

File No.: 04-1000-20-2020-2020-672

January 12, 2020

s.22(1)

Dear s.22(1)

Re: **Request for Access to Records under the Freedom of Information and Protection of Privacy Act (the "Act")**

I am responding to your request of December 16, 2020 for:

Engineering report related to the excavation, Schedule B geotechnical report, for 453 East 23rd Avenue. Date range: January 1, 2012 to December 31, 2015.

All responsive records are attached.

Under section 52 of the Act, and within 30 business days of receipt of this letter, you may ask the Information & Privacy Commissioner to review any matter related to the City's response to your FOI request by writing to: Office of the Information & Privacy Commissioner, info@oipc.bc.ca or by phoning 250-387-5629.

If you request a review, please provide the Commissioner's office with: 1) the request number (#04-1000-20-2020-672); 2) a copy of this letter; 3) a copy of your original request; and 4) detailed reasons why you are seeking the review.

Yours truly,

[Signature on file]

Barbara J. Van Fraassen, BA
Director, Access to Information & Privacy

Barbara.vanfraassen@vancouver.ca
453 W. 12th Avenue Vancouver BC V5Y 1V4

*If you have any questions, please email us at foi@vancouver.ca and we will respond to you as soon as possible. Or you can call the FOI Case Manager at 604.871.6584.

Encl.

:aa

OPTIMUM ENGINEERING CORP.

12968-66 AVENUE, SURREY, BC V3W 7H3

Tel: (604) 700-8153 Fax: (604) 543-4035

Date: May 7, 2015

OEC Project#: RAD10C

City of Vancouver
453 West 12th Avenue,
Vancouver, BC. V5Y 1V4

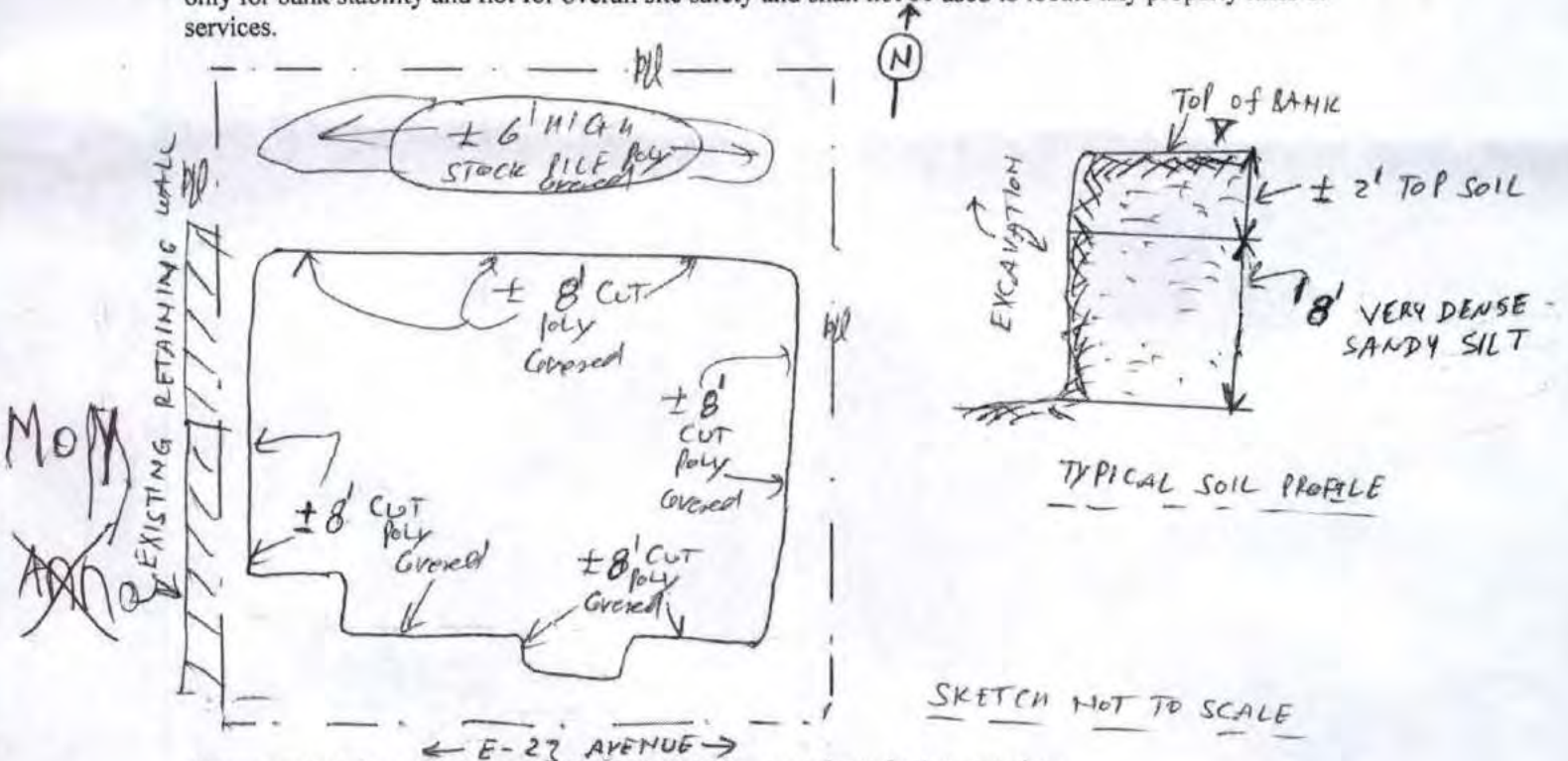
Attention: - Building Inspector.

