

## Bourne Valley Flood Management Scheme

May-18

**Proposed Works Items Summary Table** (This Schedule changes and should be taken as a guide to show the level of works proposed in the Bourne Valley by the different agencies).

Action reference	Location	Work Item	Priority and precursor (if any)	Undertaker	Status	Notes/ Action
R1	Vernham Dean	Tanglewood' property blocks overland flow path. Modify boundary fence to improve flood route through the property	1	Householder	HCC Eng. Con commissioned to investigate and provide advice for landowners.	Private land/ EC to advise to landlord
R2	Vernham Dean	Install culvert under cricket pitch car park to drain down the school play areas faster	1, R3	HCC	HCC Eng. Con. commissioned to develop preliminary design.	Does not belong to HCC.H. HCC CCBS to approach / Structural engineering support required.
R3	Vernham Dean	Lower level of cricket field locally to increase flow velocity away from the village centre	1	HCC/Landowners	HCC Eng. Con. commissioned to develop preliminary design.	Does not belong to HCC.H. HCC CCBS to approach
R3A	Vernham Dean	Install interceptor drain across Dean Terrace and outfall to cricket pitch	1	HCC	HCC Eng. Con. commissioned to develop preliminary design.	To be investigated further
R4	Vernham Dean	Flood route to be improved between Tanglewood and the cricket pitch by small scale re-grading and clearing obstacles from the flood path	1	HCC/Landowners	HCC Eng. Con. commissioned to develop preliminary design.	Landowners to action. PC to inform HCC
R5	Vernham Dean	Reduce levels around the rear of car park to increase flow velocity to the cricket pitch	1	HCC/Landowners	HCC Eng. Con. commissioned to develop preliminary design.	Does not belong to HCC.H. HCC CCBS to approach
R5A	Vernham Dean	Create flood storage area using earthwork bunds connected by a drop board sluice. The sluice will be set so as not to restrict high but acceptable flow levels and then boards can be added to hold flow back in extreme conditions.	3	HCC/Landowners	HCC Eng. Con. commissioned to develop preliminary design.	Preliminary design to be used to help inform discussions with landowners. Subject to landowner agreement construction 2019/20.
R6	Vernham Dean to Upton	Cut new ditches and grips to clear water from the highway during flooding events. These will need to be on private land behind the boundary hedges as the highway verge is of insufficient width. This work will increase downstream flood risk so cannot be implemented until the improvement work proposed downstream has been completed.	3, R7 onward	HCC.H	It has been done once (120 grips). Maintenance must be done	HCC.H *No date at present for further works as low priority work. A maintenance plan would need to be in place for the ditches.
R7	Upton	Blocked road crossing pipe to be cleaned out	1	HCC.H	Order placed with Hampshire Highways Services contract (Skanska).	
R8	Upton	Re-profile road or add gullies to inside of bend to drain the highway to a new outfall into adjacent field. This is a highway safety risk as visibility is poor round the bend, water stands in the carriageway and can freeze and the verge is being eroded by splashback.	1	HCC.H	HCC Eng. Con. commissioned to develop preliminary design.	Further discussions required with HCC.H
R9	Upton	Existing ditches and grips to be re-cut. Detailed walk through required to identify extent. Possible filter drain.	1	HCC.H (Operation Resilience) / Landowner	Passed to Operation Resilience	Expected investigation during 18/19 fin year. Expected Construction year 19/20
R10	Upton	Improve flood flow velocity through the section between The Cottage and the main road to drain the flood water down more quickly. This is all on private land and will need to be agreed with landowners. Proposals would be low impact actions such as lowering ground levels locally and modifying property boundary fences to make them more permeable to flood flow.	2	HCC/Landowners	HCC Eng. Con. commissioned to develop preliminary design.	EC to investigate further and advise to Landowners for action.
R11/R12	Upton	Improve flood flow velocity from Stable Cottage to the stream bed beyond Upton House. The existing twin culverts under Upton House and the open highway culvert as well as the levels of the highway drainage in this area will need to be land surveyed to identify the best solution in this area.	2	HCC/Landowners	HCC Eng. Con. commissioned to develop preliminary design.	Private land
R13	Upton	Re-grade stream bed to improve flow	2	HCC/Landowners	HCC Eng. Con. commissioned to investigate and provide advice for landowners.	
R14	Upton	Extend highway drainage from Stable Cottage down the main road to form a new outfall into the stream downstream of Upton House	2	N/A	Not to be progressed	HCC.H to indicate there is no space for extension hence no prospect for this item.

