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BY COURIER

January 11, 2013

Ms. Kirsten Walli
Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
P.O. Box 2319
Toronto, ON.
M4P 1E4

Dear Ms. Walli:

EB-2012-0047 – Horizon Utilities Corporation – Application for Service Area Amendment – Hydro One Networks Intervenor Evidence

In accordance with Procedural Order 2, I am attaching two (2) paper copies of the Hydro One Networks' Intervenor Evidence in the above-mentioned proceeding.

Sincerely,

ORIGINAL SIGNED BY SUSAN FRANK

Susan Frank

c – Intervenors (Electronic Only)

HYDRO ONE NETWORKS INC. INTERVENOR EVIDENCE

The incumbent distributor, the intervenor Hydro One Networks Inc. ("HONI"), submits the following evidence to contest the Revised Service Area Amendment application ("SAA") filed by Horizon Utilities Corporation ("HUC") on October 24, 2012, which was updated on December 17, 2012. The Updated Revised SAA will hereinafter be referred to as "the Application" or "HUC's Application."

The bolding and italicizing of the excerpts from the Board's Decision in RP-2003-0044 below have been done by HONI.

Principles for contesting HUC's Application

Ontario LDCs have both the obligation and the right to connect, serve, build, and plan for their entire service territory and the existing and future customers therein. Those obligations and rights are for the benefit of their existing and future customers and for the benefit of the provincial electric grid as a whole.

Over the years, LDCs have made consensual or uncontested arrangements with each other where there was common ground regarding the transfer of limited sections of territory, usually in cases where there was a new customer or a proposed and committed new development that could be served more efficiently by an adjacent LDC. Consistent with the consensual or uncontested nature of such exchanges, the Board stated the following at paragraph 267 of RP-2003-0044:

> …***Service Area amendments should not result in the Board-mandated transfer of customers from one distributor to another. Such transfers should be the subject of bilateral arrangements between distributors, wherein all of the issues engaged by such transfers can be addressed. Such issues involve appropriate compensation for any assets stranded as a result of the arrangement. In this way, the interests of the customers of the surrendering distributor can be reasonably protected. An applicant should file evidence to demonstrate all the effects on customers in the amendment area.***

Additionally, the Board stated at paragraph 247 of RP-2003-0044:

> *Similarly, proposals to align service areas with municipal boundaries are ill-considered unless the proponent can* ***provide concrete evidence that the extended area is needed to provide service to actual customers in the area*** *using assets and capacity in a manner that optimizes existing distribution assets, and* ***does not prejudice existing customers of the utility. Amendments need to be anchored by real customers****, with an economic case for the extension that is convincing. Some parties argued that aligning the service areas with municipal boundaries advances distribution system planning.* ***The Board does not regard such alignment***

> ***to be inherently beneficial.*** *It is apparent that the decoupling of the electrical utilities from municipal government, which is one of the signal reforms in the recent development of the electricity market, will continue to evolve. It is not unlikely that the pursuit of efficiencies will lead to the continuing consolidation of the distribution industry in Ontario, and any alignment of service areas to specific municipalities will be increasingly irrelevant.*

The approach above is reinforced by the recent Distribution Sector Review Panel Report, whose recommendations, although not yet adopted by the Government, reflect the trend toward further severing of legacy common municipa1/utility service areas.

Despite the pronouncements of the Board in RP-2003-0044, HUC is advancing an Application that is both novel and dramatic in that it seeks to interfere with and fundamentally change the above-mentioned obligations and rights of incumbent LDCs in four different ways:

(a) the Application seeks to carve out, from the territory of HONI, the incumbent LDC, a new and committed residential development whose owner has already accepted an Offer to Connect from its own LDC, HONI, and who does not wish to be forced to connect to another LDC;

(b) the Application seeks to carve out, from the territory of HONI, the incumbent LDC, existing, long-standing customers already being served by HONI's facilities, without discussion or negotiation with HONI, the incumbent LDC;

(c) the Application seeks to carve out, from the territory of HONI, the incumbent LDC, vacant land with future growth potential; growth that will benefit the incumbent utility and its existing customers, and for which HONI, the incumbent LDC, had the obligation and the right to plan and design its distribution system; and

(d) the Application seeks to carve out, from the territory of HONI, the incumbent LDC, a new school being built, which school was wrongfully connected by HUC during the construction phase.

It should be of concern to all incumbent LDCs, and to the Board itself, if applicant LDCs across the Province attempt to fundamentally change the Board's SAA process from its original purpose into the creation of forced SAA-mandated transfers of existing customers, unwilling customers and vacant land. Such transfers would be forced with no discussions, no agreement, no purchase price, no compensation, and a disregard of the previously-mentioned obligations and rights of incumbents, by permitting non-voluntary acquisitions to occur in situations such as (a), (b), (c) and (d) above.

Facts

As a preliminary matter, HONI notes that the Application refers throughout to the capacity of the M3 feeder and alleges potential problems if that feeder were to be used by HONI to serve additional customers in the subject area. Although HONI does not agree with those allegations, the fact is that as a result of a number of delays due primarily to HUC's wrongful refusal to cooperate with a supporting guarantee ("work protection") to allow HONI to complete work along Rymal Road. HONI will not be using the M3 feeder to serve customers in the subject area. Therefore, discussion of the M3 feeder has become irrelevant.

The Proposed Subdivision inside the territory of HONI, the Incumbent

Multi-Area Developments Inc. ("Multi-Area") is the developer of Summit Park Phase 7, which is entirely within HONI's service territory. Multi-Area accepted HONI's Offer to Connect in September 2012, and Multi-Area notified the Board of its decision on September 11. In a letter to the Board dated October 19, 2012, Multi-Area's lawyer stated that Multi-Area does not wish Summit Park Phase 7 to be forced to connect to HUC the Applicant's distribution system. The letter states, at page 2:

> *"With respect to the Project, our client is seeking service from the **in-territory** distributor. No doubt a regime where a distributor can try to "poach" new developments without an invitation from the customer will lead to considerable uncertainty for developers and distributors, and an increased caseload for the Board."*

For the reasons stated above in the "Principles" section, HONI states that this new development inside the incumbent's service territory should not be carved out unwillingly and forced to connect to another LDC.

Additionally, HONI states that in 2012, it provided Multi-Area with a DSC-compliant Offer to Connect consistent with HONI's Conditions of Service and that the customer accepted the Offer to Connect in September 2012, thereby creating a binding contract between HONI and its customer, which contract should not be abrogated. A copy of the signed OTC is attached as Appendix D. (HUC's Application shows an older version of the offer.)

As well, HONI's costs to service Summit Park Phase 7 are lower than HUC's as outlined in the information below.

Overall, the information shows that HONI is a lower-cost alternative to HUC for connection by $388,900.

Note:

- The table below is for comparison purposes only and is not intended to replace the Multi-Service Connection Cost Agreement that HONI has already provided to Multi-Area, the developer of Summit Park Phase 7.
- The numbers and estimates for HUC were derived from the HUC filing of August 10, 2012, as part of EB-2012-0047.
- The numbers and estimates for HONI contestable and civil costs are derived from the agreement Multi-Area Development has with its contractor executing that work.

	HONI	HUC
Total Capital Cost to the Developer ($000s)		
Total	1,133.9	1,522.8
Total Non-Contestable Costs[1]	571.9	310.0
Total Contestable Costs[2]	538.9	1,212.8

Given the construction of the HONI reinforcement line to Binbrook, as described further below in this document (in the 2010-2022 Distribution Area Study for Ancaster and Glanbrook Areas, and in the HONI Loop Feed to Binbrook Plan, attached respectively as Appendices A and B hereto) service to the customers in the area in question will not require further upstream capital additions by HONI or additional costs. However, according to the HUC Offer to Connect, provision of service to Summit Park Phase 7 will require upstream capital to be added, at a cost of $127,953. Economic efficiency suggests that provision of service via an existing HONI line, as already planned and under construction by HONI, would be more practical.

[1] HONI includes a number of items in the Non-Contestable portion that other Utilities, including HUC, generally include as contestable. A detailed list of those items is included in the section below the comparison table. The items total $380,075 which, when subtracted from the HONI Non-Contestable cost of $571,900, brings the net cost down to $191,800 compared to HUC Non-Contestable cost of $310,000.

[2] Included in the Contestable portion of HUC's offer to connect, they have included a number of additional items around civil construction that the developer is accountable for and HONI does not include in capital estimates.
At time of authoring, the civil costs related to Phase 7 have been or are near completion and the work has been performed by a third party contractor hired by the developer. In order to provide a fair comparison of the Contestable portions of the Offers to Connect of both utilities, HONI has estimated the cost of the civil work using information from the contractor's bid.

In doing the comparison, it should be noted that there are a number of items included in HONI's non-contestable costs which are presumed to be included in the Applicant's contestable costs. The total cost of these items is $380,075. A list of these items is as follows:

16kV 75kVA Transformers	3-phase 4-way SF6 Switchgear Kiosks
Load Break Elbows	Equipment Locks and Stickers
Secondary Buss Bars	Bushing Inserts
Load Break Feed Throughs	Bushing Caps
Megger Primary Conductor	Megger Secondary Conductor
Underground Connection at Meter	Underground Connection at Transformer

It is therefore clear that HONI's total connection costs are lower than HUC's and that the capital costs payable by the developer are lower if the developer remains with HONI, as the developer wishes to do. Furthermore, a binding contract between the developer and its licensed LDC has been entered into and should not be abrogated. HONI has acted in reliance on that binding contract, and is entitled to have acted in reliance on that binding contract, by having already performed work and having already spent monies to fulfill its obligations to its customer.

The Existing Customers inside the territory of HONI, the Incumbent

For the reasons stated above in the "Principles" section, HONI states that existing customers inside an incumbent's service territory should not be carved out and transferred to another LDC by means of a contested SAA application.

Prior to this Application, HONI was not aware of any desire of any of these existing customers to be connected to the Applicant or to be severed from HONI's service territory. Furthermore, HONI states that it is inefficient, harmful and contrary to the principles of the *Ontario Energy Board Act, 1998,* for an applicant LDC to strand assets of an incumbent LDC and to force the incumbent to lose load without compensation, thereby harming the incumbent's remaining ratepayers by saddling them with the obligation to pay for the stranding. HONI states that this would be the case if HUC were permitted to acquire HONI's existing customers by means of this Application. HONI's opposition is in line with the Board's pronouncement in EB-2005-0504, another SAA application in which HUC sought, but failed, to acquire several of the same existing HONI customers that are included in this Application. The Board stated at page 3:

> *"It does not appear that HUC has met its responsibility of following Board Decision RP-2003-0044 and attempted to negotiate a transfer of HONI's customers with HONI directly. HUC's inability to carry out its responsibility has left me no choice but to follow the views of the Board in Board Decision RP-2003-0044, namely that service area amendments "should not result in the Board-mandated transfer of customers from one*

distributor to another." This means that the four HONI customers will remain with HONI and will not become part of HUC's service area.

1. 1898 Rymal Road East, RR # 1, Hannon, Ontario;
2. 1900 Rymal Road East, RR # 1, Hannon, Ontario;
3. 1910 Rymal Road East, RR# 1, Hannon, Ontario;
4. 1912 Rymal Road East, RR # 1, Hannon, Ontario.

I would like to point out that were it not for the consideration of the larger public interest served by ensuring timely service to Multi-Area Developments Inc., I would have seriously considered denying this application until such time as it was shown that Horizon had entered into negotiations with Hydro One to provide for the transfer of the four Hydro One customers. I expect that any service area amendment applications will not be filed until the acquiring utility can show that it has attempted to negotiate with the adjoining utility where the negotiations are likely to result in a more efficient rationalization of the distribution system…."

In an unprecedented manner (for LDCs) similar to the manner in which retailers solicit electricity business around the Province, HUC has tried to gain support from HONI's existing customers by soliciting their support using the spectre of rate decreases. While any customer would welcome lower rates, the Board has stated at paragraph 86 of RP-2003-0044 below that rates should not be a deciding factor in granting SAA application:

The Board does not believe that significant weight should be put on differences in current distribution rates even though current rates may be a significant factor in determining customer preference. In fact current rates, insofar as they are not a predictor of future rates, may misinform customer preference.

The Vacant Land inside the territory of HONI, the Incumbent

For the reasons stated above in the "Principles" section, HONI states that vacant land inside an incumbent's service territory should not be carved out and transferred to another LDC by means of an SAA application.

HONI further states that even with respect to vacant lands, including the vacant lands encompassed by this Application, HONI (the incumbent LDC) has done short- and long-term planning to serve future customers across its licensed territory and looks forward to years of revenue streams from future customers. The loss of all those items is not only inefficient but also harmful to any incumbent LDC's ratepayers, including HONI's ratepayers in this Application.

The New School being built inside the territory of HONI, the Incumbent

For the reasons stated above in the "Principles" section, HONI states that the new school inside its service territory should not be carved out and transferred to another LDC by means of a contested SAA application.

The new school was wrongfully connected by the Applicant to the Applicant's distribution system, in contravention of the Applicant's licence.

Additionally, on September 28, 2012, the School Board requested its own LDC, the incumbent HONI, to provide an Offer to Connect. HONI has done so. HONI's capital costs to connect the school are lower than HUC's and HONI will have assets readily available to service the school.

According to HONI's Conditions of Service, the school would be classified as an ST customer. The Offer to Connect developed for and presented to the Hamilton-Wentworth District School Board was predicated on the school taking service as an ST customer. A characteristic of this rate class is that customers are required to provide and maintain their own transformation capabilities, and that allows the customer to obtain a lower rate than the General Service Rate Class.

HUC has stated that it intends to serve the school as a General Service customer. For customers in this class, HUC builds and maintains the transformation facilities on behalf of the customer. Given this fundamental difference, HONI acknowledges that comparison of the capital components of the Offers to Connect is difficult and not particularly instructive even though HONI's costs are significantly lower than those of HUC. HUC incurs an understandably higher cost because its estimate must include substantial assets for transformation, whereas HONI's Offer is predicated on transformation being provided by the customer. Nonetheless, building of transformation at the new school is outside the scope of HONI non-contestable and contestable costs and thus should not be part of the analysis with respect to the economic efficiency of one bid versus another.

For all of the reasons above, HONI therefore states that HUC has failed to demonstrate that it is in a better position to service the school than the incumbent or that carving the school out of HONI's service territory is in the public interest.

Services, Assets and Planning in and for the Subject Area

All of the properties included in the Application are entirely within HONI's licensed service territory, and HONI has distribution assets running across Rymal Road that are being used and will continue to be used to provide service in a manner that results in effective utilization of both existing and pre-planned, newly-constructed distribution assets. The result will optimize utilization of assets and investments made in HONI's service territory as part of HONI's long-term planning and construction for the subject area.

HONI is a well-developed distributor in this area.

There is no customer confusion regarding whom to call for service if HONI remains the distributor for the existing and future customers, as its customers will receive a HONI bill containing all necessary contact information, and HONI has local presence. Additionally, HONI also provides the benefit of underground locates via Ontario One Call service.

HONI provides reliable service in the Hamilton area, and HONI's local system reliability is comparable to the Applicant's, as are HONI's after-hours response times. All existing and new customers encompassed by the Application are supplied and will continue to be supplied by HONI's Nebo Transmission Station, regardless of which distributor connects and services them. HONI's assets in this area provide reliable service to existing customers. When HONI connects Summit Park Phase 7 pursuant to its signed contract with Multi-Area, customers in the new development, as well as existing HONI customers, will continue to have safe and reliable service.

In urban areas such as Rymal Road, HONI's reliability and response time will be significantly better than Provincial averages and will be basically the same or better than HUC's. This is demonstrated by the fact that of the eight HONI interruptions experienced in 2011 in this area, 63% of them were of a momentary nature where the outages are less than one minute. The three sustained outages equate to 3.81 hours. This is better than the reliability statistics reported by HUC in its August 10, 2012, version of the Application: 33 outages in 2011, of which 13 were autoreclose outages (less than 1 minute) for the feeder it plans to use to service the SAA area. Given that both LDCs are being supplied from HONI's Nebo TS, the reliability at the station will be similar in nature.

HONI has a Geographic Information System (GIS) that provides information on all its distribution system assets, including poles, transformers and services.

Additionally, HONI's loop feed from Nebo TS, across Rymal Road down Highway 56 to Binbrook, will enhance reliability in the subject area. (See the reference further below to the Area Study for HONI's service territory between Nebo TS and Binbrook, and the reference to HONI's Loop Feed to Binbrook Plan). Also, in the case of a breaker failure on the M5 feeder, HONI would have backfeed capability from the M6 breaker.

Area Study for HONI's service territory between Nebo TS and Binbrook, and HONI's Loop Feed to Binbrook Plan

HONI supplies, and has planned to supply, all customers in its service territory along Rymal Road. Retaining the service territory encompassed in the Application allows HONI to be in a position to economically supply future phases of development and utilize assets and investments made as part of long-term planning for this area.

