



- Legend**
- Proposed Turbine Locations
  - [ - - ] 20 km Buffer
  - Redline Boundary

Rev	Date	By	Comment

**Client**

Ballykett Green Energy Limited

**Client Representative**



**JENNINGS O'DONOVAN**  
CONSULTING ENGINEERS

**Project**

Proposed Wind Farm  
at Ballykett, Co. Clare.

**Title**

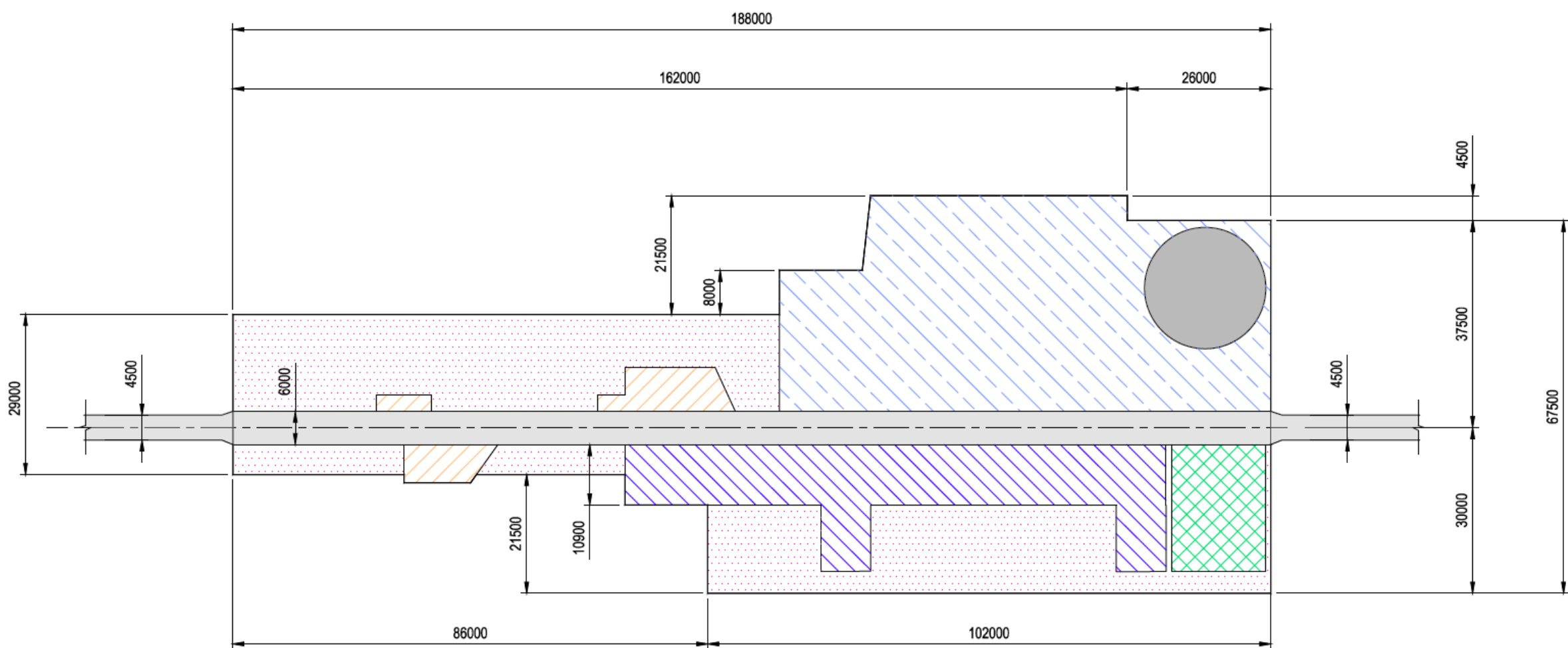
Wind Farms within 20km  
of the Proposed Development

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Drg. By	SB	Drg No	-
Checked By	SM	Rev	1
Stage	EIAR	Date	04/01/24
Scale	1:150,000 (A3)	Figure	2.1



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## Legend

	MAIN CRANE HARDSTAND (2770m²)
	COMPONENT SET DOWN AREA (1290m²)
	ASSIST CRANE HARDSTANDS (290m²)
	AREA CLEARED OF ANY OBSTACLES (3060m²)
	VEHICLE PARKING (390m²)
	ACCESS ROAD (1128m²)
	TURBINE FOUNDATION (380m²)

Rev	Date	By	Comment
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### Client

Ballykett Green Energy Limited

### Client Representative



### Project

Proposed Wind Farm  
at Ballykett, Co. Clare.

