

NO: R034

COUNCIL DATE: March 6, 2023

REGULAR COUNCIL

TO: **Mayor & Council** DATE: **February 23, 2023**
FROM: **General Manager, Engineering** FILE: **5225-40 (SDD)**
SUBJECT: **Provincial Funding in Support of the Surrey Dyking District**

RECOMMENDATION

The Engineering Department recommends that Council:

1. Receive this report for information;
2. Support staff and the Province of British Columbia (the “Province”) to work on technical studies to better understand the implications of transferring the Surrey Dyking District from the Province to the City of Surrey; and
3. Authorize the Mayor and City Clerk to execute a technical study funding agreement with the Province, once the terms have been finalized.

INTENT

The purpose of this report is to provide Council with an update on the ongoing discussions with the Province regarding the transfer of the Surrey Dyking District (the “SDD”) and its assets to the City, and to request authorization for the Mayor and City Clerk to execute a technical study funding agreement with the Province whereby the Province will provide funding to the City to undertake supportive studies, data collection and other activities to better understand the implications of a potential transfer.

The Province and City have previously negotiated a transfer agreement for the Colebrook Dyking District (the “CDD”). The transfer of the CDD was approved by Council on March 2, 2016, as part of Corporate Report No. R047; 2016 attached as Appendix “I”. The necessary dyke upgrades are well underway and the remaining steps to complete the formal CDD transfer are being finalized. The Province has recently increased its capacity to advance the transfers of outstanding dyking districts through the Ministry of Forests. With this additional capacity, City staff have begun meeting regularly with the Province to advance discussions about the transfer of the SDD to the City. Through these discussions, it was determined that there are a number of technical issues that require further study in order to inform the transfer discussions.

The Province has signaled that there may be funding available within their current fiscal year (ending March 31, 2023) to support the City in undertaking these studies. The City must be prepared to sign an agreement by March 31, 2023 in order to be eligible to receive these funds.

DISCUSSION

Provincial Flood Management Responsibility

Flood Control Works are currently regulated by the Province under the *Drainage, Ditch and Dike Act* [RSBC 1996] (the “DDDA”). There are two dyking districts within the City that the City has historically overseen: the CDD and SDD, as shown in the attached Appendix “II”. The DDDA is currently set to be repealed on December 31, 2025. The CDD and its assets have been transferred to the City through a Transfer Agreement that provided \$10.5 million for the City to upgrade the dykes prior to December 31, 2025.

A similar agreement with the Province has yet to be negotiated for the SDD, which is over ten times larger than the CDD. Given the size and complexity of the SDD, additional studies, data collection and related activities are required to better understand what improvements are needed to bring the SDD assets to a state of good repair. These studies will inform discussions between the Province and the City regarding cost-sharing and future grant applications to implement the necessary works.

Next Steps

Should the recommendations set out in this report be endorsed, the following steps are envisioned:

- The Province will confirm the funding amount available to the City to undertake further technical studies;
- An agreement will be executed by the City and the Province by the March 31, 2023 deadline for the technical study work; and
- City staff will commission studies of the SDD in priority as funds are secured.

CONCLUSION

The City and Province continue to negotiate an agreement in regard to the further technical analysis on a potential future transfer of the SDD to the City. Such an agreement will require execution by the Mayor and City Clerk prior to March 31, 2023.

Scott Neuman, P.Eng.
General Manager, Engineering

YY/cc

Appendix “I” – Corporate Report No. R047; 2016
Appendix “II” - Map of Surrey Dyking Districts

CORPORATE REPORT

NO: R047

COUNCIL DATE: March 7, 2016

REGULAR COUNCIL

TO: Mayor & Council

DATE: March 2, 2016

FROM: General Manager, Engineering

FILE: 5225-17

XC: 5225-40 (CDD)

5225-40 (SDD)

5225-40 (MBDD)

SUBJECT: Responsibility for the Colebrook Dyking District and Surrey Dyking District

RECOMMENDATIONS

The Engineering Department recommends that Council:

