White Rock **Building Bylaw No. 1928**.
- b) I have enclosed a copy of my certificate of insurance indicating the particulars of such coverage.
- c) I am a registered professional as defined under Section 1.1.3.2 of the British Columbia **Building Code**.
- d) I will notify the **Building Official** immediately if this insurance coverage is reduced or terminated at any time during **construction**.

Signed this 21st day of Mar 2024

**Shoaib Khan**

Print Name of Registered Professional

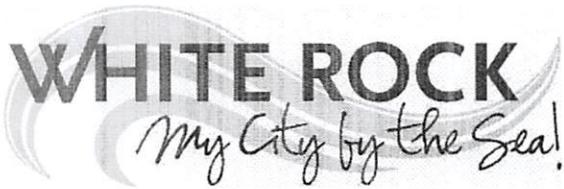


Signature of Registered Professional

Signed this \_\_\_\_\_ day of \_\_\_\_\_

Witness Signature

Occupation



# Proof of Professional Liability Insurance

Planning and Development Services Department  
15322 Buena Vista Ave., White Rock, B.C. V4B 1Y6  
Phone: 604 541 2136 Fax: 604 541 2153  
Website: [www.whiterockcity.ca](http://www.whiterockcity.ca)

## SCHEDULE "2"

RECEIVED

MAR 28 2024

### FORM B – Proof of Professional Liability Insurance

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

RE: Address: 1407 BISHOP RD., WHITE ROCK

Building Permit Application No.: \_\_\_\_\_

The undersigned hereby gives assurance that:

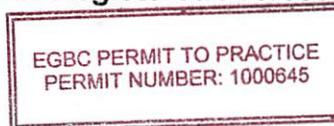
- a) I have fulfilled my obligation to obtain a subsisting policy of professional liability or errors and omissions insurance as outlined in section 16 of the City of White Rock **Building Bylaw No. 1928.**
- b) I have enclosed a copy of my certificate of insurance indicating the particulars of such coverage.
- c) I am a registered professional as defined under Section 1.1.3.2 of the British Columbia **Building Code.**
- d) I will notify the **Building Official** immediately if this insurance coverage is reduced or terminated at any time during **construction.**

Signed this 27 day of 2024.

**VISHNU SURESH**

Print Name of Registered Professional

Signature of Registered Professional



Signed this \_\_\_\_\_ day of \_\_\_\_\_.

Witness Signature

Occupation

# CERTIFICATE OF LIABILITY INSURANCE

This certificate is issued as a matter of information only and confers no rights upon the certificate holder and imposes no liability on the insurer.  
This certificate does not amend, extend or alter the coverage afforded by the policies below.

<b>1. CERTIFICATE HOLDER - NAME AND MAILING ADDRESS</b>		<b>2. INSURED'S FULL NAME AND MAILING ADDRESS</b>		
To Whom it May Concern		Northwest Engineers Inc		
		8356 120th Street		
Vancouver	BC	POSTAL CODE	Vancouver	British Columbia
				POSTAL CODE V3W 3N4

**3. DESCRIPTION OF OPERATIONS/LOCATIONS/AUTOMOBILES/SPECIAL ITEMS TO WHICH THIS CERTIFICATE APPLIES** (but only with respect to the operations of the Named Insured)

Engineer

**COVERAGES**

This is to certify that the policies of insurance listed below have been issued to the Insured named above for the policy period indicated notwithstanding any requirements, terms or conditions of any contract or other document with respect to which this certificate may be issued or may pertain. The insurance afforded by the policies described herein is subject to all terms, exclusions and conditions of such policies.

**LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS**

TYPE OF INSURANCE	INSURANCE COMPANY AND POLICY NUMBER	EFFECTIVE DATE YYYY/MM/DD	EXPIRY DATE YYYY/MM/DD	LIMITS OF LIABILITY (Canadian dollars unless indicated otherwise)		
				COVERAGE	DED.	AMOUNT OF INSURANCE
<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS MADE OR <input type="checkbox"/> OCCURRENCE <input type="checkbox"/> PRODUCTS AND / OR COMPLETED OPERATIONS <input type="checkbox"/> EMPLOYER'S LIABILITY <input type="checkbox"/> CROSS LIABILITY  <input type="checkbox"/> WAIVER OF SUBROGATION  <input type="checkbox"/> TENANTS LEGAL LIABILITY <input type="checkbox"/> POLLUTION LIABILITY EXTENSION <input type="checkbox"/> <input type="checkbox"/>				COMMERCIAL GENERAL LIABILITY BODILY INJURY AND PROPERTY DAMAGE LIABILITY - GENERAL AGGREGATE - EACH OCCURRENCE  PRODUCTS AND COMPLETED OPERATIONS AGGREGATE <input type="checkbox"/> PERSONAL INJURY LIABILITY OR <input type="checkbox"/> PERSONAL AND ADVERTISING INJURY LIABILITY  MEDICAL PAYMENTS  TENANTS LEGAL LIABILITY  POLLUTION LIABILITY EXTENSION   		
<input type="checkbox"/> NON-OWNED AUTOMOBILES <input type="checkbox"/> HIRED AUTOMOBILES				NON-OWNED AUTOMOBILES HIRED AUTOMOBILES		
<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> DESCRIBED AUTOMOBILES <input type="checkbox"/> ALL OWNED AUTOMOBILES <input type="checkbox"/> LEASED AUTOMOBILES ** ** ALL AUTOMOBILES LEASED IN EXCESS OF 30 DAYS WHERE THE INSURED IS REQUIRED TO PROVIDE INSURANCE				BODILY INJURY AND PROPERTY DAMAGE COMBINED BODILY INJURY (PER PERSON) BODILY INJURY (PER ACCIDENT) PROPERTY DAMAGE		
<b>EXCESS LIABILITY</b> <input type="checkbox"/> UMBRELLA FORM <input type="checkbox"/>				EACH OCCURRENCE AGGREGATE		
<b>OTHER LIABILITY (SPECIFY)</b> <input checked="" type="checkbox"/> Claims Made <input type="checkbox"/>	Burns & Wilcox Canada - BWPM106	2024/02/01	2025/02/01	Professional Liability	\$2,500	\$2,000,000

**5. CANCELLATION**

Should any of the above described policies be cancelled before the expiration date thereof, the issuing company will endeavour to mail 30 days written notice to the certificate holder named above, but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives.

<b>6. BROKERAGE/AGENCY FULL NAME AND MAILING ADDRESS</b>		<b>7. ADDITIONAL INSURED NAME AND MAILING ADDRESS</b> (Commercial General Liability- but only with respect to the operations of the Named Insured)		
S&S Insurance Services Ltd 6607 Main Street				
Vancouver	BC	POSTAL CODE	V5X 3H3	
BROKER CLIENT ID: SHA551				POSTAL CODE

**8. CERTIFICATE AUTHORIZATION**

ISSUER S&S Insurance Services Ltd	CONTACT NUMBER(S) TYPE Main NO. (604) 324-5711	TYPE Fax NO. +1 (877) 820-7475
AUTHORIZED REPRESENTATIVE Amrit Sidhu, Caib, CIP	TYPE NO.	TYPE NO.
SIGNATURE OF AUTHORIZED REPRESENTATIVE	DATE 29 January 2024	EMAIL ADDRESS amrit@sandsinsurance.ca



# Proof of Professional Liability Insurance

Planning and Development Services Department  
15322 Buena Vista Ave., White Rock, B.C. V4B 1Y6  
Phone: 604 541 2136 Fax: 604 541 2153  
Website: [www.whiterockcity.ca](http://www.whiterockcity.ca)

RECEIVED

## SCHEDULE "2"

MAR 28 2024

### FORM B – Proof of Professional Liability Insurance

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

RE: Address: 1407 Bishop Road, White Rock, B.C.

Building Permit Application No.: \_\_\_\_\_

The undersigned hereby gives assurance that:

- a) I have fulfilled my obligation to obtain a subsisting policy of professional liability or errors and omissions insurance as outlined in section 16 of the City of White Rock **Building Bylaw No. 1928**.
- b) I have enclosed a copy of my certificate of insurance indicating the particulars of such coverage.
- c) I am a registered professional as defined under Section 1.1.3.2 of the British Columbia **Building Code**.
- d) I will notify the **Building Official** immediately if this insurance coverage is reduced or terminated at any time during **construction**. E.G.B.C Permit No. 1000110

Signed this 02 day of Feb 2024, Jugraj S. Brar | P. Eng.

Print Name of Registered Professional



Signature of Registered Professional

Signed this \_\_\_\_\_ day of \_\_\_\_\_.

Witness Signature

Occupation



# Proof of Professional Liability Insurance

Planning and Development Services Department  
15322 Buena Vista Ave., White Rock, B.C. V4B 1Y6  
Phone: 604 541 2136 Fax: 604 541 2153  
Website: [www.whiterockcity.ca](http://www.whiterockcity.ca)

RECEIVED

MAR 28 2024

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

## SCHEDULE "2"

### FORM B – Proof of Professional Liability Insurance

RE: Address: 1407 Bishop Road ,White Rock,B.C.

Building Permit Application No.: \_\_\_\_\_

The undersigned hereby gives assurance that:

- a) I have fulfilled my obligation to obtain a subsisting policy of professional liability or errors and omissions insurance as outlined in section 16 of the City of White Rock **Building Bylaw No. 1928**.
- b) I have enclosed a copy of my certificate of insurance indicating the particulars of such coverage.
- c) I am a registered professional as defined under Section 1.1.3.2 of the British Columbia **Building Code**.
- d) I will notify the **Building Official** immediately if this insurance coverage is reduced or terminated at any time during **construction**.

Signed this 26 day of Feb,2024.

Avnash Banwait

Print Name of Registered Professional

  
Signature of Registered Professional

Signed this \_\_\_\_\_ day of \_\_\_\_\_.

\_\_\_\_\_  
Witness Signature

\_\_\_\_\_  
Occupation

RECEIVED

MAR 28 2024

SCHEDULE A

Forming Part of Sentence 2.2.7.2.(1), Division C of the British Columbia Building Code

021501

Building Permit Number (for authority having jurisdiction's use)

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

CONFIRMATION OF COMMITMENT BY OWNER  
AND COORDINATING REGISTERED PROFESSIONAL

- Notes: (i) This letter must be submitted before issuance of a *building* permit.
- (ii) This letter is endorsed by: Architectural Institute of BC, Association of Professional Engineers and Geoscientists of the Province of BC, Building Officials' Association of BC, and Union of BC Municipalities.
- (iii) In this letter the words in *italics* have the same meaning as in the British Columbia Building Code.

Re: Design and *Field Review* of Construction  
by a *Coordinating Registered Professional*

EGBC PERMIT TO PRACTICE  
PERMIT NO. 1000645

To: The *authority having jurisdiction*  
CITY OF WHITE ROCK

Name of Jurisdiction (Print)

Re: SINGLE FAMILY DWELLING

Name of Project (Print)

1407 BISHOP RD., WHITE ROCK

Address of Project (Print)



MARCH 27, 2024

Date

The undersigned has retained VISHNU SURESH as a *coordinating registered professional* to coordinate the design work and *field reviews* of the *registered professionals of record* required<sup>1</sup> for this project. The *coordinating registered professional* shall coordinate the design work and *field reviews* of the *registered professionals of record* required for the project in order to ascertain that the design will substantially comply with the British Columbia Building Code and other applicable enactments respecting safety and that the construction of the project will substantially comply with the British Columbia Building Code and other applicable enactments respecting safety, not including the construction safety aspects.

"*field reviews*" are defined in the British Columbia Building Code to mean those reviews of the work

- (a) at a project site of a development to which a *building* permit relates, and
- (b) where applicable, at fabrication locations where *building* components are fabricated for use at the project site

that a *registered professional of record* in his or her professional discretion considers necessary to ascertain whether the work substantially complies in all material respects with the plans and supporting documents prepared by the *registered professional of record* for which the *building* permit is issued.

The *owner* and the *coordinating registered professional* have read Subsection 2.2.7., Division C of the British Columbia Building Code. The *owner* and the *coordinating registered professional* each acknowledge their responsibility to notify the addressee of this letter of the date the *coordinating registered professional* ceases to be retained by the *owner* before the date the *coordinating registered professional* ceases to be retained or, if that is not possible, then as soon as possible. The *coordinating registered professional* acknowledges the responsibility to notify the addressee of this letter of the date a *registered professional of record* ceases to be retained before the date the *registered professional of record* ceases to be retained or, if that is not possible, then as soon as possible.

<sup>1</sup>It is the responsibility of the *coordinating registered professional* to ascertain which *registered professionals of record* are required, and to initial each Schedule B.

# BRITISH COLUMBIA BUILDING CODE 2024

Schedule A - Continued

Building Permit Number  
(for authority having jurisdiction's use)

1407 BISHOP RD., WHITE ROCK

Project Address

The *owner* and the *coordinating registered professional* understand that where the *coordinating registered professional* or a *registered professional of record* ceases to be retained at any time during construction, work on the above project will cease until such time as

- (a) a new *coordinating registered professional* or *registered professional of record*, as the case may be, is retained, and
- (b) a new letter in the form set out in Schedule A or in the form set out in Schedule B, as the case may be, is filed with the *authority having jurisdiction*.

The undersigned *coordinating registered professional* certifies that he or she is a *registered professional* as defined in the British Columbia Building Code, and agrees to coordinate the design work and *field reviews* of the *registered professionals of record* required for the project as outlined in each attached Schedule B including coordination and integration of functional testing of fire protection and life safety systems. (See A-2.2.7.3. in Appendix A of Division C.)

**Coordinating Registered Professional**

VISHNU SURESH

Coordinating Registered Professional's Name (Print)

#304, 8356 120 ST., SURREY

Address (Print)

V3W 3N4

Address (Print) (continued)

778 885 0551

Phone Number and Email Address

**Owner**

ATAIB GILL

Owner's Name (Print)

Redacted S.22

Name of Agent of Signing Officer if Applicable (Print)

March 28/2024

Date

Owner's or Owner's appointed agent's Signature. (If owner is a corporation the signature of a signing officer must be given here. If the signature is that of the agent, a copy of the document that appoints the agent must be attached.)



MARCH 27, 2024

Date

EGBC PERMIT TO PRACTICE  
PERMIT NO. 1000645

(If the *Coordinating Registered Professional* is a member of a firm, complete the following.)

I am a member of the firm NORTHWEST ENGINEERS INC.  
and I sign this letter on behalf of the firm. (Print name of firm)

This letter must be signed by the *owner* or the *owner's* appointed agent and by the *coordinating registered professional*. An agent's letter of appointment must be attached. If the *owner* is a corporation, the letter must be signed by a signing officer of the corporation and the signing officer must set forth his or her position in the corporation.

The British Columbia Building Code defines a *registered professional* to mean

- (a) a person who is registered as an Architect with the Architectural Institute of British Columbia under the Professional Governance Act, or
- (b) a person who is registered as a professional engineer or professional licensee engineering with the Association of Professional Engineers and Geoscientists of the Province of British Columbia under the Professional Governance Act.

021501

MAR 20 2024  
PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

SCHEDULE B

Forming Part of Subsection 2.2.7., Division C of the  
British Columbia Building Code

Building Permit Number  
(for authority having jurisdiction's use)

ASSURANCE OF PROFESSIONAL DESIGN AND  
COMMITMENT FOR FIELD REVIEW

- Notes: (i) This letter must be submitted prior to the commencement of construction activities of the components identified below. A separate letter must be submitted by each *registered professional of record*.
- (ii) This letter is endorsed by: Architectural Institute of BC, Association of Professional Engineers and Geoscientists of the Province of BC, Building Officials' Association of BC, and Union of BC Municipalities.
- (iii) In this letter the words in italics have the same meaning as in the British Columbia Building Code.

To: The *authority having jurisdiction*  
City of White Rock, BC

Name of Jurisdiction (Print)

Re: Sprinkling System-Residential

Name of Project (Print)

1407 Bishop Rd, White Rock, BC

Address of Project (Print)

PTP No:1000330

The undersigned hereby gives assurance that the design of the  
(Initial those of the items listed below that apply to this *registered professional of record*. All the disciplines will not necessarily be employed on every project.)

- NA ARCHITECTURAL
- NA STRUCTURAL
- NA MECHANICAL
- NA PLUMBING
- J.K. FIRE SUPPRESSION SYSTEMS
- NA ELECTRICAL
- NA GEOTECHNICAL — temporary
- NA GEOTECHNICAL — permanent



(Professional's Seal and Signature)

March 21, 2024

Date

components of the plans and supporting documents prepared by this *registered professional of record* in support of the application for the *building* permit as outlined below substantially comply with the British Columbia Building Code and other applicable enactments respecting safety except for construction safety aspects.

The undersigned hereby undertakes to be responsible for *field reviews* of the above referenced components during construction, as indicated on the "SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS" below.

J.K.

CRP's Initials

# BRITISH COLUMBIA BUILDING CODE 2024

Schedule B - *Continued*

Building Permit Number  
(for authority having jurisdiction's use)

1407 Bishop Rd, White Rock, BC

Project Address

Fire Sprinkling System

Discipline

The undersigned also undertakes to notify the *authority having jurisdiction* in writing as soon as possible if the undersigned's contract for *field review* is terminated at any time during construction.

I certify that I am a *registered professional* as defined in the British Columbia Building Code.

Shoaib Khan

Registered Professional of Record's Name (Print)

235-970 Burrard St,

Address (Print)

Vancouver, BC V6Z 2R4

Address (Print) (continued)

778 968 1945

Phone Number and Email Address



(Professional's Seal and Signature)

March 21, 2024

Date

(If the *Registered Professional of Record* is a member of a firm, complete the following.)

I am a member of the firm \_\_\_\_\_

and I sign this letter on behalf of the firm.

(Print name of firm)

Note: The above letter must be signed by a *registered professional of record*, who is a *registered professional*. The British Columbia Building Code defines a *registered professional* to mean

- (a) a person who is registered as an Architect with the Architectural Institute of British Columbia under the Professional Governance Act, or
- (b) a person who is registered as a professional engineer or professional licensee engineering with the Association of Professional Engineers and Geoscientists of the Province of British Columbia under the Professional Governance Act.

SK

CRP's Initials

# BRITISH COLUMBIA BUILDING CODE 2024

Schedule B - *Continued*

Building Permit Number  
(for authority having jurisdiction's use)

1407 Bishop Rd, White Rock, BC

Project Address

Fire Sprinkling System

Discipline

## SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS

(Initial applicable discipline below and cross out and initial only those items not applicable to the project.)

### NA ARCHITECTURAL

- 1.1 Fire resisting assemblies
- 1.2 *Fire separations* and their continuity
- 1.3 *Closures*, including tightness and operation
- 1.4 Egress systems, including *access to exit* within *suites* and *floor areas*
- 1.5 Performance and physical safety features (guardrails, handrails, etc.)
- 1.6 Structural capacity of architectural components, including anchorage and seismic restraint
- 1.7 Sound control
- 1.8 Landscaping, screening and site grading
- 1.9 Provisions for firefighting access
- 1.10 *Access* requirements for *persons with disabilities*
- 1.11 Elevating devices
- 1.12 Functional testing of architecturally related fire emergency systems and devices
- 1.13 Development Permit and conditions therein
- 1.14 Interior signage, including acceptable materials, dimensions and locations
- 1.15 Review of all applicable shop drawings
- 1.16 Interior and exterior finishes
- 1.17 Dampproofing and/or waterproofing of walls and slabs below *grade*
- 1.18 Roofing and flashings
- 1.19 Wall cladding systems
- 1.20 Condensation control and cavity ventilation
- 1.21 Exterior glazing
- 1.22 Integration of building envelope components
- 1.23 Environmental separation requirements (Part 5)
- 1.24 Building envelope, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 1.25 Building envelope, testing, confirmation or both as per Part 10 requirements



March 21, 2024

Date

### NA STRUCTURAL

- 2.1 Structural capacity of structural components of the *building*, including anchorage and seismic restraint
- 2.2 Structural aspects of *deep foundations*
- 2.3 Review of all applicable shop drawings
- 2.4 Structural aspects of unbonded post-tensioned concrete design and construction
- 2.5 Independent review of structural designs

### NA MECHANICAL

- 3.1 HVAC systems and devices, including high *building* requirements where applicable
- 3.2 *Fire dampers* at required *fire separations*
- 3.3 Continuity of *fire separations* at HVAC penetrations
- 3.4 Functional testing of mechanically related fire emergency systems and devices
- 3.5 Maintenance manuals for mechanical systems
- 3.6 Structural capacity of mechanical components, including anchorage and seismic restraint
- 3.7 Review of all applicable shop drawings
- 3.8 Mechanical systems, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 3.9 Mechanical systems, testing, confirmation or both as per Part 10 requirements

  
CRP's Initials

# BRITISH COLUMBIA BUILDING CODE 2024

Schedule B - *Continued*

Building Permit Number  
(for authority having jurisdiction's use)

1407 Bishop Rd, White Rock, BC  
Project Address

Fire Sprinkling System  
Discipline

## NA PLUMBING

- 4.1 Roof *drainage systems*
- 4.2 Site and foundation *drainage systems*
- 4.3 *Plumbing systems* and devices
- 4.4 Continuity of *fire separations* at plumbing penetrations
- 4.5 Functional testing of plumbing related fire emergency systems and devices
- 4.6 Maintenance manuals for *plumbing systems*
- 4.7 Structural capacity of plumbing components, including anchorage and seismic restraint
- 4.8 Review of all applicable shop drawings
- 4.9 Plumbing systems, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 4.10 Plumbing systems, testing, confirmation or both as per Part 10 requirements

## 5.1 FIRE SUPPRESSION SYSTEMS

- 5.1 Suppression system classification for type of *occupancy*
- 5.2 Design coverage, including concealed or special areas
- 5.3 Compatibility and location of electrical supervision, ancillary alarm and control devices
- 5.4 Evaluation of the capacity of city (municipal) water supply versus system demands and domestic demand, including pumping devices where necessary
- 5.5 Qualification of welder, quality of welds and material
- 5.6 Review of all applicable shop drawings
- 5.7 Acceptance testing for "Contractor's Material and Test Certificate" as per NFPA Standards
- 5.8 Maintenance program and manual for suppression systems
- 5.9 Structural capacity of sprinkler components, including anchorage and seismic restraint
- 5.10 For partial systems — confirm sprinklers are installed in all areas where required
- 5.11 Fire Department connections and hydrant locations
- 5.12 Fire hose standpipes
- 5.13 Freeze protection measures for fire suppression systems
- 5.14 Functional testing of fire suppression systems and devices

## NA ELECTRICAL

- 6.1 Electrical systems and devices, including high building requirements where applicable
- 6.2 Continuity of *fire separations* at electrical penetrations
- 6.3 Functional testing of electrical related fire emergency systems and devices
- 6.4 Electrical systems and devices maintenance manuals
- 6.5 Structural capacity of electrical components, including anchorage and seismic restraint
- 6.6 Clearances from *buildings* of all electrical utility equipment
- 6.7 Fire protection of wiring for emergency systems
- 6.8 Review of all applicable shop drawings
- 6.9 Electrical systems, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 6.10 Electrical systems, testing, confirmation or both as per Part 10 requirements

## NA GEOTECHNICAL — Temporary

- 7.1 *Excavation*
- 7.2 *Shoring*
- 7.3 *Underpinning*
- 7.4 Temporary construction dewatering

## NA GEOTECHNICAL — Permanent

- 8.1 Bearing capacity of the *soil*
- 8.2 Geotechnical aspects of deep *foundations*
- 8.3 Compaction of engineered fill
- 8.4 Structural considerations of *soil*, including slope stability and seismic loading
- 8.5 *Backfill*
- 8.6 Permanent dewatering
- 8.7 Permanent underpinning



March 21, 2024

Date

CRP's Initials

021501

SCHEDULE B

Forming Part of Subsection 2.2.7., Division C of the British Columbia Building Code

Building Permit Number (for authority having jurisdiction's use)

ASSURANCE OF PROFESSIONAL DESIGN AND COMMITMENT FOR FIELD REVIEW

- Notes: (i) This letter must be submitted prior to the commencement of construction activities of the components identified below. A separate letter must be submitted by each registered professional of record. (ii) This letter is endorsed by: Architectural Institute of BC, Association of Professional Engineers and Geoscientists of the Province of BC, Building Officials' Association of BC, and Union of BC Municipalities. (iii) In this letter the words in italics have the same meaning as in the British Columbia Building Code.

To: The authority having jurisdiction

The City of White Rock

Name of Jurisdiction (Print)

Re:

Single Family Dwelling

Name of Project (Print)

1407 Bishop Road, White Rock, B.C.

Address of Project (Print)

The undersigned hereby gives assurance that the design of the

(Initial those of the items listed below that apply to this registered professional of record. All the disciplines will not necessarily be employed on every project.)

- ARCHITECTURAL
STRUCTURAL
MECHANICAL
PLUMBING
FIRE SUPPRESSION SYSTEMS
ELECTRICAL
GEOTECHNICAL - temporary
GEOTECHNICAL - permanent



APR 03 / 2024

components of the plans and supporting documents prepared by this registered professional of record in support of the application for the building permit as outlined below substantially comply with the British Columbia Building Code and other applicable enactments respecting safety except for construction safety aspects.

The undersigned hereby undertakes to be responsible for field reviews of the above referenced components during construction, as indicated on the "SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS" below.

CRP's Initials RECEIVED

APR 04 2024

# BRITISH COLUMBIA BUILDING CODE 2024

Schedule B - Continued

Building Permit Number  
(for authority having jurisdiction's use)

1407 Bishop Road, White Rock, B.C.  
Project Address

Geotechnical  
Discipline

The undersigned also undertakes to notify the *authority having jurisdiction* in writing as soon as possible if the undersigned's contract for *field review* is terminated at any time during construction.

I certify that I am a *registered professional* as defined in the British Columbia Building Code.

Jugraj S. Brar | P. Eng.  
Registered Professional of Record's Name (Print)

Registered Professional of Record's Name (Print)

Unit 216-12899 76 Avenue,  
Address (Print)

Address (Print)

Surrey, B.C. V3W 1E6  
Address (Print) (continued)

Address (Print) (continued)

(604) 501-7788  
Phone Number and Email Address

Phone Number and Email Address



(Professional's Seal and Signature)

APR 03/2024  
Date

Date

(If the Registered Professional of Record is a member of a firm, complete the following.)

I am a member of the firm Bansal and Associates Consulting Engineers Inc.  
and I sign this letter on behalf of the firm. (Print name of firm)

Note: The above letter must be signed by a *registered professional of record*, who is a *registered professional*. The British Columbia Building Code defines a *registered professional* to mean

- (a) a person who is registered as an Architect with the Architectural Institute of British Columbia under the Professional Governance Act, or
- (b) a person who is registered as a professional engineer or professional licensee engineering with the Association of Professional Engineers and Geoscientists of the Province of British Columbia under the Professional Governance Act.

CRP's Initials

# BRITISH COLUMBIA BUILDING CODE 2024

Schedule B - Continued

Building Permit Number  
(for authority having jurisdiction's use)

1407 Bishop Road, White Rock, B.C.

Project Address

Geotechnical

Discipline

## SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS

(Initial applicable discipline below and cross out and initial only those items not applicable to the project.)

### ARCHITECTURAL

- 1.1 Fire resisting assemblies
- 1.2 Fire separations and their continuity
- 1.3 Closures, including tightness and operation
- 1.4 Egress systems, including access to exit within suites and floor areas
- 1.5 Performance and physical safety features (guardrails, handrails, etc.)
- 1.6 Structural capacity of architectural components, including anchorage and seismic restraint
- 1.7 Sound control
- 1.8 Landscaping, screening and site grading
- 1.9 Provisions for firefighting access
- 1.10 Access requirements for persons with disabilities
- 1.11 Elevating devices
- 1.12 Functional testing of architecturally related fire emergency systems and devices
- 1.13 Development Permit and conditions therein
- 1.14 Interior signage, including acceptable materials, dimensions and locations
- 1.15 Review of all applicable shop drawings
- 1.16 Interior and exterior finishes
- 1.17 Dampproofing and/or waterproofing of walls and slabs below grade
- 1.18 Roofing and flashings
- 1.19 Wall cladding systems
- 1.20 Condensation control and cavity ventilation
- 1.21 Exterior glazing
- 1.22 Integration of building envelope components
- 1.23 Environmental separation requirements (Part 5)
- 1.24 Building envelope, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 1.25 Building envelope, testing, confirmation or both as per Part 10 requirements

### STRUCTURAL

- 2.1 Structural capacity of structural components of the building, including anchorage and seismic restraint
- 2.2 Structural aspects of deep foundations
- 2.3 Review of all applicable shop drawings
- 2.4 Structural aspects of unbonded post-tensioned concrete design and construction
- 2.5 Independent review of structural designs

### MECHANICAL

- 3.1 HVAC systems and devices, including high building requirements where applicable
- 3.2 Fire dampers at required fire separations
- 3.3 Continuity of fire separations at HVAC penetrations
- 3.4 Functional testing of mechanically related fire emergency systems and devices
- 3.5 Maintenance manuals for mechanical systems
- 3.6 Structural capacity of mechanical components, including anchorage and seismic restraint
- 3.7 Review of all applicable shop drawings
- 3.8 Mechanical systems, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 3.9 Mechanical systems, testing, confirmation or both as per Part 10 requirements



(Professional's Seal and Signature)

APR 03/2024  
Date

# BRITISH COLUMBIA BUILDING CODE 2024

Schedule B - Continued

Building Permit Number  
(for authority having jurisdiction's use)

1407 Bishop Road, White Rock, B.C.  
Project Address

Geotechnical

Discipline

## PLUMBING

- 4.1 Roof drainage systems
- 4.2 Site and foundation drainage systems
- 4.3 Plumbing systems and devices
- 4.4 Continuity of fire separations at plumbing penetrations
- 4.5 Functional testing of plumbing related fire emergency systems and devices
- 4.6 Maintenance manuals for plumbing systems
- 4.7 Structural capacity of plumbing components, including anchorage and seismic restraint
- 4.8 Review of all applicable shop drawings
- 4.9 Plumbing systems, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 4.10 Plumbing systems, testing, confirmation or both as per Part 10 requirements

## FIRE SUPPRESSION SYSTEMS

- 5.1 Suppression system classification for type of occupancy
- 5.2 Design coverage, including concealed or special areas
- 5.3 Compatibility and location of electrical supervision, ancillary alarm and control devices
- 5.4 Evaluation of the capacity of city (municipal) water supply versus system demands and domestic demand, including pumping devices where necessary
- 5.5 Qualification of welder, quality of welds and material
- 5.6 Review of all applicable shop drawings
- 5.7 Acceptance testing for "Contractor's Material and Test Certificate" as per NFPA Standards
- 5.8 Maintenance program and manual for suppression systems
- 5.9 Structural capacity of sprinkler components, including anchorage and seismic restraint
- 5.10 For partial systems – confirm sprinklers are installed in all areas where required
- 5.11 Fire Department connections and hydrant locations
- 5.12 Fire hose standpipes
- 5.13 Freeze protection measures for fire suppression systems
- 5.14 Functional testing of fire suppression systems and devices

## ELECTRICAL

- 6.1 Electrical systems and devices, including high building requirements where applicable
- 6.2 Continuity of fire separations at electrical penetrations
- 6.3 Functional testing of electrical related fire emergency systems and devices
- 6.4 Electrical systems and devices maintenance manuals
- 6.5 Structural capacity of electrical components, including anchorage and seismic restraint
- 6.6 Clearances from buildings of all electrical utility equipment
- 6.7 Fire protection of wiring for emergency systems
- 6.8 Review of all applicable shop drawings
- 6.9 Electrical systems, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 6.10 Electrical systems, testing, confirmation or both as per Part 10 requirements

## GEOTECHNICAL – Temporary

- 7.1 Excavation
- 7.2 Shoring
- 7.3 Underpinning
- 7.4 Temporary construction dewatering

## GEOTECHNICAL – Permanent

- 8.1 Bearing capacity of the soil
- 8.2 Geotechnical aspects of deep foundations
- 8.3 Compaction of engineered fill
- 8.4 Structural considerations of soil, including slope stability and seismic loading
- 8.5 Backfill
- 8.6 Permanent dewatering
- 8.7 Permanent underpinning



APR 03 / 2024  
Date

CRP's Initials

CSIO

# CERTIFICATE OF INSURANCE

DATE (YY/MM/DD)

23/05/16

## BROKER

Axis Insurance Managers Inc.  
#400 - 555 Burrard Street,  
Box 275,  
Vancouver BC V7X 1M8

BROKER'S CLIENT ID: BANS&amp;AS-01

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policies below.

### COMPANIES AFFORDING COVERAGE

COMPANY

A XL Specialty Insurance Company

COMPANY

B

COMPANY

C

COMPANY

D

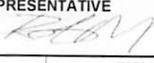
## INSURED'S FULL NAME AND MAILING ADDRESS

Bansal and Associates Consulting Engineer Inc.  
Unit 216, 12899 - 76 Avenue  
Surrey BC V3W 1E6

### COVERAGES

This is to certify that the policies of insurance listed below have been issued to the insured named above for the policy period indicated, notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain. The insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.

**LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.**

TYPE OF INSURANCE	CO LTR	POLICY NUMBER	POLICY EFFECTIVE DATE (YY/MM/DD)	POLICY EXPIRATION DATE (YY/MM/DD)	LIMITS OF LIABILITY (Canadian dollars unless indicated otherwise)	
<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS MADE OR <input type="checkbox"/> OCCURRENCE <input type="checkbox"/> PRODUCTS AND / OR COMPLETED OPERATIONS <input type="checkbox"/> EMPLOYER'S LIABILITY <input type="checkbox"/> CROSS LIABILITY <input type="checkbox"/> TENANT'S LEGAL LIABILITY <input type="checkbox"/> NON-OWNED <input type="checkbox"/> HIRED <input type="checkbox"/> POLLUTION LIABILITY EXTENSION					EACH OCCURRENCE	\$
					GENERAL AGGREGATE	\$
					PRODUCTS - COMP/OP AGG	\$
					PERSONAL INJURY	\$
					TENANT'S LEGAL LIABILITY	\$
					MED EXP (Any one person)	\$
					NON-OWNED AUTO	\$
					OPTIONAL POLLUTION LIABILITY EXTENSION	\$
					(Per Occurrence)	\$
					(Aggregate)	\$
<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> DESCRIBED AUTOMOBILES <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> LEASED AUTOMOBILES  <small>** ALL AUTOMOBILES LEASED IN EXCESS OF 30 DAYS WHERE THE INSURED IS REQUIRED TO PROVIDE INSURANCE</small>					BODILY INJURY PROPERTY DAMAGE COMBINED	\$
					BODILY INJURY (Per person)	\$
					BODILY INJURY (Per accident)	\$
					PROPERTY DAMAGE	\$
<b>EXCESS LIABILITY</b> <input type="checkbox"/> UMBRELLA FORM <input type="checkbox"/> OTHER THAN UMBRELLA FORM <small>(Specify)</small>					EACH OCCURRENCE	\$
					AGGREGATE	\$
<b>OTHER LIABILITY (SPECIFY)</b> Professional Liability Claims Made Basis	A	DPX9971021	23/05/28	24/05/28	Per Claim Annual Aggregate	1,000,000 1,000,000
<b>ADDITIONAL INSURED</b> N/A - ---					<b>DESCRIPTION OF OPERATIONS/LOCATIONS/AUTOMOBILES/SPECIAL ITEMS</b>	
<b>CERTIFICATE HOLDER</b>  To Whom It May Concern					<b>CANCELLATION</b>  SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 0 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.	
<b>SIGNATURE OF AUTHORIZED REPRESENTATIVE</b> 					<b>PRINT NAME INCLUDING POSITION HELD</b> Rob McLeod, CIP, CAIB	
<b>FAX NUMBER</b> 604-731-3137		<b>EMAIL ADDRESS</b> rob.mcleod@axisinsurance.ca		<b>COMPANY</b> Axis Insurance Managers Inc.		<b>DATE</b> 23/05/16
<b>CSIO CERT (6/00)</b>						

BRITISH COLUMBIA BUILDING CODE 2018

RECEIVED

MAR 28 2024

SCHEDULE B

Forming Part of Subsection 2.2.7., Division C of the British Columbia Building Code

021501

Building Permit Number (for authority having jurisdiction's use)

PLANNING & DEVELOPMENT CITY OF WHITE ROCK

ASSURANCE OF PROFESSIONAL DESIGN AND COMMITMENT FOR FIELD REVIEW

- Notes: (i) This letter must be submitted prior to the commencement of construction activities of the components identified below. A separate letter must be submitted by each registered professional of record. (ii) This letter is endorsed by: Architectural Institute of BC, Association of Professional Engineers and Geoscientists of the Province of BC, Building Officials' Association of BC, and Union of BC Municipalities. (iii) In this letter the words in italics have the same meaning as in the British Columbia Building Code.

To: The authority having jurisdiction

The City of White Rock

Name of Jurisdiction (Print)

Re: Single Family Dwelling

Name of Project (Print)

1407 Bishop Road, White Rock, B.C.

Address of Project (Print)

The undersigned hereby gives assurance that the design of the (Initial those of the items listed below that apply to this registered professional of record. All the disciplines will not necessarily be employed on every project.)

- ARCHITECTURAL
STRUCTURAL
MECHANICAL
PLUMBING
FIRE SUPPRESSION SYSTEMS
ELECTRICAL
GEOTECHNICAL - temporary
GEOTECHNICAL - permanent



E.G.B.C. PERMIT NO. 1000110 (Professional's Seal and Signature)

February 02, 2024

Date

components of the plans and supporting documents prepared by this registered professional of record in support of the application for the building permit as outlined below substantially comply with the British Columbia Building Code and other applicable enactments respecting safety except for construction safety aspects.

The undersigned hereby undertakes to be responsible for field reviews of the above referenced components during construction, as indicated on the 'SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS' below.

CRP's Initials

# BRITISH COLUMBIA BUILDING CODE 2018

Schedule B - Continued

Building Permit Number  
(for authority having jurisdiction's use)

1407 Bishop Road, White Rock, B.C.

Project Address

Geotechnical

Discipline

The undersigned also undertakes to notify the *authority having jurisdiction* in writing as soon as possible if the undersigned's contract for *field review* is terminated at any time during construction.

I certify that I am a *registered professional* as defined in the British Columbia Building Code.

Jugraj S. Brar | P. Eng.

Registered Professional of Record's Name (Print)

Unit 216 - 12899 76 Avenue,

Address (Print)

Surrey, B.C. V3W 1E6

Address (Print) (continued)

(604) 501-7788

Phone Number



(Professional's Seal and Signature)

February 02, 2024

Date

(If the *Registered Professional of Record* is a member of a firm, complete the following.)

I am a member of the firm Bansal and Associates Consulting Engineers Inc.  
and I sign this letter on behalf of the firm. (Print name of firm)

Note: The above letter must be signed by a *registered professional of record*, who is a *registered professional*. The British Columbia Building Code defines a *registered professional* to mean

- (a) a person who is registered or licensed to practise as an architect under the Architects Act, or
- (b) a person who is registered or licensed to practise as a professional engineer under the Engineers and Geoscientists Act.