R14A	Ibthorpe	Culvert to be cleaned	1	HCC.H advise that work could be carried out once R15 done.		Hampshire Highways will not progress this package of work until R15 and R16 works are finished
R15	Ibthorpe	Lower ground levels locally south of the pumping station to maximise flow through the highway culvert to drain down upstream flood water more quickly.	3	HCC/Landowners	HCC Eng. Con. commissioned to develop preliminary design.	Works to be agreed with Landowner
R16	Ibthorpe	Create flood storage area using earthwork bunds connected by a drop board sluice. The sluice will be set so as not to restrict high but acceptable flow levels and then boards can be added to hold flow back in extreme conditions.	3	HCC/Landowners	HCC Eng. Con commissioned to develop preliminary design.	Preliminary design to be used to help inform discussions with landowners. Subject to landowner agreement construction 2019/20.
R17	Ibthorpe	Create flood storage area using earthwork bunds connected by a drop board sluice. The sluice will be set so as not to restrict high but acceptable flow levels and then boards can be added to hold flow back in extreme conditions.	3	HCC/Landowners	HCC Eng. Con. commissioned to develop preliminary design.	Preliminary design to help inform discussions with landowners. Subject to landowner agreement construction 2019/20.
R18	Hurstbourne Tarrant	Install a manifold of pipes at 'The Crescent' to supplement the twin 300mm pipes at present so that the throttle in the 600mm diameter highway drain is removed. This will help drain down 'The Green' more quickly and improve the performance of the highway drains keeping flows off the highway.	1	HCC.H advise that work could be carried out by Operation Resilience in 18/19 if resources permit.		Passed to Operation Resilience. Expected investigation during 18/19 fin year. Expected Construction year 19/20
R19	Hurstbourne Tarrant to Stoke	Create flood storage area using earthwork bunds connected by a drop board sluice. The sluice will be set so as not to restrict high but acceptable flow levels and then boards can be added to hold flow back in extreme conditions.	2	HCC/Landowners	HCC Eng. Con. commissioned to develop preliminary design.	Preliminary design to be used to help inform discussions with landowners. Subject to landowner agreement construction 2019/20.
R20	Hurstbourne Tarrant to Stoke	Create flood storage area using earthwork bunds connected by a drop board sluice. The sluice will be set so as not to restrict high but acceptable flow levels and then boards can be added to hold flow back in extreme conditions.	3	HCC/Landowners	HCC Eng. Con. commissioned to develop preliminary design.	Preliminary design to be used to help inform discussions with landowners. Subject to landowner agreement construction 2019/20.
R21	Hurstbourne Tarrant to Stoke	Re-grade the stream bed level on the approach exit and under the road bridge to improve flow	1	PC/HCC/Landowners	De-silting to weir bridge completed by HCC	Works to be agreed with Landowner
R22	Hurstbourne Tarrant to Stoke	Re-grade stream bed level to improve flow	1	PC/Landowners	HCC Eng. Com. Commissioned to develop preliminary design.	
R23	Stoke	Cut grips through bund to allow the river to flood adjacent meadow in times of flood. The river has been re-routed in this area and this has resulted in a fast narrow and shallow section.	1	PC/Landowners	Progress unknown	
R24	Stoke	Create flood storage area using earthwork bunds connected by a drop board sluice. The sluice will be set so as not to restrict high but acceptable flow levels and then boards can be added to hold flow back in extreme conditions.	3	HCC/Landowners	HCC Eng. Con. commissioned to develop preliminary design.	Preliminary design to be used to help inform discussions with landowners. Subject to landowner agreement construction 2019/20.
R25	Stoke	Re-grade overgrown section of stream	2	PC/Landowners	HCC Eng. Con. to review actions with Parish Council.	
R26	Stoke	Remove tree blocking culvert bore	1	PC/Landowners	HCC Eng. Con.to review actions with Parish Council. .	
R27	Stoke	Relocate fence across stream to present less of an obstruction	1	PC/Landowners	HCC Eng. Con.to review actions with Parish Council. .	
R28	Stoke	Re-grade ditch to improve flow capacity	1, R30, R31, R32	PC/Landowners	HCC Eng. Con.to review actions with Parish Council. .	
R29	Stoke	Create flood storage area using earthwork bunds connected by a drop board sluice. The sluice will be set so as not to restrict high but acceptable flow levels and then boards can be added to hold flow back in extreme conditions.	3	HCC/Landowners	HCC Eng. Con. commissioned to develop preliminary design.	Preliminary design to be used to help inform discussions with landowners. Subject to landowner agreement construction 2019/20.
R30	Stoke	Harden roadside verge to provide a slipway for water to flow off the highway in to the ditch	1, R28, R31, R32	HCC	Order placed with Hampshire Highways Services contract (Skanska).	

