

ITEM No ...7.....

REPORT TO: CITY DEVELOPMENT COMMITTEE – 8 MARCH 2021

REPORT ON: SCOTTISH WATER – MAINTENANCE AGREEMENTS FOR SHARED SURFACE WATER DRAINAGE SYSTEMS FROM HOUSING DEVELOPMENTS

REPORT BY: EXECUTIVE DIRECTOR OF CITY DEVELOPMENT

REPORT NO: 103-2021

1 PURPOSE OF REPORT

- 1.1 This report presents members with background information relating to a Scottish Water Memorandum of Understanding (MoU) concerned with Dundee City Council and Scottish Water entering maintenance agreements for shared surface water drainage systems serving housing developments.
- 1.2 The report also recommends the adoption of the MoU and for Dundee City Council to work under the principles contained therein, and for the signing of maintenance agreements to be delegated to the Executive Director of City Development.

2 RECOMMENDATION

- 2.1 It is recommended that the Committee considers the content of this report and:
- a Agrees to the adoption of the “Memorandum of Understanding regarding the provision of surface water drainage from housing developments”, with the ability for Dundee City Council and Scottish Water to enter into individual, site specific maintenance agreements under Section 7 of the Sewerage (Scotland) Act 1968;
 - b agrees that the signing of maintenance agreements is delegated to the Executive Director of City Development; and
 - c notes the current position in Dundee in relation to the maintenance proposals for “legacy” surface water drainage systems.

3 FINANCIAL IMPLICATIONS

- 3.1 The financial arrangement associated with the MoU and maintenance agreements has been agreed by Scottish Government and Society of Chief Officers of Transportation in Scotland (SCOTS) as a fair split which is generally equal in proportion when considering the maintenance costs of each party over the whole life of the drainage infrastructure. Appendix 4 gives the SCOTS, Scottish Water and Scottish Government whole life cost assessment undertaken at a national level, to demonstrate the generally equal split.
- 3.2 There will be officer costs associated with setting up the working arrangement with Scottish Water and preparing maintenance agreements. These costs will be contained within the existing City Development revenue budgets.

- 3.3 There may be an additional resource required to undertake Dundee City Council's share of maintenance under the agreements. This will be dependent on a number of factors including the type, size and number of SUDS features proposed as part of any new development and if Dundee City Council had any maintenance responsibility for the site prior to the creation of the SUDS feature. For new developments an assessment of the additional annual revenue implication will be calculated as part of the Road Construction Consent (RCC) process. The resources required to complete any additional maintenance is expected to be fulfilled utilising existing staff and plant, with any specialised resources brought in as necessary.
- 3.4 As the service which would complete Dundee City Council's share of the maintenance, the Neighbourhood Services Environment Team has been consulted on the implications of the MoU and any resulting obligations in regard to ground maintenance of SUDS assets and are in agreement with this reports recommendation to accept the principles of the MoU.
- 3.5 In the case of existing legacy sites an overall assessment will be carried out by council officers on a case by case basis to determine the risk and financial implications for the council to adopt the principles of the MOU. In the event that these principles cannot be applied the current arrangements would remain in place.

4 BACKGROUND

- 4.1 New developments draining surface water to the water environment must do so in a sustainable manner, ideally by a Sustainable Urban Drainage system (SUDS), unless it is a single dwelling or where the discharge is directly to coastal waters. This is regulated under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 to avoid pollution of the water environment. SUDS are also generally an upstream requirement when any approval to connect surface water to the Scottish Water public sewer system is granted.
- 4.2 Under current legislation, Roads Authorities have responsibility for surface water generated from public "roads" (roads water) and Scottish Water have responsibility for surface water generated from roofs and paved ground within the curtilage or premises (curtilage water).
- 4.3 Under Section 7 of the Sewerage (Scotland) Act 1968, a Roads Authority and Scottish Water may enter into an agreement on the provision, management and maintenance of SUDS, sewers and drains.
- 4.4 Historically, and at a national level, a housing development's surface water drainage system collects both road water and curtilage water. This was primarily to avoid the requirement for two surface water drainage pipes (a road water pipe, and a curtilage water pipe). There are no formal maintenance agreements currently in place for the majority of these historic ("legacy") shared surface water drainage systems with, in many cases, maintenance being the responsibility of the either the original developer, the land owner, or perhaps a factor. This has resulted in a varying degree of maintenance being undertaken at existing shared surface water drainage systems with some receiving very little attention since being constructed which diminishes the aesthetic value of the area and increases the risk of flooding from the asset.
- 4.5 Scottish Water is under no obligation to accept road water into their public drainage system or vest (take on responsibility for) surface water drainage systems collecting road water. Scottish Water have made it a requirement going forward, for each Local Authority to agree to a national shared maintenance framework before consideration will be given to accepting road water connections to their public sewer in its area, or vesting a surface water drainage system collecting both road water and curtilage water.

