1. METHOD STATEMENT

This method statement is provided in support of the Marine Licence Application for the Proposed Marine Works (Pylon removal). The information provided in this method statement includes the project description for the Proposed Marine Works specific to pylon removal and the coordinates of the marine licence application area for the Proposed Marine Works (Pylon Removal).

1.1 Proposed Marine Works (Pylon Removal)

1.1.1 Design considerations

The Proposed Marine Works have been designed through an iterative process, in consultation with Natural Resources Wales (NRW), that sought to avoid or reduce environmental effects. Constraints which form part of the design of the Proposed Project and which National Grid has committed to for the Proposed Marine Works which are designed to avoid or abate negative environmental effects are presented below.

Table 1-1 Design considerations

During Construction
National Grid have made a commitment not to undertake the proposed works within the Dwyryd Estuary to remove the overhead line during the period 01 November and 31 March to minimise impacts on overwintering birds.
Existing tracks, where possible, will be used to access the pylons. In addition, where possible, access tracks to pylons will be shared (e.g. at 4ZC30 and 4ZC30R).
The same access track route as used in 2013 for the 4ZC030R pylon replacement will be used.
Access trackways will be constructed from temporary trackway instead of stone. This will distribute weight across sensitive habitat better and can be easily removed.
Cranes will not be used at pylons 4CZ031 and 4CZ032 to reduce the load on the saltmarsh habitat.
Where possible bridges instead of culverts will be used to cross saltmarsh creeks. Bridges are quicker to install and will therefore reduce the amount of time works will be undertaken on the saltmarsh.
Where stone is used it will be contained e.g. by membranes or bags, ensuring direct and specific placement.
Navigational safety will be maintained within the estuary by disseminating the appropriate notices to mariners and adding markers to the temporary stone platform at pylon site 4ZC030

1.1.2 Conductor and pylon removal

Removal of the existing VIP subsection infrastructure (i.e. removal of the OHL from Pylon 4ZC027 to 4ZC037) will take place following installation and commissioning of the new underground cables.

The Conductors between pylons could be simply removed by lowering them to the ground and reeling them onto wooden transport drums, although simple and fast this method offers no protection to anything situated in the span such as roads, buildings, railways, walls, hedges, lower voltage power lines and the ground itself.

An alternative, and the preferred approach to conductor removal is to use continuous tension stringing whereby the conductor is replaced under tension by a light bond which is used to reel the conductor onto drums for removal from site. The light bond will be lowered to the ground and reeled in at the receiving pylon. This method will have minimal impact on anything at ground level.

Pylon dismantling and removal can be carried out using a variety of methods depending on the pylon type, location and access. Potential methods include:

- Crane: Pylons can be dismantled using a large mobile hydraulic crane which is positioned on a crane pad at the pylon location. The crane pad will be approximately 20m x 20m (subject to crane size/site constraints) constructed from imported stone and plastic or metal panelling. It will take approximately three days to dismantle a pylon using a crane (following advanced site preparation i.e. installation of the crane pad and progressing of advanced works on the pylon prior to commencement of works with the crane). The sections of the pylon will be cut/ broken up as they are lowered to the ground using a steelwork breaker/ mechanical shears fitted to an excavator. The cut sections of the pylon are then placed into waste skips (which could be located within the crane pad or on temporary track way joining the crane platform) and removed from site for reuse or recycling.
- Winch and Derrick: This method requires two small mobile winches and a derrick (a latticed pole lifting device) to be taken to the site. The derrick will be raised up to the top of the pylon such that approximately one third of the derrick is above the top of the pylon. Four stay wires will be required (for support) at right angles from the top of the derrick down to backstays (concrete blocks on sledges) which are positioned at least one and a half times the maximum height of the derrick away. The pylon will act as a scaffold and will be dismantled from the inside in small sections which will be individually lowered to the ground using the winch and derrick. The winches will be positioned on the saltmarsh and on completion of the works removed, by a telehandler (an all-terrain forklift vehicle). This vehicle will cross a short section of unprotected saltmarsh, once to position the winch and once to remove it.

It is currently anticipated that pylon 4ZC030R will be dismantled with a crane and pylon 4ZC031 with a derrick.

1.1.3 Pylon foundations removal - scenarios for assessment

In line with NRWs conservation objectives for the Pen Llyn a 'r Sarnau / Lleyn Peninsula and the Sarnau Special Area of Conservation (SAC) site, National Grid is committed to removing as much of the pylon foundations as is safe, feasible and practicable, however, due to the age and configuration of the pylons, and difficult estuary environment and ground conditions, full removal of all marine pylon foundations will not be possible. NRW has advised that if full removal is not possible then they would like National Grid to assess the realistic worst-case (the greatest depth of removal which is realistically achievable) for each pylon. As National Grid has a high level of confidence in achieving full removal at the replacement pylon 4ZC030R, this has been assessed alongside a worst-case scenario whereby the pylon and cofferdam cannot be removed by vibration and pulling and partial removal by excavation and cutting is required. The different scenarios for marine pylon foundation removal which have been used in the assessments for the marine HRA (P2048_R4881_Rev4) are presented in Table 1-2 and in Figures 1-1 and 1-2.

