

(CSWMP) & (CTMP)

Proposed Extension & Refurbishment of Cleator Moor Activity Centre



Document History

Revision	Status / Purpose / Changes	Date
-	First Revision	05.12.2024

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1.0 CSWMP Introduction

1.1 Project Background

Thomas Armstrong Construction Ltd have been awarded the refurbishment and extension of an existing activity centre on behalf of GLL Group, the current PCI and drainage strategy has been provided by: Greenwood Projects (Ref: L1286) & Furness Partnerships (Ref: L2763 Drawings detailed in section 1.2 below)

Location of site: Off Wyndham Street, Cleator Moor, Whitehaven, Cumbria CA25 5AN

This report provides a construction management plan with respect to the management of surface water runoff and disposal throughout the construction phase along with a detailed traffic management plan.

1.2 Proposed Development

The works comprise the refurbishment and extension of the existing indoor bowls hall to include new health and fitness facilities, consisting of a multipurpose studio, fitness suite and sports hall. In addition, the facility will also comprise a community café, new changing provision to meet the requirements for the proposed facilities and new parking and associated infrastructure.

The proposed drainage works for the site will be contained wholly within the red line boundary with the surface water run-off infiltrating to ground and the foul water draining to an existing FW drainage located on site.

The proposed site drainage proposals and layout for the scheme are shown in Appendix A on drawings:

L2763-FUR-XX-XX-DR-D-0911-P01 / L2763-FUR-XX-XX-DR-D-0902-P03 / L2763-FUR-XX-XX-DR-D-0911-P03 / L2763-FUR-XX-XX-DR-D-0931-P02 / L2763-FUR-XX-XX-DR-D-0932-P03 /

1.3 Legislation and Policy

All works affecting the water environment are bound by the following regulations and policies (not an exhaustive list):

- Water Framework Directive (2000/60/EC);
- Freshwater Fish Directive (78/659/EEC);
- Habitats Directive (92/43/EEC);
- Integrated Pollution Prevention & Control Directive (2008/1/EC);
- Flood and Water Management Act 2010;
- UK Water Quality (Water Supply) Regulations 2000;
- Groundwater Regulations 1998;
- Control of Pollution (Oil Storage) (Wales) Regulations 2016; and
- National / Local Planning Policies





2.0 Construction Surface Water Management Principles

The Construction Surface Water Manage Plan (CSWMP) specifically deals with the drainage and surface water control during construction which has been based on the principals set out in the contractors Construction Environmental Management Plan report.

2.1 Drainage Design Principles

The following section provides a construction management plan with respect to the management of surface water runoff and disposal throughout the construction phase.

The principles of SuDS shall be applied to all components of design and construction with respect to surface water management, as per the SuDS Manual (CIRIA C753, 2015). Any design or site works that may impact on the site drainage or water quality shall:

- Soakaway where soils allow;
- Consider and manage erosion;
- Retain any silts on site and prevent silts from discharging into watercourses or drains;
- Remove pollutants in surface water; and
- Prevent accidental spillages reaching watercourses.

2.2 Silt Mitigation

The design considerations of all temporary and permanent drainage controls and silt mitigation measures will consider the following:

- Topography / falls towards drains or watercourses;
- Underlying geology, including likelihood and type of generation of silt in excavations, due to soil types, clays, and rock type in excavation;
- Vegetation type, including sensitivity of vegetation and habitats; and
- Location of sensitive receptors (e.g. watercourses or protected habitats and species) and high-risk areas (e.g. pollution sources).

The design of measures will consider industry guidance in addition to the requirements stated in this document. A list of typical industry guidance are as follows:

- NRW / NIEI / SEPA Guidance for Pollution Prevention (GPPs) rebranded PPGs;
- BS 8582:2013 Code of Practice for Surface Water Management for Development Sites
- BS 6031:2009 Code of Practice for Earthworks; and
- CIRIA Reports: SP156 / C532 / C648 / C649 / C650 / C741 / C753 / C762 / C768.



2.3 Silt Removal

Silt laden runoff should be expected from any areas of exposed soil, clay, aggregate, or rock. Prior to entering the water environment, all silt laden runoff will require treatment to remove suspended solids/silt.