CRP's Initials

# BRITISH COLUMBIA BUILDING CODE 2018

Schedule B - *Continued*

Building Permit Number  
(for authority having jurisdiction's use)

1407 Bishop Road, White Rock, B.C.

Project Address

Geotechnical

Discipline

## SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS

(Initial applicable discipline below and cross out and initial only those items not applicable to the project.)

### ARCHITECTURAL

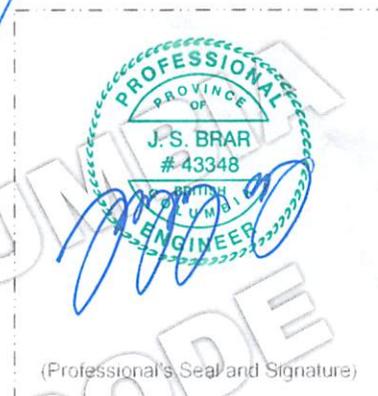
- 1.1 Fire resisting assemblies
- 1.2 *Fire separations* and their continuity
- 1.3 *Closures*, including tightness and operation
- 1.4 Egress systems, including *access to exit* within *suites* and *floor areas*
- 1.5 Performance and physical safety features (guardrails, handrails, etc.)
- 1.6 Structural capacity of architectural components, including anchorage and seismic restraint
- 1.7 Sound control
- 1.8 Landscaping, screening and site grading
- 1.9 Provisions for firefighting access
- 1.10 *Access requirements for persons with disabilities*
- 1.11 Elevating devices
- 1.12 Functional testing of architecturally related fire emergency systems and devices
- 1.13 Development Permit and conditions therein
- 1.14 Interior signage, including acceptable materials, dimensions and locations
- 1.15 Review of all applicable shop drawings
- 1.16 Interior and exterior finishes
- 1.17 Dampproofing and/or waterproofing of walls and slabs below *grade*
- 1.18 Roofing and flashings
- 1.19 Wall cladding systems
- 1.20 Condensation control and cavity ventilation
- 1.21 Exterior glazing
- 1.22 Integration of building envelope components
- 1.23 Environmental separation requirements (Part 5)
- 1.24 Building envelope, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 1.25 Building envelope, testing, confirmation or both as per Part 10 requirements

### STRUCTURAL

- 2.1 Structural capacity of structural components of the *building*, including anchorage and seismic restraint
- 2.2 Structural aspects of *deep foundations*
- 2.3 Review of all applicable shop drawings
- 2.4 Structural aspects of unbonded post-tensioned concrete design and construction

### MECHANICAL

- 3.1 HVAC systems and devices, including high *building* requirements where applicable
- 3.2 *Fire dampers* at required *fire separations*
- 3.3 Continuity of *fire separations* at HVAC penetrations
- 3.4 Functional testing of mechanically related fire emergency systems and devices
- 3.5 Maintenance manuals for mechanical systems
- 3.6 Structural capacity of mechanical components, including anchorage and seismic restraint
- 3.7 Review of all applicable shop drawings
- 3.8 Mechanical systems, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 3.9 Mechanical systems, testing, confirmation or both as per Part 10 requirements



February 02, 2024

Date

*CRP*

CRP's Initials

# BRITISH COLUMBIA BUILDING CODE 2018

Schedule B - Continued

Building Permit Number  
(for authority having jurisdiction's use)

1407 Bishop Road, White Rock, B.C.

Project Address

Geotechnical

Discipline

## PLUMBING

- 4.1 Roof drainage systems
- 4.2 Site and foundation drainage systems
- 4.3 Plumbing systems and devices
- 4.4 Continuity of fire separations at plumbing penetrations
- 4.5 Functional testing of plumbing related fire emergency systems and devices
- 4.6 Maintenance manuals for plumbing systems
- 4.7 Structural capacity of plumbing components, including anchorage and seismic restraint
- 4.8 Review of all applicable shop drawings
- 4.9 Plumbing systems, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 4.10 Plumbing systems, testing, confirmation or both as per Part 10 requirements

## FIRE SUPPRESSION SYSTEMS

- 5.1 Suppression system classification for type of occupancy
- 5.2 Design coverage, including concealed or special areas
- 5.3 Compatibility and location of electrical supervision, ancillary alarm and control devices
- 5.4 Evaluation of the capacity of city (municipal) water supply versus system demands and domestic demand, including pumping devices where necessary
- 5.5 Qualification of welder, quality of welds and material
- 5.6 Review of all applicable shop drawings
- 5.7 Acceptance testing for 'Contractor's Material and Test Certificate' as per NFPA Standards
- 5.8 Maintenance program and manual for suppression systems
- 5.9 Structural capacity of sprinkler components, including anchorage and seismic restraint
- 5.10 For partial systems — confirm sprinklers are installed in all areas where required
- 5.11 Fire Department connections and hydrant locations
- 5.12 Fire hose standpipes
- 5.13 Freeze protection measures for fire suppression systems
- 5.14 Functional testing of fire suppression systems and devices

## ELECTRICAL

- 6.1 Electrical systems and devices, including high building requirements where applicable
- 6.2 Continuity of fire separations at electrical penetrations
- 6.3 Functional testing of electrical related fire emergency systems and devices
- 6.4 Electrical systems and devices maintenance manuals
- 6.5 Structural capacity of electrical components, including anchorage and seismic restraint
- 6.6 Clearances from buildings of all electrical utility equipment
- 6.7 Fire protection of wiring for emergency systems
- 6.8 Review of all applicable shop drawings
- 6.9 Electrical systems, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 6.10 Electrical systems, testing, confirmation or both as per Part 10 requirements

## GEOTECHNICAL — Temporary

- 7.1 Excavation
- 7.2 Shoring
- 7.3 Underpinning
- 7.4 Temporary construction dewatering

## GEOTECHNICAL — Permanent

- 8.1 Bearing capacity of the soil
- 8.2 Geotechnical aspects of deep foundations
- 8.3 Compaction of engineered fill
- 8.4 Structural considerations of soil, including slope stability and seismic loading
- 8.5 Backfill
- 8.6 Permanent dewatering
- 8.7 Permanent underpinning



February 02, 2024

Date

CRP's Initials

CSIO

**CERTIFICATE OF INSURANCE**

DATE (YY/MM/DD)

23/05/16

<b>BROKER</b> Axis Insurance Managers Inc. #400 - 555 Burrard Street, Box 275, Vancouver BC V7X 1M8  <b>BROKER'S CLIENT ID:</b> BANS&AS-01	<b>This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policies below.</b>
	<b>COMPANIES AFFORDING COVERAGE</b>
<b>INSURED'S FULL NAME AND MAILING ADDRESS</b> Bansal and Associates Consulting Engineer Inc. Unit 216, 12899 - 76 Avenue Surrey BC V3W 1E6	<b>COMPANY</b> <b>A</b> XL Specialty Insurance Company
	<b>COMPANY</b> <b>B</b>
	<b>COMPANY</b> <b>C</b>
	<b>COMPANY</b> <b>D</b>

**COVERAGES**

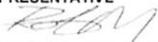
This is to certify that the policies of insurance listed below have been issued to the insured named above for the policy period indicated, notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain. The insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.

**LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.**

TYPE OF INSURANCE	CO LTR	POLICY NUMBER	POLICY EFFECTIVE DATE (YY/MM/DD)	POLICY EXPIRATION DATE (YY/MM/DD)	LIMITS OF LIABILITY (Canadian dollars unless indicated otherwise)	
<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS MADE OR <input type="checkbox"/> OCCURRENCE <input type="checkbox"/> PRODUCTS AND / OR COMPLETED OPERATIONS <input type="checkbox"/> EMPLOYER'S LIABILITY <input type="checkbox"/> CROSS LIABILITY <input type="checkbox"/> TENANT'S LEGAL LIABILITY <input type="checkbox"/> NON-OWNED <input checked="" type="checkbox"/> HIRED <input type="checkbox"/> POLLUTION LIABILITY EXTENSION					EACH OCCURRENCE \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ PERSONAL INJURY \$ TENANT'S LEGAL LIABILITY \$ MED EXP (Any one person) \$ NON-OWNED AUTO \$ OPTIONAL POLLUTION LIABILITY EXTENSION \$ (Per Occurrence) \$ (Aggregate) \$	
<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> DESCRIBED AUTOMOBILES <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> LEASED AUTOMOBILES  <small>** ALL AUTOMOBILES LEASED IN EXCESS OF 30 DAYS WHERE THE INSURED IS REQUIRED TO PROVIDE INSURANCE</small>					BODILY INJURY PROPERTY DAMAGE COMBINED \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE \$	
<b>EXCESS LIABILITY</b> <input type="checkbox"/> UMBRELLA FORM <input type="checkbox"/> OTHER THAN UMBRELLA FORM <small>(Specify)</small>					EACH OCCURRENCE \$ AGGREGATE \$	
<b>OTHER LIABILITY (SPECIFY)</b> Professional Liability Claims Made Basis	A	DPX9971021	23/05/28	24/05/28	Per Claim Annual Aggregate	1,000,000 1,000,000

<b>ADDITIONAL INSURED</b> N/A - - - -	<b>DESCRIPTION OF OPERATIONS/LOCATIONS/AUTOMOBILES/SPECIAL ITEMS</b>
--	--

<b>CERTIFICATE HOLDER</b>  To Whom It May Concern	<b>CANCELLATION</b> SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 0 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.
---	--

<b>SIGNATURE OF AUTHORIZED REPRESENTATIVE</b> 	<b>PRINT NAME INCLUDING POSITION HELD</b> Rob McLeod, CIP, CAIB
--	--

<b>FAX NUMBER</b> 604-731-3137	<b>EMAIL ADDRESS</b> rob.mcleod@axisinsurance.ca	<b>COMPANY</b> Axis Insurance Managers Inc.	<b>DATE</b> 23/05/16
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CSIO CERT (6/00)

# BRITISH COLUMBIA BUILDING CODE 2024

RECEIVED

MAR 28 2024

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

## SCHEDULE B

Forming Part of Subsection 2.2.7., Division C of the  
British Columbia Building Code

021501

Building Permit Number  
(for authority having jurisdiction's use)

### ASSURANCE OF PROFESSIONAL DESIGN AND COMMITMENT FOR FIELD REVIEW

- Notes: (i) This letter must be submitted prior to the commencement of construction activities of the components identified below. A separate letter must be submitted by each *registered professional of record*.
- (ii) This letter is endorsed by: Architectural Institute of BC, Association of Professional Engineers and Geoscientists of the Province of BC, Building Officials' Association of BC, and Union of BC Municipalities.
- (iii) In this letter the words in italics have the same meaning as in the British Columbia Building Code.

To: The *authority having jurisdiction*  
City of White Rock

Name of Jurisdiction (Print)

Re: Single Family Residence (Storm and Sanitary Pump Stations only)

Name of Project (Print)

1407 BISHOP RD., White Rock, BC

Address of Project (Print)

SRC Project No: 3600-51

The undersigned hereby gives assurance that the design of the  
(Initial those of the items listed below that apply to this *registered professional of record*. All the disciplines will not necessarily be employed on every project.)

- ARCHITECTURAL
- STRUCTURAL
- MECHANICAL
- PLUMBING
- FIRE SUPPRESSION SYSTEMS
- ELECTRICAL
- GEOTECHNICAL — temporary
- GEOTECHNICAL — permanent

EGBC PERMIT NUMBER: 1001222



(Professional's Seal and Signature)

March 26, 2024

Date

components of the plans and supporting documents prepared by this *registered professional of record* in support of the application for the *building* permit as outlined below substantially comply with the British Columbia Building Code and other applicable enactments respecting safety except for construction safety aspects.

The undersigned hereby undertakes to be responsible for *field reviews* of the above referenced components during construction, as indicated on the "SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS" below.

*[Handwritten Signature]*

CRP's Initials

# BRITISH COLUMBIA BUILDING CODE 2024

Schedule B - *Continued*

Building Permit Number  
(for authority having jurisdiction's use)

1407 BISHOP RD., White Rock, BC

Project Address

Plumbing

Discipline

The undersigned also undertakes to notify the *authority having jurisdiction* in writing as soon as possible if the undersigned's contract for *field review* is terminated at any time during construction.

I certify that I am a *registered professional* as defined in the British Columbia Building Code.

Bill Khangura, P. Eng.

Registered Professional of Record's Name (Print)

Suite 205 - 4180 Lougheed Hwy

Address (Print)

Burnaby, BC V5C 6A7

Address (Print) (continued)

604-268-9091

Phone Number and Email Address

EGBC PERMIT NUMBER: 1001222



(Professional's Seal and Signature)

March 26, 2024

Date

(If the *Registered Professional of Record* is a member of a firm, complete the following.)

I am a member of the firm SRC ENGINEERING CONSULTANTS LTD.  
and I sign this letter on behalf of the firm. (Print name of firm)

Note: The above letter must be signed by a *registered professional of record*, who is a *registered professional*. The British Columbia Building Code defines a *registered professional* to mean

- (a) a person who is registered as an Architect with the Architectural Institute of British Columbia under the Professional Governance Act, or
- (b) a person who is registered as a professional engineer or professional licensee engineering with the Association of Professional Engineers and Geoscientists of the Province of British Columbia under the Professional Governance Act.

CRP's Initials

# BRITISH COLUMBIA BUILDING CODE 2024

Schedule B - *Continued*

Building Permit Number  
(for authority having jurisdiction's use)

1407 BISHOP RD., White Rock, BC

Project Address

Plumbing

Discipline

## SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS

(Initial applicable discipline below and cross out and initial only those items not applicable to the project.)

### ARCHITECTURAL

- 1.1 Fire resisting assemblies
- 1.2 *Fire separations* and their continuity
- 1.3 *Closures*, including tightness and operation
- 1.4 Egress systems, including *access to exit* within *suites* and *floor areas*
- 1.5 Performance and physical safety features (guardrails, handrails, etc.)
- 1.6 Structural capacity of architectural components, including anchorage and seismic restraint
- 1.7 Sound control
- 1.8 Landscaping, screening and site grading
- 1.9 Provisions for firefighting access
- 1.10 *Access requirements for persons with disabilities*
- 1.11 Elevating devices
- 1.12 Functional testing of architecturally related fire emergency systems and devices
- 1.13 Development Permit and conditions therein
- 1.14 Interior signage, including acceptable materials, dimensions and locations
- 1.15 Review of all applicable shop drawings
- 1.16 Interior and exterior finishes
- 1.17 Dampproofing and/or waterproofing of walls and slabs below *grade*
- 1.18 Roofing and flashings
- 1.19 Wall cladding systems
- 1.20 Condensation control and cavity ventilation
- 1.21 Exterior glazing
- 1.22 Integration of building envelope components
- 1.23 Environmental separation requirements (Part 5)
- 1.24 Building envelope, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 1.25 Building envelope, testing, confirmation or both as per Part 10 requirements

EGBC PERMIT NUMBER: 1001222



(Professional's Seal and Signature)

March 26, 2024

Date

### STRUCTURAL

- 2.1 Structural capacity of structural components of the *building*, including anchorage and seismic restraint
- 2.2 Structural aspects of *deep foundations*
- 2.3 Review of all applicable shop drawings
- 2.4 Structural aspects of unbonded post-tensioned concrete design and construction
- 2.5 Independent review of structural designs

### MECHANICAL

- 3.1 HVAC systems and devices, including high *building* requirements where applicable
- 3.2 *Fire dampers* at required *fire separations*
- 3.3 Continuity of *fire separations* at HVAC penetrations
- 3.4 Functional testing of mechanically related fire emergency systems and devices
- 3.5 Maintenance manuals for mechanical systems
- 3.6 Structural capacity of mechanical components, including anchorage and seismic restraint
- 3.7 Review of all applicable shop drawings
- 3.8 Mechanical systems, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 3.9 Mechanical systems, testing, confirmation or both as per Part 10 requirements

CRP's Initials

# BRITISH COLUMBIA BUILDING CODE 2024

Schedule B - *Continued*

Building Permit Number  
(for authority having jurisdiction's use)

1407 BISHOP RD., White Rock, BC

Project Address

## Plumbing

Discipline

### PLUMBING

- 4.1 Roof *drainage systems*
- 4.2 ~~Site and~~ foundation *drainage systems*
- 4.3 *Plumbing systems and devices*
- 4.4 ~~Continuity of fire separations at plumbing penetrations~~
- 4.5 ~~Functional testing of plumbing related fire emergency systems and devices~~
- 4.6 Maintenance manuals for *plumbing systems*
- 4.7 ~~Structural capacity of plumbing components, including anchorage and seismic restraint~~
- 4.8 Review of all applicable shop drawings
- 4.9 ~~Plumbing systems, Part 10 – ASHRAE, NECB or Energy Step Code requirements~~
- 4.10 Plumbing systems, testing, confirmation or both as per Part 10 requirements

### FIRE SUPPRESSION SYSTEMS

- 5.1 Suppression system classification for type of *occupancy*
- 5.2 Design coverage, including concealed or special areas
- 5.3 Compatibility and location of electrical supervision, ancillary alarm and control devices
- 5.4 Evaluation of the capacity of city (municipal) water supply versus system demands and domestic demand, including pumping devices where necessary
- 5.5 Qualification of welder, quality of welds and material
- 5.6 Review of all applicable shop drawings
- 5.7 Acceptance testing for "Contractor's Material and Test Certificate" as per NFPA Standards
- 5.8 Maintenance program and manual for suppression systems
- 5.9 Structural capacity of sprinkler components, including anchorage and seismic restraint
- 5.10 For partial systems — confirm sprinklers are installed in all areas where required
- 5.11 Fire Department connections and hydrant locations
- 5.12 Fire hose standpipes
- 5.13 Freeze protection measures for fire suppression systems
- 5.14 Functional testing of fire suppression systems and devices

### ELECTRICAL

- 6.1 Electrical systems and devices, including high building requirements where applicable
- 6.2 Continuity of *fire separations* at electrical penetrations
- 6.3 Functional testing of electrical related fire emergency systems and devices
- 6.4 Electrical systems and devices maintenance manuals
- 6.5 Structural capacity of electrical components, including anchorage and seismic restraint
- 6.6 Clearances from *buildings* of all electrical utility equipment
- 6.7 Fire protection of wiring for emergency systems
- 6.8 Review of all applicable shop drawings
- 6.9 Electrical systems, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 6.10 Electrical systems, testing, confirmation or both as per Part 10 requirements

### GEOTECHNICAL — Temporary

- 7.1 *Excavation*
- 7.2 *Shoring*
- 7.3 *Underpinning*
- 7.4 Temporary construction dewatering

### GEOTECHNICAL — Permanent

- 8.1 Bearing capacity of the *soil*
- 8.2 Geotechnical aspects of deep *foundations*
- 8.3 Compaction of engineered fill
- 8.4 Structural considerations of *soil*, including slope stability and seismic loading
- 8.5 Backfill
- 8.6 Permanent dewatering
- 8.7 Permanent underpinning

EGBC PERMIT NUMBER: 1001222



(Professional's Seal and Signature)

March 26, 2024

Date

CRP's Initials

BRITISH COLUMBIA BUILDING CODE 2024

RECEIVED

MAR 28 2024

SCHEDULE B

Forming Part of Subsection 2.2.7., Division C of the British Columbia Building Code

021501

Building Permit Number (for authority having jurisdiction's use)

PLANNING & DEVELOPMENT CITY OF WHITE ROCK

ASSURANCE OF PROFESSIONAL DESIGN AND COMMITMENT FOR FIELD REVIEW

- Notes: (i) This letter must be submitted prior to the commencement of construction activities of the components identified below. A separate letter must be submitted by each registered professional of record. (ii) This letter is endorsed by: Architectural Institute of BC, Association of Professional Engineers and Geoscientists of the Province of BC, Building Officials' Association of BC, and Union of BC Municipalities. (iii) In this letter the words in italics have the same meaning as in the British Columbia Building Code.

To: The authority having jurisdiction CITY OF WHITE ROCK

Name of Jurisdiction (Print)

Re: SINGLE FAMILY DWELLING

Name of Project (Print)

1407 BISHOP RD., WHITE ROCK

Address of Project (Print)

EGBC PERMIT TO PRACTICE PERMIT NO. 1000645

The undersigned hereby gives assurance that the design of the (Initial those of the items listed below that apply to this registered professional of record. All the disciplines will not necessarily be employed on every project.)

- ARCHITECTURAL [initials]
STRUCTURAL
MECHANICAL
PLUMBING
FIRE SUPPRESSION SYSTEMS
ELECTRICAL
GEOTECHNICAL - temporary
GEOTECHNICAL - permanent



(Professional's Seal and Signature)

MARCH 27, 2024

Date

components of the plans and supporting documents prepared by this registered professional of record in support of the application for the building permit as outlined below substantially comply with the British Columbia Building Code and other applicable enactments respecting safety except for construction safety aspects.

The undersigned hereby undertakes to be responsible for field reviews of the above referenced components during construction, as indicated on the "SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS" below.

[Handwritten initials]

CRP's Initials

# BRITISH COLUMBIA BUILDING CODE 2024

Schedule B - *Continued*

Building Permit Number  
(for authority having jurisdiction's use)

1407 BISHOP RD., WHITE ROCK

Project Address

STRUCTURAL

Discipline

The undersigned also undertakes to notify the *authority having jurisdiction* in writing as soon as possible if the undersigned's contract for *field review* is terminated at any time during construction.

I certify that I am a *registered professional* as defined in the British Columbia Building Code.

EGBC PERMIT TO PRACTICE  
PERMIT NO. 1000645

VISHNU SURESH

Registered Professional of Record's Name (Print)

#304, 8356 120 ST., SURREY

Address (Print)

V3W 3N4

Address (Print) (continued)

778 885 0551

Phone Number and Email Address



MARCH 27, 2024

Date

(If the *Registered Professional of Record* is a member of a firm, complete the following.)

I am a member of the firm \_\_\_\_\_

and I sign this letter on behalf of the firm. (Print name of firm)

Note: The above letter must be signed by a *registered professional of record*, who is a *registered professional*. The British Columbia Building Code defines a *registered professional* to mean

- (a) a person who is registered as an Architect with the Architectural Institute of British Columbia under the Professional Governance Act, or
- (b) a person who is registered as a professional engineer or professional licensee engineering with the Association of Professional Engineers and Geoscientists of the Province of British Columbia under the Professional Governance Act.

CRP's Initials

# BRITISH COLUMBIA BUILDING CODE 2024

Schedule B - *Continued*

Building Permit Number  
(for authority having jurisdiction's use)

1407 BISHOP RD., WHITE ROCK

Project Address

STRUCTURAL

Discipline

## SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS

(Initial applicable discipline below and cross out and initial only those items not applicable to the project.)

### ARCHITECTURAL

- 1.1 Fire resisting assemblies
- 1.2 *Fire separations* and their continuity
- 1.3 *Closures*, including tightness and operation
- 1.4 Egress systems, including *access to exit* within *suites* and *floor areas*
- 1.5 Performance and physical safety features (guardrails, handrails, etc.)
- 1.6 Structural capacity of architectural components, including anchorage and seismic restraint
- 1.7 Sound control
- 1.8 Landscaping, screening and site grading
- 1.9 Provisions for firefighting access
- 1.10 *Access* requirements for *persons with disabilities*
- 1.11 Elevating devices
- 1.12 Functional testing of architecturally related fire emergency systems and devices
- 1.13 Development Permit and conditions therein
- 1.14 Interior signage, including acceptable materials, dimensions and locations
- 1.15 Review of all applicable shop drawings
- 1.16 Interior and exterior finishes
- 1.17 Dampproofing and/or waterproofing of walls and slabs below *grade*
- 1.18 Roofing and flashings
- 1.19 Wall cladding systems
- 1.20 Condensation control and cavity ventilation
- 1.21 Exterior glazing
- 1.22 Integration of building envelope components
- 1.23 Environmental separation requirements (Part 5)
- 1.24 Building envelope, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 1.25 Building envelope, testing, confirmation or both as per Part 10 requirements

EGBC PERMIT TO PRACTICE  
PERMIT NO. 1000645



MARCH 27, 2024

Date

### vs STRUCTURAL

- 2.1 Structural capacity of structural components of the *building*, including anchorage and seismic restraint
- 2.2 Structural aspects of *deep foundations*
- 2.3 Review of all applicable shop drawings
- 2.4 Structural aspects of *unbonded post-tensioned concrete design and construction*
- 2.5 Independent review of structural designs

### MECHANICAL

- 3.1 HVAC systems and devices, including high *building* requirements where applicable
- 3.2 *Fire dampers* at required *fire separations*
- 3.3 Continuity of *fire separations* at HVAC penetrations
- 3.4 Functional testing of mechanically related fire emergency systems and devices
- 3.5 Maintenance manuals for mechanical systems
- 3.6 Structural capacity of mechanical components, including anchorage and seismic restraint
- 3.7 Review of all applicable shop drawings
- 3.8 Mechanical systems, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 3.9 Mechanical systems, testing, confirmation or both as per Part 10 requirements

CRP's Initials

# BRITISH COLUMBIA BUILDING CODE 2024

Schedule B - *Continued*

Building Permit Number  
(for authority having jurisdiction's use)

1407 BISHOP RD., WHITE ROCK

Project Address

**STRUCTURAL**

Discipline

## **PLUMBING**

- 4.1 Roof *drainage systems*
- 4.2 Site and foundation *drainage systems*
- 4.3 *Plumbing systems* and devices
- 4.4 Continuity of *fire separations* at plumbing penetrations
- 4.5 Functional testing of plumbing related fire emergency systems and devices
- 4.6 Maintenance manuals for *plumbing systems*
- 4.7 Structural capacity of plumbing components, including anchorage and seismic restraint
- 4.8 Review of all applicable shop drawings
- 4.9 Plumbing systems, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 4.10 Plumbing systems, testing, confirmation or both as per Part 10 requirements

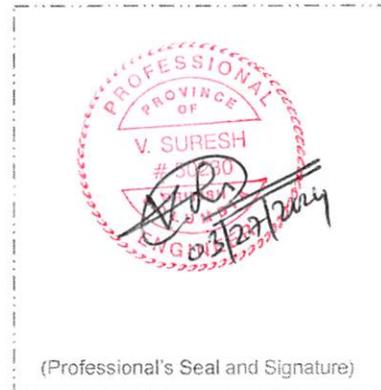
## **FIRE SUPPRESSION SYSTEMS**

- 5.1 Suppression system classification for type of *occupancy*
- 5.2 Design coverage, including concealed or special areas
- 5.3 Compatibility and location of electrical supervision, ancillary alarm and control devices
- 5.4 Evaluation of the capacity of city (municipal) water supply versus system demands and domestic demand, including pumping devices where necessary
- 5.5 Qualification of welder, quality of welds and material
- 5.6 Review of all applicable shop drawings
- 5.7 Acceptance testing for "Contractor's Material and Test Certificate" as per NFPA Standards
- 5.8 Maintenance program and manual for suppression systems
- 5.9 Structural capacity of sprinkler components, including anchorage and seismic restraint
- 5.10 For partial systems — confirm sprinklers are installed in all areas where required
- 5.11 Fire Department connections and hydrant locations
- 5.12 Fire hose standpipes
- 5.13 Freeze protection measures for fire suppression systems
- 5.14 Functional testing of fire suppression systems and devices

## **ELECTRICAL**

- 6.1 Electrical systems and devices, including high building requirements where applicable
- 6.2 Continuity of *fire separations* at electrical penetrations
- 6.3 Functional testing of electrical related fire emergency systems and devices
- 6.4 Electrical systems and devices maintenance manuals
- 6.5 Structural capacity of electrical components, including anchorage and seismic restraint
- 6.6 Clearances from *buildings* of all electrical utility equipment
- 6.7 Fire protection of wiring for emergency systems
- 6.8 Review of all applicable shop drawings
- 6.9 Electrical systems, Part 10 – ASHRAE, NECB or Energy Step Code requirements
- 6.10 Electrical systems, testing, confirmation or both as per Part 10 requirements

EGBC PERMIT TO PRACTICE  
PERMIT NO. 1000645



## **GEOTECHNICAL — Temporary**

- 7.1 *Excavation*
- 7.2 Shoring
- 7.3 Underpinning
- 7.4 Temporary construction dewatering

## **GEOTECHNICAL — Permanent**

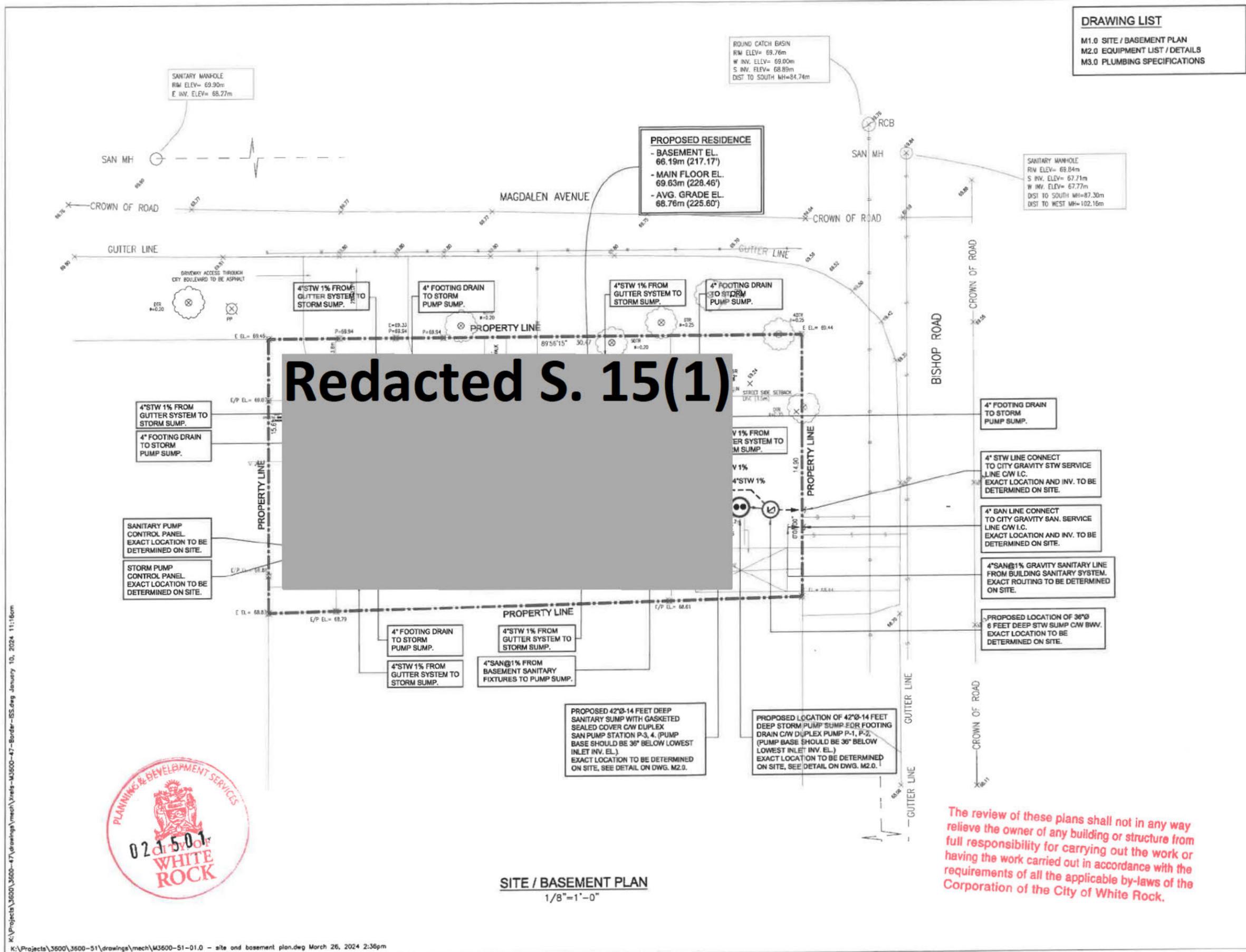
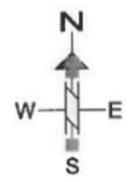
- 8.1 Bearing capacity of the *soil*
- 8.2 Geotechnical aspects of deep *foundations*
- 8.3 Compaction of engineered fill
- 8.4 Structural considerations of *soil*, including slope stability and seismic loading
- 8.5 Backfill
- 8.6 Permanent dewatering
- 8.7 Permanent underpinning

MARCH 27, 2024

Date

CRP's Initials

DRAWING LIST	
M1.0	SITE / BASEMENT PLAN
M2.0	EQUIPMENT LIST / DETAILS
M3.0	PLUMBING SPECIFICATIONS



**Redacted S. 15(1)**

REV.	DATE	BY	DESCRIPTION
1	MAR 2024-02-20	MR	ISSUED FOR REVIEW
2	MAR 2024-03-26	MR	ISSUED FOR BUILDING PERMIT

SEAL: \_\_\_\_\_  
 DATE: 2024-03-26

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 Burnaby, B.C. V5C 6A7 Fax: (604) 268-9092

**PROJECT NO. 3600-51**

**MECHANICAL**

**PROJECT**  
 PROPOSED RESIDENCE

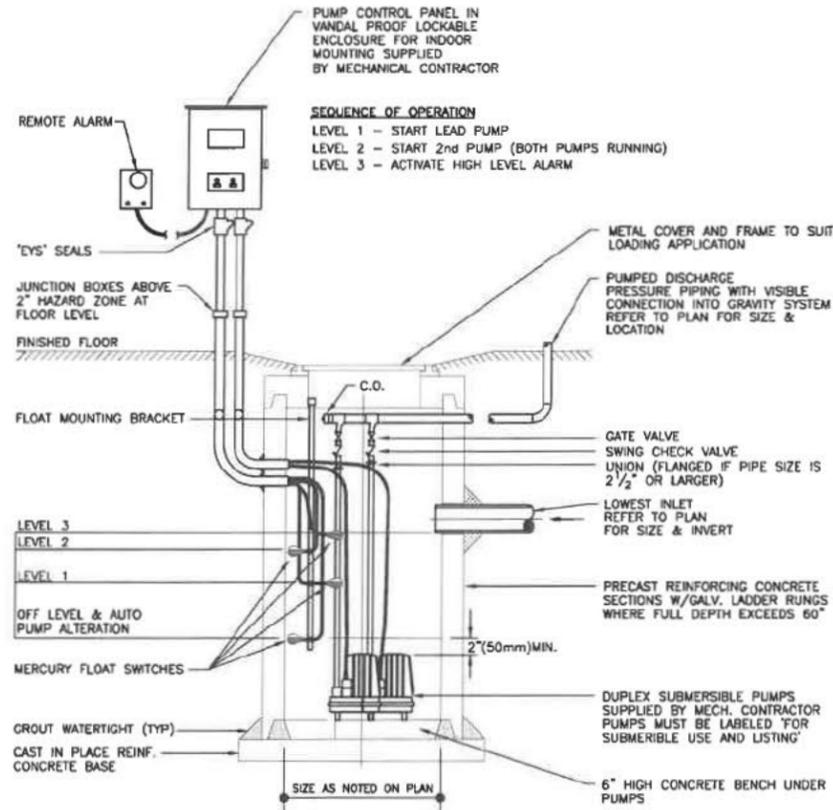
**DRAWING**  
 SITE / BASEMENT PLAN

DRAWN BY: MR	DRAWING NUMBER
DESIGN BY: BK / MR	<b>M1.0</b>
CHECKED BY: BK	
SCALE: AS SHOWN	
DATE: 2024-02	

*The review of these plans shall not in any way relieve the owner of any building or structure from full responsibility for carrying out the work or having the work carried out in accordance with the requirements of all the applicable by-laws of the Corporation of the City of White Rock.*

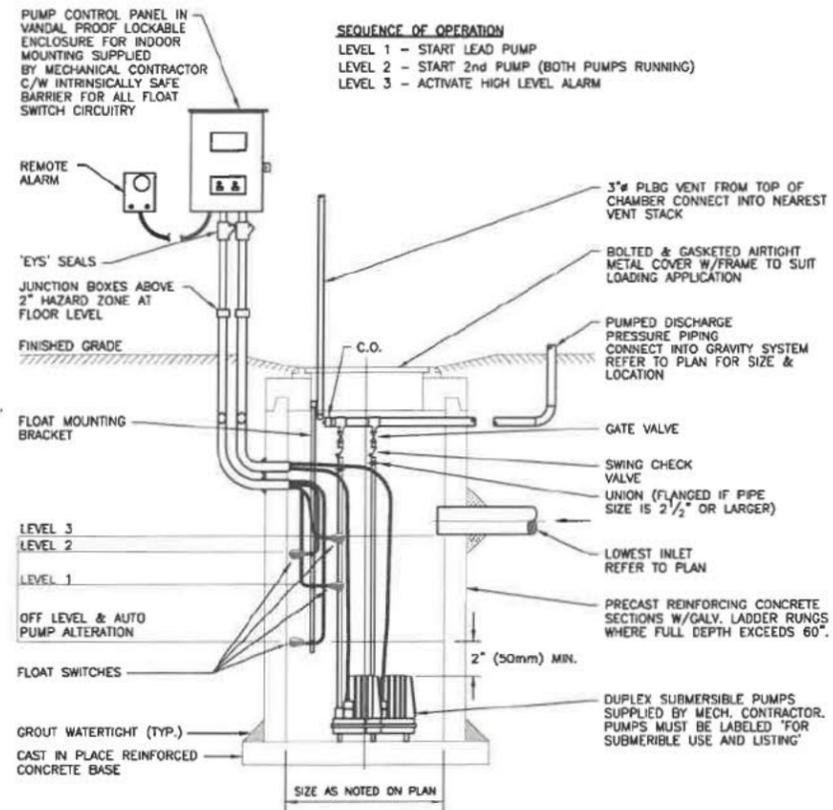


**SITE / BASEMENT PLAN**  
 1/8"=1'-0"



**DUPLEX STORM PUMPS & SUMP DETAIL**

N.T.S.



**DUPLEX SANITARY PUMPS AND SUMP DETAIL**

N.T.S.

**DUPLEX PUMP STATION**

DUPLEX SUBMERSIBLE PUMP SYSTEM, VERTICAL DISCHARGE, CAST IRON CONSTRUCTION, STAINLESS STEEL EXPOSED FITTINGS, OIL FILLED MECH. SEAL AND SWING CHECK VALVE CAST IRON CONSTRUCTION. SUPPLY MERCURY IN GLASS FLOAT SWITCHES WITH SUFFICIENT CONTINUOUS LENGTH OF POWER CABLE FOR DIRECT CONNECTION TO ABOVE GROUND JUNCTION BOX. PROVIDE A SUPPORT BRACKET WITH STRAIN RELIEF CONNECTORS FOR MOUNTING FLOATS. SUMP C/W SEALED AND GASKETTED LID.

CONTROL PANEL TO BE VANDAL PROOF COMPLETE WITH ALL NECESSARY BREAKERS, DISCONNECT SWITCHES, CONTROL TRANSFORMER, STARTERS (WITH OVERLOAD PROTECTION), H.O.A. ALTERNATOR, RELAYS, LOCAL HI-LEVEL ALARM BELL WITH CONTACTS FOR REMOTE ALARM, RUN LIGHTS, ETC. REQUIRING ONLY POWER HOOK-UP TO PANEL AND PUMPS FOR COMPLETE OPERATION.