R31	Stoke	Upsize culvert to 750mm diameter to increase flow under the highway	1, R28, R30, R32	HCC.H advise that work could be carried out by Operation Resilience in 18/19 if resources permit.	This has been submitted to the Operation Resilience team and we have prioritised this with them to ensure the scheme is progressed in their 2018/19 programme.	Expected investigation during 18/19 fin year. Expected Construction year 19/20
R32	Stoke	Re-grade ditch to improve flow capacity	1, R30, R31	PC/Landowners	HCC Eng. Con. to review actions with Parish Council.	
R33	Stoke	Re-grade stream bed level to improve flow	2, R35	PC/Landowners	HCC Eng. Con. to review actions with Parish Council.	
R34	Stoke	Create flood storage area using earthwork bunds connected by a drop board sluice. The sluice will be set so as not to restrict high but acceptable flow levels and then boards can be added to hold flow back in extreme conditions.	3	HCC/Landowners	HCC Eng. Con. commissioned to develop preliminary design.	Preliminary design to be used to help inform discussions with landowners. Subject to landowner agreement construction 2019/20.
R35	Stoke	Reduce stream bed level under bridge. Foul sewer may need to be lowered.	1	PC/Landowners	De-silting to weir bridge completed by HCC	
R36	Stoke/St Mary Bourne	Road edge cannot be seen during floods and stream is immediately adjacent. Install marker posts along edge of road.	2	HCC.H/EC	No progress	EC to discuss this item with HCC.H
R37	Not used					
R38	Not used					
R39	St Mary Bourne	Reduce stream bed level under bridge	2	HCC/landowners	De-silting to weir bridge completed by HCC	
R40	St Mary Bourne	New kerb line adjacent Belle Vue Cottages to prevent flood water from highway entering the property.	2	HCC.H advise that work could be carried out in 17/18. The side access to the property may cause an issue.	Not to be progressed	Consultation with the resident and the Parish Council have brought into question where this came from. There have been no reports to HCC.H from the resident - water only entered the rear garden on one occasion. The Parish Council have advised they are not aware of a major issue there and not pushing for any work, especially as they see kerbing as urbanisation. HCC.H are not therefore intending to progress this order.
R41	St Mary Bourne	High level overflow to be installed from stream to pond to speed up drain down from upstream when stream level at capacity	3	HCC/landowners	HCC Eng. Con. commissioned to develop preliminary design.	

**Notes:**

1. The references above has been based on the works undertaken by EC between 2013-2016 and subject to change based on further investigation and design works at preliminary stage.
2. HCC.H - Hampshire County Council Highways | EC - Engineering Consultancy | PC - Relevant Parish Council
3. Highways are also looking into April Cottage, St Mary Bourne to improve the drainage with kerbing in 18/19.
4. Unless work stated to be carried out by HCC Operation Resilience it will be done through the Highways planned maintenance programme.

	EC
	HCC H
	Op Resilience (Highways)
	PC/ Landowners/others
	Works no longer being undertaken