

December 7, 2023

Community Development Division City of Johns Creek 11360 Lakefield Drive Johns Creek, GA 30097

Received Dec 7, 2023 V-23-0019 Planning & Zoning

RE: Letter of Appeal Stream Buffer Variance Request Johns Creek Town Center Stream Restoration

Dear Ms. Agarwal,

The City of Johns Creek's Public Works Department is submitting a buffer variance request to remove and replace an existing greenway path within the City's 50-foot stream buffer and 75-foot impervious setback. The stream is a tributary of Johns Creek between McGinnis Ferry Road and East Johns Crossing and is severely eroded with near vertical banks, which has damaged nearby infrastructure, including an existing greenway path. Severe bank erosion (>10 feet) along approximately 170 feet of the east bank has caused a public safety hazard, requiring the City to temporarily close the greenway path.

As part of a stream restoration and bank stabilization project, the City is proposing to remove and replace the existing greenway path within the 50-foot stream buffer with a 10'-wide greenway path. The new path will remain within the 50-foot stream buffer but will be widened to meet ADA requirements and will be relocated farther away from the stream to protect the newly restored banks and to preserve public safety. Said encroachment will impact the following properties:

PARCEL IDENTIFICATION NUMBER	LAND LOT	TAX DISTRICT	ADDRESS	PARCEL SIZE (ACRES)	OWNER	ZONING
11 1 0600380021 8	11-0380, 11-0400	57	6620 MCGINNIS FERRY ROAD	1.81	6620 MC GINNIS FERRY LLC	C-1
11 106003800267	11-0380, 11-0381	57	11695 MEDLOCK BRIDGE ROAD	3.44	ML JOHNS CREEK HOLDING LLC	C-1
11 106003800366	11-0380, 11-0381	57	6440 E JOHNS CROSSING	3.3	ONE COURT LP	C-1
11 106003800275	11-0381	57	6460 E JOHNS CROSSING	0.32	CITY OF JOHNS CREEK	C-1
11 106003800341	11-0380, 11-0381, 11-0399, 11-0400	57	11695 JOHNS CREEK PARKWAY	7.59	TSO JOHNS CREEK LP	M-1A
11 1 060038 10357	11-0381, 11-0399	57	6470 E JOHNS CROSSING	7.94	TSO EAST JOHNS CROSSING LP	M-1A

Encroachment of the stream buffer is necessary to relocate the greenway path farther from the stream than its current location to avoid future erosion and public safety hazards. Encroachment of the 75-foot impervious setback only occurs where the new greenway ties into the existing pedestrian access and small slivers where the path is further offset from the stream. The path cannot be relocated outside of these buffers as the project area is bounded to the east by existing corporate office centers and parking lots.



If the buffer is maintained, the City will be unable to remediate the existing public safety hazard. Realigning the greenway path is necessary to protect the stream corridor that will be restored and preserve public accessibility within the corporate park.

If you have any questions or concerns, please reach out to me at Cory.Rayburn@johnscreekga.gov or 678-512-3285.

Sincerely,

Cory Rayburn, Stormwater Utility Manager

JOHNS CREEK STREAM RESTORATION DESIGN 50-FOOT VARIANCE REQUEST APPLICATION SUPPLEMENTAL INFORMATION

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INTRODUCTION

Johns Creek is a perennial stream flowing through the City of Johns Creek, Fulton County, Georgia (Figure 1: Location Map). The stream is located within the Upper Chattahoochee watershed (8-digit HUC 03130001) and flows southwest for approximately 5 miles before its confluence with the Chattahoochee River. The proposed stream restoration site is situated between McGinnis Ferry Road and East Johns Crossing and can be accessed via 11695 Medlock Bridge Road, Johns Creek (Lat: 34.0655141°N, Long: 84.1667324°W). The stream traverses through a corporate park between hotels, corporate office centers, and parking lots on either side (Figure 2: Aerial Map). The stream drains a 96-acre watershed, which is highly urbanized with approximately 60% impervious cover. North of McGinnis Ferry Road, the entire drainage system is piped through a closed drainage system that outfalls at the upstream end of the project site. The downstream end of the site is a culvert at East Johns Crossing. An existing greenway path, which is part of a larger sidewalk/multi-trail network throughout the City of Johns Creek, meanders along the east bank through the corporate park.

PHYSICAL CHARACTERISTICS OF THE PROPERTY

The project site consists primarily of forested upland riparian habitat and impervious cover. The topography of the site generally slopes from north to south and consists of steep, eroded slopes on both sides of the streambanks. The majority of the soils within the project site are characterized as Cartecay-Toccoa complex, 0 to 2 percent slopes, occasionally flooded. Cartecay-Toccoa complex is not listed as a hydric soil. Existing vegetation within the immediate riparian area consists of mixed deciduous forest. Dominant species include yellow poplar (*Liriodendron tulipifera*), sweetgum (*Liquidambar styraciflua*), tag alder (*Alnus serrulata*), red maple (*Acer rubrum*), and black cherry (*Prunus serotina*). The shrub layer is mostly dominated by Chinese privet (*Ligustrum sinense*) and Japanese privet (*Ligustrum japonicum*). Much of the cover within the 50-foot stream buffer and 75-foot impervious setback consists of regularly maintained grass with planted pines and oaks (Photos Page).

