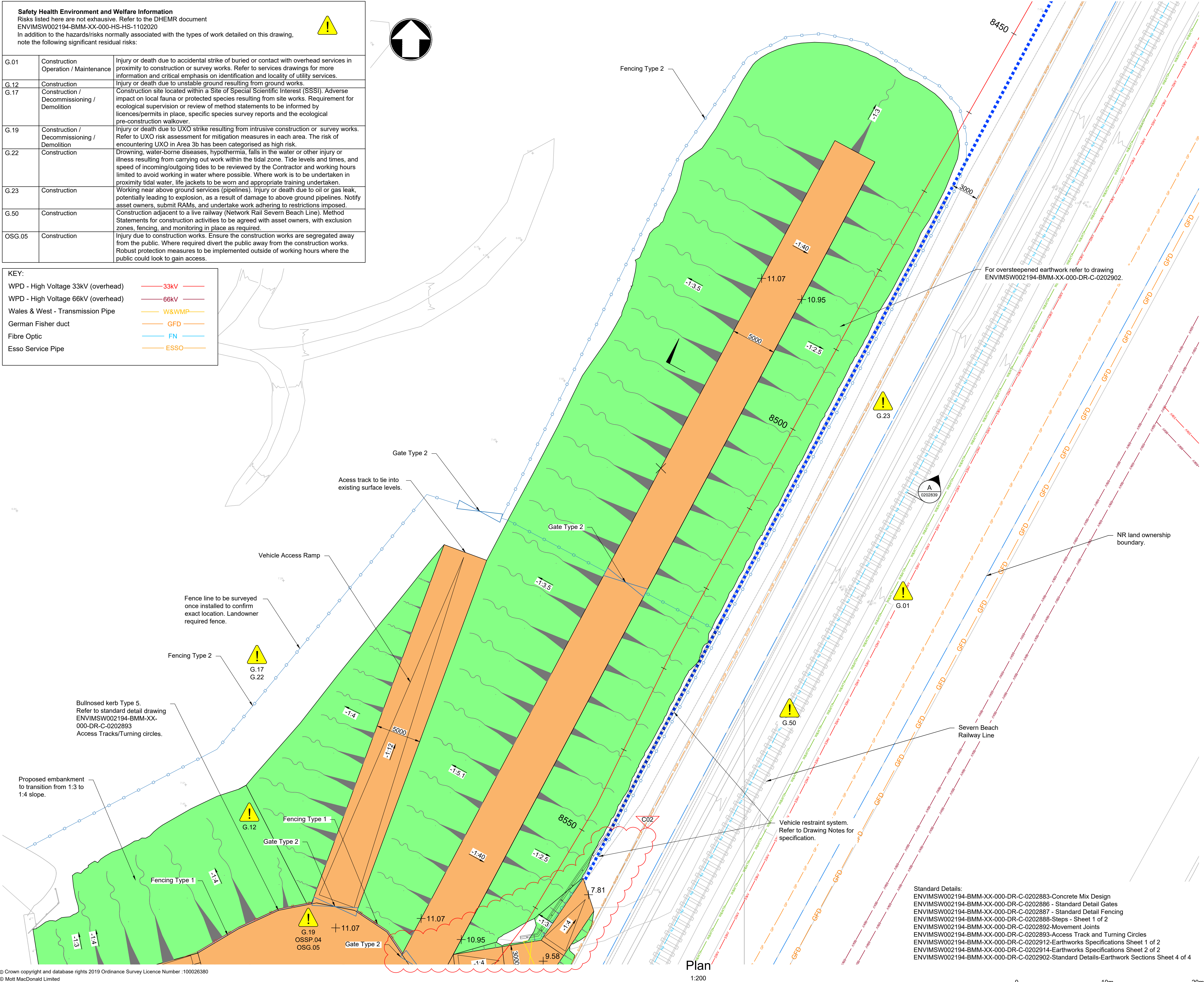


Safety Health Environment and Welfare Information		
Risks listed here are not exhaustive. Refer to the DHEMR document ENVIMSW002194-BMM-XX-000-HS-1102020 In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks:		
G.01	Construction Operation / Maintenance	Injury or death due to accidental strike of buried or contact with overhead services in proximity to construction or survey works. Refer to services drawings for more information and critical emphasis on identification and locality of utility services.
G.12	Construction	Injury or death due to unstable ground resulting from ground works.
G.17	Construction / Decommissioning / Demolition	Construction site located within a Site of Special Scientific Interest (SSSI). Adverse impact on local fauna or protected species resulting from site works. Requirement for ecological supervision or review of method statements to be informed by licences/permits in place, specific species survey reports and the ecological pre-construction walkover.
G.19	Construction / Decommissioning / Demolition	Injury or death due to UXO strike resulting from intrusive construction or survey works. Refer to UXO risk assessment for mitigation measures in each area. The risk of encountering UXO in Area 3b has been categorised as high risk.
G.22	Construction	Drowning, water-borne diseases, hypothermia, falls in the water or other injury or illness resulting from carrying out work within the tidal zone. Tide levels and times, and speed of incoming/outgoing tides to be reviewed by the Contractor and working hours limited to avoid working in water where possible. Where work is to be undertaken in proximity tidal water, life jackets to be worn and appropriate training undertaken.
G.23	Construction	Working near above ground services (pipelines). Injury or death due to oil or gas leak, potentially leading to explosion, as a result of damage to above ground pipelines. Notify asset owners, submit RAMs, and undertake work adhering to restrictions imposed.
G.50	Construction	Construction adjacent to a live railway (Network Rail Severn Beach Line). Method Statements for construction activities to be agreed with asset owners, with exclusion zones, fencing, and monitoring in place as required.
OSG.05	Construction	Injury due to construction works. Ensure the construction works are segregated away from the public. Where required divert the public away from the construction works. Robust protection measures to be implemented outside of working hours where the public could look to gain access.