CONTROL TO OPERATE PUMP P-2 PRIOR TO HIGH-LEVEL ALARM.

FACTORY BUILT, WET-MOUNTED, TWO PUMP AUTOMATIC UNDERGROUND PUMP STATION. THE PUMP STATION CHAMBER SHALL BE FIBERGLASS CONSTRUCTION OR CONCRETE FURNISHED IN ONE MAIN SECTION, 0.914 METERS DIAMETER, THE PUMP STATION WILL BE FURNISHED WITH PUMPS, PIPING, VALVES AND ALL NECESSARY AUTOMATIC CONTROLS.

**NOTES:**  
CONNECT THE FORCE MAIN TO THE GRAVITY LINE WITH A CROWN CONNECTION AND REFER TO THE CITY STANDARDS FOR DETAILS.



**PUMP SCHEDULE**

TAG	SPECIFICATIONS/ DESCRIPTION	SERVICE	LOCATION	MAKE/ MODEL	PERFORMANCE/ SPECIFICATION	CONTROLS	ELECTRICAL POWER/V/PH	EMERGENCY POWER	COMMENTS/ NOTES
P-1,2	DUPLEX STORM PUMP STATION	FOOTING DRAIN, LANDSCAPE AREA	LANDSCAPE AREA	LIBERTY LE50	50 GPM @ 20' HEAD	CONTROL PANEL	1/2HP/120/1PH	NO	- 2" DISCHARGE - C/W PANEL/BATTERY PACK
P-3,4	DUPLEX SAN. PUMP STATION	SANITARY FIXTURES	BASEMENT	LIBERTY PRG101M2	30 GPM @ 25' HEAD	CONTROL PANEL	1HP/120/1PH	NO	- 2" DISCHARGE - C/W PANEL/BATTERY PACK

NO.	DATE	BY	DESCRIPTION
1	2024-03-26	MR	ISSUED FOR BUILDING PERMIT
2	2024-02-20	MR	ISSUED FOR REVIEW
1			ISSUE REV.

EGBC PERMIT # 1001222

SEAL:

DATE: 2024-03-26

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Burnaby, B.C. V5C 6A7 Fax: (604) 268-9092

PROJECT NO. 3600-51

MECHANICAL

PROJECT

PROPOSED RESIDENCE

1407 BISHOP RD  
White Rock, B.C.

DRAWING

EQUIPMENT LIST / DETAILS

DRAWN BY: MR	DRAWING NUMBER
DESIGN BY: BK / MR	<b>M2.0</b>
CHECKED BY: BK	
SCALE: N.T.S	
DATE: 2024-02	

SPECIFICATIONS

MECHANICAL GENERAL - SECTION 15

- 1. GENERAL CONDITIONS
A) THE GENERAL CONDITIONS OF THE CONTRACT SHALL FORM AN INTEGRAL PART OF THIS DIVISION OF THE SPECIFICATIONS.
B) THE CONTRACTOR SHALL EXAMINE AND BE GOVERNED BY ALL SECTIONS OF THE SPECIFICATIONS, DRAWINGS AND TENDER DOCUMENTS PERTAINING TO THIS PROJECT.

- 7. APPROVAL OF ALTERNATES
A) WHERE TRADE NAMES ARE LISTED, THE FIRST MENTIONED NAME WAS USED TO ESTABLISH QUALITY, FUNCTIONS, PERFORMANCE AND DIMENSIONS TO PREPARE THE CONTRACT DOCUMENTS.
B) SUBSTITUTION OF ALTERNATES WILL BE ALLOWED IF:
C) THE CONTRACTOR SHALL PROTECT FINISHED AND UNFINISHED WORK AND WORK OF ALL OTHER TRADES FROM DAMAGE DUE TO THE CARRYING OUT OF THE WORK.

- 14. SHOP DRAWINGS
A) THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER, SHOP DRAWING FOR ALL MECHANICAL EQUIPMENT AS SPECIFIED ON THE EQUIPMENT SCHEDULE.
15. TESTING AND INSPECTIONS
A) THE CONTRACTOR SHALL PROVIDE ANY NECESSARY ASSISTANCE AND COOPERATION TO FACILITATE THE INSPECTION OF THE WORKMANSHIP AND MATERIAL AS SUPPLIED AND INSTALLED OR MATERIAL ON SITE TO BE INSTALLED UNDER THIS SPECIFICATION.

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Table with 4 columns: DATE, BY, REV., ISSUE. Contains revision history for the drawing.

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DATE: 2024-03-26

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Burnaby, B.C. V5C 5A7 Fax: (604) 268-9092

PROJECT NO. 3600-51
MECHANICAL

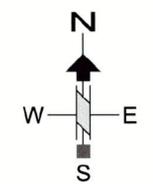
PROPOSED RESIDENCE

1407 BISHOP RD
White Rock, B.C.

DRAWING
SEPECIFICATION

DRAWN BY: MR
DESIGN BY: BK / MR
CHECKED BY: BK
SCALE: N.T.S.
DATE: 2024-02
DRAWING NUMBER
M3.0

DRAWING LIST	
M1.0	SITE / BASEMENT PLAN
M2.0	EQUIPMENT LIST / DETAILS
M3.0	PLUMBING SPECIFICATIONS



DATE	BY	REVISION	DESCRIPTION
MR 2024-03-26		1	ISSUED FOR BUILDING PERMIT
MR 2024-02-20		2	ISSUED FOR REVIEW

EGBC PERMIT # 1001222

SEAL:

DATE: 2024-03-26

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PROJECT NO. 3600-51  
 MECHANICAL

PROJECT  
 PROPOSED RESIDENCE

1407 BISHOP RD  
 White Rock, B.C.

DRAWING	
SITE / BASEMENT PLAN	
DRAWN BY: MR	DRAWING NUMBER
DESIGN BY: BK / MR	<b>M1.0</b>
CHECKED BY: BK	
SCALE: AS SHOWN	
DATE: 2024-02	

RECEIVED  
 MAR 28 2024  
 PLANNING & DEVELOPMENT  
 CITY OF WHITE ROCK

City of White Rock Building Approvals  
 City review of documents stamped:  
 Permit No:

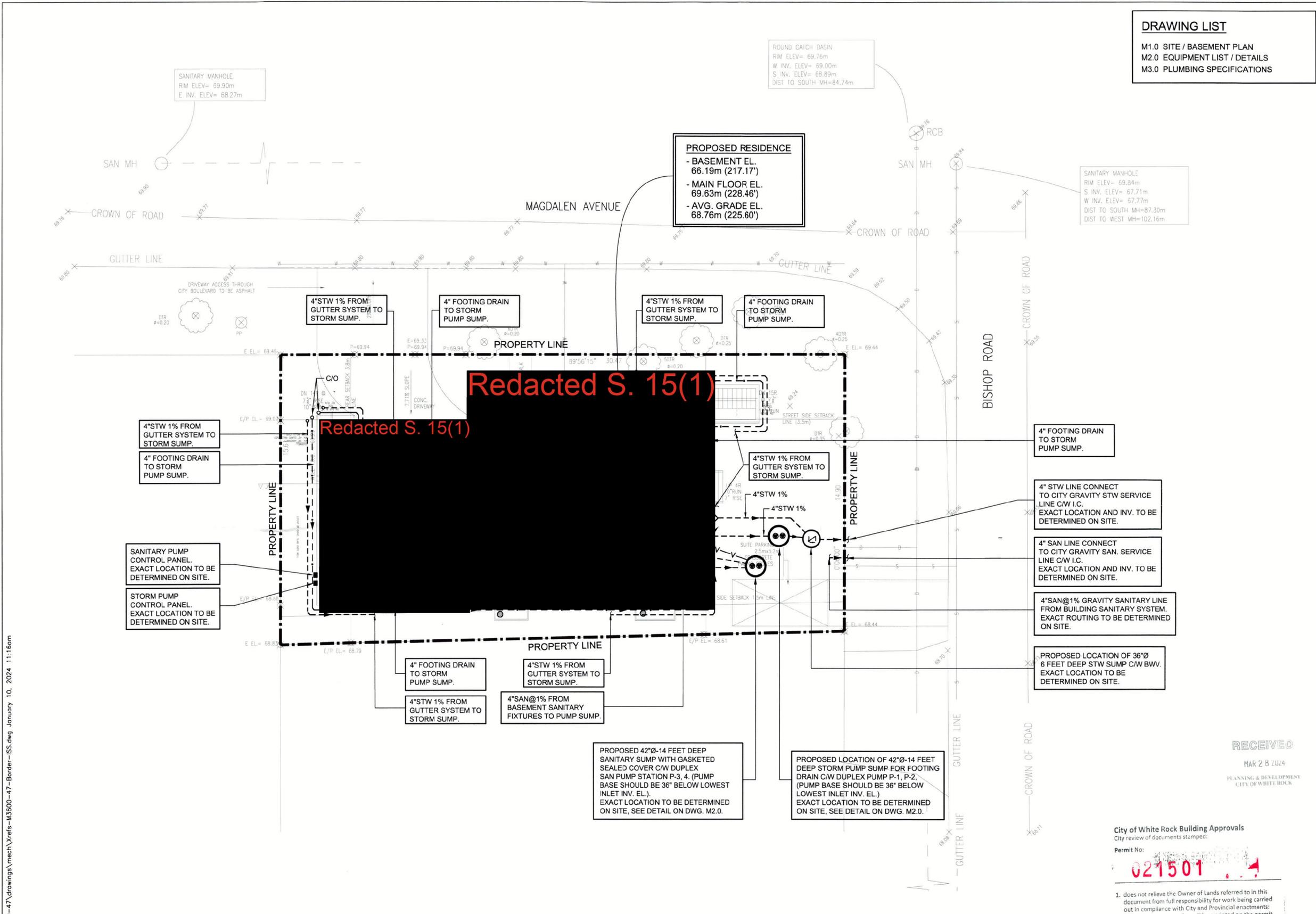
**021501**

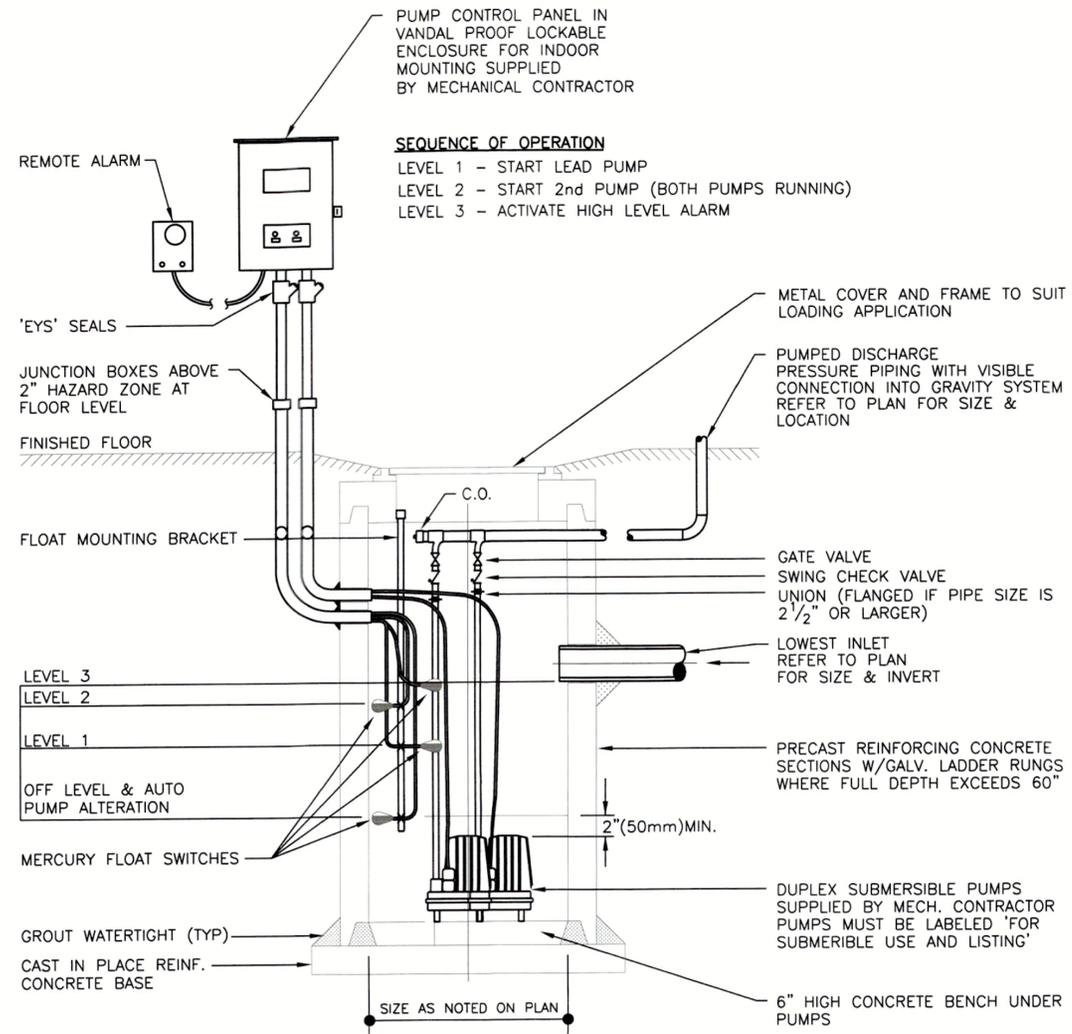
1. does not relieve the Owner of Lands referred to in this document from full responsibility for work being carried out in compliance with City and Provincial enactments;  
 2. is subject to terms and conditions printed on the permit and prescribed in the City bylaws.

Reviewed by: *[Signature]* Date: *May 13, 2024*

**SITE / BASEMENT PLAN**  
 1/8" = 1'-0"

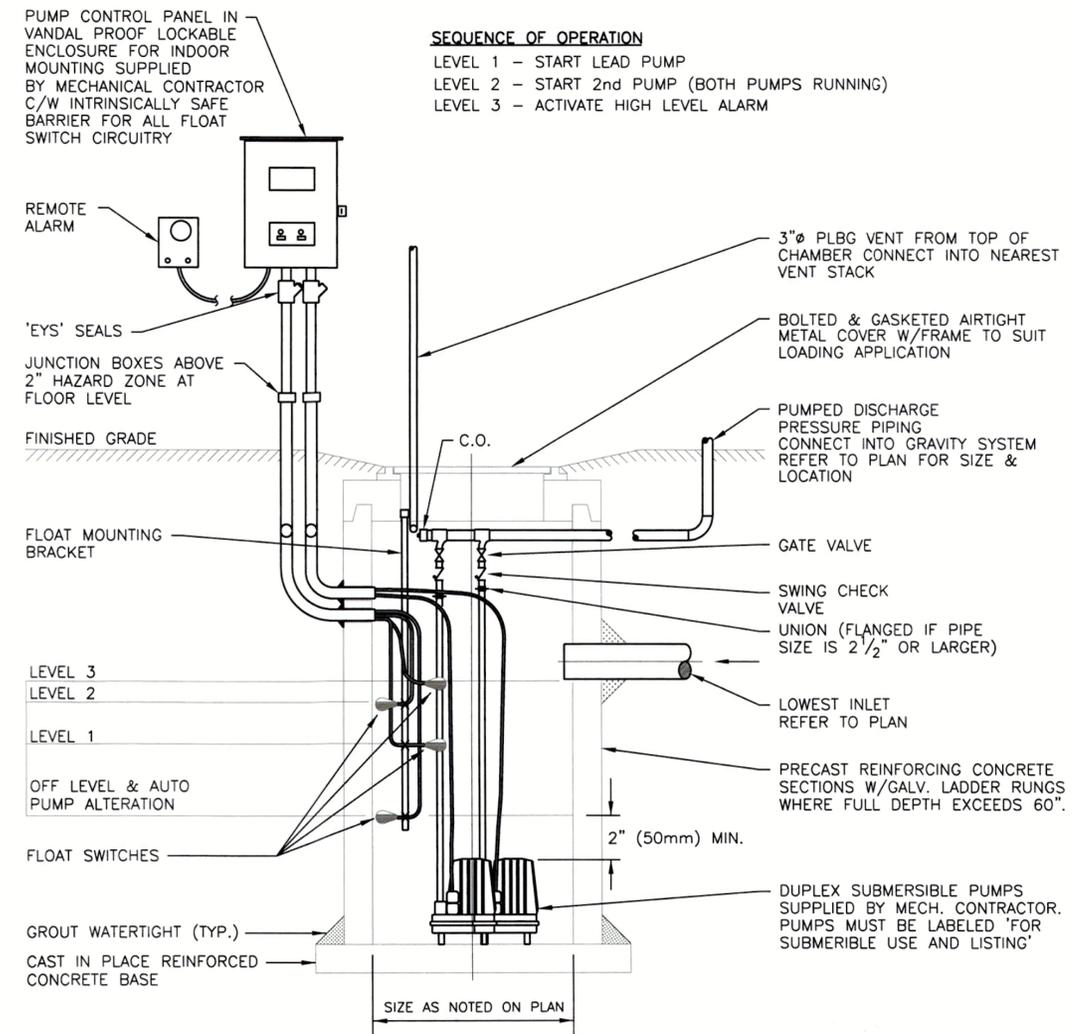
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**DUPLEX STORM PUMPS & SUMP DETAIL**

N.T.S.



**DUPLEX SANITARY PUMPS AND SUMP DETAIL**

N.T.S.

**DUPLEX PUMP STATION**

DUPLEX SUBMERSIBLE PUMP SYSTEM, VERTICAL DISCHARGE, CAST IRON CONSTRUCTION, STAINLESS STEEL EXPOSED FITTINGS, OIL FILLED MECH. SEAL AND SWING CHECK VALVE CAST IRON CONSTRUCTION. SUPPLY MERCURY IN GLASS FLOAT SWITCHES WITH SUFFICIENT CONTINUOUS LENGTH OF POWER CABLE FOR DIRECT CONNECTION TO ABOVE GROUND JUNCTION BOX. PROVIDE A SUPPORT BRACKET WITH STRAIN RELIEF CONNECTORS FOR MOUNTING FLOATS. SUMP C/W SEALED AND GASKETTED LID.

CONTROL PANEL TO BE VANDAL PROOF COMPLETE WITH ALL NECESSARY BREAKERS DISCONNECT SWITCHES CONTROL TRANSFORMER STARTERS (WITH

**NOTES:**  
CONNECT THE FORCE MAIN TO THE GRAVITY LINE WITH A CROWN CONNECTION AND REFER TO THE CITY STANDARDS FOR DETAILS.

NO.	REV.	DATE	DESCRIPTION
2	1	MR 2024-03-26	ISSUED FOR BUILDING PERMIT
1	1	MR 2024-02-20	ISSUED FOR REVIEW

EGBC PERMIT # 1001222



DATE: 2024-03-26

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SPECIFICATIONS

MECHANICAL GENERAL - SECTION 15

- 1. GENERAL CONDITIONS
A) THE GENERAL CONDITIONS OF THE CONTRACT SHALL FORM AN INTEGRAL PART OF THIS DIVISION OF THE SPECIFICATIONS.
B) THE CONTRACTOR SHALL EXAMINE AND BE GOVERNED BY ALL SECTIONS OF THE SPECIFICATIONS, DRAWINGS AND TENDER DOCUMENTS PERTAINING TO THIS PROJECT.
C) WHEN WORK IS IN THE SPECIFICATION ONLY, OR SHOWN ON THE DRAWINGS ONLY, OR SHOWN ON ONE DRAWING AND NOT ON OTHER APPLICABLE DRAWINGS, IT SHALL BE DEEMED TO BE PART OF THE CONTRACT.
D) THE CONTRACTOR SHALL MAKE CERTAIN THAT HE HAS RECEIVED ALL ADDENDA TO THESE SPECIFICATIONS AND ALL REVISIONS TO THE DRAWINGS AND THAT ALL ADDITIONS, DELETIONS AND ALTERATIONS TO THE PROPOSED WORK HAVE BEEN INCLUDED IN HIS QUOTATION.
E) CHECK DRAWINGS OF ALL TRADES TO VERIFY SPACE AND HEADROOM LIMITATIONS FOR WORK TO BE INSTALLED.
F) ENSURE THAT ANY BUILDING STRUCTURE LOADED DURING THE INSTALLATION IS ADEQUATE TO CARRY SUCH LOAD.
G) THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOUR, EQUIPMENT AND SERVICES NECESSARY TO COMPLETE THE MECHANICAL WORK IN ACCORDANCE WITH THE DRAWINGS AND THESE SPECIFICATIONS.
H) THE CONSULTANT SHALL NOT BE LIABLE FOR CODE CHANGES OCCURRING BETWEEN THE TIME OF ISSUING OF THE DRAWINGS AND THE TAKING OF THE BUILDING PERMIT.
I) ALL PRODUCTS USED SHALL BEAR THE CSA STAMP OF APPROVAL TO MEET ALL CODES AND OTHER ENFORCEMENTS.
J) ALL WORK SHALL SATISFY THE REQUIREMENTS OF THE CURRENT B.C. BUILDING CODE 2012, AND ALL APPLICABLE CODES (I.E. PLUMBING, GAS, ETC.) AND ALL AUTHORITIES HAVING JURISDICTION.
2. LABOUR
A) EMPLOY ONLY COMPETENT TRADESMEN TO PERFORM THE WORK AND ENSURE COOPERATION WITH OTHER TRADES.
3. SITE CONDITIONS
A) THE CONTRACTOR SHALL VISIT THE SITE OF THE PROPOSED CONSTRUCTION AND EXAMINE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS RELATING TO THE WORK.
B) THE CONTRACTOR SHALL MAKE COMPLETE HIS WORK AS QUICKLY AS REASONABLY POSSIBLE AND SHALL FOLLOW THE GENERAL CONTRACTOR'S WORK SCHEDULE.
4. DISCREPANCIES
A) ANY DISCREPANCIES BETWEEN DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND CLARIFIED IN WRITING PRIOR TO THE CONTRACTOR SUBMITTING HIS BID.
5. COORDINATION WITH OTHER TRADES
A) THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL, STRUCTURAL, ELECTRICAL, LANDSCAPING, (ETC.) DRAWINGS.
B) THE ARCHITECTURAL PLANS SHALL HAVE PRECEDENCE OVER THE MECHANICAL PLANS WITH REFERENCE TO WALLS, FIXTURES, FINISH ETC.
6. CUTTING, PATCHING, DIGGING AND PLACEMENT OF LARGE EQUIPMENT
A) ALL CUTTING, PATCHING (INCLUDING REPAIRS TO PLASTER), FIREPROOFING AND SEALING OF OPENINGS SHALL BE PROVIDED BY THIS DIVISION.
B) ALL CUTTING OR DRILLING OF STRUCTURAL ELEMENTS SHALL BE APPROVED BY STRUCTURAL ENGINEER PRIOR TO WORK.
C) LAYOUT SLEEVES, OPENINGS, INSERTS FOR INSTALLATION OF WORK IN THIS DIVISION. FAILURE TO PROVIDE PROPER LOCATION AND SIZES SHALL MAKE THIS DIVISION LIABLE FOR EXTRA CHARGES TO PROPERLY EXECUTE THE WORK.
D) ROOF FLASHING SHALL BE SUPPLIED FOR INSTALLATION BY ROOFING DIVISION.
E) CONTRACTOR TO CO-ORDINATE WITH OTHER TRADES TO ENSURE CORRECT PLACEMENT OF LARGE EQUIPMENT.

- 7. APPROVAL OF ALTERNATES
A) WHERE TRADE NAMES ARE LISTED, THE FIRST MENTIONED NAME WAS USED TO ESTABLISH QUALITY, FUNCTIONS, PERFORMANCE AND DIMENSIONS TO PREPARE THE CONTRACT DOCUMENTS.
B) SUBSTITUTION OF ALTERNATES WILL BE ALLOWED IF:
a) THIS DIVISION ASSUMES THE RESPONSIBILITY AND COSTS FOR ALL ASSOCIATED CHANGES IN THE WORK OF THIS DIVISION AND OTHER DIVISIONS.
b) COMPLETE DETAILS OF THE ALTERNATE PROPOSED ARE SUBMITTED IN DUPLICATE.
c) THE APPLICANT RECEIVES AN APPROVED, SIGNED COPY OF THE APPLICATION.
d) SUBMIT DETAIL DRAWING OF PROPOSED ALTERNATE AS REQUIRED BY ENGINEER TO DEFINE SPECIFIC REQUIREMENTS.
8. DELIVERY, SCHEDULING AND PROTECTION OF WORK AND EQUIPMENT
A) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE DELIVERY TIME OF ITEMS SUPPLIED UNDER THIS DIVISION DOES NOT CAUSE A DELAY IN SCHEDULING OF THE PROJECT.
B) ALL WORK SHALL START IMMEDIATELY AND FOLLOW THE SCHEDULE OF WORK AS OUTLINED BY THE OWNER.
C) THE CONTRACTOR SHALL PROTECT FINISHED AND UNFINISHED WORK AND WORK OF ALL OTHER TRADES FROM DAMAGE DUE TO THE CARRYING OUT OF THE WORK.
9. WARRANTIES AND GUARANTEE
A) GUARANTEE THE SATISFACTORY OPERATION OF ALL WORK AND EQUIPMENT INSTALLED UNDER THIS DIVISION, FOR A PERIOD OF 12 MONTHS AFTER FINAL COMPLETION.
B) BE RESPONSIBLE FOR THE COST OF ANY DAMAGE TO THE WORK OF THIS OR OTHER DIVISIONS DUE TO FAULTY MATERIALS OR WORKMANSHIP, DURING CONSTRUCTION AND THE GUARANTEE PERIOD.
C) SUBMIT GUARANTEES AS REQUIRED ON EQUIPMENT AND WARRANTIES WHICH EXTEND BEYOND A 12 MONTH PERIOD. BIND GUARANTEES AND WARRANTIES WITHIN MAINTENANCE MANUALS.
10. CODES PERMITS & FEES
A) OBTAIN AND PAY FOR ALL PERMITS, APPROVALS AND INSPECTIONS BY REGULATION AGENCIES UNLESS ADVISED OTHERWISE.
11. UTILITY CHARGES:
A) THE OWNER SHALL PAY ALL UTILITIES USAGE CHARGES (I.E. GAS, ETC.). THE CONTRACTOR SHALL BE RESPONSIBLE FOR CO-ORDINATING ALL WORK WITH THE UTILITY COMPANIES.
12. MAINTENANCE MANUALS
A) ALL THE INFORMATION SHALL BE TYPED, INDEXED WITH IDENTIFICATION OF DESIGN AUTHORITIES, CONTRACTOR, SUBCONTRACTORS. THE MAINTENANCE MANUALS SHALL INCLUDE THE FOLLOWING:
a) MAINTENANCE REQUIREMENTS FOR ALL EQUIPMENT.
b) LOCAL SOURCE OF SUPPLY AND SPARE PARTS LIST.
c) LUBRICATION SCHEDULE AND LUBRICANT COVERING ALL EQUIPMENT.
d) ONE CORRECTED COPY OF APPROVED SHOP DRAWINGS BY ENGINEER.
e) SCHEMATIC AND MAINTENANCE DATA FOR SEPARATE SYSTEMS.
B) INSTRUCT OWNER'S PERSONNEL ON OPERATING AND MAINTENANCE PROCEDURE AT SUBSTANTIAL COMPLETION.
13. AS-BUILT DRAWINGS
A) THE CONTRACTOR SHALL KEEP A COMPLETE SET OF CONSTRUCTION DOCUMENTS (I.E. DRAWINGS, SPECIFICATIONS, SHOP DRAWINGS, ADDENDA, REVISIONS, ETC.) ON THE JOB SITE. THE CONSTRUCTION DRAWINGS SHALL BE CONTINUOUSLY AND ACCURATELY UPDATED TO SHOW ALL FIELD CHANGES (I.E. LOCATE NEW DUCT RUNS, EQUIPMENT, ALL UNDERGROUND PIPING, ETC.) TO THE DRAWINGS AS WELL AS ALL DEVIATIONS OF THE INSTALLATION FROM THAT SHOWN ON THE DRAWINGS. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL PRODUCE A COMPLETE SET OF REPRODUCIBLE DRAWINGS (SEPIA) INCORPORATING NEATLY (I.E. CHANGES TO BE DONE BY COMPETENT DRAFTSPERSON) ON THEM ALL CHANGES AND DEVIATIONS TO THE WORK FROM THAT SHOWN. THESE "AS-BUILT" DRAWINGS SHALL BE SIGNED AND DATED BY THE MECHANICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL THEN PROVIDE TO THE OWNER:
a) THREE (3) SETS OF "AS-BUILT DRAWINGS (BLACKLINE),
b) ONE SET OF REPRODUCIBLE (SEPIA) DRAWINGS, AND
c) ALSO PROVIDE ONE SET OF DRAWINGS IN "DXF" FILE FORMAT (I.E. "DOS-FORMATTED DISKETTES" IF THE DRAWINGS ARE IN ELECTRONIC FORMAT).
d) THE CONTRACTOR MAY PURCHASE COPIES OF THE MECHANICAL DRAWINGS ON ELECTRONIC FILE FROM THE CONSULTANT FOR A COAST OF \$500.00 (FOR FIVE DRAWINGS OR LESS) AND ADDITIONAL COAST OF \$50.00 PER DRAWING (FOR MORE THAN 5 DRAWINGS)
B) AS BUILT DRAWINGS AND MAINTENANCE MANUALS MUST BE SUBMITTED TO HE ENGINEER MINIMUM 15 WORKING DAYS BEFORE THE OWNER'S REQUEST FOR "OCCUPANCY PERMIT INSPECTION".

- 14. SHOP DRAWINGS
A) THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER, SHOP DRAWING FOR ALL MECHANICAL EQUIPMENT AS SPECIFIED ON THE EQUIPMENT SCHEDULE. THE SHOP DRAWINGS SHALL BE IDENTIFIED BY PROJECT NUMBER AND RELEVANT EQUIPMENT TAG. THE SHOP DRAWINGS SHALL INCLUDE THE FOLLOWING INFORMATION:
a) CAPACITY AND PERFORMANCE CHARACTERISTICS
b) SOUND POWER DATA WHERE APPLICABLE.
c) ELECTRICAL POWER DATA CONTROL/INTERLOCKING DIAGRAM(S)/DESCRIPTION, AND WIRING DIAGRAMS.
d) PHYSICAL CHARACTERISTICS; DIMENSIONS; PLANS; FINISHES; INSTALLATION RECOMMENDATIONS/REQUIREMENTS; DETAILED DRAWINGS FOR BASES, SUPPORTS AND ANCHOR BOLTS, AND RECOMMENDED CLEARANCES.
B) THE CONTRACTOR TO SUBMIT 3 COPIES OF SHOP DRAWINGS AND RESUBMIT AS REQUIRED.
C) EQUIPMENT SHALL NOT BE PURCHASED PRIOR TO THE COMPLETION OF SHOP DRAWINGS REVIEW PROCESS.
15. TESTING AND INSPECTIONS
A) THE CONTRACTOR SHALL PROVIDE ANY NECESSARY ASSISTANCE AND COOPERATION TO FACILITATE THE INSPECTION OF THE WORKMANSHIP AND MATERIAL AS SUPPLIED AND INSTALLED OR MATERIAL ON SITE TO BE INSTALLED UNDER THIS SPECIFICATION.
B) WORK SHALL NOT BE CLOSED IN OR COVERED BY CONCRETE OR OTHER MATERIAL BEFORE INSPECTION AND APPROVAL BY THE ENGINEER AND MUNICIPAL INSPECTOR.
16. IDENTIFICATION
A) IDENTIFY ALL MECHANICAL EQUIPMENT WITH PROPER LABELS (I.E. LAMICOID ETC.
17. MISCELLANEOUS METALS
A) PROVIDE MISCELLANEOUS METALS TO SUPPORT, SECURE OR PROTECT EQUIPMENT IN THIS DIVISION.
B) PRIME COAT MISCELLANEOUS STEEL AFTER INSTALLATION.
16. SCOPE OF WORK
A) SUPPLY AND INSTALL (PROVIDE) WORK AS SHOWN ON THE DRAWINGS OR SPECIFIED HEREIN, INCLUDE ALL LABOUR, TOOLS AND PLANS NECESSARY FOR WORK IN THE DIVISION.
B) THIS SHALL INCLUDE BUT NOT BE LIMITED TO THE SUPPLY AND INSTALLATION OF THE FOLLOWING AS APPLICABLE:
- PLUMBING SYSTEM
17. PLUMBING:
A) INSTALLATION AND MATERIALS TO B.C.B.C. 2012 (OR THE LATEST), & LOCAL MUNICIPAL REQUIREMENTS. ALL PUMPED LINES TO BE SCHEDULE 40 PRESSURE PIPE.
B) PRIOR TO COMMENCING THE PLUMBING AND UNDERGROUND PIPING THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE FOLLOWING:
a) THE ELEVATION AND LOCATION OF THE EXISTING/PROPOSED SANITARY CONNECTION
b) INFORM THE ARCHITECT/ENGINEER IMMEDIATELY SHOULD ANY CHANGES BE REQUIRED.
c) OBTAIN ALL LATEST MUNICIPAL STANDARDS AND INCLUDE FOR THEIR PROVISION IN THE BID.
C) a) ALL UNDERGROUND SANITARY SEWER TO BE MINIMUM 4" DIA.
b) ALL DRAINAGE PIPING 4" DIA OR LARGER TO BE RUN AT MINIMUM 1% SLOPE EXCEPT AS NOTED.
c) TEST DRAINAGE SYSTEM BY FILLING WITH WATER TO PRODUCE WATER PRESSURE OF 5 FEET MINIMUM AND 25 FEET MAXIMUM. CHECK PROPER GRADE AND OBSTRUCTION BY BALL TEST.
D) a) ALL SANITARY FLOOR DRAINS TO HAVE DEEP SEAL P TRAPS WITH PRIMER AS REQUIRED BY THE CODE.
E) a) PROVIDE SUPPORTS TO SECURE PIPES, PREVENT PIPE VIBRATION, MAINTAIN REQUIRED GRADING BY PROPER ADJUSTMENTS, ALLOW FOR EXPANSION AND CONTRACTION AND PRODUCE A NEAT APPEARANCE.
b) DESIGN SUPPORTS TO SUIT LOADING AND SERVICES AND PREVENT UNDUE STRESS TO STRUCTURAL MEMBERS.
c) FOR ALL COPPER HORIZONTAL PIPING USE WROUGHT CLEVIS HANGERS (25mm LARGER THAN PIPE DIAMETER) SUITABLE FOR VERTICAL ADJUSTMENT, ISOLATED FROM PIPE WITH PLASTIC TAPE.

K:\Projects\3600\3600-47\drawings\mech\M3600-47-03.0 - specification.dwg February 20, 2024 2:11am

Table with columns: ISSUE, REV., DATE, DESCRIPTION. Includes entries for building permit and review dates.

EGBC PERMIT # 1001222
SEAL: [Professional Engineer Seal]
DATE: 2024-03-26

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Burnaby, B.C. V5C 6A7 Fax:(604) 268-9092

PROJECT NO. 3600-51
MECHANICAL

PROJECT
PROPOSED RESIDENCE
1407 BISHOP RD
White Rock, B.C.

