

DATE: June 26, 2020

TO: Hon. Mayor Bevilacqua and Members of Council

FROM: Nick Spensieri, Deputy City Manager, Infrastructure Development; and
Vince Musacchio, Director, Infrastructure Planning and Corporate Asset
Management

RE: Report No. 25, Item No. 21 – Committee of the Whole (2), June 16, 2020
KIRBY ROAD EXTENSION BETWEEN BATHURST STREET AND
DUFFERIN STREET CLASS ENVIRONMENTAL ASSESSMENT STUDY
COST REVIEW AND CAPITAL BUDGET AMENDMENT

**COMMUNICATION – C28
Council – June 29, 2020
Committee of the Whole
Report No. 25, Item 21**

Purpose

To amend an incorrect By-Law reference in Recommendation #3 in the subject report and to provide Council with information requested of staff.

Recommendations

- 1) That Recommendation 3 in the report of the Deputy City Manager, Infrastructure Development dated June 16, 2020 be amended to read as follows:
 3. That the inclusion of this matter on a Public Committee or Council agenda with respect to amending the Capital Budget DT 7112-14 is deemed sufficient notice pursuant to Section 2(1)(c) of By-Law ~~394-020~~ 394-2002 as amended; and
- 2) That Council receive the information requested of staff as provided in Attachments 1 and 2 of this Memorandum.

Background

Committee of the Whole, at its meeting of June 16, 2020 adopted, inter alia, the following recommendations:

- 1) That staff be directed to request Rizmi Holdings Limited (RHL) to provide clarity of the costs they incurred to undertake the Kirby Road Extension Class Environmental Assessment Study, and that such information be provided at the June 29, 2020 Council meeting;
- 2) That the report of the third-party peer review be made public;

Conclusion

The information requested is provided in Attachments 1 and 2 of this Memorandum.

Attachments

1. Request for Clarification of Costs to undertake the Environmental Assessment Study for Kirby Road Extension between Bathurst Street and Dufferin Street, Schaeffers Consulting Engineers, June 25, 2020
2. 3rd Party Review: Findings & Conclusions
Third-Party Review of Rizmi Holding Limited's (RHL) Request for Reimbursement of Additional Costs May 2019 -Kirby Road Extension between Bathurst Street and Dufferin Street Class Environmental Assessment Study, HDR, June 5, 2020

Respectfully submitted,



Nick Spensieri
Deputy City Manager, Infrastructure Development

June 25, 2020

File #: 4339



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Attention: Cam Milani
Chief Executive Officer
Rizmi Holdings Limited

VIA EMAIL ONLY

Dear Mr. Milani:

Re: Request for Clarification of Costs to undertake the Environmental Assessment Study for Kirby Road Extension between Bathurst Street and Dufferin Street

The City of Vaughan (CoV) asked Rizmi Holdings Limited (RHL) to provide information clarifying the costs they incurred to undertake the Kirby Road Extension Environmental Assessment Study (EAS) with a purpose that such information will be provided at the June 29, 2020 Council meeting. With this in mind and at your request, we have prepared the following overview explaining why actual spending exceeded the original fee proposal.

Background

The CoV through the transportation master planning process determined that the Kirby Road Extension between Dufferin and Bathurst Streets would be required in place by 2021. In accordance with the Ontario Environmental Assessment (EA) Act, a new municipal road project is subject to a Class EA planning and design process prepared by the Municipal Engineers Association (MEA) of Ontario. A Class EA is a method to obtain approval under the EA Act and to provide an alternative to carrying out an individual assessment. In addition, the Class EA provides a means for integrating the requirements of the EA Act and the Planning Act.

The City's Council, at its meeting on April 21, 2015, directed staff to: "work with the landowner along the Kirby unopened road allowance between Dufferin Street and Bathurst Street with a goal to having the missing link constructed by Fall of 2018 if possible". RHL agreed to carry out the Municipal Class EAS earlier than it could have been achieved by City staff and frontend the cost of undertaking. It was advantageous to both parties to coordinate the effort with the development of the abutting lands owned by RHL.

SCE Fee Proposal

In September 2015 RHL engaged professional services of Schaeffers Consulting Engineers (SCE) and submitted a fee proposal to the CoV to advance the Kirby Road Extension EAS, whereby RHL would be a sole proponent of the study. Different from a typical Municipal Class EA, there were no Terms of Reference provided by the City, the circumstance necessitating the

project team to have identified the scope of work based on a limited understanding of the project at that time.