Attached as Appendix A is a copy of HONI's 2010-2022 Distribution Area Study for Ancaster and Glanbrook Areas that shows HONI's plan, formulated beginning in 2010, to supply all customers in its service territory along Rymal Road pursuant to a rational,

well-conceived development plan. Item 11.1 on page 8 of the Study shows the alternative adopted by HONI, namely to increase capacity at Nebo TS by constructing four new feeders out of Nebo TS and transferring load from overloaded feeders to new feeders. Item 11.1 shows the plan to build 30 km of new 27.6 kV circuits, and the second bullet in Item 11.1 shows the plan to building 14 km of 27.6 kV feeder from Nebo TS east on Rymal Road and on Highway 56 for the purpose stated in the bullet.

The Study is a planning document, so planning assumptions are therefore made throughout to allow for contingency plans as per HONI's "normal" system conditions.

Attached as Appendix B is a copy of HONI's Loop Feed to Binbrook Plan, formulated beginning in 2010, for constructing a loop feed to the Binbrook Area. (Binbrook is entirely within HONI's service territory.) As stated in the Plan, there are already 2,322 HONI customers in the Binbrook area, and the existing built-up area is only about one-third of the developable land available: there are signs that growth is going to continue at a steady pace, as subdivision developers have applied for connection of more homes (over 1,800 lots), and a commercial plaza with a large grocery store has recently applied for connection. Binbrook is now supplied by the M5 feeder from Nebo TS, which is a radial feeder supplying over 5,000 customers. In the case of a line failure on the M5 feeder there are no other feeders to back up the M5 to facilitate power restoration. Therefore, HONI determined some time ago to provide an alternate supply to Binbrook to minimize the duration of interruptions. The route selected by HONI, which is shown in the Plan, goes along Rymal Road and Highway 56.

Stranded assets based on the load in HONI service territory being taken into consideration in the Nebo TS upgrade project

The load growth throughout HONI territory fed by Nebo TS was taken into consideration to determine the capital contribution required by HONI Distribution to pay for its share of the TS upgrade project undertaken by HONI Transmission. If HUC were to be successful in acquiring HONI's service territory and customers encompassed by the Application, approximately 6MW of load would be lost, resulting not only in lost future revenue benefiting HONI and its ratepayers. HONI would expect to be compensated for any financial impacts should this happen. It would be compensated for the amount involved.

The Board has recognized the problem of stranding of upstream assets. At paragraph 292 of the Decision in RP-2003-0044, the Board stated:

> *Where upstream customers have made significant contributions in aid of construction with a reasonable expectation that future connections will provide contributions in turn as they become connected, the Board may consider some portion of the original contribution to be stranded.*

Rate impacts on existing HONI customers

Summit Park Phase 7 and all future phases of the development as per the City of Hamilton's Urban plan included with HUC's additional material submitted on December 17, 2012, are inside HONI's service territory. The culmination of the next phase of development in the area would result in a new urban cluster within HONI's territory, thereby lowering or helping to contain the rates for existing HONI customers in this area and across the Province.

If, however, the Application were to be successful in carving out the Application areas (especially vacant land with future growth potential) out of HONI's service territory, existing HONI customers would continue to be held responsible, subject to any compensation as noted above, for the total costs of upstream reinforcement costs outlined in the Area Plan (Appendix A hereto) without benefit of offsetting future customer revenue and/or developer contributions, thereby negatively impact the rates of existing HONI customers.

The Board has recognized this problem. At paragraph 179 of its Decision in RP-2003-0044, the Board stated:

> *If a new embedded distributor targets service to lower cost customers (usually small dense areas), the remaining customers served by the host distributor may well face higher rates than if the embedded distributor did not exist. Loss of such loads will necessarily have implications for the customers of the host distributor. Is it equitable and fair to all customers that an embedded distributor can take advantage of this regulatory arbitrage to create a two-tiered rate structure, one for customers of the embedded distributor, and one for the remaining customers of the incumbent distributor? In the view of the Board, this would not be in the public interest.*

Inaccuracies and/or Missing Information in HUC's Evidence, excluding the Burman Report

(a) Allegation

At s. 7.1.5 of Part III of the Application, statements are made regarding the costs of connecting HONI's existing customers in the Application area.

Fact

The cost for HONI to retain the existing customers is $0, whereas the estimated costs for HUC to connect ten of HONI's existing customers is $123,000. Clearly and logically, HONI is the more economical and efficient LDC to continue to service the existing customers. There is no cost justification for transferring these customers to HUC, and there certainly are no regulatory efficiencies as alleged by HUC.

(b) Allegation

At s. 7.2.1(e) of Part II & III of the Application, statements are made regarding the costs of the stranded equipment (e.g., lines, cables, and transformers) that would need to be de-energized or removed if the Applicant were to acquire the subject area.

Fact

HONI has existing assets in place in order to currently service these customers. HUC's assessment of the asset value is incorrect. HONI estimates that there is approximately $15,000 of existing assets that would be stranded, currently used to service the existing customers in these two parts of the Application.

(c) Allegation

In section 7.3.2 of Part IV of the Application, HUC presents a rate comparison, using a rate class and load forecast.

Fact

HUC has used an incorrect rate comparison, incorrect rate class and incorrect load forecast.

(d) Allegation

Section 7.3.2 of Part V of the Application makes allegations about bill impacts.

Fact

Given that this is vacant land, the type of customers and time frame of when they would be there is unknown, making the alleged figures irrelevant.

(e) Allegation

Sections 7.5.1/7.5.5 of Part V of the Application makes assumptions that HONI requires an expansion to service future customers which do not have a time frame associated with them, while claiming HUC does not require any upgrades to do so.

Fact

HUC's assumption is incorrect because as per HONI's area plan attached hereto as Appendix A, HONI will have a new 27.6kV feeder on Rymal Road with ample capacity to service the expected future load. Furthermore, HUC has requested two new feeder positions from HONI's Nebo TS, which suggests that HUC does not currently have capacity to service the future customers of Summit Park.

(f) Allegation

In the conclusion of Part V of the Application, HUC references serving customers and states that it has sufficient capacity to supply the load for such customers.

Fact

There are no customers included in this part of the SAA, and there is no indication of what load is being referred to, because there are no customers. Additionally, as stated in (e) above, HUC has requested two new feeder positions from HONI's Nebo TS, which suggests that HUC does not currently have capacity to service the future customers of Summit Park or of any other development occurring in those vacant lands.

(g) Allegation

The revised Application dated December 17, 2012, included a copy of HONI's Offer to Connect the new school and also continues to allege in section 7.5.4 of Part IV that HONI supplied only a division of work to date and no costs.

Fact

The Offer to Connect is not the latest Offer to Connect. The latest Offer to Connect is attached by HONI as Appendix C. Furthermore, it is not correct that HONI supplied only a division of work to date and no costs. Also incorrect is HUC's allegation regarding the difference in rates between HONI and HUC for the school. The fact is that HONI's rates are slightly lower.

(h) Allegation

In Part IV of the Application, at page 20, HUC alleges that HONI has expansion costs to service the school.

Fact

HONI has no expansion costs to service the school. Furthermore, HUC is disregarding the costs that will be borne by HUC's other ratepayers if HUC services the school, yet HUC expects the Board to take into consideration the school's costs if HONI services the school. HONI states that such an apples-to-oranges comparison is a contradiction and should be disregarded by the Board because it creates an unfair playing field.

Allegations in the Burman Report

As part of its Application, HUC submitted a report from Mr. Burman (the Burman Report). The Application alleges that the Burman Report is an independent assessment of HUC's and HONI's distribution systems in the subject area and their respective abilities to serve new development in a reliable and efficient manner.

The fact is that there were no consultations or discussions between the author of the Report and the planning group at HONI, nor did the author provide a copy to Hydro One for review and comment prior to its being filed. Understandably, the Report is replete with inaccuracies and misunderstandings regarding HONI's assets and plans and cannot be considered as helpful, nor can it be considered a comprehensive and accurate assessment of HONI's distribution system or HONI's capability to efficiently and reliably supply new development in the area.

Facts regarding the Burman Report

- Page 7 of the Report states that HONI is undertaking an expansion project along Rymal Road. As shown in HONI's Area Study described above and attached as Appendix A (see also the Loop Feed to Binbrook Plan attached as Appendix B), the feeder being built by HONI on Rymal Road is part of a larger enhancement project to bring a loop feed to the HONI's Binbrook area. As the Report states, HONI is optimizing the use of existing assets in the design of the enhancement project by utilizing existing poles where possible, based on HONI design standards.

- Although the current 8 kV line is not suitable to service the new customers in the subject area, it was never HONI's intention to use that line for that purpose. As shown by HONI's Area Study and Loop Feed Plan, HONI will be using a new 27.6kV line to service all customers in the Application area.

- The slide included as Appendix A in the Report has been taken out of context and therefore misunderstood. This slide was part of a presentation given by HONI to other LDCs regarding the procedures for handling Distributed Generators (not load customers) on varying types of feeders. HONI always strives to optimize the use of existing infrastructure to meet changing needs over time, and HONI does not have any feeders that are contractually or otherwise "dedicated" to a single LDC. The M3 and M4 feeders are owned by HONI and, like other feeders, can be used to supply any customers that HONI deems appropriate to supply, based on sound engineering and economic considerations. This is now an irrelevant point, given HONI plans to use the M5 feeder to supply the customers along Rymal Road as stated in the Facts section above.

- The review of the Dickenson and F Class feeders is not relevant to this Application because, as per HONI's Area Study described above, there is neither an expansion nor an enhancement on this infrastructure. Again on pages 24-25, the Report uses the F Class system in the infrastructure comparative analysis, but the F Class system is irrelevant.

- In the connection of Summit Park Phase 7, HONI has no intention to request HUC to reduce its load on M3/M4, as referenced at page 23 of the Report.

- The allegation that servicing a new urban subdivision would be inconsistent with the service HONI generally provides is an inaccurate statement. One-third of the HONI customers south of HUC's service territory are Urban customers.

- The service reliability comparative analysis on page 28 of the Report is not valid. The indices referenced for HONI are Province-wide statistics and are therefore irrelevant for the Application area. (Refer to the section above on Service, Assets & Planning in and for the subject area). Furthermore, the allegation that HONI's system has higher exposure to outage-causing elements is incorrect.

- The rate comparisons on pages 28/29 of the Report are incorrect, as is the assessment of the Offers to Connect for Summit Park Phase 7 on page 33. The same figure cannot be used for contestable costs for both LDCs, given that the scope of non-contestable and contestable work is different for each part. A correct comparison of the offers can be found in the section above entitled *The Proposed Subdivision inside the territory of HONI, the Incumbent*.

- Direct-bury underground residential installation is not limited to rural systems, as alleged on page 32 of the Report. Both direct-bury and in-duct standards are acceptable in rural and urban environments and are commonly utilized by all utilities.

- Also incorrectly stated on page 32/33 is that, due to a road widening by City of Hamilton, many of the poles which have recently been framed by HONI will need to be moved, that existing poles will be replaced with larger and higher class poles appropriate for 27.6/16 kV circuits, and that HUC will not need to relocate its poles. The poles in question are Bell-owned poles. As can be seen in Appendix E Minutes from a meeting on August 15, 2012, regarding the road-widening project, Point 8 states that only three Bell-owned poles will require relocation to allow for a right-turn lane, while Point 1 shows that HUC has up to 40 poles that will require relocation. Furthermore, pole height and class are not driven by voltage.

Conclusion

Although the Application differs greatly from the SAA applications heard by the Board to date, HONI has nevertheless provided information and figures as would be provided by an incumbent to oppose a "normal" SAA application, in which a developer or other new customer has compared two Offers to Connect and wishes to connect to a non-incumbent LDC.

Despite having provided the said information and figures that HONI believes are more than sufficient to justify the retention of all the subject territory and customers and to show that the Applicant has not met the onus that the Board has placed on applicants in contested SAA applications, HONI nevertheless states that it should retain all the subject territory and customers based on the Principles stated on pages 1 and 2 above. HONI states that the granting of any portion of the Application would initiate "open season" on the Ontario map of distribution service territories by allowing any LDC to use the SAA

process to cherry-pick the existing customers and vacant lots within an incumbent LDC's service territory, and to disregard written connection agreements between an incumbent LDC and its customers. It would also give credence to the approach of aggressively soliciting existing customers of an incumbent LDC to persuade them to leave their supplier, similar to the practices of Ontario retailers seeking new and existing customers. More generally, this would encourage LDCs to acquire customers and service territories without going through a negotiated purchase-and-sale process that creates benefit on both sides by compensating one utility with fair market price for giving up current customers, new customers and vacant land that will be subject to future customer growth.

HONI states that, and understands the Board to have found that, such activities and their results are both inappropriate and undesirable.

Furthermore, at paragraph 199 of its Decision in RP-2003-0044, the Board stated:

> *In a contested application, the onus will be on the applicant to demonstrate that the amendment is in the public interest.*

HONI states that the Applicant has not satisfied this obligation.

Distribution Area Study

for

Ancaster and Glanbrook Areas

Planning Document for the period between: *2010*-2022

Prepared by: Distribution Business Development Department

1.0 Background and Need

Hydro One Distribution supplies power to the retail customers in the southeastern part of the City of Hamilton. The area is part of the former Town of Ancaster and Township of Glanbrook and is supplied by the Nebo TS and Dundas TS feeders. The Ancaster area is supplied by Nebo TS 157M6, 157M7 & 157M8 and from Dundas TS 2M4 & 2M6 while the Glanbrook area is supplied from the Nebo TS M5 feeder.

According to the Census data available from Statistics Canada the Ancaster and Glanbrook areas saw a population growth of 34% and 85% respectively from year 2001 to year 2011. It is anticipated the substantial load growth will continue in the areas for the study horizon.

The Nebo TS M5 feeder is recommended for a backup supply since it is only one feeder for the supply of Glanbrook areas, specifically for the Binbrook community. Other Nebo TS feeders, M6, M7 and M8 are heavily loaded requiring load relief. As well, Nebo TS loading has reached its summer 10-Day Limited Time Rating (LTR) requiring capacity improvement.

This planning contained in this area study began in 2010. The loading and costing information have been updated with current numbers as they became better known through 2011 and 2012. The 10 year study horizon is 2012 – 2022.

This is a planning document; therefore planning assumptions are made throughout to allow for contingency plans as per HONI's "normal" system conditions.

2.0 Study Area

This study focuses on the Hydro One 27.6 kV supply networks in the town of Ancaster and Glanbrook areas in the City of Hamilton. The study area is currently supplied by Dundas TS (2M4 & 2M6) and Nebo TS (157M5, 157M6, 157M7 & 157M8). There are 6 distribution stations (DS) that are supplied from the feeders and these DSs make up the 8.32kV supply network within the study area. The DSs are Dickenson Road DS, Duff DS, Ancaster West DS, Fiddlers Green DS, Mount Hope DS and Woodburn DS.

The load growth within the study area is assumed to be 1.8% annually from 2014 to 2022 following a step increase in 2013-2014 due to the planned connection of a large load customer.

This study has one distributed generation which has been connected since 2008 on the Nebo TS M5 feeder; 3.2 MW biogas.

An overview of the study area is provided in Figure 1. The time period considered in this study is 10 years- from 2012 to 2022.

3.0 Transmission Lines

Nebo TS is 230/27.6 kV station doubly fed from Middleport TS and Beach TS via circuits Q24HM and Q29HM.

Dundas TS is 115/27.6 kV station doubly fed from Burlington TS and Newton TS via circuits B3 and B4.

4.0 Transformer Station (TS) and Capacity

The summer loading for Nebo TS has reached its summer Limited Time Ratings (LTR)
A summary of station's summer LTR and 10 year load projection are recorded in table 1. The actual peak load on Nebo TS for 2010 and 2011 was 98.8MVA and 109.5MVA respectively.

Table 1: Transmission Stations Capacity and Loading- Existing and Forecast

TS	Summer LTR [MVA]	Summer Peak Existing [MVA] 2012	Present Available Summer Capacity [MVA] 2012	5 Years (2017)*		10 Years (2022)*	
				Growth [MVA]	Projected Available Capacity [MVA]	Growth [MVA]	Projected Available Capacity [MVA]
Nebo TS	106	106	0	49	-49	61	-61
Dundas TS & Dundas TS #2	213	160	53	16	37	35	19

Note: TS loading includes both H1Dx and Horizon Utilities.
Dundas TS #2 was built in 2003 for load relief of Dundas TS.

5.0 TS Feeder Capacity

The existing 27.6 kV feeders of Nebo TS and Dundas TS affecting the study area are listed in the table 2 below. The load projection of each feeder is based on local growth knowledge on any possible future new load connections in addition to the normal growth rate at 1.8%. The table 2 below shows load growth if no corrective action is taken.

