Do not scale from this drawing. Scale bar for reference only.
Contractor must check all dimensions on site.
Any discrepancies should be reported to the Architect immediately

NORTH

0 SCALE 3m

New **MH-SW3** (drain connects to extg MHSW1) CL - 102.000 IL - 100.995

hopper and plant provided by others -allow services connections

Rooms to West wing - non habitable spaces. Exposed block walls, insulation to slab only

approx line of extg mains water supply (exact line to be confirmed) - to be adpated or diverted

re-routed line of water main (line approx - to be confirmed)

A **B** **C**

CENTRAL WING

New **MH-SW4** (drain connects to extg MHSW2) CL - 101.350 IL - 100.290

surface water drain - fall approx 1 in 40

New **MH-SW5** (drain connects to extg MHSW2) CL - 101.00 IL - 100.070

drainage channel and gully

drainage channel across opening (see detail)

drainage channel

BUNKER/LOG STORE SLAB LEVEL (laid to fall) - outer edge 101.425

D8 D7 D6 D5 D4

EP

rwp+gully &RE

rwp+ gully

HL grille (vent)

Hopper Room

Wood chip bunker (open sided)

Store

trapped floor boss

water entry point + stopcock valve under sink

New **MH-FW9** (drain connects to extg MHFW4) CL - 101.000 IL - 99.800

SM DB

ACC WC D9

W7

stub stack + VP

water stopcock

Drinks area D10

opening for boiler feed -tbc

Log storage (open sided)

32A

HL grille (air supply to boiler)

INTERNAL FFL - 101.500

Plant Room

A1 A2 A3

rwp+ gully plus water tap

drainage channel across opening (see detail)

D2

W6

W2

Office

D1

Small Store Room

W1

W8

D3

W5

W3

W4

E/D

New **MH-SW6** (drain connects to extg MHSW1) CL - 101.300 IL - 100.600

gully &RE

New **MH-SW7** (drain connects to extg MHSW1) CL - 101.400 IL - 100.605

surface water drain - fall approx 1 in 40

approx line of underground trench taking insulated hot water pipes to main house - see notes, route tbc

electrical sub main from main house

new spring water supply pipe

foul drain - fall approx 1 in 40

line of projecting plinth at base of wall

WEST WING

EAST WING

FLOOR PLAN

WATER SUPPLY POINT - existing connection point for spring water supply

90mm pipe supply from nearby spring

spring water supply to main house

MH - SW1 (extg) CL 100.780 IL 100.280

MH - SW2 (extg) CL 100.240 IL 99.700

MH - FW4 (extg) CL 100.390 IL 99.310

GULLY

Services Key

- L2 Drum light fitting (2 pin type) IP44 type (splashproof)
- L2 Wall mounted drum light fitting (2 pin type) IP44 type (splashproof)
- R Ceiling Rose Light Fitting
- Wall mounted light fitting E = external quality 1P65 E/F = external floodlight E/D = external downlight
- Fluorescent Light Fitting (surface mounted)
- One Way Lightswitch (General lightswitch ht 1200mm)
- 2W Two Way Lightswitch
- Pullcord
- DB Distribution Bd
- SM Sub meter
- Double 13A Switched Socket (general height 450mm above FFL or 1100mm where above worktops)
- F Fused Spur
- 32A Supply to boiler
- N Extract Fan, Duct & Grille (wired to light circuit with 15min overrun)
- New radiator–approx positions to be agreed on site
- EL Emergency exit light fitting (to comply with HSE Signs Directive)
- S Alarm sounder
- T External water tap (with isolator)

BUILDING REGULATION NOTES - SERVICES
These notes relate to Building Regulations items only. Contractor must refer to full Schedule of Work in Specification document for details of all work required.