Dear Sir/Madam,

Re: Temporary Excavation for site address at: 453 E 23 Avenue, Vancouver, BC.

We have visited the site and reviewed the temporary excavated cut to provide formwork at above-mentioned site, and found to be as per the following sketch. All excavated cuts are safe under normal weather conditions from the bank stability point of view. All persons near top of any adjacent excavated areas shall stay minimum 3' away from top edge of excavated cuts. Entrance in to excavation shall be only from designated access area(s) provided by owner or contractor. Machinery such as vibrators, excavators and trucks shall be kept minimum 8' away from the top edge of cuts having height more than 4'. Excavation shall be kept free from accumulation of water. Mr. Anders Kvarnstrom (Site Supervisor) will monitor the site periodically and inform us in case of 24 hour rainfall more than 20mm or any visually noticeable change in the site conditions.

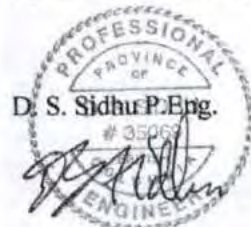
This report is valid till May 27, 2015 and a reinspection will be required after this date. This letter is only for bank stability and not for overall site safety and shall not be used to locate any property lines or services.



Please contact the undersigned at 604-700-8153 in case of any further question.

Yours truly,

Optimum Engineering Corp.



MAY 07 2015

DB 448088 (LWH)

Building Permit No. 1

City of Vancouver - FOI 2020-672 - Page 2 of 12

Schedule B-1 - Continued

OB. 448088 (LWH)

Building Permit No.†

453 E 23 Avenue, Vancouver, BC.

Project Address

Structural & Geotechnical only

Discipline

The undersigned also undertakes to notify the *Chief Building Official* 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 Vancouver Building By-law.

Deepinder Sidhu, P.Eng.

Registered Professional's Name (Print)

12968-66 Avenue

Address (Print)

Surrey, BC. V3W 7H3

(604) 700-8153

Phone No.



