

East Markham Works Yard

Presentation to General Committee



October 19, 2020



Purpose of Presentation

- 1. To identify additional project budget requirements and request funding approval for a budget increase of \$1,503,734
- Provide an update on project schedule and revised opening date of Spring/Summer 2021
- 3. Request authority to grant an easement to Alectra for provision of electrical services



Project Update

- April 2019 Project approved by Council
- August 2019 Land purchase completed
- February 2020 Zoning Bylaw amended to allow outdoor storage and office for an Operations Works Yard
- June 2020
 - Council update and budget increase of \$6.072M approved
 - Tender for the GC (Orin Contractors Group) closed in June 2020, Contract awarded to Orin
- July 2020
 - Construction commenced July 2, 2020
 - Site Plan Approval was issued
- August 2020
 - Building Permit and TRCA approvals issued August 5, 2020
 - Early August contractor unexpectedly encountered large amounts of top soil on the site
- October 2020
 - Construction continues, but is already four weeks behind



Revised Budget

| Initial Project Budget (2018) | Budget Increase for Construction Costs (Request Approved by Council June 9, 2020) | Budget Increase for Changes during Construction (October 19, 2020) | Estimated Total Revised Project Cost (October 19, 2020) |
|----------------------------------|--|--|---|
| \$8,240,000 | \$6,072,306 | \$1,503,734 | \$15,816,040 |





Increases to Construction Costs

| ITEM | DESCRIPTION | BUDGET | ESTIMATED COST | BUDGET INCREASE |
|--|---|-----------|-------------------|--------------------|
| Excess Topsoil | Export additional 10,000m3 of soil from the site | \$0 | \$420,000 | \$420,000 |
| Additional Fill | Import additional 22,000m3 of engineered fill to site | \$0 | \$361,800 | \$361,800 |
| Generator Revision and Upsize | Change to one (1) larger generator to power entire site | \$40,000 | \$375,000 | \$335,000 |
| Permit Changes | Changes to drawings and specifications between tender drawings and permit approvals | \$0 | \$120,000 | \$120,000 |
| Left Turn Lane Length Increase | Region revised and increased required length of left hand turn lane (LTL) | \$300,000 | \$400,000 | \$100,000 |
| Footing and Grade Beam Revisions | Changes to the depth and thickness of the foundation due to grading | \$0 | \$55,000 | \$55,000 |





Increases to Construction Costs (cont'd.)

| ITEM | DESCRIPTION | BUDGET | ESTIMATED | BUDGET INCREASE |
|---------------------------------|--|-----------|-------------|--------------------|
| Fuel System | Structural changes to the concrete pad and electrical revisions to suit the fuel system design | \$0 | \$50,000 | \$50,000 |
| Alectra Connect | New hydro service to site | \$30,000 | \$60,926 | \$30,926 |
| Wall & Guard Rail Relocation | To increase the storage capacity of the salt structure | \$0 | \$5,000 | \$5,000 |
| SUB TOTAL | | \$370,000 | \$1,847,726 | \$1,477,726 |
| TOTAL INCREASE Incl. HST Impact | | | | \$1,503,734 |



Additional Topsoil/Engineered Fill – Cost Increase

- 2018/19 Design Phase 20 boreholes were drilled that showed topsoil depths anywhere between 50mm (2 inches) and 350mm (14"). The average depth of topsoil from all of the boreholes = 145mm / 5.7".
 - Location of boreholes determined by consultants based on site typography, location of proposed building locations, storm water ponds, and hydrological studies
- July/August 2020 Construction Phase discovered valleys and pits of topsoil with depths up to 1.3m (4'), meaning significant increase in top soil and reduction of stable fill available on the site
- Resulting in increases in imported fill and exported top soil

| ITEM | TENDER DESIGN (Cut/Fill) Anticipated Volumes (m3) | ACTUAL VOLUMES During Construction (m3) |
|-------------------|---|---|
| Imported Fill | 3,200 | 22,000 |
| Exported Top Soil | (1,300) | (10,000) |

Result: Cost increase of \$361,800 for fill import and \$420,000 for top soil export





Cost Increases (\$100k+)

| CHANGE | DESCRIPTION | ESTIMATED ADDITIONAL COST |
|---------------------|---|---------------------------------|
| Generator Upsize | Tendered design = two (2) smaller portable generators to power essential items in an outage On the electrical consultant's recommendation based on feedback from Operations, to revise the design to one (1) larger unit (similar to 555 Miller) that can power entire site more effectively and efficiently | \$335,000 |
| Permit Changes | Project was tendered for construction prior to permits being issued in order to start construction July 2020 During permit applications to City, Region of York and TRCA, there were changes to the designs and specs that led price increases to the contract | \$120,000 |





Cost Increases (\$100k+)

| CHANGE | DESCRIPTION | ESTIMATED ADDITIONAL COST |
|--|---|---------------------------------|
| Regional Road (9 th Line) widening for left turn lane | During Site Plan Approval, the Region required the City to widen Ninth Line and install a left turn lane into the south entrance of the site. Based on the Region's comments estimated construction cost = \$300K Due to Region's revisions to the design post SPA (longer left turn lane and road widening) the construction cost has increased to \$400K | \$100,000 |



Schedule Update & Revised Opening

- Currently four weeks behind schedule
- COVID and weather delays may cause further sliding of schedule
- Winter construction will likely result in increased costs and reduced durability of paving installed
- In consultation with Operations we are revising opening date to spring/summer 2021
- Operations will manage salt capacity with the two new salt barns at 555 Miller (right) that added 4,500 T of storage





Easement to Alectra Utilities

- October 2020 Offer to Connect agreement issued by Alectra Utilities to provide a new service connection and transformer to the EMWY site
- Alectra's standard Offer to Connect requires any easements necessary be able to be granted now or in the future before signing the agreement.
- Staff are seeking authority to grant any easements necessary now or in the future for this site to Alectra for nominal consideration



Recommendation

- THAT the presentation entitled "East Markham Works Yard General Committee October 19, 2020" be received; and
- 2. THAT the requested budget increase to the capital project in the amount of \$1,503,734 (incl. HST) be funded from Development Charges Reserves in the amount of \$1,466,140.65 or 97.5% and the Non-DC Growth Reserve in the amount of \$37,593.35 or 2.5%; and
- 3. THAT the City grant an easement to Alectra Utilities, for nominal considerations over part of the lands municipally known as 10192 9th Line acceptable to the City's Senior Manager of Real Property in the event that such easement is required by Alectra to provide services to the site (the "Alectra Easement"); and
- 4. THAT the Mayor and Clerk be authorized to execute agreement(s) with Alectra Utilities required for the development of a works yard on the lands municipally known as 10192 9th Line and to convey the Alectra Easement, if required, provided the form of such agreement (s) is satisfactory to the City Solicitor and the CAO; and
- 5. THAT Staff be authorized and directed to do all things necessary to give effect to this resolution.



End of Presentation





Site Plan





End of Update