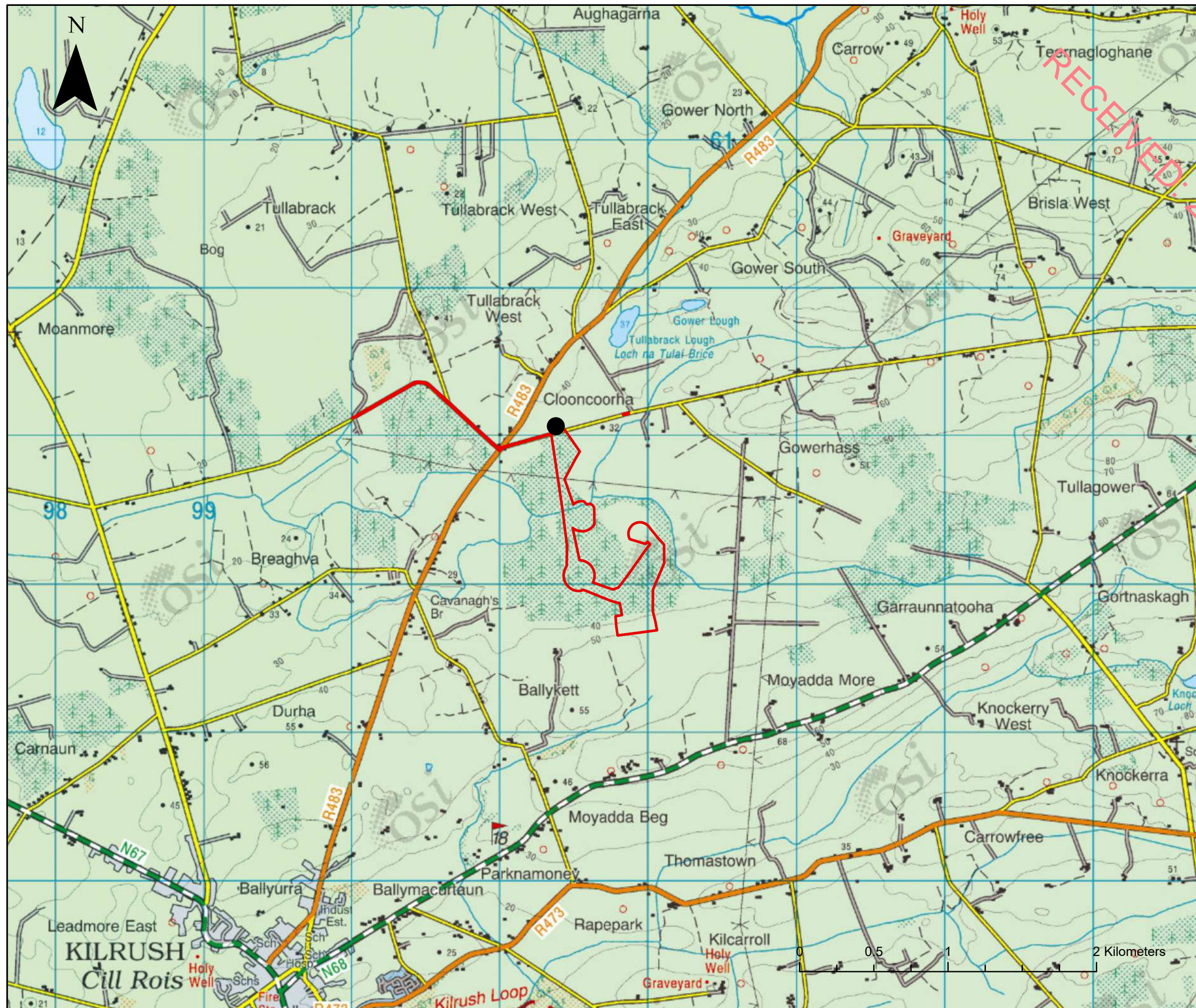
### Title

Turbine Hardstand Schematic

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Drg. By	AB	Drg No	-
Checked By	AOG	Rev	0
Stage	EIAR	Date	26/05/'22
Scale	NTS	Figure	2.2





**Legend**

- Redline Boundary
- Site Entrance

Rev	Date	By	Comment

**Client**

Ballykett Green Energy Limited

**Client Representative**

**JENNINGS O'DONOVAN**  
CONSULTING ENGINEERS

**Project**

Proposed Wind Farm at Ballykett, Co. Clare.