- 4.6 To prepare the national framework and maintenance agreements for shared surface water drainage systems, representatives from the SCOTS “Roads” and “Flood Risk Management” Groups and Scottish Water, with support from the Scottish Government, worked in partnership and produced a national “Proposal for the drainage of surface water” and the “Memorandum of Understanding regarding the provision of surface water drainage from housing developments” (MoU). The MoU sets out an overarching agreement on the principles of maintenance agreements. Each of the thirty two Local Authorities in Scotland have been asked to confirm their agreement to work under the principles set out in the MoU. Appendices 1, 2, and 3 contain the “Proposal for the Drainage of Surface Water”, the MoU, and an “agreement template” for use by Roads Authorities if they wish.

Benefits of Adopting the Memorandum of Understanding and Shared Maintenance Agreements

- 4.7 Working under the principles of the MoU and creating maintenance agreements will minimise the costs to Dundee City Council, Scottish Water and developers. It will remove the need for Dundee City Council and Scottish Water to have their own independent surface water drainage systems and enable maintenance costs associated with surface water drainage systems collecting both road water and curtilage water to be shared which will reduce the maintenance burden for each party.
- 4.8 As well as being required as part of new development sites, the provision of new surface water drainage systems, which collect both road water and curtilage water, will play a crucial role in the delivery of surface water management strategies across the city to reduce flood risk and free up capacity in the public combined sewer to assist with the development of brownfield sites. Reference is made to Article X of the minute of the meeting of the City Development Committee held on 25 January 2021 (report 32-2021) wherein members were updated on the progress being made between Dundee City Council and Scottish Water in developing surface water management strategies. The creation of maintenance agreements will ensure that these shared surface water drainage systems are maintained in perpetuity by a public body where possible. This will ensure that appropriate maintenance is undertaken to retain the aesthetic value of an area, enable them to function as designed, and reduce flood risk from the asset.
- 4.9 Adoption of the MoU will assist with the development of brownfield sites incorporating public roads, without creating additional maintenance burdens associated with separate road water drainage systems, and where there is no alternative to discharging surface water to the Scottish Water public sewer.
- 4.10 Under the MoU, individual, site specific maintenance agreements will be prepared based on the principles set out in the MoU. Appendix 3 contains an “agreement template” for use by Roads Authorities if they wish. The maintenance agreements will ensure that each party undertakes work appropriately suited to their expertise and will generally make Dundee City Council responsible for the maintenance of above ground infrastructure and Scottish Water responsible for maintenance of the below ground infrastructure. Scottish Water will also renew the shared surface water drainage system at the end of its life at their own expense. The type of maintenance Dundee City Council is expecting to undertake would be, but is not limited to, grass cutting, aquatic plant management, weed management, litter picking and fencing/signage repair and maintenance. Appendices 1 and 2 provide details of the proposed maintenance split.
- 4.11 Each maintenance agreement will be developed as part of the Dundee City Council Planning Application and Road Construction Consent (RCC) processes, and the Scottish Water Technical Approval application process. Full details of the procedures and processes associated with the creation of these maintenance agreements are to be developed by officers and Scottish Water.

- 4.12 Maintenance agreements are only necessary where the drainage system is collecting both road water and curtilage water.
- 4.13 It should be noted that working under the principles of the MoU is not legally binding and it is not a legal requirement to enter into maintenance agreements with Scottish Water but it is considered best practice to do so otherwise Dundee City Council would have to ensure the provision of, and meet the full costs of maintaining, their own separate drainage systems for which there is currently no budget allocation.