DRAWING
SEPECIFICATION

Table with columns: DRAWN BY, DESIGN BY, CHECKED BY, SCALE, DATE, DRAWING NUMBER. Includes values: MR, BK/MR, BK, N.T.S, 2024-02, M3.0



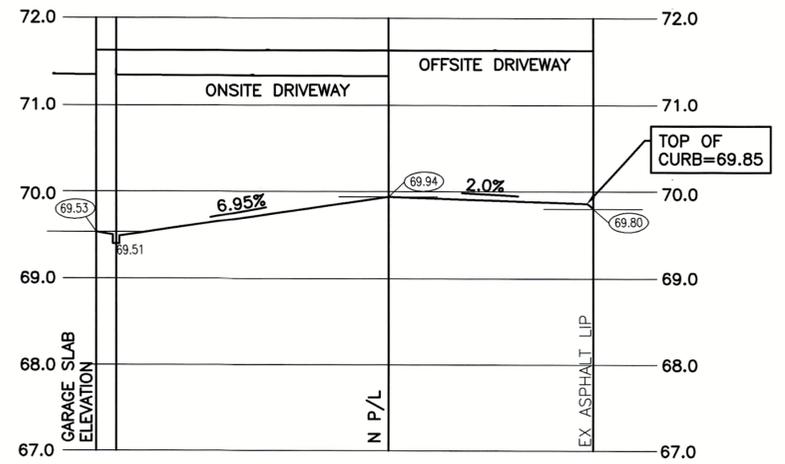
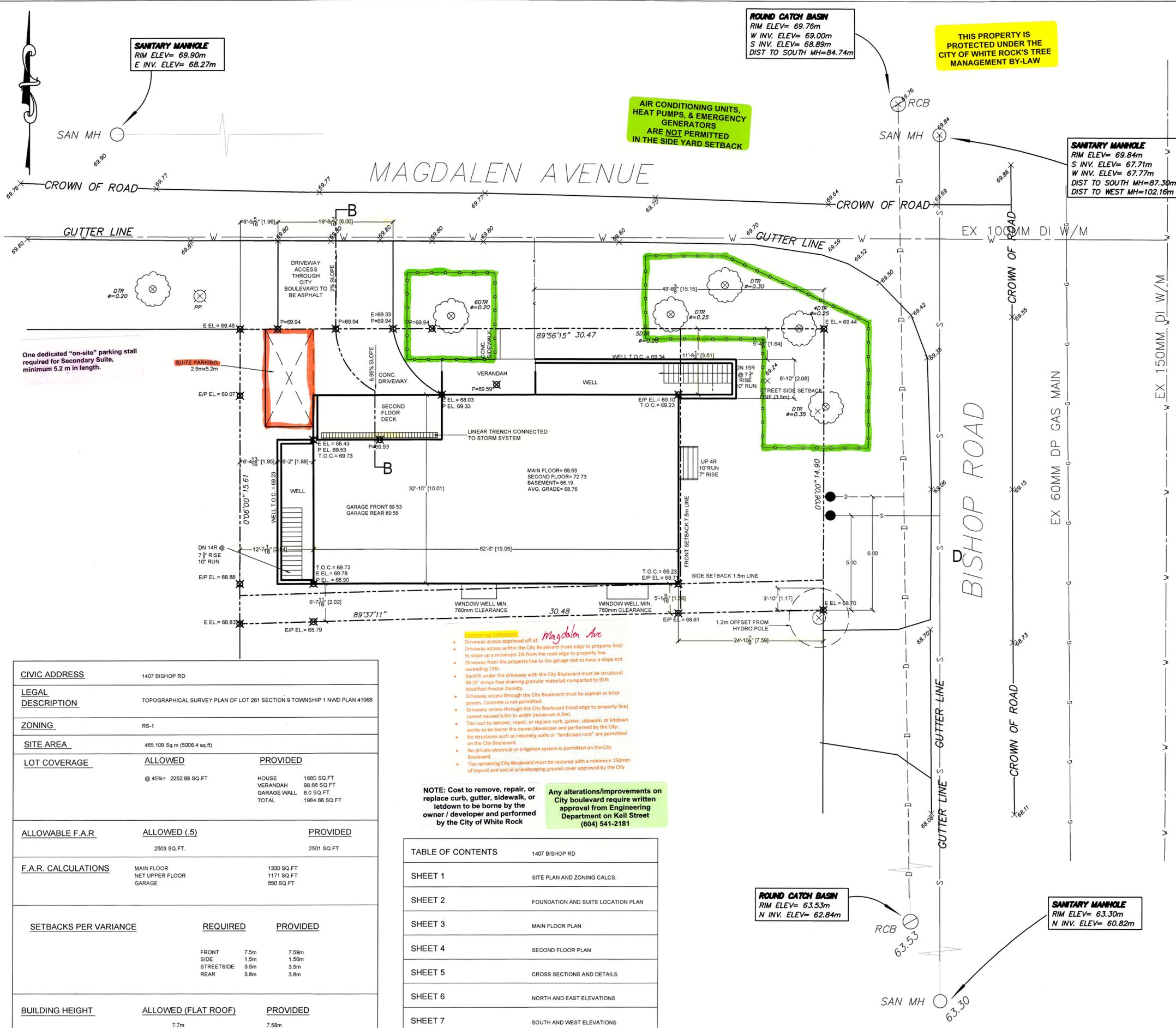
021501

ORIGINAL BUILDING PERMIT DRAWINGS ISSUED ARE REQUIRED TO BE ON-SITE DURING THE ENTIRE DURATION OF CONSTRUCTION

FIELD REVIEWS ARE REQUIRED FROM REGISTERED PROFESSIONALS BEFORE CALLING FOR CITY INSPECTIONS. EMAIL TO [Building@WhiteRockCity.ca](mailto:Building@WhiteRockCity.ca)

THIS PROPERTY IS PROTECTED UNDER THE CITY OF WHITE ROCK'S TREE MANAGEMENT BY-LAW

AIR CONDITIONING UNITS, HEAT PUMPS, & EMERGENCY GENERATORS ARE NOT PERMITTED IN THE SIDE YARD SETBACK



DRIVEWAY SECTION AT B-B  
VERT: - 1:50 HORI: - 1:100

\*SEE CIVIL DRAWING FOR DRIVEWAY SECTIONS

<b>CIVIC ADDRESS</b>	1407 BISHOP RD	
<b>LEGAL DESCRIPTION</b>	TOPOGRAPHICAL SURVEY PLAN OF LOT 261 SECTION 9 TOWNSHIP 1 NWD PLAN 41968	
<b>ZONING</b>	RS-1	
<b>SITE AREA</b>	465.109 Sq.m (5006.4 sq.ft)	
<b>LOT COVERAGE</b>	<b>ALLOWED</b>	<b>PROVIDED</b>
	@ 45% = 2252.88 SQ.FT	HOUSE 1890 SQ.FT VERANDAH 98.66 SQ.FT GARAGE WALL 6.0 SQ.FT TOTAL 1984.66 SQ.FT
<b>ALLOWABLE F.A.R.</b>	<b>ALLOWED (.5)</b>	<b>PROVIDED</b>
	2503 SQ.FT.	2501 SQ.FT
<b>F.A.R. CALCULATIONS</b>	MAIN FLOOR NET UPPER FLOOR GARAGE	1330 SQ.FT 1171 SQ.FT 550 SQ.FT
<b>SETBACKS PER VARIANCE</b>	<b>REQUIRED</b>	<b>PROVIDED</b>
	FRONT 7.5m SIDE 1.5m STREETSIDE 3.5m REAR 3.8m	7.59m 1.56m 3.5m 3.8m
<b>BUILDING HEIGHT</b>	<b>ALLOWED (FLAT ROOF)</b>	<b>PROVIDED</b>
	7.7m	7.58m

- Driveway access approved off of: *Magdalena Ave*
- Driveway access within the City Boulevard (road edge to property line) to slope up a minimum 2% from the road edge to property line.
- Driveway from the property line to the garage slab to have a slope not exceeding 15%.
- Backfill under the driveway with the City Boulevard must be structural fill (3" minus free draining granular material) compacted to 95% Modified Proctor Density.
- Driveway access through the City Boulevard must be asphalt or brick pavers. Concrete is not permitted.
- Driveway access through the City Boulevard (road edge to property line) cannot exceed 5.0m in width (minimum 4.5m).
- The cost to remove, repair, or replace curb, gutter, sidewalk, or letdown works to be borne the owner/developer and performed by the City.
- No structures such as retaining walls or "landscape rock" are permitted on the City Boulevard.
- No private electrical or irrigation system is permitted on the City Boulevard.
- The remaining City Boulevard must be restored with a minimum 150mm of topsoil and sod or a landscaping ground cover approved by the City.

**NOTE: Cost to remove, repair, or replace curb, gutter, sidewalk, or letdown to be borne by the owner / developer and performed by the City of White Rock**

**Any alterations/improvements on City boulevard require written approval from Engineering Department on Keil Street (604) 541-2181**

TABLE OF CONTENTS	1407 BISHOP RD
SHEET 1	SITE PLAN AND ZONING CALCS.
SHEET 2	FOUNDATION AND SUITE LOCATION PLAN
SHEET 3	MAIN FLOOR PLAN
SHEET 4	SECOND FLOOR PLAN
SHEET 5	CROSS SECTIONS AND DETAILS
SHEET 6	NORTH AND EAST ELEVATIONS
SHEET 7	SOUTH AND WEST ELEVATIONS

THESE DRAWINGS HAVE BEEN PREPARED TO CONFORM TO THE 2024 B.C. BUILDING CODE

City of White Rock Building Approvals  
City review of documents stamped:  
Permit No:

**021501-02**

1. does not relieve the Owner of Lands referred to in this document from full responsibility for work being carried out in compliance with City and Provincial enactments;
2. is subject to terms and conditions printed on the permit and prescribed in the City bylaws.

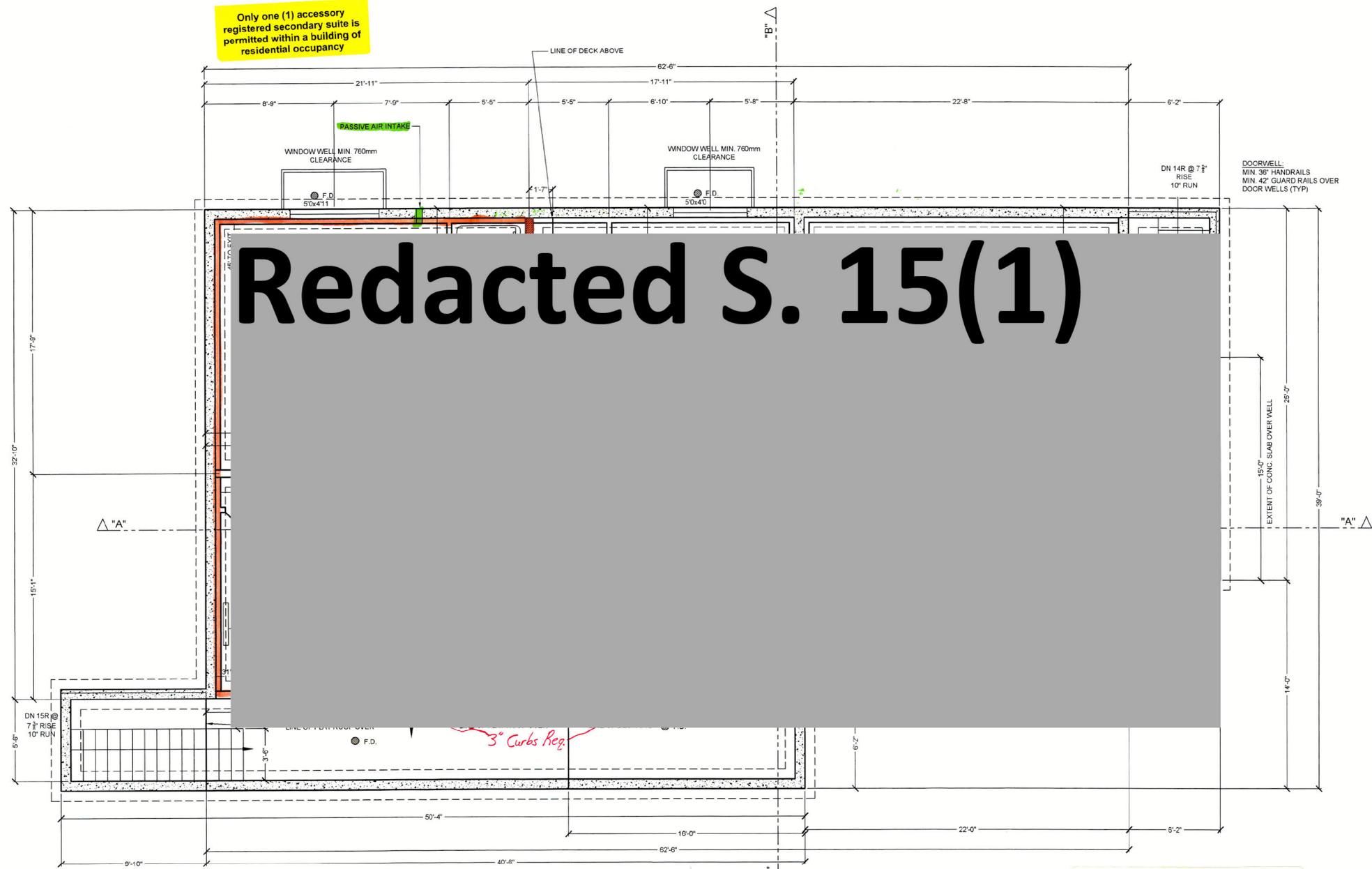
Reviewed by: *[Signature]* Date: *May 13, 2024*

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PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

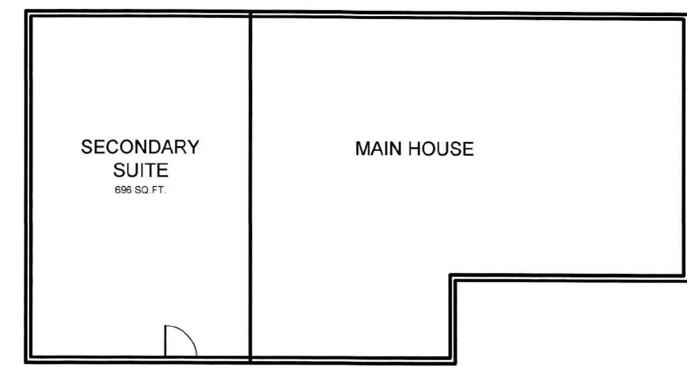
PLANS BY DESIGN LTD. B.L.# 139618 DATE: 2024-05-06	PROJECT: 1407 BISHOP RD WHITE ROCK SITE PLAN
SCALE: 1/8"=1'-0" U.N.O.	
SHEET 1	

Office Copy

Only one (1) accessory registered secondary suite is permitted within a building of residential occupancy



# Redacted S. 15(1)



SUITE LOCATION PLAN  
SCALE: 1/4"=1'-0"

Interconnected Photo Electric Smoke Detectors required between Suite and Principal Residence

Fire separations for walls and ceilings require a minimum 45 minute fire resistance rating. A 30 minute fire resistance rating is permitted where the dwelling units are equipped with additional photo electric type smoke alarms CAN/ULC-S531, "Standard for Smoke Alarms"

FOUNDATION PLAN  
1880 SQ. FT.

DOORWELL:  
MIN. 36" HANDRAILS  
MIN. 42" GUARD RAILS OVER  
DOOR WELLS (TYP)

Suites must have their own separate Electrical Panel and NOT located in a fire separation wall.

- Dedicated Air Inlet Supply are required
  - In each bedroom
  - In at least one common area
  - To be located minimum 1' 8" above the floor
  - To have an unobstructed vent area not less than 25 cm<sup>2</sup> - approx. 2 1/2" dia.

Shall run continuously and provide at least the minimum Run rates specified in Table 9.10.3.1.3. It shall be controlled by a dedicated switch that has "on" and "off" settings and is located such that it is accessible for servicing purposes, but is not likely to be turned off inadvertently and is marked "Principal Ventilation Exhaust Fan"

Floor Drain Required in Basement Mechanical Room

Seismic Restraint Required on all Hot Water Tanks

SAFETY GLASS TO BE USED WITHIN 3' OF DOOR ENTRY LOCKS, AT ENTRANCE DOORS AND SKYLIGHTS, NEAR BATHTUBS AND JACUZZIS

NOTE: BUILDING TO BE SPRINKLERED TO NFPA 13D ENHANCED

Registered Suite Requirements (Sprinklered buildings):

- Hardwired photoelectric type smoke alarms shall be installed in every bedroom as per 9.10.19 and in halls serving bedrooms.
- Exterior suite door to be hinged - using a sliding door as your only exit door not permitted.
- If you have an interconnected door between suite and main residence, the door, frame, and self-closing device must have a 20 min Fire Resistance Rating.
- Heating and ventilation ducts are not permitted to be interconnected - unless designed by a mechanical engineer to include fire dampers, in-duct smoke detection sensors and automatic system deactivation.
- Central vacuum systems are not permitted to be interconnected.
- Independent heating system required. This could include: Electrical baseboards, hot water boiler radiant heating or gas appliance rated to heat entire space (i.e.: gas fireplaces)
- A fire separation and minimum STC rating of 43 is required between the main residence and suite. This can be achieved by using a prescriptive wall and ceiling assembly from table 9.10.3.1.-A and 9.10.3.1.-B
- Minimum headroom height in suite shall not be less than 2.0m (6'-7")
- Pot lights are not permitted - unless Fire Resistance Rating and the STC rating of the ceiling assembly is maintained.
- The total area of the secondary suite cannot exceed 90 square meters (968 s.f.).

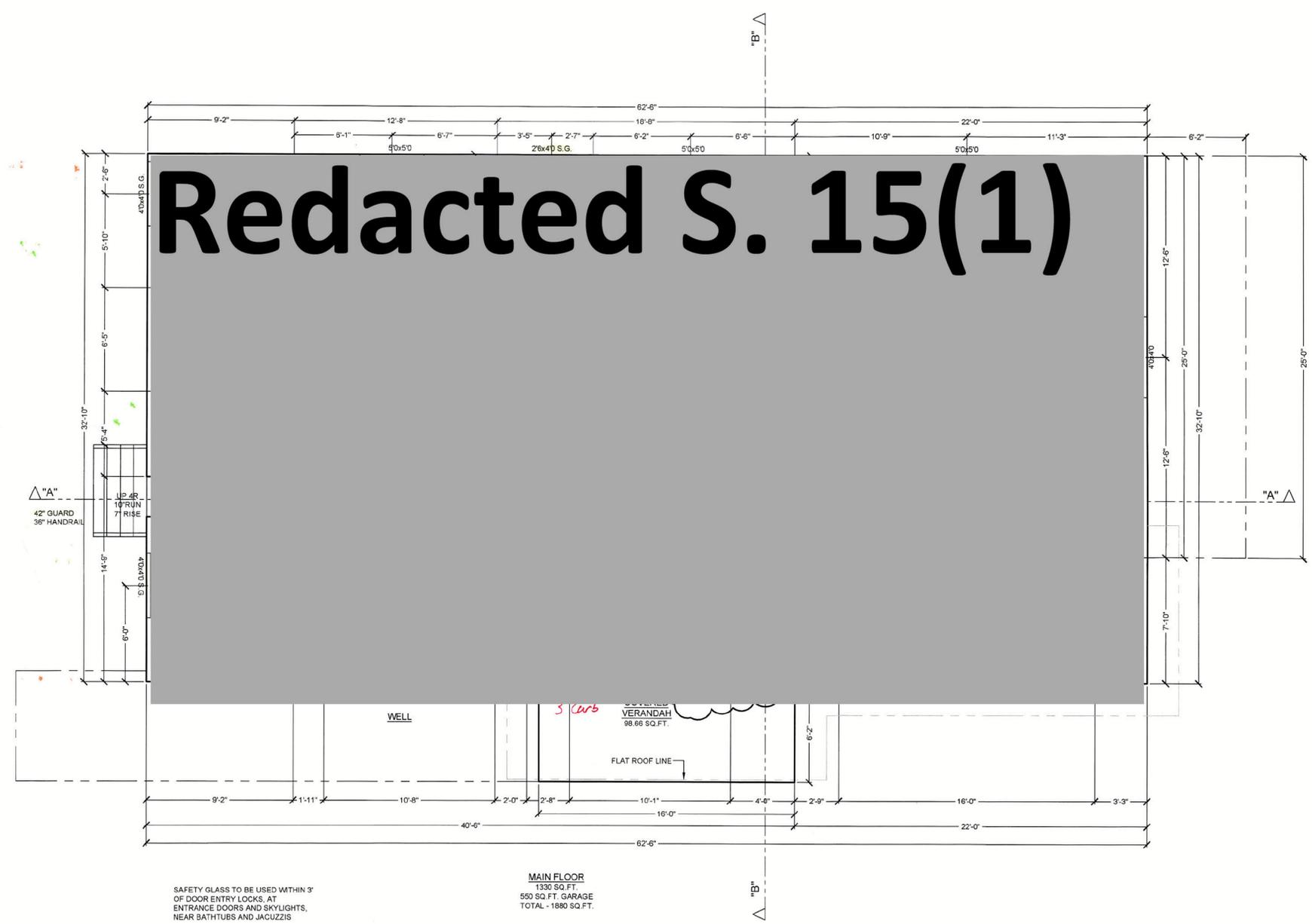
DESIGN BY: PLANS BY DESIGN 604-617-3878 BL# 139618	PROJECT: 1407 BISHOP RD WHITE ROCK, B.C.
DATE: 2024-05-07	FOUNDATION PLAN
SCALE: 1/4"=1'-0"	
SHEET 2	

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**KEEP ELEVATOR  
SPECS ON SITE**

Design, construction and installation of elevators to conform to 'BC Elevating Devices Safety Regulation' and ASME A17.1-2016/CSA B44-16 'Safety Code for Elevators and Escalators'. Declaration of conformance to be provided prior to final inspection.



**Carbon Monoxide Detectors:**  
Hardwired CO2 alarms are required on all floor levels and in rooms where fuel powered appliances are located

SAFETY GLASS TO BE USED WITHIN 3' OF DOOR ENTRY LOCKS, AT ENTRANCE DOORS AND SKYLIGHTS, NEAR BATHTUBS AND JACUZZIS

**MAIN FLOOR**  
1336 SQ. FT.  
550 SQ. FT. GARAGE  
TOTAL - 1880 SQ. FT.

Glazing installed over stairs, ramps and landings that extends to less than 900 mm above the surface of the treads, ramp or landings shall be protected in accordance with sentence 9.8.8.1.(7) of the BC Building Code.

**NOTE: BUILDING TO BE SPRINKLERED TO NFPA 13D ENHANCED**

021501-02

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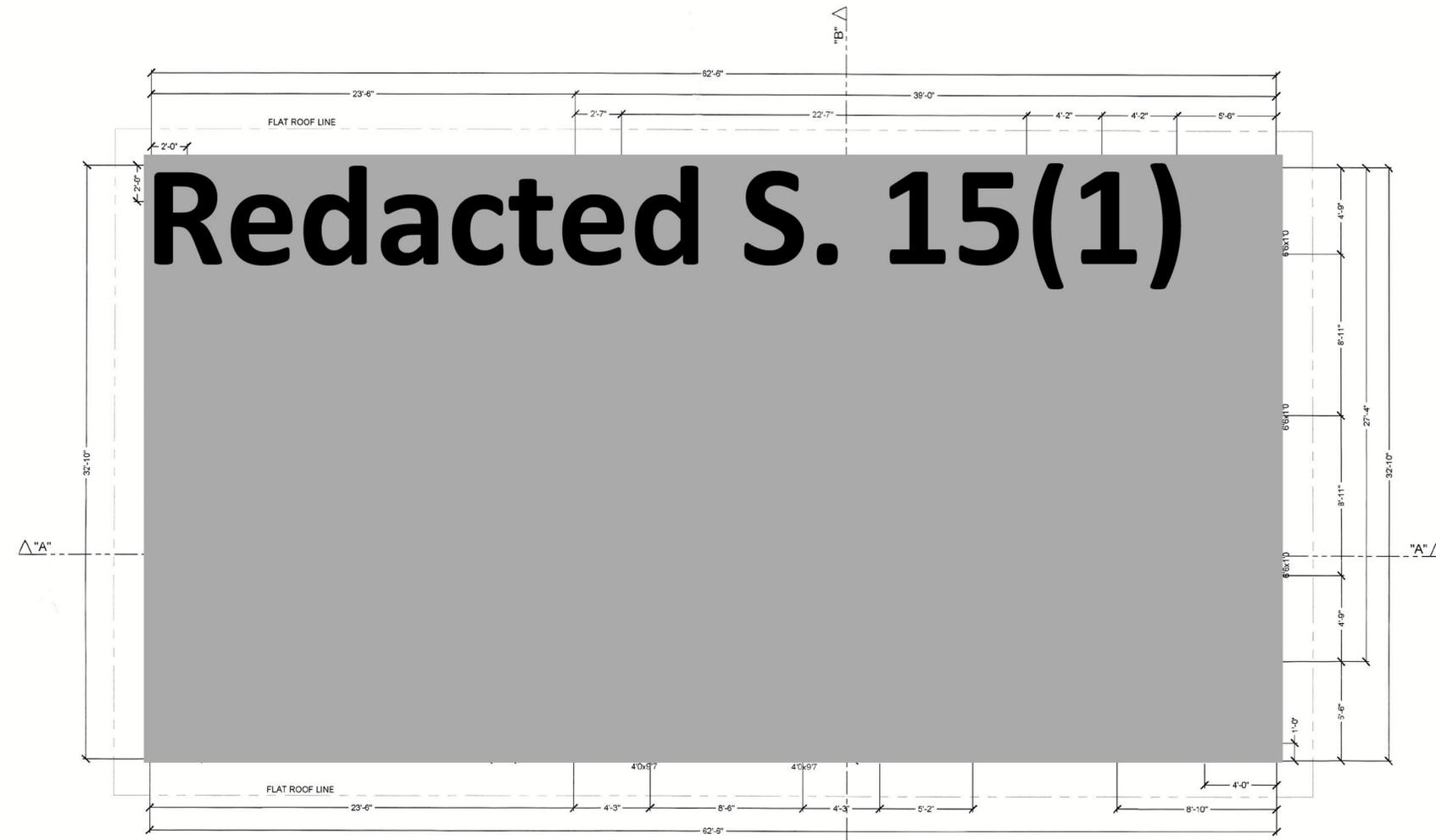
MAY 1 3 2024

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CITY OF WHITE ROCK

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DATE: 2024-05-07	
SCALE: 1/4"=1'-0"	MAIN FLOOR PLAN
SHEET 3	

THESE DRAWINGS HAVE BEEN PREPARED TO CONFORM TO THE 2024 B.C. BUILDING CODE

# Redacted S. 15(1)



SAFETY GLASS TO BE USED WITHIN 3'  
OF DOOR ENTRY LOCKS, AT  
ENTRANCE DOORS AND SKYLIGHTS,  
NEAR BATHTUBS AND JACUZZIS

**SECOND FLOOR**  
1171 SQ. FT.  
882 SQ. FT. DECKS

**NOTE: BUILDING TO  
BE SPRINKLERED  
TO NFPA 13D  
ENHANCED**

**3" CURB REQUIRED  
UNDERSIDE ALL  
DOORSILLS TO FINISHED  
SURFACES**

All piping to be frost protected.  
Heated, insulated and weather-  
stripped cabinet required.  
Consult with Building Inspector  
prior to installation.

021501-02

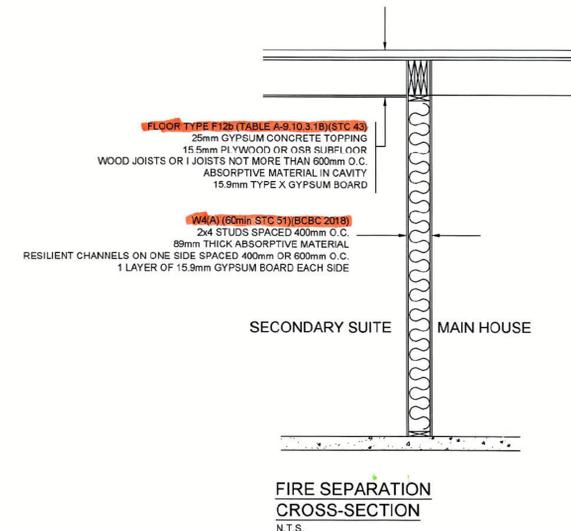
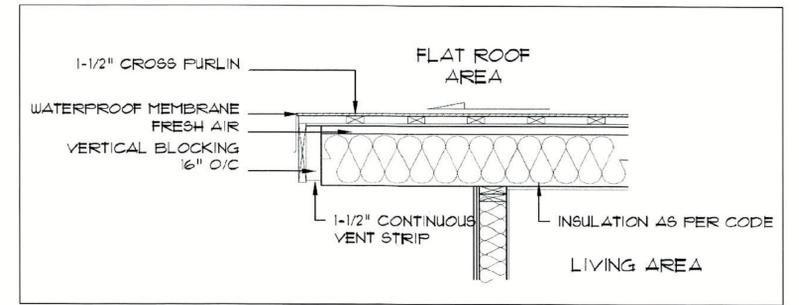
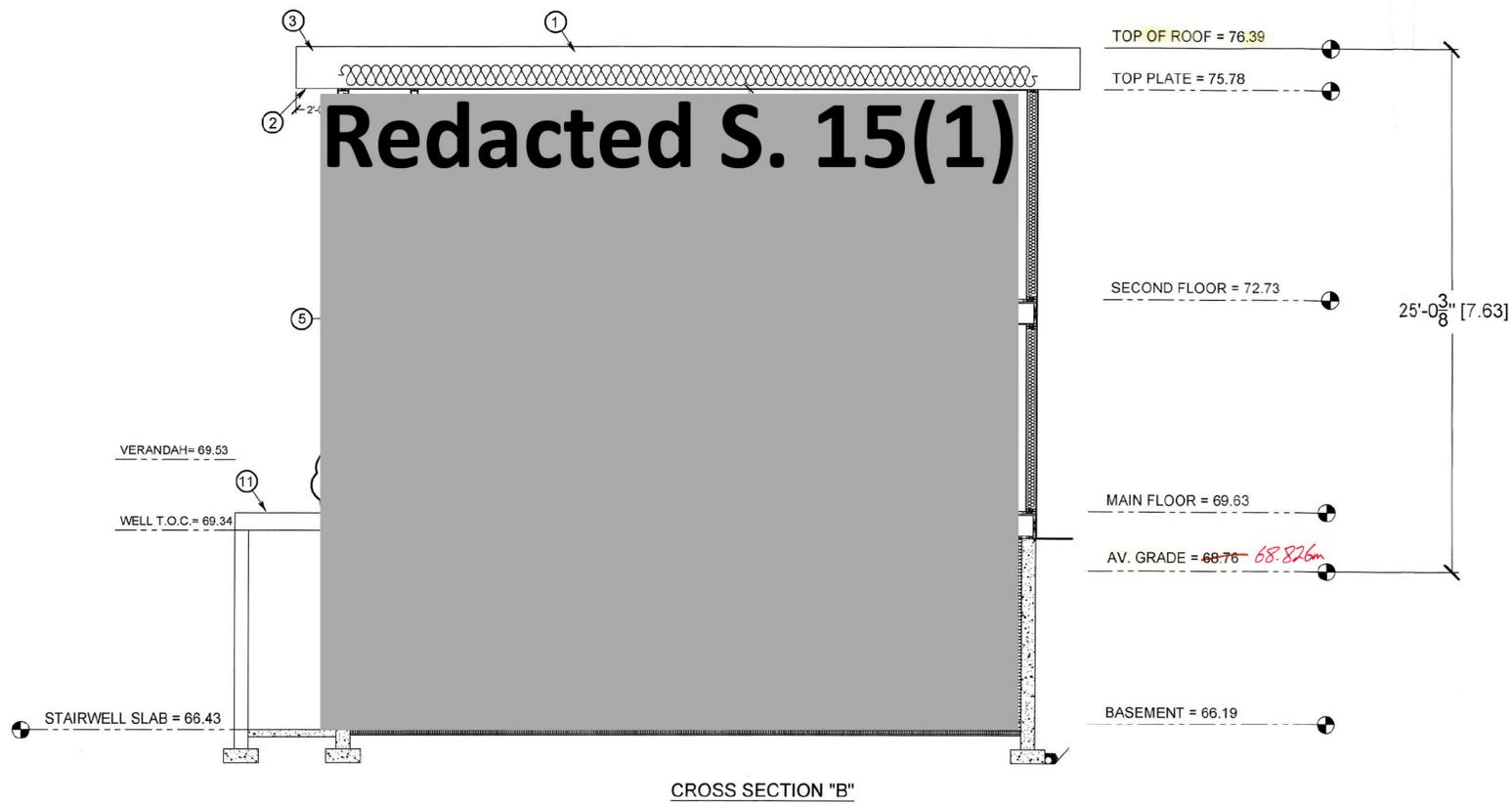
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CITY OF WHITE ROCK

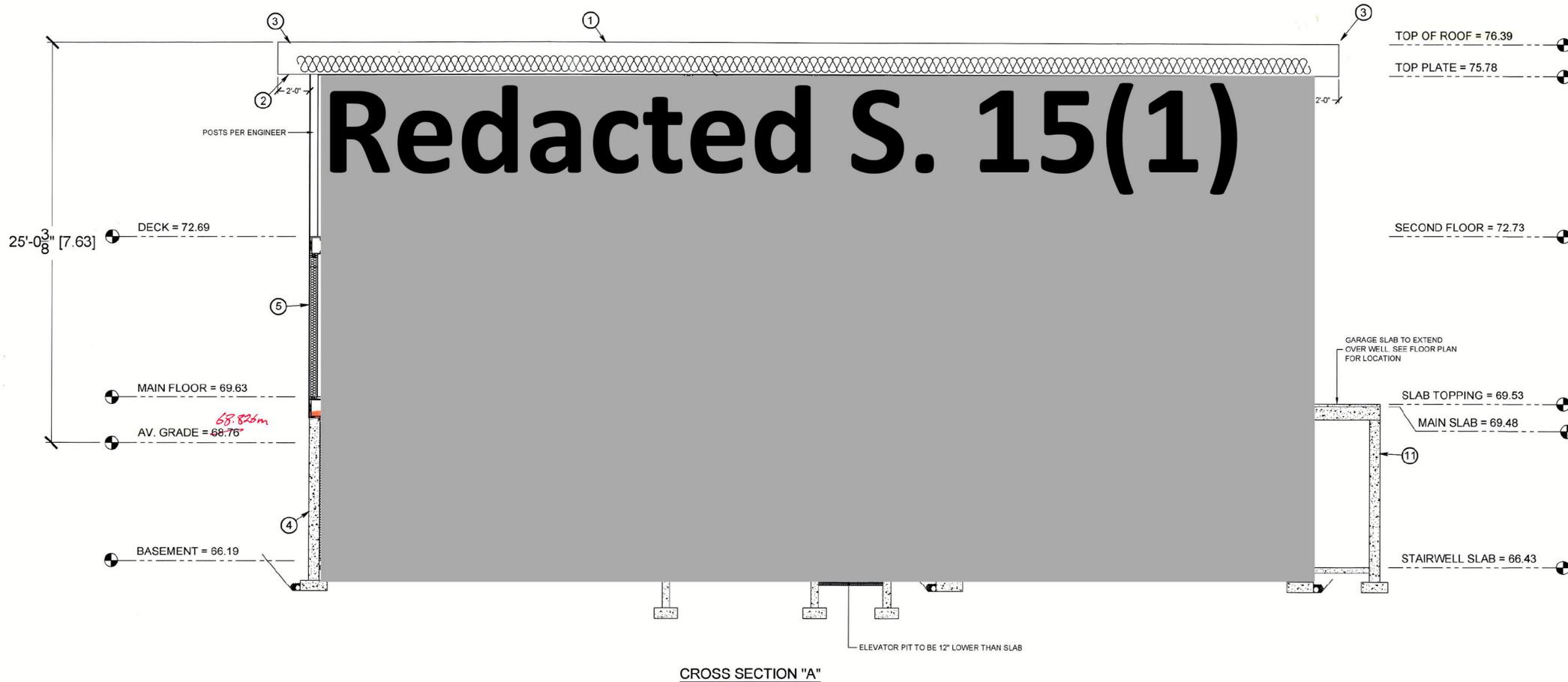
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DATE: 2024-05-07	
SCALE: 1/4"=1'-0" SHEET 4	

THESE DRAWINGS HAVE BEEN PREPARED TO CONFORM TO THE 2024 B.C. BUILDING CODE



**SECONDARY SUITE REQUIREMENTS**

- SEPARATED HEATING SYSTEM
- INTERCONNECTING PHOTO-ELECTRIC SMOKE ALARM SYSTEM REQUIRED
- R20 INSULATION @ WALLS
- 30 MIN. FIRE SEPARATION REQUIRED BETWEEN SUITE AND MAIN HOUSE
- ALL LOAD BEARING WALLS TO BE 1 HR. FRR
- FIRE SEPARATIONS TO BE CONTINUOUS BEHIND CABINETS, FIXTURES, TUBS, APPLIANCES AND HVAC
- ALL WALL SUPPORTING THE FIRE RATED CEILING TO BE THE SAME RATING
- SMOKE ALARMS TO COMPLY WITH B.C.B.C.



- ROOF:**  
 TORCH ON ROOF  
 FELT UNDERLAY  
 5/8" PLYWOOD SHEATHING  
 ENG'D ROOF JOISTS @ 24" O.C.  
 R-48 BATT INSULATION  
 6 MIL POLY V.B.  
 3/4" PLYWOOD  
 1/2" CEILING BOARD
- ROOF VENTILATION:**  
 INSULATION STOPS  
 2" CLEARANCE OVER  
 1/300 SCREENED VENTING
- TYPICAL GUTTER:**  
 HIDDEN GUTTER C/W RAIN WATER LEADERS TO SEPARATE DRAIN TILE WITH EAVE PROTECTION TO MIN. 12" PAST INSIDE FACE OF STUD LINE
- FOUNDATION:**  
 2x4 INTERIOR WALL WITH R14 BATT  
 6" CONCRETE FOUNDATION WALL (TYP) ON 2 COATS ASPHALT EMULSION BELOW GRADE  
 18"x8" CONTINUOUS CONCRETE FOOTING (TYP)  
 R-12 INSULATION TO 2'-0" MIN. BELOW FINISHED GRADE  
 4" DRAIN TILE
- EXTERIOR WALLS:**  
 STUCCO  
 RAINSCREEN  
 1/2" PLYWOOD OR OSB SHEATHING  
 2x6 STUDS @ 16" O.C.  
 R-24 HD BATT INSULATION  
 6 MIL POLY V.B.  
 1/2" GYPSUM WALL BOARD
- INTERIOR WALLS (TYP.):**  
 2x4 STUDS @ 16" O.C. (NON-BEARING)  
 1/2" GYPSUM WALL BOARD BOTH SIDES
- FLOOR:**  
 FINISH FLOORING  
 CONC. TOPPING  
 3/4" PLYWOOD  
 TJI JOISTS AS PER ENGINEER  
 1/2" CEILING BOARD
- BASEMENT SLAB:**  
 4" CONCRETE SLAB FLOOR  
 3" EPS (R12) INSULATION UNDER SLAB  
 6 MIL POLY V.B.  
 5" MIN. COMPACT GRANULAR FILL
- INTERIOR FOUNDATION WALL:**  
 2x6 STUDS @ 16" O.C.  
 6" CONC. CURB  
 18"x6" CONCRETE FOOTING
- GARAGE SLAB:**  
 SEE STRUCTURAL DRAWINGS FOR SUSPENDED SLAB  
 GARAGE SLAB TO BE COVERED IN 2 LAYERS OF TORCH ON WATERPROOF MEMBRANE COVERED WITH 2" CONCRETE TOPPING METAL CHANNEL @ 24" O.C.  
 R28 RIGID INSULATION
- STAIRWELL ROOF:**  
 TORCH ON ROOF  
 FELT UNDERLAY  
 1/2" PLYWOOD SHEATHING  
 2x10 JOISTS @ 16" O.C.  
 VINYL SOFFITS
- DECK FLOOR:**  
 FINISH FLOORING  
 3/4" PLYWOOD  
 TJI JOISTS AS PER ENGINEER  
 R28 RIGID INSULATION  
 1/2" CEILING BOARD

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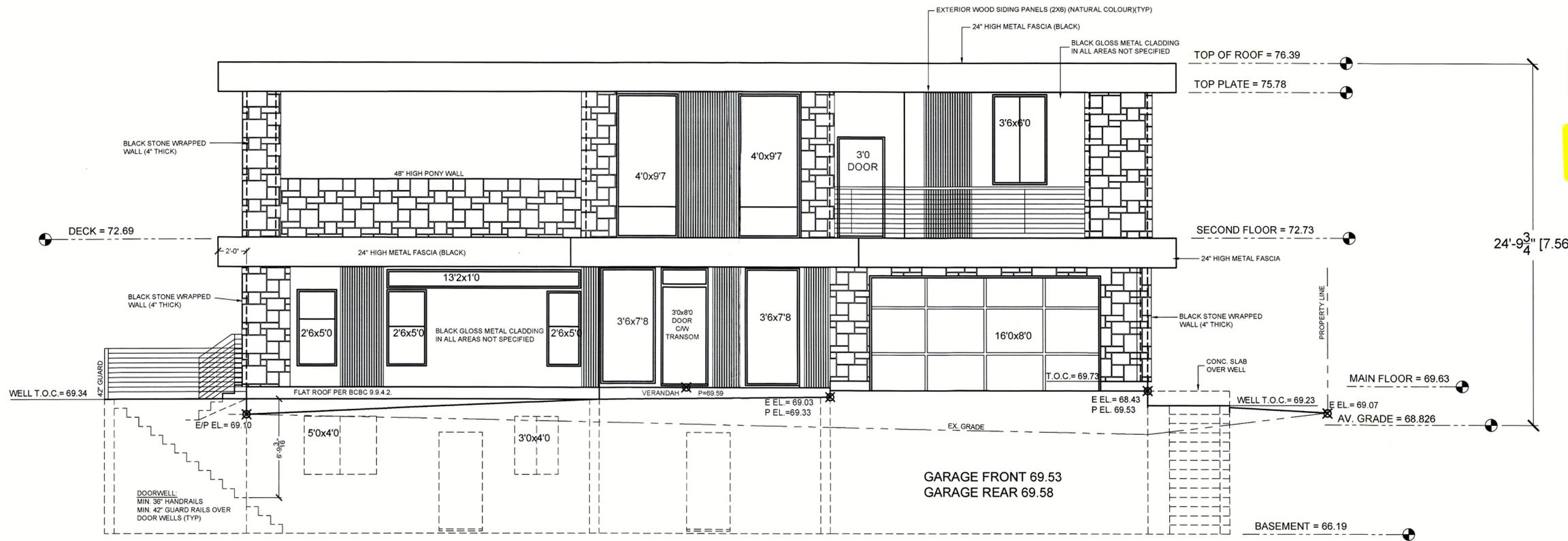
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 CITY OF WHITE ROCK

DESIGN BY: PLANS BY DESIGN 604-817-3879 BL# 139618	PROJECT: 1407 BISHOP RD WHITE ROCK, B.C.
DATE: 2024-05-07	
SCALE: 1/4"=1'-0"	CROSS SECTIONS AND DETAILS
SHEET 5	

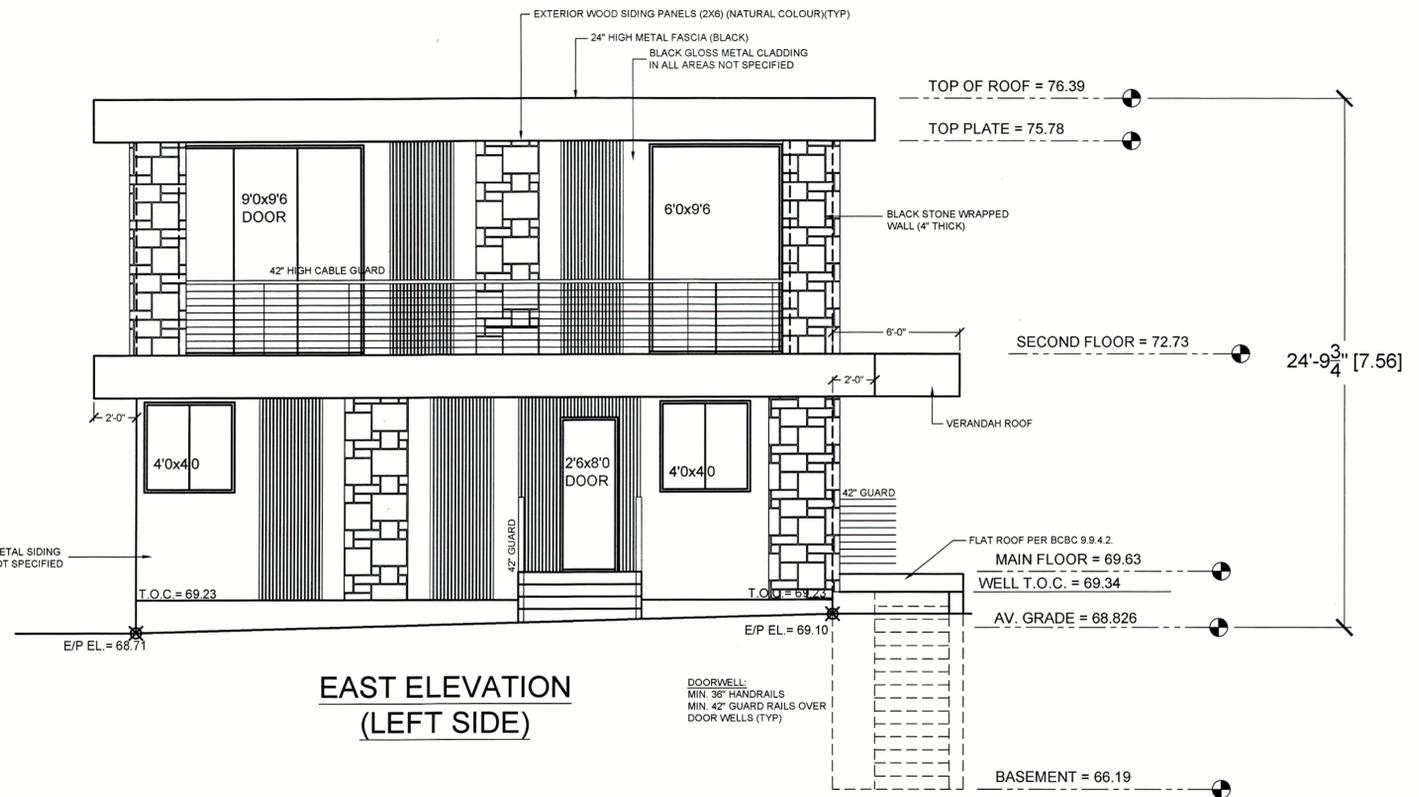
THESE DRAWINGS HAVE BEEN PREPARED TO CONFORM TO THE 2024 B.C. BUILDING CODE



**NORTH ELEVATION  
(FRONT)**

Flat roofs require emergency overflow scuppers & drains as per BCPC 2.4.10.4.

