



Package 6 Turley Holes

| Table o | of Contents | |
|-----------------------|---|----|
| 1. W | orks Quantities | 2 |
| 2. W | orks Dates | 2 |
| 2.1. | Start Date: | 2 |
| 2.2. | End Date | 2 |
| 2.3. | Restricted Dates | 2 |
| 2.4. | Works Phasing | 2 |
| 3. Works Site Details | | |
| 3.1. | Work Site Name: | 3 |
| 3.2. | Work Site Grid Reference: | 3 |
| 3.3. | Description of location: | 3 |
| 3.4. | Description of Site Area | 5 |
| 3.5. | Specified Access Points: | 5 |
| 3.6. | Delivery and Lift Sites: | 6 |
| 3.7. | Public Rights of Way / Footpaths: | 6 |
| 3.8. | Vehicles allowed on Works Site: | 6 |
| 3.9. | Livestock: | 7 |
| 3.10. | Hazards associated with the Works Site | 7 |
| 3.11. | SSSI | 7 |
| 3.12. | Scheduled Ancient Monuments and other Archaeology | 7 |
| 4. W | ork Techniques- Site Specific Details | 7 |
| 4.1. | Gully blocking: stone dams | 8 |
| 5. Ma | ıps | 10 |



1. Works Quantities

Table 1 shows the proposed work quantities for the Turley Holes Site, package 6

| Treatment | Grand Total |
|--|-------------|
| Peat Bunding (ha) | 1.905 |
| Grip/Gully Blocking: Peat Dam (Dam unit) | 132 |
| Grip/Gully Blocking: Heather (Bale) | 468 |
| Grip/Gully Blocking: Stone (Dam unit) | 29 |
| Re-profiling (m) | 281 |

Standard works specifications can be found in Appendix 9. Site specific works technique information is included in section 4.

All maps are included in section 5.

Map 1 provides an overview of the site location. Map 2 shows planned restoration works. Map 3 shows site access and lift site. Map 4 shows past restoration. Map 5 shows past restoration.

2. Works Dates

2.1. Start Date: 15th August 2022

*Subject to confirmation of end date of 2022 bird nesting restriction which may be subject to delay if evidence of "late" bird nesting activity.

2.2. End Date 31st March 2025

2.3. Restricted Dates Nesting bird season: 1st April to 15th August

*end date of bird nesting restriction subject to delay dependent on evidence of "late" bird nesting activity.

2.4. Works Phasing Table 1 below provides suggested outline phasing/timing of the different works elements. These are based on completing the works within the dates stipulated in section 2.1, 2.2 and 2.3. The Contractor is required to provide their proposed detailed programme for the works as part of the tender.



Table 1 Suggested Outline Works Phasing

| Year | Period | Works element |
|---------------|-------------------------|--|
| 2022- 2023 | April 2022 to July 2022 | Contractor prepares/finalises HSSE & CDM documentation. |
| | Autumn 2022 | Supply, fly & install Stone dams, Heather/Coir dams. |
| | Spring 2023 | Update/prepare/finalise HSSE & CDM documentation (as required) Contingency for completing gully blocking works |
| 2023- 2024 | April 2023 to July 2024 | Contractor prepares/finalises HSSE & CDM documentation. |
| | Autumn 2023 | Install peat dams Peat bunding (ha) |
| | Spring 2024 | Update/prepare/finalise HSSE & CDM documentation (as required) Contingency for completing gully blocking work Re-profiling |

3. Works Site Details

3.1. Work Site Name: Turley Holes

3.2. Work Site Grid Reference: Approximate Site centre SD 97746 19237 – Turley Holes

3.3. Description of location:

The Works Site at Turley Holes is owned by Yorkshire Water. The Works Site is located southwest of the town of Mytholmroyd and east of the town of Todmorden. The Works Site is located within the "Metropolitan Borough of Calderdale" local government district, within the county of West Yorkshire.

