

CABINET

Date of Meeting	Tuesday, 17 th December 2019
Report Subject	Proposals for Infrastructure Improvements at Standard Yard Waste Transfer Station
Cabinet Member	Deputy Leader of the Council and Cabinet Member for Streetscene & Transportation
Report Author	Chief Officer (Streetscene and Transportation)
Type of Report	Strategic

EXECUTIVE SUMMARY

With the introduction of new policies to encourage the reduction of side waste and increased recycling through weekly food and kerbside collections, as well as ongoing promotion and increased awareness around waste reduction, recycling rates in Flintshire have increased significantly and the WG 2024 target of 70% has almost been achieved 5 years earlier than planned (The rate is currently 69.18%).

As a result, Standard Yard's Waste Transfer Station (WTS) has seen significant growth in processing demand, both in terms of the quantity and quality of recyclable materials collected at the kerbside in recent years. However, the WTS is now operating at its maximum capacity, and lacks the space and facilities to be able to take in more materials and/or additional waste streams for processing. Without further development and investment the facility, there is a risk that the rise in the quantity of the materials collected will start to compromise the quality. Consequently, the facility is at a critical point and significant further investment in infrastructure is required to ensure the continued viability of the site and accommodate future growth in processing capacity.

Subject to funding, an opportunity has now arisen for the site to be extended to enable the WTS to operate under cover on one single site and to increase the size of the site, which would enable future growth and capacity, as well as improve efficiency and environmental compliance on site. In turn, the new facility would enable the Council to deliver an increase in recycling rates, reduce material contamination and increase the quality of the recyclable materials, thereby maximising potential income for recyclable materials for the Council.

This report outlines the proposals for funding the development of the WTS and seeks approval to progress with the project.

RECOMMENDATIONS	
1	That Cabinet notes the proposals for developing the Standard Yard WTS.
2	That Cabinet approves the proposed funding bids and investment required for the improvements to Standard Yard WTS.

REPORT DETAILS

1.00	EXPLAINING THE BACKGROUND TO THE PROPOSALS
1.01	The Collections Blueprint for Affordable and Sustainable Local Authority Collection Services for Recyclable, Compostable and Residual Waste describes the Welsh Government's recommended service profile for the collection of waste and recycling from households. It provides a system that, if adopted across the whole of Wales, would result in high rates of high quality recycling, significant cost savings and improved sustainable development outcomes. Whilst achieving a far greater degree of consistency of service across Wales, it nevertheless allows a degree of flexibility in approach and allows for services to be tailored for specific circumstances and in accordance with local needs. The Blueprint is intended to help local authorities achieve the recycling targets set in the Waste (Wales) Measure 2010, and provide the best overall service for the people of Wales and future generations.
1.02	As recommended by the Collections Blueprint, Flintshire currently provides a weekly collection service for Flintshire residents for dry recyclables and food waste on a single pass via the use of modern multi-compartment vehicles through a kerbside sort system, which includes the acceptance of paper, card, tin/aluminium cans, glass, metals and mixed plastics. Additionally, the weekly collection of food waste (not co-mingled with green waste) provides residents with free compostable liners as advocated by Welsh Government (WG). In Flintshire, we also provide fortnightly residual waste collections and we have a strict 'no side waste' policy in place, which is enforced, as well as a fortnightly collection service for garden waste with a charge to residents for the use of the service. Again, these services also follow the WG Collections Blueprint.
1.03	Once collected, all dry recyclables and food waste are taken to one of the Council's Waste Transfer Stations (WTS) and Materials Recovery Facility (MRF) at Standard Yard on the Spencer's Industrial Estate in Buckley, where the materials are either separated further and baled (e.g. plastics, tins and cans) or bulked (e.g. food waste, glass, paper and card) before being sent for onward processing, treatment and recycling. The collected plastic, tins and cans are sorted and separated and processed into bales on site, whilst the glass, paper and cardboard, are deposited into bays or containers and bulked up on site before being hauled for processing elsewhere. A separate WTS is also provided at Greenfield Business Park near Holywell; however, this site currently does not have an MRF.
1.04	With the introduction of new policies to encourage the reduction of side waste and increased recycling through weekly food and kerbside