Nebo TS M6 and M7 are currently over their Planned Load Limit (PLL) of 350 Amps or 17 MVA for 27.6 kV feeder. These feeders will require load relief soon. Also, Nebo TS M5, M8 and Dundas TS M4 will approach their PLL starting in 2013

Table 2: TS Feeder Capacity and Loading- Existing and 10 year forecast – no additional feeders or load transfers.

TS Feeder	*Present 2012*		*2017*		*2022*	
	Voltage	**Load**	**Voltage**	**Load**	**Voltage**	**Load**
	[%]	**[A]**	**[%]**	**[A]**	**[%]**	**[A]**
Nebo TS M5*	100%	288	95.2%	**850**	95.2%	**926**
Nebo TS M6	98.2%	**430**	98.0%	**470**	97.5%	**514**
Nebo TS M7	97.5%	**494**	97.4%	**540**	96.9%	**590**
Nebo TS M8	97.1%	330	96.5%	**360**	95.9%	**393**
Dundas TS M4	100%	330	99.7%	**360**	99.3%	**393**
Dundas TS M6	101.6%	180	101.3%	197	100.7%	215

Note: The lower permissible voltage limit on each feeder is 94% of the nominal voltage as per Hydro One's system voltage standards.
Red Hill Business Park is estimated to be 26MVA during the study period and is shown on Nebo M5 for the 2017 and 2022.

6.0 TS Feeder Performance

The average TS feeder performance for the past 3 years from 2007 to 2009 is listed in table 3 below.

Table 3: Transmission Station Feeder Performance- Average from 2007 to 2009

	3 Year Average from 2007 to 2009					
TS Feeder	**SAIDI**		**SAIFI**		**CAIDI**	
	SAIDI	**Prov Rank**	**SAIFI**	**Prov Rank**	**CAIDI**	**Prov Rank**
Nebo TS M5	0.0012	1376	0.0005	1146	2.2308	1947
Nebo TS M6	0.0017	1174	0.0014	532	3.1654	1337
Nebo TS M7	0.0083	352	0.0057	115	1.9829	2113
Nebo TS M8	0.0038	706	0.0038	192	0.8814	2599
Dundas TS M4	0.0146	**198**	0.0050	**143**	2.8382	1524
Dundas TS M6	0.0001	2356	0.0003	1423	0.4638	2725

Note: There are no significant distribution feeder reliability or performance issues in the study area except Dundas TS M4; this feeder is considered in the "worst performer" category in the province in terms of customer interruptions duration and outage frequencies. The feeder was reconfigured in 2011 so that a half of its feeder is transferred to Dundas M6. The feeder performance is expected to improve as a result.

7.0 Distribution Station (DS) Capacity

The Planning Load Limit (PLL) of the Distribution Stations (DS) in the study area, along with existing, 5 and 10 years load forecast are summarized in Table 4.

Table 4: Distribution Station Summer Capacity- Existing, 5 and 10 years forecast.

DS	Summer PLL [MVA]	Summer Peak 2012 [MVA]	Present Summer Available Capacity [MVA]	5 Year (2017) Growth [MVA]	5 Year (2017) Projected Available Capacity [MVA]	10 Year (2022) Growth (2^{nd} 5 yrs) [MVA]	10 Year (2022) Projected Available Capacity [MVA]
Dickenson Road DS	6.3	4.9	1.4	0.5	0.9	0.6	0.3
Duff DS	6.3	4.0	2.3	0.4	1.9	0.5	1.52
Ancaster West DS	6.3	7.0	**-0.7**	0.7	**-1.4**	0.8	**-2.2**
Fiddlers Green DS	6.3	5.8	0.5	0.6	**-0.1**	0.6	**-0.7**
Mount Hope DS	6.3	5.4	0.9	0.5	0.4	0.6	**-0.2**
Woodburn DS	6.3	3.3	3.0	0.3	2.7	0.4	2.3

Note: Duff DS, Woodburn DS, and Dickenson Road DS will have surplus capacity by the end of the study period. Ancaster West DS is currently over its PLL while Fiddlers Green DS is expected to be over its PLL in 2017 and Mount Hope DS by 2022.

8.0 DS Feeder Capacity

The DS feeders operate at 8.32 kV. A summary of these DS feeders, their existing, 5 and 10 year forecast loading is in Table 5.

Table 5: Distribution Station Feeder Capacity- Existing, 5 and 10 years forecast

DS Feeder	*Max. Load With Overcurrent Protection [A]*	*Present Load (2012) [A]*	*2017 Load [A]*	*2022 Load [A]*
Dickenson RD DS F1	200	5	5.5	6
Dickenson RD DS F2	200	169	185	**202**
Dickenson RD DS F3	280	160	175	191
Duff DS F1	200	185	**202**	**221**

Duff DS F2	200	95	104	114
Ancaster West DS F1	200	111	121	133
Ancaster West DS F2	280	79	86	94
Ancaster West DS F3	280	**290**	**317**	**347**
Fiddlers Green DS F1	280	169	185	202
Fiddlers Green DS F2	280	226	247	270
Mount Hope DS F1	140	**154**	**168**	**184**
Mount Hope DS F3	280	215	235	257
Woodburn DS F1	200	112	122	134
Woodburn DS F2	280	47	51	56
Woodburn DS F3	200	56	61	67

9.0 DS Feeder Performance

The average DS feeder performance from 2007 to 2009 is listed in Table 6 below. There are no significant distribution feeder reliability or performance issues in the study area.

Table 6: Distribution Station Feeder Performance- Average from 2007 to 2009.

DS Feeder		3 Year Average from 2007 to 2009					
		SAIDI		SAIFI		CAIDI	
		SAIDI	Prov Rank	SAIFI	Prov Rank	CAIDI	Prov Rank
Dickenson RD DS	F1	0.00	0	0.00	0	0.00	0
Dickenson RD DS	F2	0.0015	1222	0.0007	896	2.2089	1969
Dickenson RD DS	F3	0.0021	1018	0.0003	1520	6.5029	340
Duff DS	F1	0.0017	1150	0.0004	1354	4.3204	822
Duff DS	F2	0.0003	2109	0.0001	2242	3.6388	1100
Ancaster West DS	F1	0.0012	1369	0.0005	1134	2.1593	2001
Ancaster West DS	F2	0.0002	2287	0.0001	2152	2.2691	1913
Ancaster West DS	F3	0.0033	766	0.0006	960	5.4365	523
Fiddlers Green DS	F1	0.0004	2013	0.0001	2309	3.4762	1180
Fiddlers Green DS	F2	0.0022	993	0.0010	683	2.1038	2045
Mount Hope DS	F1	0.0015	1226	0.0009	762	2.2514	1927
Mount Hope DS	F3	0.0011	1466	0.0004	1232	3.4841	1175

Note: Ancaster West DS F3 had a series of outages in 2010 on its off road sections. As a result corrective actions have undertaken during 2011-2012 and its performance is expected to improve.
Dickenson Rd DS F3 has the worst CAIDI. The plan is in place to convert the section of F3 and provide a loop feed in 2013/2014.

10.0 Summary

This is a 10 year period area study (from 2012 to 2022) concentrating mainly on Town of Ancaster and the Township of Glanbrook where Hydro One serves as Local Distribution Company. The study took into account of the urban Hamilton official plan in estimating the load growth.

The issues identified in this area study were the following:

- Nebo TS was loaded beyond its summer LTR in 2012 (table 1).
- Nebo TS M6 and M7 feeders are over its planning limit of 17 MVA or 350 amps (table 2).
- Nebo TS M5 and M8 will be over its planning limit by early 2014 and 2016 respectively.
- Ancaster West DS, Fiddlers Green DS and Mount Hope DS will be over its PLL (6.25 MVA) within the study period requiring corrective actions to mitigate risks (table 4).
- Mount Hope DS F1 and Ancaster West DS F3 are currently under review for recloser upgrade and/or load transfer between feeders in order to bring the loading within the equipment rating. Dickenson Road DS F2 and Duff DS F1 reclosers will be reviewed as required for upgrades.

Loading in this study area will continue to increase at a steady rate and as a result Nebo TS upgraded capacity will be depleted by the end of the study period and thus further relief will need to be planned for 2023.

A summary of issues identified in this area study are in table 7 below.

Table 7: Summary of issues identified in this area study.

TS/Feeder	Issue	Year
Nebo TS	Over PLL	Now
Nebo TS M6	Over PLL	Now
Nebo TS M7	Over PLL	Now
Ancaster West DS	Over PLL	Now
Mount Hope DS F1 Recloser	Over PLL	Now
Ancaster West DS F3 Recloser	Over PLL	Now
Nebo TS M5	Over PLL	2014
Nebo TS M8	Over PLL	2015
Dundas TS M4	Over PLL	2015
Duff DS F1 Recloser	Over PLL	2017
Fiddlers Green DS	Over PLL	2017
Mount Hope DS	Over PLL	2022

11.0 Description of Alternatives

Based on the findings of this area study, the TS and TS feeder capacity limitation within the study area are a major concern requiring resolution.
Three alternatives were considered for relieving the forecasted Transformer Station Feeder overloads in the study area. Alternative 3 was considered but rejected due to the technical difficulties in building a new TS and running 4 new feeders from the existing Dundas TS site.

The common actions for all three alternatives are listed below:

- Change DS reclosers to higher rated reclosers in the years identified in section 8.
- Maintain Ancaster West DS load below the equipment rating by converting to 27.6kV (2014) and via transformer upgrade from 5MVA to 7.5MVA (2015).
- Maintain Fiddlers Green DS load below the equipment rating via transformer upgrade from 5MVA to 7.5MVA (2017)
- Transfer Ancaster West DS from Nebo M6 to Dundas M6

11.1 Alternative 1 – Increase capacity at Nebo TS

This alternative provides additional capacity at Nebo TS by 64MVA providing load relief to the overloaded feeders 157M5 (2014), 157M6 & 157M7 (currently) & 157M8 (2016). This additional capacity in the study area will be achieved by constructing four new feeders out of Nebo TS (M9. M10, M11 and M12) and transfer load from the overloaded feeders to the new feeders. About 30 km of new 27.6 kV circuits will need to be constructed in this alternative.

The proposed action plans for alternative 1 are summarized as follows (please refer to Figure 3):

- Increase Nebo TS capacity with four new feeder positions and larger transformers with 10 Day LTR of 170MVA in 2013. ($7M capital contribution 2013)
- Build four 27.6 kV underground and overhead egresses from Nebo TS for feeders M9 through M12 ($4M 2013)
- Build approximately 2 km from existing Nebo TS feeders M7 and M8 to enhance system for the Red Hill Business Park. ($0.5M 2013)
- Build approximately 14 km of 27.6 kV feeder, M11 from Nebo TS east on Rymal Rd and on Hwy 56 to provide a backup and load relief for Nebo TS M5 to Binbrook ($2.8M 2013/2014)
- Build approximately 10 km of 27.6 kV feeder, M10, from Nebo TS to Airport Road/Upper James Road and transfer load from Nebo M6 and M7 feeders. ($2.5M, 2014)

11.2 Alternative 2 – Build "New Ancaster" TS on Shaver Rd

This alternative includes the construction of a new station, "New Ancaster" TS, with four feeders (M1, M2, M3 and M4) with two 25/41 MVA transformers, 230/27.6 kV (with maximum station load (LTR) of 57 MVA) on Shaver Rd (between Garner Rd. and Book Rd.) where four 230kV circuits M27B, M28B, Q24HM and Q29HM are located.
The new Ancaster TS would provide relieve to Nebo TS as well as its overloaded feeders, 157M6, 157M7 & 157M8 by load transfers from the Nebo TS to the new TS. Approx 19 km of new 27.6 kV feeder construction will be required in this alternative.

The proposed action plans for alternative 2 are summarized as follows (please refer to Figure 4):

- Build new station with two 25/41 MVA transformers, 230/27.6 kV, 4-feeders, "New Ancaster" TS, that will be supplied from either M27B & M28B or Q24HM & Q29HM circuits. The new TS will be built as typical DESN ($20M capital contribution 2013).
- Build four overhead feeder egresses, M1 through M4, from TS structure ($2M 2013)
- Build approximately 2 km from existing Nebo TS feeders M7 and M8 to enhance system for the Red Hill Business Park. ($0.5M 2013).
- Build approximately 14 km of 27.6 kV feeder overhead, existing M6 from Nebo TS east on Rymal Rd and on Hwy 56 to provide a backup and load relief for Nebo TS M5 to Binbrook ($2.8M 2013/2014).

11.3 Alternative Considered but Rejected - Build Dundas TS #3

Both Dundas TS and TS #2 combined would not have enough capacity to accommodate load growth if the new load were transferred to Dundas TS. To relieve further an additional station, Dundas TS #3 would need to be built in 2013.
This alternative was considered but rejected for the following reasons:

- Difficulty and high costs running feeders across Hamilton/Burlington Bluffs and across Hwy 403 and through already built up city subdivisions.
- Not enough land to add another DESN station where there exists Dundas TS and Dundas TS #2
- Decrease reliability due to long feeders from Dundas TS #3 to load center
- Costly to build Dundas TS #3

12.0 Comparison of Alternatives

12.1 Treatment of Transmission Connection Costs

Under the Transmission System Code, HONI Transmission supports investments in Transmission Connection Facilities for supply to LDC's based on the NPV of future revenue from the LDC over a 25-year horizon. Connection tariff revenues associated with forecast load that is over and above existing available connection capacity is used.

To upgrade Trasnmission connection facilities, HONI Transmission requires Capital Contribution from HONI Distribution for the revenue shortfall.

Hydro One Transmission has determined the budgetary cost estimate for building the additional capacity for Nebo TS and Ancaster TS. The capital contribution required by Hydro One Distribution is about $7M for Nebo TS upgrage (Alternative 1) and $20M for new Ancaster TS option. Dundas TS option was not separately estimated however the contribution amount would be a minimum of $20M due to greater complexity in building a DESN at the current site.

12.2 Cost Comparison of Alternatives

The costs for each of the three alternatives are summarized in Table 8 below. Alternative 1 is the preferred and the lowest cost alternative. Alternative 2 requires $8.5M in additional costs and does not meet the loading requirement for the planning period.

Table 8: Cost table summarizing alternatives 1 and 2 major action items and NPV (2013)

	Alternative 1		**Alternative 2**	
Action Items	**Cost ($M)**	**Year**	**Cost ($M)**	**Year**
Dx Capital Contribution for TS proposed in each Alternative	7	2013	20	2013
New Feeder Egresses from TS (4 feeders)	4	2013	2	2013
New feeder to Binbrook	2.8	2013	2.8	2013
Red Hill Park enhancement	0.5	2013	0.5	2013
New feeder to Airport	2.5	2014		

Cumulative NPV (2013 $M)	**16.8**	**25.3**

12.3 Capacity

The available TS capacity at the end of the study period is summarized in Table 9 below. Alternative 1 upgrading Nebo TS will see the additional capacity dwindle to 3MVA at the end of the study period requiring further work in as early as 2023. For the alternative 2 of building new Ancaster TS the new capacity would fall short by year 2022. Therefore, Alternative 1 satisfies the capacity requirement for the study period whereas alternative 2 does not.

Table 9: Summary of available station capacity.

	Available Capacity (MVA)		
Alternative	2014 after upgrade	2017	2022
1	24	15	3
2	17	8	-4

12.4 Reliability

Both alternatives 1 and 2 provide four new feeders. Alternative 1 will build 30km additional feeders whereas Alternative 2 builds 18km. Alt 2 builds less line because Ancaster TS would be located close to the load centre where existing feeders are already there. The shorter line distance provides less line exposure and therefore will help yield an incremental improvement in the feeder performance.

12.5 Line Losses

Alternative 2 would result in smaller line losses than alternative 1 since new feeders from Ancaster TS would sectionalize the Nebo TS feeders and reduce their lengths reducing I^2R losses.

12.6 Recommendations

Alternative 1 – Upgrade Nebo TS is recommended for implementation as it provides a higher capacity and less capital contribution requirement. The advantage of meeting a longer period of capacity requirement at less cost is the deciding factor selecting alternative 1 over the benefits in line losses reduction and line length reduction provided in alternative 2.

The major action items for this recommended alternative are the following:

- All the common action items in Section 11.

