

NO: R072 COUNCIL DATE: April 15, 2019

REGULAR COUNCIL

TO: Mayor & Council DATE: April 9, 2019

FROM: General Manager, Parks, Recreation & Culture FILE: 2320-20/H

SUBJECT: Renewal of Tree Watering Contract No. 1220-040-2015-074

RECOMMENDATION

The Parks, Recreation and Culture Department recommends that Council:

- 1. Receive this report for information;
- 2. Authorize the renewal of Contract No. 1220-040-2015-074 with Horizon Landscape Contractors Inc. for 2019 in the amount of \$1,055,115.00 including GST, for the watering of street trees, park trees and trees around civic buildings;
- 3. Set the expenditure authorization limit for Contract No. 1220-040-2015-074 at \$1,303,377.00 including GST and contingency; and
- 4. Authorize the General Manager, Parks, Recreation & Culture to execute Contract No. 1220-040-2015-074 to a maximum of \$1,303,377.00 including GST and contingency.

INTENT

The purpose of this report is to obtain approval to renew a contract for the watering of street trees, park trees, and trees around civic buildings in 2019.

SCOPE OF WORK

Street trees and park shade trees require supplemental watering during the first six to eight years following planting, depending on the weather during any given year. For 2019, there are approximately 26,000 trees that may need to be watered at the peak of the summer drought period. Approximately 5% of the watering is carried out by City staff with the remainder undertaken by qualified external contractors.

BACKGROUND

At its Regular meeting on April 27, 2015, Council approved the recommendations of Corporate Report No. Ro60; 2015, to award Contract No. 1220-040-2015-074 for the watering of street trees, park trees and trees around civic buildings to Horizon Landscape Contractors Inc. in the amount of \$850,000.00 including GST and contingency (report attached as Appendix "I").

In October 2015, due to a record-breaking dry spring and summer, an amending agreement was prepared and a further \$104,000.00 was added to the value of the contract to a total value in 2015 of \$1,001,700.00. The term of the contract was from May 31, 2015 to December 31, 2015. The contract included an option in favour of the City to renew for an additional four, one-year periods.

At its Regular meeting on April 11, 2016, Council approved the recommendations of Corporate Report No. Ro77; 2016, to renew Contract No. 1220-040-2015-074 with Horizon Landscape Contractors Inc. in the amount of \$960,000.00 including GST and contingency (attached as Appendix "II"). The term of the contract was from May 31, 2016 to December 31, 2016. The contract included an option in favour of the City to renew its term for an additional three, one-year periods.

At its Regular meeting on March 6, 2017, Council approved the recommendations of Corporate Report No. Ro55; 2017, to extend Contract No. 1220-040-2015-074 with Horizon Landscape Contractors Inc. in the amount of \$1,230,000.00 including GST and contingency (attached as Appendix "III"). The term of the contract was from May 31, 2017 to December 31, 2017. The contract included an option in favour of the City to renew its term for an additional two, one-year periods.

At its Regular meeting on February 2018, Council approved the recommendations of Corporate Report No. Ro45; 2018 to renew Contract No. 1220-040-2015-074 with Horizon Landscape Contractors Inc. in the amount of \$1,464,000.00 including GST and contingency (attached as Appendix "IV"). The term of the contract was from May 31, 2018 to December 31, 2018. The contract included an option in favour of the City to renew its term for an additional single, one-year period.

The contract recommended in this report is the fourth renewal, making it the fifth, and final, year that the contractor will be undertaking the work of tree watering under the terms and conditions of the original contract. As such, the City will go out to tender for this service in advance of the 2020 watering season.

DISCUSSION

The work carried out by Horizon Landscape Contractors Inc. during the contract has been fully satisfactory. This company has sufficient resources and expertise to undertake the necessary work with high quality and has a very good safety record.

Financial Evaluation for 2019

The total anticipated cost of the contracted work for 2019, with average weather conditions, is \$1,055,115 including GST. However, warm weather can drive watering costs up significantly. For this reason, the recommendations of this report include additional fund authorization in an amount equal to a 25% increase in watering over an average year, in the event that the spring and summer in Surrey is unusually sunny and hot. A three-year average cost was utilized to estimate the cost for the year. The contingency amount is necessary to respond to historical weather patterns (e.g. a very dry spring or summer). The ability to increase the watering program for stressed trees during periods of prolonged drought is essential to extend the useful life of trees (tree survival). This amount also reflects the general trend towards drier summers where more watering is required.