The Turley Holes Works Site comprises mostly heather dominated open moorland/blanket bog and primarily sheds water from the high point near Bryon Edge in the south west down into Turvin Clough and on into Cragg Vale. The Byron Edge area in the south west of the Works Site comprises mostly grass dominated open moorland, crossed by electricity pylons.

The Sites lie within the South Pennine Moors 'Special Area of Conservation' (SAC) and the South Pennine Moors 'Special Protection Area' (SPA). The Sites lie within the South Pennine Moors SSSI, and includes the SSSI units 106 and 161. The SSSI units are indicated on Figure 1 (inset below).



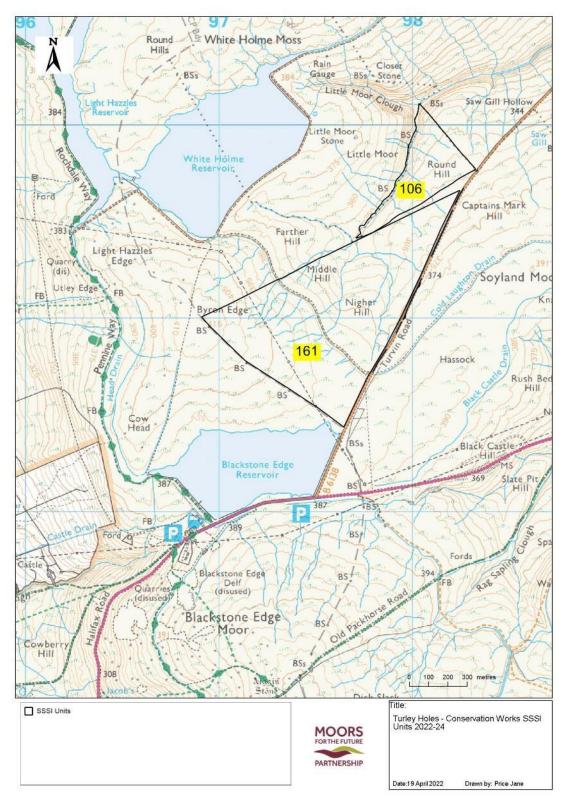


Figure 1 Inset map of Turley Holes Works Site, SSSI Units



3.4. Description of Site Area

Turley Holes is predominantly made up of "blanket peat" of variable depth with a mix of shallow peaty soils, exposed rocks and some hagging. The habitats on site vary from relatively diverse blanket mire in the south west of the Site to heather dominated areas dissected by very wet and wide channels of Molinia south of Turvin Clough. Sphagnum is relatively abundant in gully flushes and some of the most Molinia dominated areas.

- 3.5. Specified Access Points:
 - 3.5.1. Access:
 - Access to the Site is via the Byron Edge track used to access White Holme Reservoir from the B6138 Turvin Road.
 - The feasibility of vehicle access would need to be ascertained by the contractor. The tenderer is advised to inspect the proposed machine access routes in advance of tendering to assess suitability and to determine the need for ground protection/support to allow access/prevent damage.
 - The tenderer may propose additional/alternative machine access routes with their submission; another potential machine access point for Saw Gill Hollow on the south side of Turvin Clough is via a gate on the B6138 Turvin Road. However it is advised that the contractor inspect and satisfy themselves of the suitability of these or any alternative routes prior to tender.
 - 3.5.2. Access Restrictions
 - o Contractor access is restricted to daylight hours only during the Contract Period.
 - Access across the south side of Turvin Clough is particularly challenging so it is suggested that access through this part of the site is along the top of the slope, next to the B6138 Turvin Road. There is a fence across this area marked on Round Hill with a gate next to the road, enabling access to Saw Gill Hollow. Where practicable, such existing crossing points are to be used, in preference to breaking fence for new access points. There is also known to be a gate near a layby on the B6138 which would allow access to the Saw Gill Hollow area of Turvin Clough.
 - The Authority cannot confirm what rights there are (if any) to use any car parking or access routes or their suitability (whether of a safety nature or otherwise) for any use (including but not limited to in connection with the Works). Such information is for indicative purposes only and without any liability or obligation on the Authority. The Contractor agrees and confirms that it has not placed any reliance on such information and that it uses such car parking or access routes wholly at its own risk. Contractors should satisfy themselves as to the safety, suitability and rights.
 - Previous Works have been undertaken on the Site which include heather cutting and brash, lime, seed and fertiliser application (map 5.4, 5.5). The contractor shall, so far as is practicable, avoid disturbing or damaging these completed Works.