All Windows, Doors & Skylights must conform to NAFS



**EAST ELEVATION  
(LEFT SIDE)**

Note: Exterior Stairs/Walkways/ landings within setbacks to be built on grade.

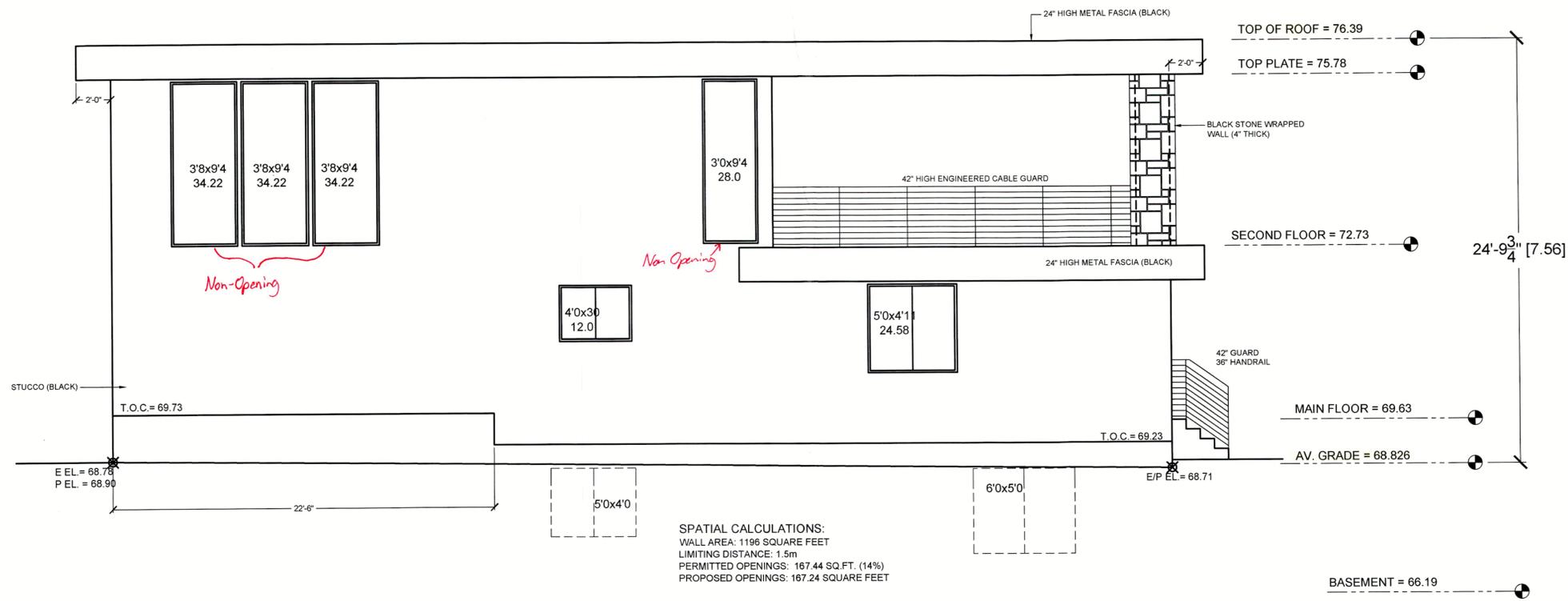
Exterior Hose Bibs Must Have Vacuum Breakers Installed

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CITY OF WHITE ROCK

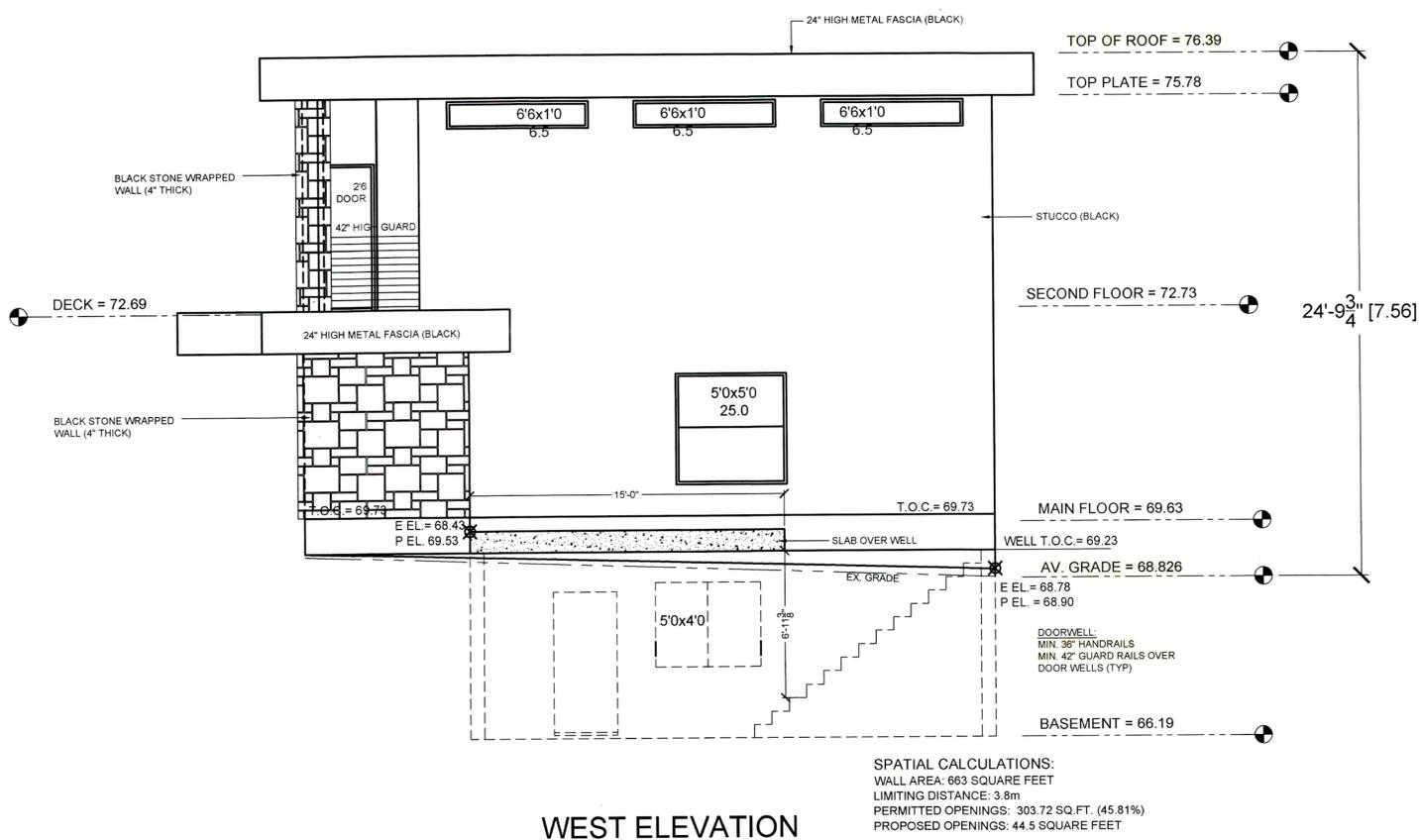
THESE DRAWINGS HAVE BEEN PREPARED TO CONFORM TO THE 2024 B.C. BUILDING CODE

DESIGN BY: PLANS BY DESIGN 604-817-3879 BL# 139618	PROJECT: 1407 BISHOP RD WHITE ROCK, B.C.
DATE: 2024-05-07	
SCALE: 1/4"=1'-0"	NORTH AND EAST ELEVATIONS
SHEET 6	



Minimum 8" clearance to materials adversely affected by moisture.

**SOUTH ELEVATION  
(BACK)**

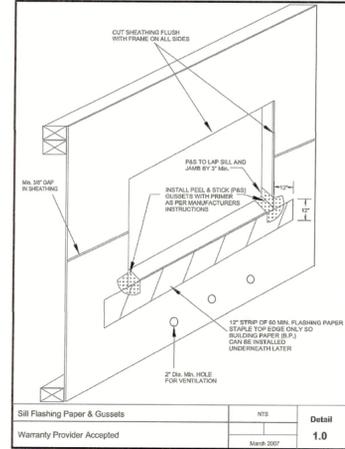


**WEST ELEVATION  
(RIGHT SIDE)**

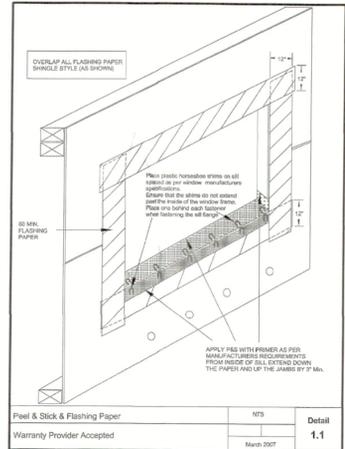
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 CITY OF WHITE ROCK  
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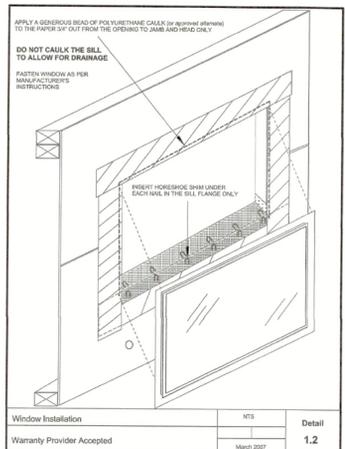
DESIGN BY: PLANS BY DESIGN 604-817-3879 BL# 139618	PROJECT: 1407 BISHOP RD WHITE ROCK, B.C.
DATE: 2024-05-07	NORTH AND EAST ELEVATIONS
SCALE: 1/4"=1'-0"	
SHEET 7	



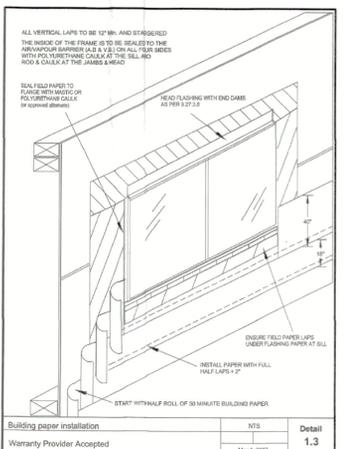
Sill Flashing Paper & Gussets  
NTS  
Detail  
1.0  
Warranty Provider Accepted  
March 2007



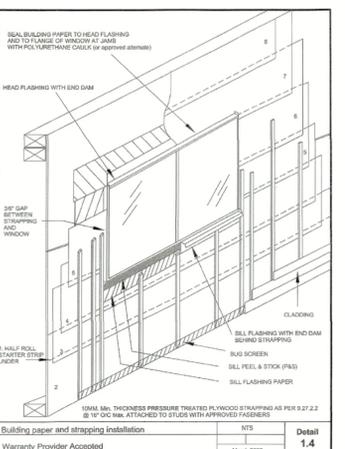
Peel & Stick & Flashing Paper  
NTS  
Detail  
1.1  
Warranty Provider Accepted  
March 2007



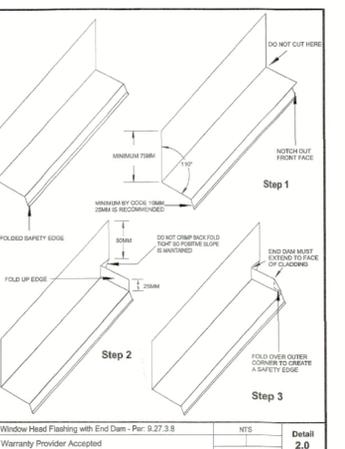
Window Installation  
NTS  
Detail  
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Warranty Provider Accepted  
March 2007



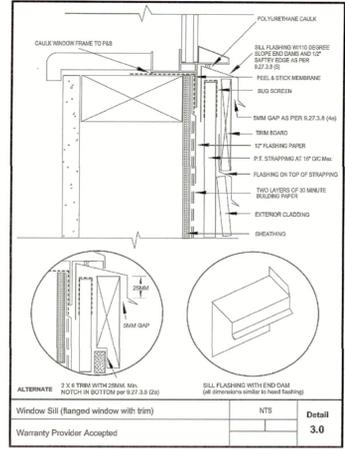
Building paper installation  
NTS  
Detail  
1.3  
Warranty Provider Accepted  
March 2007



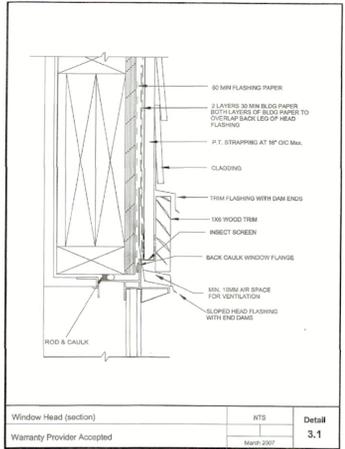
Building paper and strapping installation  
NTS  
Detail  
1.4  
Warranty Provider Accepted  
March 2007



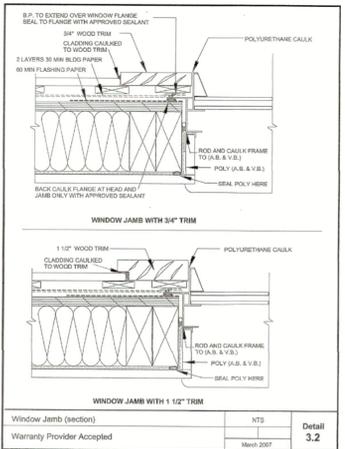
Window Head Flashing with End Dam - Par 9.27.3.8  
NTS  
Detail  
2.0  
Warranty Provider Accepted  
March 2007



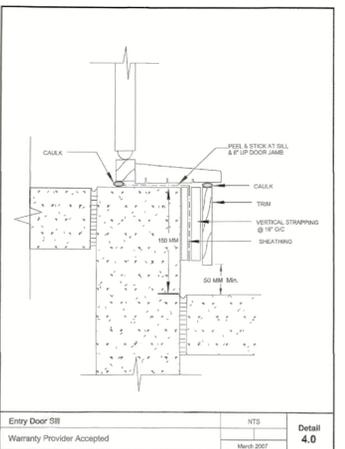
Window Sill (flanged window with trim)  
NTS  
Detail  
3.0  
Warranty Provider Accepted  
March 2007



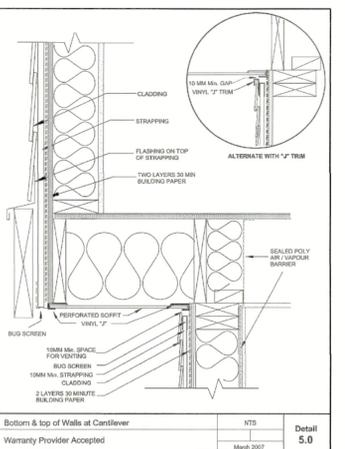
Window Head (section)  
NTS  
Detail  
3.1  
Warranty Provider Accepted  
March 2007



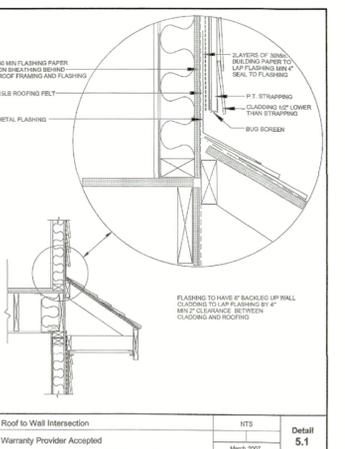
Window Jamb (section)  
NTS  
Detail  
3.2  
Warranty Provider Accepted  
March 2007



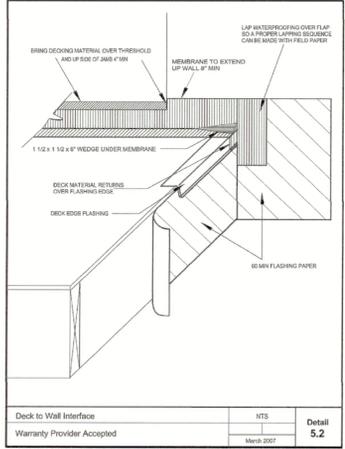
Entry Door Sill  
NTS  
Detail  
4.0  
Warranty Provider Accepted  
March 2007



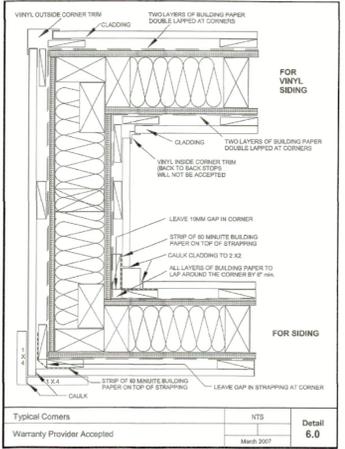
Bottom & top of Walls at Cantilever  
NTS  
Detail  
5.0  
Warranty Provider Accepted  
March 2007



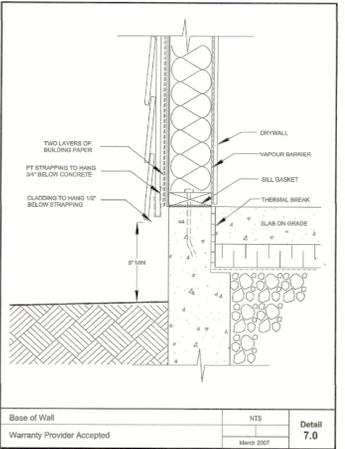
Roof to Wall Intersection  
NTS  
Detail  
5.1  
Warranty Provider Accepted  
March 2007



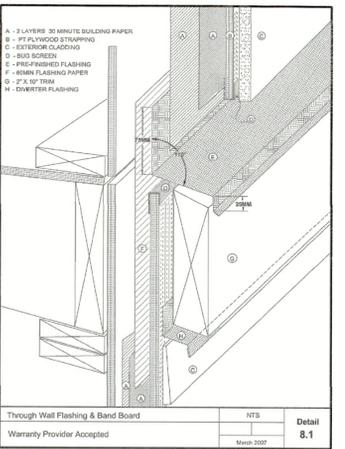
Deck to Wall Interface  
NTS  
Detail  
5.2  
Warranty Provider Accepted  
March 2007



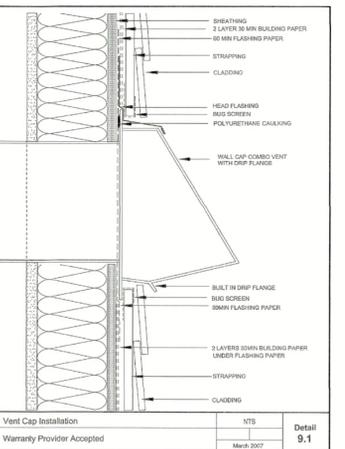
Typical Corners  
NTS  
Detail  
6.0  
Warranty Provider Accepted  
March 2007



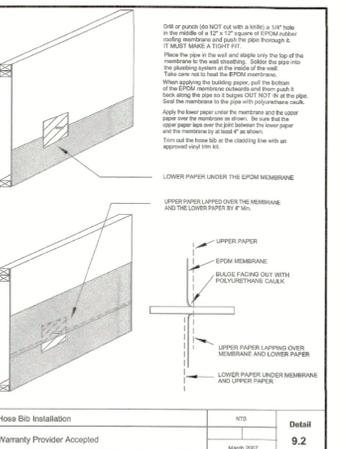
Base of Wall  
NTS  
Detail  
7.0  
Warranty Provider Accepted  
March 2007



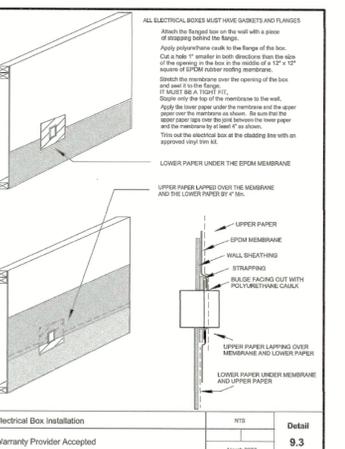
Through Wall Flashing & Band Board  
NTS  
Detail  
8.1  
Warranty Provider Accepted  
March 2007



Vent Cap Installation  
NTS  
Detail  
9.1  
Warranty Provider Accepted  
March 2007



Hose Bib Installation  
NTS  
Detail  
9.2  
Warranty Provider Accepted  
March 2007

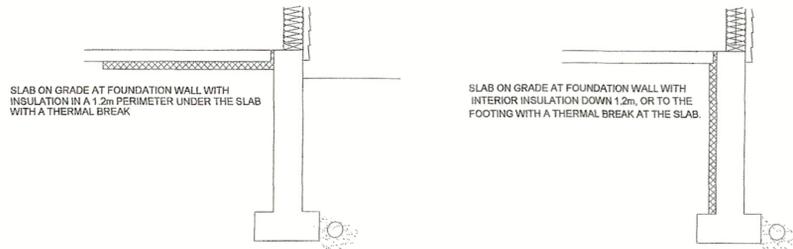


Electrical Box Installation  
NTS  
Detail  
9.3  
Warranty Provider Accepted  
March 2007

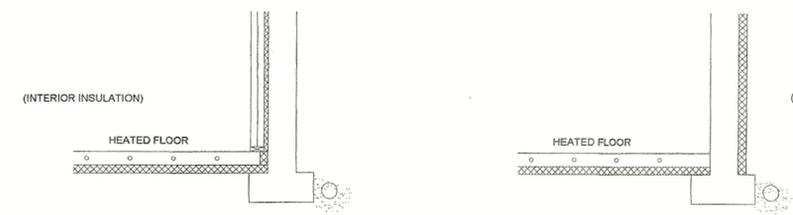
RECEIVED  
MAR 28 2024  
PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

021501

RAINSCREEN DETAILS



(INSULATION OF UNHEATED AND HEATED SLABS ABOVE THE FROST LINE SCALE 1/2"=1'-0" AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR)



INSULATION PLACEMENT FOR HEATED SLABS (INTERIOR) SCALE 1/2"=1'-0" AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR

INSULATION PLACEMENT FOR HEATED SLABS (EXTERIOR) SCALE 1/2"=1'-0" AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR

# CLIMATE ZONES 4 & 5

(AS PER SECTION 9.36.2.10, NOTES PERTAINING TO LEAKAGE PATHS IN PROBLEMATIC AIR BARRIERS)

## FLOORS OVER UNHEATED SPACES (CERAMIC TILE FLOORING) AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR

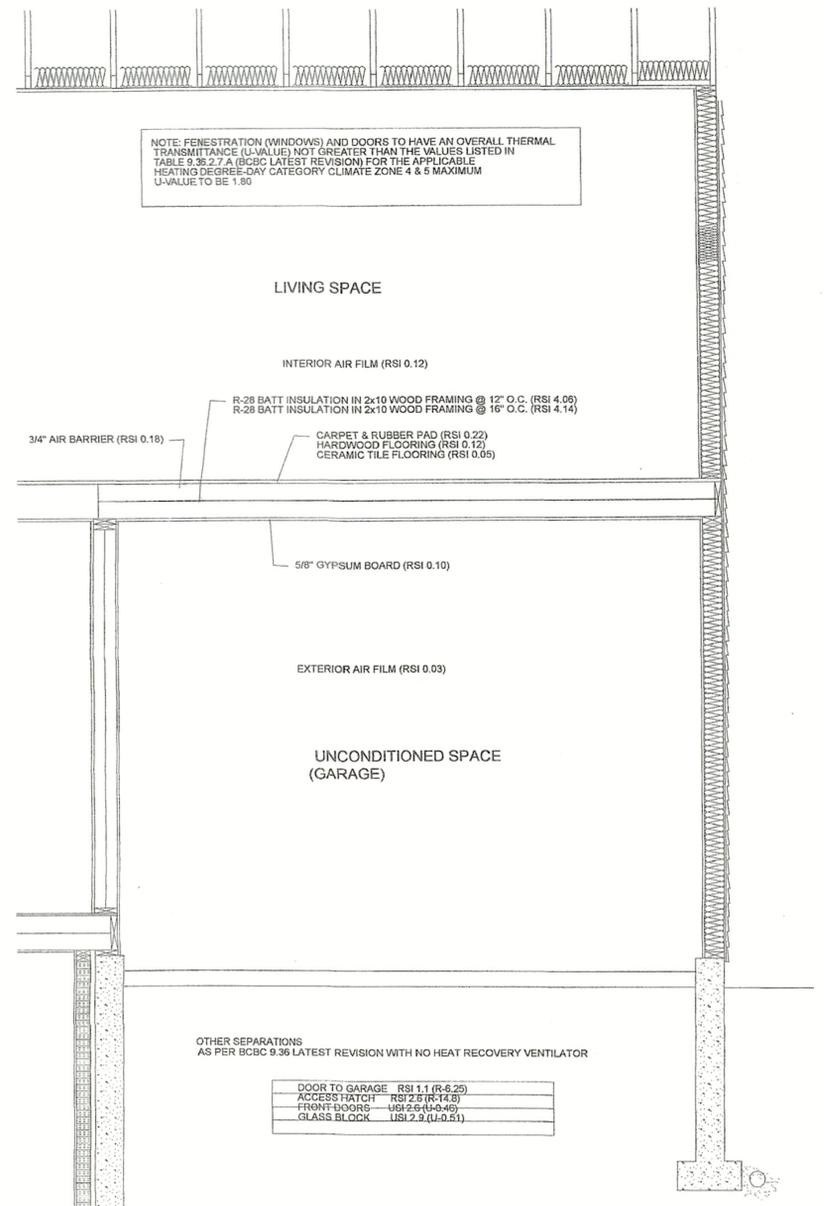
DESCRIPTION	NOMINAL	EFFECTIVE
R-28 BATT INSULATION IN 2x10 WOOD FRAMING @ 12" O.C.	RSI 4.93 (R-28)	RSI 4.06 (R-23.0)
R-28 BATT INSULATION IN 2x10 WOOD FRAMING @ 16" O.C.	RSI 4.93 (R-28)	RSI 4.14 (R-23.5)
OTHER BUILDING ENCLOSURE LAYERS THAT CONTRIBUTE TO EFFECTIVE INSULATION:		
1. INTERIOR AIR FILM	0.16	RSI 0.625 (R-3.55)
2. FLOORING MATERIAL - CERAMIC TILE	0.005	
3. 5/8" PLYWOOD SUBFLOOR	0.13485	
4. CAVITY	-	
5. 3/4" AIR BARRIER	0.18	
6. POLYETHYLENE	-	
7. 5/8" GYPSUM CEILING BOARD	0.09455	
8. EXTERIOR AIR FILM	0.03	
TOTAL EFFECTIVE INSULATION VALUE (12" O.C. FRAMING)		RSI 4.685 (R-26.55)
TOTAL EFFECTIVE INSULATION VALUE (16" O.C. FRAMING)		RSI 4.765 (R-27.05)
MINIMUM EFFECTIVE THERMAL RESISTANCE FOR FLOORS ABOVE UNHEATED SPACES		RSI 4.67 (R-26.5)

## FLOORS OVER UNHEATED SPACES (CARPET FLOORING) AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR

DESCRIPTION	NOMINAL	EFFECTIVE
R-28 BATT INSULATION IN 2x10 WOOD FRAMING @ 12" O.C.	RSI 4.93 (R-28)	RSI 4.06 (R-23.0)
R-28 BATT INSULATION IN 2x10 WOOD FRAMING @ 16" O.C.	RSI 4.93 (R-28)	RSI 4.14 (R-23.5)
OTHER BUILDING ENCLOSURE LAYERS THAT CONTRIBUTE TO EFFECTIVE INSULATION:		
1. INTERIOR AIR FILM	0.16	RSI 0.79 (R-4.5)
2. FLOORING MATERIAL - CARPET & RUBBER PAD	0.22	
3. 5/8" PLYWOOD SUBFLOOR	0.14	
4. 3/4" AIR BARRIER	0.18	
5. POLYETHYLENE	-	
6. 5/8" GYPSUM CEILING BOARD	0.10	
7. EXTERIOR AIR FILM	0.03	
TOTAL EFFECTIVE INSULATION VALUE (12" O.C. FRAMING)		RSI 4.85 (R-27.5)
TOTAL EFFECTIVE INSULATION VALUE (16" O.C. FRAMING)		RSI 4.93 (R-28.0)
MINIMUM EFFECTIVE THERMAL RESISTANCE FOR FLOORS ABOVE UNHEATED SPACES		RSI 4.67 (R-26.5)

## FLOORS OVER UNHEATED SPACES (HARDWOOD FLOORING) AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR

DESCRIPTION	NOMINAL	EFFECTIVE
R-28 BATT INSULATION IN 2x10 WOOD FRAMING @ 12" O.C.	RSI 4.93 (R-28)	RSI 4.06 (R-23.0)
R-28 BATT INSULATION IN 2x10 WOOD FRAMING @ 16" O.C.	RSI 4.93 (R-28)	RSI 4.14 (R-23.5)
OTHER BUILDING ENCLOSURE LAYERS THAT CONTRIBUTE TO EFFECTIVE INSULATION:		
1. INTERIOR AIR FILM	0.16	RSI 0.69 (R-3.9)
2. FLOORING MATERIAL - HARDWOOD	0.12	
3. 5/8" PLYWOOD SUBFLOOR	0.14	
4. 3/4" AIR BARRIER	0.18	
5. POLYETHYLENE	-	
6. 5/8" GYPSUM CEILING BOARD	0.10	
7. EXTERIOR AIR FILM	0.03	
TOTAL EFFECTIVE INSULATION VALUE (12" O.C. FRAMING)		RSI 4.75 (R-27.0)
TOTAL EFFECTIVE INSULATION VALUE (16" O.C. FRAMING)		RSI 4.83 (R-27.4)
MINIMUM EFFECTIVE THERMAL RESISTANCE FOR FLOORS ABOVE UNHEATED SPACES		RSI 4.67 (R-26.5)



NOTE: PENETRATION (WINDOWS) AND DOORS TO HAVE AN OVERALL THERMAL TRANSMITTANCE (U-VALUE) NOT GREATER THAN THE VALUES LISTED IN TABLE 9.36.2.7.A (BCBC LATEST REVISION) FOR THE APPLICABLE HEATING DEGREE-DAY CATEGORY CLIMATE ZONE 4 & 5 MAXIMUM U-VALUE TO BE 1.90

INTERIOR AIR FILM (RSI 0.12)

R-28 BATT INSULATION IN 2x10 WOOD FRAMING @ 12" O.C. (RSI 4.06)  
R-28 BATT INSULATION IN 2x10 WOOD FRAMING @ 16" O.C. (RSI 4.14)

3/4" AIR BARRIER (RSI 0.18)

CARPET & RUBBER PAD (RSI 0.22)  
HARDWOOD FLOORING (RSI 0.12)  
CERAMIC TILE FLOORING (RSI 0.05)

5/8" GYPSUM BOARD (RSI 0.10)

EXTERIOR AIR FILM (RSI 0.03)

UNCONDITIONED SPACE (GARAGE)

OTHER SEPARATIONS AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR

DOOR TO GARAGE	RSI 1.1 (R-6.25)
ACCESS HATCH	RSI 2.6 (R-14.8)
FRONT DOORS	RSI 2.6 (R-14.8)
GLASS BLOCK	RSI 2.9 (U-0.51)

(CLIMATE ZONE 4 & 5 ENERGY EFFICIENCY FLOORS OVER UNHEATED SPACES SCALE 1/2"=1'-0" AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR)

-FOUNDATION TO SILL PLATE AND RIM JOISTS  
ALL JOINTS AT THE TRANSITION BETWEEN THE FOUNDATION WALL AND THE ABOVE GRADE WALL MUST BE MADE AIR-TIGHT BY SEALING ALL JOINTS AND JUNCTIONS BETWEEN THE STRUCTURAL COMPONENTS, OR COVERING THE STRUCTURAL COMPONENTS WITH AN AIR BARRIER MATERIAL.

-INTERIOR WALL INTERFACE  
INTERIOR WALLS THAT MEET EXTERIOR WALLS OR CEILINGS WITH AN INTERIOR PLANE OF AIR TIGHTNESS MUST BE MADE AIRTIGHT BY EITHER SEALING ALL JUNCTIONS BETWEEN THE STRUCTURAL COMPONENTS, COVERING THE STRUCTURAL COMPONENTS WITH AN AIR BARRIER MATERIAL, OR MAINTAINING THE CONTINUITY OF THE AIR BARRIER SYSTEM THROUGH THE INTERIOR WALL.

-RIM JOIST  
ALL JOINTS AT THE RIM JOIST ASSEMBLY MUST BE MADE AIRTIGHT BY SEALING ALL JOINTS AND JUNCTIONS BETWEEN THE STRUCTURAL COMPONENTS, OR COVERING THE STRUCTURAL COMPONENTS WITH AN AIR BARRIER MATERIAL.

-CANTILEVERED FLOOR  
CANTILEVERED FLOORS AND FLOORS OVER UNHEATED SPACES/EXTERIOR SPACE MUST BE MADE AIRTIGHT BY SEALING ALL JOINTS AND JUNCTIONS BETWEEN THE STRUCTURAL COMPONENTS AND/OR COVERING THE STRUCTURAL COMPONENTS WITH AN AIR BARRIER MATERIAL AND SEAL IT TO THE ADJACENT AIR BARRIER MATERIAL.

-WINDOW HEAD  
THE INTERFACE BETWEEN WINDOW HEAD/JAMB AND WALL ASSEMBLY MUST BE MADE AIRTIGHT BY SEALING ALL JOINTS AND JUNCTIONS BETWEEN THE AIR BARRIER IN THE WALL AND WINDOW. THE REQUIREMENT ALSO APPLIES TO DOORS AND SKYLIGHTS.

-WINDOW SILL  
THE INTERFACE BETWEEN WINDOW SILL AND WALL ASSEMBLY MUST BE MADE AIRTIGHT BY SEALING ALL JOINTS AND JUNCTIONS BETWEEN THE AIR BARRIER MATERIAL IN THE WALL AND THE WINDOW. THE REQUIREMENT ALSO APPLIES TO DOORS AND SKYLIGHTS.

-MECHANICAL FLUES AND CHIMNEYS  
STEEL-LINED CHIMNEYS THAT PENETRATE THE BUILDING ENVELOPE MUST BE MADE AIRTIGHT BY BLOCKING THE VOID BETWEEN REQUIRED CLEARANCES FOR METAL CHIMNEYS AND SURROUNDING CONSTRUCTION WITH SHEET METAL AND SEALANT CAPABLE OF WITHSTANDING HIGH TEMPERATURES.

-PLUMBING STACKS  
PLUMBING VENT STACK PIPES THAT PENETRATE THE BUILDING ENVELOPE MUST BE MADE AIRTIGHT BY EITHER SEALING THE AIR BARRIER MATERIAL TO THE VENT STACK PIPE WITH A COMPATIBLE MATERIAL OR SHEATHING TAPE, OR INSTALLING A RUBBER GASKET OR PREFABRICATED ROOF FLASHING AT THE PENETRATION OF THE PLANE OF AIR TIGHTNESS AND SEALING IT TO THE TOP PLATE.