Table 1-2 Pylon foundation removal scenarios

Pylon Site	Scenario	Method of extraction	Minimum depth of removal
4ZC030	Partial removal Worst case	Construction of temporary platform to access foundations, excavator with hydraulic breaker	3.75m below ground level (-1.25m ODN)
4ZC030R	Scenario 1 Full removal Best case	Collars removed by hydraulic breakers, steel tube piles & cofferdam removed by leader pile rig	Full removal
	Scenario 2 Partial removal Worst case	Excavate sand to 2m, collars removed by hydraulic breakers, steel tube piles and cofferdam cut at 2m depth	2m below ground level (+0.5m ODN)

4ZC031	Partial removal Worst case	Excavate sand around foundations and then mechanically break up pile caps and remove piles to depth excavator arm can reach	3.75m below ground level (-1.25m ODN)

Note: Ground level refers to the saltmarsh level which has been estimated to be 2.5m above ODN

Figure 1-1 Schematic showing the pylon removal scenarios 4ZC030, 4ZC031 worst case, 4ZC030R preferred case

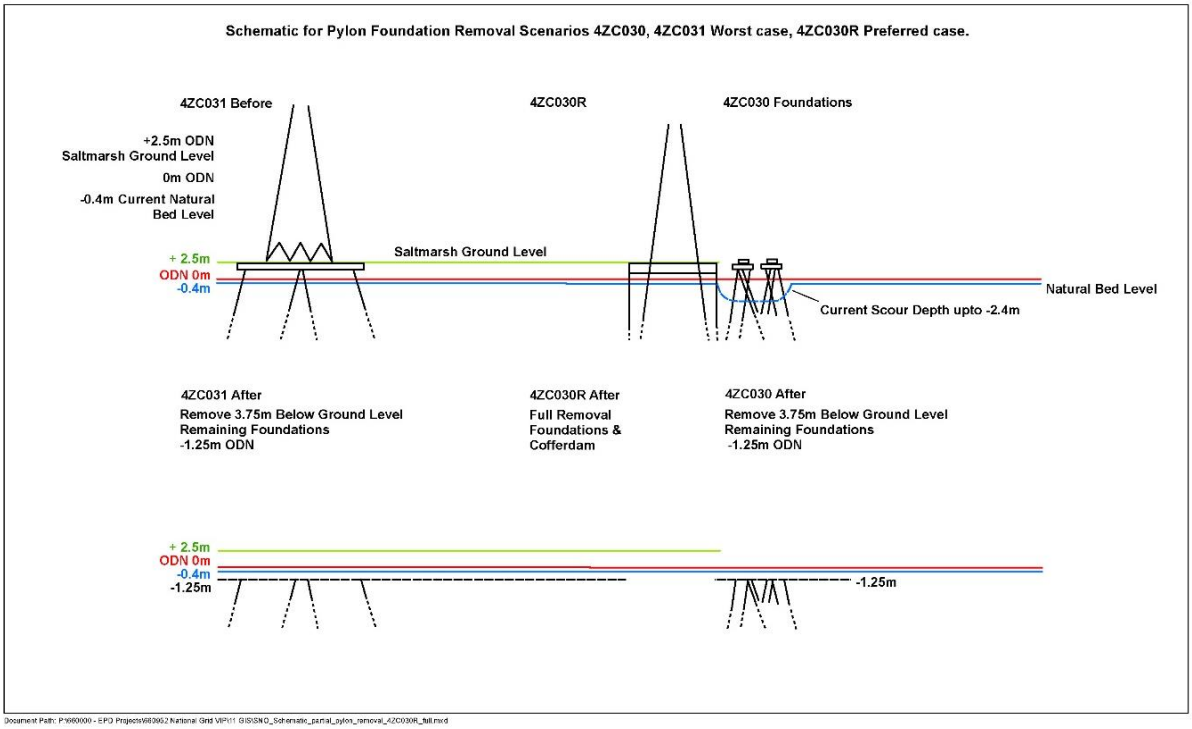
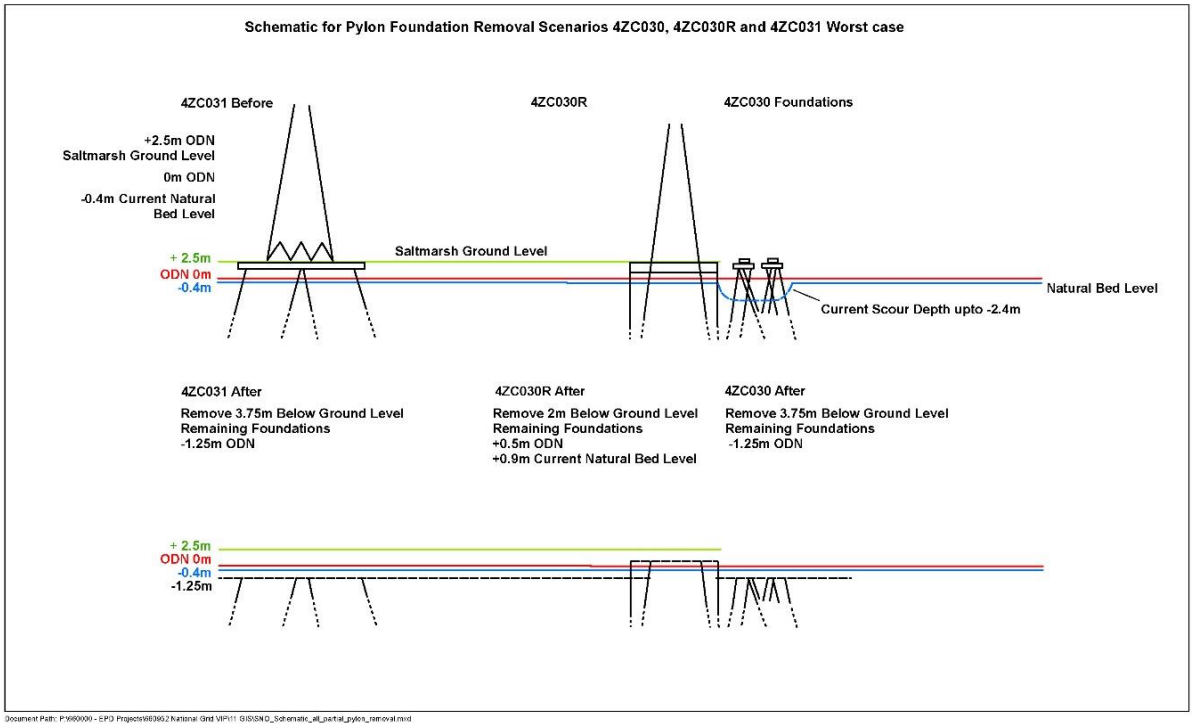


