



**CITY OF BURLINGTON
DEPARTMENT OF PUBLIC WORKS**

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October 4, 2012

**TO: Burlington City Council
Finance Board**

**FROM: Norman Baldwin, P.E.
Assistant Director-Technical Services**

**RE: Request Authorization to award construction contract for NORTSHORE
BIKE PATH SLOPE FAILURE REMEDIATION PROJECT**

BACKGROUND

In May of 2011 we experience unprecedented high lake levels and extremely wet conditions causing the soils to be saturated, that lead to significant damage private property and public facilities. The City of Burlington suffered damage to a handful of public buildings but had seen more significant damage to its Bike Path. The bike path had segments washed out entirely while other sections had seen significant slope failures that affected the long term stability of the bike path. Given the destructive force of high lake levels and the damage left in its wake a Federal disaster was declared making public assistance funds available to Burlington to aid in its recovery.

As a result, the Department of Public Works has been working to advance recovery projects that need to advance through design, permitting and construction. More particularly the NORTSHORE BIKE PATH SLOPE FAILURE REMEDIATION PROJECT is in the later stages of the process by seeking to procure and award a construction contract to repair this segment of the Bike Path.

PROJECT DESCRIPTION

The slope failure is located on the west side of the existing recreation path about 1,700 feet north of Starr Farm Road (Longitude W 73-16-08.2, Latitude N 44-31-00.9). The slope failure was caused by a washout of the lakeside stone toe protection and subsequent erosion of the lakeshore during the high water even in the spring of 2011. The slope failure has removed a section of the recreation path and undermined the existing steel retaining wall. This is endangering the existing 6' diameter storm pipe and the 18" diameter sewer pipe underneath the path.

Our designed remediation calls for us to install an effective "Rip-Rap" key at the lakeshore up to elevation 106'. The slope above this point will then be reinforced with stone fill with a maximum slope of 1.5'

horizontal to 1' vertical. This will also remove the unstable overburden above the wetland area,. Access to this site will be down the slope being repaired.

PROJECT STATUS

For **NORTHSHORE BIKE PATH SLOPE FAILURE REMEDIATION PROJECT** we have:

- meet with FEMA officials,
- defined a scope of work, developed preliminary budgets,
- Procured a designer under our existing On-Call Consultant Contract
- completed our design
- In the process of acquiring all necessary permits
- Have prepared bid documents
- received bids

FUNDING

Under FEMA's Public Assistance Program,

- FEMA 75%,
- State of Vermont 15%,
- CITY- Local Match Obligation 10%
- The total project cost is anticipated to be approximately \$526,000.
- The City local match obligation will be approximately \$52,600, funded by use of the city's General Fund Capital which has already been approved and placed in reserve for this purpose.
- Given this project is considered a large project(over \$60,000) by FEMA, the city will need to assume all project expenses and seek reimbursement from FEMA and the State of Vermont.
- Progress payments can be submitted on a monthly basis as the project is advanced.

BID RESULTS

We are now at the stage of seeking to award a construction contract that will restore this damaged portion of the bike path.

Our bid opening is scheduled for October 12, 2012. As a result we will submit the bid tab and our recommendation for award at the October 15, 2012 meeting.

Our construction estimate for this project is \$355,000

SUMMARY

Timing is critical to completing this work this fall construction season, we have purposely sought to complete the work in the fall when the on-going uses on the bike path are at a season low and lake levels adjacent to the project are low, allowing us better access to the toe of the slope.

As a result of our need to act swiftly, we are seeking:

- the approval of the Finance Board and Burlington City Council to approve award of **NORTHSHORE BIKE PATH SLOPE FAILURE REMEDIATION PROJECT** to our recommended contractor.
- the Finance Board and City Council to authorize the Director of Public Works, Steven Goodkind to award and execute the contract,

If there are any questions please do not hesitate to call me, I will be at the meeting to answer any additional questions.



City of Burlington-Lake Flooding Recovery Projects



Northshore Slope Failure

Lakeview Cemetery Slope Failure

Legend

● Flood Recovery Projects

WHEREAS, in May 2011, the City of Burlington experienced unprecedented high lake levels and extremely wet conditions, causing soils to be saturated which in turn led to significant damage private property and public facilities; and

WHEREAS, while the City suffered damage to a handful of public buildings, there was significant damage to the City's Bike Path where some segments washed out entirely and other sections suffered significant slope failures that affected the long term stability of the bike path; and

WHEREAS, given this natural disaster a Federal disaster was declared, thereby making federal and state public assistance funds available to Burlington to aid in recovery; and

WHEREAS, the remediation of damage to the Bike Path is a project upon which the Department of Public Works (DPW) has been working with the Federal Emergency Management Agency (FEMA); and

WHEREAS, two particularly important Bike Path recovery projects that the DPW has been working on are the Lakeview Cemetery-Burlington Bike Path Slope Failure Remediation Project ("Lakeview") and the Northshore Bike Path Slope Failure Remediation Project ("Northshore"); and

WHEREAS, the Lakeview slope failure is located on the west side of the existing recreation path about 1,100 feet south of the North Beach Campground and was caused by a washout of the lakeside stone toe protection and subsequent erosion of the lakeshore during the high water event in the spring of 2011, thereby causing the destruction of a section of the recreation path; and