(Professional's Seal and Signature)

09/07/2014

Date

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

I am a member of the firm Optimum Engineering Corp.
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*. The Vancouver Building By-law 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

† For Building Official's use only

VANCOUVER BUILDING BY-LAW 2007

SCHEDULE B-2

Forming Part of Subsection 2.2.7, Division C of the
Vancouver Building By-lawBuilding Permit No. ¹

DB, 448088 (LWH)

SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS

- Notes: (i) This letter must be submitted along with Schedule B-1 before issuance of a *building permit*.
(ii) This letter is endorsed by: Architectural Institute of B.C., Association of Professional Engineers and Geoscientists of B.C., Building Officials' Association of B.C., and Union of B.C. Municipalities.
(iii) In this letter the words in *italics* have the same meaning as in the Vancouver Building By-law.

Registered Professional's Name (Print) Deepinder Sidhu, P.Eng.Name of Project (Print) Laneway House OnlyAddress of Project (Print) 453 E 23 Avenue, Vancouver, BC.

(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 fire fighting 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 Thermal insulation systems, including condensation control and cavity ventilation
- 1.21 Exterior glazing
- 1.22 Integration of building envelope components
- 1.23 Environmental separation requirements (Part 5)



(Professional's Seal and Signature)

09/07/2014

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 Verification of the satisfactory completion of an in-house check of the structural design
- 2.6 ~~Verification of the satisfactory completion of an independent Concept Review, including a general overview of the design calculations~~

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

¹ For Building Official's use only

Schedule B-2 - Continued

DB.448088 (LWH)
Building Permit No. 1Address of Project (Print) 453 E 23 Avenue, Vancouver, BC.
Registered Professional's Name (Print) Deepinder Sidhu, P.Eng.**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

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 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

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



09/07/2014

Date

CRP's Initials

* For Building Official's use only

OPTIMUM ENGINEERING CORP.

12968-66 AVENUE, SURREY, BC V3W 7H3

Tel: (604) 700-8153 Fax: (604) 543-4035

Date: - October 5, 2015

OEC Project#: RADI0C

The City of Vancouver,
Vancouver, BC.

DB448086

Attention: - Building Inspector.

Re: Soil compaction in the living area of Laneway House at 449 E 23 Avenue,
Vancouver, BC.

Dear Sir/Madam:

We have reviewed the soil compaction in the living area of Laneway House at above mentioned site. Approximately 2' to 3' (varying depth) of gravel has been backfilled and compacted in the living area of Laneway House. Compaction found to be 95% modified proctor density.

Please contact the undersigned at 604-700-8153 in case of any further question.

Yours truly,
Optimum Engineering Corp.

D. S. Sidhu P.Eng.



OCT 05 2015

VANCOUVER BUILDING BY-LAW 2007

SCHEDULE B-1

Forming Part of Subsection 2.2.7, Div. C of the
Vancouver Building By-law

DB.448086
Building Permit No. *

ASSURANCE OF PROFESSIONAL DESIGN AND COMMITMENT FOR FIELD REVIEW

- Notes: (i) This letter must be submitted along with Schedule B-2 before issuance of a *building permit*. A separate letter must be submitted by each *registered professional*.
- (ii) This letter is endorsed by: Architectural Institute of B.C., Association of Professional Engineers and Geoscientists of B.C., Building Officials' Association of B.C., and Union of B.C. Municipalities.
- (iii) In this letter the words in italics have the same meaning as in the Vancouver Building By-law.

To: *The Chief Building Official*

The City of Vancouver

Re: *Single Family Dwelling*

Name of Project (Print)

453 E 23 Avenue, Vancouver, BC.

Address of Project (Print)

LOT 16 BLK 22 DL 301 GROUP 1 NWD PLAN 187

Legal Description 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*.
All the disciplines will not necessarily be employed on every project.)

_____ ARCHITECTURAL

DB _____ STRUCTURAL

_____ MECHANICAL

_____ PLUMBING

_____ FIRE SUPPRESSION SYSTEMS

_____ ELECTRICAL

DB _____ GEOTECHNICAL — temporary

DB _____ GEOTECHNICAL — permanent



(Professional's Seal and Signature)

09/07/2014

Date

components of the plans and supporting documents prepared by this *registered professional* in support of the application for the *building permit* as outlined on the attached Schedule B-2 substantially comply with the Vancouver Building By-law 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 attached "SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS" (SCHEDULE B-2).