Figure 1-2 Schematic showing the pylon removal scenarios 4ZC030, 4ZC031 worst case, 4ZC030R worst case



The foundation removal method for pylons located within the Marine Environment Area is described below:

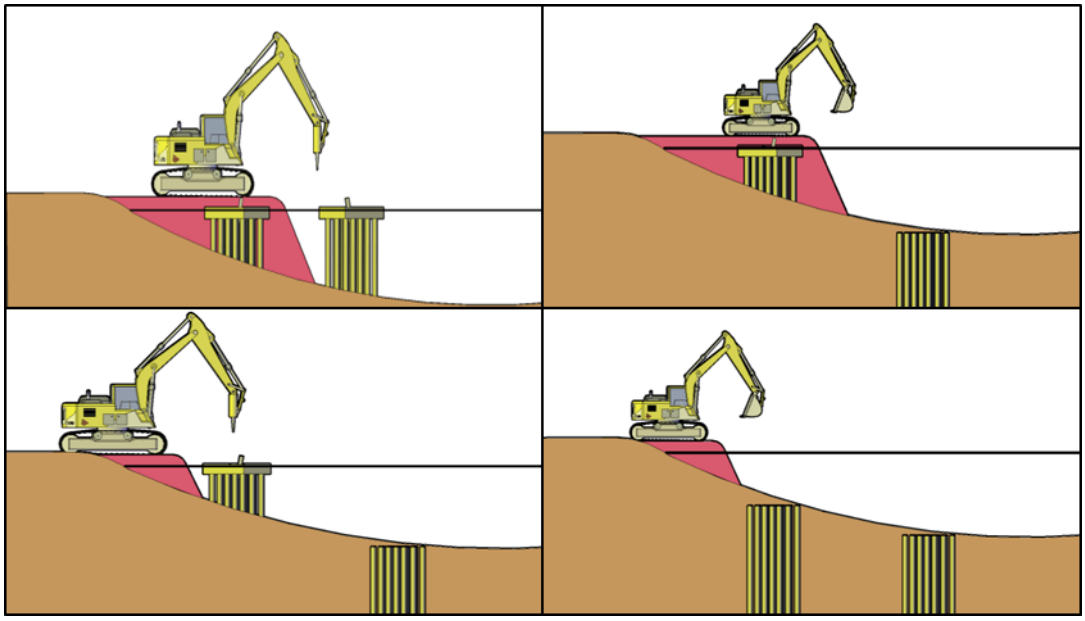
1.1.3.2 4ZC030 (Foundations in estuary)

The method of removing the foundations addresses the pile caps and the pre-cast concrete piles down to below the seabed level. The works will be suspended at high tide and the equipment removed to place above the anticipated water level.

The pre-cast concrete piles are in sections which are not connected (as they were designed to resist compressive forces), therefore it will not be possible to withdraw the piles from the sand by any method other than to excavate them out as far as is safe and reasonably practicable.

The proposed method of foundation removal involves building a working platform so that an excavator with a hydraulic breaker can be located close to the pylon foundations (Figure 1-3). The working platform will be created by placing boulders in the sea or alternately textile bags filled with granular material. If textile bags are used a capping layer of granular material will be required; laid over the top of the bags. The outer pile caps (the pile caps on the foundations furthest from the shore) will be broken up and removed before reducing the size of the working platform and removing the inner pile caps (on the foundations closest to the shore).

Figure 1-3 Illustration showing working platform to be used for foundation recovery



Although it is expected that the pre-cast concrete piles cannot be totally recovered it is expected that it will be possible to remove sections of pile within the reach of the excavator which is anticipated to be 6-7m below the level of the working platform (the working platform is anticipated to be approximately 1m above low tide level). In terms of assessment, a realistic worst case for foundation removal of 3.75m below ground level (assumed to be the saltmarsh level at 2.5m above ODN) has been adopted. It is anticipated that it will take 21 days to set up and remove the working area and a further seven days for excavation of the foundations.

1.1.3.3 4ZC030R (Replacement pylon for 4ZC030)

National Grid will aim to remove all pylon structures including the foundation piles and cofferdam sheet piles at 4ZC030R.

The foundation collars will be removed by hydraulic breakers. The preferred approach to removing the steel tube piles is to use a Leader Pile Rig which will grip the pile and remove it vertically with a vibrating action. It is anticipated that the piles will be removed with the concrete plug intact. The cofferdam ring beam will be removed by using the same Leader Piling Rig which would simultaneously vibrate and lift the metal sheets. The sheets will be cut into manageable sizes and lifted out using a crane. It is anticipated that five days will be required for pylon foundation removal. However, if full removal of the foundations and cofferdam is successful it is anticipated to require seven days (i.e. a further two days to remove the cofferdam) (timescales are weather dependant). As this area is tidal the void in the ground will fill naturally with local material by tidal action.

