

NO: **R056** COUNCIL DATE: **April 6, 2020**

REGULAR COUNCIL

TO: **Mayor & Council** DATE: **April 2, 2020**
FROM: **General Manager, Engineering** FILE: **6020-001**
SUBJECT: **Award of Contract No. 6020-001-11
Burrow's Drainage Pump Station and Stewart Farm Sanitary Pump Station
Improvements ("DMAF" Projects)**

RECOMMENDATION

The Engineering Department recommends that Council:

1. Award Contract No. 6020-001-11 to Drake Excavating (2016) Ltd. in the amount of \$3,066,210.00 (including GST) for Burrow's Drainage Pump Station and Stewart Farm Sanitary Pump Station Improvements;
2. Set the expenditure authorization limit for Contract No. 6020-001-11 at \$3,373,000.00 (including GST and contingency); and
3. Authorize the General Manager, Engineering to execute Contract No. 6020-001-11.

BACKGROUND

Construction of the Burrow's Drainage Pump Station and Stewart Farm Pump Station Improvements is included as part of the Surrey Disaster Mitigation and Adaptation Fund ("DMAF") program involving the implementation of a comprehensive flood protection strategy that will seek to reduce Surrey's vulnerability to coastal flooding and sea level rise. Completion of this Contract will represent the completion of one of the 13 projects identified under the DMAF program, as listed in the attached Appendix "I" and shown on the map attached as Appendix "II", with all projects being completed by 2028 in order to remain eligible for the Federal government contribution grant.

SCOPE OF WORK

As part of the DMAF program, this Contract consists of upgrades to the Burrow's Drainage Pump Station with a new base flow pump and chamber and replacement of the existing three flood boxes. The new pump station and floodbox replacements will improve the resilience of the agricultural floodplain area to flooding. Additionally, the new pump station will be less vulnerable to earthquake impacts. Furthermore, the construction package includes upgrades to the Stewart Farm Sanitary Pump Station to raise the existing sanitary pump station to provide flood protection. The pump station locations are listed in the following table, which are also illustrated on the map attached to this report as Appendix "III":

Map Reference Number	Project #	Project Description	Location
1	D-16039	Burrow's Drainage Pump Station	4444 - 168 Street
2	S-15630	Stewart Farm Sanitary Pump Station	13855 Crescent Road

The Contract permits construction from 7:00 a.m. to 10:00 p.m. in compliance with the *Surrey Noise Control Bylaw, 1982, No. 7044*. The Contract does not include an option for contractors to work 24 hours a day, seven days a week, given the specialized nature of the work taking place within a stream and the challenges that would be presented with conducting instream work at night.

The contract work is expected to start in May 2020 and be completed by December 2020.

TENDER RESULTS

Tenders for the subject Contract were opened on March 12, 2020 with the following results:

<i>Contractor</i>	<i>Tendered Amount with GST</i>	<i>Corrected Amount</i>
1. Drake Excavating (2016) Ltd.	\$3,028,410.00	\$3,066,210.00
2. Kenaidan Contracting Ltd.	\$4,356,261.00	\$4,356,024.75
3. Deramore Construction Services Inc.	\$4,426,257.75	\$4,426,470.30
4. B. Cusano Contracting (2007) Ltd.	\$4,811,962.05	\$4,812,266.55
5. Hanna Infrastructure Ltd.	\$4,870,635.00	\$4,823,385.00
6. TYBO Contracting Ltd.	\$5,985,000.00	\$5,983,425.00

The Engineer's (Kerr Wood Leidal Associates Ltd.) pre-tender estimate was \$3,400,000, including GST.

EVALUATION

The City's consultant reviewed the tender submissions for accuracy and completeness. There were minor arithmetic errors on all the bids that had no bearing on the outcome of the tender process. All submissions included the required 10% bid bond and were signed on the Tender Form.