	collections, as well as ongoing promotion and increased awareness around waste reduction, recycling rates for the County have increased significantly and the WG 2024 target of 70% has nearly been achieved (currently 69.18%). As a result, Standard Yard's WTS has seen significant growth in demand in terms of the quantity and quality of recyclable materials received there in recent years.
1.05	However, the WTS is now operating at its maximum capacity, and lacks the space and facilities to be able to take in more materials and/or additional waste streams for processing. The WTS also operates across two sites in the same location and on separate sides of a public access road to the industrial estate, which can cause logistical difficulties with collection vehicles, on site plant and haulage vehicles.
	At peak times of the year, the site struggles to cope in terms of space and room for processing, depositing and storage of materials. Without further development of the facility, there is a risk that the rise in the quantity of the materials collected will start to compromise the quality. Consequently, the facility is at a critical point and further investment in infrastructure is required to ensure the continued viability of the site and accommodate future growth in processing capacity.
1.06	In order to exceed the WG targets and accommodate increased recyclable materials in the future, the existing site and infrastructure would need to be developed and improved. An opportunity has now arisen for the site to be extended to enable the WTS to operate under cover on one single site and to increase the size of the site, which would enable future growth and capacity, as well as improve efficiency and environmental compliance on site. In turn, a new facility would enable the Council to increase recycling rates further, reduce material contamination and increase the quality of the recyclable materials, thereby maximising potential income for recyclable materials for the Council.
1.07	Additionally, the current baling and sorting machine, which was purchased in 2013 and is used for the operation of the Council's MRF for the separation of plastic, aluminium cans and steel cans, has helped to increase the Council's capacity to process the recovery of these materials and maximise the material quality; however, in recent times the plant has experienced recurrent mechanical failures, which has resulted in significant downtime that impacts on the operation on a regular basis (approx. every month for 3-4 days at a time).
	This in turn has necessitated temporary processing arrangements through external third parties, which incurs additional haulage costs and necessitates collection vehicles having to deposit materials at Greenfield WTS some distance away, which in itself presents other logistical challenges and creates more downtime for collection crews and vehicles. With the proposed changes to the site, there is an opportunity to renew the baling machine, plant and equipment, and introduce increased automated processing on site with less manual processing.
1.08	Furthermore, the welfare facilities for the workforce at the Standard Yard WTS are reaching the end of their lifespan and are becoming more and more costly to repair and maintain, with issues arising regularly at the

facility such as roof leaks and building repairs. With the proposals, there is an opportunity to renew and improve the facilities, which in turn would increase job satisfaction, value of employees and contribute to the well-being of the workforce.

- 1.09 The opportunity has arisen for the existing site to be developed to gain additional space and capacity by extending the WTS over the un-adopted section of road and by providing a new access road to the Spencer's Industrial Estate off Globe Way (indicative layout plan enclosed in **Appendix 1**). This would enable improved access for the businesses on the industrial estate and it would allow the WTS to operate over one single site rather than the current operation of both sides of the access road, which has its limitations. The existing shed facility, which houses the current baling and sorting machine, would be demolished and a new larger shed facility built on the new site to allow for the depositing of materials such as glass, plastic, cans, paper and cardboard, with the materials recovery process and storage to be undertaken under cover on one single site.
- 1.10 Under the proposals, the existing baling and sorting machine would be relocated to Greenfield WTS to provide additional capacity and resilience at peak times. A new MRF with sorting conveyors, screeners, baling presses and balers will be procured and installed in the new shed, which will enable the authority to increase the volume of materials collected and provide opportunities for baling additional materials such as paper and cardboard, which are now bulked and hauled as loose materials. MRFs are being increasingly used to provide quality raw materials to industry. MRFs are designed to separate recyclables into their individual material streams and prepare them for sale in the commodity markets. Other MRFs exist across the UK and case studies are available, such as Exeter, Milton Keynes, Reading and Rhondda Cynon Taff. All facilities have demonstrated increased capacity to process recyclable materials with recovery rates in excess of 97% (i.e. for every 100 tonnes of recyclables that are taken into the facility 97 tonnes are recycled into new products).
- 1.11 The proposed improvements would ensure that the site, plant and equipment are more efficient and cost effective to operate, and it would enable the service to increase its resilience and capacity for processing more recyclable materials on site in the future, which in turn would ensure that we maximise the quality, recovery and rates of recyclable, re-usable and compostable waste, and reduce landfilled waste. Other improvements include:
 - New access road off Globe Way into Spencer's Industrial Estate, which will improve access onto the industrial estate for other businesses and users of the industrial estate
 - New plant (loading shovels, telehandlers etc.)
 - New weighbridge and office facility for the weighbridge
 - Improved welfare facilities for collection crews and workforce on site (drying room, ladies and gents WC/showers, kitchen/canteen seating area), which in turn would lead to increased job satisfaction, reduced sickness absence levels and staff retention