3.6. Delivery and Lift Sites:

For lift site location see map 5.2. and 5.3

There are high voltage power lines that cross Turley Holes west of the Lift Site across Byron Edge (see map 5.2).

This area is subject to high levels of anti-social behaviour including vandalism, theft and arson. It is not advised to store any machinery or materials within sight of the public roads or access tracks.

- The tenderer is advised to inspect the proposed delivery and Lift Sites in advance of tendering to assess suitability and to determine the need for traffic management, ground protection and security measures.
- The Contractor may wish to propose the use different Lift Sites through the programme, if beneficial for execution of the works.
- The use of any such Lift Sites are subject to MFFP obtaining relevant stakeholder consents/permissions.
- o Trespass sheep may be present.
- See section 3.7 for public rights of way
- Turley Holes Delivery and Lift Site:
 - o Byron Edge Track Lift Site and Delivery Site Grid Ref: SD9732919190
 - o Located off B6138 (Turvin Road), south of White Holme Reservoir
 - Wide track to hard surface parking area. Suitable for most vehicles.
 - Storage areas are located along the edge of the track. Trackway is not required.
 - Banksmen and marshals will be required for deliveries and aerial load lifting. Traffic management will not be required.
 - The Access Track to the Lift Site is a United Utilities access road used for reservoir maintenance. Access must remain clear at all times. The track is also accessible on foot to members of the public. The Contractor should liaise with the Nominated Officer at least 48hrs before requiring initial access to the Lift Site, in order that the Landowner and other stakeholders can be advised and combination code obtained.
 - There is a gate at the bottom of the access track which requires a combination code. This gate must remain locked when the Site is not in use. A code will be provided for this purpose. The Lift Site is in a large passing place of hard standing at the side of the track

3.7. Public Rights of Way / Footpaths:

The Site and access route is located within Access Land pursuant to the CRoW Act and the Pennine Way passes around the Site. A public footpath exists around the Site alongside The White Holme Drain which surrounds the uppermost slopes and plateau of Turley Holes. The Contractor must be aware of and have due regard to members of the public, who may be present at the Site, and ensure appropriate mitigation measures are in place.

3.8. Vehicles allowed on Works Site:

Contractors may park vehicles on the White Holme Reservoir track. There are also laybys along the B6138 Turvin Road. The access points from the White Holme reservoir must remain clear at all times for emergency access. Contractors should satisfy themselves as to the safety, suitability and rights to use such car parking and access routes.



Only suitably low ground pressure vehicles (<3psi) may be taken onto the Works Site for machine works, cutting, refuelling or transport of required materials associated with the Works.

Access for excavators and other low ground pressure vehicles can be made at the access points and outline route as per section 3.5. Contractors should assess to their own satisfaction the exact route to be taken.

3.9. Livestock:

Sheep are excluded from the Turley Holes site, although stray sheep from neighbouring moorland are present.

3.10. Hazards associated with the Works Site

A summary of the main known hazards are identified to the Contractor in this section. Upon award of the Works Package further information will be provided to the Contractor in the MFFP CDM2015 Pre-Construction Information.

The Works Site is on open moorland at high altitude and include waterlogged areas, deep peat, gullies, stream channels, steep slopes and unstable ground. There are also some rocky outcrops and boulder strewn areas across the Site, especially the south west area.