It is anticipated that full removal of the foundations and cofferdam will be possible. However, this will not be known for certain until the contractors are on site and removal has been attempted. If the piles have fused / bonded they may not come out through vibration and pulling as planned. In this case the foundations will be removed to the maximum depth possible by using an excavator. This will be located on the working area, which will be formed of plastic or aluminium panels. The excavator will remove sediment to allow cutters to be used inside the cofferdam to cut the piles and cofferdam sheet piles.

The sand around the tube piles will be excavated to a depth of around 2m (inside the cofferdam). Even though the foundations are inside the cofferdam, water will continue to enter the excavation even at

low tide so continuous pumping will be required. The piles and cofferdam will then be cut at approximately 2m below ground level and removed.

The duration of excavation of the foundations if full removal does not work is estimated to be 17 days in total (three days to attempt full removal and a further 14 days to undertake partial removal). Timescales are weather dependent.

The reinforced concrete will be disposed of and the redundant steelwork removed for recycling.

1.1.3.4 4ZCO31 (Pylon on the saltmarsh)

4ZC031 will be removed using the method outlined below.

- Place temporary trackway across the saltmarsh. Trackway approximately 4.5m wide, constructed of plastic or aluminium panels laid two side by side and a third centrally positioned over the top.
- Excavate soil from around the foundations to depth of 3.75m below ground level and set aside for backfilling.
- Removal of the pile cap and concrete piles to 3.75m below ground level.
- Backfill with soil set aside and a non-cohesive fill imported from local source to maintain the topography.

It is anticipated that once the access to the pylon has been installed, 10 days will be required for pylon removal, and a further four days for excavation of foundation (timescales are weather dependant).

1.1.3.5 Temporary access and laydown

Access Tracks: The removal of pylons (including the foundations) in the Marine Environment Area will require temporary access across saltmarsh habitat. The temporary access will make use of trackway (or similar); however, upgrades may be required by placing a temporary stone access road/ surface across an existing access track. Pylons 4ZC030, 4ZC030R and 4ZC031 will require temporary access as follows:

- Access to pylons 4ZC030 and 4ZC030R will partly use an existing stone track which leads to a sewage works and partly cross the saltmarsh using a temporary constructed track along the same route used during the installation of pylon 4ZC030R in 2013. The existing stone track may require widening.
- Access to pylon 4ZC031 will partly use a narrow existing stone track which follows the boundary of the SAC (and the Marine Environment Area) and partly use a temporary constructed track across the saltmarsh. To access the saltmarsh from the existing stone track a culverted ramp will be required to cross from the higher ground of the track to the lower ground of the saltmarsh, over a NRW defined 'main river' watercourse. Further details on the ramp are provided below.

In general, preference will be given to using plastic or aluminium road panels to construct temporary roads.

Access to the saltmarsh from the existing track will require the creation of approximately 40m of additional stone track way to make a ramp and turning point for vehicles turning into / out of the saltmarsh. A ramp is required due to the difference in ground level and will need to be culverted due to the presence of a deep channel adjacent to the track (see Figure 1-4). The culverted ramp will be constructed as follows:

Pipes will be laid in the watercourse to carry the water and to prevent fill from blocking the watercourse. At each end of the pipe way, a “headwall” will be built to prevent water flowing outside the pipes, which would scour the fill away. The pipes will be overlaid with geotextile membrane which will prevent fill or silt entering the watercourse. Crushed stone will be placed over the membrane to

form the roadway or ramp. All this work will be carried out with a small excavator to lift the pipes and place the crushed stone.

Figure 1-4 Photographs of ramp construction and trackway for previous works on Pylon 4ZC030R

Two culverts will be built to protect two known watercourses along the access route to pylon 4ZC031. The ramp will sit over one culvert as described above, and track panels will sit over the top of another culvert which will need to be constructed. Due to the dynamic nature of the estuary and saltmarsh, it is possible that by the time the works are planned to take place other culverts may be required for any additional creeks identified along the access routes.

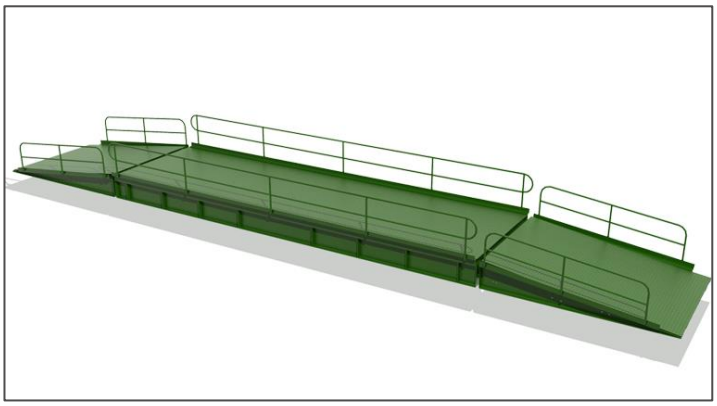
A vehicular bridge approximately 8m x 2.5m will be required to cross a watercourse located in front of the west side of pylon 4ZC031 (see Figure 1-5). Additionally, a further six vehicular bridges approximately 6m x 2.5m will be required to cross creeks on the saltmarsh (three between pylons 4ZC031 and 4ZC030R, and three along the access route to pylons 4ZC030 and 4ZC030R).