- Increase Nebo TS capacity with four new feeder positions and larger transformers with 10 Day LTR of 170MVA in 2013. ($7M capital contribution 2013)
- Build four 27.6 kV underground and overhead egresses from Nebo TS for feeders M9 through M12 ($4M 2013)
- Build approximately 2 km from existing Nebo TS feeders M7 and M8 to enhance system for the Red Hill Business Park. ($0.5M 2013)
- Build approximately 14 km of 27.6 kV feeder, M11 from Nebo TS east on Rymal Rd and on Hwy 56 to provide a backup and load relief for Nebo TS M5 to Binbrook ($2.8M 2013/2014)
- Build approximately 10 km of 27.6 kV feeder, M10, from Nebo TS to Airport Road/Upper James Road and transfer load from Nebo M6 and M7 feeders. ($2.5M, 2014)

Table 10: Feeder Loading & Voltage Conditions – preferred alternative

TS Feeder	*Present 2012*		*2017*		*2022*	
	Voltage	**Load**	**Voltage**	**Load**	**Voltage**	**Load**
	[%]	**[A]**	**[%]**	**[A]**	**[%]**	**[A]**
Nebo TS M5	99.9%	288	99.6%	315	99.3%	344
Nebo TS M6	98.2%	**430**	100.1%	320	99.8%	350
Nebo TS M7	97.5%	**494**	100.1%	318	99.8%	350
Nebo TS M8	97.1%	330	97.8%	300	97.1%	350
Nebo TS M9			101.2%	265	101%	289
Nebo TS M10			98%	295	97.3%	350
Nebo TS M11			101.8%	130	101.6%	142
Nebo TS M12			101.2%	265	101%	289

Dundas TS M4	100%	330	99.8%	350	99.5%	**355**
Dundas TS M6	101.6%	180	99.8%	350	99.5%	**355**

Note: New Nebo feeders M9-M12 to be built in 2013.

Dundas M4 and M6 feeders are kept close to its PLL 350amps via load transfers to Nebo feeders M6/M7/M8/M10.

Lower permissible limit for voltage on feeders is 94 %. Voltage in % is taken from the feeder-end.

Dundas M4 and M6 will need further relief when a new TS is built in Ancaster in 2023 when a new TS is required for the load relief of Nebo TS.

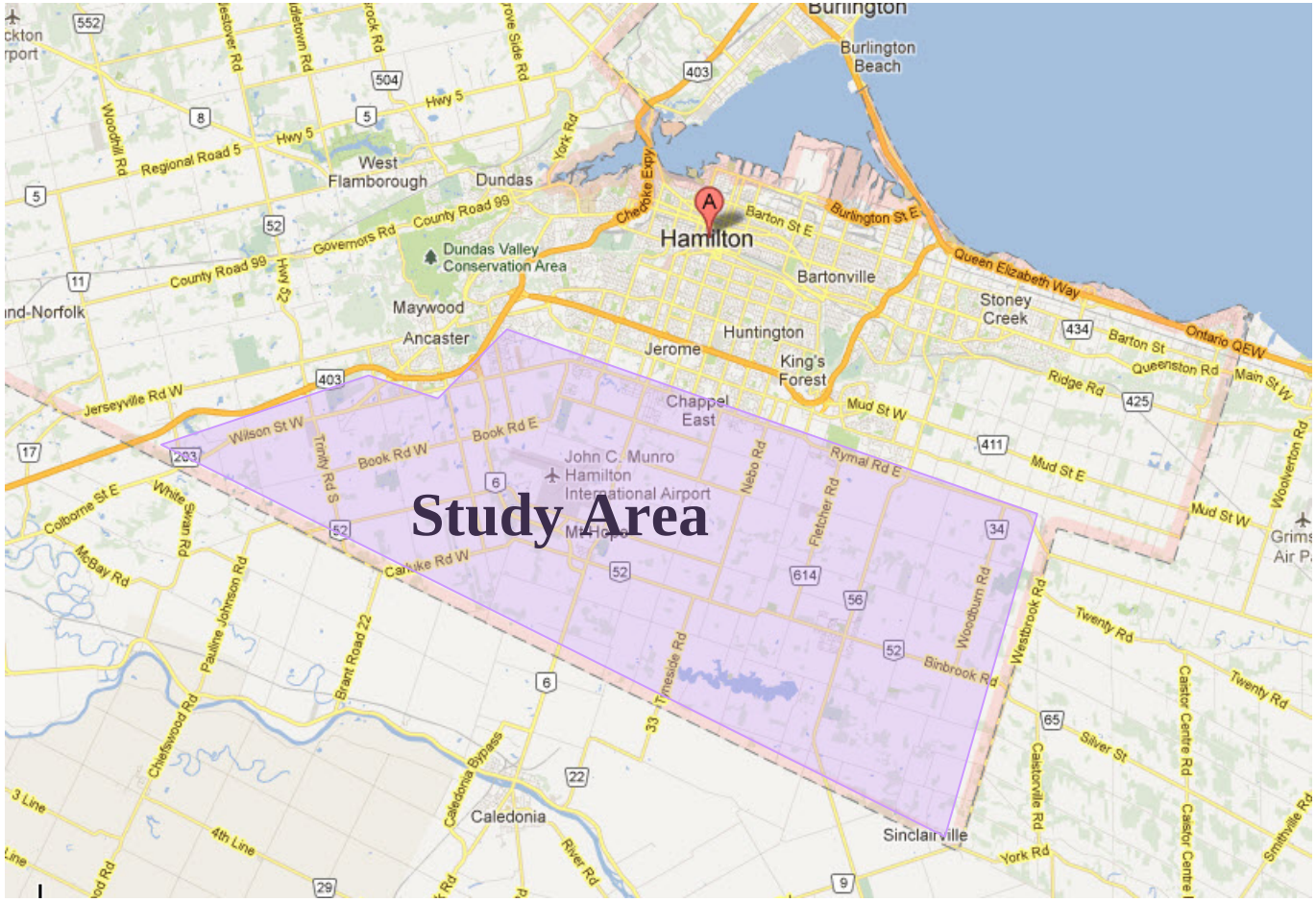


Figure 1: Study Area

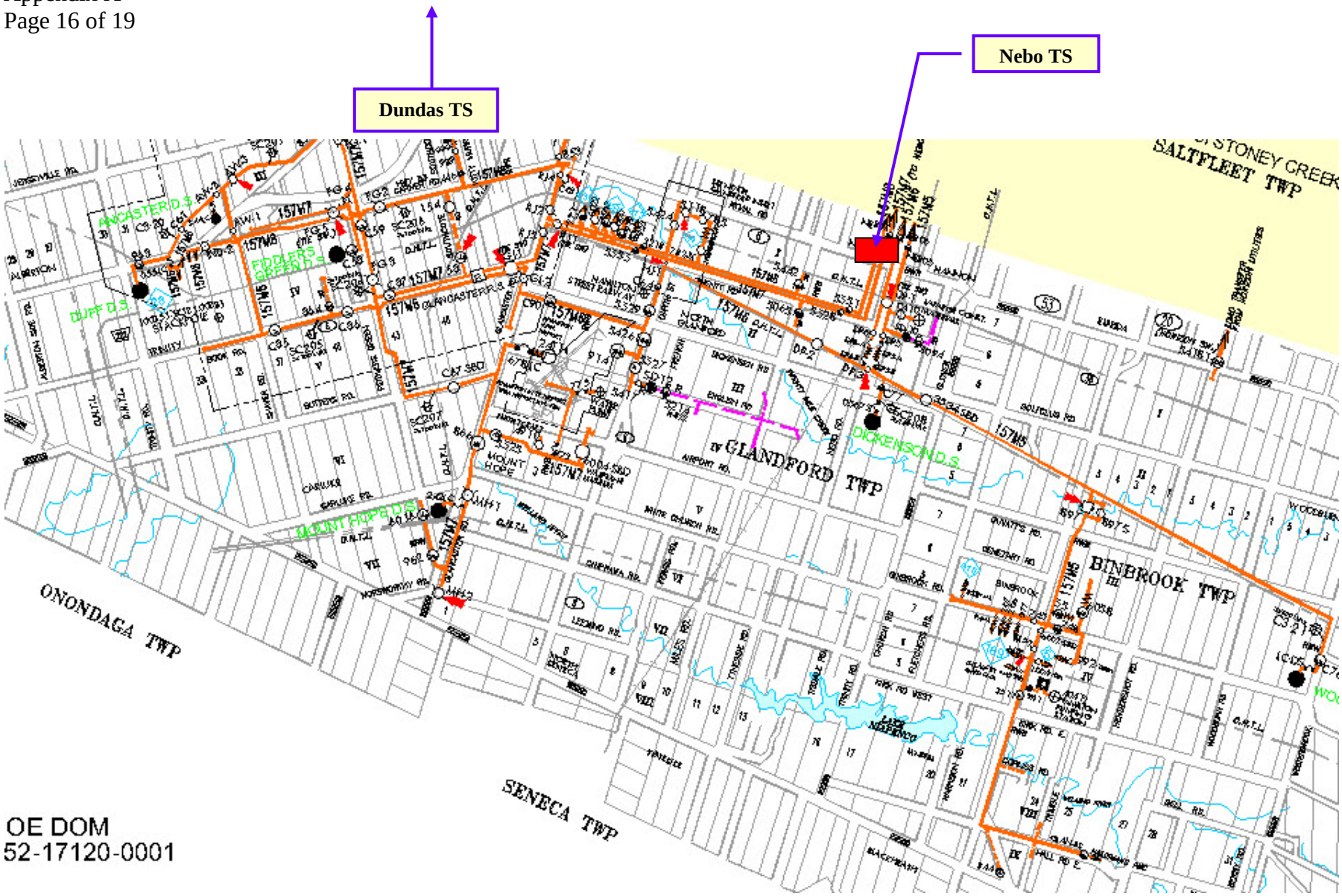


Figure 2: Existing 27.6 kV Facilities

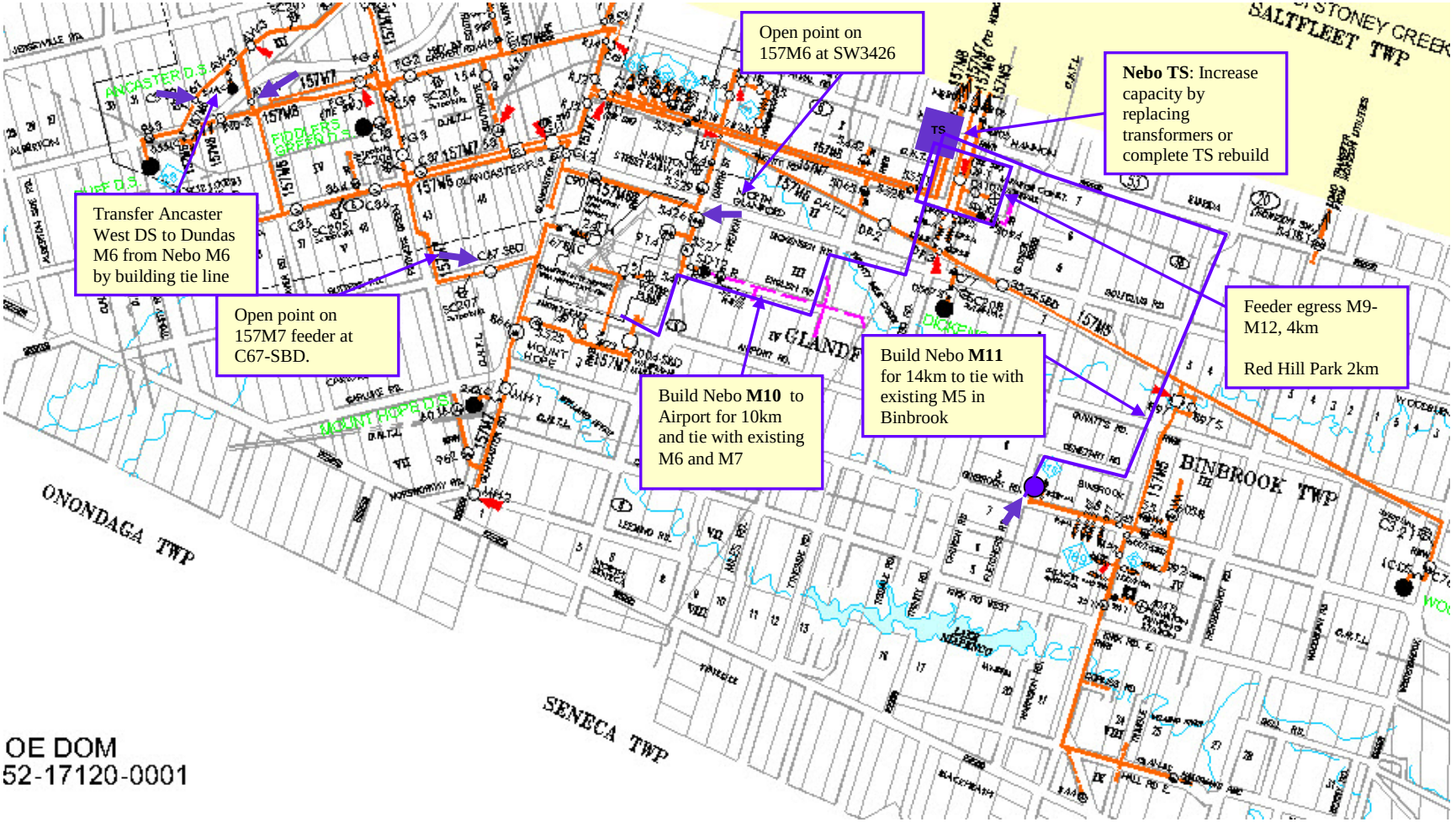

Open point on 157M6 at SW3426
Nebo TS: Increase capacity by replacing transformers or complete TS rebuild
Transfer Ancaster West DS to Dundas M6 from Nebo M6 by building tie line
Open point on 157M7 feeder at C67-SBD.
Build Nebo M10 to Airport for 10km and tie with existing M6 and M7
Build Nebo M11 for 14km to tie with existing M5 in Binbrook
Feeder egress M9-M12, 4km
Red Hill Park 2km
TS
ONONDAGA TWP
SENECA TWP
BINBROOK TWP
SALTFLEET TWP
GLANBROOK
ANCASTER D.S
FIDDLERS GREEN D.S
MOUNT HOPE D.S
OE DOM
52-17120-0001

Figure 3 – Alternative 1 – Increase Capacity at Nebo TS

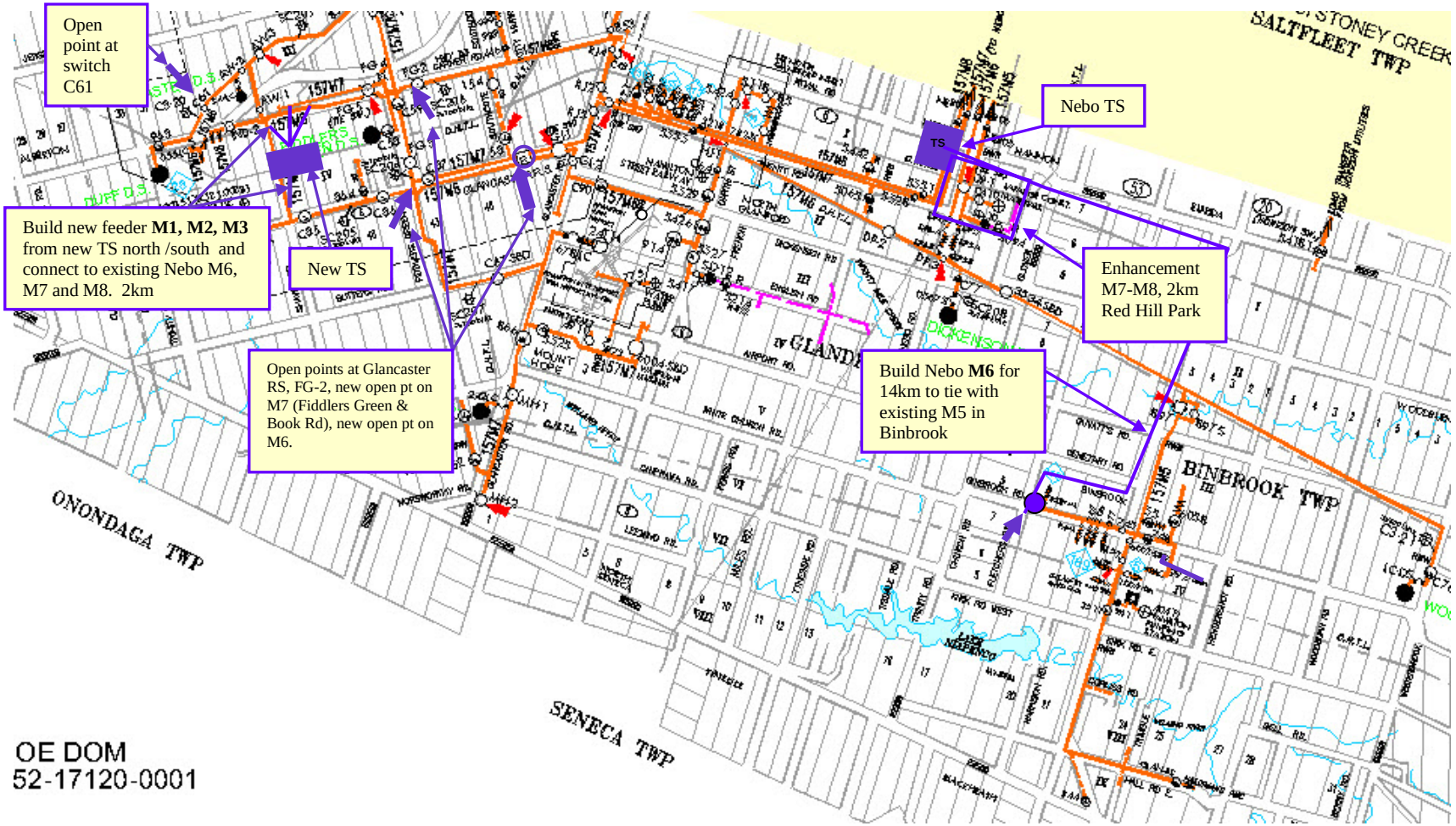


Figure 4 – Alternative 2 – Build "New Ancaster" TS on Shaver Road

Hydro One – Dundas Area

Loop Feed to Binbrook

Need: Binbrook area requires a backup feeder for supply security.