- Improved security (CCTV, barriers, fencing etc.) and lighting systems.
 Although the existing site is protected by CCTV and robust boundary fencing, it can be vulnerable to metal theft with bales of recyclable materials stored outside. By having the new waste transfer station wholly indoors and under one large shed, the security of the site would be improved
- Improved environmental compliance i.e. by having the operation indoors and wholly under cover, there would be a reduction in noise and litter
- Inclusion of an Educational Visitor Centre at the new site. It is
 proposed that an educational centre would be incorporated into the
 design of the new site, which would enable schools and other groups to
 conduct educational visits to the site to learn about recycling and waste
 management

1.12 The costs for the scheme are set out below: -

Item	Cost £000
MRF baling / sorting plant	500
New welfare facility	50
New shed	1,250
New plant (loading shovels, telehandlers etc.)	250
New access road	400
Detailed design	40
Planning costs	15
Security / CCTV systems	30
New office facility for weighbridge	30
Relocation of / new weighbridge	30
Extension to existing yard	100
Ecological	50
Demolition costs	100
Relocation of old baling / sorting machine	50
Boundary fencing	20
Signage / line painting	10
Traffic Regulation Orders	10
Sub-Total	2,935
10% Contingency	293.5
TOTAL	3,228.5

1.13 It is proposed that the capital costs for the scheme will be funded as follows: -

Invest to Save (WG)	£1.2m
Flintshire's Capital Funding (already committed for 2020-2021)	£1.2m
Collaborative Change Programme (WG)	£0.8m
AHP Collections (WG)	£0.05m
TOTAL	£3.25m

1.14 Capital funding bids are being made through the Invest to Save funding grant and Collaborative Change Programme. It is intended that the Invest to Save grant will be repaid to WG over a 10-year period, commencing in

	2021-2022, which will be funded through revenue savings generated from the improvements made to the site, increased productivity and efficiency and a reduction in downtime.		
1.15	Once fully operational, the annual revenue savings for the service are estimated as follows: -		
	Reduced overheads (staffing, supervision)	£54k	
	Increased recycling rates / quality of materials	£10k	
	Reduced maintenance costs	£54k	
	Reduced plant and equipment	£39k	
	Increased productivity / reduced downtime	£56k	
	TOTAL	£213k	

2.00	RESOURCE IMPLICATIONS
2.01	Revenue: There are no implications for the approved revenue budget for this service for the current financial year. The funding sought through the Invest to Save Funding Grant is intended to be repaid to WG over a 10-year period commencing in 2021-2022, which will be funded through revenue savings generated from the improvements made to the site, increased productivity and efficiency and a reduction in downtime (see 1.15 above).
2.02	Capital: The approved capital programme for 2020-2021 includes £1.2m funding for the proposed improvements to Standard Yard WTS.
2.03	Human Resources: There are no implications for additional capacity or for any change to current workforce structures or roles.

3.00	IMPACT ASSESSMENT AND RISK MANAGEMENT		
3.01	Ways of Working (Sustainable Development) Principles Impact		
	Long-term	Positive - Welsh Government's review of the Blueprint and increases to recycling targets will have an impact on the Local Authority's ability and capacity to recycle more. The improvements proposed aim to future proof the current waste transfer station site and build in capacity to accommodate an increase in recycling performance and potential additional waste streams; additionally, the infrastructure improvements would ensure improved environmental compliance i.e. by having the operation indoors and wholly under cover, there would be a reduction in noise and litter on the site; Inclusion of an Educational Visitor Centre at the new site. It is proposed that an educational centre would be incorporated into the design of the new site, which would enable schools and other groups to conduct educational visits to the site to learn about recycling and waste management.	
	Prevention	Positive - Improved welfare facilities for collection crews and workforce on site, which in turn would lead to increased job satisfaction, reduced sickness absence levels and staff retention	

Integration	No impact
Collaboration	The proposals will provide an opportunity for the County
	Council to work with community groups to promote recycling awareness and waste management through the educational visitor centre
Involvement	Improved engagement with Flintshire residents, schools,
	community groups through the educational visitor centre