WHEREAS, the damage to the Lakeview slope has the potential of affecting the long term stability of this section of the bike path because on the west side of the path, there is a sharp drop off where once had a 2 foot gravel shoulder and fence and the stormwater runoff collection system has been compromised and runoff is flowing out of the existing damaged drainage structure, further scouring the bank just west of the bike path; and

WHEREAS, the Northshore slope failure is located on the west side of the existing recreation path about 1,700 feet north of Starr Farm Road and was caused by a washout of the lakeside stone toe protection and subsequent erosion of the lakeshore during the high water even in the spring of 2011, thereby causing the destruction of a section of the recreation path, undermining the existing steel retaining wall, and endangering the existing 6' diameter storm pipe and the 18" diameter sewer pipe underneath the path; and

WHEREAS, having worked with FEMA officials on these projects, DPW has defined scopes of work, developed preliminary budgets, procured a designer under our existing On-Call Consultant Contract, completed the remediation designs, acquired all necessary permits, prepared bid documents and received bids, and is now recommending that construction contracts be awarded to the selected bidder; and

WHEREAS, DPW's Lakeview design calls for an effective "Rip-Rap" key at the lakeshore up to elevation 106', the slope above this point then being reinforced with stone fill with a maximum slope of 1.5' horizontal to 1' vertical and a re-developed stormwater system of conveyance to the toe of the slope, with access to repair this segment gained from either the north or south at the toe of the slope along the beach; and

WHEREAS, DPW's Northshore designed remediation calls for the installation of an effective "Rip-Rap" key at the lakeshore up to elevation 106', with the slope above this point then being reinforced with stone fill with a maximum slope of 1.5' horizontal to 1' vertical to remove the unstable overburden above the wetland area, with access to this site being down-slope of the repair; and

WHEREAS, the total project cost for the Lakeview remediation project is approximately \$237,000 and the total project cost for the Northshore remediation project is approximately \$526,000; and

WHEREAS, these projects are eligible for funding under FEMA's Public Assistance Program, with the the FEMA share being 75%, the State of Vermont share being 15%, and the City's local match obligation being 10%; and

WHEREAS, for the Lakeview project the City's local match obligation is anticipated to be \$23,700, with this obligation being funded by City's General Fund Capital which has already been approved and placed in reserve for this purpose; and

WHEREAS, for the Northshore project the City's local match obligation will be approximately \$52,600, with this obligation being funded by the City's General Fund Capital which has already been approved and placed in reserve for this purpose; and

WHEREAS, because these projects are considered "large" projects (over \$60,000) by FEMA, the City will need to assume all project expenses and seek reimbursement from FEMA and the State of Vermont, with an allowance for the monthly submission of progress payments as the project proceeds; and

WHEREAS, DPW's construction estimate for the Lakeview project was \$231,595.00 and it received three bids from three qualified contractors with the following bid results: All Season Excavating--\$199,641, J. Hutchins, Inc.--\$212,228, and Engineers Construction--\$159,950; and

WHEREAS, after reviewing the qualifications, associated documentation, and individual pay items DPW is prepare to recommend awarding the bid to Engineers Construction, believing that it is highly qualified to perform the scope of work and in the best position to complete the work according to our specification on time and within budget.

WHEREAS, DPW's construction estimate for the Northshore project was \$355,000.00 and it received ____ bids from ____ qualified contractors with the following bid results:

[the bid opening is scheduled for October 12, 2012. As a result PW will submit the bid tab and our recommendation for award at the October 15, 2012 meeting.]

WHEREAS, DPW is of the opinion that prompt action is critical to completing this work during this fall construction season because on-going uses on the Bike Path are at a seasonal low and lake levels adjacent to the project are low, thereby allowing for better access to the toe of the slope; and

WHEREAS, the Finance Board reviewed the Lakeview project at its meeting of October 15, 2012 and recommended that the City Council approve the award of LAKEVIEW CEMETERY - BURLINGTON BIKE PATH SLOPE FAILURE REMEDIATION PROJECT to Engineers Construction, Inc. and authorize the Director of Public Works, Steven Goodkind to award and execute a contract with Engineers Construction, Inc., subject to the prior review and approval of the City Attorney

WHEREAS, the Finance Board reviewed the Northshore project at its meeting of October 15, 2012 and recommended that the City Council approve the award of NORTHSHORE BIKE PATH SLOPE FAILURE REMEDIATION PROJECT to _____ and authorize the Director of Public Works, Steven Goodkind to award and execute a contract with _____, subject to the prior review and approval of the City Attorney

NOW THEREFORE BE IT RESOLVED THAT the Burlington City Council does hereby approve the award of LAKEVIEW CEMETERY - BURLINGTON BIKE PATH SLOPE FAILURE REMEDIATION PROJECT to Engineers Construction, Inc. and authorize the Director of Public Works, Steven Goodkind to award and execute a contract with Engineers Construction, Inc., subject to the prior review and approval of the City Attorney; and

BE IT FURTHER RESOLVED THAT the Burlington City Council does hereby approve the award of NORTHSHORE BIKE PATH SLOPE FAILURE REMEDIATION PROJECT to _____ and authorize the Director of Public Works, Steven Goodkind to award and execute a contract with _____, subject to the prior review and approval of the City Attorney.