Bridges will be built using kits which can be lifted into place using a crane unit mounted on the delivery lorry. Prior to bridge placement, the bank seat (temporary footings for the bridge) will require some preparation such as laying wooden sleepers or bags of crushed stone to form a temporary level base. The bridge unit, depending on its span, may be delivered as one unit or a series of sections. Figure 1-5 shows an example of a vehicle bridge and Figure 1-6 shows a diagram of the sectioned parts to vehicular bridges.

The bridges will be lifted onto the temporary foundation using the lorry mounted crane and then bolted together.

Figure 1-5 An example of a vehicular bridge

Figure 1-6 Diagram showing three-part sections of vehicular bridge



Where laydown areas are located close to pylons for the removal of conductors, the temporary working area is known as the Equipotential Zone (EPZ) or puller / tensioner platform and it will be constructed from aluminium panels.

There are two EPZs in the Marine Environment Area, one each side of pylon 4ZC031. The combined footprint of these areas is 3,155m^2**.** The EPZ on the east side of pylon 4ZC031 will also have back stays which are used to brace the pylon tower when the conductors are pulling it in the opposite direction. The back stay will comprise a row of steel sledges installed on the ground each loaded with 3 kentledge blocks, which weigh approximately 1.4 tonnes each. The footprint of each sledge is approximately 1.2m x 1.8m.

The footprint for light use vehicle access (forklift vehicle) across the saltmarsh will be along a narrow track the width of the vehicle. As the exact route the vehicle takes is unknown, the two footprint areas allow for flexibility. Combined the two areas cover approximately 3820m^2. Pylon dismantling will take place within a temporary working area around the pylon comprising aluminium or plastic panels. The required footprint is approximately 60m x 60m, with a 32m x 32m gap in the middle.

Excavation of the foundations will take place within the foundation removal area which is the 32m x 32m gap in the middle of the working area.

1.1.4 Materials permanently deposited in the Marine Environment

At pylon site 4ZC031, the excavation of the foundations will involve the removal of concrete which will result in a net loss of material following back fill of all excavated sediments.

For the partial removal scenario assessed in the EA and HRA (3.75m depth excavation) it has been estimated that following backfill with excavated sediment the depth of the residual holes at each of the four pylon legs will be approximately 0.85m.

NRW Advisory has advised that completely backfilling the excavation may not be necessary, as the creation of a shallow pan could potentially provide a suitable area for *Eleochoris parvula*. NRW has recommended leaving a depth of approximately 30cm, avoiding a regular shape if possible. Therefore, for this scenario, a 0.55m depth of backfill would be required. Each excavated hole is estimated to be 6.7m x 4.84m. The volume per hole would therefore be 17.8m^3 (6.7m x 4.84 x 0.55m). Therefore, the total amount of imported infill required for four holes for this scenario is estimated to be 71m^3.

However, the contractor will aim to extract as much of the piles as possible and since this amount won't be known until on site the estimated worst case of required imported infill has been estimated to be double this amount, i.e. 142m^3.

NRW advisory has advised that a suitable infill material would be fine sand (approximately 0.1mm grade) of marine origin which can be purchased from a builders' merchant.

1.1.5 Footprint of works

The surface footprint of the Proposed Marine Works is presented in Table 1-3. These are indicative figures which include the surface areas (either on the saltmarsh or in the estuary) affected by the removal of the pylons, conductors and foundations within the Marine Environment Area. There will be no surface footprint from the construction of the tunnel under the estuary and the laying of the cable within the tunnel within the Marine Environment Area.

The area of the existing stone track which crosses the saltmarsh to pylons 4ZC030 and 4ZC030R has been included because it is possible it may require improvement and widening. Since it is likely any additional width which overlaps with the saltmarsh will be less than the existing area of track, this figure is very conservative.

The volumes of excavated material associated with foundation removal works will not be known until the contractor is on site and the maximum depth of excavation has been achieved. However, indicative values have been estimted based on the worst-case depths of excavation and are presented in Table 1-4 below.

Table 1-3 Indicative footprint surface area of Proposed Marine Works

Pylon /site	Description	Working area	Excavation footprint
Pylon working area			
4ZC030	A stone platform will be constructed from the shore approximately 32m x 32m. The excavator will sit on the platform and its arm will be positioned over the exposed foundations which are within scour holes therefore minimal excavation anticipated.	1024 m^2	Not known but minimal
4ZC030R Worst case scenario – partial removal	60m x 60m working area formed using terrafirma plastic panels with 32m x 32m centre gap. At least two layers of panels to be laid due to wet ground conditions. 32m x 32m area disturbed by excavation works. Within this area there will be 4 holes within the cofferdam each approximately 2.25m^2	3,600m^2	1,024m^2
4ZC031	60m x 60m working area formed using terrafirma plastic panels with 32m x 32m centre gap. At least two layers of panels to be laid due to wet ground conditions. 32m x 32m surface area disturbed by excavation works. Within this area there will be 4 holes each approximately 32.5m^2 (6.7m x 4.84m)	3,600m^2	1,024m^2
Sub Total working and excavation areas		**8,224m^2**	**2,048m^2**
Conductor removal laydown areas			
EPZ / Puller/ Tensioner Platform	Two EPZs (Laydown area for the removal of conductors) within the Marine Environment Area, one either side of 4ZC031.	3200m^2	N/A
Back stay	One back stay used to brace the 4ZC031 pylon tower when conductors are pulling it in the opposite direction. Steel sledges will be installed on the ground each loaded with 3 kentledge blocks, which weigh approximately 1.4 tonnes each.	240m^2	N/A
Light Access	Two winches will be positioned on the saltmarsh either side of pylon 4ZC031 by a telehandler (all terrain forklift vehicle)	3820m^2	N/A