Legacy Sites

- 4.14 Across Dundee there are a number of “legacy” shared surface water drainage systems which are not vested in Scottish Water where maintenance is the responsibility of either the original developer, the land owner, or perhaps a factor. Scottish Water is now proactively reviewing legacy shared surface water drainage infrastructure to determine what is required to bring them up to a vestable standard. The MoU does not cover legacy shared surface water drainage infrastructure, however if the MoU is adopted by Dundee City Council, the principles contained therein will also to be used to enter maintenance agreements for them.

5 POLICY IMPLICATIONS

- 5.1 This report has been subject to an assessment of any impacts on Equality and Diversity, Fairness and Poverty, Environment and Corporate Risk. There are no major issues.

6 CONSULTATIONS

- 6.1 The Council Management Team have been consulted in the preparation of this report and are in agreement with its content.

7 BACKGROUND PAPERS

- 7.1 None.

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NM/JM/KAS

25 February 2021

APPENDIX 1

Proposal for the drainage of surface water

INTRODUCTION

The Scottish Government charged Scottish Water and roads authorities to make the most cost effective arrangements for draining new development sites, in particular to avoid a 3-pipe drainage solution. As the environmental considerations over the disposal of surface water have developed, and additional flood risk management issues have come to the fore, consideration has been given to providing a shared drainage system to take both curtilage and roads drainage, treat it effectively and outfall it into our existing natural drainage with minimal environmental impact.

To achieve this aim, representatives from Scottish Water, the SCOTS Roads Group and the SCOTS Flood Group have drawn up an arrangement under which the authorities with responsibility for drainage, roads and flood risk management at new housing developments work together to require the developers to provide a shared, environmentally-friendly surface water drainage system which will vest in an in-perpetuity public body with the maintenance costs shared between Scottish Water and roads authorities, to their mutual benefit.

No changes are required to the statutory powers and responsibilities of the separate authorities. The framework proposed brings together the exercise of their respective powers from initial approval of the design of the shared drainage system through to the shared responsibility of maintaining the system. The framework is in the form of a memorandum of understanding of working together, the principles of which are not legally binding on any authority. Each authority will be asked to sign up to these principles for individual housing developments. A maintenance agreement under section 7 of the Sewerage (Scotland) Act 1968 will be put in place. If any authority does not wish to do so, then Scottish Water and the roads authority will have to ensure the provision of, and meet the full costs of maintaining, their own separate drainage systems.

At legacy sites, where authorities accept the proposals, then when the reasons preventing vesting are resolved, the principles of shared maintenance may, where practicable, be applied.

At this time, the proposal relates to housing developments to which the Security for Private Road Works (Scotland) Regulations 1985 applies. Those regulations do not apply to all housing developments (eg some publicly-financed housing developments) or to non-housing developments. It is intended addenda will be produced catering for the variations required to the framework at those types of developments.

The memorandum of understanding is attached as Appendix 2. It will be housed on Scottish Water's website, and other authorities are encouraged to provide links from their own websites to the memorandum.

SCOTS and Scottish Water have signed up to this proposal, and encourage local authorities to do the same and adopt the principles and working practices set out in the memorandum.

RECOMMENDED MAINTENANCE SPLIT

A sub-group was set up to consider what constitutes a fair and equitable division of maintenance responsibilities for the shared drainage system. Appendix 4 lists the scenario and assumptions used to inform this process.

The recommendation is that maintenance responsibility be split between Scottish Water and roads authorities on the basis of Scottish Water maintaining that part of the shared drainage system which lies below ground and roads authorities maintaining that part of the shared drainage system which lies above ground. Scottish Water will, in addition, renew the shared drainage system at the end of its life at its own expense.

By way of example, Scottish Water will take care of desilting, outlet/inlet and forebay cleaning and repairs/maintenance to engineered structures. Scottish Water will also be responsible for capital maintenance of access surfaces, with the roads authority responsible for the day-to-day clearance and management of these surfaces.

Roads authorities will be responsible for grounds and vegetation maintenance including grass cutting, litter picking, plant and weed management and fencing/signage if applicable.

Each authority will retain the responsibility it has under statute for those parts of the drainage infrastructure lying outwith the shared drainage system. For example, roads authorities will retain responsibility for gullies and drains that exclusively drain the road.