In recognition that tree watering is costly, a number of initiatives are carried out to encourage residents to water trees on a voluntary basis in order to help the City reduce watering costs. Tree water bags are offered for free to residents who express interest in watering trees adjacent to their homes. The City engages with volunteers (e.g. Urban Forestry Leaders) to carry out tree watering and encourages tree watering by residents during events such as Releaf plantings and Nature Work Parties. In addition, Surrey's Natural Area Partnership ("SNAP") carries out tree watering outreach at a number of events throughout the year, ads are placed in local media, and information is distributed via the City's website and social media to encourage residents to fill water bags and water trees.

FUNDING

As stipulated in the contract, the 2019 contract rates will increase by 2.9% (following the Consumer Price Index for Vancouver, BC, as published by Statistics Canada). Funding is available within the approved 2019 Parks Operating budget.

SUSTAINABILITY CONSIDERATIONS

The work of this contract supports the objectives of the City's Sustainability Charter 2.0. In particular, this work relates to Sustainability Charter themes of Built Environment & Neighbourhoods, Ecosystems and Infrastructure. Specifically, this project supports the following Desired Outcomes (DO) and Strategic Directions (SD) identified in the Sustainability Charter:

- Neighbourhoods & Urban Design DO 5: Trees, green spaces and natural areas are integrated into all neighbourhoods.
- Natural Areas, Biodiversity & Urban Forest DO 1: Parks, natural areas, urban forests and habitat corridors are interconnected throughout Surrey and the region, creating healthy places for people and wildlife.
- Natural Areas, Biodiversity & Urban Forest DO 2: Surrey actively protects, enhances and restores its natural environment and habitats.
- Natural Areas, Biodiversity & Urban Forest DO 3: All development enhances or minimizes the impacts on Surrey's lush tree canopy and natural environment, and avoids encroachment into natural areas, habitat features and parks.
- Natural Areas, Biodiversity & Urban Forest SD 5: Increase tree canopy coverage across
 the city.
- Natural Areas, Biodiversity & Urban Forest DO 12: Surrey protects ecosystem services and manages natural assets in order to create resiliency in order to adapt and thrive in a changing climate.
- All Infrastructure DO 1: City infrastructure systems are well managed, adaptable and long lasting, and are effectively integrated into regional systems.
- All Infrastructure DO 4: Ecosystems and natural assets are an essential part of the community's infrastructure system.
- All Infrastructure SD 3: Develop and manage the green infrastructure network to continue to deliver ecosystem services.

CONCLUSION

The General Manager, Parks, Recreation & Culture, recommends that Council approve the renewal of Contract No. 1220-040-2015-074 with Horizon Landscape Contractors Inc., set the expenditure authorization limit at \$1,303,377.00 including GST and contingency and authorize the General Manager, Parks, Recreation and Culture, to execute and sign the contract for 2019.

Laurie Cavan General Manager, Parks, Recreation & Culture

Appendix "I" - Corporate Report No. Ro60; 2015 Appendix "II" - Corporate Report No. Ro77; 2016 Appendix "III" - Corporate Report No. Ro55; 2017 Appendix "IV" - Corporate Report No. Ro45; 2018

 $\footnote{Mileserver3}\$ annex park-rec\wpcentre\corprpts\2019\tree watering contract no. 1220-040-2015-074 renewal 2019.docx SR 4/11/19 11:04 AM





NO: ROGO

COUNCIL DATE: April 27, 2015

REGULAR COUNCIL

TO:

Mayor & Council

DATE: April 10, 2015

FROM:

General Manager, Parks, Recreation and Culture

FILE: 2320-20/H

SUBJECT:

Award of Tree Watering Contract (No. 1220-040-2015-074)

RECOMMENDATION

The Parks, Recreation and Culture Department recommends that Council:

- 1. Award Contract No. 1220-040-2015-074 to Horizon Landscape Contractors Inc. in the amount of \$657,530.00 including GST, for the watering of street trees and park trees; and
- 2. Set the expenditure authorization limit for Contract No. 1220-040-2015-074 at \$850,000.00 including contingency and GST.