Pylon /site	Description	Working area	Excavation footprint
Conductor working Area	The conductor working area will receive a light bond which will be lowered to the ground and reeled in at the receiving pylon as described in Section 3.2.3.	9200m^2	N/A
Conductor working area & 3 bridges	Conductor working area and area where 3 bridges will be required	8220m^2	N/A
Sub Total conductor removal laydown areas		**24,680m^2**	**N/A**
Scaffold and Scaffold Stay Areas			
Scaffold & Scaffold Stay	Scaffolding is required in the wider Proposed Project area and parts of the scaffolding and scaffold stay areas partially overlap with the marine environment area. Therefore, although not part of the Proposed Marine Works the footprints of these areas have been included here for completeness.	1210m^2	N/A
Sub Total scaffold and scaffold stay areas		**1210m^2**	**N/A**
Access routes and watercourse crossings			
4ZC030 & 4ZC030R	Existing stone track (towards sewage works) to be used and / or improved. *Note the footprint value is based on the area of the existing track. Should the track need widening the area inside the SAC is likely to be the length of the existing track but certainly less than the width of the existing track. Therefore, the footprint value is an over-estimate.*	890m^2	N/A
	Temporary track – plastic track is between 2m and 2.5m wide. Two panels are laid side by side and a third is laid over the top in the middle. Total width of track approximately 4.5m. 3 temporary vehicular bridges	2160m^2	
4ZC031	Existing Stone Access track (to cottage) to be used and / or improved	120m^2	
4ZC031	Temporary track - plastic track panels between 2m and 2.5m wide. Two panels are laid side by side and a third is laid over the top in the middle. Total width of track approximately 4.5m.	950m^2	
Sub Total area of access tracks		**4120m^2**	**N/A**
Total Footprint of works in marine environment		**37,024m^2**	**2,048m^2**
Total Footprint within the Proposed Marine Works Site Boundary		**38,701m^2**	

Table 1-4 Indicative excavation volumes associated with foundation removal

Pylon / Scenario	Pylon structure to remove	Volume of excavated hole/material per foundation leg (Length x width x depth)	Total volume of excavation (4 foundation legs) (+ cofferdam at 4ZC030R)	Quantity of material* to remove from site	Excavated material to be re-used as fill	Quantity of imported fill
4ZC030 Partial removal 3.75m	Concrete pile cap + 18 piles per leg	38.75m^3 (7.02m x 4.6m x 1.2m) + 13m^3	207m^3 (155m^3 + 52m^3)	207m^3	0m^3	0m^3
	Concrete platform	N/A	N/A	1,800m^3 (20m x 20m x 4.5m)	N/A	N/A

4ZC030R Full removal scenario	Concrete pile cap + concrete plugs (concrete plug in each tube pile)	2.25m³ (1.5m x 1.5m x 1.0m) + 1m³	13m³ (9m³ + 4m³)	13m³	0m³	0m³
	Metal tube piles & cofferdam sheet piles	N/A	25.2m³ (1.7m³ + 23.5m³)	25.2m³	0m³	0m³
4ZC030R Partial removal 2m scenario	4ZC030R Concrete pile cap + Metal tube piles & cofferdam sheet piles + concrete plugs	N/A	1711m³	38.2m³ (13m³ + 25.2m³)	1,673m³	0m³
4ZC031 Partial removal 3.75m	Chimney & muff	0.49m³ (0.9m x 0.6m x 0.9m)	1.96m³	1.96m³	377m³	110m³
	Pile cap + 18 piles per leg	121.6m³ (6.7m x 4.84m x 3.75m)	486.4m³	107.7m³ 4 x (5.2m x 3.34m x 1.55m)		

* Concrete and / or scrap metal

1.1.6 Project programme

The current indicative programme for the Proposed Project is that, assuming planning consent, on-site works would commence in 2021 and take approximately 5-6 years to complete.

First site access is likely to be taken at the western tunnel drive site near Garth, this is currently expected to take place in early 2021 and is subject to gaining all necessary approvals.

Site establishment near Cilfor is likely to begin later and will be started at a time to allow completion of the shaft prior to the arrival of the TBM. Site establishment at Cilfor will involve building the floating access road (which will permanently remain in situ), a construction compound and any associated groundworks.

The shaft, tunnel head house, and SEC will be constructed at Cilfor. Once the outage is in place, the erection of the new pylon will be completed, as well as the removal of the current 4ZC027 pylon. Once these, and the tunnel are complete and the new conductors and cables energised, the OHL removal will take place. All tunnel, tunnel head house and sealing end compound construction work is expected to be complete by the end of 2025.

Overhead line removal work (including the Proposed Marine Works) is expected to take place in 2026. The proposed overhead line Marine Works will take place between 01 April and 31 October, with the foundation removal completed and the physical barriers within the estuary removed as far as possible by the end of this period. If the contractor is able to complete the works earlier overhead line removal works may take place in 2025 but would still take place between 01 April and 31 October.

1.1.7 Pylon Removal Proposed Marine Works Application Area

The Pylon Removal Proposed Marine Works Application Areas are shown in Figure 1-7 (see Location Plan for Proposed Marine Works (Pylon Removal) (P2048-LOC-005) for a full-page copy) and the coordinates for these areas are listed in Table 1-5 below. The main area of Pylon Removal Proposed Marine Works is Area 1. There are five other small discrete areas which fall within the Proposed Project

site boundary and are within the marine environment and therefore have been included within the marine licence application.