1. Receive this report as information;
2. Authorize staff to inform the appropriate Provincial officials that the City is willing to assume responsibility of the Surrey Dyking District on the basis that the Province acknowledges and agrees that any future dyke upgrades required will comply with the *Dike Design and Construction Guide Best Management Practices for British Columbia* as originally published in July 2003, and that the Province is not requiring that the dykes within the Colebrook Dyking District be designed and/or constructed to the their *Seismic Design Guidelines for Dikes*;
3. Authorize staff to inform the appropriate Provincial officials that the City is willing to assuming responsibility of the Colebrook Dyking District given the financial support committed to by the Province on the basis that the Province acknowledges and agrees that any future dyke upgrades required will comply with the *Dike Design and Construction Guide Best Management Practices for British Columbia* as originally published in July 2003, and that the Province is not requiring that the dykes within the Colebrook Dyking District be designed and/or constructed to the their *Seismic Design Guidelines for Dikes*; and
4. Authorize the Mayor to sign on behalf of the City of Surrey a Government Transfer-Shared Cost Arrangement with the Province as part of the transfer of the Colebrook Dyking District based on the draft agreement that is attached to this report as Appendix "IV".

INTENT

The purpose of this report is to make recommendations regarding the transfer of the Colebrook Dyking District and the Surrey Dyking District to the City.

BACKGROUND

At its Regular meeting on January 14, 2013, Council considered Corporate Report No. R003;2013 and adopted its recommendations. That report documented that the Province had enacted legislation that would repeal the *Drainage, Ditch and Dike Act [RSBC 1996] Chapter 102* (the "Act"), and that as a result staff would continue to work with the Surrey Dyking District and the Province with a view to the City of Surrey assuming responsibility for the Surrey Dyking District in 2013.

The report also documented that the repealing of the subject Act would result in the dissolution of the Colebrook Dyking District effective December 31, 2015. Unlike the Surrey Dyking District, whose dyking system is an integral part of the City's drainage conveyance system, the dyking system under the responsibility of the Colebrook Dyking District provides flood control related to coastal flooding. In addition, unlike the Surrey Dyking District for which the City has rights-of-way covering the dyking system, the City does not have control over the Colebrook Dyking District dyke rights-of-way, and therefore the City is not in a position to ensure maintenance of the dyking system. On this basis, Council also resolved that the City not assume responsibility of the Colebrook Dyking District at this time.

The areas of the Surrey Dyking District and Colebrook Dyking District are illustrated in the map attached as Appendix "I".

At its Regular meeting on April 8, 2014, Council considered Corporate Report No. R054;2013, a copy of which is attached as Appendix "II", and adopted its recommendations which included authorizing staff to inform the appropriate Provincial officials that the City is not willing to assume responsibility for either of the Colebrook Dyking District and the Mud Bay Dyking District until such time as a long term and sustainable funding program has been established by the Province to address the costs of necessary upgrades to the dykes in these Districts related to sea level rise and other coastal hazards.

DISCUSSION

Since Council's consideration of Corporate Report No. R003;2013, the Dyking District essentially dissolved with the commissioners resigning and all remaining assets of the Surrey Dyking District, including cash, equipment and land, have been transferred to the City and staff have assumed the management of the dykes within the jurisdiction of the Surrey Dyking District in anticipation of the dyking district being formally transferred to the City. Costs to operate and maintain the dykes within the jurisdiction of the Surrey Dyking District have been incorporated into the Drainage Utility and are recovered as part of the Drainage Parcel Tax.

Since Council's consideration of Corporate Report No. R003;2013, all of the Commissioners of the Colebrook Dyking District have also resigned and the dykes within the Colebrook Dyking District have largely gone unmanaged.

Surrey Dyking District

Although the City has assumed the operation of the dykes within the jurisdiction of the Surrey Dyking District, the Province has yet to complete the formal transfer. The formal transfer will include assigning any debts owed to the dyking district and liabilities owed by the dyking district to the City, currently estimated at \$29,500 and \$750 respectively. The formal transfer will also include transferring all rights-of-way to the City.