INTENT

The purpose of this report is to obtain Council approval to award a contract for the watering of street trees and park trees in 2015.

BACKGROUND

Street trees and park shade trees require supplemental watering during the first six to eight years following planting, depending on the weather during any given year. For 2015, there are approximately 24,000 trees that may need to be watered at the peak of the summer drought period. Approximately 5% of the watering is carried out by City staff with the remainder undertaken by a qualified external contractor.

DISCUSSION

A request for expression of interest and statement of qualifications was advertised on the B.C. Bid website and the City website. Two companies responded. Both companies were evaluated with respect to the requirements of the request and subsequently were invited to submit a quotation to provide tree watering services.

The proponents provided quotes on the rate to water trees in various categories. Structuring the contract on a cost per tree basis, rather than an hourly rate, ensures efficient performance by the contractor. Separate rates are required for trees located in parks, trees located on streets and for different age categories.

Based on the numbers of trees in each component of the contract, the following represents the value of the quote from each of the two pre-qualified contractors:

1. Horizon Landscape Contractors Inc.

\$ 657,530.00 incl. tax

2. D.J. Weedbusters Ltd.

\$1,246,689.15 incl. tax

Based on previous experience and reference checks, Horizon Landscape Contractors Inc. has the necessary expertise and capacity to deliver the services that are required under the subject contract. As such, based on their quote being the lower of the two submissions, staff is recommending that the subject contract be awarded to Horizon Landscape Contractors Inc.

Funding

The quotation from Horizon represents the watering of trees in a year of average weather. However, warm weather can drive watering costs up very significantly. For this reason, the recommendations of this report include funding in an amount equal to a 1/3 increase in watering over an average year, in the event that the spring and summer in Surrey is unusually sunny and hot. Funding for the contract is contained within the approved 2015 Parks Division Operating Budget.

SUSTAINABILITY CONSIDERATIONS

The City's street trees and park trees represent a significant green infrastructure investment. Well-managed trees beautify the City, provide habitat, mitigate storm water run-off, off-set carbon emissions and filter other pollutants. Regular watering of the trees helps to reduce tree failure and increase the service life of the trees. This is consistent with the objectives of the City Sustainability Charter; more particularly, Environmental Sustainability Goal EC3: undertake the maintenance of infrastructure for sustainability.

CONCLUSION

Based on the above discussion, it is recommended that Council approve the award of tree watering Contract No. 1220-040-2015-074 to Horizon Landscape Contractors Inc. for the watering of street trees and park trees up to a maximum amount of \$850,000.00 including contingency and GST.

Laurie Cavan,

General Manager

Parks, Recreation and Culture

Laurii D fur





NO: RO77

COUNCIL DATE: April 11, 2016

REGULAR COUNCIL

TO:

Mayor & Council

DATE: March 15, 2016

FROM:

General Manager, Parks, Recreation and Culture

FILE: 2320-20/H

SUBJECT:

Extension of Tree Watering Contract (No. 1220-040-2015-074)

RECOMMENDATION

The Parks, Recreation and Culture Department recommends that Council:

- 1. Authorize the extension of Contract No. 1220-040-2015-074 with Horizon Landscape Contractors Inc. for 2016 in the amount of \$737,213.40 including GST, for the watering of street trees and park trees; and
- 2. Set the expenditure authorization limit for Contract No. 1220-040-2015-074 at \$960,000.00 including contingency and GST.

INTENT

The purpose of this report is to obtain Council approval to extend a contract for the watering of street trees, park trees and trees around civic buildings in 2016.

BACKGROUND

Street trees and park shade trees require supplemental watering during the first six to eight years following planting, depending on the weather during any given year. For 2016, there are approximately 27,000 trees that may need to be watered at the peak of the summer drought period. Approximately 5% of the watering is carried out by City staff with the remainder undertaken by a qualified external contractor.

In April 2015 Council approved the Award of Contract No. 1220-040-2015-074 for the watering of street and park trees in 2015 to Horizon Landscape Contractors Inc. in the amount of \$657,530.00 including GST and approved the expenditure authorization limit for Contract No. 1220-040-2015-074 at \$850,000.00 including GST (Corporate Report Ro60:2015 is attached as Appendix "I"). In October 2015, due to a record-breaking dry spring and summer, an amending agreement was prepared and a further \$104,000.00 was added to the value of the contract to a total value in 2015 of \$954,000.00 plus applicable taxes. The term of the contract was from May 31, 2015 to December 31, 2015. The contract included an option in favour of the City to extend its term for up to an additional four 1-year periods. The contract recommended in this report is the first extension.