The low bidder, Drake Excavating (2016) Ltd., has provided a Consent of Surety for a Performance Bond and a Labour & Materials Bond, and agreed to complete the work within 140 working days, as stipulated in the Contract. Drake Excavating (2016) Ltd.'s past performance on similar work has been satisfactory. They have no outstanding legal claims against the City. It is recommended that Drake Excavating (2016) Ltd. be awarded Contract No. 6020-001-11.

SUSTAINABILITY CONSIDERATIONS

Implementation of the DMAF Projects supports the objectives of the City’s Sustainability Charter 2.0. In particular, the DMAF works relate to the Sustainability Charter themes of Infrastructure, Built Environment and Neighbourhoods, Ecosystems, and Public Safety. Specifically, the DMAF Project supports the following Desired Outcomes (“DOs”):

- Energy and Climate DO6: The City anticipates changing weather patterns and sea level rise as a result of climate change, and implements appropriate infrastructure, land use planning and emergency response solutions that will be resilient over the long term;
- Neighbourhoods and Urban Design DO9: All aspects of planning, design and construction include climate change impacts, greenhouse gas mitigation, adaptation and resiliency strategies;
- Green Infrastructure DO12: Surrey protects ecosystem services and manages natural assets in order to create resiliency to adapt and thrive in a changing climate; and
- Emergency Preparedness and Prevention DO8: The community’s critical infrastructure and systems are designed to withstand climate change impacts and natural events and disasters, and include emergency response and reconstruction plans.

FUNDING

Funding for this contract is available in the approved 2020 Drainage and Sanitary Budget, in which 40% is available to be contributed under the Federal government contribution grant through the DMAF program as shown in the table below.

Project Description	Tender Amount With GST	Federal Government Contribution (40%)	City Contribution
Burrows Drainage Pump Station	\$2,596,860	\$1,038,744	\$1,558,116
Stewart Farm Sanitary Pump Station	\$469,350	\$187,740	\$281,610
Total	\$3,066,210	\$1,226,484	\$1,839,726

Scott Neuman, P.Eng.
General Manager, Engineering

VJ/HL/cc

Appendix “I” – DMAF Projects

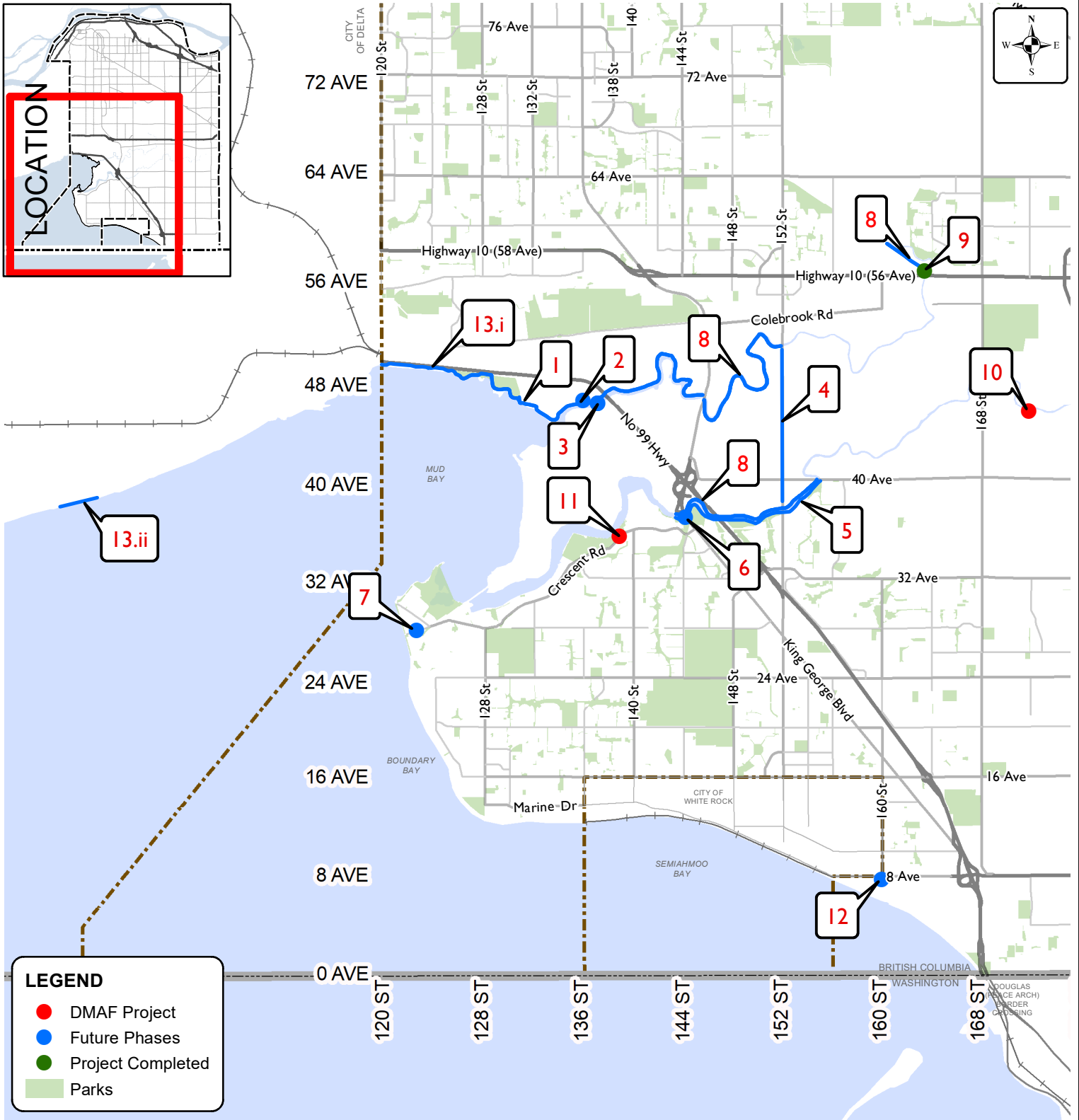
Appendix “II” – Map of DMAF Project Locations

