

Benefits analysis for the purchase of Flood Pumps for the Town of Tadcaster

Issue outlined:

Over the last four years surface water flooding has become an increased worry for the community of Tadcaster and surrounding areas. The group is concerned regarding reliable resources due to stretched emergency service facilities for the local area in flooding situations. This is outlined from the group's analysis of the 5 surface water incidents of flooding in the last four years.

The group has raised the issues of increased frequency of flooding with the multi agency's. A catchment study is to be performed by NYCC and YW, looking at long-term solutions. This will take approximately 18 months.

Areas affected by surface water flooding:

- Bridge Street and Wharfe Bank Mews
- Wharfe Bank Terrace
- St Joseph's Street
- Westfield Crescent
- Commercial Street and Crab Garth

Proposed purchase with Tadcaster Flood Action Group funds:

Flood pump/s to provide a short to medium term facility to help alleviate the effects of surface water flooding where possible.

Benefit analysis:

- **Bridge Street and Wharfe Bank Mews:**

Surface water flooding has become an increased concern for businesses and residential properties in these areas with 5 incidents of surface water floods in four years. For surface water flooding to normally occur, approximately 76mm per hour of rainfall is required, causing an issue of water not escaping to the outfall, which is at approximately 0.3 meters. An increase risk of flooding occurs when the river levels are above 0.3 metres covering the outfall.

Affects:

Causing a loss for businesses and increased insurance premiums with reduced cover, high emotional stress and concern.

Approximately affects and decreases access to 22 Businesses premises.

Approximately affects and decreases access to approximately 6 Residential premises.

- **Wharfe Bank Terrace:**

(reason for assessment made on Wharfe Bank Terrace due to the close proximity of Bridge Street and Wharfe Bank Mews).

Surface water flooding previously has not been a concern or risk to properties, although river over topping and deluge is a concern in this area and affects the following:

Affects:

Approximately affects and decreases access to 2 Businesses premises.

Approximately affects and decreases access to 7 Residential premises.

- **St Joseph's Street:**

Surface Water flooding in 2013 and 2014 caused internal flooding to three business premises.

From liaising with the Highways and YW, work has been carried out on this system and since this area has not suffered surface water flooding.

This area is a medium to high-risk area from heavy rainfall to surface water flooding.

A pump purchase for this area would be problematic as there is no ideal area for the water to be discharged.

Affects:

Approximately affects and decreases access to 3 Businesses premises.

Approximately affects and decreases access to 7 Residential premises.

- **Westfield Crescent:**

Surface Water flooding in 2013 and 2014 caused internal flooding up to 5 residential premises.

From liaising with the Highways and YW, work has been carried out on this system and since has not suffered surface water flooding.

This area is a medium to high-risk area from heavy rainfall to surface water flooding.

A pump purchase for this area would be problematic as there is no ideal area for the water to be discharged.

Affects:

Approximately affects and decreases access to 5 residential premises.

- **Commercial Street and Crab Garth:**

Surface water flooding occurs when the town has rainfall of 96mm/per hour. The outfall is at approximately 0.3 meters. This causes flooding in the bus station (Close proximity to Tadcaster Medical and health Centre) and Power Plus area.

This has become an increased concern for businesses and residential properties in this area with incidents of 3 surface water floods in four years.

Businesses have had increased insurance premiums and cover, and emotional stress and concern.

The Town's Medical Centre is a key facility to our community and must be protected as much as feasibly possible.

Affects:

Approximately affects and decreases access to 11 Businesses premises.

Approximately affects and decreases access to 8 Residential premises.

Conclusion of analysis:

To help alleviate the affects of flooding in Tadcaster, and reduce response time to initiate pumping it has been agreed that the following areas are in need of increased facilities i.e. Flood Pumps.

Bridge Street suffers surface water flooding due to increase rainfall and water discharge not getting out of the outfall for the access of approximately 28 properties, at rainfall events of approximately 76mm per hour.

Commercial Street and Crab Garth suffer surface water flooding, causing an issue of access and risk to property for 19 premises, at rainfall events approximately 96mm per hour.

A pump specification analysis is required prior to purchasing.

Further investigation is needed for the need of increased facilities for Wharfe Bank Terrace and a continual review needed of St Joseph's and Westfield in times of heavy storms. The group will therefore continue to provide signage and volunteer assistance in these areas.

Assessed by Nicola Eades and Richard Rafferty.

Consulted with: Tadcaster Flood Action Group Volunteers, Tadcaster Town Council, Emergency Planning Committee, NYCC, YW and EA.

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