The EAS was envisioned as a scoped EA which will follow an integrated approach and satisfy requirements of both the EA Act and Planning Act. SCE, acting a civil engineer assembled a team of professional consultants to supplement our in-house capabilities, including transportation, natural heritage, planning, geotechnics and hydrogeology, geomorphology, archeology and noise disciplines. Each of the consultants, including SCE provided their cost estimates with a total of \$325,000.00 (exclusive of HST). It was assumed that the master planning undertaken in advance of the EAS has completed Phases 1 and 2 of the Class EA process and the project team is required to complete Phases 3 and 4 only. Public consultation efforts and desktop investigations by the study disciplines were proposed to fit into a tight period of 10 months for completion of the study.

City's staff had reviewed the fee proposal and it was further supported by the City's Council in December 2015 recommending to reimburse RHL to an upset limit of \$325,000.00 (exclusive of HST) and enter an agreement with the CoV to formalize the arrangements.

RHL and CoV Agreement

The project team started working on the elements of the EAS immediately after the Council's approval. It took almost a year, until mid-November 2016, when the City and RHL entered into an agreement authorizing the RHL to undertake the EAS.

Some of the clauses imposed new requirements surpassing the original scope. For example, Clause 8 of the agreement required the developer to "confirm that each agency has accepted the methodology, conclusions, and recommendations of the EAS". Clause 12 required to undertake a comprehensive and inclusive public consultation process throughout the study, including the formation of a Citizen Liaison Committee (CLC).

The agreement provided that the completed Class EA and related Environmental Study Report (ESR) may only be filed for the mandatory public review once the CoV is satisfied that the key agencies and stakeholders have accepted the recommendations and conclusions of the Class EAS. Achieving the requirements led to significant budget overruns.

Overview of the Actual Effort

As the project understanding evolved, the actual effort to complete the Class EA rose from a limited scope Class EA to the level of an Individual EA. The extreme level of EAS intricacy was triggered by the recognized extreme complexity of issues and environmental sensitivity associated with the Kirby Road extension study area. For example, a similar setting for the Teston Road extension between Dufferin Street and Keel Street has required the preparation of a Terms of Reference approved by the Ministry of Environment, Conservation and Parks (MECP) and then carrying out an Individual EA Study, which represents the highest level of investigation.

Notably, in response to the advertisement of study initiation, the York Region and Ministry of Natural Resources and Forestry (MNR) both requested to elevate the investigation to an Individual EA. As a result, the Kirby Road Class EAS was completed to the level of detail well exceeding routine municipal Class environmental investigations. This in general explains the significant amount of work completed beyond the original scope and cost overruns.

Comparison between selected budget estimates provided in the 2015 fee proposal by the key project team members to the actual spending is summarized in the table below.

Project Team Member	Expert knowledge provided	Original Estimate (excluding HST)	Actual Spending (excluding HST)	Difference (%)	Difference (\$)
SCE	<ul style="list-style-type: none"> • Project Management • Class EA Planning • Public Consultation • Transportation Engineering • Stormwater Management • Cost Estimates 	\$74,545.00	\$524,432.50	604	\$449,887.50
Savanta	<ul style="list-style-type: none"> • Natural Heritage 	\$31,005.00	\$231,131.51	645	\$200,126.51
Lucas & Associates Ltd.	<ul style="list-style-type: none"> • Socio-economic Analysis 	\$16,125.00*	\$101,520.00	530	\$85,395.00

* Original cost estimate was provided by SGL

The table illustrates that the budget overages experienced by the three key consultants are in the same order of magnitude with the Natural Heritage as a most costly component.

Key activities that were not included in the original proposal and required additional budget, including some reasoning are summarized as follows:

- Field investigations such as geotechnical drilling, groundwater monitoring, topographic survey, wildlife surveys, basal area, and creek centerline surveys (support selection of alternatives).
- Establishment of the Technical Advisory Group (TAG) and Citizen Liaison Committee (CLC) and conducting milestone meetings, including creation terms of reference, venue rentals, preparing presentations, and meeting minutes (flows from the agreement).

