TRDC Climate and Sustainability Impact Assessment

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'

Name of project/policy/procurement and date		1st CW Scout HQ - Build Back Better
Brief description (1-2 sentences):		Refurbishment of HQ building to make accessible for community use with disabled facilities, baby change/accessible facilities, and

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?**	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	Reduced use of electricity through replacing existing light (Inc. CFL) fittings with LEDs, using occupancy sensors to prevent lights being left on. The installation of more toilets and changes to use of the current kitchen gives us the opportunity to move water heaters from the current inefficient gas water heater to modern thermally efficient multipoint-type heaters.	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
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	Reduced use of gas for heating, by increased insulation to walls and ceilings in areas being scoped. Replacing inefficient wall water heater with high efficiency (insulated) small (multipoint-type) heaters + a modern replacement hot water heating solution for the kitchen usage. Our realistic position today is that we will need to one of the following options: 1. feasibility for Air-sourced heat pump + suitable thermal water store – though this is expensive and currently under investigation / discussion with CPLM. 2. Electric Mega flow-type eco-cylinder (suitable for heat-pump use, used initially on an electric green energy tariff) for large-volume hot water cylinder (electric heated) – this will likely be our preference (see below). 3. another suitable solution that is significantly more efficient than we currently have – a highly efficient combi-boiler is our backstop (and budgeted) position. Phase 4 will look at replacing the concrete roof, and at that point solar PV or solar thermal panels + suitable thermal water store will be a good option. Option 2 above is our expected direction, because it would allow us to install a water cylinder that can be electric heated from day 1, but compatible with heat-pump or Solar thermal panels to heat. Options 1 and Phase 4 would then work with the cylinder in option 2 above. Our backstop (budgeted position) is a combi boiler as a short-term fix if this is not possible (as the cylinder option pricing for option 2 is broadly similar) .	**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***	**Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.**	4	Poorly used store rooms will be brought in to use to increase toilet facilities. Poorly used store room turned to functional kitchen use with efficient storage. Existing non-useful kitchen turned to disabled wet room and accessible toilet facilities. Existing garage that stores unused trailer and unused other equipment (old Kayaks) will be converted to camp store room to consolidate storage to useful (and efficient) stores rather than the sprawling mass of current inefficiency	**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").***	**Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.**	4	No new buildings, but existing 1970 wall panelling removed and replaced with thermally efficient (insulated) PIR Plasterboard to increase R-value of external walls and ceiling cavities in all areas affected by these plans. We see this as a roadmap for the future for any future renovations (i.e. roof replacement - which isn't in this phase, to increase thermal efficiency).	**Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.**	4
5	**Does this make use of sustainable materials / unputs 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	FSC sourced timber will be used. For composite toilet partitions, intention to source HDPE based partitioning (sustainable, made from recycled materials, and further recyclable beyond). The materials used to upgrade to the fire escape route will be considered against this criteria.	**Some positive impact for sustainability. Recommendation to further enhance this aspect where possible and proceed.**	3
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,***	**Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.**	4	Unfortunately, with the exception of the washroom panels mentioned above, manufacturing offsite won't be possible due to the project refurbing what already exists (and reuse where possible).All plant used on site (lifts / hoists / access equipment) will be electrical wherever possible.	**Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.**	4

Ways to optimise sustainability and work towards net zero carbon:

- Insulate buildings to a high standard.
- Include energy efficiency measures when carrying out refurbishment to deliver improvement in EPC ratings.
- 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 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.

7	**Will this increase the supply of renewable energy? *e.g. installing solar panels; switching to a renewable energy tariff***	**Some positive impact for sustainability. Recommendation to further enhance this aspect where possible and proceed.**	3	HQ is in a shady position and currently has a concrete asbestos roof. When the roof can be renewed, PV and solar thermal will be further reconsidered. Heat pumps (air and borehole ground source) will be considered - noting that the roof insulation and windows will need addressing as part of a wholesale upgrade required to meet the U-values for heat pumps, including heating + pipe sizes. Even if these are not viable in the near-term, we aspire to replace the roof with a type which improves the ecological aspect - hence would look to consider a living/sedum roof to reduce run-off and stabilise rainfall. The building covers >50% of the plot, hence this is a significant upgrade option. With energy, we intend to conduct an energy review and would consider renewable energy as long as the increased usage (hiring) of the building supports the additional cost of tariffs.	**Some positive impact for sustainability. Recommendation to further enhance this aspect where possible and proceed.**	3
8	**Do any appliances or electrical equipment to be used have high energy efficiency ratings?**	**Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.**	4	New kitchen appliances, modern water heating solutions (prefer renewable / green heat sources if found feasible - currently under investigation/discussion with CLPM) will have current/modern spec high efficiency rating. All lighting will be replaced to current modern efficient specifications (all lighting is old/inefficient). Showers will be efficient (heat only water used) as will water heaters.	**Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.**	4
	Average Score		**3.75**			**3.75**