EXISTING CONDITIONS

The existing stream is severely eroded and deeply incised with near vertical banks. The high level of impervious surface in the watershed causes rapid runoff into the closed drainage system, and the concentration of flows into a single outfall has resulted in severe bank erosion. The severe erosion has damaged nearby infrastructure, including the existing greenway path. Bank erosion (>10 feet) along approximately 170 feet of the east bank has caused a public safety hazard, requiring the City of Johns Creek to temporarily close the greenway path.



Photo 1: 10'-high eroded bank along greenway creating public safety hazard, facing upstream



Photo 2: 10'-high eroded bank along greenway, creating public safety hazard, facing downstream

PROPOSED BUFFER DISTURBANCE

As part of a stream restoration and bank stabilization project, the City of Johns Creek is proposing to remove and replace the existing greenway path within the City's 50-foot stream buffer with a 10'-wide greenway path farther away from the stream. Approximately 1,063 linear feet (5,369 square feet) of the existing greenway is located within the City of Johns Creek 50-foot stream buffer. Approximately 21 linear feet (348 square feet) is located within the 75-foot impervious setback. The new greenway is proposed to remain within the 50'foot stream buffer but will be widened to meet ADA requirements and relocated farther away from the stream to protect the newly restored and stabilized stream banks and to preserve public safety. The new greenway will result in a 50-foot stream buffer encroachment of approximately 1,062 linear feet (10,464 square feet) to realign the greenway away from the stream and a 75-foot impervious setback encroachment of approximately 128 linear feet (286 square feet). Encroachment of the greenway into the 75-foot impervious setback only occurs where the new greenway ties into the existing pedestrian access and small slivers where the path is further offset from the stream (Sheets 1-6 of Plan Set). The total buffer disturbance, encompassing the entire stream corridor along the east bank is approximately 57,055 square feet (1.31 acres), measured from the wrested vegetation to the limits of development (Exhibit 1).

	AREA (sf.)	LENGTH (If.)				
50'- Stream Buffer						
Existing Greenway	5,369	1,063				
Proposed Greenway	10,464	1,062				
75'- Impervious Setback						
Existing Greenway	348	21				
Proposed Greenway	286	128				
Total Buffer Disturbance (sf.)						
57,055						

Buffer Encroachment Calculations

If the buffer is maintained, the City will be unable to access the stream to conduct the stream restoration and bank stabilization activities. Additionally, the City would be unable to remediate the existing public safety hazard. Realigning the greenway is necessary to protect the newly restored stream bank while preserving future public accessibility within the corporate park.

ALTERNATIVES CONSIDERED

Due to the urbanized location of the stream and greenway path, encroachment of the 50-foot stream buffer and 75-foot impervious setback cannot be avoided. Encroachment is necessary to conduct the stream restoration and bank stabilization activities. The new greenway path must be located farther from the stream than its existing location to avoid future erosion and public safety hazards. The pathway cannot be relocated outside of these buffers as the project area is bounded to the east by existing corporate office centers and parking lots. Encroachment into the impervious setback has been minimized to the greatest extent practicable and is only located where the greenway path will tie-into the existing access and in a few areas where the pathway must be further offset from the stream bank.

BUFFER MITIGATION PLAN

Buffer mitigation will be achieved via the proposed stream restoration of Johns Creek. Briefly, the stream restoration and bank stabilization project will restore the entire stream corridor within the 50-foot stream buffer. Restoration activities within the 50-foot stream buffer include step-pool structures at eroding outfalls to eliminate headward erosion and bank stabilization practices, including grading banks to more stable slopes and planting native riparian forest vegetation. Bioswale areas are proposed along the east bank to capture and filter stormwater runoff before the water enters the existing stream. The proposed restoration activities will stabilize the eroding stream banks and will protect vulnerable infrastructure from future erosion, thereby mitigating any disturbance from realigning the greenway within the buffer.

Construction within the buffer is estimated to take 120-140 days. Erosion and sediment control best management practices will be implemented prior to any land disturbing activities and will be maintained at all times as shown on the plans (Sheets EC1-EC6). During construction activities, tree protection measures will be implemented as shown on the plans (Sheets EC7-EC12). Newly graded banks and all disturbed areas will be stabilized through a combination of mulching, temporary seeding, and permanent vegetation. The project will include the removal and long-term maintenance of invasive and exotic species (Chinese and Japanese privet). Vegetation native to Fulton County, GA will be planted through a combination of bare root/tublings and container grown trees and shrubs with 8 ft. x 10 ft. average spacing. The selection and placement of species vary based on the elevations relative to the stream channel (Planting Plan Sheets EC13-EC14). The riparian buffer habitat will be enhanced by an increase in the number and diversity of shrub species to be planted. The bioswale areas between the new greenway and the east bank will capture and filter stormwater runoff before the water enters the existing stream to help offset the impervious surface within the buffer.

OTHER PERMITS

All restoration work is proposed within the State of Georgia's mandated 25-foot vegetative stream buffer. A Buffer Variance application for major activities within the 25-foot vegetative buffer encroachment was submitted to the Georgia Environmental Protection Division (GA EPD) on November 3, 2023. GA EPD has proposed to issue the variance and released a 30-day public notice on November 16, 2023. The public comment period will close on December 18, 2023, at which time the buffer variance is expected to be issued. The project was submitted to the U.S. Army Corps of Engineers (USACE) on November 13, 2023, and is currently under review for coverage under a combination of nationwide permits. The review is expected to take 2-3 months. The project is anticipated to go to bid in spring with work beginning in March, once all permits are acquired.