- Advertising of study notices in four local newspapers; engaging public facilitator for the TAG meetings; creating and updating a study web page.
- Indigenous Peoples consultation.
- Screening of ten Alternative Road Alignments.
- Revisiting Phases 1 and 2 of MEA MCEA planning and design process (requested by review agencies).
- Development and detailed evaluation of five Alternative Road Cross-sections (requested by the City).
- Development and assessment of Modified Road Alignment 6A (requested by review agencies).
- Confirming conformity to the 2017 Oak Ridges Moraine Conservation Plan (requested by review agencies).
- Satisfying requirements of Endangered Species Act and Ecosystem compensation (requested by the MNRF and TRCA).
- Preparation of Air Quality, Climate Change Assessment and Contamination Overview Study (requested by the MECP).
- Refinement of Technically Preferred Road Alignment 5 (requested by review agencies)
- Preparation of design drawings to a 30% level, including preliminary intersection design and cost analyses (requested by the City).
- Two full ESR submissions to review agencies before a final third submission of the ESR to the MECP.
- TRCA review fees.

Communication with the CoV Staff Related to the Budget

EAS budget concerns were raised at the meeting on March 1, 2018. It was discussed that the approved budget of \$325,000.00 is insufficient for the completion of the study and expenditure stands at \$464,503.25, exclusive of HST.

Following submission of the Final Draft ESR to review agencies, RHL met with CoV staff on May 17, 2019 to discuss costs incurred over the duration of the EA study. It was communicated that the actual project spending stands at \$1,143,191.73, exclusive of HST. It was agreed that the City's staff will accept reasonable cost overruns. A Memo providing a detailed analysis of EAS costs was provided to RHL by SCE on May 27, 2019.

Third Party Cost Review

HDR was retained by the City of Vaughan in February 2020 to perform a Third Party Review of the fees incurred by the Kirby Road Extension EAS. SCE has provided HDR with a detailed account of the study activities and actual spending. Their comments to the City have not been provided to us.

Cost of Comparable EA Studies

In September 2016, the bid received from MMM Group Limited for Contract No. P-16-94 for Class Environmental Assessment (EA) Study - Langstaff Road from Weston Road to Highway 7 has been accepted by York Region in the amount of \$1,647,359.99, excluding HST.

In January 2017, the bid received from Hatch Corporation for Contract No. P-16-164 for Consulting Services for Class Environmental Assessment Study at Dufferin Street from Langstaff Road to Teston Road has been accepted by York Region in the amount of \$998,077.00, excluding HST.

In November 2019, the bid received from Morrison Hershfield Limited for Contract No. P-19-218 for an Individual Environmental Assessment for the Teston Road Area Transportation Improvements to construct a missing link between Dufferin Street and Keele Street has been accepted by York Region in the amount of \$2,499,956.25, excluding HST. Notably, the bids from only pre-qualified consultants ranged from \$5.3 to \$2.5 Millions and an additional fee was paid before the bid by York Region to WSP to deliver Terms of Reference for the study.

Value for Money

The project team was prepared to file the ESR as early as in December 2018. The capital cost of the Technically Preferred Alignment 5 was estimated at \$32,018,318.00. However, TRCA staff was not satisfied with the recommendations of the draft ESR and recommended amendments that included additional study and evaluation of modifications to the currently preferred alignment prior to the finalization of the ESR. In their comment letter dated February 1, 2019, TRCA indicated that their staff would pursue a new hybrid route (Suggested Alternative Alignment for Further Consideration) with the CoV, study proponent (read RHL), and involved agencies. It should be noted that the suggested hybrid route largely resembled the Alternative Road Alignment 6A with an estimated cost of \$66,455,265.00, the alignment that was ruled out through a detailed evaluation process.

The pushback resulted in the second Final Draft ESR submission to the review agencies in May 2019. Committed to the RHL-CoV agreement and working in a close dialog with review agencies, the project team was able to demonstrate the stakeholders that refinements to the Technically Preferred Alignment 5 would provide a satisfactory outcome.

Nevertheless, the refinements required additional analysis and investigations, revisions to the ESR and preliminary design, and addressing the following comments from the review agencies, including the CoV. Finally, the ESR was filed with the MECP and placed on the public domain in September 2019 with the CoV as a co-proponent.

As a result of the project team's diligent effort, the Refined Preferred Alignment 5A was approved with an estimated capital cost of \$43,221,851.00. Compared to the worst-case scenario

Cam Milani, Rizmi Holdings Limited
June 25, 2020

of creating a new hybrid route similar to Alignment 6A, the final Alignment 5A still offers savings to the City in the order of **\$20+Millions**.