The Work Site is on Open Access land (pursuant to the CRoW Act) so the Contractor must be aware of and have due regard to members of the public, who may be present at the Site, and ensure appropriate mitigation measures are in place.

There is no commercial shooting interest or planned burning on Turley Holes.

Overhead power lines and Pylons run across the western edge of the site. This represents a potential hazard to aerial load lifting from the proposed lift site. Under certain weather conditions, there is a risk of falling ice from the cables. Contractors should work to the standards set out in GS6 – 'Avoidance of danger from overhead electric power lines <u>Avoiding danger from overhead power lines GS6 (hse.gov.uk)</u> and National Grid Guidance <u>8589935533-TGN 287 Third party guidance for working near NGET equipment.pdf (nationalgrid.com)</u>

UXO hazard is considered to be LOW (from Zetica Bomb Risk Mapping). No known belowground services/utilities at the site.

3.11. SSSI

The Sites are located within the Dark Peak SSSI. SSSI Consent/Assent will be arranged by MFFP in co-ordination with Yorkshire Water. No works shall commence prior to confirmation from MFFP that SSSI consent/assent has been granted.

3.12. Scheduled Ancient Monuments and other Archaeology There are no Scheduled Ancient Monuments on the Sites. Heritage Gateway shows features of archaeological interest on Turley Holes. These are parish boundary stones. The locations of these are easily identifiable on the Ordnance Survey map, marked as BSs.

4. Work Techniques- Site Specific Details

Site specific details pertaining to the proposed works are outlined in following sections, to be read in conjunction with MFFP standard specifications (Appendix 9) for all techniques to be undertaken.



4.1. Gully blocking: stone dams

Proposed stone dams may include "standard" single and multi-unit stone dam constructions in erosion gullies, in addition to placement of stone to act as protection at the toe of re-profiled slopes (photo 1 below). These may comprise part-width baffles (see figure 2 below), full-width stone dams, or placed as linear protection along the toe of re-profiled slopes, where appropriate. Some or all of the stone dams may be placed prior to completion of re-profiling works depending on works phasing.



Photo 1 Photograph showing typical location for stone dam proposed for protection of re-profiled hagg edge/gully side. (Hagg edge/gully side shown prior to re-profiling).



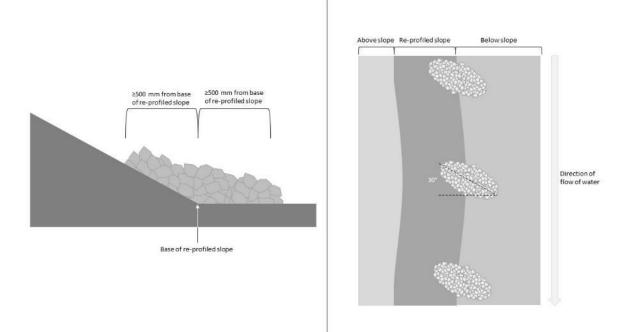
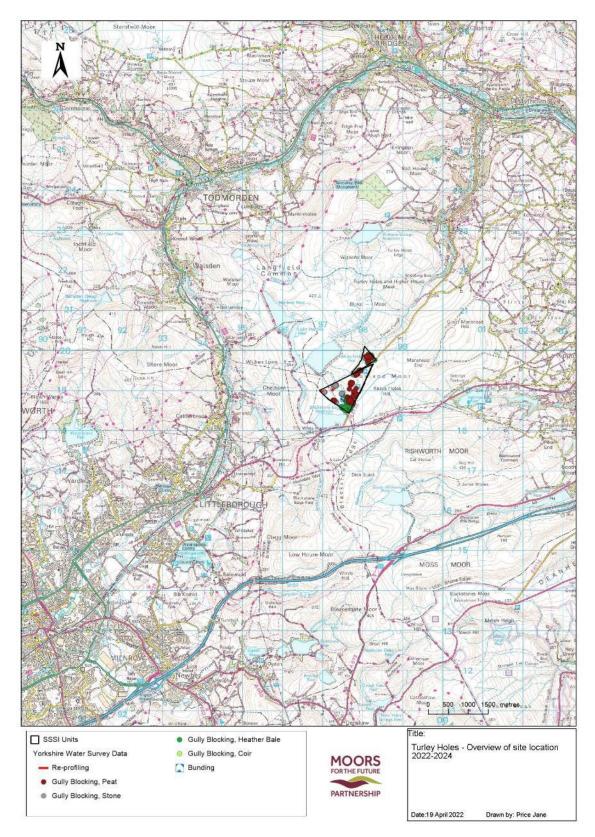