Should Council see the merits in formally accepting the transfer of the Surrey Dyking District, the Province will need to complete several administrative transactions, including an Order in Council to transfer the dyking district to the City. As required by the Act, the City will receive the dyking district as a Local Area Service. Given that the Drainage Utility is operated on a City wide basis, once the transfer is complete, it is recommended that the newly established Local Area Service be dissolved as a further administrative step once all debts and liabilities have been resolved.

Colebrook Dyking District

In an effort to assist the City in accepting the transfer of the Colebrook Dyking District, the Province, as outlined in the letter attached as Appendix "III", has approved funding of \$1.166 million for land acquisition and a financial commitment to \$9.234 million for improvements to the dykes to bring them up to an acceptable standard for a total of \$10.4 million. Since receipt of this letter, Provincial staff have advised that the total funding of \$10.4 million can now be provided at this time.

The total funding of \$10.4 million offered by the Province is based on estimates by staff in order to acquire rights-of-way over the dykes in the name of the City and to complete improvements to raise the dykes to current flood protection levels. The total funding does not address the costs of necessary upgrades to the dykes related to sea level rise and other coastal hazards. There is no Provincial or Federal funding program currently in place to help fund the upgrades of the dykes to address sea level rise and other coastal hazards.

While the total funding of \$10.4 million offered by the Province does not include the costs of necessary upgrades to the dykes related to sea level rise and other coastal hazards, staff see the merits in assuming the dykes within the Colebrook Dyking District at this time in order to complete deferred maintenance and minor raising of the dykes in order to best protect the residences of those within the Colebrook Dyking District, to protect other municipal infrastructure in the area such as Colebrook Road and King George Boulevard, and to protect other critical Provincial infrastructure including Highway 99.

Similar to the transfer of the Surrey Dyking District, the formal transfer of the Colebrook Dyking District will include assigning debts owed to the dyking district to the City, currently estimated at \$2,500. The Colebrook Dyking District has no liabilities. The formal transfer will also include transferring all rights-of-way to the City.

Should Council see the merits in formally accepting the transfer of the Colebrook Dyking District, similar to the steps required to transfer the Surrey Dyking District to the City, the Province will need to complete several administrative transactions, including an Order in Council to transfer the dyking district to the City. As required by the Act, the City will receive the dyking district as a Local Area Service. Given that the Drainage Utility is operated on a City wide basis, once the transfer is complete, it is recommended that the newly established Local Area Service be dissolved once the liabilities have been resolved.

In support of the administrative transactions to transfer Colebrook Dyking District, the Province is also seeking to execute a Government Transfer – Shared Cost Arrangement. This agreement is the mechanism that the Province will provide their funding. To facilitate the transfer and meet budgeting timelines, the Province is seeking to execute the Government Transfer – Shared Cost Arrangement by March 31, 2016. A draft agreement is attached as Appendix "IV".

Should Council see the merits in formally accepting the transfer of the Colebrook Dyking District, staff will continue work with Provincial staff to finalize the Government Transfer – Shared Cost Arrangement in preparation for execution by the Mayor.

Should Council not see the merits in formally accepting the transfer of the Colebrook Dyking District, staff will continue to work with Provincial staff to ensure that the Province takes appropriate action to adequately maintain and inspect the dykes, and staff will request that the Province initiate the dyke improvements themselves.

Dyke Design Guidelines

The dykes within the Colebrook Dyking District and Surrey Dyking District generally conform to the Province's *Dike Design and Construction Guide Best Management Practices for British Columbia* as originally published in July 2003.

In 2014, the Province issued their *Seismic Design Guidelines for Dikes*. These guidelines provide design consideration to address the seismic stability and integrity of the dykes in southwestern British Columbia and Vancouver Island with the intent to provide flood protection for densely populated urban communities and regional infrastructure. These guidelines acknowledge that achieving the dyke performance criteria specified may be difficult and costly in some instances considering that a majority of the dykes have originally been built to rudimentary standards and for rural area protection.