DISCUSSION

The work carried out by Horizon Landscape Contractors Inc. during 2015 has been fully satisfactory. This company has sufficient resources and expertise to undertake the necessary work with high quality and has a very good safety record.

Financial Evaluation for 2016

The 2016 contract rates have increased by 1.2% (as stipulated in the contract) at the Consumer Price Index for Vancouver, BC as published by Statistics Canada.

The total anticipated cost of the work under the contract in 2016 with average weather conditions is \$737,213.40 including GST. However, warm weather can drive watering costs up very significantly. For this reason, the recommendations of this report include funding in an amount equal to a 1/3 increase in watering over an average year, in the event that the spring and summer in Surrey is unusually sunny and hot. This amount reflects the general increase in the number of trees for 2016 and the general trend toward drier summers where more watering is required. Funding for the contract is contained within the approved 2016 Parks Division Operating Budget.

In recognition that tree watering is costly, a number of initiatives are carried out to encourage residents to water trees on a voluntary basis in order to help us reduce watering costs. Tree water bags are offered for free to residents who express interest in watering trees adjacent to their homes. In addition, ads are placed in local media and information is distributed via the City's website and social media to encourage residents to fill water bags and water trees.

SUSTAINABILITY CONSIDERATIONS

The City's street trees and park trees represent a significant green infrastructure investment. Well-managed trees beautify the City, provide habitat, mitigate storm water run-off, off-set carbon emissions and filter other pollutants. Regular watering of the trees helps to reduce tree failure and increase the service life of the trees. This is consistent with the objectives of the City Sustainability Charter; more particularly:

• Environmental Sustainability Goal EC3: undertake the maintenance of infrastructure for sustainability.

CONCLUSION

Parks, Recreation and Culture recommend that Council approve the extension of tree watering Contract No. 1220-040-2015-074 with Horizon Landscape Contractors Inc. for the watering of street trees and park trees in 2016 for \$737,213.40 including GST and set the expenditure authorization limit for Contract No. 1220-040-2015-074 at \$960,000.00 including contingency and

General Manager

Parks, Recreation and Culture

Appendix "I" - CR Ro60:2015 Award of Tree Watering Contract (No. 1220-040-2015-074) (available upon request)

\ \file-server3\annex\park-rec\wpcentre\corprpts\2016\extension of tree watering contract.docx





NO: R055

COUNCIL DATE: March 6, 2017

REGULAR COUNCIL

TO:

٩

Mayor & Council

DATE: February 10, 2017

FROM:

General Manager, Parks, Recreation and Culture

FILE: 2320-20/H

SUBJECT:

Extension of Tree Watering Contract (No. 1220-040-2015-074)

RECOMMENDATION

The Parks, Recreation and Culture Department recommends that Council:

- Authorize the extension of Contract No. 1220-040-2015-074 with Horizon Landscape 1. Contractors Inc. for 2017 in the amount of \$981,828.75 including GST, for the watering of street trees and park trees;
- Set the expenditure authorization limit for Contract No. 1220-040-2015-074 at 2. \$1,230,000.00 including contingency and GST; and
- Authorize the General Manager, Parks, Recreation and Culture to execute and sign 3. Contract No. 1220-040-2015-074 for 2017.

INTENT

The purpose of this report is to obtain Council approval to extend a contract for the watering of street trees, park trees, and trees around civic buildings in 2017.

BACKGROUND

Street trees and park shade trees require supplemental watering during the first six to eight years following planting, depending on the weather during any given year. For 2017, there are approximately 27,000 trees that may need to be watered at the peak of the summer drought period. Approximately 5% of the watering is carried out by City staff with the remainder undertaken by qualified external contractors.