Figure 1-7 Proposed Marine Works Pylon Removal

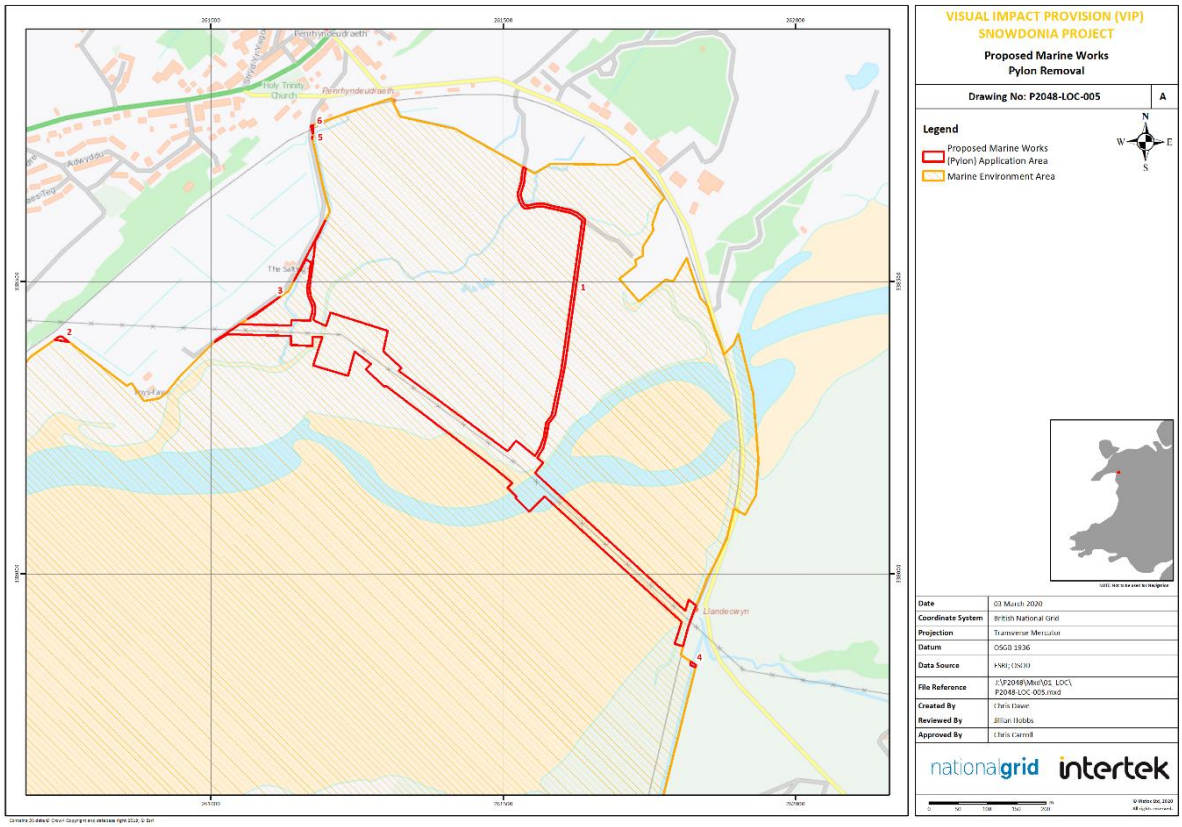


Table 1-5 Proposed Marine Works Pylon Removal Coordinates

Area ID	Easting	Northing	Order
1	261537.9	338630.7	0
1	261540.8	338630.5	1
1	261549.8	338632.3	2
1	261555.3	338633.4	3
1	261562.6	338634	4
1	261562.8	338634	5
1	261563	338634	6
1	261569.9	338633.6	7

Area ID	Easting	Northing	Order
1	261172.4	338471	113
1	261174.2	338467.3	114
1	261176	338463.8	115
1	261176.9	338460.8	116
1	261177.6	338458.1	117
1	261178.1	338454.9	118
1	261178.2	338451.7	119
1	261178.1	338448.6	120

1	261570.2	338633.6	8	1	261177.7	338446	121
1	261570.5	338633.5	9	1	261176.8	338442.6	122
1	261581.8	338630.4	10	1	261175.4	338439.2	123
1	261616	338622.7	11	1	261174.9	338437.4	124
1	261616.3	338622.6	12	1	261175	338435.6	125
1	261616.6	338622.5	13	1	261176	338434.1	126
1	261626.9	338617.5	14	1	261176.9	338433.2	127
1	261627	338617.4	15	1	261196.6	338424.3	128
1	261627.3	338617.2	16	1	261203.9	338447.6	129
1	261633	338612.9	17	1	261302	338416.2	130
1	261633.1	338612.8	18	1	261294.2	338381.2	131
1	261633.2	338612.8	19	1	261325.4	338352.5	132
1	261639.1	338607.5	20	1	261321.3	338347.7	133
1	261640	338605.7	21	1	261507.2	338210.6	134
1	261639.9	338605.2	22	1	261521.6	338228.3	135
1	261605.2	338357.8	23	1	261554.2	338202.2	136
1	261603.3	338345.3	24	1	261561.4	338214.1	137
1	261588.3	338272.2	25	1	261561.5	338214.4	138
1	261577.7	338257.9	26	1	261569.2	338235	139
1	261573.7	338236.5	27	1	261569.2	338235.3	140
1	261573.6	338236.5	28	1	261572.9	338259.1	141
1	261567.9	338215.2	29	1	261582.4	338272	142
1	261558.1	338199.1	30	1	261583	338274.7	143
1	261568.3	338190.7	31	1	261589.8	338305.3	144
1	261553.9	338172.8	32	1	261591.2	338311.5	145
1	261811	337937.6	33	1	261598.8	338346	146
1	261816.8	337956.2	34	1	261600.6	338358.8	147
1	261829.9	337946.3	35	1	261634.8	338604.7	148
1	261826	337937.1	36	1	261634.1	338605.4	149