Suspended solid (silt) removal features are to be designed in accordance with the SuDS Manual, specifically Section 3.3 'Water Quality Design Standards'; and CIRIA C648 Control of Water Pollution from Linear Construction Projects, specifically Section 18 'Runoff and Sediment Control'.

All temporary and permanent drainage from the site shall initially be designed to have as a minimum three stages of treatment, as defined in the SuDS Manual. A single stage of treatment would be considered as any of the following:

- Filtration of water through filter media (sand / stone check dam, silt fence);
- Detention / settlement in settlement ponds / tanks or behind check dams in swales; and
- Conveyance of shallow depths of water in vegetated swale.

2.4 Settlement Ponds / Tanks / Swale

Temporary settlement ponds/Dry Swales have been mentioned in the contractors CEMP and will be used during the construction period to provide adequate silt containment & removal. Settlement ponds / tanks should comply with the following considerations:

- Sediment control structures may comprise a single or sequence of settlement ponds / tanks with additional incorporated filtration measures where required;
- The location and dimensions of settlement ponds / tanks, plus requirements for flow attenuation measures will depend on:
- o Volume of water requiring treatment;
- o Rate of inflow, particularly if inflow is pumped from excavations;
- o Silt load characteristics; and
- o Topography and access constraints.
- Settlement ponds / tanks are to be designed to accommodate the critical storm (for volume) of the 1-year rainfall event for water quality protection;
- Settlement ponds should be designed to accommodate Treatment Volume 'Vt' as defined by the SuDS Manual;
- The use of synthetic liners within settlement ponds / tanks shall be avoided in order to reduce the impact from disturbance of silt during liner removal. The exception to this may be where impermeable liners are required to prevent risks to underlying groundwater from infiltration of contaminated water such as concrete wash out ponds / tanks;
- In the event that the natural or excavated ground profile in any area of the site does not lend itself easily to construction of adequate settlement ponds / tanks, water should be directed towards a sump area prior to being pumped away to a suitable settlement pond / tank or vegetated area with adequate silt mitigation measures.
- Where water depth within settlement ponds / tanks has the potential to exceed 0.6m, specific consideration is to be given within the Contractors design risk assessment / hazard inventory



to the implications of hazard posed to site personnel due to potential for trips / falls in the vicinity of water.

• Consideration is to be given to demarcation of the perimeter of the ponds / tanks by safety fencing and appropriate warning signs.

2.5 Excavation Dewatering

Drainage management is to ensure that adequate provisions are always in place to treat any polluted water arising from all excavations.

2.6 Spoil Management

The Contractor will be required to consider potential for silt laden runoff from areas of temporary and permanent stockpiled and deposited spoil. Design considerations are to include as a minimum:

- Requirement to cover clays with topsoil to prevent wash off of fine sediments;
- Provision of sediment settlement features down slope of stockpiled material until such times as potential for silt loading had reduced and vegetation has established; and
- Avoidance of placing permanent or temporary spoil stockpiles in close proximity to watercourses / drains/ infiltration structures.

2.7 Construction Phasing

The appointed contractor will be required to provide a detailed site construction phasing plan. This will detail the construction stages including enabling works, retaining structures, attenuation and drainage provision, access road, car parking and the landscaping.

2.8 Good Practice Checklists

CIRIA C768 Guidance on the Construction of SuDS, provides good practice checklists for constructing,

managing, inspecting, or adopting SuDS in a consistent way, to ensure that the design, construction, and maintenance have been considered and fully documented. Extracts from C768 are provided in Appendix B.

3.0 Site Specific Considerations

3.1 Site Assessment

The site backs onto woodland and an open field adjacent to the Cleator Moor indoor bowling centre and MUGA within a semi-rural area with residential properties primarily found to the south west and a cluster of commercial business units adjacent the main entrance to site.

While the site is deemed a low risk for contamination, the measures described below will need to be considered to reduce the risk of impacting the local environment during construction.