Appendix “III” – Map of Project Locations – Contract No. 6020-001-11

APPENDIX “I”

DMAF Projects

DMAF Projects	
1.	Colebrook Dyke – Upgrade the earth dike along Mud Bay and the mouth of the Serpentine River, including drainage floodboxes
2.	Colebrook Drainage Pump Station – Remove and replace the drainage pump station on the Colebrook Dyke
3.	Sea Dam Serpentine River – Remove and replace the flood and irrigation control structure and instrumentation
4.	152 Street Road and Raising – Increase the vehicle and multi-modal capacity and resilience of this critical emergency access road and provide secondary flood defense
5.	Nicomekl Riverfront Park – Develop a new park that provides increased flood storage, recreation and habitat
6.	King George Boulevard Bridge and Nicomekl River Sea Dam – Remove and replace existing structures with an integrated structure
7.	Crescent Beach Storm Sewer System – Expand the existing storm sewer network to reduce flooding
8.	Dyking Lower Reaches of Nicomekl and Serpentine – Raise and widen the existing flood control works
9.	Serpentine SRY Rail Link Bridge and Surrey Dyke Crossing– Upgrade crossing to improve flood resilience (Completed)
10.	Burrows Drainage Pump Station – Increase capacity of existing pump station and upgrade irrigation infrastructure and drainage floodboxes
11.	Stewart Farm Sanitary Pump Station – Raise the existing pump station
12.	Campbell River Pedestrian and Emergency Access Bridge – Remove and replace the existing bridge
13.	<ul style="list-style-type: none"> i. Foreshore Enhancements and Dyke in Delta – Upgrade existing Boundary Bay Dyke and pilot Living Dyke ii. Foreshore Enhancements in Surrey – Construct foreshore enhancements in front of Colebrook Dyke and instrumentation