In April 2015, Council approved the Award of Contract No. 1220-040-2015-074 for the watering of street and park trees in 2015 to Horizon Landscape Contractors Inc. in the amount of \$657,530.00 including GST and approved the expenditure authorization limit for Contract No. 1220-040-2015-074 at \$850,000.00 including GST (Corporate Report Ro60:2015 is attached as Appendix "I"). In October 2015, due to a record-breaking dry spring and summer, an amending agreement was prepared and a further \$104,000.00 was added to the value of the contract to a total value in 2015

of \$1,001,700.00 including GST. The term of the contract was from May 31, 2015 to December 31, 2015. The contract included an option in favour of the City to extend its term for up to an additional four 1-year periods.

In April 2016, Council approved the extension of Contract No. 1220-040-2015-074 with Horizon Landscape Contractors Inc. in the amount of \$737,213.40 including GST and approved the expenditure authorization limit for Contract No. 1220-040-2015-074 at \$960,000.00 including contingency and GST (Corporate Report Ro77:2016 is attached as Appendix "II"). The term of the contract was from May 31, 2016 to December 31, 2016. The contract included an option in favour of the City to extend its term for up to an additional three 1-year periods.

The contract recommended in this report is the second extension to the contract, making it the third year that the contractor will be undertaking the work of tree watering under the terms and conditions of the original contract.

DISCUSSION

The work carried out by Horizon Landscape Contractors Inc. during 2015 and 2016 has been fully satisfactory. This company has sufficient resources and expertise to undertake the necessary work with high quality and has a very good safety record.

Financial Evaluation for 2017

The 2017 contract rates have increased by 2.2% (as stipulated in the contract) at the Consumer Price Index for Vancouver, BC as published by Statistics Canada.

The total anticipated cost of the work under the contract in 2017 with average weather conditions is \$981,828.75 including GST. However, warm weather can drive watering costs up very significantly. For this reason, the recommendations of this report include funding in an amount equal to a 25% increase in watering over an average year, in the event that the spring and summer in Surrey is unusually sunny and hot. A 3-year average cost is utilized to estimate the cost for the year. The contingency amount is necessary to respond to the historical weather patterns include very dry spring and summers every few years. The ability to increase the watering program for stressed trees during periods of prolonged drought is essential for extending the useful life of trees (tree survival). This amount also reflects the general increase in the number of trees for 2017 and the general trend toward drier summers where more watering is required. Funding for the contract is contained within the approved 2017 Parks Division Operating Budget.

In recognition that tree watering is costly, a number of initiatives are carried out to encourage residents to water trees on a voluntary basis in order to help us reduce watering costs. Tree water bags are offered for free to residents who express interest in watering trees adjacent to their homes. The City also engages with volunteers (such as Urban Forestry Leaders) to carry out tree watering, and also encourages tree watering by residents during events such as Releaf plantings and Nature Work Parties. In addition, Surrey's Natural Area Partnership (SNAP) carries out tree watering outreach at a number of events throughout the year. Ads are placed in local media and information is distributed via the City's website and social media to encourage residents to fill water bags and water trees.

SUSTAINABILITY CONSIDERATIONS

The City's street trees and park trees represent a significant green infrastructure investment. Well-managed trees beautify the City, provide habitat, mitigate storm water run-off, off-set carbon emissions, and filter other pollutants. Regular watering of the trees helps to reduce tree failure and increase the service life of the trees. Specifically, the recommendations contained within this report support the following Desired Outcomes (DO) and Strategic Directions (SD) identified in the Sustainability Charter:

- Built Environments and Neighbourhoods, DO5: Trees, green spaces and natural areas are integrated into all neighbourhoods.
 - o **SD5:** Integrate natural areas, ecosystems, and green areas in all neighbourhoods.
- Ecosystems, DO1: Parks, natural areas, urban forests and habitat corridors are interconnected throughout Surrey and the region, creating healthy places for people and wildlife.
- Ecosystems DO2: Surrey actively protects, enhances and restores its natural environment and habitats.
- Ecosystems DO3: All development enhances, or minimizes the impacts on Surrey's lush tree canopy and natural environment, and avoids encroachment into natural areas, habitat features and parks.
 - o SD5: Increase tree canopy coverage across the city.
- Ecosystems DO12: Surrey protects ecosystem services and manages natural assets in order to create resiliency in order to adapt and thrive in a changing climate.
- Infrastructure DO1: All infrastructure systems are well managed, adaptable and long lasting, and are effectively integrated into regional systems.
- Infrastructure DO4: Ecosystems and natural assets are an essential part of the community's infrastructure system.
 - o SD3: Develop and manage the green infrastructure network to continue to deliver ecosystem services.