-SKYLIGHTS  
THE INTERFACE BETWEEN THE SKYLIGHT AND WALL ASSEMBLY MUST BE MADE AIRTIGHT BY SEALING ALL JOINTS AND JUNCTIONS BETWEEN THE AIR BARRIER MATERIAL IN THE WALL AND THE SKYLIGHT.

-WALL TO CEILING  
ALL JOINTS AT THE TRANSITION BETWEEN THE ABOVE GRADE WALL AND CEILING MUST BE MADE AIRTIGHT BY SEALING ALL JOINTS AND JUNCTIONS BETWEEN THE STRUCTURAL COMPONENTS AND/OR COVERING THE STRUCTURAL COMPONENTS WITH AN AIR BARRIER MATERIAL.

-WALL VENTED DUCTS  
DUCT PENETRATIONS THROUGH THE BUILDING ENVELOPE MUST HAVE AN AIRTIGHT SEAL.

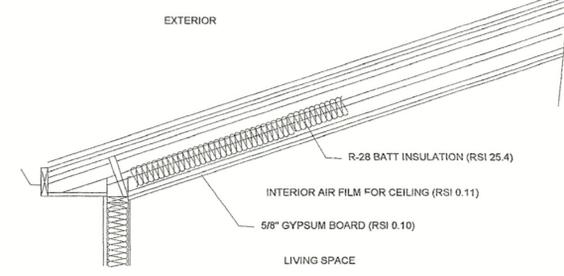
-ELECTRICAL PENETRATIONS IN WALLS  
ELECTRICAL PENETRATIONS IN WALLS, INCLUDING ELECTRICAL OUTLETS, WIRING, SWITCHES, AND RECESSED FIXTURES THROUGH THE PLANE OF AIR TIGHTNESS MUST BE AIRTIGHT. OPTIONS INCLUDE USING A COMPONENT THAT IS DESIGNED TO BE AIRTIGHT AND SEALING IT TO THE ADJACENT AIR BARRIER MATERIAL, OR BY COVERING THE COMPONENT WITH AN AIR BARRIER MATERIAL AND SEALING IT TO THE ADJACENT AIR BARRIER MATERIAL.

**SPECIFIC REQUIREMENTS**

- EFFECTIVE INSULATION OF CEILINGS, WALLS AND FLOORS MEET THE REQUIREMENTS OF TABLE 9.36.2.6.A AND TABLE 9.36.2.6.B FOR THE CORRECT CLIMATE ZONE.
- THE THERMAL CHARACTERISTICS OF WINDOWS, DOORS AND SKYLIGHTS MEET THE REQUIREMENTS OF TABLE 9.36.2.7.A, B, AND C FOR THE CORRECT CLIMATE ZONE.
- EFFECTIVE INSULATION OF FOUNDATIONS MEET THE REQUIREMENTS OF TABLE 9.36.2.8.A OR B FOR THE CORRECT CLIMATE ZONE.
- DUCTS LOCATED OUTSIDE THE THERMAL ENCLOSURE ARE SEALED AND INSULATED TO THE EXTERIOR WALL INSULATION REQUIREMENTS.
- DAMPERS ARE INSTALLED AT AIR INLETS AND EXHAUSTS WHERE REQUIRED.
- PIPING FOR HEATING OR COOLING SYSTEMS IS LOCATED WITHIN THE THERMAL ENCLOSURE OR ARE FULLY INSULATED.
- HVAC EQUIPMENT IS LOCATED WITHIN THERMAL ENCLOSURE OR DESIGNATED TO BE INSTALLED OUTSIDE OF THERMAL ENCLOSURE.
- TEMPERATURE CONTROLS ARE INSTALLED ON HEATING AND COOLING EQUIPMENT.
- INDOOR POOLS ARE COVERED OR HAVE AN HRV/ERH/MIDRIFER.
- HVAC AND SWH EQUIPMENT MEET MINIMUM PERFORMANCE REQUIREMENTS DETERMINED IN TABLES 9.36.3.10, AND 9.36.4.2.
- SERVICE WATER HEATING PIPES ARE INSULATED AT THE INLET AND OUTLET OF STORAGE TANKS.
- SERVICE WATER HEATERS HAVE TEMPERATURE CONTROLS.
- THE AIR BARRIER DETAILS, AND LOCATIONS HAVE BEEN IDENTIFIED.

TEMPERATURE CONTROLS AS PER SECTION 9.36.3.6

TEMPERATURE CONTROLS ARE GENERALLY REQUIRED FOR HEATING AND COOLING EQUIPMENT, THE ACCURACY OF THE CONTROL MUST BE BETTER THAN PLUS OR MINUS 0.5 DEGREES CELSIUS



(CLIMATE ZONE 4 & 5 ENERGY EFFICIENCY CEILINGS BELOW CATHEDRAL & FLAT ROOFS DETAIL SCALE 1/2"=1'-0" AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR)

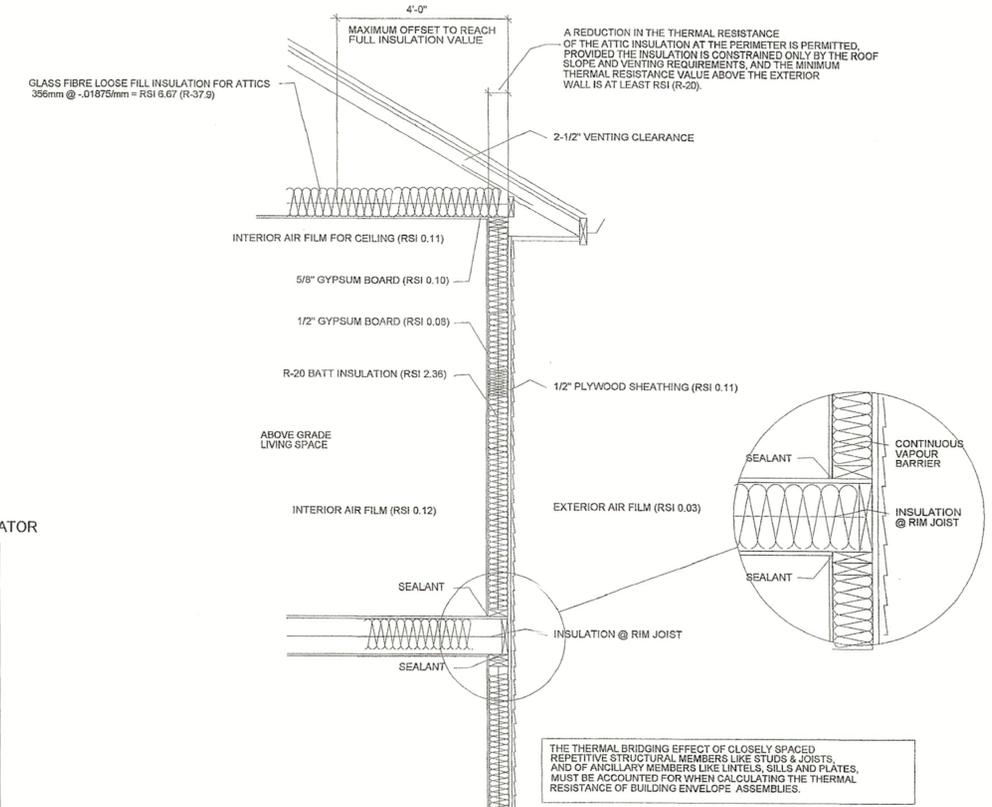
## CEILINGS BELOW CATHEDRAL & FLAT ROOFS AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR

DESCRIPTION	NOMINAL	EFFECTIVE
R-28 BATT INSULATION IN 2x12 WOOD FRAMING @ 24" O.C.	RSI 4.93 (R-28)	RSI 4.47 (R-25.4)
OTHER BUILDING ENCLOSURE LAYERS THAT CONTRIBUTE TO EFFECTIVE INSULATION:		
1. EXTERIOR AIR FILM	0.03	RSI 0.24 (R-1.36)
2. POLYETHYLENE	0.10	
6. 5/8" GYPSUM CEILING BOARD	0.10	
4. INTERIOR AIR FILM	0.11	
TOTAL EFFECTIVE INSULATION VALUE		RSI 4.71 (R-26.76)
MINIMUM EFFECTIVE THERMAL RESISTANCE FOR CEILINGS BELOW CATHEDRAL & FLAT ROOFS		RSI 4.67 (R-26.5)

# CLIMATE ZONE 4

CEILING BELOW ATTICS  
AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR

DESCRIPTION	NOMINAL	EFFECTIVE
406mm (16") GLASS FIBRE LOOSE FILL INSULATION FOR ATTICS 2x4 BOTTOM CHORD @ 24" O.C.	RSI 7.61 (R-43.2)	RSI 7.42 (R-42.13)
OTHER BUILDING ENCLOSURE LAYERS THAT CONTRIBUTE TO EFFECTIVE INSULATION:		
1. EXTERIOR AIR FILM	0.03	RSI 0.24 (R-1.36)
2. POLYETHYLENE	-	
3. 5/8" GYPSUM CEILING BOARD	0.10	
4. INTERIOR AIR FILM	0.11	
TOTAL EFFECTIVE INSULATION VALUE		RSI 7.66 (R-43.49)
MINIMUM EFFECTIVE THERMAL RESISTANCE FOR CEILING BELOW ATTICS		RSI 6.91 (R-39.2)



ABOVE GRADE WALL ASSEMBLY  
(WOOD SIDING)  
AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR

DESCRIPTION	NOMINAL	EFFECTIVE
R-20 BATT INSULATION IN 2x6 WOOD FRAMING @ 16" O.C.	RSI 3.34 (R-19)	RSI 2.36 (R-13.4)
OTHER BUILDING ENCLOSURE LAYERS THAT CONTRIBUTE TO EFFECTIVE INSULATION:		
1. EXTERIOR AIR FILM	0.03	RSI 0.64 (R-3.63)
2. WOOD SIDING BEVEL 200mm	0.14	
3. 1/2" AIR SPACE FOR RAIN SCREEN	0.16	
4. SHEATHING MEMBRANE	-	
5. 1/2" PLYWOOD SHEATHING	0.109	
6. POLYETHYLENE	0.08	
7. 1/2" GYPSUM WALL BOARD	0.12	
8. INTERIOR AIR FILM	-	
TOTAL EFFECTIVE INSULATION VALUE		RSI 3.00 (R-17.03)
MINIMUM EFFECTIVE THERMAL RESISTANCE FOR ABOVE GRADE WALLS		RSI 2.78 (R-15.8)

ABOVE GRADE WALL ASSEMBLY  
(STUCCO SIDING)  
AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR

DESCRIPTION	NOMINAL	EFFECTIVE
R-20 BATT INSULATION IN 2x6 WOOD FRAMING @ 16" O.C.	RSI 3.34 (R-19)	RSI 2.36 (R-13.4)
OTHER BUILDING ENCLOSURE LAYERS THAT CONTRIBUTE TO EFFECTIVE INSULATION:		
1. EXTERIOR AIR FILM	0.03	RSI 0.50 (R-2.84)
2. STUCCO	0.16	
3. 1/2" AIR SPACE FOR RAIN SCREEN	-	
4. SHEATHING MEMBRANE	-	
5. 1/2" PLYWOOD SHEATHING	0.109	
6. POLYETHYLENE	0.08	
7. 1/2" GYPSUM WALL BOARD	0.08	
8. INTERIOR AIR FILM	0.12	
TOTAL EFFECTIVE INSULATION VALUE		RSI 2.86 (R-16.24)
MINIMUM EFFECTIVE THERMAL RESISTANCE FOR ABOVE GRADE WALLS		RSI 2.78 (R-15.8)

ABOVE GRADE WALL ASSEMBLY  
(6.35mm FIBRE-CEMENT BOARD SIDING)  
AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR

DESCRIPTION	NOMINAL	EFFECTIVE
R-20 BATT INSULATION IN 2x6 WOOD FRAMING @ 16" O.C.	RSI 3.34 (R-19)	RSI 2.36 (R-13.4)
OTHER BUILDING ENCLOSURE LAYERS THAT CONTRIBUTE TO EFFECTIVE INSULATION:		
1. EXTERIOR AIR FILM	0.03	RSI 0.523 (R-2.97)
2. 6.35mm FIBRE-CEMENT BOARD SIDING	0.023	
3. 1/2" AIR SPACE FOR RAIN SCREEN	0.16	
4. SHEATHING MEMBRANE	-	
5. 1/2" PLYWOOD SHEATHING	0.109	
6. POLYETHYLENE	0.08	
7. 1/2" GYPSUM WALL BOARD	0.08	
8. INTERIOR AIR FILM	0.12	
TOTAL EFFECTIVE INSULATION VALUE		RSI 2.883 (R-16.37)
MINIMUM EFFECTIVE THERMAL RESISTANCE FOR ABOVE GRADE WALLS		RSI 2.78 (R-15.8)

BELOW GRADE HEATED FLOOR  
AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR

DESCRIPTION	NOMINAL	EFFECTIVE
3.5" POURED IN-PLACE CONCRETE SLAB	RSI 2.169 (R-12.3)	RSI 2.169 (R-12.3)
2.5" EXTRUDED POLYSTYRENE INSULATION	-	-
OTHER BUILDING ENCLOSURE LAYERS THAT CONTRIBUTE TO EFFECTIVE INSULATION:		
1. INTERIOR AIR FILM	0.16	RSI 0.16 (R-0.90)
2. 3.5" CONCRETE SLAB	-	
TOTAL EFFECTIVE INSULATION VALUE		RSI 2.329 (R-13.2)
MINIMUM EFFECTIVE THERMAL RESISTANCE FOR BELOW GRADE HEATED FLOORS		RSI 2.32 (R-13.2)

BELOW GRADE WALL ASSEMBLY  
AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR

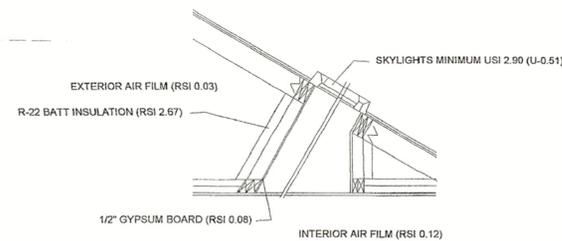
DESCRIPTION	NOMINAL	EFFECTIVE
8" POURED IN-PLACE CONCRETE WALL	RSI 2.46 (R-14)	RSI 1.91 (R-10.85)
R-14 BATT INSULATION IN 2x4 WOOD FRAMING @ 24" O.C.	-	-
OTHER BUILDING ENCLOSURE LAYERS THAT CONTRIBUTE TO EFFECTIVE INSULATION:		
1. DAMPPROOFING	0.21	RSI 0.57 (R-3.23)
2. 1" AIR SPACE	0.16	
3. POLYETHYLENE	-	
4. 1/2" GYPSUM WALL BOARD	0.08	
5. INTERIOR AIR FILM	0.12	
TOTAL EFFECTIVE INSULATION VALUE		RSI 2.48 (R-14.08)
MINIMUM EFFECTIVE THERMAL RESISTANCE FOR BELOW GRADE WALLS		RSI 1.99 (R-11.3)

ABOVE GRADE WALL ASSEMBLY  
(HOLLOW BACKED VINYL SIDING)  
AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR

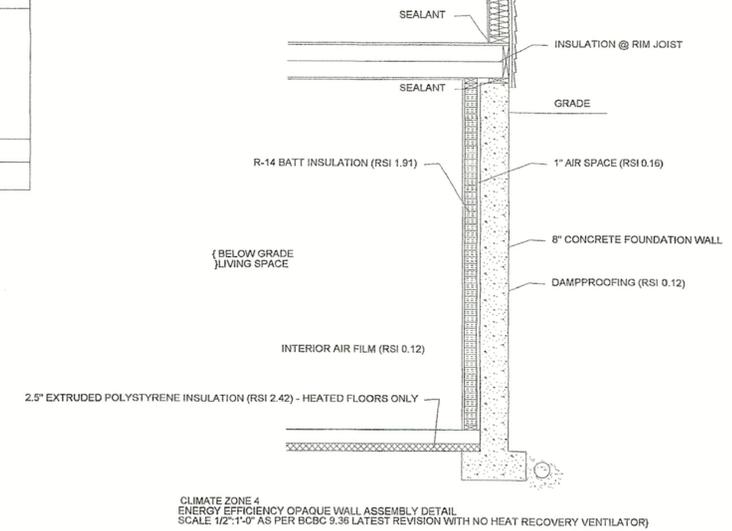
DESCRIPTION	NOMINAL	EFFECTIVE
R-20 BATT INSULATION IN 2x6 WOOD FRAMING @ 16" O.C.	RSI 3.34 (R-19)	RSI 2.36 (R-13.4)
OTHER BUILDING ENCLOSURE LAYERS THAT CONTRIBUTE TO EFFECTIVE INSULATION:		
1. EXTERIOR AIR FILM	0.03	RSI 0.45 (R-2.81)
2. VINYL CLADDING HOLLOW BACKED	0.11	
3. SHEATHING MEMBRANE	-	
4. 1/2" PLYWOOD SHEATHING	0.109	
5. POLYETHYLENE	0.08	
6. 1/2" GYPSUM WALL BOARD	0.08	
7. INTERIOR AIR FILM	0.12	
8. INTERIOR AIR FILM	-	
TOTAL EFFECTIVE INSULATION VALUE		RSI 2.81 (R-15.95)
MINIMUM EFFECTIVE THERMAL RESISTANCE FOR ABOVE GRADE WALLS		RSI 2.78 (R-15.8)

ABOVE GRADE WALL ASSEMBLY  
(SKYLIGHT SHAFT WALLS)  
AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR

DESCRIPTION	NOMINAL	EFFECTIVE
R-22 BATT INSULATION IN 2x6 WOOD FRAMING @ 24" O.C.	RSI 3.87 (R-22)	RSI 2.67 (R-15.1)
OTHER BUILDING ENCLOSURE LAYERS THAT CONTRIBUTE TO EFFECTIVE INSULATION:		
1. EXTERIOR AIR FILM	0.03	RSI 0.23 (R-1.30)
6. POLYETHYLENE	0.08	
7. 1/2" GYPSUM WALL BOARD	0.12	
8. INTERIOR AIR FILM	-	
TOTAL EFFECTIVE INSULATION VALUE		RSI 2.90 (R-16.4)
MINIMUM EFFECTIVE THERMAL RESISTANCE FOR ABOVE GRADE WALLS (SKYLIGHT SHAFT)		RSI 2.78 (R-15.8)



CLIMATE ZONE 4 ENERGY EFFICIENCY SKYLIGHT SHAFT WALL ASSEMBLY DETAIL  
SCALE 1/2"=1'-0" AS PER BCBC 9.36 LATEST REVISION WITH NO HEAT RECOVERY VENTILATOR



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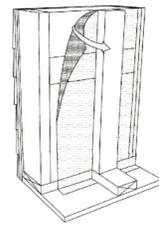
MAR 28 2014

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

021501

PLANS BY DESIGN  
B.L.# 139618

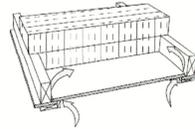
PROJECT : THERMAL DETAILS



**INT. WALL INTERFACE**

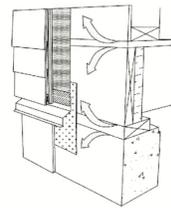
INT. WALLS THAT MEET EXT. WALLS OR CEILINGS WITH AN INTERIOR FINISH OF AIRTIGHTNESS MUST BE MADE AIRTIGHT BY EITHER SEALING ALL JOINTS BETWEEN THE STRUCTURAL COMPONENTS COVERING THE STRUCTURAL COMPONENTS WITH AN AIR BARRIER MATERIAL AND SEALING IT TO THE ADJACENT AIR BARRIER MATERIAL OR MAINTAINING THE CONTINUITY OF THE AIR BARRIER SYSTEM THROUGH THE INT. WALL.

NOTE: ALL ELECTRICAL PENETRATIONS IN WALLS INCLUDING ELECTRICAL OUTLETS, SWITCHES AND RECESSED LIGHT FIXTURES THROUGH THE PLANE OF AIRTIGHTNESS MUST BE AIRTIGHT.



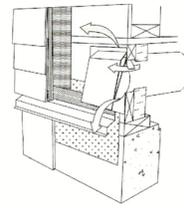
**ATTIC HATCH**

AIR LEAKAGE OCCURS THROUGH THE JOINT BETWEEN THE HATCH AND CEILING. AIR SEALING CAN BE ACHIEVED BY ENSURING THE HATCH IS SIZED PROPERLY SO THAT IT HAS ENOUGH CONTACT WITH THE OPENING LEDGE AND PROVIDING A CLOSED CELL FOAM GASKET.



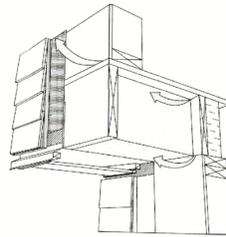
**FOUNDATION TO SILL PLATE AND RIM JOISTS**

ALL JOINTS AT THE TRANSITION BETWEEN THE FOUNDATION WALL AND THE ABOVE GRADE WALL MUST BE MADE AIRTIGHT BY SEALING ALL JOINTS AND JOCTIONS BETWEEN THE STRUCTURAL COMPONENTS OR COVERING THE STRUCTURAL COMPONENTS WITH AN AIR BARRIER MATERIAL.



**WALL VENTED DUCTS**

DUCT PENETRATIONS THROUGH THE BUILDING ENVELOPE MUST HAVE AN AIRTIGHT SEAL.



**CANTILEVERED FLOOR**

CANTILEVERED FLOORS AND FLOORS OVER UNHEATED SPACES EXT. GRADE MUST BE MADE AIRTIGHT BY SEALING ALL JOINTS AND JOCTIONS BETWEEN THE STRUCTURAL COMPONENTS AND/OR COVERING THE STRUCTURAL COMPONENTS WITH AN AIR BARRIER MATERIAL AND SEALING IT TO THE ADJACENT AIR BARRIER MATERIAL.

**AIRTIGHTNESS - 9.36.2.9**

A CONTINUOUS AIR BARRIER IS REQUIRED. ARTICLE 9.36.2.9 REQUIRES THAT THE AIR BARRIER BE CONTINUOUS:  
 - ACROSS JOINTS  
 - BETWEEN ASSEMBLIES  
 - AROUND PENETRATIONS  
 FURTHER REQUIREMENTS FOR AIR BARRIERS ARE DETAILED IN SUBSECTION 9.3.3 OF THE BRITISH COLUMBIA BUILDING CODE.

**In Accordance with B.C.B.C. 2012 - 9.36 Energy Efficiency (Climate Zone 4)**

General Information			
Compliance Path	<input type="checkbox"/> Prescriptive	<input checked="" type="checkbox"/> Prescriptive with trade-offs	<input type="checkbox"/> Performance
Ventilation design (active or passive, airflows, HRV, crawlspace ventilation scheme, etc.)			
Heating Type	<input type="checkbox"/> Forced Air	<input checked="" type="checkbox"/> Hydronic	<input type="checkbox"/> Electric

Construction and effective RSI value for all envelope assemblies With or Without a Heat-Recovery Ventilator		
Above Ground Opaque Building Assemblies	Required Effective Insulation RSI (R) value	Actual Effective Insulation RSI (R) value
Ceilings below attics	6.91 (R-39.23)	6.91 (R-39.21)
Cathedral ceiling & Flat Roofs	4.67 (R-26.52)	4.71 (R-26.76)
Walls	2.78 (R-15.78)	2.86 (R-16.24)
Foundation Walls	1.99 (R-11.30)	N/A
Floors over unheated spaces	4.67 (R-26.52)	4.83 (R-27.4) MINIMUM
Below-grade or in Contact with the Ground Building Assemblies		RSI (R) value
Below frost line	Uninsulated	N/A
Above frost line	1.96 (R-11.13)	N/A
Heated Floors	2.32 (R-13.17)	N/A
Slabs-on-grade with an integral footing	1.96 (R-11.13)	2.8 (R-15.89)
fenestration & Doors		U value
U-Values shall be in accordance with the values specified in B.C.B.C. Table 9.36.2.7.A.		
Door to Garage	1.1 (R-6.25)	
Access Hatch	2.6 (R-14.8)	
Front Door	2.6 (U-0.46)	
Glass Block	2.9 (U-0.51)	
Skylights	2.78 (R-15.78)	RSI 2.90 (R-16.4)
Garage Door (in conditioned setting)	1.1 (R-6.245)	

**WALLS**

**ABOVE GRADE WALL ASSEMBLY**

COMPONENT DESCRIPTION	NOMINAL	EFFECTIVE
R-20 BATT INSULATION IN 2x4 WOOD FRAMING @ 16" O.C.	RSI 3.34 (R-19)	RSI 2.36 (R-13.4)
EXTERIOR AIR FILM	0.03	
1/2" AIR BARRIER (RAINSCREEN) 1/2" (12.1 MM) PLYWOOD SHEATHING POLYETHYLENE	0.16	
1/2" (12.1 MM) GYPSUM BOARD	0.08	
INTERIOR AIR FILM	0.03	
AGGREGATE EFFECTIVE INSULATION VALUE		RSI 2.66 (R-16.24)
MINIMUM EFFECTIVE INSULATION RESISTANCE		RSI 2.78 (R-15.8)

**CEILING**

**CEILING ASSEMBLY (BELOW ATTICS)**

COMPONENT DESCRIPTION	NOMINAL	EFFECTIVE
1/4" (3.6 MM) GLASS-FIBRE LOOSE FILL INSULATION FOR ATTICS @ 2x4 BOTTLE CHORD @ 24" O.C.	RSI 1.04 (R-19)	RSI 6.61 (R-37.8)
EXTERIOR AIR FILM	0.03	
POLYETHYLENE	0.10	
5/8" (15.8 MM) GYPSUM BOARD	0.01	
INTERIOR AIR FILM	0.03	
AGGREGATE EFFECTIVE INSULATION VALUE		RSI 6.91 (R-39.2)
MINIMUM EFFECTIVE INSULATION RESISTANCE		RSI 6.91 (R-39.2)

**CEILING ASSEMBLY (CATHEDRAL & FLAT ROOF)**

COMPONENT DESCRIPTION	NOMINAL	EFFECTIVE
R-20 BATT INSULATION IN 2x2 WOOD RAFTERS OR PARALLEL TRUSSES @ 24" O.C.	RSI 4.93 (R-28)	RSI 4.41 (R-25.4)
EXTERIOR AIR FILM	0.03	
POLYETHYLENE	0.10	
5/8" (15.8 MM) GYPSUM BOARD	0.01	
INTERIOR AIR FILM	0.03	
AGGREGATE EFFECTIVE INSULATION VALUE		RSI 4.71 (R-26.76)
MINIMUM EFFECTIVE INSULATION RESISTANCE		RSI 4.67 (R-26.5)

**FLOORS**

**FLOORS OVER UNHEATED SPACES**

FINISH FLOORING: HARDWOOD

COMPONENT DESCRIPTION	NOMINAL	EFFECTIVE
R-20 BATT INSULATION IN WOOD JOISTS @ 16" O.C.	RSI 4.93 (R-28)	RSI 4.14 (R-23.5)
INTERIOR AIR FILM	0.03	
FINISH FLOORING	0.02	
5/8" (15.8 MM) PLYWOOD SUBFLOOR	0.14	
3/4" AIR BARRIER	0.08	
POLYETHYLENE	0.01	
5/8" (15.8 MM) GYPSUM BOARD	0.08	
EXTERIOR AIR FILM	0.03	
AGGREGATE EFFECTIVE INSULATION VALUE		RSI 4.83 (R-27.4)
MINIMUM EFFECTIVE INSULATION RESISTANCE		RSI 4.67 (R-26.5)

**FLOORS OVER UNHEATED SPACES**

FINISH FLOORING: CARPET w/ UNDERLAY

COMPONENT DESCRIPTION	NOMINAL	EFFECTIVE
R-20 BATT INSULATION IN WOOD JOISTS @ 16" O.C.	RSI 4.93 (R-28)	RSI 4.14 (R-23.5)
INTERIOR AIR FILM	0.03	
FINISH FLOORING	0.02	
5/8" (15.8 MM) PLYWOOD SUBFLOOR	0.14	
3/4" AIR BARRIER	0.08	
POLYETHYLENE	0.01	
5/8" (15.8 MM) GYPSUM BOARD	0.08	
EXTERIOR AIR FILM	0.03	
AGGREGATE EFFECTIVE INSULATION VALUE		RSI 4.93 (R-28.0)
MINIMUM EFFECTIVE INSULATION RESISTANCE		RSI 4.67 (R-26.5)

**FLOORS OVER UNHEATED SPACES**

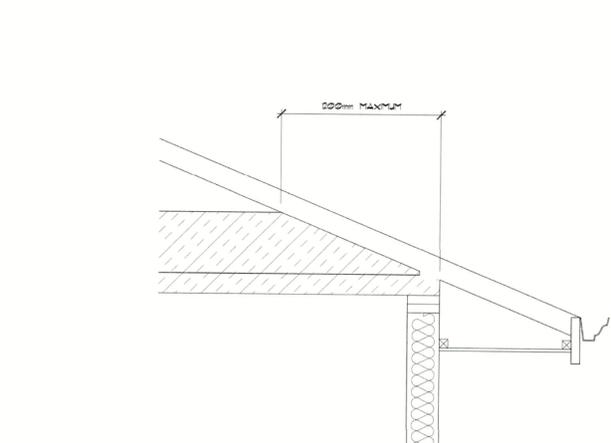
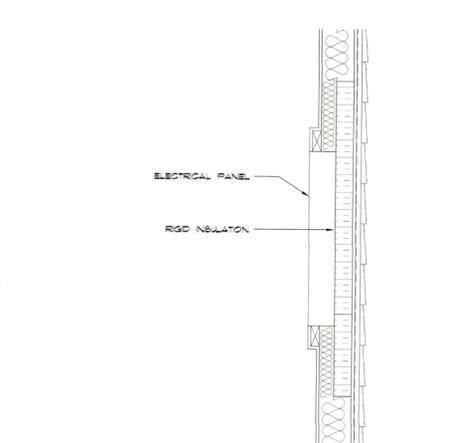
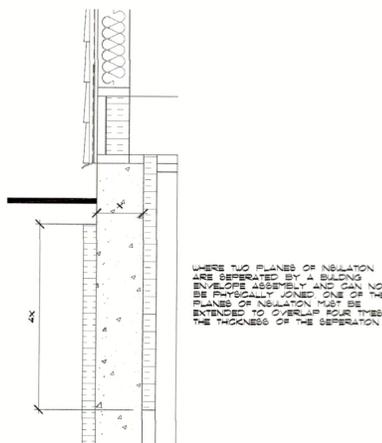
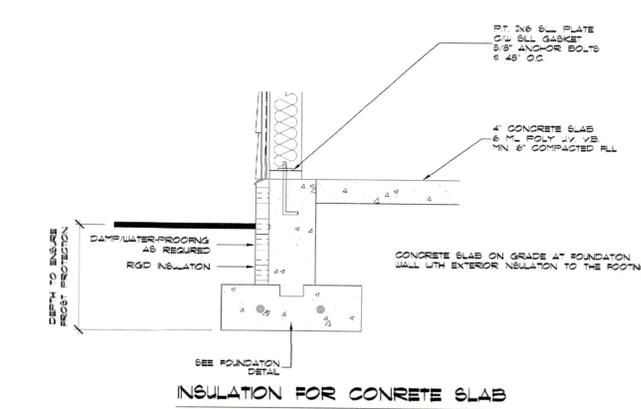
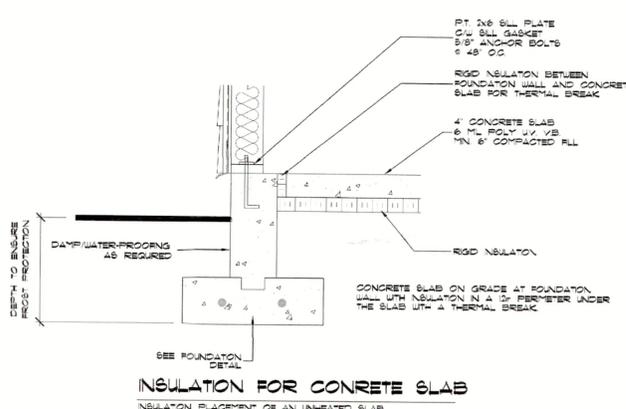
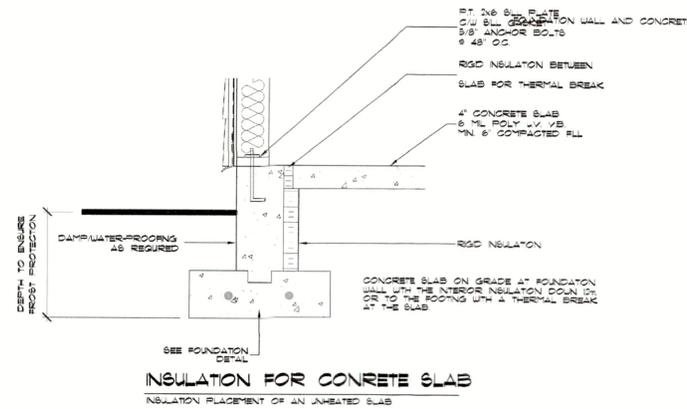
FINISH FLOORING: CERAMIC TILE

COMPONENT DESCRIPTION	NOMINAL	EFFECTIVE
R-20 BATT INSULATION IN WOOD JOISTS @ 16" O.C.	RSI 4.93 (R-28)	RSI 4.14 (R-23.5)
INTERIOR AIR FILM	0.03	
FINISH FLOORING	0.005	
5/8" (15.8 MM) PLYWOOD SUBFLOOR	0.14	
3/4" AIR BARRIER	0.08	
POLYETHYLENE	0.01	
5/8" (15.8 MM) GYPSUM BOARD	0.08	
EXTERIOR AIR FILM	0.03	
AGGREGATE EFFECTIVE INSULATION VALUE		RSI 4.71 (R-27.05)
MINIMUM EFFECTIVE INSULATION RESISTANCE		RSI 4.67 (R-26.5)

**SLABS ON GRADE**

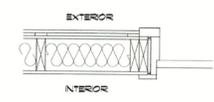
FINISH FLOORING: HARDWOOD

COMPONENT DESCRIPTION	NOMINAL	EFFECTIVE
3 1/2" FOURS-IN-PLACE CONCRETE SLAB ON 1/2" EPS INSULATION	RSI 2.36 (R-13.4)	RSI 2.42 (R-13.74)
INTERIOR AIR FILM	0.03	
FINISH FLOORING	0.02	
5/8" (15.8 MM) PLYWOOD SUBFLOOR	0.14	
AGGREGATE EFFECTIVE INSULATION VALUE		RSI 2.8 (R-15.89)
MINIMUM EFFECTIVE INSULATION RESISTANCE		RSI 1.96 (R-11.3)



**CONTINUITY OF INSULATION - 9.36.2.5**

THE CONTINUITY OF THE EFFECTIVENESS OF INSULATION IS REQUIRED REFER TO SECTION 9.36.2.5 OF THE BRITISH COLUMBIA BUILDING CODE FOR FURTHER REQUIREMENTS.

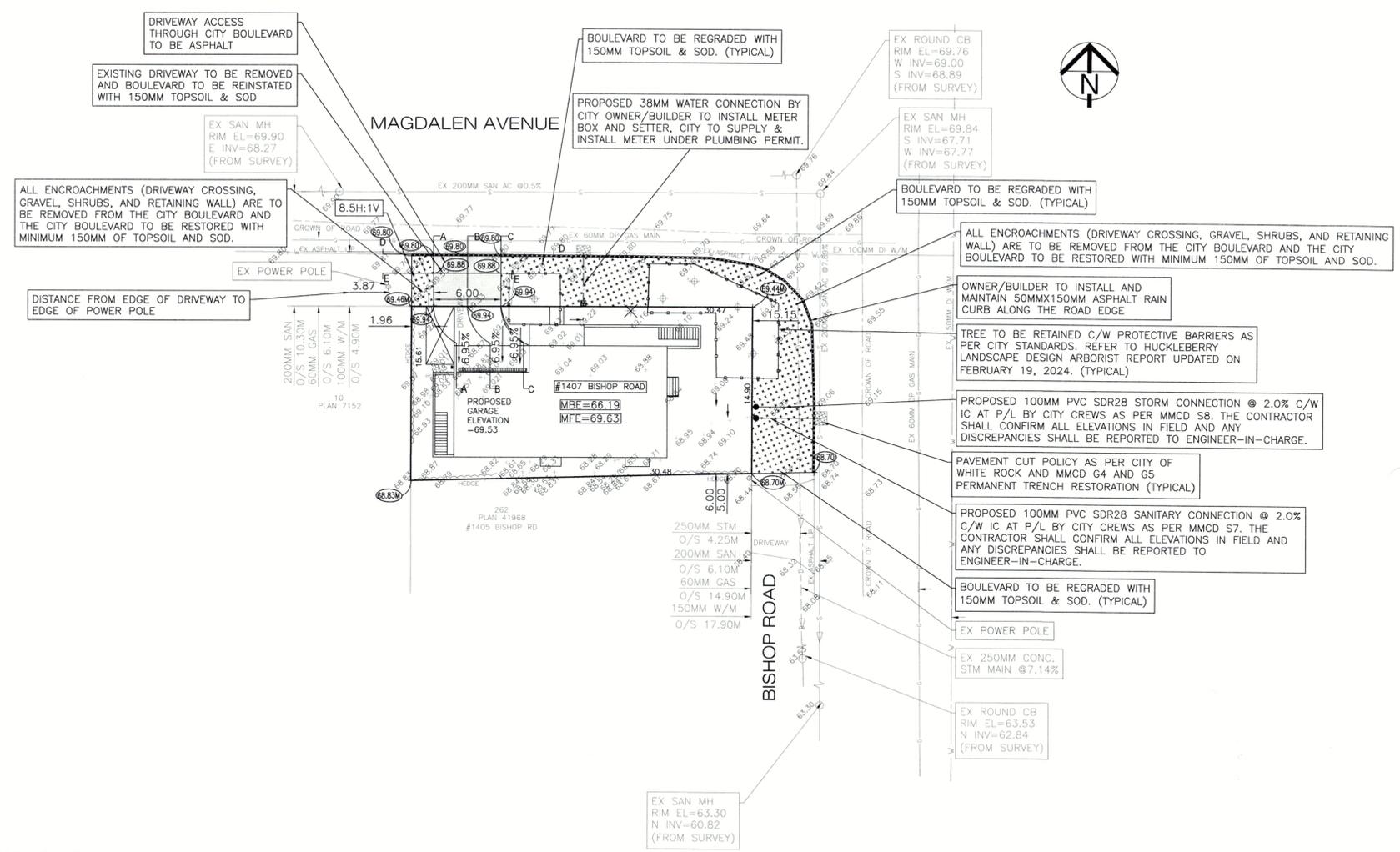


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PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

021501

**LEGEND**

EXISTING	PROPOSED	PROPERTY LINE
		GROUND ELEVATION (M. TO MEET EX EL.)
		CONTOUR
		EDGE OF PAVEMENT
		CURB & GUTTER
		SIDEWALK (ASPHALT)
		SIDEWALK (CONCRETE)
		ROAD SIGN BOARD
		SANITARY SEWER, MANHOLE & CONNECTION INSPECTION CHAMBER
		STORM SEWER, MANHOLE & CONNECTION INSPECTION CHAMBER
		CATCH BASIN-TOP & SIDE INLET
		LAWN BASIN(D) BY DEVELOPER
		LAWN BASIN(B) BY BUILDER
		SWALE (BY DEVELOPER)
		SWALE (BY BUILDER)
		DITCH
		DIRECTION OF SURFACE DRAINAGE
		BLOW OFF
		WATER VALVE
		WATERMAIN & CONNECTION SERVICE
		HYDRANT
		STREET LIGHT U/G DUCT
		ORNAMENTAL STREET LIGHT-DAVIT
		UTILITY POST
		TREES
		TREES TO REMAIN WITH TREE PROTECTION FENCE
		TREE TO REMOVE
		SERVICES UNDER GROUND
		MILL AND OVERLAY MIN. 35MM ASPHALT
		GAS MAIN
		TREE PROTECTION FENCE
		CONCRETE SURFACE
		PROPOSED 150MM TOPSOIL AND SOD
		SERVICES UNDER GROUND
		WITH PUMPED STORM & SANITARY CONN.
		UNDER GRAVITY STORM & SANITARY CONN.