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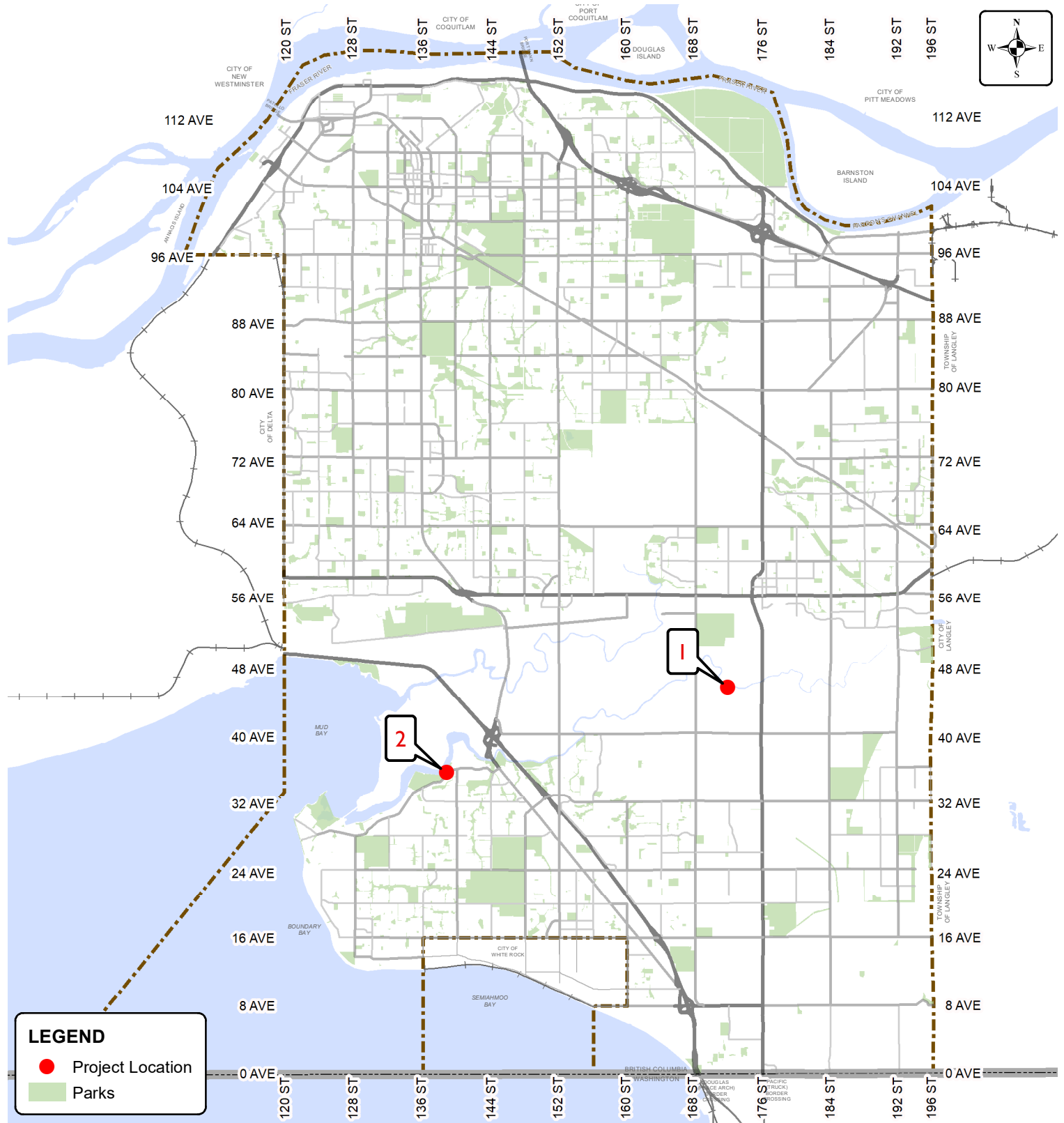
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CONTRACT No. 6020-001-11
Burrow's Drainage Pump Station and
Stewart Farm Sanitary Pump Station Upgrades
(DMAF Projects)

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.



LEGEND

- Project Location
- Parks

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CONTRACT No. 6020-001-11 Burrow's Drainage Pump Station and Stewart Farm Sanitary Pump Station Upgrades

ENGINEERING
DEPARTMENT

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