Background:

Binbrook is located in the former Glanbrook Township, which is now part of the amalgamated City of Hamilton. Binbrook and surrounding area in the former Township of Glanbrook has grown substantially over the past several years. The Statistics Canada Census data show the occupied private dwellings in Glanbrook grew by 46.8% from 2006 to 2011.

The City of Hamilton's Planning and Economic Development Department is designating the Binbrook area as part of its urban boundary. There were 2322 Hydro One customers in the Binbrook area at the end of 2012. The existing built-up area within the Binbrook urban boundary is about a third of the space available and there are signs that the growth is going to occur at a steady pace as the subdivision developers have applied for connection of more homes with over 1800 lots. A commercial plaza with a large grocery store has recently applied for connection.

The Binbrook area is currently supplied via Nebo TS M5 feeder which is a radial feeder supplying over 5000 customers. There are no other feeders to back up the M5 feeder to facilitate power restoration. This means that if a planned or unplanned outage occurs on the M5 customers fed from this circuit will be out of power until the feeder is restored. Providing an alternate supply to

Binbrook enables Hydro One to minimize the duration of interruptions regardless of their nature or cause.

Backup feeder:

In determining the route for the backup feeder the following factors were considered See map page 3 showing the preferred and alternative routes considered.

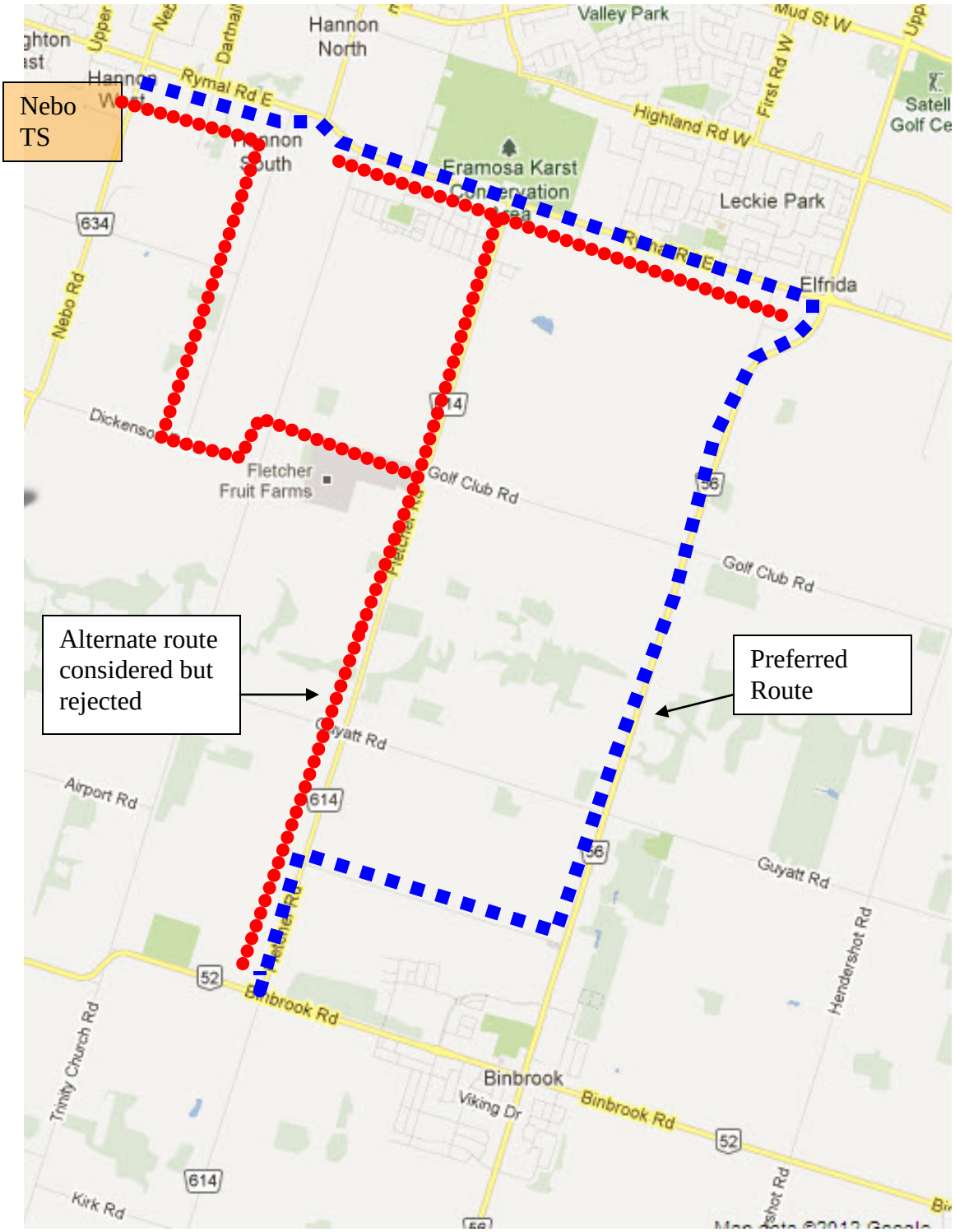
1. Environment: Environmental concerns were taken into consideration to have as little impact on the wildlife and landscape impact within the Glanbrook Township.

2. The new line is proposed in a route that can effectively and efficiently serve Hydro One service area. The feeder route will enable further system reinforcement eastward on Rymal Road from Hwy 56 as required in future. The preferred route will meet this requirement.

3. The cost to build the line in the proposed route is expected to be lower than other alternative due to the fact the much of the route is preframed for 27.6kV conversion. The preframing for future conversion started as far back as 1975. See photos on page 4-7.

4. Reliability: The new line in its route will not only provide a back up for the Binbrook area but also will set up a supply network to the Elfrida industrial complex on Rymal Road at Hwy 56 which is currently supplied from a radial 8.32kV. The 8.32kV system in the industrial complex will be converted to 27.6kV. The poles and the pole frames on Hwy 56 were built to the 27.6kV standards in anticipation of this

conversion. Based on good utility practice the desired distribution system will have as many loop feeds as possible for Hydro One's current and future customers, therefore reducing outage times where car accidents, storms, wildlife contacts and equipment issues may occur.



Map: Preferred Route for Binbrook Backup Feeder

Photo Reference

The arrow/number locations are where the photos are taken illustrating the existing poles are ready for future 27.6kV.


Photo 1:
Looking North towards Golf Club Road. 27.6kV framing poles dated
1975 1990 2002

Photo 2:
Existing Bell pole line looking East on Rymal Road. Ready for 27.6kV framing

Photo 3:
Existing Bell pole line looking West on Rymal Road. Ready for 27.6kV framing. Poles 2005


70


Photo 5:
New Bell poles.
Rymal Road looking
West from Trinity
Church Road. 27.6kV
framing

hydro one

Electronic Layout

Schedule 'A'

Customer Information		Service Location & Contractor Information		General Information			
Customer: HAMILTON WENT RC		911 Address: 1820 RYMAL RD E		Date prepared: 12/14/2012		Service Centre Name:	Dundas
Address: 90 MULBERRY STREET PO BOX 2012 HAMILTON ON L8N3R9		Lot:	Concession:	Rate Class: Sub-Transmission		Hydro One Phone #:	888-652-2302
		Township: BINBROOK		D.S.: Nebo TS		Hydro One Fax #:	905-627-6000
		RP#:	Sublot:	Customer Cable: Yes	Feeder: M5	Electrical Safety Authority:	877-372-7233
Primary # 905-648-0072		Contractor: David Morrissey		Service Size: 1600	Switch: NEW	EI Order No.	283533608
Bus.:	Fax:	Ph #: 905 525 2930	Fax:	Account #: 0	Transformer: Customer Owned	Prepared By:	David DeNoble

1820 Rymal Rd East
NCON - 347/600v; 3 Phase Primary 27.6KV
Proposed inservice date of April 2013

Rate Class: *ST - Subtransmission*

WIRING DIAGRAM RM8-22.2

N
W E
S

J1235879
ACN27M
40' 5
45' 3
1
RYMAL RD E
3000RWB
2
3
1820
TRINITY CHURCH RD

HYDRO ONE TO:
WL # 1: Supply and install all framing on the dip pole,
DL3-120.1 R01;DU-08-201; DU-08-206 'D3"; DU-08-301 R03; DU-08-302 R02:
run customer supplied conductor up new 45'/3 pole and terminate

WL # 3: MDET to install meter as per RM8-22.2.
MDET requires two days for metering

CUSTOMER/ CONTRACTOR TO SUPPLY AND INSTALL:
(ALL CUSTOMER/ CONTRACTOR WORK TO BE BUILT TO ESA STANDARDS)
WL 2:
Install new three-phase customer owned transformer, 27.6 kv 347/600v sec., with all necessary grounding.
Supply and install approved primary conductor and
leave appx 12m at WL1 for termination and connection by Hydro One.
All primary U/G cable to be 2/0 AL 28KV XLPE cable with full concentric neutral.
Primary and secondary trenching per ESA guidelines to WL #1. Conduit to end 1.2m from the riser pole.
Supply sand for backfilling at the riser pole.
Supply and install all material for the primary side of the transformer
(load break elbows, bushing inserts, etc)
Make all primary connections and HI-POT cable.
Make all secondary connections.
Arrange ESA inspection of installation including padmount grounding

Metering:
Supply and install 4 x 4 Meter Cabinet or Switchgear,
1 1/4"conduit using no LB's (50 ft run max) @ bottom 3"
of P-base.
P-base enclosure supplied by Hydro One.
Ensure metering room access is provided to Hydro One.
Note:
Sign and return contract to Hydro One with payments ASAP.
Customer responsible to obtain any easements if required

BELL SHALL:
WL#1: Remove existing 40'/5 end-of-life pole
Supply and install new 45'/3 pole

A new NCCI form with a detailed loading profile must be submitted to Hydro One if the customer decides to add large motors to the facility.

** This Layout is valid for 6 months from the date prepared. There will be a charge to re-design due to customer initiated changes.
** All work to be done to Electrical Safety Code

Existing	Hydro One Only Section 2.0	Hydro One or Contractor Section 3.0	Work by Customer	Work by Others (Bell or LDC)
	X Remove - Hydro One Only - Section 2.0	X Remove - Hydro One or Contractor Section 3.0	X Remove - By Customer	X Remove - By Others (Bell or LDC)

SAP Order #: 60724518	Dep.Date/Time: 9/28/2012 4:15:00 PM
CM Number: 00126279	Arr.Date/Time: 9/28/2012 12:00:00 PM
Customer #: 0000009999	Sec Voltage: 347/600

LETTER OF AGENCY
CONSENT/TERMINATION OF CONSENT FOR DISCLOSURE OF INFORMATION TO A THIRD PARTY

PART A – CONSENT

I/we, account holder(s) for the electricity account at

(Lot, Concession, Township, 911 Address) _____

Hydro One Account # _____, consent to the disclosure of account-related information to

(Name and Phone Number) _____ or their authorized representatives for the purpose of

(Specify Exactly) _____ .

Account-related information can be any or all of the following. Please check the pieces of information you wish disclosed:

- ☐ Account holder(s) name(s), address, telephone number
- ☐ Copy of Layout for service work
- ☐ Copy of Invoice for service work

The above consent remains in effect from the date of authorization to the date that written termination of the consent is received by Hydro One, or the account is no longer in the account holder(s) name, whichever happens first.

Date: _____

Name (Print): _____ Name (Print) _____

Signature: _____ Signature: _____

Note: For Hydro One accounts where two parties are responsible, both account holders must sign the above consent before account information will be disclosed.

PART B – TERMINATION OF CONSENT

I/we, account holder(s) for the above referenced electricity account hereby terminate consent to the disclosure of account-related information to the above-named party.

Date: _____

Name (Print) _____ Name (Print) _____

Signature: _____ Signature: _____

5 critical steps to completing your new connection

Dear Valued Customer,

Thank you for your recent request for service. In order to schedule your connection request and provide you with the best service possible, please follow the step-by-step instructions below. If you have questions, please call us at: 1-888-652-2302 Monday to Friday, from 7:00 a.m. to 4:30 p.m.

1 Carefully review the enclosed sketch of your requested service layout.

Be sure that every detail in your service layout is accurate and that you're clear about how the work will be completed. The sketch has been designed with colour-coded comments as well as a key to help you with your review. If anything is incorrect, please call us *immediately*. **If your service layout is accurate, then…**

2 Read the enclosed customer service contract.

Read all sections of the customer service contract carefully. Review each option available to you before making your selection. Make sure the method of payment section is **completed**.

3 Sign, date and send the Customer Service Contract to us.

Sign the contract and fax it to us at: 905-627-6000 or mail it to Hydro One, 40 Olympic Drive, Dundas ON, L9H 7P5. Please make sure that you've enclosed the proper payment and payment information on the contract. Note: You don't need to wait for your ESA permit before sending this contract.

4 Call the Electrical Safety Authority for your permit, and the required inspections and authorizations.

Contact the Electrical Safety Authority (ESA) at 1-877-372-7233 for an electrical inspection and fee estimate. It's easily done over the phone and will allow you to proceed with your electrical work. Once the electrical work is complete, contact the ESA again for an electrical inspection. The ESA will advise you when the inspection is approved, as well as send a copy of the connection authorization directly to our office. We will contact you to discuss scheduling the connection.

5 If your connection involves underground cables, make sure all special requirements are met.

To help you with these requirements, we've attached our trenching specifications.

Following the five critical steps outlined above will ensure we have the essential information we need to schedule your service work and have the required materials and equipment on hand.

Your thorough attention to these details will make it possible for your new connection to be completed as planned. Thank you for your cooperation.

Sincerely,

Hydro One Networks
Dundas Field Business Centre

hydro one

Bringing Power to the People of Ontario™

Hydro One Networks, Inc. ("Hydro One")
Hydro One, 40 Olympic Drive, Dundas ON, L9H 7P5
Phone: 888-652-2302

CUSTOMER SERVICE CONTRACT
NEW CONNECTIONS, SERVICE UPGRADES & EMBEDDED GENERATION
ECRA/ESA Lic 7002572 Date Prepared: 14/Dec/2012

SECTION 1.0 CUSTOMER INFORMATION

Name: HAMILTON WENT RC
Address: 90 MULBERRY STREET PO BOX 2012
HAMILTON, ON, L8N3R9
Phone: 905-648-0072
Alt Phone:
Fax:

Service Location: EI 283533608
Lot Con RP# Sublot#
Twp BINBROOK
1820 RYMAL RD E, BINBROOK, ON,

CUSTOMER: Please complete all shaded areas

SECTION 2.0 STANDARD BASIC REGULATED WORK (MUST BE PERFORMED BY HYDRO ONE)

Available Support or Cost based on Rate Class	$	0.00
Other Related Work	$	4619.34
Incremental Cost for Transformer	$	0.00
Easement and Associated Costs	$	0.00
Cost of Service Wire	$	0.00
Credit for up to 30m of Overhead Service Wire	$	0.00
Standard Service Charges (ex. Additional Layout Fee)	$	0.00
Misc Charges (ex. 400 Amp Self Contained rebate)	$	0.00
Deposit Paid	$	0.00
SUB TOTAL	$	4619.34

Description of Other Related Work:
Metal guards, terminators, surge arrestors, fused primary cable termination and flared cable guards.