The Whole Life Cost spreadsheet at Appendix 4 reflects a typical example scenario consisting of a swale, pond and basin over a 25-year lifespan. Maintenance task costs have been extracted using CIRIA standard rates and (where appropriate) maintenance frequencies. During discussions within the sub-group, some of these frequencies were adjusted to reflect real world experience.

The costs reflect an example scenario. Roads authorities will incur high frequency, smaller value costs over the life of the asset. Scottish Water will incur lower frequency, higher cost activities, including asset renewal. Scottish Water will also be ultimately liable, as the system owner, for any liabilities in relation to licensed activities under SEPA.

It should be noted that no allowance has been made for events such as reactive chokes, vandalism and damage. Damage costs will be incurred on the basis of which party maintains that part of the asset. For example, damage to planting will fall to be made good by roads authorities, and damage to inlets/outlets by Scottish Water.

MAINTENANCE AGREEMENT

A style agreement under section 7 of the Sewerage (Scotland) Act 1968, should authorities wish to use it, is attached as Appendix 3.

APPENDIX 2

Memorandum of Understanding regarding the provision of surface water drainage from housing developments

1. When proposals are received from a developer of a new housing development to which the Security for Private Road Works (Scotland) Regulations 1985 apply to incorporate into the development as part of its overall drainage design a section which carries surface water from both the curtilage of houses and other buildings within the development and the roads serving the development (this section being the “shared drainage system”), Scottish Water (SW), the roads authority (RA) and the flood risk management authority (FRM) will work together to agree the technical aspects of the shared drainage system to ensure it meets the requirements of each of the authorities involved, liaising with other authorities with statutory responsibility in relation to the development as required.
2. The approvals given to the developer to allow the developer to proceed will include conditions to ensure the shared drainage system (1) is constructed to the agreed technical standards, and (2) can vest in SW on its completion independently from the remainder of the drainage system of which it forms a part.
3. Subject to any change in law over the period in question, the technical standards will not be revised over the period of time given to the developer to complete the development. If the developer seeks an extension to the timescale for completion, RA will liaise with SW and FRM on the proposal, and the three authorities will agree any revised technical standards to be imposed.
4. Where the development comprises a phase of a larger development, the developer must include a stand-alone drainage system in the first phase to be completed, and either an individual stand-alone drainage system or integration by agreement into a completed drainage system for each subsequent phase.
5. RA will take a security to construct the road in accordance with the terms of the relevant construction consent. This will include an amount sufficient to construct the shared drainage system to the agreed standard.
6. The shared drainage system will vest in SW on completion in accordance with agreed standards.
7. In the event of RA being required to construct the road in accordance with the provisions of the 1985 regulations, SW will allow RA access onto land it has acquired to house the shared drainage system to allow RA to complete the infrastructure. As required by the 1985 regulations, RA will adopt the road on completion.
8. SW’s vesting process will result in SW being legally responsible for maintaining the shared drainage system. Once vested, SW will maintain that shared drainage system. Where the road is not constructed by RA, RA will adopt the road as and when it is required to do so in accordance with the provisions of section 16(2) of the Roads (Scotland) Act 1984. When the road is adopted by RA, SW and RA will share the cost of maintenance of the shared drainage system on a basis to be agreed. The agreed sharing of costs will be set out in a maintenance agreement under section 7 of the Sewerage (Scotland) Act 1968. RA will become liable for its share of maintenance under the maintenance agreement relating to that road from the date of its adoption of the road.
9. The maintenance agreement will be specific to each development, and be based on a standard framework, as follows –
 - a SW will maintain the ‘below ground’ components of the shared drainage system,