Figure 2 Stone baffle construction specification

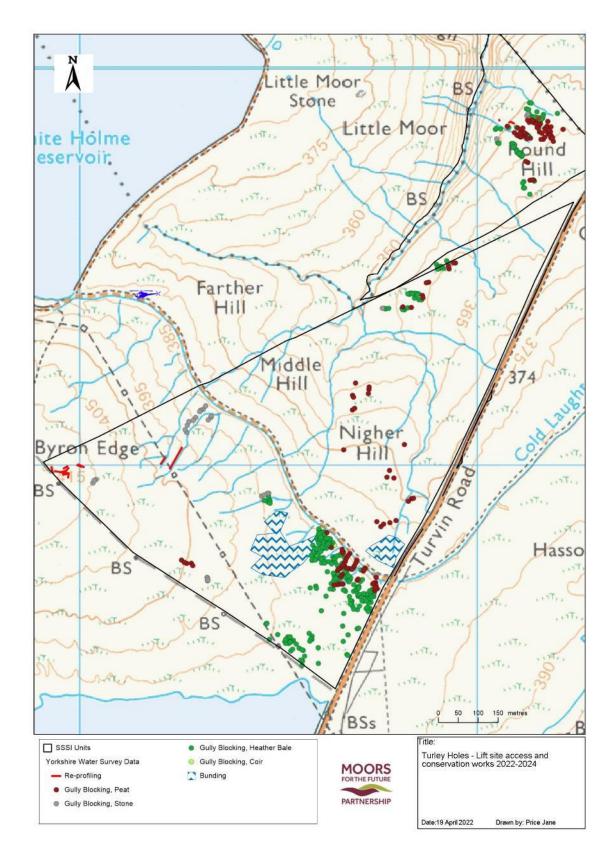


5. Maps



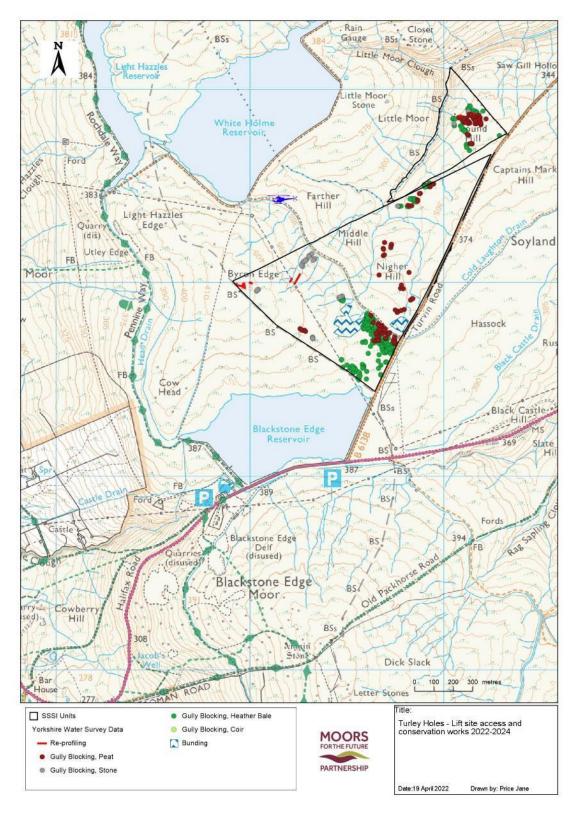
5.1 Overview of Turley Holes Works Site location





