TRDC Climate and Sustainability Impact Assesment

Score / Colour Code	Impact and Recommendation
Dark green (4)	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.
Light green (3)	Some positive impact for sustainability. Recommendation to further enhance this aspect where possible and proceed.
Yellow (2)	Some possible negative impacts for sustainability. Recommendation to review these aspects and find mitigations where possible.
Red (1)	**Considerable inconsistency with the council's sustainability objectives. Strong recommendation to review these aspects and find mitigations.**
Grey (0)	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.

Guidance for use
Please answer all questions from the drop-down options in the 'impact' column (C), including 'not applicable' as needed.

Please email your completed copy of the form to Joanna.Hewitson@threerivers.gov.uk.

Key to the colour coding of answers is given at the top of the page.

Name of project/policy/procurement and date		Beryl Bikeshare scheme expansion areas Rickmansworth, South Oxhey & Leavesden/Abbots Langley
Brief description (1-2 sentences):		An extension of the existing Watford & Croxley Beryl Bikeshare scheme giving access for more 3RDC residents to the main Watford & Croxley Green scheme scheme in 3 new areas of Rickmansworth , South Oxhey & Leavesden/Abbotts Langley boarding areas of Watford Borough. Funding being used for additional parking bays and eBikes for the scheme.

Homes, buildings, infrastructure, equipment and energy

	Question	Impact (select from list)	Score (-1 to 4)	Justification or mitigation	Impact (select from list)	Revised Score (1-4)
1	**What effect will this project have on overall energy use (electricity or other fuels) e.g. in buildings, appliances or machinery?**	Some possible negative impacts for sustainability. Recommendation to review these aspects and find mitigations where possible.	2	Battery charging for ebikes , renuables energy provider used	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	3
2	**What effect will this project have on the direct use of fossil fuels such as gas, petrol, diesel, oil?**	**Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.**	4	Potential to reduce car journeys	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
3	**Does this project further maximise the use of existing building space? *E.g. co-locating services; bringing under-used space into use; using buildings out-of-hours***	**Considerable inconsistency with the council's sustainability objectives. Strong recommendation to review these aspects and find mitigations.**	-1	Uses current facilities , so no increased impact	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
4	**Will any new building constructed or refurbished be highly energy efficient in use? *(e.g. high levels of insulation, low energy demand per sq. m., no servicing with fossil fuels such as gas heating, EPC "A" or BREAM "excellent").***	**Some positive impact for sustainability. Recommendation to further enhance this aspect where possible and proceed.**	3		Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0
5	**Does this make use of sustainable materials / inputs in your project? *E.g. re-used or recycled construction materials; timber in place of concrete***	**Some positive impact for sustainability. Recommendation to further enhance this aspect where possible and proceed.**	3		Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0
6	**Does this use more sustainable processes in the creation of the project? *E.g. modular and off-site construction; use of electrical plant instead of petrol/diesel,***	**Some positive impact for sustainability. Recommendation to further enhance this aspect where possible and proceed.**	3		Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0
7	**Will this increase the supply of renewable energy? *e.g. installing solar panels; switching to a renewable energy tariff***	**Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.**	0		Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but	0
8	**Do any appliances or electrical equipment to be used have high energy efficiency ratings?**	**Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.**	0		Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but	0
	Average Score		**2.33**			**3.67**

Ways to optimise sustainability and work towards net zero carbon:
- Insulate buildings to a high standard.
- Include energy efficiency measures when carrying
- Replace gas boilers with renewable heating, such as heat pumps. Consider District Heat Networks where appropriate.
- Construct new buildings to Passivhaus standard.
- Design and deliver buildings and infrastructure with lower-carbon materials, such as recycled material, wool- or hemp-based insulation, and timber frames.
- Use construction methods that reduce overall energy use, such as modular, factory-built components, or use of electrical plant on-site.
- Install solar panels or other renewable energy generation, and consider including battery storage.
- Switch to a certified renewable energy provider e.g. utilise power purchase agreements (PPA)
- Use energy-efficient appliances.
- Install low-energy LED lighting.
- Install measures to help manage building energy demand, such as smart meters, timers on lighting, or building management systems.

Travel

	Question	Impact	Score (0-4)	Justification or mitigation	Impact (select from list)	Revised Score (0-4)
9	Reducing travel: what effect will this project have on overall vehicle use?	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	providing a sustainable active travel option Vs use of a car - this expansion alone will replace car journeys and estimate to save save over 500 kg of co2 per year (based on the results from the recent croxley green expansion & the overall Watford scheme Calculations of 61.16 tonnes of co2 saved from the scheme launch in 2020)	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
10	Will this project use petrol or diesel vehicles or EV, hybrid?	**Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.**	0	Electric Vans Used	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
11	Will this support people to use active or low-carbon transport? *E.g. cycling, walking, switching to electric transport*	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	providing access to bikes as a sustainable alternative to cars	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
12	Will it be easily accessible for all by foot, bike, or public transport, including for disabled people?	Some possible negative impacts for sustainability. Recommendation to review these aspects and find mitigations where possible.	2	not currently available for disabled use, however we are looking into this area with Watford Borough Council to set up a pilot trial (subject to funding)	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4

Ways to optimise sustainability and work towards net zero carbon:

- Reduce the need to travel e.g. through remote meetings, or rationalising routes and rounds.
- Share vehicles or substitute different modes of travel, rather than procuring new fleet.
- Specify electric, hybrid, or most fuel efficient vehicles for new fleet or for services involving transport.
- Support users and staff to walk, cycle, or use public transport e.g. with cycle parking, training, incentives.
- Use zero-emission deliveries
- Model and mitigate the project's effect on traffic and congestion e.g. retiming the service or deliveries