- b RA will maintain the 'above ground' components of the shared drainage system,
c the 'below ground' and 'above ground' components will be identified on the drawing forming part of the maintenance agreement, and
d SW will meet the cost of renewing the shared drainage system or any part thereof at the end of its life.
10. If a developer proposes to add discharge to an existing shared drainage system, SW, RA and FRM will liaise over the proposal and agree a response.
 11. Should damage or an incident be caused by a third party which affects any part of the shared drainage system, SW and RA will co-operate fully and openly in investigating the incident, together with, where necessary, any relevant regulator, and join in seeking to recover the costs of repair from that third party, if both consider that action is reasonable and proportionate.
 12. Where a road is stopped up or de-listed, RA will no longer be responsible for its share of the maintenance of any shared drainage system serving that road. If all connections from the curtilage of houses and other buildings into a shared drainage system are removed, SW will no longer be responsible for its share of the maintenance of that shared drainage system.
 13. In their dealings with each other and other stakeholders in relation to the application of these principles, SW, RA and FRM will endeavour always to act in a reasonable manner and a spirit of co-operation. In addition, SW and RA will keep under review the terms of any maintenance agreement they enter into, and will endeavour to ensure it always reflects a fair and equitable division of the overall maintenance costs.
 14. If a difference of opinion on any issue covered by these principles or a maintenance agreement cannot be resolved through internal escalation procedures agreed between SW and RA, the matter will be referred to the Scottish Ministers for determination, and that determination is final.
 15. It is acknowledged these principles will evolve over time to reflect changes in legislation and practice. SW, RA and FRM agree to review these principles from time to time at the instigation of any of the authorities.

APPENDIX 3

Cover Sheet – not a page of the agreement

MAINTENANCE AGREEMENT

(under section 7 of the Sewerage (Scotland) Act 1968) between

Scottish Water

and

[]Council

(as local roads authority for the local government area of [])

Development []

Date of Maintenance Agreement []

Cover Sheet – not a page of the agreement

MAINTENANCE AGREEMENT

(under section 7 of the Sewerage
(Scotland) Act 1968)

between

Scottish Water, established under the Water Industry (Scotland) Act 2002 and having its principal office at Castle House, 6 Castle Drive, Carnegie Campus, Dunfermline KY11 8GG

and

[] **Council**, a local authority constituted under the Local Government etc. (Scotland) Act 1994 and having its principal offices at [] acting in its capacity as local roads authority for the local government area of []

1. DEFINITIONS AND INTERPRETATION**1.1. Definitions**

In this agreement, unless the context otherwise requires, –

“development”	means the housing development at [] and for illustrative purposes shown outlined in red on the plan;
“local roads authority”	means [] Council acting in its capacity as local roads authority for the local government area of [];
“memorandum of understanding”	means the memorandum of understanding regarding the provision of surface water drainage from housing developments dated August 2016 and reproduced at part 1 of the schedule;
“plan”	means the plan annexed and signed as relative to this agreement;
“schedule”	means the schedule annexed and signed as relative to this agreement; and
“shared drainage system”	means that part of the drainage system serving the development carrying surface water from both roads and the curtilage of houses and other buildings and for illustrative purposes shown coloured [] and [] on the plan.

1.2 Interpretation

- 1.2.1 Words importing any gender include the other genders.
- 1.2.2 Words importing the singular number include the plural and vice versa.
- 1.2.3 any reference to any particular statute or other law includes any modification, extension, amendment or re-enactment of such statute or other law for the time being in force and all instruments, orders, plans, bye-laws, regulations, permissions and directions for the time being made, issued or given under, or deriving validity from, that statute or other law.

1.3 Headings

The clause headings shall be disregarded in the construction or interpretation of this agreement.

2. Recital

This agreement is made under section 7 of the Sewerage (Scotland) Act 1968 to apportion the maintenance responsibility of the shared drainage system at the development in line with the principles set out in the memorandum of understanding.

3. Memorandum of Understanding

Scottish Water and the local roads authority agree to follow the principles set out in the memorandum of understanding in relation to the provision of surface water drainage at the development.

4. Maintenance Split

- 4.1 The below ground components referred to at clause 9 of the memorandum of understanding are listed at part 2 of the schedule and are shown for illustrative purposes coloured [] on the plan.
- 4.2 The above ground components referred to at clause 9 of the memorandum of understanding are listed at part 3 of the schedule and are shown for illustrative purposes coloured [] on the plan.

5. Law

This agreement shall be governed by and construed in accordance with the law of Scotland and shall be subject to the exclusive jurisdiction of the Scottish courts.

IN WITNESS WHEREOF these presents printed on this and the preceding page are subscribed as follows –

for and on behalf of us the said Scottish Water as follows –

Place of signing

Date of signing

Signature of Authorised Signatory

Full name of Authorised Signatory

before this witness –

Signature of witness

Full name of witness

Address of witness

.....

