

Legislation Text

File #: Resolution 56-2019, Version: 1

Agenda Date: 10/15/2019

Subject:

Resolution 56-2019: Approving an Intergovernmental Agreement with Denver Water to allow construction of a storm drainage outlet into the High Line Canal at Windermere Street

Prepared by: Carolyn Roan, Water Resource Manager

PURPOSE:

To approve an Intergovernmental Agreement (IGA) with Denver Water to allow construction of a storm drainage outlet into the High Line Canal at Windermere Street and assume city maintenance of the canal corridor from this location downstream to the Lee Gulch waste gate.

PRESENTATIONS:

Staff Presenter(s):N/AAdditional Presenter(s):N/A

SUMMARY:

City council and staff have been involved in developing a regional vision for the future of the High Line Canal, part of which involves converting this irrigation feature into a stormwater feature. Historically, Denver Water has not permitted stormwater outfalls into the canal because of the potential contamination of irrigation water. However, the irrigation use of the canal is gradually ceasing to exist, and there is a movement to convert this canal into a stormwater collection and water quality treatment feature, which will maintain the vegetative community along the canal and its recreational value as the irrigation water flow decreases. This is documented in the Plan for the High Line Canal: New Life for a Regional Legacy, which was adopted by city council in Resolution 44-2019.

The City of Littleton has an opportunity, due to adjacent development, to contribute storm drainage into the canal at Windermere Street, and further the mission of the Plan for the High Line Canal. Currently, storm drainage from the residential area on the south side of the canal at this location is conveyed under and north of the canal via an inverted siphon pipe. By their very nature, inverted siphons create a maintenance issue because of stagnant water in the depressed portion of the pipe system during times of no flow or low flow because of insufficient forces to drive the water through the system.

The pending subdivision and development of 7328 South Windermere Street and adjacent required roadway and sidewalk improvements require extending the existing inverted siphon system. This would include installation of "bubbler" inlets, which during times of high storm flow would allow water to flow up and out of inlets into the proposed curb and gutter system. However, bubbler inlets also are a maintenance problem during times of low flow because of stagnant water.

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As a condition of allowing storm drainage outfalls into the canal, Denver Water requires local jurisdictions to enter into an Intergovernmental Agreement (IGA) which requires the local jurisdiction assume maintenance of the storm drainage outfall and the canal corridor downstream of that location to its natural outlet. In this case, the downstream outlet is at Lee Gulch where there is a waste gate that allows all canal water to re-enter the creek. The distance from Windermere Street to Lee Gulch is approximately one mile. Maintenance of the canal corridor is primarily trees, grass, and weeds. The maintenance responsibility to be transferred to the city is detailed in the IGA.

Denver Water intends to cease all irrigation flows in the High Line Canal and transfer ownership and maintenance of the canal to others within the next few years. The ultimate governance of the canal is yet to be determined. Governance is being actively discussed by the High Line Canal Conservancy and its partners. While the city would take over maintenance of this segment via this IGA, it is expected that this responsibility is temporary, and would be assumed by a governance and maintenance entity yet to be determined.

PRIOR ACTIONS OR DISCUSSIONS:

The High Line Canal Framework Plan was adopted with Resolution 44-2019. This specific project has not been previously discussed.

ANALYSIS:

Staff Analysis

To eliminate the maintenance issues associated with both an inverted siphon pipe and any future bubbler inlets, it is proposed to instead outfall this storm system into the High Line Canal adjacent to and including the property at 1605 West Hinsdale Place. This enables not only reduced infrastructure maintenance costs, but active participation in the overall High Line Canal preservation mission. This property owner is willing to cooperate and allow for a permanent drainage easement on the property to accommodate this storm drainage outfall, with minor landscape restoration by the city. Staff has evaluated the maintenance responsibilities of the canal corridor and the approximate costs and believes that by leveraging both city forces and contracted work, this can be accomplished with funds in the Storm Drainage Enterprise Fund.

Council Goal, Objective, and/or Guiding Principle

Supporting this resolution is consistent with the value of the High Line Canal to the Littleton community as a recreational asset, commitment to the Canal's continued integrity via Resolution 44-2019, and goals and objectives of the Envision Littleton comprehensive plan.

Fiscal Impacts

The anticipated annual cost of maintenance of this one-mile segment of the High Line Canal is estimated at a maximum of \$10,000. The Storm Drainage Enterprise Fund would be used to cover these costs. Expenditures less than \$10,000 in each year is proposed to be saved to fund larger and infrequent maintenance expenses, such as large cottonwood tree trimming and removal as needed. Alternatively, reserves in the fund could be used for these larger expenses. The saved maintenance costs of inverted siphon and bubbler inlets have not been quantified, and vary depending on resident complaints, but in the longer term are expected to outweigh the maintenance costs of the canal and the benefits it provides to the community.

Alternatives

By not approving this IGA, the city assumes maintenance costs associated with an inverted storm sewer pipe siphon and bubbler inlets which are subject to odor and clogging complaints. In addition, not approving the agreement would be in contrast to the goals of the High Line Canal Conservancy mission of preserving the canal via stormwater contributions.

STAFF RECOMMENDATION:

Staff is recommending approval of construction of a storm drainage outfall into the High Line Canal at Windermere Street and associated maintenance of the canal corridor for one mile to Lee Gulch.

PROPOSED MOTION:

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I move to approve the resolution approving an Intergovernmental Agreement (IGA) with Denver Water to allow construction of a storm drainage outlet to the High Line Canal and assume city maintenance of the canal corridor from this location downstream to the Lee Gulch waste gate.