- GENERAL NOTES :**
- FOR THE PURPOSE OF CONSTRUCTION AND ACCOUNTABILITY THE DEVELOPER MUST ADVISE THE WHITE ROCK CITY INSPECTOR, IN WRITING, WHICH OF THE CITY NOTES IS GOING TO BE THE RESPONSIBILITY OF THE DEVELOPER'S CONTRACTOR.
  - CONSTRUCTION TO BE IN ACCORDANCE WITH THE CITY OF WHITE ROCK AND THE APPLICABLE MUNICIPAL MASTER SPECIFICATIONS AND STANDARD DETAIL DRAWINGS, CITY OF WHITE ROCK STANDARD CONSTRUCTION DOCUMENTS, SUPPLEMENTARY SPECIFICATIONS & STANDARD DRAWINGS AND CITY DESIGN CRITERIA & EPCOR WHITE ROCK STANDARDS, WHERE APPLICABLE.
  - THE DEVELOPER SHALL BE RESPONSIBLE FOR OBTAINING ALL CITY PERMITS FOR WORKS WITHIN THE CITY ROAD ALLOWANCE.
  - WHERE UTILITY OR SERVICE CROSSINGS ARE REQUIRED ACROSS EXISTING PAVEMENTS, AN UNDERGROUND METHOD OF INSTALLATION IS REQUIRED UNLESS SPECIAL APPROVAL IS GIVEN FROM THE CITY FOR AN OPEN CUT OPERATION. ALL EXISTING PAVEMENTS, BOULEVARDS, DRIVEWAYS, ETC., ARE TO BE REINSTATED TO ORIGINAL OR BETTER CONDITION AND IN ACCORDANCE WITH CITY SPECIFICATIONS AND THE PAVEMENT CUT POLICY.
  - WHITE ROCK'S MONUMENT(S) ARE TO BE PROTECTED AND SHOULD THEY REQUIRE RAISING OR RELOCATING, THE DEVELOPER WILL NOTIFY WHITE ROCK'S SURVEY DEPARTMENT AT LEAST THREE WORKING DAYS IN ADVANCE OF SCHEDULING WORK AFFECTING THEM. DEVELOPER TO PAY CASH IN LIEU FOR DESTROYED/DAMAGED MONUMENT.
  - ALL STREET, TRAFFIC AND ADVISORY SIGNS, PAVEMENT MARKINGS AND NO-POST GUARD RAILS REQUIRED BUT NOT NECESSARILY SHOWN ON THE DRAWINGS, SHALL BE INSTALLED BY THE CITY AT THE DEVELOPER'S COST.
  - WHERE INFILLING OF EXISTING DITCHES, ETC. IS REQUIRED OR WHERE SERVICES ARE CONSTRUCTED IN A FILL SECTION, FILL MATERIAL IS TO BE IN ACCORDANCE WITH CITY OF WHITE ROCK SPECIFICATIONS FIG. 3.3.J AND IS TO BE COMPACTED TO 95% OF MODIFIED PROCTOR DENSITY.
  - DRIVEWAY BOULEVARD CROSSINGS TO EACH OF THE PROPOSED LOTS ARE TO BE INSTALLED BY THE DEVELOPER IN ACCORDANCE WITH CITY STANDARD DRAWINGS.
  - RESIDENTS DIRECTLY AFFECTED BY CONSTRUCTION OF THIS PROJECT MUST BE GIVEN 72 HOURS WRITTEN NOTICE OF THE PROPOSED START OF CONSTRUCTION. THE DEVELOPER WILL REQUIRE WRITTEN AUTHORIZATION FROM A PRIVATE PROPERTY OWNER, WITH A COPY TO THE CITY, PRIOR TO ANY ENTRY ONTO PRIVATE PROPERTY AND A WRITTEN RELEASE, FROM THE PROPERTY OWNER, WHEN COMPLETED.
  - WHEN NATIVE SITE GRANULAR BACKFILL IS PROPOSED FOR USE IN TRENCHES THE DEVELOPER SHALL EMPLOY A PROFESSIONAL ENGINEER WITH EXPERIENCE IN GEOTECHNICAL ENGINEERING FOR PERFORMANCE OF IN PLACE DENSITY AND SIEVE TESTING. SELECTION OF THE PROFESSIONAL ENGINEER AND USE OF THE THE SITE MATERIAL MUST FALL WITHIN ONE OF THE GRANULAR BACKFILL MATERIAL SPECIFICATIONS. RIVER SAND IS NOT ACCEPTABLE AS TRENCH BACKFILL MATERIAL.
  - DEVELOPER IS TO VERIFY THE LOCATION AND ELEVATION OF ALL PIPES, OR OTHER UTILITY CROSSINGS, PRIOR TO CONSTRUCTION AND SHALL NOTIFY THE ENGINEER OF RECORD OF ANY CONFLICTS BEFORE START OF CONSTRUCTION.
  - PRE-CONSTRUCTION MEETING REQUIRED & ROW USE PERMIT REQUIRED BY PRIME CONTRACTOR.
  - CONTRACTOR TO ENSURE THAT RIM ELEVATION OF ALL RELOCATED AND NEW INSPECTION CHAMBERS ARE ADJUSTED.
  - CONTRACTOR TO HIRE HIS/HER OWN SURVEYOR FOR LAYOUT OF ROAD WORKS AND SERVICES AND VERIFY EXISTING SERVICES WITH RESPECT TO PROPOSED WORK. CONTRACTOR TO ENSURE THAT EXISTING SERVICES AND PROPOSED WORK DO NOT INTERFERE AND THE EXISTING SERVICES ARE NOT DAMAGED DURING THE CONSTRUCTION. ANY DAMAGE TO EXISTING SERVICES DURING THE CONSTRUCTION WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
  - CONTRACTOR TO HAVE HIS/HER OWN ENGINEER TO VERIFY MATERIALS TESTING DURING CONSTRUCTION. REPORTS TO BE SUBMITTED FOR ALL TESTING, FIELD INSPECTION REPORTS ARE ALSO A REQUIREMENT AND SHALL BE SUBMITTED WEEKLY.
  - WATER SERVICE LINES ON CITY RIGHT OF WAY, WATER METERS & FINAL CONNECTIONS TO ONSITE WATER SERVICES WILL BE INSTALLED BY CITY OF WHITE ROCK.
  - CONTRACTOR TO REFER TO STANDARD DETAIL DRAWINGS G4 AND G5 FOR UTILITY TRENCH AND PAVEMENT RESTORATION, RESPECTIVELY.
  - CB'S SHALL BE PRECAST ASTM C4748, CONFORM TO CITY OF WHITE ROCK STANDARDS AND CB DRAINAGE GRATE AND COVER SHALL TO CITY OF WHITE ROCK STD. DRAWING FIG. 3.3.4 CAST IRON FRAME AND GRATE CONFORM TO ASTM A48 AND TO BE SAFE FOR H2O LOADING.
  - ALL PIPES MATERIAL SHALL CONFORM TO CSA STANDARDS AND ALL JOINTS TO WATERTIGHT AND SHALL CONFORM TO CSA STANDARDS OR EQUALLY APPROVED BY CITY OF WHITE ROCK OFFICIAL.
  - CONCRETE SHALL HAVE 25 MPA MINIMUM COMPRESSIVE STRENGTH UNLESS OTHERWISE NOTED.
  - REGULAR CONSTRUCTION INSPECTION REPORTS TO BE SUBMITTED TO CITY'S INSPECTOR.

**M.B.E. NOTES:**  
 "MBE" IS THE MINIMUM BUILDING ELEVATION AND IS THE LOWEST LEVEL TO WHICH CRAWL SPACE SKIM COAT TOP OF THE BASEMENT SLAB ELEVATION/OR SLAB ON GRADE SHALL NOT BE LOWER THAN THE ELEVATION SHOWN. NOTWITHSTANDING THE MBE ELEVATION SHOWN, AND MBE SHALL ALSO BE A MINIMUM OF 3.0M ABOVE THE MINIMUM POTENTIAL SURCHARGE LEVEL FOR ANY SEPTIC DISPOSAL SYSTEM OR SANITARY SEWER CONNECTION, STORM WATER DISPOSAL DRAINS, MAJOR STORM WATER FLOW PATH AND/ OR STORM SEWER CONNECTION.



NOTE: CONTRACTOR TO INFORM ENGINEER OF RECORD IN CASE NEW CONNECTIONS INSTALLED INVERT ELEVATIONS ARE HIGHER THAN THE DESIGN INVERT ELEVATIONS

ALL EXISTING TREES ONSITE & OFFSITE TO BE RETAINED OR REMOVED AS PER ARBORIST REPORT TO BE APPROVED BY CITY OF WHITE ROCK

- BUILDER/OWNER TO CONFIRM THE LOCATION, INVERT/DEPTH OF THE EXISTING/PROPOSED STM/SAN SERVICE CONNECTIONS. BEFORE ANY CONSTRUCTION ACTIVITY AT SITE AND INFORM ENGINEER OF RECORD (MAINLAND ENGINEERING DESIGN CORP.) FOR ANY MISMATCH.
- WATER METER AND CHAMBER AT PROPERTY LINE TO BE INSTALLED BY BUILDER.
- CONTACT CITY ENGINEERING DEPARTMENT AT (604) 541-2181, TO ARRANGE CITY INSPECTOR, 72 HOURS PRIOR TO INSTALLATION OF SANITARY AND STORM SERVICES.
- INFORMATION SHOWN ON THIS DRAWING REGARDING EXISTING UTILITIES IS COMPILED FROM DIVERSE SOURCES AND MAY NOT BE COMPLETE OR ACCURATE. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXPOSE AND CONFIRM THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES, AND ADVISE THE ENGINEER OF ANY POTENTIAL CONFLICTS.

ADDRESS	STORM CONNECTION						PUMP REQUIRED	NOTE:-- CONTRACTOR TO EXCAVATE AND EXPOSE THE DEPTH OF THE STM/SAN MAIN PIPELINE. IF COVER IS LESS THAN 1.0M ON THE PIPE, THEN PROVIDE PROTECTIVE CONCRETE SLAB AS PER MMCD DWG G-7
	DISTANCE FROM UPSTREAM MANHOLE	UPSTREAM MH INVERT	SANITARY MAIN SIZE & SLOPE	TIE-IN INVERT ON EXISTING STORM MAIN	SERVICE LENGTH OF RUN FROM MAIN TO PROPERTY LINE	STM IC INV EL/DEPTH		
#1407 BISHOP ROAD	20.80	68.89	250MM @ 7.14%	67.40	4.25	67.74/1.47	YES	

ADDRESS	SANITARY CONNECTION						PUMP REQUIRED	NOTE:-- CONTRACTOR TO EXCAVATE AND EXPOSE THE DEPTH OF THE STM/SAN MAIN PIPELINE. IF COVER IS LESS THAN 1.0M ON THE PIPE, THEN PROVIDE PROTECTIVE CONCRETE SLAB AS PER MMCD DWG G-7
	DISTANCE FROM UPSTREAM MANHOLE	UPSTREAM MH INVERT	SANITARY MAIN SIZE & SLOPE	TIE-IN INVERT ON EXISTING SANITARY MAIN	SERVICE LENGTH OF RUN FROM MAIN TO PROPERTY LINE	SAN IC INV EL/DEPTH		
#1407 BISHOP ROAD	20.16	67.71	200MM @ 7.89%	66.12	6.10	66.80/2.36	YES	

- Engineering Comments:**
- Driveway access approved off of: *Magdalen Avenue*
  - Driveway access within the City Boulevard (road edge to property line) to slope up a minimum 2% from the road edge to property line.
  - Driveway from the property line to the garage slab to have a slope not exceeding 15%.
  - Backfill under the driveway with the City Boulevard must be structural fill (3" minus free draining granular material) compacted to 95% Modified Proctor Density.
  - Driveway access through the City Boulevard must be asphalt or brick pavers. Concrete is not permitted.
  - Driveway access through the City Boulevard (road edge to property line) cannot exceed 6.0m in width (minimum 4.5m).
  - The cost to remove, repair, or replace curb, gutter, sidewalk, or letdown works to be borne the owner/developer and performed by the City.
  - No structures such as retaining walls or "landscape rock" are permitted on the City Boulevard.
  - No private electrical or irrigation system is permitted on the City Boulevard.
  - The remaining City Boulevard must be restored with a minimum of 150mm of topsoil and sod or a landscaping ground cover approved by the City.

Any alterations/improvements to the City boulevard requires written approval from the Engineering and Municipal Operations Department  
 377 Keil Street 604-541-2181

NOTE: Cost to remove, repair or replace curb, gutter, sidewalk, or letdown works to be borne by the owner/developer and performed by the City of White Rock

**THE MBE & GARAGE ELEVATIONS ARE AS PER THE HOUSE PLANS PREPARED BY THE DESIGNER**

THE DRIPLINE CIRCLES ARE APPROXIMATE, CONTACT ARBORIST ON THE PROJECT FOR ANY CONSTRUCTION WORKS NEAR THE TREE PROTECTION ZONE. ANY TREE IN CONFLICT WITH THE SITE SERVICING/ON-SITE WORKS TO BE REVIEWED BY CITY OF WHITEROCK FOR REMOVAL/RETENTION OF THE TREE (TYPICAL)

THE CORPORATION OF THE CITY OF WHITE ROCK  
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 JUL 09 2024  
 Operations Department

BENCHMARK: ELEVATIONS ARE GEODETIC DERIVED FROM CITY OF WHITE ROCK CONTROL MONUMENT NO. 88H3896 ELEVATION=69.344M DATUM CVD28GVRD 2018 SURVEY BY: GREWAL & ASSOCIATES PROFESSIONAL LAND SURVEYORS UNIT 204, 15299-88TH AVENUE SURREY, B.C. V3S 2C1 TEL: 604-597-8567 EMAIL: OFFICE@GREWALSURVEYS.COM

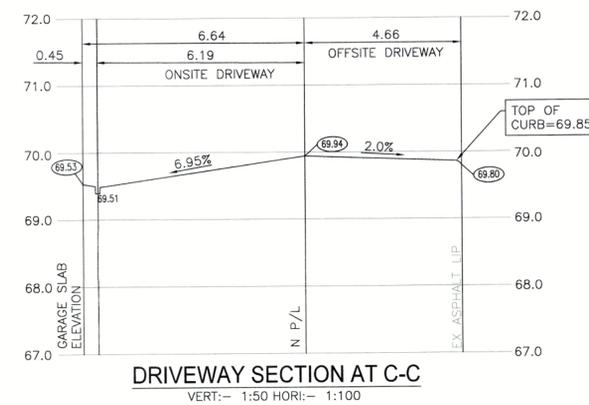
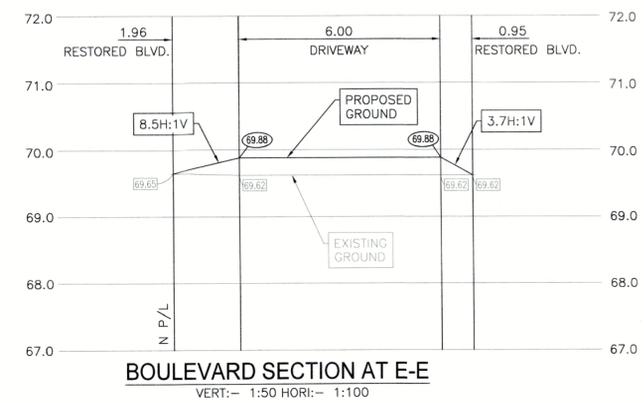
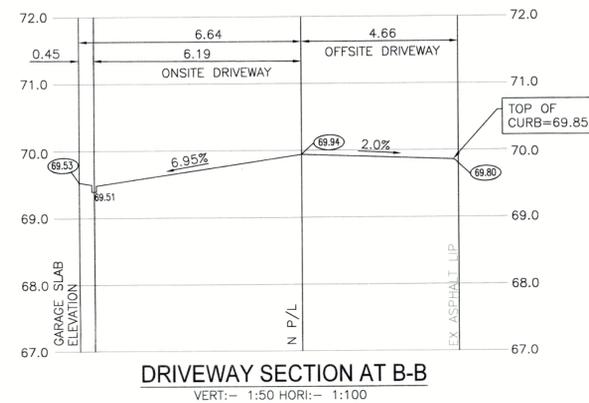
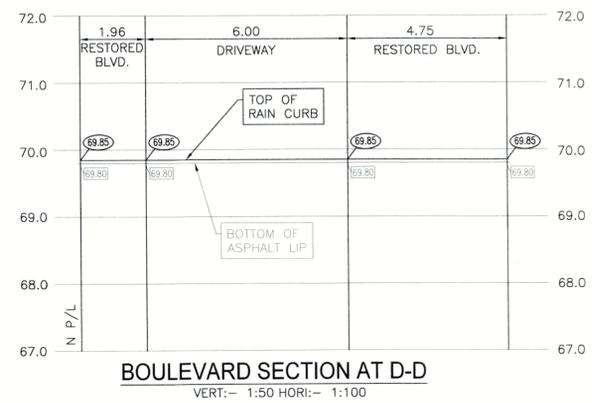
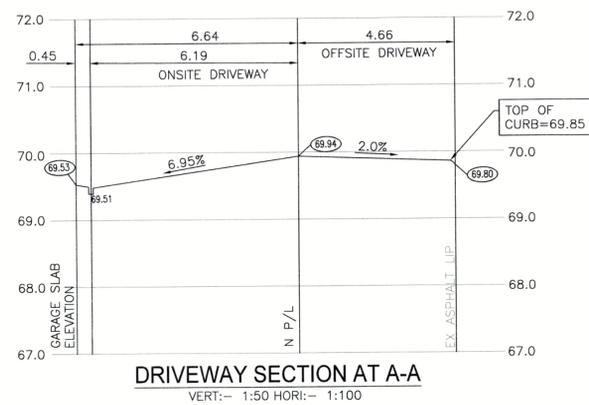
NO.	DATE	BY	REVISION
1	24/05/23	AS RM	REVISED AS PER CITY COMMENTS
0	24/02/23	AS RM	ISSUED FOR APPROVAL
NO.	YY/MM/DD	DRN	CH. REVISION

**MAINLAND ENGINEERING DESIGN CORPORATION**  
 UNIT 206 8363 128TH STREET SURREY, B.C. V3W 4G1  
 TEL: (604) 543 8044 FAX: (604) 543 8104  
 EMAIL: civil@mainlandeng.com

DEVELOPMENT/SITE LOCATION: #1407 BISHOP ROAD WHITE ROCK, B.C.  
 DWG. NAME: **SITE SERVICING / GRADING PLAN**

SCALE: 1:250  
 DESIGNED: RM  
 DRAWN: AS  
 CHECKED: RM  
 APPROVED: AB

WHITEROCK PROJECT NO.	DRAWING NO.
WHITEROCK DRAWING NO.	1
MAINLAND PROJECT NO. G-2406	OF 2
DATE 2024/05/23	REV. 1



**WHITE ROCK**  
*City by the Sea!*

INFORMATION SHOWN ON THIS DRAWING REGARDING EXISTING UTILITIES IS COMPILED FROM DIVERSE SOURCES AND MAY NOT BE COMPLETE OR ACCURATE. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXPOSE AND CONFIRM THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES, AND ADVISE THE ENGINEER OF ANY POTENTIAL CONFLICTS.

BENCHMARK: ELEVATIONS ARE GEODETIC DERIVED FROM CITY OF WHITE ROCK CONTROL MONUMENT NO. 88H3896 ELEVATION=69.344M DATUM CVD28GVRD 2018 SURVEY BY: GREWAL & ASSOCIATES PROFESSIONAL LAND SURVEYORS UNIT 204, 15299-68TH AVENUE SURREY, B.C. V3S 2C1 TEL: 604-597-8567 EMAIL: OFFICE@GREWALSURVEYS.COM

LEGAL DESCRIPTION:				
LOT 261 SECTION 9 TOWNSHIP 1 NWD PLAN 41968				
NO.	DATE	BY	REVISION	
1	24/05/23	AS RM	REVISED AS PER CITY COMMENTS	
0	24/02/23	AS RM	ISSUED FOR COORDINATION	
NO.	YY/MM/DD	DRN.	CH.	REVISION

**MAINLAND ENGINEERING DESIGN CORPORATION**  
UNIT 206 8363 128TH STREET SURREY, B.C. V3W 4G1  
TEL: (604) 543 8044 FAX: (604) 543 8104  
EMAIL: civil@mainlandeng.com

DEVELOPMENT/SITE LOCATION #1407 BISHOP ROAD WHITE ROCK, B.C.  
DWG. NAME **SECTIONS**

SEAL PROFESSIONAL ENGINEER S. BANWAIT # 21008 JUL 08 2024 PRACTICE PERMIT NUMBER: 1003021

SCALE	AS NOTED	WHITEROCK PROJECT NO.	DRAWING NO.
DESIGNED	RM		2
DRAWN	AS		OF 2
CHECKED	RM	MAINLAND PROJECT NO. G-2406	1
APPROVED	AB	DATE 24/05/23	

## Debbie Johnstone

---

**From:** Jason Birkland  
**Sent:** Wednesday, June 26, 2024 9:50 AM  
**To:** **Redaction S.22** Evan Mix  
**Cc:** Ajaib Gill  
**Subject:** RE: 1407 BISHOP RD - TMP00709

Hello,

If you have provided everything the City has asked for to support approval of a particular application type, we will let you know if/when it is ready to issue.

Regards,

Jason T. Birkland  
Assistant Plans Examiner, City of White Rock  
15322 Buena Vista Avenue, White Rock, BC V4B 1Y6  
Tel: 604.541.2144 / [www.whiterockcity.ca](http://www.whiterockcity.ca)



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**From:** **Redaction S.22**  
**Sent:** Tuesday, June 25, 2024 5:21 PM  
**To:** Evan Mix <[emix@whiterockcity.ca](mailto:emix@whiterockcity.ca)>; Jason Birkland <[JBirkland@whiterockcity.ca](mailto:JBirkland@whiterockcity.ca)>  
**Cc:** Ajaib Gill <[gillelectric@hotmail.com](mailto:gillelectric@hotmail.com)>  
**Subject:** Re: 1407 BISHOP RD - TMP00709

*CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.*

Hi Evan & Jason

Just a quick update, I came in today and paid both the security deposit for the trees and the fees including the bond for the demo permit.

Can you please both review and issue the appropriate permits? If possible I would like to come tomorrow to pick up.

Thanks,  
**Redaction S.22**

Sent from my iPhone

On Jun 20, 2024, at 3:19 PM, Evan Mix <[emix@whiterockcity.ca](mailto:emix@whiterockcity.ca)> wrote:

Good afternoon,

Thank you for providing the documents; I will add them to the file. Once you have paid the tree security deposit, you will have satisfied all the requirements for the Demolition Tree Management Permit.

For the Building Tree Management Permit, there are two remaining items to complete. The city requires a Coordinated Site Plan (CSDP) with signatures and a Comfort Letter from the arborist for the building stage, as the current CSDP does not specify when arborist supervision is needed during this stage.

If you require further assistance or have any additional questions, please feel free to contact me.

Regards,

**Evan Mix, ISA|TRAQ**  
**Tree Preservation Official**  
15322 Buena Vista Avenue, White Rock, BC V4B 1Y6  
Tel: 604.541.2143 | [www.whiterockcity.ca](http://www.whiterockcity.ca)



***BIRD NESTING SEASON runs March 1<sup>st</sup>- August 31<sup>st</sup>. Tree Management Permits may be subject to the Migratory Birds Convention Act and BC Wildlife Act.***

**From:** Redaction S.22  
**Sent:** Tuesday, June 18, 2024 9:57 AM  
**To:** Evan Mix <[emix@whiterockcity.ca](mailto:emix@whiterockcity.ca)>  
**Subject:** Re: 1407 BISHOP RD - TMP00709

*CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.*

Hi Evan,

Thanks for meeting with me this morning. My arborist has sent over a copy of the tree barrier inspection report this morning to your attention, I have also attached a copy. Also attached are the site drawings that we have provided to the city as per your request.

Can you please review my file and let me know if there are any other outstanding items? I will also be coming in this afternoon to pay the security deposits for the tree permits.

Will you be in the office around 12pm?

On Mon, May 13, 2024 at 4:08 PM Evan Mix <[emix@whiterockcity.ca](mailto:emix@whiterockcity.ca)> wrote:

Hello,

Everything looks good on the Arborist report and as mentioned in our phone conversation the Coordinated Site Development Plan (CSDP) will require signatures.

If you have any question, please do not hesitate to contact me.

Regards,

**Evan Mix, ISA|TRAQ**

**Tree Preservation Official**

15322 Buena Vista Avenue, White Rock, BC V4B 1Y6

Tel: 604.541.2143 | [www.whiterockcity.ca](http://www.whiterockcity.ca)



***BIRD NESTING SEASON runs March 1<sup>st</sup>- August 31<sup>st</sup>. Tree Management Permits may be subject to the Migratory Birds Convention Act and BC Wildlife Act.***

**From:** Redaction S.22  
**Sent:** Monday, May 13, 2024 3:35 PM  
**To:** Evan Mix <[emix@whiterockcity.ca](mailto:emix@whiterockcity.ca)>  
**Subject:** Fwd: 1407 BISHOP RD - TMP00709

You don't often get email from **Redaction S.22** [Learn why this is important](#)

*CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.*

As discussed.

Sent from my iPhone

Begin forwarded message:

**From:** Huckleberry Landscape Arborist  
<[arborist@huckleberrylandscape.ca](mailto:arborist@huckleberrylandscape.ca)>  
**Date:** May 13, 2024 at 7:56:40 AM PDT  
**To:** Redaction S.22  
**Cc:** Ajaib Gill <[gillelectric@hotmail.com](mailto:gillelectric@hotmail.com)>  
**Subject:** RE: 1407 BISHOP RD - TMP00709

Hi Redaction S.22

The report has already been completed.

Please submit these.

Tony Zang

**Redaction S.22**

Certified ISA Arborist PN-9004A

Tree Risk Assessor Qualified

*I'll be away from May 31 to June 10, 2024.*

*Please contact Anne at [Anne@Huckleberrylandscape.ca](mailto:Anne@Huckleberrylandscape.ca) or 604-724-3025 for any arborist questions.*



Design/ Install/ Maintain/ Consult

Arborist Reports and Consult

From: **Redaction S.22**  
Sent: Sunday, May 12, 2024 1:18 PM  
To: Huckleberry Landscape Arborist <[arborist@huckleberrylandscape.ca](mailto:arborist@huckleberrylandscape.ca)>  
Subject: Re: 1407 BISHOP RD - TMP00709

Hi Tony,

Have you started to work on the items for the building permit, tree management permit? I spoke to the city arborist and he is good to review these items now as well.

**For Building Permit TMP:**

**\*\*Submit these items all together in one email or package. One-off items will not be tracked or reviewed.\*\***

1. Submit civil drawings for review of where utilities are going. All sewer/sanitation, gas, water and hydro trenches should be outside of the tree protection areas. If cannot be avoided, all work within the TPZ must be done with the arborist onsite directing and supervising the work as approved in the CSDP by the city.
2. Submit completed Coordinated Site Development Plan (CSDP) for city approval that will be part of the tree management permit.
3. Submit Comfort Letter from Arborist signed with arborist, owner, contractor of each utility in CSDP.
1. Submit a tree replacement plan that complies with City standards to be approved by the City of White Rock. If you remove the trees proposed, you are responsible for two (2) replacement trees. Any trees not planted will have the tree security collected for it and will not be returned to you. This is considered a cash-in-lieu payment to the City and will go towards tree plantings elsewhere in the City.

**Replacement Trees must be the following size:**

- Deciduous tree species – 6cm caliper or greater
- Coniferous tree species – 3m tall

The following will *not* be accepted as a replacement tree:

- Hedges
- Dwarf and weeping varieties
- Shrub species
- Palm trees

**LOCATION OF REPLACEMENT TREES:**

Trees must be planted:

- On the site where the tree cutting permit was issued
- At least 1m away from all property lines, from all service utilities and retaining walls
- At least 3m away from another tree, house, garage, pool or other permitted outbuildings
- At least 3m away from BC Hydro lines

Sent from my iPhone

On Apr 24, 2024, at 10:11 AM, Huckleberry Landscape Arborist <[arborist@huckleberrylandscape.ca](mailto:arborist@huckleberrylandscape.ca)> wrote:

H **Redaction S.22**

Let me know when the barriers are done, and I come inspect them.

Tony

---

**From:** **Redaction S.22**  
**Sent:** Wednesday, April 24, 2024 9:49:13 AM  
**To:** Huckleberry Landscape Arborist  
<[arborist@huckleberrylandscape.ca](mailto:arborist@huckleberrylandscape.ca)>  
**Subject:** Fwd: 1407 BISHOP RD - TMP00709

Hi Tony

Sharing the update from the city. We will start building the barriers soon, however can you have a review?

Thanks,

**s.22**

Sent from my iPhone

Begin forwarded message:

**From:** Gill Electric <[info@gillelectric.ca](mailto:info@gillelectric.ca)>  
**Date:** April 18, 2024 at 3:47:46 PM PDT  
**To:** Redaction S.22  
**Subject:** Fwd: 1407 BISHOP RD - TMP00709

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---

**From:** Evan Mix <[emix@whiterockcity.ca](mailto:emix@whiterockcity.ca)>  
**Sent:** Thursday, April 18, 2024 2:55:37 PM  
**To:** Gill Electric <[info@gillelectric.ca](mailto:info@gillelectric.ca)>;  
[gillelectric@hotmail.com](mailto:gillelectric@hotmail.com) <[gillelectric@hotmail.com](mailto:gillelectric@hotmail.com)>  
**Subject:** 1407 BISHOP RD - TMP00709

Hello,

I am writing with regard to your Tree Management Permit (TMP) application for the property address 1407 BISHOP RD. This application has been made to support SFD. You do not have any approvals to remove trees until a building permit has been approved. I will outline the corresponding steps and outstanding requirements in order to approve your permit.

There are two separate permits that will be issued by TMP, one is for demolition and one for building permit. These permits are non-transferrable. If you sell your lot, you cannot sell or transfer a Tree Management Permit or related tree bonds.

Please complete all of the items to keep your file moving ahead.

### **This is your Checklist**

#### **For Demo TMP:**

1. Pay tree security deposit – see attached copy of Schedule C.
2. Build tree protection barriers (TPB) with signs attached and submit the arborist inspection letter to confirm barriers have been constructed to City standards. Trees do not get approval or removal permits until the Building Permit has been approved /issued.
3. Satisfy demolition permit requirements.

Pay tree security deposit by cheque at the Planning and Development Services Department desk in City Hall. You may email me the barrier confirmation report.

**Address your cheque to:** The City of White Rock

**Memo:** Permit Address and TMP00709 Securities (you must include information on your bank draft or cheque in the memo section)

#### **For Building Permit TMP:**

**\*\*Submit these items all together in one email or package. One-off items will not be tracked or reviewed.\*\***

1. Submit civil drawings for review of where utilities are going. All sewer/sanitation, gas, water and hydro trenches should be outside of the tree protection areas. If cannot be avoided, all work within the TPZ must be done with the arborist onsite directing and supervising the work as approved in the CSDP by the city.
  2. Submit completed Coordinated Site Development Plan (CSDP) for city approval that will be part of the tree management permit.
  3. Submit Comfort Letter from Arborist signed with arborist, owner, contractor of each utility in CSDP.
- 
1. Submit a tree replacement plan that complies with City standards to be approved by the City of White Rock. If you remove the trees proposed, you are responsible for two (2) replacement trees. Any trees not planted will have the tree security collected for it and will not be returned to you. This is considered a cash-in-lieu payment to the City and will go towards tree plantings elsewhere in the City.

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Trees must be planted:

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- At least 1m away from all property lines, from all service utilities and retaining walls
- At least 3m away from another tree, house, garage, pool or other permitted outbuildings
- At least 3m away from BC Hydro lines

If you have any questions, please do not hesitate to contact me.

Regards,

**Evan Mix**

**Tree Preservation Official, City of White Rock**

15322 Buena Vista Avenue, White Rock, BC V4B 1Y6

Tel: 604.541.2143 | [www.whiterockcity.ca](http://www.whiterockcity.ca)

<image001.jpg>

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## Debbie Johnstone

---

**From:** Gill Electric <info@gillelectric.ca>  
**Sent:** Friday, July 26, 2024 3:57 PM  
**To:** City Permits  
**Cc:** Engineering Inspection  
**Subject:** Re: 1407-Bishop Road BP021502

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Yes we can confirm they are safely exposed to the property line and are ready to be capped.

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---

**From:** City Permits <engpermits@whiterockcity.ca>  
**Sent:** Friday, July 26, 2024 3:53:55 PM  
**To:** Gill Electric <info@gillelectric.ca>  
**Cc:** Engineering Inspection <Enginspections@whiterockcity.ca>  
**Subject:** RE: 1407-Bishop Road BP021502

Good afternoon,

This question has been sent to Engineer Inspector to respond. Engineering Permits was only reaching out as you requested to have services capped and we require confirmation that they are safely exposed to the property line and are ready to be capped.

Regards,

### The Engineering and Municipal Operations Team

Operations Clerk, City of White Rock  
877 Keil Street, White Rock, BC V4B 4V6



Tel: 604.541.2154 | [www.whiterockcity.ca](http://www.whiterockcity.ca)

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---

**From:** Gill Electric <info@gillelectric.ca>  
**Sent:** Friday, July 26, 2024 3:46 PM  
**To:** City Permits <engpermits@whiterockcity.ca>  
**Subject:** Re: 1407-Bishop Road BP021502

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Do we need to install the fencing prior to digging or is it required for this inspection?  
Please advise.

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---

**From:** City Permits <[engpermits@whiterockcity.ca](mailto:engpermits@whiterockcity.ca)>  
**Sent:** Friday, July 26, 2024 2:22:03 PM  
**To:** Gill Electric <[info@gillelectric.ca](mailto:info@gillelectric.ca)>  
**Subject:** FW: 1407-Bishop Road BP021502

Good afternoon,

Please confirm that you are requesting that the City complete a cap off of services for Sanitary and Storm Connections to the property line?

To clarify wording from the demo permit, City staff will perform the capping of drainage and sanitary services, but you (applicant) are responsible for exposing those services at the property line and ensuring it's safe for City staff to enter the excavation site. If the excavation is greater than 4' deep, you'll need to have shoring in place or bench the excavation appropriately. If you have a date planned as to when your excavator will be on site, you may give us a heads up so can plan ahead.

Please confirm your request.

Regards,

**The Engineering and Municipal Operations Team**

Operations Clerk, City of White Rock  
877 Keil Street, White Rock, BC V4B 4V6



Tel: 604.541.2154 | [www.whiterockcity.ca](http://www.whiterockcity.ca)

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---

**From:** Gill Electric <[info@gillelectric.ca](mailto:info@gillelectric.ca)>  
**Sent:** Friday, July 26, 2024 10:25 AM  
**To:** Operations <[operations@whiterockcity.ca](mailto:operations@whiterockcity.ca)>  
**Subject:** 1407-Bishop Road BP021502

You don't often get email from [info@gillelectric.ca](mailto:info@gillelectric.ca). [Learn why this is important](#)

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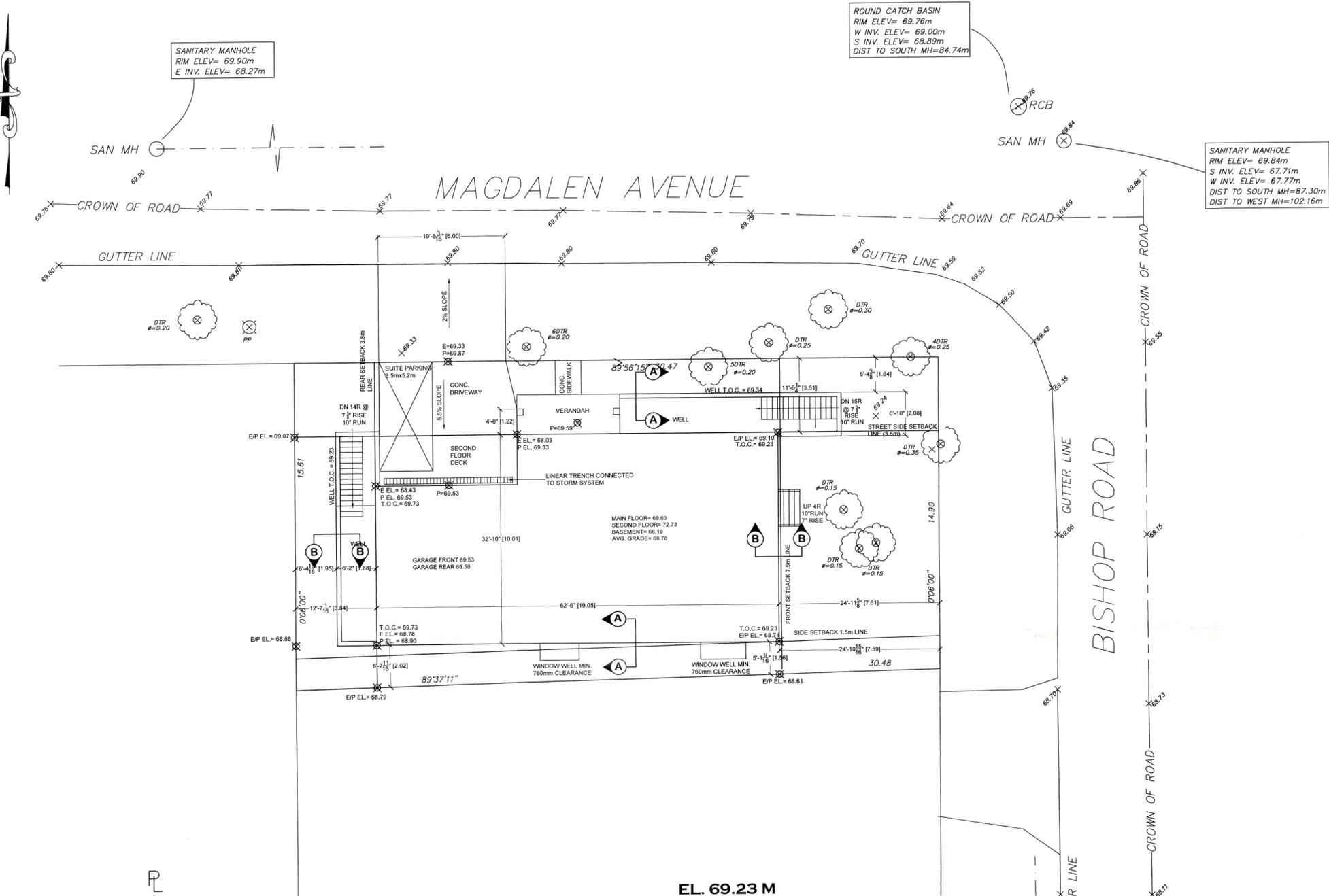
Hi,

I would like to call the inspection for Sanitary and Storm services are capped off. Can you also forward this info to Demo permit department cause I also need inspection for Demolition completed.