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	The upgrade of kitchen, halls and toilet facilities will mean the building is suitable for local community use. The building will be the only central Chorleywood building with these facilities - hence walking distance from all local housing and the underground station. This will reduce vehicle travel as currently users using similar facilities in Chorleywood are using halls outer edge of the village (further away, less accessible), which naturally people tend to drive to. The plan for better toilet and shower facilities is that other Scout groups can use it as a base for Chiltern Hills and London weekends, reducing their need for vehicles to be used when travelling into London, due to the locality to the LUL station. Our survey (nationally to other Scout Groups) on this has confirmed that this will be a popular use case of the building.	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	N/A	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0
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	Central Chorleywood location - cannot be emphasised enough - walkable from everywhere within the village, unlike all other current halls in Chorleywood (which are on the edge, or up steep hills), and where most people currently drive to. Sleep over facilities in the hall will encourage groups to explore the local area (on foot) as Chorleywood has many amazing walks (Chess valley, Chilterns, etc.). Installation of a Bike Rack will encourage local cycling over motor use. Charging points for e-bikes is currently aspirational, but if demand is there - we would support this. Better lighting around the building will make foot use safer	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?	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	Yes - step-free access to the site from all public transport. The only current challenge is the site itself where the entrance and building is not accessible (step access). The renovations will allow wheelchair users access via flat and step-free methods.	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
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	Bike rack - to encourage bike usage to reduce traffic. Allowing more use of faculties during the day will reduce pressure on other high traffic and congestion areas in Chorleywood such as the memorial hall. Central location (again) - all reduce traffic in the village by providing a much needed central community facility.	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
	Average Score		**4.00**			**4.00**

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

Goods and Consumption

Question	Impact	Score (0-4)	Justification or mitigation	Impact (select from list)	Revised Score (0-4)

Ways to optimise sustainability and work towards net zero carbon:

14	Has this project considered ways to reuse existing goods and materials to the greatest extent possible, before acquiring newly manufactured ones?	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	As this project is a refurb, the upgrade of existing walls, floors is embedded. The project has been designed with the minimal removal (supported by the plans). Kitchen & washroom doors, timber, partitions and equipment will be reused where viable. Timber from existing racking will be re-used for racking out the garage store where viable. Scouts are great at re-use and minimising waste.	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	- 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.
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*	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	The works are focused around an adaptive reuse proposal for the existing building. This will reuse the existing structure so avoiding carbon and the use of lots of new materials.	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	
16	Does it use products and resources that are re-used, recycled, or renewable?	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	We have focussed on using recycled washroom partitioning where possible and FSC timber for renewable and sustainable sources.	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	
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	Inherently the more flexible and attractive we make the building (attractive, to needs - not just cosmetics), the more attractive the building will become to local groups. Being in the heart of the village (unlike ALL other meeting places) means this will be the most central (and shortest distance) to get to for most people. This encourages walking/cycling as a lifestyle choice and keeps engagement with the village.	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	Only the minimum will be sent to landfill - licenced waste carriers will be used (which will sort contents of skips). Plasterboard disposal will be via plaster recycling methods. Reuse will reduce landfill. Contractors will be vetted on including material separation in their methodology. Scout volunteers will assist with environmental disposal or reuse of recyclable materials rather than going to landfill.	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 recycled at end of its life?	Some positive impact for sustainability. Recommendation to further enhance this aspect where possible and proceed.	3	All timber will be reusable. Composite recycled material (i.e. intended toilet partitions) would have further life.	Some positive impact for sustainability. Recommendation to further enhance this aspect where possible and proceed.	3	
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.*	Some positive impact for sustainability. Recommendation to further enhance this aspect where possible and proceed.	3	The upgrade of the kitchen will allow greater preparation area - and allow more use of base ingredients rather than the current need to take shortcuts due to lack of food hygiene safe prep space. Groups using the building will be encouraged and championed to also do so.	Some positive impact for sustainability. Recommendation to further enhance this aspect where possible and proceed.	3	
	Average Score		**3.71**			**3.71**	