Vehicular access to the site is located towards the south of the site via a single road link off Wyndham Street / Quarry Road between a mechanics garage and residential property. There is also pedestrian access from the western boundary of the site via a footpath leading from Aldby Street and from the north-west via a footpath leading from Birks Road. Clear temporary signage must be provided on access roads and approaches to the site for Contractor's vehicles, staff and visitors and as warnings to other road users.



3.2 Construction Phases

Phasing of the proposed works is as follows Appendix B. Site layout plan drawing detailing location and size of swale drainage,

silt fences could be introduced if deemed a requirement.

- Phase 1: Site set-up enabling works, internal strip out and silt trap/SuDs pond
- Phase 2: Excavate building footprint, foundations and road stockpile of spoil on site
- Phase 3: Install underground drainage tails to building perimeter
- Phase 4: Roof and walls & cladding
- Phase 5: Install drainage & external ductwork

3.2.1 Phase 1 - Site set-up silt trap/SuDs

There is a relatively low chance of silt running off site during site set-up. Prior to the commencement of phase 2, the dry swales should be formed as silt traps. Levels generally tend towards the west, where the appears to already be a depression where the dry swale is to be formed.

3.2.2 Phase 2 – Excavations and Stockpiles

It is not expected that there will be significant ground water ingress into any excavated areas, however the silt trap/SuDs pond will be used to store any water that needs to be pumped from excavations.

Any stockpile of spoil should be suitably covered to reduce the risk of silt run off where possible. The piles could be covered in topsoil or surrounded by a silt fence/ straw bales. If there is any risk of silt entering the existing swale area or watercourse, silt fence or bales could be used between the stock pile and the swale to catch any silt.

3.2.3 Phase 3 - Drainage Tails

The existing swale will continue to be utilised to serve any water that needs to be removed from the north section of the yard, the drainage to this area is to remain.

The drainage installed should be capped at the head and downstream end is to remain unchanged.

3.2.4 Phase 4 - Cladding

It is anticipated that the rainwater pipes will be installed with the cladding, the rainwater pipes should terminate above ground until there is below ground drainage to connected to. The rain-water pipes should drain to one of the dry swales where permanent connections can't be made.

3.2.5 Phase 5 – Drainage

The drainage will be constructed, still utilising the settlement ponds to pump any water that enters the excavations. The perforated pipes, wrapped in a permeable membrane and stone surround also wrapped in a permeable membrane should be the first part of the surface water network to be constructed so that the remaining drainage can drain to it and infiltrate to ground.

The complete on-site drainage system will need to be inspected and cleaned prior to commissioning.



4.0 CTMP Introduction

4.1 Introduction to traffic management Plan

This Construction Traffic Management Plan (CTMP) sets out the arrangements to ensure that the risks involved in the movement of mobile plant and vehicles around the **Site**, and the interface with site personnel and existing road users are identified and controlled as far as reasonably practicable.

The key risks associated with mobile plant and vehicle operations on the site include:

- people being run over, crushed, or struck by mobile plant or vehicles.
- · Congestion of access roads.
- Deterioration of access roads.

If the nature of the site changes, or if/when additional risks are identified, revised controls will be implemented. Any revisions to the document because of these changes will be recorded and re-briefed as required.

The CTMP is primarily for planning and controlling mobile plant, vehicles and people interface including Vehicle delivery wagons and public traffic.

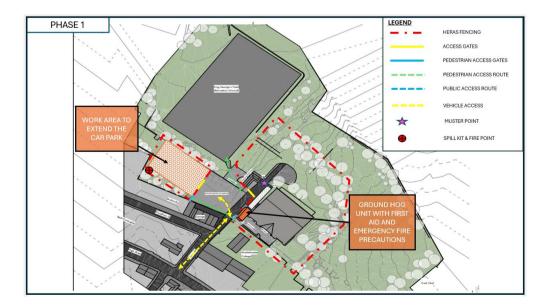
4.2 Display/Communication of Information

The arrangements for vehicle and pedestrian management will be communicated through the Site Induction and distributed to all Sub-Contractors. When further specific information needs to be communicated, additional toolbox talks /Safety Meetings will be given to the relevant site personnel.