CONCLUSION

Parks, Recreation and Culture recommend that Council approve the extension of tree watering Contract No. 1220-040-2015-074 with Horizon Landscape Contractors Inc. for the watering of street trees and park trees in 2017 for \$981,828.75 including GST, set the expenditure authorization limit for Contract No. 1220-040-2015-074 at \$1,230,000.00 including contingency and GST, and authorize the General Manager, Parks, Recreation and Culture to execute and sign Contract No. 1220-040-2015-074 for 2017.

Laurie Cavan General Manager

Parks, Recreation and Culture

Appendix "I" - CR Ro60:2015 Award of Tree Watering Contract (No. 1220-040-2015-074) (available upon request)

Appendix "II" - CR R077:2016 Extension of Tree Watering Contract (No. 1220-040-2015-074) (available upon request) \ \\file-server3\annex\park-rec\ wpcentre\corprpts\\2017\extension of tree watering contract.docx





NO: R045

COUNCIL DATE: March 12, 2018

REGULAR COUNCIL

TO:

Mayor & Council

DATE: **February 28, 2018**

FROM:

General Manager, Parks, Recreation & Culture

FILE: 2320-20/H

SUBJECT:

Extension of Tree Watering Contract (No. 1220-040-2015-074)

RECOMMENDATION

The Parks, Recreation & Culture Department recommends that Council:

- 1. Authorize the extension of Contract No. 1220-040-2015-074 with Horizon Landscape Contractors Inc. for 2018 in the amount of \$1,171,241.40 including GST, for the watering of street trees and park trees;
- 2. Set the expenditure authorization limit for Contract No. 1220-040-2015-074 at \$1,464,000.00 including contingency and GST; and
- 3. Authorize the General Manager, Parks, Recreation & Culture to execute and sign Contract No. 1220-040-2015-074 for 2018.

INTENT

The purpose of this report is to obtain Council approval to extend a contract for the watering of street trees, park trees, and trees around civic buildings in 2018.

BACKGROUND

Street trees and park shade trees require supplemental watering during the first six to eight years following planting, depending on the weather during any given year. For 2018, there are approximately 29,000 trees that may need to be watered at the peak of the summer drought period. Approximately 5% of the watering is carried out by City staff with the remainder undertaken by qualified external contractors.

In April 2015, Council approved the Award of Contract No. 1220-040-2015-074 for the watering of street and park trees in 2015 to Horizon Landscape Contractors Inc. in the amount of \$657,530.00 including GST, and approved the expenditure authorization limit for Contract No. 1220-040-2015-074 at \$850,000.00 including GST (Corporate Report Ro60; 2015 is attached as Appendix "I"). In October 2015, due to a record-breaking dry spring and summer, an amending agreement was prepared and a further \$104,000.00 was added to the value of the original Contract to a total value in 2015 of \$1,001,700.00 including GST. The term of the contract was from May 31, 2015 to December 31, 2015. The Contract included an option in favour of the City to extend its term for up to an additional four 1-year periods.

In April 2016, Council approved the extension of Contract No. 1220-040-2015-074 with Horizon Landscape Contractors Inc. in the amount of \$737,213.40 including GST and approved the expenditure authorization limit for Contract No. 1220-040-2015-074 at \$960,000.00 including contingency and GST (Corporate Report Ro77; 2016 is attached as Appendix "II"). The term of the Contract was from May 31, 2016 to December 31, 2016. The contract included an option in favour of the City to extend its term for up to an additional three 1-year periods.

In March 2017, Council approved the extension of Contract No. 1220-040-2015-074 with Horizon Landscape Contractors Inc. in the amount of \$981,828.75 including GST and approved the expenditure authorization limit for Contract No. 1220-040-2015-074 at \$1,230,000.00 including contingency and GST (Corporate Report Ro55; 2017 is attached as Appendix "III"). The term of the Contract was from May 31, 2017 to December 31, 2017. The contract included an option in favour of the City to extend its term for up to an additional two 1-year periods.

The extension recommended in this report is the third extension to the Contract, making it the fourth year that the contractor will be undertaking the work of tree watering under the terms and conditions of the original Contract.