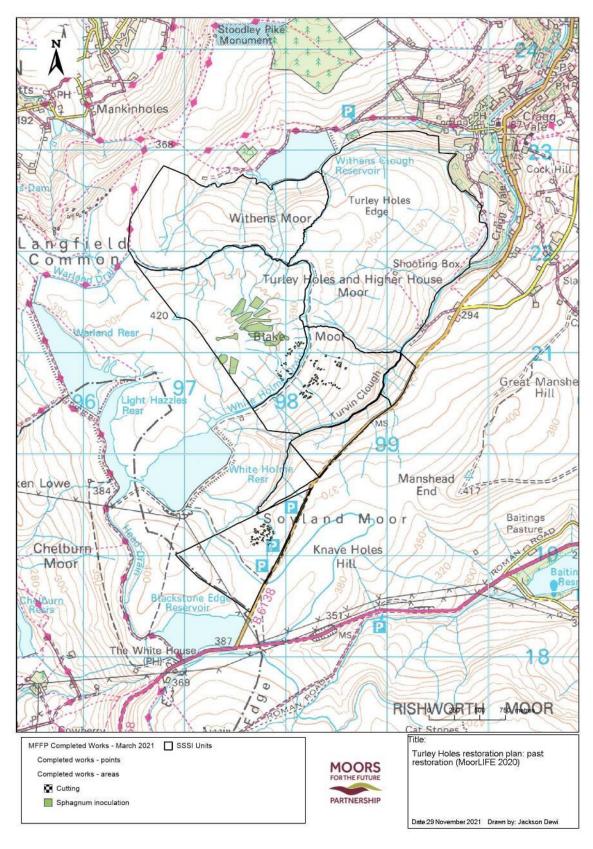
5.2 Turley Holes planned restoration works





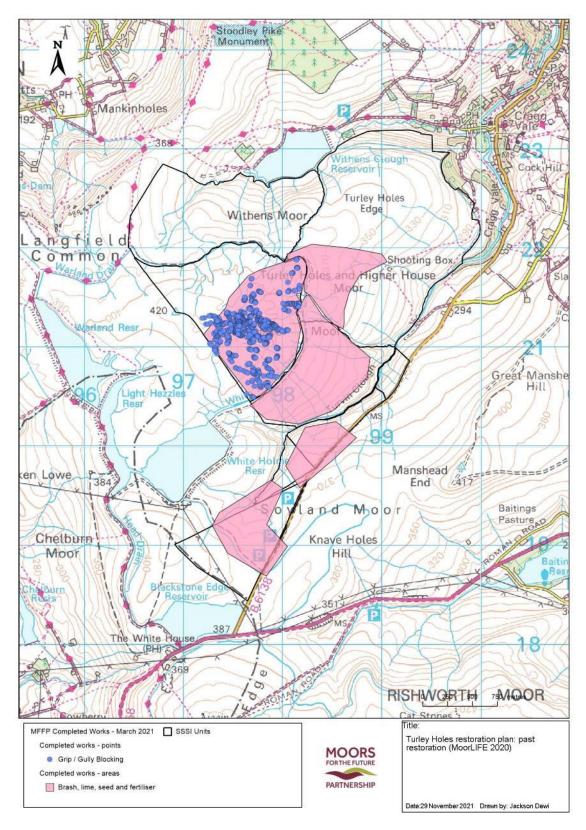
5.3 Turley Holes site access and lift site





^{5.4} Past restoration – Turley Holes





5.5 Past restoration – Turley Holes