Summary

Full set of records documenting the EAS expenses is available on our file. Actual spending to undertake the Kirby Road Extension Class EAS has significantly exceeded the budget allocation of \$325,000.00 stipulated in the 2016 RHL-Vaughan agreement. Notably, budget overages experienced by the key project team members are in the same order of magnitude with the Natural Heritage as a most costly component. This illustrates that spending was driven by the actual scope of work rather than by the opinions of any specific consultants.

Cost comparison to similar EA studies shows that the project expenses are in line with the fees requested by others. The most important causes for this EAS budget increase are the limited scope of work provided in the original fee proposal, extreme level of EA complexity due to the highly legislated study area, and continuous changes in the scope of the study.

The Kirby Road Extension Municipal Class EAS was successfully delivered to the City. Connecting Kirby Road between Dufferin Street and Bathurst Street will considerably improve the transportation network in the area. This continuous road network will provide opportunities for growth and provide long-awaited travel demand relief in the surrounding area. The final Alignment 5A offers capital budget savings to the City in the order of \$20+Millions while ensuring wise management of important environmental resources.

Should you require further clarifications or additional information, please contact the undersigned at 905-738-6100, ext.: 216, or by e-mail: asteedman@schaeffers.com.

Respectfully,
On behalf of Schaeffers Consulting Engineers



Al Steedman, P. Eng.

Cc: Peter Stefanovic, SCE
Hacik Tozcu, SCE
Vijay Gupta, SCE
Koryun Shahbikian, SCE
Leonid Groysman, SCE



3rd Party Review: Findings & Conclusions

Third-Party Review of Rizmi Holding Limited's (RHL) May 2019 Request for Reimbursement of Additional Costs - Kirby Road Extension between Bathurst Street and Dufferin Street Class Environmental Assessment Study

City of Vaughan
June 5, 2020



Project: Third-Party Review of Rizmi Holding Limited's (RHL)
Request for Reimbursement of Additional Costs May 2019 -
Kirby Road Extension between Bathurst Street and Dufferin
Street Class Environmental Assessment Study

Prepared For: City of Vaughan – Infrastructure Planning and Corporate
Asset Management

Prepared By: HDR



Legal

The material contained in this report reflects HDR's professional judgment considering the scope, schedule and other limitations stated in the document and in the contract between HDR and the City of Vaughan. The opinions in the document are based on conditions and information existing at the time the document was published and do not consider any subsequent changes. In preparing the document, HDR did not verify information supplied to it by others, which information has not been independently verified by HDR and which HDR has assumed to be accurate, complete, reliable, and current. Therefore, while HDR has utilized its best efforts in preparing this report, HDR does not warrant or guarantee the conclusions set forth in this report which are dependent or based upon data, information or statements supplied by third parties or the City of Vaughan, or that the data and information have not changed since being provided in the report.

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Use of this report or any information contained herein, if by any party other than the City of Vaughan, shall be at the sole risk of such party and shall constitute a release and agreement by such party to defend and indemnify HDR and its affiliates, officers, employees and subcontractors from and against any liability for direct, indirect, incidental, consequential or special loss or damage or other liability of any nature arising from its use of the report or reliance upon any of its content. To the maximum extent permitted by law, such release from and indemnification against liability shall apply in contract, tort (including negligence), strict liability, or any other theory of liability.



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1. Introduction and Background

HDR Corporation was retained by the City of Vaughan to provide a third-party review of Rizmi Holdings Limited (RHL) submission and request for reimbursement of additional costs received by the City on May 28, 2019, for the Kirby Road Extension between Bathurst Street and Dufferin Street Schedule 'C' Class Environmental Assessment Study (approved December 2019). This third party review follows in association with and per [City of Vaughan Council recommendation at the meeting June 5, 2019](#) *"That staff review the submission and request from Rizmi Holdings Limited to be reimbursed for the additional costs associated with completing the Kirby Road Extension Class Environmental Assessment Study and report back to Council once the Kirby Road Extension Class Environmental Assessment Study has received final approval by the Ministry of Environment Conservation and Parks"*.

The following report summarizes HDR's review of RHL's May 28, 2019 submission to the City comprised of a draft memo May 27, 2019 prepared by SCE with respect to a cost review, actual spending and invoices for professional consultant services and costs incurred as of that date. It is noted that the submission also included a March 6, 2018 memo prepared by SCE to project file summarizing discussion points from a meeting held on March 1, 2017 with RHL, SCE and City staff at that time.