Given that the dykes within the Surrey Dyking District and the Colebrook Dyking District service a largely agricultural area and that it will be likely difficult and costly to achieve the performance criteria specified in the *Seismic Design Guidelines for Dikes*, it is recommended that as a condition of assuming responsibility of the Surrey Dyking District and the Colebrook Dyking District be done on the basis that the Province acknowledges and agrees that any future dyke upgrades in these areas will comply with the *Dike Design and Construction Guide Best Management Practices for British Columbia* as originally published in July 2003, and that the Province is not requiring that the dykes within the Colebrook Dyking District be designed and/or constructed to the their *Seismic Design Guidelines for Dikes*.

Mud Bay Dyking District

The Province has not advised of any plans to transfer the Mud Bay Dyking District to the City as the Mud Bay Dyking District is not impacted by the pending repeal of the *Drainage, Ditch and Dike Act* as they are incorporated under different legislation. Provincial staff advised both the Surrey Dyking District and the Colebrook Dyking District prior to their dissolution that they would not support them incorporating under the same legislation as the Mud Bay Dyking District.

Staff have not initiated any plans to seek to have the Mud Bay Dyking District transferred to the City as the Mud Bay Dyking District continues to effectively operate and maintain the dykes within their jurisdiction.

Next Steps

Should Council see the merits in formally accepting the transfer of the Colebrook Dyking District, staff will continue work with Provincial staff to finalize the Government Transfer-Shared Cost Arrangement in preparation for execution by the Mayor.

Once executed, staff will initiate the acquisition of rights-of-way and designs for improvements to the dykes. Improvements to the dykes would likely start in 2017.

Upon completion of the formal transfer of the dyking districts to the City, staff will prepare future Corporate Reports for Council's consideration to dissolve the newly created Local Service Areas.

Staff will continue their pursuit of additional funding programs to support the necessary upgrades to these dykes and all other dykes in the City to address sea level rise and other coastal hazards.

Should Council not see the merits in formally accepting the transfer of the Colebrook Dyking District, staff will continue to work with Provincial staff to ensure that the Province takes appropriate action to adequately maintain and inspect the dykes and staff will request that the Province initiate the dyke improvements themselves.

Legal Services Review

Legal Services have reviewed this report and the draft Government Transfer -Shared Cost Arrangement and have no concerns.

CONCLUSION

Based on the above discussion, it is recommended that Council:

- Receive this report as information;
- Authorize staff to inform the appropriate Provincial officials that the City is willing to assume responsibility of the Surrey Dyking District on the basis that the Province acknowledges and agrees that any future dyke upgrades required will comply with the *Dike Design and Construction Guide Best Management Practices for British Columbia* as originally published in July 2003, and that the Province is not requiring that the dykes within the Colebrook Dyking District be designed and/or constructed to the their *Seismic Design Guidelines for Dikes*;
- Authorize staff to inform the appropriate Provincial officials that the City is willing to assuming responsibility of the Colebrook Dyking District given the financial support committed to by the Province on the basis that the Province acknowledges and agrees that any future dyke upgrades required will comply with the *Dike Design and Construction Guide Best Management Practices for British Columbia* as originally published in July 2003, and that the Province is not requiring that the dykes within the Colebrook Dyking District be designed and/or constructed to the their *Seismic Design Guidelines for Dikes*; and

- Authorize the Mayor to sign on behalf of the City of Surrey a Government Transfer-Shared Cost Arrangement with the Province as part of the transfer of the Colebrook Dyking District based on the draft agreement that is attached to this report as Appendix "IV".