Well-being Goals Impact

Prosperous Wales	Positive – the proposals are aimed to maximise the quantity and quality of recyclable materials recovered and the design of the new building will include solar panels (renewable energy) and ensure that resources are used efficiently. The educational centre would enable schools and other community groups to carry out educational visits to the site and learn about recycling and waste management
Resilient Wales	Positive – the construction of the site and infrastructure improvements will improve environmental compliance on site and will ensure that the natural environment and surrounding land is managed appropriately and supports ecological resilience, making the environment healthier for wildlife and people
Healthier Wales	Positive - The improvements to welfare facilities on site will help to support the health and well-being of the workforce; the improved layout to the site aims to reduce vehicle movements and emissions (solar panels)
More equal Wales	Positive - The educational centre would enable schools and other community groups to carry out educational visits to the site to enable people to learn about recycling and waste management and develop their knowledge
Cohesive Wales	No impact
Vibrant Wales	Positive – through the promotion of recycling and reduction in waste, support people to engage with culture in their daily lives
Globally responsible Wales	Positive – The proposals aim to accommodate increased recyclable materials, ensuring that our supply chains are fair, ethical and sustainable and ensure that resources are used efficiently and contribute to global wellbeing by reducing the reliance on the extraction of raw materials and destruction of natural habitats and ecosystems by the reprocessing of recyclable materials.
If no action was taken, plant a	and equipment would continue to experience

3.02

If no action was taken, plant and equipment would continue to experience increased down time and/or, at worst, fail, which could potentially result in service failure and/or necessitate hiring in plant / equipment that is more costly or contracting processing operations, which again is more costly. Breakdown of plant can also increase the likelihood of rejected payloads for recyclable materials, which is costly and time consuming to rectify. The condition of welfare facilities would continue to deteriorate and become unviable to use, which would affect where staff could take breaks / access

	welfare facilities on site and could result in closure of site if no alternative was available. Additionally, it is likely that we will exceed capacity of the site and be unable to keep up with demand and maintain our ability to process recyclable materials on site, which could lead in failure to achieve recycling targets set by Welsh Government and meet Council Plan objectives, resulting in financial penalties for the Authority.
3.03	A delivery project team will be established to monitor the delivery of the project.

4.00	CONSULTATIONS REQUIRED/CARRIED OUT
4.01	Consultation with Cabinet Member required.
4.02	Consultation with workforce and Trade Unions required. Operational staff were involved in the formulation of the idea and development of proposals to ensure that they meet the identified needs and are fit for purpose; the impact is intended to be positive, as it would lead to improved welfare facilities, a more efficient layout for the site and increase the reliability of plant and equipment.
4.03	The new facility will require planning permission, so the impact on neighbouring businesses will need to be considered along with the main freeholder for the industrial estate, Spencer's Industrial Estates.
4.04	Initial discussions have already taken place with the Spencer family, who were receptive to the proposals and welcomed the move to a single separate site under cover and a new access road for the industrial estate. More detailed and formal discussions will be required as the project progresses.
4.05	Natural Resources Wales (NRW) will also need to be consulted in relation to changes to the environmental permit; however, initial discussions regarding the proposals have been met favourably by NRW officers.
4.06	Consultation with contractors required. The impact on haulage companies collecting from site will need to be considered: the plans are being developed and proposed with a view to improving access to the site to enable hauliers to manoeuvre more easily and separate haulage from the processing operations.
4.07	Environment Overview and Scrutiny considered the matter at their meeting in December 2019 and recommended Cabinet approve the investment detailed in this report.
4.08	The Local Members whose ward the site is located have been consulted and their comments will be considered during the detailed design work.

5.00	APPENDICES
5.01	Appendix 1 – Indicative layout plan for Standard Yard WTS.

6.00	LIST OF ACCESSIBLE BACKGROUND DOCUMENTS
6.01	The Welsh Government's Collections Blueprint.

7.00	CONTACT OFFICER DETAILS
7.01	Contact Officer: Stephen Jones Telephone: 01352 704700
	E-mail: stephen.o.jones@flintshire.gov.uk

8.00	GLOSSARY OF TERMS
	WTS - Waste Transfer Station, which is a building / processing site for the temporary deposition of waste or recyclable materials before they are sorted, baled or bulked for onward processing, treatment and recycling.
	MRF - Materials Recovery Facility, Materials Reclamation Facility, Materials Recycling Facility or Multi Re-use Facility (MRF, pronounced "murf") is a specialised plant that receives, separates and prepares recyclable materials for marketing to the end-user manufacturer