SECTION 3.0 CONNECTION WORK (MAY BE PERFORMED BY EITHER HYDRO ONE or CONTRACTOR as per customer's choice)

	HYDRO ONE		CONTRACTOR		Description of Other Related Work
Other Related Work	$	0.00			
Available Support Based on Rate Class	$	0.00	$	0.00	
SUB TOTAL	$	0.00	$	0.00	

CONNECTION WORK OPTION (PLEASE INDICATE YOUR CHOICE WITH AN "X" IN THE APPROPRIATE BOX)

☑ **Hydro One to complete Section 2.0 and Section 3.0**

Section 2.0	$	4619.34
Section 3.0	$	0.00
SUB TOTAL	$	4619.34
HST	$	600.51
TOTAL	$	5219.85

☐ **Hydro One to complete Section 2.0 and customer's contractor to complete Section 3.0**

Section 2.0	$	4619.34
Section 3.0	$	0.00
SUB TOTAL	$	4619.34
HST	$	600.51
TOTAL	$	5219.85

SECTION 1.0 CUSTOMER INFORMATION

Name: HAMILTON WENT RC
Address: 90 MULBERRY STREET PO BOX 2012
HAMILTON, ON, L8N3R9
Phone: 905-648-0072
Alt Phone:
Fax:

Service Location: EI 283533608
Lot Con RP# Sublot#
Twp BINBROOK
1820 RYMAL RD E, BINBROOK, ON,

CUSTOMER: Please complete all shaded areas

Acceptance of Terms and Conditions:

This Customer Service Contract (the "Contract") duly executed by the Customer, must be received by Hydro One at the above address within 180 days after the Date Prepared, failing which this Contract is null and void and Hydro One shall have no liability or obligations in respect thereof. The Customer and Hydro One agree that this document when signed by the Customer and accepted by Hydro One, by the signature of its authorized staff, shall be a contract and binding upon the Customer and Hydro One. The Electronic Layout set out in Schedule "A", the Terms and Conditions set out in Schedule "B" and any other Schedule attached hereto are to be read with and form part of the Contract. The parties acknowledge and agree that the above-noted fees are valid for a period of one hundred and eighty (180) days from the Date Prepared.

This Contract may be executed in counterparts and delivered by facsimile, and the counterparts together shall constitute an original.

The Customer acknowledges that upon execution of the Contract, a Hydro One account will set up in the Customer's name for the Service Location identified on Page 1 (the "Account"). The Customer agrees to assume responsibility for charges for services provided to the Service Location and be bound by Hydro One's Conditions of Service, as amended from time to time.

Customer Name: (print)

Hydro One Networks Inc. **HST# 870865821RT0001**

Customer Signature:

Staff Signature: K Myers ext 6005

Date:

FAX #: 905-627-6000

DESIRED COMPLETION DATE:

Work will not be scheduled prior to return of signed contract.

PAYMENT METHOD: **AMOUNT $** _____ **(Total amount based on your choices)**
Payment must accompany signed contract.

☐ Cheque ☐ Visa ☐ Mastercard

Credit Card # | | | | | | | | | | | | | | | | Exp. Date: | | | | |

Cardholder Name: (print)

Date:

Card Holder Signature:

By Signing above, the Cardholder hereby authorizes Hydro One to charge the above-noted credit card with the above-stated fees payable.

REPRESENTATIONS AND WARRANTIES

1. The Customer represents and warrants that:
   (a) it is the sole absolute beneficial and legal owner of any and all poles, anchors, wires and other electrical equipment utilized for the distribution of electrical power and energy located on the Service Location (identified in Section 1.0 of the Customer Service Contract) and not owned by Hydro One (collectively, the "**Electrical System**"), free and clear of any and all claims, interests and encumbrances and has the authority to enter into the Contract with respect thereto; and
   (b) it is the registered owner in fee simple and in possession of the Service Location.

2. Hydro One represents and warrants that any Work performed by Hydro One shall be performed in a manner consistent with Good Utility Practice (as that term is defined in the Distribution System Code issued by the Ontario Energy Board (the "**DSC**"), in accordance with Hydro One's Conditions of Service and the terms of the Customer Service Contract (the "**Contract**"). Except as provided herein Hydro One makes no warranties, express or implied, and Hydro One disclaims any warranty implied by law, including implied warranties of merchantability or fitness for a particular purpose and implied warranties of custom or usage with respect to the work performed by Hydro One.

THE WORK

3.
   (a) The Customer agrees that it shall obtain all approvals from the Electrical Safety Authority and other approvals, including municipal consents, as may be requested by Hydro One or required for purposes of the work. Hydro One shall not be obligated to perform any work until such time that the Customer has satisfied and/or complied with its obligations in the Contract, paid requisite fees and the Customer has obtained the permits and approvals referenced in this clause (the "**Customer's Work**"). The Customer shall advise Hydro One when it has satisfied and/or complied with the obligations described herein.
   (b) Where padmount transformation is required, the Customer shall construct a transformer ground grid and thereafter shall obtain a ground grid inspection from the ESA. Once the ESA has approved the work, the Customer shall transfer ownership of the transformer ground grid to Hydro One.
   (c) The Customer acknowledges that it will have 180 days from the date Hydro One receives payment of the fees payable under the Contract. If the Customer does not complete the Customer's Work within the specified time frame then Hydro One shall have the option of reassessing the cost of the Contract. If the cost of the Contract exceeds what was originally quoted to the Customer then the Customer agrees to pay the increased costs.

4. Subject to clauses 3, 5, 8 and 9 hereof and provided Hydro One has received payment of the total fees payable as specified in the Contract, once the Customer has completed its obligations referenced in clause 3 above, Hydro One shall be obligated to perform the Work in accordance with the specifications outlined in Schedule "A" attached to the Contract and otherwise in accordance with the provisions of the Contract, and shall do so on a date to be established by Hydro One (the "**Scheduled Work Date**").

5. In the event that the work to be performed by the Customer's Contractor involves the construction and/or installation of an electricity distribution line at the Customer's Service Location, and the line is to be transferred to Hydro One,, upon completion of the said construction and/or installation, but prior to the connection of the line to Hydro One's distribution system, the Customer agrees to transfer ownership of the said line to Hydro One in accordance with Hydro One's standard transfer of ownership agreement. Hydro One shall not be obligated to connect the said line until such time that the Customer has executed the transfer of ownership agreement.

6. Hydro One shall own all facilities constructed by Hydro One under the terms of the Contract other than any Work performed by Hydro One under the terms of the Contract in respect of Customer Owned Equipment.

7. Where the Customer has chosen to have a Contractor perform Contestable Connection Work and/or expansion work that is identified as contestable in the Contract (collectively, the "**Contestable Work**"):
   (a) the Customer shall:
      (i) complete all of the Contestable Work;
      (ii) select and hire the Contractor;
      (iii) assume full responsibility for the construction of the Contestable Work;
      (iv) be responsible for administering the Contract including, the acquisition of all required permissions, permits and easements;
      (v) ensure that the Contestable Work is performed in accordance with Hydro One's design and technical standards and specifications;

   (b) Hydro One shall have inspected and have approved all aspects of the constructed facilities as part of a system commissioning activity prior to the connection of the Contestable Work to Hydro One's existing distribution system;

(c) the Customer shall be responsible for paying the cost of the following work to be performed by Hydro One:
  (i) the design of the Contestable Work;
  (ii) the engineering or installation of facilities required to complete the project;
  (iii) administration of the contract between the Customer and the contractor hired by the Customer if asked to do so by the Customer and Hydro One agrees, in writing, to do so; and
  (iv) inspection or approval of the work performed by the Contractor hired by the Customer;

(d) by no later than fifteen (15) days prior to the date that the assets are to be transferred to Hydro One, the Customer shall provide Hydro One with a breakdown of the cost of the Contestable Work in a form acceptable to Hydro One, together with copies of all documents related to the Contestable Work including, but not limited to, all invoices, purchase orders and fixed price contracts related to the design and construction of the Contestable Work and the procurement of equipment.

(e) the Customer shall represent and warrant to Hydro One on the date that the Contestable Work is transferred to Hydro One that:
  (i) the Contestable Work is free and clear of all mortgages, liens, demands, charges, pledges, adverse claims, rights, title, retention agreements, security interests, or other encumbrances of any nature and kind whatsoever;
  (ii) the Contestable Work is free and clear of any work orders, non-compliance orders, deficiency notices or other such notices relative to the Contestable Work Assets or any part thereof which have been issued by any regulatory authority, police or fire department, sanitation, environment, labour, health or other governmental authorities or agencies;
  (iii) there are no matters under discussion with any regulatory authority, police or fire department, sanitation, environment, labour, health or other governmental authorities or agencies relating to work orders, non-compliance orders, deficiency notices or other such notices pertaining to all or any part of the Contestable Work;
  (iv) the Customer is the sole owner of the Contestable Work;
  (vi) that the Contestable Work has been performed in accordance with Hydro One's design and technical standards and specifications; and
  (vii) all deficiencies identified by Hydro One have been remedied;

(f) the Customer agrees that the representations and warranties in (e) above shall survive the transfer, and the execution and delivery of any easements or other land rights, bills of sale, assignments or other instruments of transfer of title to the Contestable Work and the payment of the transfer price;

(g) the Customer shall execute all documents necessary to evidence the transfer of the Contestable Work to Hydro One, including but not limited to bills of sale or similar documents and legal, binding and registrable easements from all legal and beneficial owners of lands traversed by the Contestable Work and/or land use permits for Crown lands traversed by the Contestable Work, satisfactory to and in favour of Hydro One;

(h) the Customer understands and agrees that Hydro One will not assume and shall not be liable or responsible for any and all liabilities, debts or obligations and demands, direct or indirect, absolute or contingent, of the Customer, whether or not related to, attributable to or in any way connected with the Contestable Work. The Customer shall pay, satisfy, assume, discharge, observe, perform, fulfil, release, and indemnify and save harmless Hydro One and its successors, its directors, officers, employees, representatives and agents from and against such liabilities, debts and obligations and all costs, expenses, debts, demands, proceedings, suits, actions, losses or claims in connection therewith. This obligation shall survive the termination of the Contract; and

(i) Hydro One shall pay the Customer a transfer price on the transfer date in accordance with the requirements of the DSC. The transfer price shall be considered a cost to Hydro One for the purposes of the final economic evaluation to be performed by Hydro One in accordance with the requirements of the DSC.

FEES PAYABLE

8. A late payment charge shall apply to all amounts that are overdue as a result of an invalid or declined credit card or an N.S.F. cheque, calculated from the date of execution of the Contract by the Customer to the date payment is actually received by Hydro One. In addition, a N.S.F. cheque charge shall be charged on retuned cheques. The Customer shall pay any applicable late payment charges and N.S.F. cheque charges to Hydro One immediately upon demand by Hydro One.

ADDITIONAL FEES

9. In the event that Hydro One discovers that the Customer has failed to perform its obligations referenced in clause 3 above despite Hydro One being advised of said performance by the Customer or the Customer has breached its representations and warranties referenced in clause 1 above and/or in the

event that the Customer has changed the condition of the Service Location or the Electrical System to the extent that, in Hydro One's opinion, the Work can no longer be performed in accordance with Schedule "A" of the Contract, the Customer shall reimburse Hydro One for all costs and expenses incurred by Hydro One in its preparation to perform the Work on the Scheduled Work Date, including, without limitation, Hydro One's restocking fee for returning material ordered for the Work to Hydro One's stores, facility removal expenses, the hourly rates payable to Hydro One's employees, contractors and/or subcontractors where such employees, contractors and subcontractors are to perform the Work and have attended at the Service Location on the Scheduled Work Date and any other charges or expenses related to additional trips required to be made by the said employees, contractors and/or subcontractors to the Service Location. In the event that a new Schedule "A" is required as a result of any of the foregoing, the Customer shall also pay Hydro One's applicable fee for the new Schedule "A". The Customer shall pay all such costs, charges and expenses described herein in the same manner in which it has paid the total fees payable on the execution of the Contract, upon being notified of same by Hydro One.

RIGHT TO ENTER PROPERTY

10. The Customer hereby grants to Hydro One, its successors and assigns, the unrestricted right, privilege and easement, free of charge or rent, to use so much of the Service Location and to enter on, in, upon, along and over the Service Location at any time as Hydro One may deem it necessary or desirable for purposes of performing the Work and for its employees, agents, contractors and subcontractors to pass and re-pass with or without vehicles, supplies, machinery and equipment, on, in, upon, along and over the Service Location at any time to perform the Work and for all purposes necessary or convenient to the exercise and enjoyment of the right, privilege and easement hereby granted.

REQUIREMENT TO EXECUTE CAPITAL COST RECOVERY AGREEMENT

11. Hydro One may require the Customer to execute a Capital Cost Recovery Agreement ("**CCRA**") at any time where the amounts that would have been otherwise payable under the terms of the Contract in respect of the Work were reduced by the incremental revenue attributed to the Customer's load forecast. Hydro One shall have the right to refuse to continue performing Work under the terms of the Contract (including, but not limited, the right to refuse to connect the Customer) until such time as the Customer executes a CCRA.

LIMITATION OF LIABILITY

12. In addition to any amounts payable under the terms of the Contract, the Customer shall only be liable to Hydro One and Hydro One shall only be liable to the Customer for any damages that arise directly out of the willful misconduct or negligence in meeting their respective obligations under the Contract.

13. Despite clause 12 above, neither party shall be liable under any circumstances whatsoever for any loss of profits or revenues, business interruption losses, loss of contract or loss of goodwill, or for any indirect, consequential or incidental damages, including but not limited to punitive or exemplary damages, whether any of the said liability, loss or damages arise in contract, tort or otherwise.

14. The Customer shall release, defend, discharge and indemnify Hydro One, its successors and assigns and its employees, servants, agents, representatives, contractors and subcontractors from and against all loss, damage or injury to persons or property, claims, actions, suits, proceedings, charges, risks, debts, obligations, liabilities, costs, expenses and fees which may arise from, relate to, be based upon or connected in any way with the Electrical System, the Work and/or the Contract (except if due solely to Hydro One's negligence).

15. Notwithstanding any other provision in the Contract, Hydro One's total liability to the Customer for any and all claims for damages under the Contract whether it arises by contract, tort or otherwise, will not exceed in aggregate the amounts paid for the Work hereunder to the date of such negligent act or wilful misconduct.

16. Both parties acknowledge and agree that clauses 12, 13 and 14 shall survive the termination or expiration of the Contract.

FORCE MAJEURE

17. Save and except for the payment of any monies required under the Contract, neither party shall be deemed to be in default of the Contract where the failure to perform or the delay in performing any obligation is due wholly or in part to a cause beyond its reasonable control, including but not limited to an act of God, an act of any federal, provincial, municipal or government authority, civil commotion, strikes, lockouts and other labour disputes, fires, floods, sabotage, earthquakes, storms, epidemics, and an inability due to causes beyond the reasonable control of the party. The party subject to such an event of force majeure shall promptly notify the other party of its inability to perform or of any delay in performing due to an event of force majeure and shall provide an estimate, as soon as practicable, as to when the obligation will be performed. The time for performing the obligation shall be extended for a period equal to the time during which the party was subject to the event of

force majeure. Both parties shall explore all reasonable avenues available to avoid or resolve events of force majeure in the shortest time possible.

18. Notwithstanding clause 17 above, the settlement of any strike, lockout, restrictive work practice or other labour disturbance constituting a force majeure event shall be within the sole discretion of the party involved in such strike, lockout, restrictive work practice or other labour disturbance and nothing in clause 17 above shall require the said party to mitigate or alleviate the effects of such strike, lockout, restrictive work practice or other labour disturbance.

AMENDMENTS

19. Any amendment to the Contract shall be made in writing and executed by both parties.

ASSIGNMENT

20. The Customer shall not assign its rights or obligations under the Contract in whole or in part without the prior written consent of Hydro One, which consent shall not be unreasonably withheld or unduly delayed. Hydro One may withhold its consent to any proposed assignment until the proposed assignee assumes, in writing, all of the Customer's obligations contained in the Contract.

GOVERNING LAW

21. The Contract shall be governed by and construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein, and the parties hereto irrevocably attorn to the exclusive jurisdiction of the courts of the Province of Ontario in the event of a dispute hereunder.

INCORPORATION OF DSC AND APPLICATION OF CONDITIONS OF SERVICE

22. The DSC is hereby incorporated in its entirety by reference into, and forms part of, the Contract. Unless the context otherwise requires, all references to "the Contract" include a reference to the Code. Hydro One hereby agrees to be bound by and at all times to comply with the Code, and the Customer acknowledges and agrees that Hydro One is bound at all times to comply with the Code in addition to complying with the provisions of the Contract. In the event of a conflict or an inconsistency between a provision of the Code or the Contract, the provision of the Code shall govern. The fact that a condition, right, obligation or other term appears in the Contract but not in the Code shall not be interpreted as, or deemed grounds for finding of a conflict or inconsistency.

23. In addition to the Contract, the relationship between Hydro One and the Customer will also be governed by Hydro One's Conditions of Service that are in effect at the relevant time. In the event of a conflict or an inconsistency between a provision of the Contract and a provision of Hydro One's Conditions of Service, the provision of the Contract shall govern.

ENTIRE AGREEMENT

24. The Contract represents the entire agreement between the parties hereto and supersedes all prior agreements, understandings, discussions, negotiations, representations and correspondence made by or between them with relating to the Work described in the Contract.

MULTI-SERVICE CONNECTION COST AGREEMENT

Between

Multi- Area Developments Inc.