1	261815.5	337908.7	37	1	261629.9	338609	150
1	261807.2	337876.7	38	1	261624.5	338613.1	151
1	261792.9	337880.7	39	1	261614.7	338617.9	152
1	261800.5	337903.5	40	1	261580.7	338625.5	153
1	261805.1	337918.5	41	1	261580.5	338625.6	154
1	261570.8	338133.2	42	1	261569.4	338628.6	155
1	261544.8	338106.8	43	1	261562.9	338629	156
1	261520.3	338130.2	44	1	261556	338628.4	157
1	261522.6	338132.6	45	1	261550.8	338627.4	158
1	261507.4	338148.4	46	1	261541.5	338625.5	159
1	261515.6	338156.1	47	1	261541.1	338625.4	160
1	261484	338181.6	48	1	261540.8	338625.4	161
1	261299	338322.2	49	1	261536.5	338625.8	162
1	261297.2	338320.2	50	1	261536.2	338625.9	163
1	261264.5	338350.3	51	1	261535.8	338626	164
1	261273.3	338359.9	52	1	261535.5	338626.1	165
1	261245.4	338380.4	53	1	261535.2	338626.3	166
1	261234	338339.5	54	1	261534.9	338626.6	167
1	261174.4	338357.2	55	1	261530.8	338630.8	168
1	261190.3	338405.3	56	1	261530.6	338631.2	169
1	261173.8	338405.9	57	1	261530.4	338631.5	170
1	261173.6	338390.4	58	1	261527.1	338638.5	171
1	261136.1	338392.1	59	1	261527	338638.7	172
1	261136.6	338407.1	60	1	261526.9	338638.9	173
1	261028.3	338410.6	61	1	261524.8	338646.5	174
1	261005.8	338397.4	62	1	261524.7	338646.8	175
1	261008.5	338400.1	63	1	261524.7	338647.2	176
1	261049.5	338428	64	1	261524.7	338651.4	177
1	261137.1	338425.1	65	1	261524.7	338651.9	178

1	261137.5	338434.5	66
1	261170.1	338433.4	67
1	261169.7	338434.9	68
1	261169.6	338436.4	69
1	261169.9	338438.4	70
1	261171.3	338441.7	71
1	261172.1	338443.8	72
1	261172.6	338446.1	73
1	261173.1	338448.3	74
1	261173.3	338451	75
1	261173.4	338452.8	76
1	261173.2	338455.3	77
1	261172.8	338457.9	78
1	261171.9	338461.4	79
1	261170.8	338464.6	80
1	261168.4	338469.4	81
1	261167.4	338471.8	82
1	261166.2	338475.2	83
1	261165.3	338478.8	84
1	261164.8	338482.9	85
1	261164.6	338486.7	86
1	261164.8	338490.6	87
1	261165.1	338494.7	88
1	261166.3	338500.1	89
1	261167.7	338511.8	90
1	261170.5	338533.5	91
1	261162.2	338537.9	92
1	261150.4	338516.3	93
1	261142.3	338502.7	94

1	261524.8	338652.2	179
1	261526.4	338657.1	180
1	261529.5	338666.8	181
1	261531.2	338675.1	182
1	261531.2	338679.9	183
1	261531.2	338680.2	184
1	261532.4	338689.7	185
1	261532.4	338689.8	186
1	261532.5	338690.1	187
1	261534.4	338696.3	188
1	261538.9	338693.8	189
1	261537.3	338688.8	190
1	261536.2	338679.7	191
1	261536.2	338674.9	192
1	261536.2	338674.4	193
1	261536.2	338674.4	194
1	261534.3	338665.7	195
1	261534.3	338665.4	196
1	261531.2	338655.6	197
1	261529.7	338651	198
1	261529.7	338647.6	199
1	261531.7	338640.5	200
1	261534.7	338634	201
1	261537.9	338630.7	202
2	260744.7	338405.9	0
2	260756.4	338397.1	1
2	260732.2	338401	2
2	260739.5	338406.1	3
2	260744.7	338405.9	4

1	261141.2	338501.3	95	3	261076.4	338444.4	0
1	261195.1	338604.7	96	3	261062.4	338436.7	1
1	261194.7	338603.6	97	3	261117.1	338473.9	2
1	261194.6	338603.4	98	3	261116.9	338473.8	3
1	261181.6	338575.8	99	3	261076.4	338444.4	4
1	261181.6	338575.7	100	4	261829.6	337844.7	0
1	261178.3	338569.4	101	4	261828.6	337841	1
1	261175.3	338544.4	102	4	261819.6	337844.5	2
1	261174.5	338538.2	103	4	261821.1	337850.5	3
1	261174	338533.7	104	4	261829.6	337844.7	4
1	261173	338525.3	105	5	261173.3	338748.2	0
1	261170.1	338501.2	106	5	261173.3	338744.6	1
1	261169.2	338496.4	107	5	261172.6	338747.8	2
1	261168.6	338491.2	108	5	261173.3	338748.2	3
1	261168.7	338487.4	109	6	261174.9	338768.2	0
1	261169.1	338482.6	110	6	261173.6	338753.6	1
1	261169.8	338478.8	111	6	261170.5	338766.7	2
1	261170.7	338475.4	112	6	261174.9	338768.2	3