KEY:	
WPD - High Voltage 33kV (overhead)	33kV
WPD - High Voltage 66kV (overhead)	66kV
Wales & West - Transmission Pipe	W&WMP
German Fisher duct	GFD
Fibre Optic	FN
Esso Service Pipe	ESSO

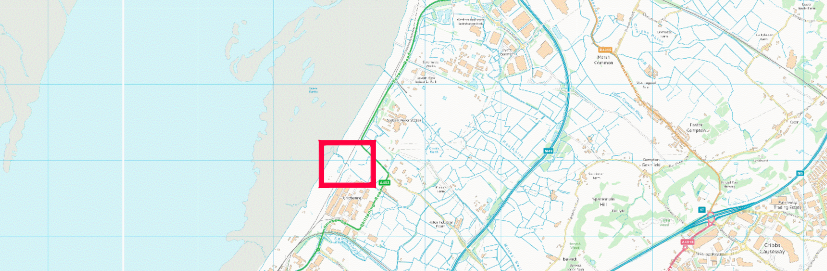


- Notes
1. All dimensions are in Millimetres unless stated otherwise.
 2. All levels are stated in Metres, and relative to ordnance datum. Levels are based on the topographical survey carried out by Texo Drone Survey and Inspection Ltd in December 2019.
 3. Contains Ordnance Survey Data © Crown copyright and database rights 2020 Ordnance Survey. All rights reserved. Environment Agency 100026791.
 4. All works to be in accordance with the MCHW - Specification for Highway Works.
 5. Workmanship and materials shall be in accordance with all relevant current statutory authority requirements, the latest British Standards and Codes of Practice/Eurocodes and UK Annexes and good working practice.
 6. Crane to enable maintenance and replacement of the flap valves and penstock can be positioned directly on the outfall. Proposed crane - Kato CR-80C crawler crane (10t), with steel pads to spread the outrigger loads.
 7. Vector unit to enable deslitting to be positioned on the level area to the north of the outfall. Proposed Vector unit - Kilo Whale Vector unit (26t), allowed to drive over the outfall to reach the turning area. Excavator, ZX85US (10t), to operate directly on top of the outfall.
 8. Width restriction of 5m noted over the outfall.
 9. An edge protection is required along the turning circle to reduce the risk of vehicle impact onto the fuel lines. This shall comprise an proprietary vehicle restraint system (N1 containment, W3 working width), installed in accordance with the manufacturer's instructions, and with P1 terminals at either end. The extent of VRS shall be confirmed on site.
 10. Flood embankment grass (EFG) seeding will be implemented across all earth embankments. In addition to this treatment, 'high pollinator' wildflower seed mix is proposed to the landward slopes. These 100% wildflower mixes will be sown with the EFG mix.
 11. EM3F wildflower mix by Emorsgate Seeds (or equal approved) is proposed to be sown at 1.5g/m² in combination with EFG seeding for all landward side embankments.
 12. The following seed mixes are subject to agreement with the EA's asset performance team regarding the need for ongoing maintenance. For further details refer to Landscape Specification - Area 1, 2 & 3 (ENVIMSW002194-BMM-XXX-Z00-RP-L-0302135).

Key to symbols	
	Embankment
	Maintenance Access Track / Footpath
	Vehicle Restraint System
	Fencing Type 1
	Fencing Type 2
	Gate Type 1
	Gate Type 2
	NR Land Ownership Boundary
	3m Offset from Oil Pipeline
	Gate Type 3
	Gate Type 4A

Reference drawings	
ENVIMSW002194-BMM-XX-A32-DR-C-0202837-Area 3B (Ch.8+460-8+650) - Stup Pill Outfall - General Arrangement	
ENVIMSW002194-BMM-XX-A32-DR-C-0202838-Area 3B (Ch.8+460-8+650) - Stup Pill Outfall - General Arrangement	
ENVIMSW002194-BMM-XX-A32-DR-C-0202839-Area 3B (Ch.8+460-8+650) - Stup Pill Outfall - Sections	
ENVIMSW002194-BMM-XX-A32-DR-C-0202840-Area 3B (Ch.8+460-8+650) - Stup Pill Outfall - Sections	
ENVIMSW002194-BMM-XX-A32-DR-C-0202841-Area 3B (Ch.8+460-8+650) - Stup Pill Outfall - Setting out	
ENVIMSW002194-BMM-XX-A32-DR-Z-0202484 - 0202485-Area 3B - (Ch.8+460-8+650) - Earthwork General Arrangement	

Key Plan



P01	16/06/21	ER	For Client Acceptance	MC	MS
C01	05/08/21	TR	For Construction	MC	MS
C02	06/06/23	LM	Fisher German Ramp Added	MC	MS
Rev	Date	Drawn	Description	Ch'k'd	App'd

10 Temple Back
Bristol
BS1 6FL
United Kingdom

T +44 (0)117 906 9500
F
W www.mottmac.com

Client

Title

ASEA Ecology & Flood Defence Scheme

Area 3B (Ch.8+460-8+650)

Stup Pill Outfall

General Arrangement

Sheet 1 of 3

Designed	J.POPPERL	JP	Eng check	M.CHEETHAM	MC
Drawn	L.MIKHALKINA	LM	Coordination	M.CHEETHAM	MC
Dwg check	J.POPPERL	JP	Approved	M.D.SECKER	MS
Scale at A1	Status	Rev	Security		
1:200	CON	C02	STD		

Drawing Number

ENVIMSW002194-BMM-XX-A32-DR-C-0202836