DISCUSSION

The work carried out by Horizon Landscape Contractors Inc. during 2015, 2016, and 2017 has been fully satisfactory. This company has sufficient resources and expertise to undertake the necessary work with high quality and has a very good safety record.

Financial Evaluation for 2018

The 2018 contract rates have increased by 2.2% (as stipulated in the Contract) at the Consumer Price Index for Vancouver, BC as published by Statistics Canada.

The total anticipated cost of the work under the Contract in 2018 with average weather conditions is \$1,171,241.40 including GST. However, warm weather can drive watering costs up very significantly. For this reason, the recommendations of this report include funding in an amount equal to a 25% increase in watering over an average year, in the event that the spring and summer in Surrey is unusually sunny and hot. A 3-year average cost is utilized to estimate the cost for the year. The contingency amount is necessary to respond to the historical weather patterns including very dry spring and summers every few years. The ability to increase the watering program for stressed trees during periods of prolonged drought is essential for extending the useful life of trees (tree survival). This amount also reflects the general increase in the number of trees for 2017 and the general trend toward drier summers where more watering is required. Funding for the Contract is contained within the approved 2018 Parks Division Operating Budget.

In recognition that tree watering is costly, a number of initiatives are carried out to encourage residents to water trees on a voluntary basis in order to help the City reduce watering costs. Tree water bags are offered for free to residents who express interest in watering trees adjacent to their homes. The City engages with volunteers (such as Urban Forestry Leaders) to carry out tree watering, and also encourages tree watering by residents during events such as Releaf plantings and Nature Work Parties. In addition, Surrey's Natural Area Partnership (SNAP) carries out tree watering outreach at a number of events throughout the year. Ads are placed in local media and information is distributed via the City's website and social media to encourage residents to fill water bags and water trees.

SUSTAINABILITY CONSIDERATIONS

The City's street trees and park trees represent a significant green infrastructure investment. Well-managed trees beautify the City, provide habitat, mitigate storm water run-off, off-set carbon emissions, and filter other pollutants. Regular watering of the trees helps to reduce tree failure and increase the service life of the trees. Specifically, the recommendations contained within this report support the following Desired Outcomes (DO) and Strategic Directions (SD) identified in the Sustainability Charter:

- Built Environments and Neighbourhoods, Do₅: Trees, green spaces and natural areas are integrated into all neighbourhoods.
 - **SD5**: Integrate natural areas, ecosystems, and green areas in all neighbourhoods.
- Ecosystems, Doi: Parks, natural areas, urban forests and habitat corridors are interconnected throughout Surrey and the region, creating healthy places for people and wildlife.
- **Ecosystems Do2**: Surrey actively protects, enhances and restores its natural environment and habitats.
- **Ecosystems Do3**: All development enhances, or minimizes the impacts on Surrey's lush tree canopy and natural environment, and avoids encroachment into natural areas, habitat features and parks.
 - **SD5**: Increase tree canopy coverage across the city.
- **Ecosystems Do12**: Surrey protects ecosystem services and manages natural assets in order to create resiliency in order to adapt and thrive in a changing climate.
- **Infrastructure Doi**: All infrastructure systems are well managed, adaptable and long lasting, and are effectively integrated into regional systems.
- Infrastructure Do4: Ecosystems and natural assets are an essential part of the community's infrastructure system.
 - **SD3**: Develop and manage the green infrastructure network to continue to deliver ecosystem services.

CONCLUSION

The Parks, Recreation & Culture Department recommends that Council approve the extension of tree watering Contract No. 1220-040-2015-074 with Horizon Landscape Contractors Inc. for the watering of street trees and park trees in 2018 for \$1,171,241.40 including GST; set the expenditure authorization limit for Contract No. 1220-040-2015-074 at \$1,464,000.00 including contingency and GST; and authorize the General Manager, Parks, Recreation & Culture to execute and sign

Contract No.1220-040-2015-074 for 201

Laurie Cavan

General Manager,

Parks, Recreation & Culture

Appendix "I" - Corporate Report Ro60; 2015 Award of Tree Watering Contract (available upon request)

Appendix "II" - Corporate Report Ro77; 2016 Extension of Tree Watering Contract Appendix "III" - Corporate Report Ro55; 2017 Extension of Tree Watering Contract (available upon request)