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13	Has the project taken steps to reduce traffic? *Using e-cargo bikes; timing activities or deliveries to be outside peak congestion times*	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	overnight electric van used to redistribute bikes on the scheme	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
	Average Score		**3.50**			**4.00**

Goods and Consumption

	Question	Impact	Score (0-4)	Justification or mitigation	Impact (select from list)	Revised Score (0-4)
14	Has this project considered ways to reuse existing goods and materials to the greatest extent possible, before acquiring newly manufactured ones?	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0		Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but	0
15	Does it reduce reliance on buying newly manufactured goods? *E.g. repair and re-use; sharing and lending goods between services or people; leasing or product-as-a-service rather than ownership*	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0		Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0
16	Does it use products and resources that are re-used, recycled, or renewable?	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0		Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but	0
17	Does it enable others to make sustainable choices within their lifestyles, or engage people about this?	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	encourages active travel	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
18	Is there a plan to reduce waste sent to landfill in manufacture?	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	Minimal waste created , majority of which is recycled	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
19	Is the material used able to be re-used, re-purposed, or recyled at end of its life?	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	Majority of the assets are fully recycleable	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
20	Has it taken steps to ensure any food it offers is more sustainable? *E.g. less and high-quality (high welfare) meat and dairy; minimises food waste; seasonal produce; locally sourced.*	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0		Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but	0
	Average Score		**4.00**			**4.00**

Ways to optimise sustainability and work towards net zero carbon:

- Procure goods through sharing, leasing, or product-as-a-service models rather than ownership.
- Use pre-owned and reconditioned goods, and reduce reliance on procuring new goods.
- Use recycled materials, and procure items that can be reconditioned or recycled at end-of-life.
- Use lifecycle costing in business cases to capture the full cost of operation, repair and disposal of an item.
- Ensure meat and dairy is high-quality, high-welfare.
- Design waste, including food waste, out of business models e. g. separating (and composting) food waste; replacing single-use items with reusable items.
- Use contact points with residents, community groups and businesses to engage and enable them to adopt low-waste, low-carbon behaviours.

Ecology

	Question	Impact	Score (0-4)	Justification or mitigation	Impact (select from list)	Revised Score (0-4)
21	What effect does this project have on total area of non-amenity green/blue space? (Amenity green space = playing fields, play areas, sporting lakes etc. Non-amenity= e.g. woodland, grassland, wetland, gardens, lakes, rivers, ponds etc.)	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0		Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but	0
22	Does the project create more habitat for nature? E.g. native plants, trees, and flowers	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0		Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but	0
23	Does it make changes to existing habitats and have a negative impact on nature? *E. g. use of pesticides, reduced extent and variety of plants, planting non-native species*	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0	No negative impact on nature	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
24	Does it help people understand the value of biodiversity, and encourage residents to support it in their private and community spaces?	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0	Encouraging active travel and awareness of the local environment from both commuting and leaisue	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
	Average Score		**0**			**4.00**

Ways to optimise sustainability and work towards net zero carbon:
(Seek advice from Landscapes Team if required)

- Avoid converting green space to hard surfacing.
- Use underutilised space for planting, such as green roofs and walls.
- Plant native plants and perennials, rather than non-native ornamental species, to encourage biodiversity.
- Reduce trimming of grass and hedges, and avoid use of synthetic pesticides.
- Provide space for animals e.g. long grass areas, bird boxes, bat boxes, 'insect hotels', ponds, hedgehog hides and passages, log piles
- Consider the ecological impacts from manufacture and use of procured goods, e.g. water pollution; water consumption; land use change for farming; pesticide use; organic/regenerative

Adaptation

	Question	Impact	Score (0-4)	Justification or mitigation	Impact (select from list)	Revised Score (0-4)
25	Does any planned project, construction or building use include measures to conserve water?	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0		Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but	0
26	Does anythe project , consider how to sustainably protect people from extreme weather?	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0		Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but	0
27	Has any planned building work or infrastructure considered how to mitigate flood risk? *E.g. Sustainable Drainage Systems (SuDS); de-paving areas; green roofs*	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0		Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but	0
28	Does any planned infrastructure or building work increase the overall footprint of hard surfacing? (as opposed to green or permeable surfacing)	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0		Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but	0
29	Has the project considered its own resilience to future extreme heat, flood risk, or water shortage?	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0		Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but	0
	Average Score		**0.0**			**0.00**

Ways to optimise sustainability and work towards net zero carbon:

- Install water-saving devices in taps, showers and toilets
- Re-use grey water in new developments
-Capture and re-use rainwater where possible e.g. water butts for use in car washing, watering garden, toilets
- Ensure all new building or refurbishment (especially of homes) models and mitigates future overheating risk, with adequate ventilation and shading
- Avoid increasing areas of hard surfacing.
- Convert hard surfacing to green and permeable surfacing where possible, and install Sustainable Drainage systems (SUDS).
- Plant drought-tolerant plants and mulch landscapes to avoid water loss through evaporation.

Engagement and Influence

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	Question	Impact	Score (0-4)	Justification or mitigation	Impact (select from list)	Revised Score (0-4)
30	Does this project raise awareness and understanding of the climate and ecological emergency, and the steps that people can take?	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	regular communications with users to promote sustainanble active travel	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
	Average Score		**4**			**4**
	Total Overall Average Score		**2.3**			**3.3**

Ways to optimise sustainability and work towards net zero carbon:
- 'Make every contact count', by using contact points with residents, businesses and community groups to promote understanding of the climate emergency.

Climate and Sustainability Impact Assessment Summary	
Homes, buildings, infrastructure, equipment and energy	3.67
Travel	4.00
Goods and Consumption	4.00
Ecology	4.00
Adaptation	0.00
Engagement and Influence	4
Total Overall Average Score	**3.3**