This memo summarizes and documents HDR's review of the information sources, and provides HDR's updated cost estimate, findings and trends, and conclusions.

Information Sources

To complete the review, background information and data was obtained through three sources:

1. City of Vaughan
2. In-person meeting with Rizmi Holdings Limited and Schaeffers Consulting Engineers (February 19, 2020)
3. Written requests for information (RFI's) to Schaeffers: RFI#1 February 18, 2020 (responses received March 19 and 27, 2020) and RFI#2 April 9, 2020 (response received April 22, 2020)

The background documents provided to HDR are outlined in **Table 1-1**.

Table 1-1: Information Sources

Background Review Documents	
2.1a	RHL Preliminary Proposal Scoped Class EA September 2015
2.1b	December 2015 Cost Breakdown Structure
2.2	Council Extract December 2015. https://www.vaughan.ca/council/minutes_agendas/AgendaItems/CW1201_15_10.pdf
2.3	2018-03-01 Memorandum of Understanding (Schaeffers Consulting Engineers)
2.4	2018-04-24 Kirby Road Extension Class EA Schedule pdf
2.5	PIC Notification Letter (img-612135353-0001)
2.6	2018-11-09 Kirby RoAD Extension Class EA Schedule
2.7	TRCA staff report to Executive Committee.url
2.8a	City letter to Schaeffers Revised Schedule November 9, 2018.pdf
2.8b	2019-01-08 Letter to Vince Musacchio.pdf
2.9	2019-05-27 Draft Kirby EAS Cost Review V5.pdf
2.10	Council Extract June 2019 https://pub-vaughan.escrimemeetings.com/filestream.ashx?DocumentId=18416
2.11a	Fully executed Agreement between the City & Rizmi Holdings LTD.
2.11b	Kirby EA Amending Agreement April 2018 Fully Executed.pdf
2.11c	238799 Kirby EA 2nd Amending Agreement October 2019 Fully Executed.pdf
2.12	Invoice Submissions
2.13	RFI#1
2.13a	Introductory Meeting and Request for Information #1 Feb 18, 2020
2.13b	Response from SCE to HDR RFI Feb 18, 2020.pdf (File # 4339) March 19, 2020
2.14	RFI#2
2.14a	Response to HDR RFI #2 of April 9, 2020 with attachments.pdf on April 22,2020

It is noted that at times the data conflicted or had errors. In these instances HDR flagged the item and when necessary made a reasonable assumption.

Understanding of Timeline of Agreement and Amendments

Executed Agreement dated November 11, 2016 following Council authorization December 2015 (https://www.vaughan.ca/council/minutes_agendas/AgendaItems/CW1201_15_10.pdf) had identified that the City will reimburse the RHL for the total costs of the undertaking to an upset limit of \$325,000.00 (exclusive of HST) or actual cost of EAS, whichever is lesser.

A memo to the project file prepared by SCE dated March 6, 2018 to summarize key discussion points raised during the March 1, 2018 meeting with City Staff at that time was included as part of RHLs May 28, 2019 submission to the City. The memo identified that project expenditures were at \$464,503.25 when approved budget is \$325,000.00. City staff clarified any cost adjustment would require Council's approval. Post meeting note to park EAS fees when opportunity to amend.

The Agreement was amended April 23, 2018 which included extension from December 31, 2017 to December 2018. It is noted there was no amendment to the terms of the agreement with respect to reimbursement to the upset limit of \$325,000 or the lesser associated with the undertaking and completion of the EA to approval. .



A Second Amendment following Council authorization June 2019 (<https://pub-vaughan.escibemeetings.com/filestream.ashx?DocumentId=18416>) with an executed date of October 2, 2019 maintained the \$325,000.00 upset limit and included conditions of payment (80% upon filing EAS, and remaining 20% upon EAS clearance).

2. HDR Cost Estimate

To develop a 2019 cost estimate for completing the Environmental Assessment the HDR team brought in sub consultants to cover the following disciplines:

- NRSI – Natural Environment
- Thurber – Hydrogeological, Geotechnical, Contamination Overview
- Tham – Ontario Land Surveyor
- Cumming + Company – Public Facilitation
- MSH – Socio Economic

The resulting cost estimate is approximately \$753,900 (excluding HST).