.....

and for and on behalf of us the said [] Council as follows –

Place of signing

Date of signing

Signature of Proper Officer

Full name of Proper Officer

before this witness –

Signature of witness

Full name of witness

.....

.....

This is the Schedule referred to in the foregoing Maintenance Agreement between Scottish Water and [] Council acting in its capacity as local roads authority dated [].

SCHEDULE

PART 1

PART 2

PART 3

APPENDIX 4

Whole Life Cost Spreadsheet

Total 25 year maintenance profiles			
Year	SW - (Backloaded)	RAS	Discount Rate
1	£ 2,241.55	£ 7,343.00	1.035
2	£ 2,165.74	£ 7,094.68	1.071225
3	£ 3,111.05	£ 6,622.96	1.147523001
4	£ 1,953.38	£ 6,399.00	1.187686306
5	£ 1,887.32	£ 6,182.60	1.229255326
6	£ 2,805.99	£ 5,973.53	1.272279263
7	£ 1,761.83	£ 5,771.53	1.316809037
8	£ 1,702.26	£ 5,576.36	1.362897353
9	£ 2,530.84	£ 5,387.78	1.410598761
10	£ 10,493.37	£ 5,205.59	1.459969717
11	£ 1,535.34	£ 5,029.55	1.511068657
12	£ 2,282.67	£ 4,859.47	1.56395606
13	£ 1,433.25	£ 4,695.14	1.618694522
14	£ 1,384.79	£ 4,536.37	1.675348831
15	£ 2,058.84	£ 4,382.96	1.73398604
16	£ 1,292.71	£ 4,234.75	1.794675551
17	£ 1,249.00	£ 4,091.54	1.857489196
18	£ 1,856.96	£ 3,953.18	1.922501317
19	£ 1,165.95	£ 3,819.50	1.989788863
20	£ 7,438.95	£ 3,690.34	2.059431474
21	£ 1,674.87	£ 3,565.54	2.131511575
22	£ 1,051.62	£ 3,444.97	2.20611448
23	£ 1,016.06	£ 3,328.47	2.283328487
24	£ 1,510.63	£ 3,215.92	2.363244984
25	£ 77,350.04	£ 3,107.17	2.445958559
	SW		Roads Authority
TOTALS	£ 134,955.01		£ 121,511.91
£ 256,466.92	53%		47%

Roads Authority Costs					SW Costs				
		Freq.	Unit Cost	Annual Cost		Freq.	Unit Cost	Annual Cost	
Ponds	Grass Cutting, Collection & Disposal	12	£ 150	£ 1,800	Inspect structures, rip rap, clear out/inlets	12	£ 95	£ 1,140	
	Weed Management (general vegetation management)	3	£ 60	£ 180	Inlet Clear and desilt	0.3	£ 500	£ 150	
	Litter Picking	52	£ 20	£ 1,040	Inspect Valves	2	£ 10	£ 20	
	Aquatic plant management	1	£ 100	£ 100	Repair of inlet/outlet, forebay and berm and planting	0.1	£ 5,000	£ 500	
Basins	Grass Cutting, Collection & Disposal	12	£ 150	£ 1,800	Inspect Structures, rip rap, clear out/inlets	12	£ 95	£ 1,140	
	Weed Management (general vegetation management)	3	£ 60	£ 180	Inlet Clear and desilt	0.3	£ 500	£ 150	
	Litter Picking	52	£ 20	£ 1,040	Inspect Valves	2	£ 10	£ 20	
Swales	Swale grass cutting	12	£ 25	£ 300	Repair of inlet/outlet, forebay and berm, planting	0.1	£ 5,000	£ 500	
	Weed Management (Wetland ditch vegetation management)	3	£ 40	£ 120	Silt removal	0.3	£ 250	£ 75	
	Litter Picking	52	£ 20	£ 1,040	Reinstatement of infiltration surfaces	0.1	£ 3,000	£ 300	

	Refurb Cost (50% +O/Head@15%)	Install Cost	Assumption
	CAPEX25	CAPEX1	
Swales	£ 57,500	£ 100,000	(£20m2 - 5000m2)
Pond	£ 71,875	£ 125,000	(£25m3 - 5000m3)
Basin	£ 57,500	£ 100,000	(£20m3 - 5000m3)