And

Hydro One Networks Inc.

for

Summit Park Phase 7

MULTI-AREA DEVELOPMENTS INC. **(the "Developer")** has requested and **HYDRO ONE NETWORKS INC. ("Hydro One")** has agreed to perform certain work pertaining to the connection of the project described below, on the terms and conditions set forth in this Multi-Service Connection Cost Agreement dated this 27th day of July 2012 (the "**Agreement**"). The attached Standard Terms and Conditions for Multi-Service Connection Projects V1 06-2011 (the "**Standard Terms and Conditions**") and the following schedules, as amended, supplemented or restated from time to time, are to be read with and form part of the Agreement:

- Schedule "A" (Description of the Non-Contestable Work and the Contestable Work);
- Schedule "B" (Description of Civil Work);
- Schedule "C" (Specifications);
- Schedule "D" (Hydro One Design - Drawing # **00351-12-116 Rev 06**)
- Schedule "E" (Developer's Load Forecast")"
- Schedule "F" (Economic Evaluation Results)
- Schedule "G" (Option A/Option B Chart)
- Schedule "H" (Form of Transfer of Ownership of Primary Distribution System, Secondary Distribution System, Line Expansion and Residential Service Cables)
- Schedule "I" – certified copy of the Band Council resolution where the Developer is a Band of Indians, authorizing the execution of this Agreement and the issuance of any permits required under Section 28(2) of the *Indian Act* (Canada).

Unless otherwise defined herein, all capitalized terms herein shall have the meaning ascribed to them in the Standard Terms and Conditions.

I. Project Summary

The Developer is planning to:

expand or develop a residential subdivision known as Summit Park Phase 7 at the property located at Part of Lots 4 & 5, Block 4, Conc. 1, Binbrook, in the City of Hamilton in the Province of Ontario, as more particularly described in PIN 17385 1563, and where a plan of subdivision has been registered as _____ at __:__ a.m./p.m. on the _____ day of _____, _____ (the foregoing being hereinafter described as "**Project**").

Hydro One hereby commits to honouring all the prices stated hereunder in the Agreement even if it becomes necessary, for any reason, for Hydro One to supply the said subdivision by means of a feeder or feeders other than the feeder or feeders stated hereunder in the Agreement.

The Developer hereby agrees to proceed with one of the following options:

Option A: Hydro One performs the Non-Contestable Work and the Contestable Work; or

Option B: The Developer performs the Contestable Work and Hydro One performs the Non-Contestable Work,

by confirming its selection of the appropriate option contained in below:

The Developer hereby elects Option A by checking the box below and initialling where specified below and agrees with and accepts all the figures contained in the Option A Chart set out in Schedule "C".

Option A ☐ _____ (Developer's Signatories' Initials)

The Developer hereby elects Option B by checking the box below and initialling where specified below and agrees with and accepts all the figures contained in the Option B Chart set out in Schedule "C".

Option B ☒ _____ (Developer's Signatories' Initials)

II. Term

Except as expressly set out in this Agreement; this Agreement shall be in full force and effect and binding on the parties upon execution by both parties and shall terminate on the 7th anniversary of the Energization Date. Termination of the Agreement for any reason shall not relieve either party of its liabilities and obligations existing under the Agreement at the time of termination. Termination of this Agreement for any reason shall be without prejudice to the right of either party, including the terminating party, to pursue all legal and equitable remedies that may be available to it including, but not limited to, injunctive relief.

III. Impact on Agreement if Developer Fails to Execute the Agreement by the Required Execution Date

All amounts quoted in the applicable Option A Chart or the Option B Chart (including, but not limited to, the Firm Offer and the estimate of Available Support and the estimate of the Capital Contributions will only be remain valid until the Required Execution Date (see Part IV below).

This Agreement shall be null and void and neither party shall have any further liability or obligation to the other if the Developer fails to do any of the following by the Required Execution Date:

(i) execute and deliver this Agreement to Hydro One;
(ii) Deliver the Capital Contribution to Hydro One upon the execution of the Agreement by the Developer;
(iii) Deliver the Expansion Deposit to Hydro One upon the execution of the Agreement by the Developer;
(iv) Deliver proof of insurance as required under the terms of this Agreement upon the execution of the Agreement by the Developer; or
(v) Deliver a certified copy of the Band Council resolution upon the execution of the Agreement by the Developer where the Developer is a Band of Indians with such Band Council Resolution authorizing the execution of this Agreement and the issuance of any permits required under Section 28(2) of the *Indian Act* (Canada).

IV. Miscellaneous:

Developer's HST Registration Number:[1]

Expansion Deposit:[2]	$1,425,258.67
Easement Date:[3]	5th day of September 2012
Customer Connection Horizon:	**5** years
Required Execution Date:	27th day of January 2013
Revenue Horizon:	**25** years

Developer Notice Info:[4]

Multi-Area Developments Inc.
10-301 Fruitland Road, Stoney Creek, Ontario L8E 5M1

Attention: Steve Spicer

Fax: 905-662-8401

V. Entire Agreement

Subject to Section 2.4 of the Standard Terms and Conditions, this Agreement constitutes the entire agreement between the parties with respect to the subject matter of this Agreement and supersedes all prior oral or written representations and agreements concerning the subject matter of this Agreement.

[SIGNATURE PAGE FOLLOWS]

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[1] See Subsection 1.1(e) of the Standard Terms and Conditions.
[2] See Sections 6.1 and 6.2 of the Standard Terms and Conditions.
[3] See Subsections 5.2(l) of the Standard Terms and Conditions.
[4] See Section 13.5 of the Standard Terms and Conditions.

VI. Amendments

It is recognized that from time to time during the currency of the Agreement the parties hereto may mutually, unless otherwise provided for in the Agreement, alter, amend, modify or vary the provisions of the Agreement and such alteration, amendment, modification, variation or substitution shall be effected in writing and attached hereto and shall be deemed to form part hereof and shall, from the date agreed upon, alter, amend, modify, vary or substitute the Agreement in the manner and to the extent set forth in writing by the parties. Subject to the foregoing, no amendment, modification or supplement to the Agreement shall be valid or binding unless set out in writing and executed by the parties with the same degree of formality as the execution of the Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement.

HYDRO ONE NETWORKS INC.

Name: Gordon Messervey
Title: Supervising Planning & Design
Date: Sept 10, 2012.
I have the authority to bind the Corporation.

Multi-Area Development Inc.

Name: ALDO DE SANTIS
Title: PRESIDENT
Date: SEPTEMBER 7, 2012

Name:
Title:
Date:
I/We have the authority to bind the Corporation.

Schedule "A" Description of the Contestable and Non-Contestable Work

See attached Drawing 00351-12-116 Rev 06

Description of Non-Contestable Work Hydro One MUST perform:

For Underground Lines (Including Submarine):

1. Perform make ready work on existing Hydro One facilities (dip pole or existing transformer or kiosk)
2. Termination of all primary and secondary cables within the Electrical Distribution System
3. Installation of transformers and kiosks including inserts, elbows, insulating caps, arrestors and feed through
4. Install kiosks including insulating caps
5. Install numbering, signs, locks and phase markings on transformers and kiosks
6. Connection of grounds to transformers and kiosks
7. Install switching/isolation of existing Hydro One facilities
8. Perform Inspection

For Overhead Lines:

1. Perform make ready work on existing Hydro One facilities
2. Termination of all primary cables at transformer and switch locations and secondary cables transitioning to underground within the Electrical Distribution System
3. Install transformers and transformer framing
4. Install switches

Description of Contestable Work Hydro One or Developer/Contractor can perform (Unless otherwise stated on Drawing):

For Underground Lines (Including Submarine):

1. Supply and install primary and secondary cables
2. Install secondary splices

For Overhead Lines:

1. Install new poles, primary and secondary conductor, guys and anchors
2. Install primary and secondary framing
3. Install grounding (Plates and Rods)

Schedule "B" – Description of Civil Work

The Developer shall perform the following Civil Work, at its own expense, in accordance with the terms of this Agreement, including, the applicable Hydro One Specifications and standards:

For Underground Lines:

- Excavate trenches;
- Install sand padding with masonry sand;
- Supply and install pre-cast concrete vaults and backfill;
- Install bollards if specified by Hydro One in the design of the Electrical Distribution System;
- Install grounding (Rods);
- Install a crushed stone base for transformers and kiosks;
- Install partial and complete duct banks as specified on drawing (Direct Buried and or Concrete Encased);
- Install road crossing ducts (Including Road Cuts and Bores) complete with pull rope and caps for spares; and
- Perform any other Civil Work referenced in the applicable Hydro One Specifications and standards.

For Sub-cable work (In addition to requirements for Underground Lines):

- Install poured pads (when specified on drawing) in accordance with Hydro One's Standard DU-06-302;
- Supply and install pre-cast concrete vaults and or aluminum vaults;
- Install grounding (Rods or Plates);
- Install masonry sand padding and crushed stone; and
- Perform any other Civil Work referenced in the applicable Hydro One specifications and standards.

All Forestry work outside of operating clearances around existing lines

Schedule "C" - Specifications

The following will be provided to the Developer on a CD-ROM:

The Hydro One Overhead and Underground Distribution Standards – 2011 Editions

Schedule "D" - Hydro One Design - Drawing # 00351-12-116 Rev 06

Schedule "E" –"Developer's Load Forecast"

Residential Services

Rate Class	#of Lots	Sq. Ftge	Load Type	Service Size (Amps)
UR	101	2500 sqft	Base + AC	200 amps
UR	185	1500 sqft	Base + AC	200 amps

Commercial Services

Rate Class	#of Lots	Secondary Voltage	Service Size (Amps)	Usage	Business Type
Gse	1	120/240V	200 amps	Single Shift	Commercial

Submitted by the Developer on this 12th day of June 2012.

Multi-Area Developments Inc.

Name: ALDO DE SANTIS
Title: PRESIDENT
Date: SEPTEMBER 7, 2012

Name:
Title:
Date:
I/We have the authority to bind the Corporation.

Schedule"F": Economic Evaluation Results

Basic Discounted Cash Flow Calculation

Capital Costs and Charges					Hydro One does all the work (Option A)	Alternative Bid Option (Option B)
Subdivision Expansion Cost	Length	2477	metres		$ 757,154.26	$ 473,214.43
Line Expansion Cost	Length	0	metres		$ -	$ -
				Subtotal	$ 757,154.26	$ 473,214.43
				Overheads and Interest During Construction	$ 93,510.86	$ 60,382.38
				Total Capital Cost	$ 850,665.11	$ 533,596.80

Operating and Maintenance (O&M) Costs over 25 Year Revenue Horizon						
Estimated Connection O & M per year			$ 34,180.06			
Estimated Expansion O & M per year						
Line Expansion O&M (OH Line)		0 m	$ -			
Line Expansion O&M (UG Line)		0	$ -			
Subdivision Line (OH Line)		0	$ -			
Subdivision (UG Line)		2477	$ 2,558.74			
Estimated System Reinf. O&M per year			$ 31,776.61			
Estimated Yearly O&M			$ 68,515.41			
Estimated Total O&M Over F	25 Years		$ 1,712,885.16	PV	$ 886,979.63	$ 886,979.63

Total Cost of Connection			
Total Capital Cost	$ 850,665.11	$	533,596.80
Total PV of O&M	$ 886,979.63	$	886,979.63
Total Cost Of Connection	$ 1,737,644.75	$	1,420,576.44

hydro one

Basic Discounted Cash Flow Calculation

Summary of Revenues over Horizon

Residential Energy Kilowatt hours (kWh)			##########	Energy Billed at a Rate of		2.918	cents per kWh
Combined Averages for	286	UR	Rate Class customer(s)				
Residential Energy Kilowatt hours (kWh)							
Commercial Energy Kilowatt hours (kWh)			**1892.1600**	Energy Billed at a Rate of		3.938	cents per kWh
Combined Averages for	1	GSe	Rate Class customer(s)				
Commercial Demand Kilowatts (kW)							
Monthly Combined Revenue			$	5,665.65			
Service Charges	Totaled for the project		$	4,188.21			
Total			$	9,853.86			
Yearly Revenue			$	118,246.36			
Total Revenue Over	25	Years	$	2,956,159.02	PV $	1,530,781.46	$ 1,530,781.46

Taxes, Tax Credits and Other Adjustments

PV Income Taxes	$	181,874.01				
CCA Tax Shield, and Municipal Taxes	$	(130,709.12)				
PV Working Capital	$	6,349.69				
Capital Contribution Adjustment	$	47,998.21				
	$	105,512.79	PV	$ 105,512.79	$	105,512.79
		Revenue After Tax		$ 1,425,268.67	$	1,425,268.67

Summary of Costs and Revenues

Total Cost of Connection	$	1,737,644.75	$ 1,420,576.44
Less Applicable Revenue After Tax	$	1,425,268.67	$ 1,425,268.67
Customer Pays This Amount* plus Excluded Items and HST	$	(312,376.08)	** $ 4,692.23

*Difference between the Total Cost of Connection and Revenue After Tax (note negative number indicates Capital Contribution is required)

** In the case of a credit, the maximum amount of this valueis equal to the Contestable support of Option A

PV = Present Value

Rev 07/2011

Basic Discounted Cash Flow Calculation

This is how the Calculation relates to Sections 2.0, 3.0, 5.0A and 5.0B of your contract.

	Hydro One does all the work (Option A)	Alternative Bid Option (Option B)
Customer Contribution Required For The Connection (From Above)	$ 312,376.08	$ (4,692.23)
Less Pre Paid Amounts		
Line 1.1 Engineering Design Fees Paid	$ 14,800.00	$ 14,800.00
Line 3.4 Miscellaneous Approvals Paid	$ -	$ -
Plus Items Excluded From Receiving Support		
Incremental Cost For Pad-Mounted Transformer (NonContestable)	$ -	$ -
Work Site Inspector	$ -	$ 38,253.60
Returned Materials Charge	$ -	$ -
Sub Total	$ 297,576.08	$ 18,761.37
HST	$ 38,684.89	$ 2,438.98
Amount Due*	$ 336,260.97	$ 21,200.35

Average Support per Service	Option A	Option B
Residential Energy	$ 4,928.42	$ 4,435.58
Commercial Energy	$ 15,741.45	$ 14,167.31
Commercial Demand	$ -	$ -

Note: Option B Average Support Includes 10% Holdback for Warranty

* Note:Section 4.0 charges are in addition to these amounts.

Rev 06/2011

3.2 The Developer hereby elects Option A by checking the box below and agrees and accepts all the figures contained in the Option A chart below:

Option A – Hydro One Networks Performs Non-Contestable Work and Contestable Work				
Part 1 Non-Contestable Work Firm Offer		TOTAL	PAID	DUE
1.0 Engineering & Design				
1.1	Design Costs (subject to GST)	$ -	$ -	$ -
	Design Costs (subject to HST)	$ 12,877.50	$ (14,800.00)	$ (1,922.50)
	Total Cost Section 1.1	$ 12,877.50	$ (14,800.00)	$ (1,922.50)
	Less: Revenue Support Applied To This Section (to a maximum of the cost above)	$ -	$ -	$ -
	Remaining Balance Section 1.1	$ 12,877.50	$ (14,800.00)	$ (1,922.50)
2.0 Cost of Non-Contestable Work Other Than Line Expansion				
		TOTAL	PAID	DUE
2.1	Non-Contestable Subdivision Secondary Costs			
	Material	$ 146,723.85	$ -	$ 146,723.85
	Labour	$ 124,161.12	$ -	$ 124,161.12
	Equipment	$ 70,279.88	$ -	$ 70,279.88
	Other Miscellaneous	$ 16,398.64	$ -	$ 16,398.64
	Administration & Overheads	$ 23,426.63	$ -	$ 23,426.63
	400A Meterbase Credit	$ -	$ -	$ -
	Total Cost Section 2.1	$ 380,990.11	$ -	$ 380,990.11
	Less: Revenue Support Applied To This Section (to a maximum of the cost above)	$ 380,990.11	$ -	$ 380,990.11
	Remaining Balance Section 2.1	$ -	$ -	$ -
2.2	Non-Contestable Subdivision Primary Costs			
	Material	$ 95,874.57	$ -	$ 95,874.57
	Labour	$ 23,242.95	$ -	$ 23,242.95
	Equipment	$ 13,156.39	$ -	$ 13,156.39
	Other Miscellaneous	$ 3,069.82	$ -	$ 3,069.82
	Administration & Overheads	$ 4,385.46	$ -	$ 4,385.46
	Cost To Connect To An Existing Powerline	$ -	$ -	$ -
	Forestry Cost (If Applicable)	$ -	$ -	$ -
	Total Cost Section 2.2	$ 139,729.19	$ -	$ 139,729.19
	Less: Revenue Support Applied To This Section (to a maximum of the cost above)	$ -	$ -	$ -
	Remaining Balance Section 2.2	$ 139,729.19	$ -	$ 139,729.19

Continued

3.2 Continued

The Developer hereby elects Option A by checking the box below and agrees and accepts all the figures contained in the Option A chart below:

Option A – Hydro One Networks Performs Non-Contestable Work and Contestable Work				
3.0	**Cost Of Non-Contestable Line Expansion (If Applicable)**			
		TOTAL	PAID	DUE
3.1	Non-Contestable Line Expansion Costs			
	Material	$ -	$ -	$ -
	Labour	$ -	$ -	$ -
	Equipment	$ -	$ -	$ -
	Other Miscellaneous	$ -	$ -	$ -
	Administration & Overheads	$ -	$ -	$ -
3.2	Cost To Connect To An Existing Powerline	$ -	$ -	$ -
3.3	Forestry Cost (If Applicable)	$ -	$ -	$ -
3.4	Miscellaneous Approvals Such As Water Crossing, Railway Crossing, Pipeline Crossing, etc.	$ -	$ -	$ -
3.5	Easements, Permits and Approvals	$ -	$ -	$ -
	Total Cost Section 3.1 to 3.5	$ -	$ -	$ -
	Less: Revenue Support Applied To This Section (to a maximun of the cost above)	$ -	$ -	$ -
	Remaining Balance Section 3.1 to 3.5	$ -	$ -	$ -
4.0	**Cost of Contestable Work Other Than Line Expansion**			
		TOTAL	PAID	DUE
4.2	Contestable Subdivision Secondary Costs			
	Material	$ 96,914.95	$ -	$ 96,914.95
	Labour	$ 62,015.99	$ -	$ 62,015.99
	Equipment	$ 35,103.39	$ -	$ 35,103.39
	Other Miscellaneous	$ 8,190.79	$ -	$ 8,190.79
	Administration & Overheads	$ 11,701.13	$ -	$ 11,701.13
	Total Cost Section 4.1	$ 213,926.25	$ -	$ 213,926.25
	Less: Revenue Support Applied To This Section (to a maximun of the cost above)	$ 157,298.92	$ -	$ 157,298.92
	Remaining Balance Section 4.1	$ 56,627.33	$ -	$ 56,627.33
4.2	Contestable Subdivision Primary Costs			
	Material	$ 63,274.69	$ -	$ 63,274.69
	Labour	$ 21,129.70	$ -	$ 21,129.70
	Equipment	$ 11,960.21	$ -	$ 11,960.21
	Other Miscellaneous	$ 2,790.72	$ -	$ 2,790.72
	Administration & Overheads	$ 3,986.74	$ -	$ 3,986.74
	Total Cost Section 4.2	$ 103,142.06	$ -	$ 103,142.06
	Less: Revenue Support Applied To This Section (to a maximun of the cost above)	$ -	$ -	$ -
	Remaining Balance Section 4.2	$ 103,142.06	$ -	$ 103,142.06

Continued

3.2 Continued

The Developer hereby elects Option A by checking the box below and agrees and accepts all the figures contained in the Option A chart below:

Option A – Hydro One Networks Performs Non-Contestable Work and Contestable Work				
5.0	**Contestable Cost Of Line Expansion (If Applicable)**			
5.1	Contestable Cost of Line Expansion	TOTAL	PAID	DUE
	Material	$ -	$ -	$ -
	Labour	$ -	$ -	$ -
	Equipment	$ -	$ -	$ -
	Other Miscellaneous	$ -	$ -	$ -
	Administration & Overheads	$ -	$ -	$ -
	Total Cost Section 5.1	$ -	$ -	$ -
	Less: Revenue Support Applied To This Section (to a maximum of the cost above)	$ -	$ -	$ -
	Remaining Balance Section 5.1	$ -	$ -	$ -
	Remaining balance on Non-Contestable and Contestable Work (Sections 1.0 through 5.0)	$ 312,376.08	$ (14,800.00)	$ 297,576.08
Part 3 Non-Contestable and Contestable Work Above Standard Connection				
		TOTAL	PAID	DUE
6.0	**Items Excluded From Receiving Support**			
6.1	Pad-mount Transformer Incremental Cost (NonCont.)	$ -	$ -	$ -
6.2	Returned Materials Charge	$ -	$ -	$ -
	Total Cost Section 6.1 to 6.2	$ -	$ -	$ -
Part 4 Totals				
	Revenue Shortfall (if applicable)	$ -		$ -
	Sub-Total (without Tax) for Option A	$ 312,376.08	$ (14,800.00)	$ 297,576.08
	GST on Engineering and Design for Option A	$ -	$ -	$ -
	HST on Engineering and Design for Option A	$ 1,674.08	$ (1,924.00)	$ (249.93)
	HST on Remaining Items for Option A	$ 38,934.82	$ -	$ 38,934.82
	Grand Total (with GST & HST) for Option A	$ 352,984.97	$ (16,724.00)	$ 336,260.97
	GST/HST# 870865821RT0001			
A-1	The Developer has paid the cost of Design and Staking, incurred by Hydro One Networks in the amount of =		$ (16,724.00)	
A-2	The Developer shall pay 100% of the Remaining Cost to be incurred by Hydro One Networks at the time of signing of this Agreement, in the amount of =			$ 336,260.97
A-3	Refund After Hydro One Networks Support Applied			$ -
I Elect To Choose Option A ☐			← Signature	

3.3 The Developer hereby elects Option B by checking the box below and agrees and accepts all the figures contained in the Option B chart below:

Option B – Hydro One Networks Performs Non-Contestable Work Only				
Part 1 Non-Contestable Work Firm Offer		TOTAL	PAID	DUE
1.0	**Engineering & Design**			
1.1	Design Costs (subject to GST)	$ -	$ -	$ -
	Design Costs (subject to HST)	$ 12,877.50	$ (14,800.00)	$ (1,922.50)
	Total Cost Section 1.1	$ 12,877.50	$ (14,800.00)	$ (1,922.50)
	Less: Revenue Support Applied To This Section (to a maximum of the cost above)	$ -	$ -	$ -
	Remaining Balance Section 1.1	$ 12,877.50	$ (14,800.00)	$ (1,922.50)
2.0	**Cost of Non-Contestable Work Other Than Line Expansion**			
		TOTAL	PAID	DUE
2.1	Non-Contestable Subdivision Secondary Costs			
	Material	$ 146,723.85	$ -	$ 146,723.85
	Labour	$ 124,161.12	$ -	$ 124,161.12
	Equipment	$ 70,279.88	$ -	$ 70,279.88
	Other Miscellaneous	$ 16,398.64	$ -	$ 16,398.64
	Administration & Overheads	$ 23,426.63	$ -	$ 23,426.63
	400A Meterbase Credit	$ -	$ -	$ -
	Total Cost Section 2.1	$ 380,990.11	$ -	$ 380,990.11
	Less: Revenue Support Applied To This Section (to a maximun of the cost above)	$ 380,990.11	$ -	$ 380,990.11
	Remaining Balance Section 2.1	$ -	$ -	$ -
2.2	Non-Contestable Subdivision Primary Costs			
	Material	$ 95,874.57	$ -	$ 95,874.57
	Labour	$ 23,242.95	$ -	$ 23,242.95
	Equipment	$ 13,156.39	$ -	$ 13,156.39
	Other Miscellaneous	$ 3,069.82	$ -	$ 3,069.82
	Administration & Overheads	$ 4,385.46	$ -	$ 4,385.46
	Cost To Connect To An Existing Powerline	$ -	$ -	$ -
	Forestry Cost (If Applicable)	$ -	$ -	$ -
	Total Cost Section 2.2	$ 139,729.19	$ -	$ 139,729.19
	Less: Revenue Support Applied To This Section (to a maximun of the cost above)	$ -	$ -	$ -
	Remaining Balance Section 2.2	$ 139,729.19	$ -	$ 139,729.19

Continued

3.3 Continued

The Developer hereby elects Option B by checking the box below and agrees and accepts all the figures contained in the Option B chart below:

Option B – Hydro One Networks Performs Non-Contestable Work Only				
3.0	**Non-Contestable Cost Of Line Expansion (If Applicable)**			
		TOTAL	PAID	DUE
3.1	Non-Contestable Line Expansion Costs			
	Material	$ -	$ -	$ -
	Labour	$ -	$ -	$ -
	Equipment	$ -	$ -	$ -
	Other Miscellaneous	$ -	$ -	$ -
	Administration & Overheads	$ -	$ -	$ -
3.2	Cost To Connect To An Existing Powerline	$ -	$ -	$ -
3.3	Forestry Cost (If Applicable)	$ -	$ -	$ -
3.4	Miscellaneous Approvals Such As Water Crossing, Railway Crossing, Pipeline Crossing, etc.	$ -	$ -	$ -
3.5	Easements, Permits and Approvals	$ -	$ -	$ -
	Total Cost Section 3.1 to 3.5	$ -	$ -	$ -
	Less: Revenue Support Applied To This Section (to a maximun of the cost above)	$ -	$ -	$ -
	Remaining Balance Section 3.1 to 3.5	$ -	$ -	$ -
	Remaining balance on Non-Contestable and Contestable Work (Sections 1.0 through 3.0)	$ 152,606.69	$ (14,800.00)	$ 137,806.69
	Total Unused Support Available For Contestable Work	$ 157,298.92	$ -	$ 157,298.92
	Total Remaining Balance	$ (4,692.23)	$ (14,800.00)	$ (19,492.23)
Part 2 Non-Contestable Work Above Standard Connection				
4.0	**Items Excluded From Receiving Support**			
4.1	Pad-mount Transformer Incremental Cost	$ -	$ -	$ -
4.2	Work Site Inspection (If Applicable)	$ 38,253.60	$ -	$ 38,253.60
4.3	Returned Materials Charge	$ -		$ -
	Total Cost Section 4.1 to 4.2	$ 38,253.60	$ -	$ 38,253.60
Part 3 Totals				
	Revenue Shortfall (if applicable)	$ -	$ -	$ -
	Sub-Total (without Tax) for Option B	$ 33,561.37	$ (14,800.00)	$ 18,761.37
	GST on Engineering and Design for Option B	$ -	$ -	$ -
	HST on Engineering and Design for Option B	$ 1,674.08	$ (1,924.00)	$ (249.93)
	HST on Remaining Items for Option B	$ 2,688.90	$ -	$ 2,688.90
	Grand Total (with GST & HST) for Option B	$ 37,924.35	$ (16,724.00)	$ 21,200.35
	GST/HST# 870865821RT0001			
				Continued

3.3 Continued

The Developer hereby elects Option B by checking the box below and agrees and accepts all the figures contained in the Option B chart below:

Option B – Hydro One Networks Performs Non-Contestable Work Only				
Part 3 Totals Unused Support Available For Contestable work				
		TOTAL	PAID	DUE
B-1	The Developer has paid the cost of Design and Staking, incurred by Hydro One Networks in the amount of =		$ (16,724.00)	
B-2	The Developer shall pay 100% of the Remaining Cost to be incurred by Hydro One Networks at the time of signing of this Agreement, in the amount of =			$ 21,200.35
B-3	Refund After Hydro One Networks Support Applied			$ -
I Elect To Choose Option B ☐				← Signature

Schedule "H" – Form of Transfer of Ownership of Primary Distribution System, Secondary Distribution System, Line Expansion and Residential Service Cables

TRANSFER OF OWNERSHIP OF PRIMARY DISTRIBUTION SYSTEM, SECONDARY DISTRIBUTION SYSTEM, LINE EXPANSION AND RESIDENTIAL SERVICE CABLES
(CONSTRUCTED BY HYDRO ONE NETWORKS INC. OR DEVELOPER)

Hydro One Networks Inc. Expansion/Connection #: 00351-12-116 Rev 06

Summit Park Phase 7

In accordance with the Multi-Service Connection Cost Agreement made between the undersigned Developer (the "**Developer**") and Hydro One Networks Inc. dated the 27th day of July 2012 (the "**Agreement**"), the Developer hereby irrevocably conveys all rights, title and interest, free and clear of all present and future mortgages, liens, demands, charges, pledges, adverse claims, rights, title, retention agreements, security interests, or other encumbrances of any nature and kind whatsoever in the:

(a) Primary Distribution System and any Line Expansion as described in Schedule "D" of the Agreement and as referred to in the said Agreement; and
(b) that part of the Secondary Distribution System as described in Schedule "D" of the Agreement and as referred to in the said Agreement that has been installed as of the Energization Date of the Primary Distribution System; and
(c) any Residential Service cables connected to the Secondary Distribution System described in (b) above on the Energization Date of the Primary Distribution System,

to Hydro One Networks Inc. with effect as of the Energization Date of the Primary Distribution System;

AND:

(1) any addition to the Secondary Distribution System as described in Schedule "E" of the Agreement and as referred to in the said Agreement that is installed following the Energization Date of the Primary Distribution System; and
(2) any Residential Service cables connected to the Secondary Distribution System ,

to Hydro One Networks Inc. with effect as of the Energization Date of the addition to the Secondary Distribution System described in (1) above.

Schedule "H" – Form of Transfer of Ownership of Primary Distribution System, Secondary Distribution System, Line Expansion and Residential Service Cables

Multi- Area DevelopmentsInc.

Name: ALDO DESANTIS
Title: PRESIDENT
Date: SEPTEMBER 7, 2012

Name:
Title:
Date:
I/We have the authority to bind the Corporation.

Hydro One Networks Inc. hereby agrees to assume ownership and responsibility for operation and maintenance of the Primary Distribution System, the Secondary Distribution System, the Line Expansion and the Residential Service cables (all as described above) and as referred to in the said Agreement above on the respective Energization Dates described above.

HYDRO ONE NETWORKS INC.

Name: Gordon Messervey
Title: Supervising Planning & Design
Date: Sept 10, 2012
I have the authority to bind the corporation.

A. J. Clarke and Associates Ltd.
SURVEYORS • PLANNERS • ENGINEERS

A. J. Clarke, O.L.S.
Geoff Aldworth, O.L.S.
Barry Clarke, O.L.S., C.L.S.

Stephen Fraser, M.C.I.P., R.P.P.

Adi Irani, P.Eng.
Claudio Giammarco, P.Eng.

Utility Co-ordination Meeting
Rymal Road Reconstruction Dartnell to Fletcher

Date: Wednesday August 15, 2012

Location: Office of A.J. Clarke

Attendees:

Name	Organization	
Gord McGuire	City of Hamilton	Gord.McGuire@hamilton.ca
Bob Howard	City of Hamilton	Bob.Howard@hamilton.ca
George Berenyi	City of Hamilton	George.Berenyi@hamilton.ca
Sally Yong Lee	City of Hamilton	Sally Yong-Lee@hamilton.ca
Scott Beaudrie	Horizon Utilities	Scott.Beaudrie@Horizonutilities.ca
Mark Jakubowski	Horizon Utilities	Mark.Jakubowski@Horizonutilities.ca
Ted Sloat	Hydro One	Ted.Sloat@Hydroone.ca
Darcy Mckinnon	Hydro One	Darcy.Mckinnon@Hydroone.ca
Enzo Greco	Union Gas	Egreco@uniongas.com
Scott Gemmill	Bell Canada	Scottgemmill@bell.net
Janice Freckleton-Brunet	A.J. Clarke	jfreckleton@ajclarke.com

Discussions:

1. Horizon stated that if sidewalk can be relocated there are 12 poles to be relocated, if sidewalk cannot be relocated then there are 40 poles to be relocated.
2. George stated City will look at sidewalk location.
3. Enzo enquired about the reconstruction past Fletcher, Sally indicated that this would still be a few years away , sewers need to be brought up Hwy 20.
4. Schedule for the utility relocations is 2013
5. Horizon has a new duct structure to be placed on the south side, they have indicated that it would go in conjunction with the road reconstruction. It is anticipated that they will keep it at 2.75 m off the property line. (future as marked)
6. Union Gas is placing a new line at with crossing at Pritchard going to Glover at 1 m off property for Canada Bread site. Enzo stated it will be an 8 in. high pressure. There may have to be a distribution station at the point where the high pressure meets the intermediate pressure. Approx at Pritchard south side.
7. Discussions took place regarding the acquisition of property along Rymal. AJC will provide drawings with areas shaded where property is required. Union Gas is adamant that they will either go in at 1 m off property line (future) when all acquisitions are completed or follow existing property lines resulting in non standard running line.

8. Hydro One is replacing Bell poles and relocating some along the south side of Rymal to facilitate servicing for the future developments including the Canada Bread site. This work is on an accelerated schedule. The poles in questions are not being relocated (excepting a few at Dakota?) this results in the poles being in the blvd of the new road cross section.
9. Hydro will provide to AJC drawings showing new location, Gas will auto cad their design for the work at Glover and Pritchard for inclusion on the engineering drawings. JF asked Bell if they could provide their drawings of the fiber duct structure from Glover running westerly.
10. A.J. Clarke will put new location of poles and gas on the engineer drawings and distribute to the City for review.
11. Discussions took place regarding intersection of Upper Mount Albion and the widening at that location. It is anticipated that a hydro pole on the northeast may have to be relocated in that area. Horizon will advise.

Minutes prepared by Janice Freckleton-Brunet. Please advise of any omissions or discrepancies as soon as possible.

Janice Freckleton-Brunet
A. J. Clarke and Associates Ltd.