This updated estimate reflects the following assumptions:

- Facilitator is only needed for the CLC
- Topographic survey assumes no existing and / or current data
- Conformity memo would not need an update
- No additional traffic reassessment without GTA West
- A 24 month schedule for the estimate of project management fees
- PIC's are attended by HDR staff only
- Technical disciplines attend only relevant agency meetings with HDR staff
- Consultant pays for venues, media and web costs, and TRCA review costs

This updated estimate does not include:

- Environmental field work required for detailed design

This updated estimate includes the following items not fully included in the original scope / December 2015 proposal:

- Contaminant Overview Study

3. Findings and Trends

HDR's cost estimate was approximately 65% of the actual spending indicated by Schaeffers Consulting Engineer in their May 27, 2019 memo. This variance may be attributed to several factors.

Reasons the cost for the EA should be more than \$325,000 where reimbursement can be considered relative to and where not scoped and/or provision made for in the December 2015 proposal to the City:

- Website and Venue costs
- TRCA review costs including floodplain mapping fee
- Additional TAG meetings (original scope only identified joint CLC)
- Facilitation for CLC meetings
- Reconfirming Phase 1&2 - Needs and Justification and Planning Solution beyond reconfirming City-Wide TMP
- Indigenous Communities Consultation

- GTA West Corridor Sensitivity Analysis
- Additional costs for LID options
- Efforts to address Contamination
- Design effort to tie into Dufferin Street and Bathurst Street intersections beyond existing T-intersections
- Underestimation of the amount of geotechnical and hydrogeology work in the original scope for various alignments

Potential reasons the cost for the EA exceeded HDRs cost estimate:

- Bringing various technical discipline leads to several meetings
- Advancing an alternative alignment (alignment 5) as the preferred, without having fully addressed public, and stakeholder comments including regulatory and review agencies
- Advancing some areas (i.e. natural heritage, fluvial geomorphology) to a detailed design level

It is noteworthy to mention that there were several instances where there were discrepancies in the values, including as based on HDR's review of invoice documentation, provided by SCE. Some examples are listed below:

- The November 11, 2016 Executed Agreement is for \$325,000. There was an error in original proposal spreadsheet (September 2015) where the spreadsheet total was submitted as \$325,037.75. Based on the values in the spreadsheet however the total value would be \$343,288 exclusive of HST resulting in a calculation error of \$21,050.25.
- The total value of the invoice submitted for HDRs review was \$1,140,571.73 excluding HST however the Memo from May 27, 2019 identified expenditures of \$1,143,191.73.
- The Memo from May 27, 2019 included an Original Estimate column that was missing services listed in the original scope (OLS – Legal Survey and Tree Inventory) of a value of \$5,000 each.
- The Memo from May 27, 2019 included an Original Estimate column that listed Geotechnical and Hydrogeology as \$18,643.56 however the original proposal spreadsheet listed this work as \$39,600.
- The Memo from May 27, 2019 included a request for \$18,701.90 for the First Nations Engineering Services Ltd. (FNESL), but in response to RFI #2 the request was \$13,890 but invoicing only to support \$13,640. It is also noted FNESL was invoiced under SCE.
- The Memo from May 27, 2019 requests for GEO Morphix was for \$16,677.04 but in response to RFI #2 was \$18,280.84 but invoicing to support \$16,677.04.
- In response to RFI #2 the Savanta detailed fee request breakdown table had calculation errors.
- There were instances where SCE's sub-consultants provided the reason for being over budget on certain task as "it is a time and materials contract."

4. Conclusions

Based on review and analysis of the data, and as based on the findings and trends HDR provides the following conclusions based on information available at the time:

- An updated 2019 cost estimate, for undertaking and completing this Environmental Assessment, noting assumptions, is approximately \$753,900 (excluding HST). This cost estimate is approximately 65% of the actual spending indicated by Schaeffers in their May 27, 2019 memo.
- Findings with respect to the review of the request and where costs for reimbursement can be considered over and above the original upset limit of \$325,000 are within ranges with upset limit as tabled below (excluding HST):

Cost Reimbursement Consideration	Range	Total Upset Limit (inclusive of original \$325,000)
Environmental Assessment	\$157,613 to \$191,318	\$482,613 to \$516,318
Detailed Design	\$28,130 to \$38,240	\$510,743 to \$554,558

- The total value of the invoices submitted for HDRs review was \$1,140,571.73 (excluding HST) noting there were observed discrepancies and that the SCE May 27, 2019 memo identified expenditures of \$1,143,191.73.