Fraser Smith, P.Eng., MBA
General Manager, Engineering

JA/clr

Appendix "I" - Areas of the Surrey Dyking District and Colebrook Dyking District

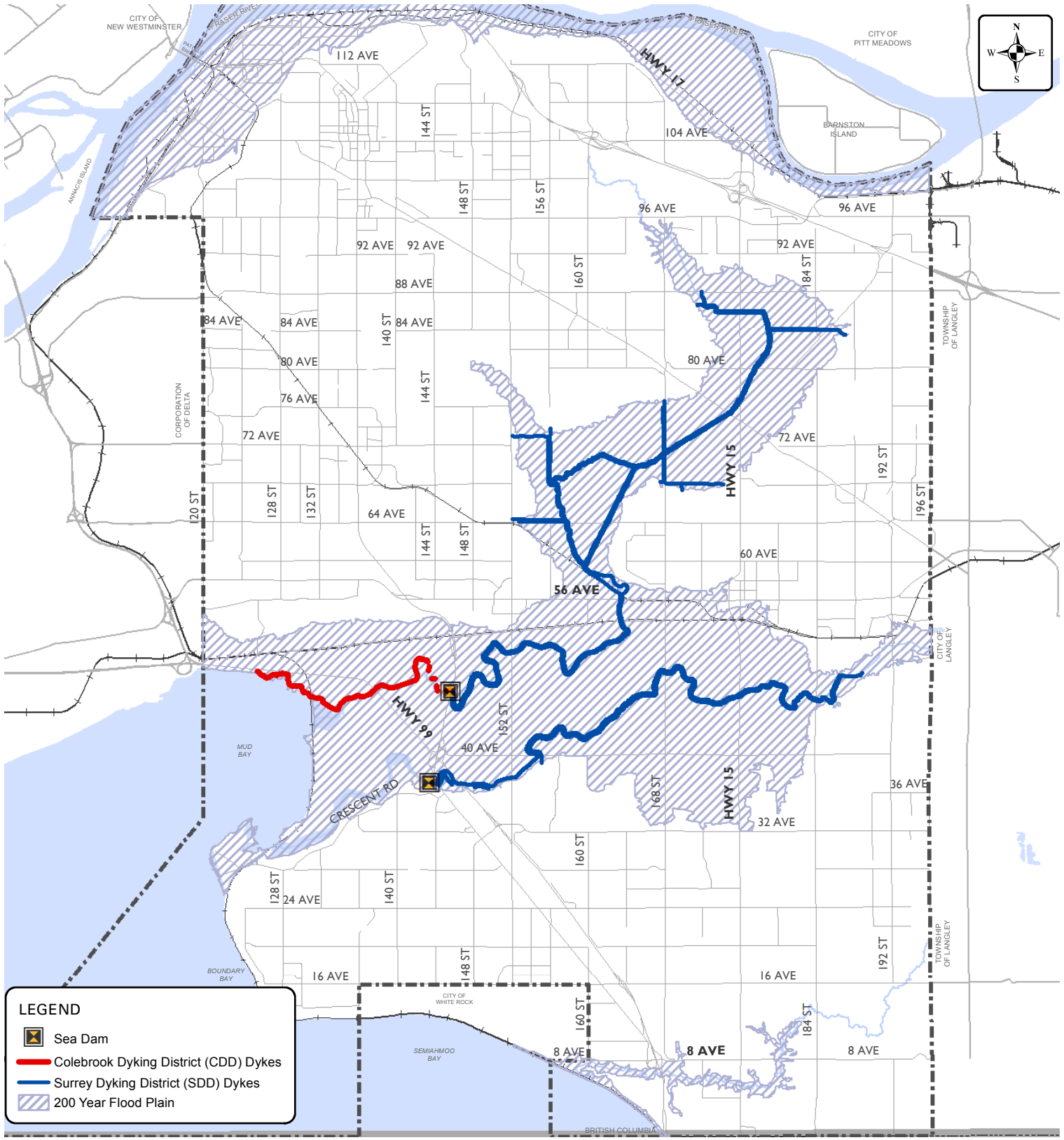
Appendix "II" - Corporate Report No. R054;2013

Appendix "III" - Letter from Minister Steve Thomson dated December 29, 2015





Appendix "IV" - Draft Government Transfer – Shared Cost Arrangement

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Note: Appendices available upon request



LEGEND

-  Sea Dam
-  Colebrook Dyking District (CDD) Dykes
-  Surrey Dyking District (SDD) Dykes
-  200 Year Flood Plain

Produced by GIS Section: 03-Mar-2016, JJR

Scale: 1:112,000 0 1,000 M



Areas of the Surrey Dyking District and Colebrook Dyking District

ENGINEERING DEPARTMENT

The data provided is compiled from various sources and IS NOT warranted as to its accuracy or sufficiency by the City of Surrey. This information is provided for information and convenience purposes only. Lot sizes, Legal descriptions and encumbrances must be confirmed at the Land Title Office.