CRP's Initials

* For Building Official's use only

VANCOUVER BUILDING BY-LAW 2007

Schedule B-1 - Continued

Building Permit No.†

453 E 23 Avenue, Vancouver, BC.

Project Address

Structural & Geotechnical only

Discipline

The undersigned also undertakes to notify the *Chief Building Official* 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 Vancouver Building By-law.

Deepinder Sidhu, P.Eng.

Registered Professional's Name (Print)

12968-66 Avenue

Address (Print)

Surrey, BC. V3W 7H3

(604) 700-8153

Phone No.



(Professional's Seal and Signature)

09/07/2014

Date

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

I am a member of the firm Optimum Engineering Corp.

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*. The Vancouver Building By-law 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

† For Building Official's use only

VANCOUVER BUILDING BY-LAW 2007

SCHEDULE B-2

Forming Part of Subsection 2.2.7, Division C of the
Vancouver Building By-law

08.448086

Building Permit No.¹

SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS

- Notes: (i) This letter must be submitted along with Schedule B-1 before issuance of a *building permit*.
(ii) This letter is endorsed by: Architectural Institute of B.C., Association of Professional Engineers and Geoscientists of B.C., Building Officials' Association of B.C., and Union of B.C. Municipalities.
(iii) In this letter the words in *italics* have the same meaning as in the Vancouver Building By-law.

Registered Professional's Name (Print) Deepinder Sidhu, P.Eng.Name of Project (Print) Single Family DwellingAddress of Project (Print) 453 E 23 Avenue, Vancouver, BC.

(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 fire fighting 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 Thermal insulation systems, including condensation control and cavity ventilation
- 1.21 Exterior glazing
- 1.22 Integration of building envelope components
- 1.23 Environmental separation requirements (Part 5)



09/07/2014

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 Verification of the satisfactory completion of an in-house check of the structural design
- 2.6 ~~Verification of the satisfactory completion of an independent Concept Review, including a general overview of the design calculations~~

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

¹ For Building Official's use only

DB 448086

Schedule B-2 - Continued

Building Permit No. *

Address of Project (Print) 453 E 23 Avenue, Vancouver, BC.

Registered Professional's Name (Print) Deepinder Sidhu, P.Eng.

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

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 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

08 GEOTECHNICAL — Temporary

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

08 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



(Professional's Seal and Signature)

09/07/2014

Date

CRP's Initials

* For Building Official's use only

2 of 2

Tel: (604) 700-8153 Fax: (604) 543-4035

MAY 26 2015

JUN 03 2015

OPTIMUM ENGINEERING CORP.

12968-66 AVENUE, SURREY, BC V3W 7H3

Tel: (604) 700-8153 Fax: (604) 543-4035

Date: July 8, 2015

File: RAD10C

City of Vancouver,
453 West 12th Avenue,
Vancouver, BC. V5Y 1V4

DB445088
ED BONEY
Building Insp. - Dist. #

JUL 13 2015

Attention: Building Inspector

Dear Sir/Madam:

Re: Laneway House Foundation Formwork for site address at: 449 E 23 Avenue, Vancouver, BC.

We have visited the site and reviewed the foundation formwork for Laneway House at above mentioned site and noted as under:

- **Owner has decided to delete foundation between 1 Car Garage & Storage and to provide a beam to support the anticipated loads.**
- Top soil has been stripped off from footing areas and allowable bearing pressure found to be 1500psf.
- Sizes of footings and foundation walls are satisfactory.
- Reinforcement provided is adequate and as per site instructions.
- The formwork is ready for pouring concrete.

Please contact the undersigned at 604-700-8153 in case of any further question.

Yours Truly,

Optimum Engineering Corp.

D. S. Sidhu P.Eng
35053


JUL 08 2015