If you require anything else, don't hesitate to contact us anytime at **S.22** or [info@gillelectric.ca](mailto:info@gillelectric.ca) Cheers!

Regards,

Gill Electric



ROUND CATCH BASIN  
RIM ELEV= 69.76m  
W INV. ELEV= 69.00m  
S INV. ELEV= 68.89m  
DIST TO SOUTH MH=84.74m

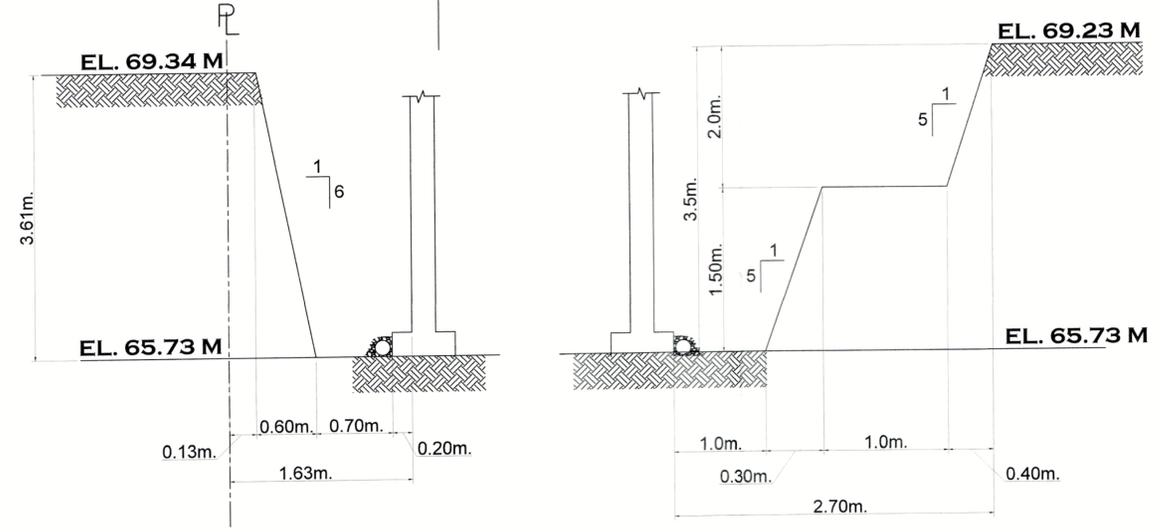
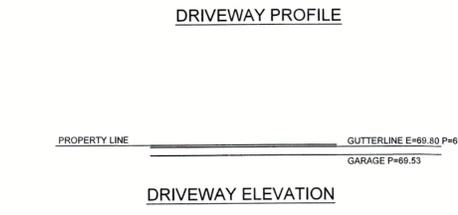
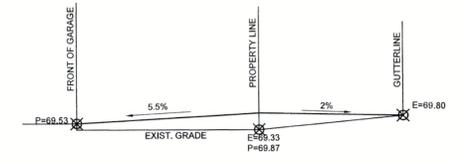
SANITARY MANHOLE  
RIM ELEV= 69.90m  
E INV. ELEV= 68.27m

SANITARY MANHOLE  
RIM ELEV= 69.84m  
S INV. ELEV= 67.71m  
W INV. ELEV= 67.77m  
DIST TO SOUTH MH=87.30m  
DIST TO WEST MH=102.16m

ROUND CATCH BASIN  
RIM ELEV= 63.53m  
N INV. ELEV= 62.84m

SANITARY MANHOLE  
RIM ELEV= 63.30m  
N INV. ELEV= 60.82m

CIVIC ADDRESS	1407 BISHOP RD	
LEGAL DESCRIPTION	TOPOGRAPHICAL SURVEY PLAN OF LOT 261 SECTION 9 TOWNSHIP 1 NWD PLAN 41968	
ZONING	RS-1	
SITE AREA	465.109 Sq.m (5006.4 sq.ft)	
LOT COVERAGE	ALLOWED @ 45% = 2252.88 SQ.FT	PROVIDED HOUSE 1880 SQ.FT VERANDAH 1890 SQ.FT GARAGE WALL 6.0 SQ.FT
ALLOWABLE F.A.R	ALLOWED (.5) 2503 SQ.FT.	PROVIDED 2501 SQ.FT
F.A.R. CALCULATIONS	MAIN FLOOR NET UPPER FLOOR GARAGE	1330 SQ.FT 1171 SQ.FT 590 SQ.FT
SETBACKS PER VARIANCE	REQUIRED	PROVIDED
	FRONT 7.5m SIDE 1.5m STREETSIDE 3.5m REAR 3.8m	7.59m 1.56m 3.5m 3.8m
BUILDING HEIGHT	ALLOWED (FLAT ROOF) 7.7m	PROVIDED 7.58m



\* THE CONTRACTOR, HOMEOWNER AND ARCHITECT SHALL CHECK AND VERIFY ALL DIMENSIONS PRIOR TO COMMENCEMENT OF WORK AND WILL BE RESPONSIBLE FOR ALL WORK COMPLETED.

\* ALL EXCAVATION CUTS TO BE COVERED COMPLETELY WITH MIN. 6 MIL POLY. POLY TO BE SECURED AT THE TOP AND BOTTOM.

E.G.B.C. PERMIT NO. 1000110

BUILDING CODE:  
THESE PLANS CONFORM TO THE  
BRITISH COLUMBIA BUILDING  
CODE 2024 EDITION.

R#	REVISION DATE	TYPE OF REVISION	ISSUED FOR BP	SINGH	M.S.B	REVISOR
1	APRIL 03, 2024					
0	FEBRUARY 2, 2024					

Consulting Engineers  
**BANSAL**  
AND ASSOCIATES  
UNIT 216 - 12899 76 AVENUE,  
SURREY, B.C. V3W 1E9  
PH:(604)501-7788 FAX:(604)501-6189  
INFO@BANSALANDASSOCIATES.COM

PROJECT ADDRESS:  
**1407 BISHOP ROAD, WHITE ROCK, B.C**  
SHEET CONTENTS:  
**SLOPE STABILITY & EXCAVATION DRAWING**

P. ENG. STAMP:  
RECEIVED  
APR 04 2024  
PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK  
**021501**

FILE NUMBER:  
AG24 - 3206  
DATE DRAWN:  
FEBRUARY 2, 2024  
DRAWN BY:  
M.S.B  
CHECKED BY:  
J. S. B.  
SCALE:  
NOT TO SCALE  
SHEET NUMBER:  
**SSD1**

RECEIVED

MAR 28 2024

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

1 of 3

Submitted to City of White Rock, BC

For:  
Project Address: 1407 Bishop Rd, White Rock, BC  
Project Number: OE24-1407-120  
Calculation Doc Number: OEC24-1407-120  
Calculation Doc Rev: 0A  
Drawing Number: OED24-1407-120  
Drawing Rev : 0A  
Dated: 19-Mar-24

Sign & Stamp:

PTP NO:1000330



**SPRINKLER SPECIFICATIONS (For Reference only)**

Manufacturer	Sprinkler Type	Model No:	K Factor	Min Pressure (PSI)	Min Flow (GPM)	Max Coverage
Viking	Horizontal Sidewall	VK484	4.2	14.5	16	16'x16'
Viking	Pendent Sprinkler	VK468	4.9	12	17	18'x18'
Viking	Concealed Pendent	VK494	4.9	7	13	16'x16'
Viking	Horizontal Sidewall	VK486	4	16	16	16'x18'

**PIPE SPECIFICATIONS:**

Manufacturer	Pipe Type	C
Blazemaster	CPVC Pipe	150

SYSTEM TYPE = WET SYSTEM

**SYSTEM SPECIFICATIONS:**

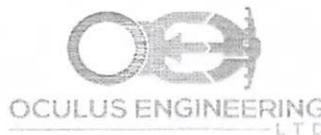
Hazard Class	Light Hazard
Min desired flow density	0.05 gpm/ft
Coverage Area	256 Sq Ft
Sprinkler Temperature	68 °C
Max Sprinkler Pressure	175 psi
Pressure (psi)	92.4
Number of active Nodes	8
Number of active sprinklers	2

**SYSTEM DEMAND:**

Pressure	61.06 psi
Flow Rate	34.82 gpm

Details	Page No:
Cover Page & Project Spe	1
Calculations	2
Graph	3

SHOAB KHAN  
P.Eng. PMP



1 778 968 1945

info@oeng.ca

## HYDRAULIC NODAL CALCULATION

2 of 3

Beg. End. Node	Nodal K Factor (K)	Elevation (Feet)	Spk/Pipe Discharge (gpm)	Pipe Length (Ft Eq Length Total Length)	Nom Dia (Inc Inside Dia (In C value)	Residual Pressure (psi)	q (gpm) Q (gpm)	PF (psi) PE (psi) PT (psi)
1	0.00	0.01	0.00	78.00	1.50	61.06	0.00	3.79
2	0.00	0.01	0.00	15.00	1.51	57.27	34.82	0.00
				93.00	150.00			3.79

Beg. End. Node	Nodal K Factor (K)	Elevation (Feet)	Spk/Pipe Discharge (gpm)	Pipe Length (Ft Eq Length Total Length)	Nom Dia (Inc Inside Dia (In C value)	Residual Pressure (psi)	q (gpm) Q (gpm)	PF (psi) PE (psi) PT (psi)
2	0.00	0.01	0.00	15.00	1.00	57.27	0.00	6.07
3	0.00	9.00	0.00	6.00	1.01	47.31	34.82	3.89
				21.00	150.00			9.96

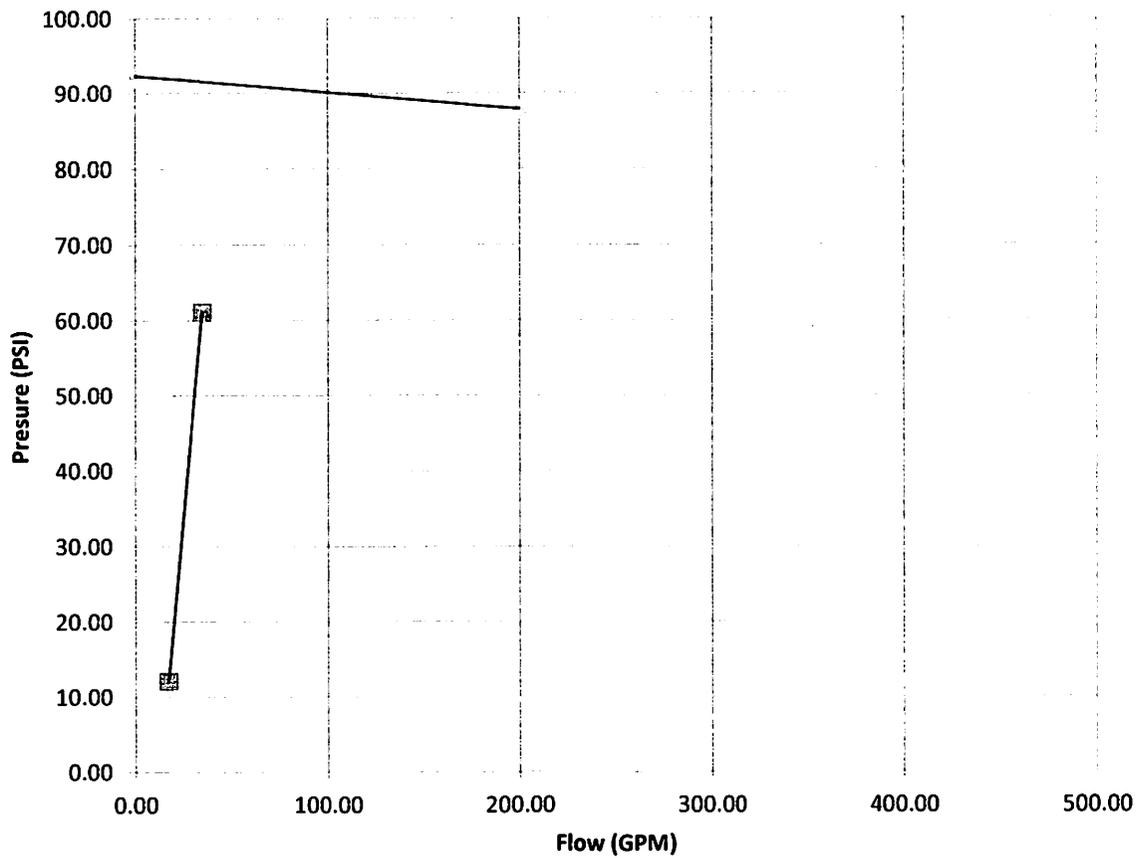
Beg. End. Node	Nodal K Factor (K)	Elevation (Feet)	Spk/Pipe Discharge (gpm)	Pipe Length (Ft Eq Length Total Length)	Nom Dia (Inc Inside Dia (In C value)	Residual Pressure (psi)	q (gpm) Q (gpm)	PF (psi) PE (psi) PT (psi)
3	0.00	9.00	0.00	11.00	1.00	47.31	0.00	4.91
4	0.00	20.00	0.00	6.00	1.01	37.63	34.82	4.76
				17.00	150.00			9.67

Beg. End. Node	Nodal K Factor (K)	Elevation (Feet)	Spk/Pipe Discharge (gpm)	Pipe Length (Ft Eq Length Total Length)	Nom Dia (Inc Inside Dia (In C value)	Residual Pressure (psi)	q (gpm) Q (gpm)	PF (psi) PE (psi) PT (psi)
4	0.00	20.00	0.00	13.00	1.00	37.63	0.00	6.36
5	0.00	20.00	0.00	9.00	1.01	31.28	34.82	0.00
				22.00	150.00			6.36

Beg. End. Node	Nodal K Factor (K)	Elevation (Feet)	Spk/Pipe Discharge (gpm)	Pipe Length (Ft Eq Length Total Length)	Nom Dia (Inc Inside Dia (In C value)	Residual Pressure (psi)	q (gpm) Q (gpm)	PF (psi) PE (psi) PT (psi)
5	0.00	20.00	0.00	25.00	1.00	31.28	0.00	10.11
6	0.00	33.00	0.00	10.00	1.01	15.54	34.82	5.63
				35.00	150.00			15.74

Beg. End. Node	Nodal K Factor (K)	Elevation (Feet)	Spk/Pipe Discharge (gpm)	Pipe Length (Ft Eq Length Total Length)	Nom Dia (Inc Inside Dia (In C value)	Residual Pressure (psi)	q (gpm) Q (gpm)	PF (psi) PE (psi) PT (psi)
6	0.00	33.00	0.00	5.00	1.00	15.54	17.82	2.31
7	4.90	33.00	17.00	3.00	1.01	13.23	34.82	0.00
				8.00	150.00			2.31

Beg. End. Node	Nodal K Factor (K)	Elevation (Feet)	Spk/Pipe Discharge (gpm)	Pipe Length (Ft Eq Length Total Length)	Nom Dia (Inc Inside Dia (In C value)	Residual Pressure (psi)	q (gpm) Q (gpm)	PF (psi) PE (psi) PT (psi)
7	4.90	33.00	17.00	13.00	1.00	13.23	0.00	1.23
8	4.90	33.00	17.00	3.00	1.01	12.00	17.00	0.00
				16.00	150.00			1.23



### HYDRAULIC SUPPLY/DEMAND GRAPH

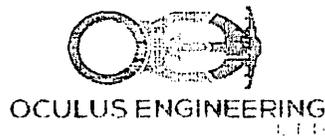
**SUPPLY CURVE DATA**

Static Pressure	92.4 psi
Residual Pressure	87.9 psi
Flow Rate	200 gpm

**DEMAND CURVE DATA**

Calculated Residual Pressure	61.06 psi
Calculated Flow Rate	34.82 gpm
Pressure required at HD Node	12.00 psi

SHOAIB KHAN  
P.Eng. PMP



1 778 968 1945  
info@oeng.ca

RECEIVED

MAR 28 2024

1 of 3

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

Submitted to City of White Rock, BC

For:

Project Address: 1407 Bishop Rd, White Rock, BC

Project Number: OE24-1407-120

Calculation Doc Number: OEC24-1407-120

Calculation Doc Rev: 0A

Drawing Number: OED24-1407-120

Drawing Rev : 0A

Dated: 19-Mar-24

Sign & Stamp:

PTP NO:1000330



**SPRINKLER SPECIFICATIONS (For Reference only)**

Manufacturer	Sprinkler Type	Model No:	K Factor	Min Pressure (PSI)	Min Flow (GPM)	Max Coverage
Viking	Horizontal Sidewall	VK484	4.2	14.5	16	16'x16'
Viking	Pendent Sprinkler	VK468	4.9	12	17	18'x18'
Viking	Concealed Pendent	VK494	4.9	7	13	16'x16'
Viking	Horizontal Sidewall	VK486	4	16	16	16'x18'

**PIPE SPECIFICATIONS:**

Manufacturer	Pipe Type	C
Blazemaster	CPVC Pipe	150

SYSTEM TYPE = WET SYSTEM

**SYSTEM SPECIFICATIONS:**

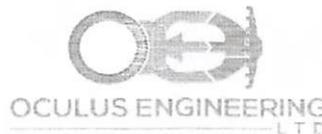
Hazard Class	Light Hazard
Min desired flow density	0.05 gpm/ft
Coverage Area	256 Sq Ft
Sprinkler Temperature	68 °C
Max Sprinkler Pressure	175 psi
Pressure (psi)	92.4
Number of active Nodes	8
Number of active sprinklers	2

**SYSTEM DEMAND:**

Pressure	61.06 psi
Flow Rate	34.82 gpm

Details	Page No:
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SHOAIB KHAN  
P.Eng. PMP



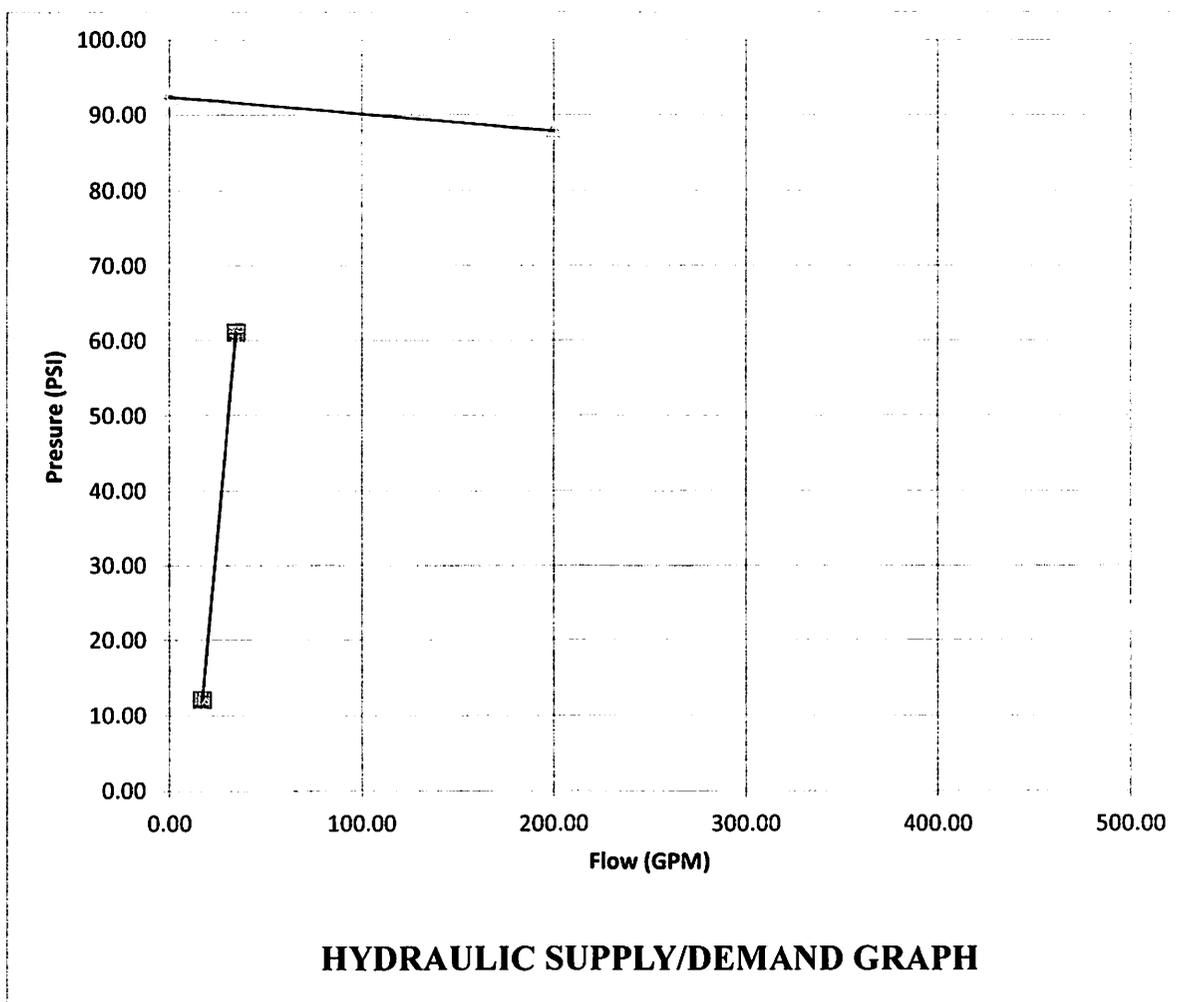
1 778 968 1945

info@oeng.ca

## HYDRAULIC NODAL CALCULATION

2 of 3

Beg. End. Node	Nodal K Factor (K)	Elevation (Feet)	Spk/Pipe Discharge (gpm)	Pipe Length (Ft Eq Length Total Length)	Nom Dia (Inc Inside Dia (In C value)	Residual Pressure (psi)	q (gpm) Q (gpm)	PF (psi) PE (psi) PT (psi)
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				93.00	150.00			3.79
2	0.00	0.01	0.00	15.00	1.00	57.27	0.00	6.07
3	0.00	9.00	0.00	6.00	1.01	47.31	34.82	3.89
				21.00	150.00			9.96
3	0.00	9.00	0.00	11.00	1.00	47.31	0.00	4.91
4	0.00	20.00	0.00	6.00	1.01	37.63	34.82	4.76
				17.00	150.00			9.67
4	0.00	20.00	0.00	13.00	1.00	37.63	0.00	6.36
5	0.00	20.00	0.00	9.00	1.01	31.28	34.82	0.00
				22.00	150.00			6.36
5	0.00	20.00	0.00	25.00	1.00	31.28	0.00	10.11
6	0.00	33.00	0.00	10.00	1.01	15.54	34.82	5.63
				35.00	150.00			15.74
6	0.00	33.00	0.00	5.00	1.00	15.54	17.82	2.31
7	4.90	33.00	17.00	3.00	1.01	13.23	34.82	0.00
				8.00	150.00			2.31
7	4.90	33.00	17.00	13.00	1.00	13.23	0.00	1.23
8	4.90	33.00	17.00	3.00	1.01	12.00	17.00	0.00
				16.00	150.00			1.23

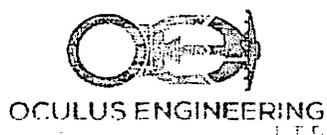
**SUPPLY CURVE DATA**

Static Pressure	92.4 psi
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Flow Rate	200 gpm

**DEMAND CURVE DATA**

Calculated Residual Pressure	61.06 psi
Calculated Flow Rate	34.82 gpm
Pressure required at HD Node	12.00 psi

SHOAIB KHAN  
P.Eng. PMP



1 778 968 1945  
info@oeng.ca

**TITLE SEARCH PRINT**

2024-03-03, 15:16:39

File Reference:

Requestor: **Redaction S.22**

Declared Value \$1605000

**\*\*CURRENT INFORMATION ONLY - NO CANCELLED INFORMATION SHOWN\*\***

**Land Title District** NEW WESTMINSTER  
Land Title Office NEW WESTMINSTER

**Title Number** CB720782  
From Title Number BV258707

**Application Received** 2023-06-29

**Application Entered** 2023-07-11

**Registered Owner in Fee Simple**  
Registered Owner/Mailing Address:

**Redaction S.22**

**S. 22**

AS JOINT TENANTS

**Taxation Authority** White Rock, The Corporation of the City of

**Description of Land**  
Parcel Identifier: 003-353-516  
Legal Description:  
LOT 261 SECTION 9 TOWNSHIP 1 NEW WESTMINSTER DISTRICT PLAN 41968

**Legal Notations** NONE

**RECEIVED**

**Charges, Liens and Interests**

Nature: MORTGAGE  
Registration Number: CB720783  
Registration Date and Time: 2023-06-29 09:40  
Registered Owner: THE TORONTO-DOMINION BANK

MAR 28 2024

PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

**Duplicate Infeasible Title** NONE OUTSTANDING

**Transfers** NONE

**Pending Applications** NONE

**TITLE SEARCH PRINT**

2024-06-25, 13:09:14

File Reference:

Requestor: S.22

Declared Value \$1605000

**\*\*CURRENT INFORMATION ONLY - NO CANCELLED INFORMATION SHOWN\*\***

**Land Title District** NEW WESTMINSTER  
Land Title Office NEW WESTMINSTER

**Title Number** CB720782  
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**Application Received** 2023-06-29

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Registered Owner/Mailing Address:

**Redaction S.22**

**S. 22**

AS JOINT TENANTS

**Taxation Authority** White Rock, The Corporation of the City of

**Description of Land**  
Parcel Identifier: 003-353-516  
Legal Description:  
LOT 261 SECTION 9 TOWNSHIP 1 NEW WESTMINSTER DISTRICT PLAN 41968

**Legal Notations** NONE

**Charges, Liens and Interests**

Nature: MORTGAGE  
Registration Number: CB720783  
Registration Date and Time: 2023-06-29 09:40  
Registered Owner: THE TORONTO-DOMINION BANK

Nature: COVENANT  
Registration Number: CB1382178  
Registration Date and Time: 2024-06-17 14:44  
Registered Owner: THE CORPORATION OF THE CITY OF WHITE ROCK

**TITLE SEARCH PRINT**

2024-06-25, 13:09:14  
Requestor **S.22**

File Reference:

Declared Value \$1605000

Nature:

PRIORITY AGREEMENT

Registration Number:

CB1382179

Registration Date and Time:

2024-06-17 14:44

Remarks:

GRANTING CB1382178 PRIORITY OVER CB720783

**Duplicate Indefeasible Title**

NONE OUTSTANDING

**Transfers**

NONE

**Pending Applications**

NONE

# TOPOGRAPHICAL SURVEY PLAN AND PROPOSED BUILDING FOOT PRINT OF LOT 261 SECTION 9 TOWNSHIP 1 NWD PLAN 41968



PID : 003-353-516

**CIVIC ADDRESS :**  
1407 - BISHOP ROAD  
WHITE ROCK, B.C.

**ELEVATION DERIVATION**

ELEVATIONS ARE GEODETIC DERIVED FROM  
CITY OF WHITE ROCK CONTROL MONUMENT  
No. 88H3896 ELEVATION=69.344m  
DATUM CVD28GVRD 2018

**LEGEND :**

- PP ☒ DENOTES POWER POLE
- RCB ☒ DENOTES ROUND CATCH BASIN
- WM ☒ DENOTES WATER METER
- SAN MH ☒ DENOTES SANITARY MANHOLE
- DTR ☒ DENOTES DECIDUOUS TREE
- RTWL ☒ DENOTES RETAINING WALL
- UP ☒ DENOTES UTILITY POLE

Lot dimensions and clearances according to  
Field Survey.

This plan does not show non-plan  
charges, liens or interests.

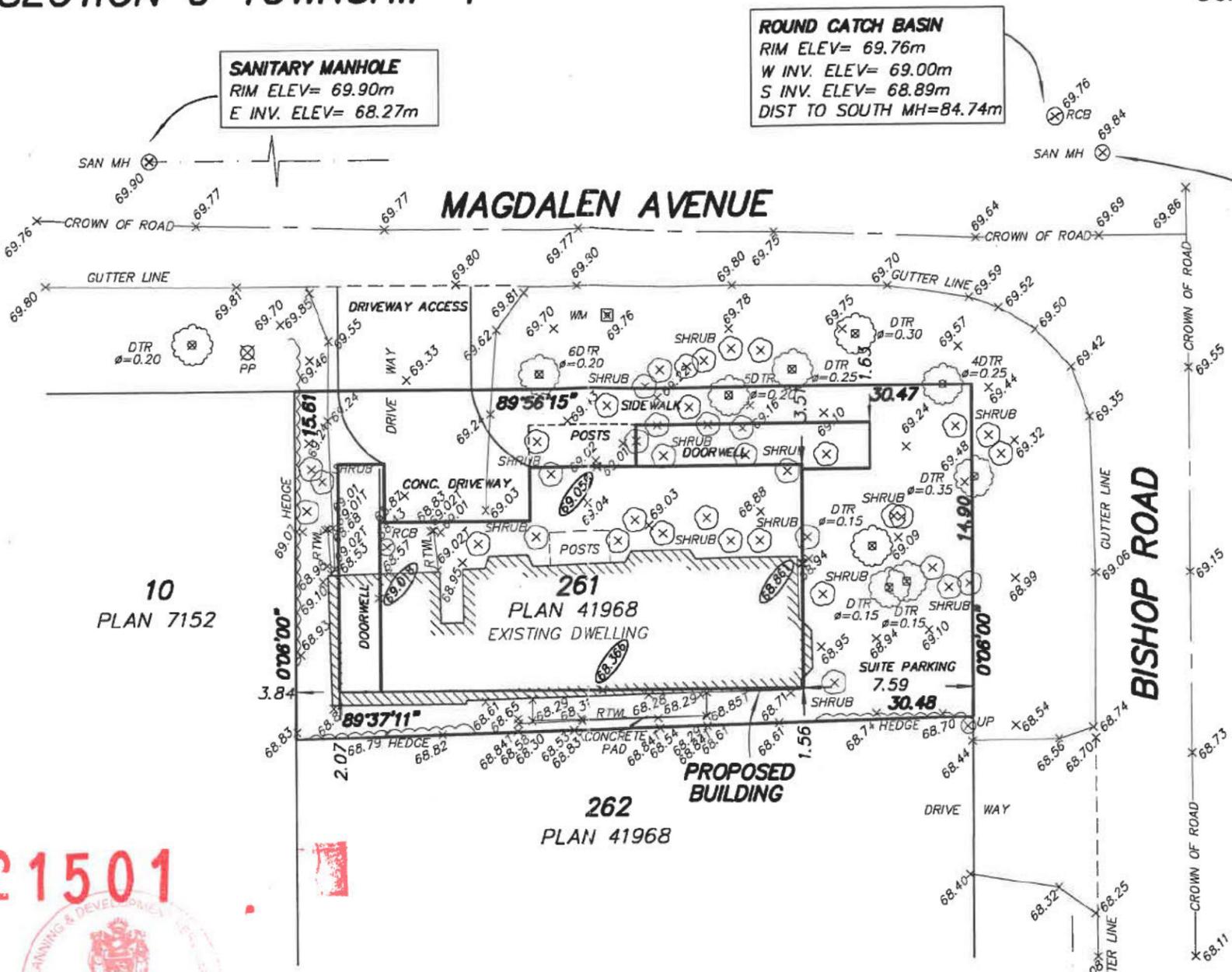
This plan was prepared for inspection purposes and is  
for the exclusive use of our client. The signatory  
accepts no responsibility or liability for any damages  
that may be suffered by a third party as a result of  
any decisions made or actions taken based on this  
document. This documents shows the relative location  
of the surveyed structures and features with respect to  
the boundaries of the parcel described above. This  
document shall not be used to define property lines or  
property corners. All rights reserved. No person may  
copy, reproduce, transmit or alter this document in  
whole or in part without the consent of the signatory.

THIS TOPOGRAPHICAL SURVEY HAS BEEN PREPARED IN  
ACCORDANCE WITH THE MANUAL OF STANDARD PRACTICE AND  
IS CERTIFIED CORRECT THIS 20th DAY OF JULY, 2023.

RECERTIFIED CORRECT THIS 19th DAY OF MARCH, 2024.

The review of these plans shall not in any way  
relieve the owner of any building or structure from  
full responsibility for carrying out the work or  
having the work carried out in accordance with the  
requirements of all the applicable by-laws of the  
Corporation of the City of White Rock.

B.C.L.S.



**SANITARY MANHOLE**  
RIM ELEV= 69.90m  
E INV. ELEV= 68.27m

**ROUND CATCH BASIN**  
RIM ELEV= 69.76m  
W INV. ELEV= 69.00m  
S INV. ELEV= 68.89m  
DIST TO SOUTH MH=84.74m

**SANITARY MANHOLE**  
RIM ELEV= 69.84m  
S INV. ELEV= 67.71m  
W INV. ELEV= 67.77m  
DIST TO SOUTH MH=87.30m  
DIST TO WEST MH=102.16m

**NATURAL GRADES**  
ESTIMATED AVERAGE NATURAL  
GRADE OF BUILDING ENVELOPE

MID - SIDES

- 68.366m
- 68.861m
- 69.058m
- 69.018m

AVG. = 68.826m

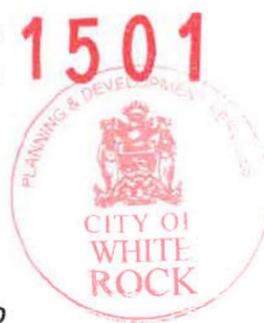
**ROUND CATCH BASIN**  
RIM ELEV= 63.53m  
N INV. ELEV= 62.84m

**SANITARY MANHOLE**  
RIM ELEV= 63.30m  
N INV. ELEV= 60.82m

RECEIVED  
MAR 28 2024  
PLANNING & DEVELOPMENT  
CITY OF WHITE ROCK

**NOTE :**  
ALL ELEVATIONS SHOWN ARE  
TAKEN AT NATURAL GROUND

© GREWAL & ASSOCIATES  
PROFESSIONAL LAND SURVEYORS  
UNIT 204, 15299-68th AVENUE  
SURREY, B.C. V3S 2C1  
TEL: 604-597-8567  
EMAIL: Office@GrewalSurveys.com  
FILE : 2307-011 T3



*[Signature]*  
LAKHJOT S. GREWAL

**TITLE SEARCH PRINT**

2024-06-25, 13:09:14

File Reference:

Requestor: s.22

Declared Value \$1605000

**\*\*CURRENT INFORMATION ONLY - NO CANCELLED INFORMATION SHOWN\*\***

**Land Title District**

Land Title Office

NEW WESTMINSTER

NEW WESTMINSTER

**Title Number**

From Title Number

CB720782

BV258707

**Application Received**

2023-06-29

**Application Entered**

2023-07-11

**Registered Owner in Fee Simple**

Registered Owner/Mailing Address:

Redaction S.22

S. 22

**Taxation Authority**

White Rock, The Corporation of the City of

**Description of Land**

Parcel Identifier:

003-353-516

Legal Description:

LOT 261 SECTION 9 TOWNSHIP 1 NEW WESTMINSTER DISTRICT PLAN 41968

**Legal Notations**

NONE

**Charges, Liens and Interests**

Nature:

MORTGAGE

Registration Number:

CB720783

Registration Date and Time:

2023-06-29 09:40

Registered Owner:

THE TORONTO-DOMINION BANK

Nature:

COVENANT

Registration Number:

CB1382178

Registration Date and Time:

2024-06-17 14:44

Registered Owner:

THE CORPORATION OF THE CITY OF WHITE ROCK

**TITLE SEARCH PRINT**

2024-06-25, 13:09:14

File Reference:

Requestor: s.22

Declared Value \$1605000

Nature:	PRIORITY AGREEMENT
Registration Number:	CB1382179
Registration Date and Time:	2024-06-17 14:44
Remarks:	GRANTING CB1382178 PRIORITY OVER CB720783

**Duplicate Indefeasible Title** NONE OUTSTANDING

**Transfers** NONE

**Pending Applications** NONE

**Notice of Project: 1004312  
Construction**

**Submitted:** Sunday, June 16, 2024 at 8:26 p.m. Pacific Time

Except as permitted by OHS regulation 20.2(4), WorkSafeBC must be provided at least 24 hour written notice prior to the start of the work activity. Work on this project, including set up activities, may begin on June 17, 2024, 8:26 p.m. Pacific Time, or on the start date indicated on the Notice of Project – whichever is later.

OHS regulation 20.2(3) requires that a copy of the Notice of Project is posted at the worksite for the duration of the project.

**Worksite details**

Worksite Location				
	City	Location	Planned start date	Duration
1	White Rock	1407 Bishop Rd, White Rock, BC V4B 3K4, Canada 49.027801,-122.83068	7/2/2024	12 Months

**Owner or agent representative of this worksite:**

Redaction S.22

**Project information**

**Project:**

Project cost greater than \$100,000  
Designed by a professional engineer  
Work in an excavation over 1.2 m (4 ft) deep

**Person responsible for co-ordinating health and safety activities:**

s.22

**Person in charge of the project:**

s.22

Owner

s.22

Redaction S.22

**General contractor:**

Redaction S.22

Redaction S.22

**Scope of work**

**General construction:**

Residential - single family

**Total number of floors (below and above ground):**

2

**Total floor area:**

4400 sq feet

**Electrical declaration:**

Not applicable. No portable electrical equipment, including temporary lighting, will be used on this site.

**Other information****Submitted by:**Redaction S.22  
**Limitations**

Neither the issuance of a Notice of Project number, nor the absence of follow-up action by WorkSafeBC indicates acceptance or approval of the information provided. If you have any safety concerns regarding this project, contact the person in charge of this project or WorkSafeBC prevention information line at 604.276.3100 or 1.888.621.7233.

**Significant changes**

If the information on the Notice of Project significantly changes, the new information must be submitted to WorkSafeBC as soon as possible and posted at the worksite.

To update the information, provide WorkSafeBC with the Notice of Project number, the worksite address, and a summary of the changes you want to make by either:

**Email:** [prevnop@worksafebc.com](mailto:prevnop@worksafebc.com)**Fax:** 604.276.3247