It is intended that the CTMP site layout drawing(s) (Section 4.3 & 4.4) will form the main part of the plan and this **along** with relevant sections of the TMP will be displayed in prominent positions on relevant notice board(s).

4.3 Details of any initial site setup and phase 1 layout

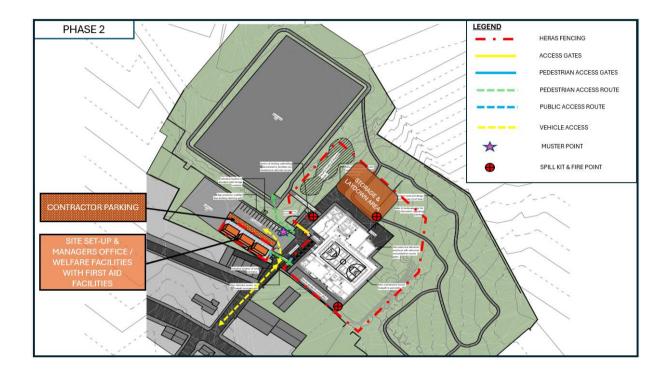
Initially a small groundhog or similar will be used to ensure welfare provision for operatives, this will allow us to establish site, make any temporary service connections and extend the existing carpark for the users of the MUGA throughout the construction phase.





4.4 Details of site setup and phase 2 layout

Once site is established and the carpark is extended then the semi-permanent welfare will be situated (final configuration to be agreed) this will allow parking for both existing users and construction vehicle parking throughout the works. Strictly no deliveries or off-loading in this area. A separate laydown area and will be created with the construction zone.



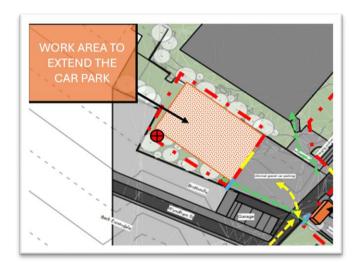


4.5 Retained Area for vehicle parking

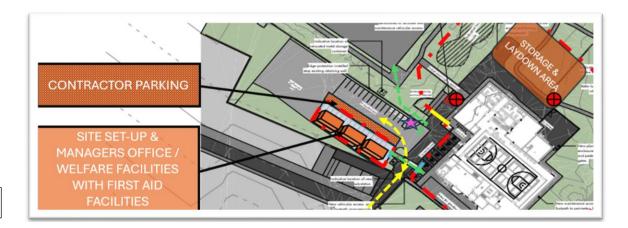
Contractor Parking will be in the designated area beside the site set-up, vehicles may pull into the turning and unloading areas to drop off tools and equipment then return the vehicle to the designated parking area.

Deliveries to the site will follow route through to the designated laydown area.

No delivery vehicles shall be permitted prior to 8.00 hrs or after 18.00 hrs weekdays. Deliveries will be accepted on Saturday mornings with prior notice between 08.00 hrs and 13.00 hrs only. This includes all plant collections and deliveries (No Sunday or Bank Holiday working permitted)



Phase 1



Phase 2

4.6 Cleaning of the site entrance and adjacent highway

The existing highways leading to the site shall be kept free from mud, dirt, debris and other deleterious matter.

Works and hard standing areas will be progressed into site in a manner that causes least debris and hazard to users of the MUGA, general public and road users.

Road sweeping shall be implemented as required to prevent build-up of mud / dust on site roads and to ensure it is not deposited on adjoining public roads.



4.7 Details of proposed wheel was facilities

Although the proposed development is in the proximity of existing roads, businesses and dwellings, the current assessment is that a wheel wash is not required. However, should this change a wash out bay and pressure washer will be utilised along with the road sweeper being deployed when necessary (As mentioned above in section 4.6).

4.8 Sheeting of HGV vehicles

Most of our suppliers do now operate with automated sheeting devices, but it's a legal requirement enforced by HSE and VOSA that all delivery companies take all reasonably practicable steps to prevent falls during the vehicles' operation. This will be emphasised by our own duty of care to reasonably practicably ensure all vehicles leaving our site are checked for overloading and covering of loose materials.