1 DRAINAGE AND PLUMBING
a) Drainage generally. Adapt and extend existing system, make all necessary connections as shown on drawings or described in Specification. Drains to be 110mm diam upvc at min fall of 1 in 40, laid in pea gravel. Minimum cover - 600mm under grassed areas, 900mm under tracks. All sections of all drains and gullies to be roddable. Any divergence from drainage routes shown to be agreed on site with Building Inspector. Where drains penetrate cavity walls concrete lintels to be fitted, providing 50mm clearance around pipe, opening masked both sides with rigid sheet material & void filled with compressible sealant. Any redundant gullies, manholes & sections of drain run to be dug out & removed, or capped both ends & grout filled.
b) Foul drainage. Construct 6 no new manholes (5 No surface water and 1 No foul) connected to existing system. Plastidrain 475 diam inspection chambers with heavy duty covers. Install stub stack with Durgo valve in wc and trapped floor boss in Drinks area and connect to manhole as shown. Provide vent pipe to system (min 75mm diam) to roof cowl, with mesh, terminating min 900 above any window or door openings within 3m (location to be confirmed).
c) Surface. Fit new gullies and lay drains connecting to new and existing drainage system as shown. Construct drainage channels along openings to wood chip bunker and log store, connected to new gullies (details to be confirmed - to avoid blocking with chips). Rainwater goods - cast iron 75 downpipes and 125 gutters on galv drive-in brackets
d) Plumbing. Positions of all fittings & pipe layouts to be confirmed on site before work commences. Provide hot and cold water feeds (as applicable) to all fittings. Install wastes & white bottle traps & connect to drains. All pipework in unheated spaces to be insulated. Install fittings as follows:
Acc Wc - basin & wc, install full Doc M pack equip.
Drinks area - fit sink.
External - fit external water tap above gully by door D2 (with internal isolator valve in Acc Wc room).
e) Water supply. Water supply to new building to be spring water from existing supply point. An existing mains water supply pipe to the main house runs underneath the new building. Allow for diverting this and for all work to comply with water board regulations (finished pipe to be tested and commissioned).

2 ELECTRICAL
NOTE: all work to be designed and installed in accordance with BS 7671:2008. Work to be carried out by a registered installer who will certify the work and notify the local authority. Positions of fittings & layouts to be confirmed on site before work commences. See Spec for full details.
a) Electrical supply. Install new underground sub main (from supply at main house), sub meter and distribution board with RCD protection, located in Wc room at high level (above 2.2m). Details to be agreed.
b) Boiler supply and controls. Provide supply to controls (provided by other but allow for co-ordinating requirements with supplier). They will require 32 amp single phase supply to plant room and a 100ma time delay trip from the supply.
c) Power. Provide power sockets and fused spurs as shown on drawings.
d) Extract. Provide mechanical extract to WC wall mounted fan with isolator (15 l/sec connected to light switch with 15 mins overrun).
e) Lighting (internal). Provide lighting as shown on drawings. Drum and wall fittings to be 2 pin low energy type (IP44 where indicated).
f) Lighting external. NOTE: all external lighting to be agreed with Planners (a condition of planning permission) before any work commences. All light fittings, switches and power sockets in external areas or in open sided central wing to be suitable for external use. External lights to have timer controls and movement sensors. See specification for full details

3 HEATING AND HOT WATER
a) Boiler. New bio-mass boiler and associated plant and controls supplied by others see separate drawings and specification. Boiler to provide heating to new office, wc & drinks area, and also to main house via underground trench.
b) Radiators. Radiators in new building to have TRVs and to be sized by contractor to provide internal temperature of 20 degrees C when outside temperature equal minus 5 degrees C. Positions to be confirmed on site.
c) Ventilation Ventilation to plant room. High level grille (approx. 500x500 size to be confirmed) to provide air supply to boiler.High level vent grille (approx. 300x300 size to be confirmed) to provide backround ventilation to hopper room).
d) Hot water. Hot water to basin in wc and sink in Drinks area supplied from new boiler.
e) Trench route. Underground supply route for hot water from boiler to main house excavated (min 200mm wide - exact route to be confirmed), insulated pipes laid with 700mm cover and back filled with sand or pea gravel.

PROPOSED BIOMASS HEATING PLANT AT HEPPLE WHITEFIELD, NORTHUMBERLAND
for
SIR WALTER RIDDELL

Proposed services plan - with Building Regulation notes

Scale 1:50 at A1

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Rev.

Northumberland National Park Authority