Ecology

	Question	Impact	Score (0-4)	Justification or mitigation	Impact (select from list)	Revised Score (0-4)	Ways to optimise sustainability and work towards net zero carbon: (Seek advice from Landscapes Team if required)
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.)	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	The project increases the quantity of non-amenity space by reducing clutter and increasing storage for items currently stored outside. The building will flow to the outdoor space better, making it accessible and more attractive. Our aspiration in a future phase is to replace concrete roof with a living roof in the medium-term to reduce hard surfaces and therefore affecting the rainfall run-off by softening >50% of the plot area.	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	- 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 farming methods
22	Does the project create more habitat for nature? E.g. native plants, trees, and flowers	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	We intend to add swift boxes, bat boxes and bug boxes as part of the program with the Scouting sections. It's a great way to demonstrate and energise the young people to learn and practice by doing - in a practical way that is relevant to the nature on the doorstep. The increased non-amenity space will allow Scout groups to grow vegetables in micro plots around the back yard. This in turn should increase nature (bugs/bees).	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	
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*	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	Not in a negative way at all - only positive.	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	Certainly if we can realise the living roof it will - but as that's not part of this phase - it can only score zero.	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0	
	Average Score		**4**			**4**	

Adaptation

	Question	Impact	Score (0-4)	Justification or mitigation	Impact (select from list)	Revised Score (0-4)	Ways to optimise sustainability and work towards net zero carbon:

25	Does any planned project, construction or building use include measures to conserve water?	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	Internally the washrooms, and kitchens will all use also low flow sanitaryware. Showers will be efficient electric-type which only heat the water they use, but will be limited in power to limit both energy use and therefore hot water flow. This will reduce water consumption in the building. Rainwater will be collected for irrigation for the scouts allotment (micro plot) use mentioned above. See above for aspirations on living roof to replace the concrete roof in the medium term.	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
26	Does the project , consider how to sustainably protect people from extreme weather?	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	The building ramped front will include Aco Drains which will be used to a soakaway. Rainwater will be confirmed to use soakaways, not main drains. The building naturally is good with extreme heat - but this will be further improved with increased insulation.	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
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	Unfortunately not possible within the current project phase (the changes are mostly internal), but will be seriously considered for the future - see Sedum/Living roof aspiration to reduce the overall hard surface of the entire plot by >50%. But to answer the question directly - for this phase the score is zero.	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0
28	Does any planned infrastructure or building work increase the overall footprint of hard surfacing? (as opposed to green or permeable surfacing)	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4	Current shingle area (12 sqm) will unfortunately need to be upgraded to hard surfacing due to upgrading fire exit (for wheelchair exit), but this will be mitigated by use of at minimum, drainage to soakaway locally, or preferably a permeable solution (permeable pavers are an opiton). Net change to runoff = zero. Permeable solutions will be further investigated in the detailed planning phase.	Strong positive impacts for sustainability. Recommendation to proceed as is with this aspect.	4
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	The building is currently a cool building even in heatwaves. The increase in insulation will only reinforce this and keep the interior cool. This is inherent in the existing building and will be retained - so isn't really a key consideration going forwards - hence neutral score of Zero.	Neutral or not applicable. Recommendation to consider how benefits could be achieved in this area, but otherwise proceed.	0
	Average Score		**4.0**			**4.00**

- 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

	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?	Some positive impact for sustainability. Recommendation to further enhance this aspect where possible and proceed.	3	The project will raise awareness and understanding of the climate and ecological emergency as it will be a perfect example of how a building can be sensitively retro fitted and reused and become a community asset accessible to all. The users of the building currently ranges mostly from 5-18, but the plan will be to enable it from 0-100+. Young children will be able to learn about reusing and repurposing, about energy usage, re-use and sustainable materials, rain water collection. The building will also have a new lease of life that can be enjoyed and used by many generations to come that will keep illustrating the benefits of low energy design and adaptive reuse.	Some positive impact for sustainability. Recommendation to further enhance this aspect where possible and proceed.	3
	Average Score		**3**			**3**
	Total Overall Average Score		**3.74**			**3.7**

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.

Now assessment is complete copy and paste box into your business case, committee report. (under environmental implications 6).Whole assessment can be an appendix. Procurement tenders are expected to submit complete report with application.

Climate and Sustainability Impact Assessment Summary	
Homes, buildings, infrastructure, equipment and energy	3.75
Travel	4.00
Goods and Consumption	3.71
Ecology	3.71
Adaptation	4.00
Engagement and Influence	3
Total Overall Average Score	**3.7**