4.9 Construction Vehicle Routing

All construction vehicles will be kept on site, there'll be no requirements other than statutory authorities to work beyond the site perimeter, delivery vehicles and contractors coming and going will be the greatest impact however there is very little we can do to mitigate this, we'll carryout a letter drop to nearby residents and businesses making them aware of the construction works and also keep them updated with any significant movements that may cause concern.

4.10 The management of junctions to and crossings from the public highway

As and when there is a requirement to work beyond the site boundary there will be permits applied for to the local authority and task specific TMP considered and approved before any works will commence.





4.11 Assessment of Risk - Vehicle and Pedestrian Movements

The following hazards and means of control must be assessed prior to the commencement of the site and ongoing giving due regard to any changes to the site.

Hazard = potential to cause harm Risk = probability of that harm occurring

Risk rating criteria:

High = A hazard which has the potential to cause a fatal/major injury.

Medium = A hazard resulting in lost time injury or significant material damage.

Low = A hazard resulting in minor injury but not lost time, or some material damage.

SIGNIFICANT HAZARDS	Н	М	L	
Construction vehicles and movements				
Areas of restricted width and visibility ✓				
Temporary structures, power lines ✓				
Material delivery and storage ✓				
Transport of materials				
Reversing vehicles ✓				
Roadway edges, manholes, spoil heaps		√		
Terrain (mud, ruts, dust)		✓		
WHO MAY BE HARMED				
Nearby residents				
Members of the public				
Pedestrians, especially children				
Employees				
Contractors				
Visitors to site				



4.11 Assessment of Risk - Vehicle and Pedestrian Movements

(continued)

CONTROL MEASURES				
Control Measure	Detail Site Requirements			
Access and egress to the site:				
> Segregation of vehicles and pedestrians.	As per site set up plan.			
> Warning/direction signs.	Signage each side of the entrance works to be erected to warn pedestrians of site traffic			
 Speed restrictions i.e., speed limit signs, speed ramps, etc. 				
Site rules clearly displayed i.e., hi-vis clothing must be worn.				
Site parking:	Signage on Heras Fencing identifying locations,			
> Clearly defined for workforce and visitors.	annotated traffic plan at office to be updated as required.			
Adequate arrangements				
Pedestrian routes to office/canteen/toilet:	Annotated traffic plan at office to be updated as			
> Clearly defined.	required.			
> Signs and barriers				
Routes from office/canteen/toilet to workplace:	As per site set up plan			
Clearly defined.				
 Signs and barriers or other means of segregation. 				
Pedestrian crossing points on site:	Pedestrian entry gates to be installed at all			
> Clearly defined.	crossing points.			
> Signs to pedestrians and vehicles				
Loading/unloading areas:	To be communicated as the works progresses			
> Clearly defined.	and TMP updated			
 Arrangements for reversing vehicles where necessary 				

Details of the above must be shown on a site traffic management plan and clearly displayed. The above information must be brought to the attention of all site personnel – Toolbox Talk.

PRINT NAME: Ryan Robertson DATE: 05.12.24

Construction Surface Water Management Plan & Traffic Management Plan Cleator Moor Activity Centre – Whitehaven – January 2025



5.0 Appendices

Appendix A Drainage Layout Plans
Appendix B (A1) Good Practice Checklists
Appendix C PCI (Appendix 4 CPP)*
*Once complete the above and appendices will form part of the CPP

Construction Surface Water Management Plan & Traffic Management Plan Cleator Moor Activity Centre – Whitehaven – January 2025



Construction Surface Water Management Plan & Traffic Management Plan Cleator Moor Activity Centre – Cleator Moor, Whitehaven – January 2025



Appendix A Drainage Layout Plans

Construction Surface Water Management Plan & Traffic Management Plan Cleator Moor Activity Centre – Cleator Moor, Whitehaven – January 2025



Appendix B (A1) Good Practice Checklists

Construction Surface Water Management Plan & Traffic Management Plan Cleator Moor Activity Centre – Cleator Moor, Whitehaven – January 2025



Appendix C Pre-Construction Information (appendix 4 CPP)