**Title**

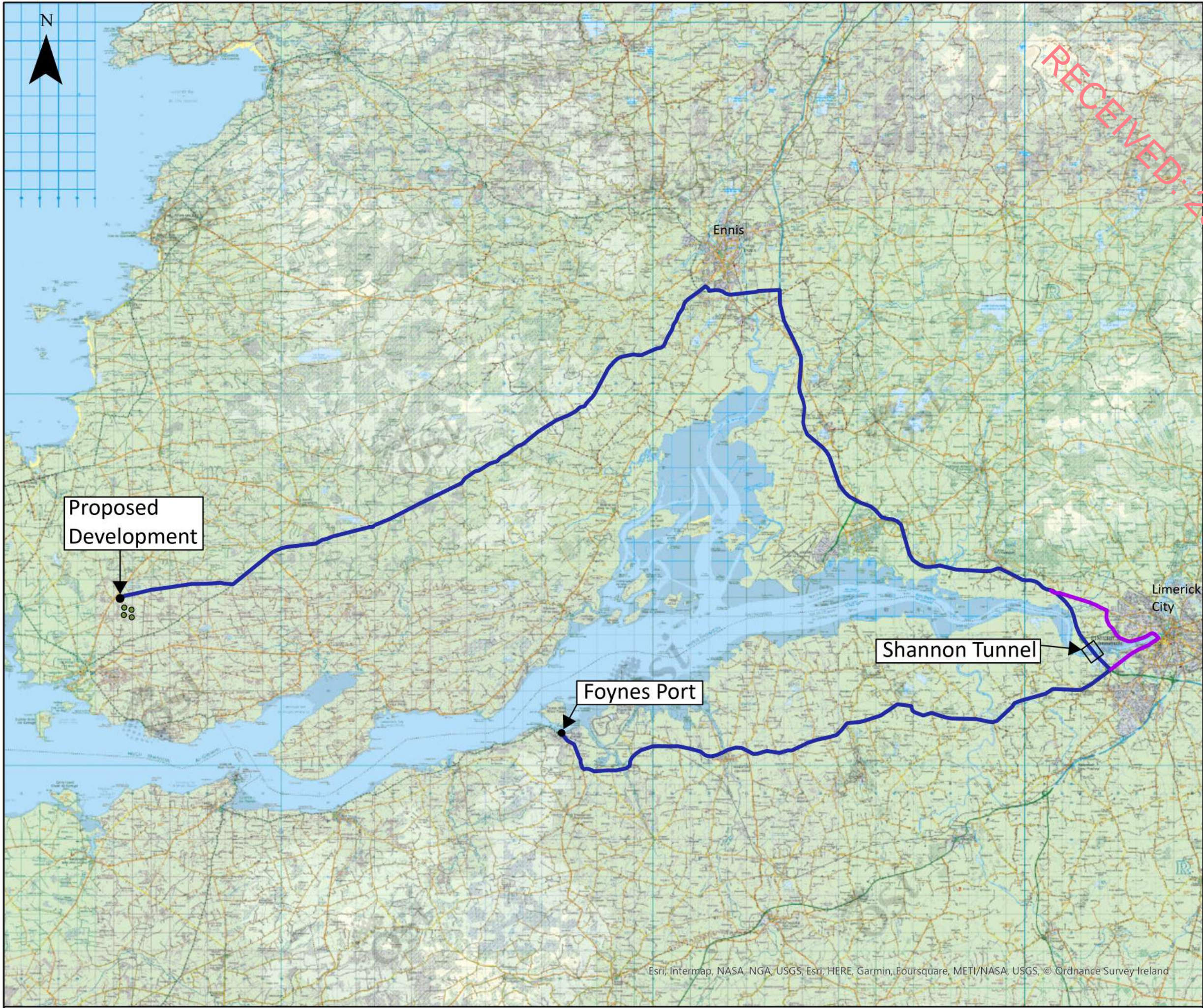
Site Entrance Location

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Drg. By	SB	Drg No	-
Checked By	SM	Rev	1
Stage	EIAR	Date	24/04/'23
Scale	1:25,000 (A3)	Figure	2.3

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**Legend**


- Proposed Turbine Locations
- Delivery Route Avoid Tunnel
- Delivery Route through Tunnel

Rev	Date	By	Comment

**Client**

Ballykett Green Energy

**Client Representative**

**JENNINGS O'DONOVAN**  
CONSULTING ENGINEERS

**Project**

Proposed Wind Farm at Ballykett, Co. Clare.

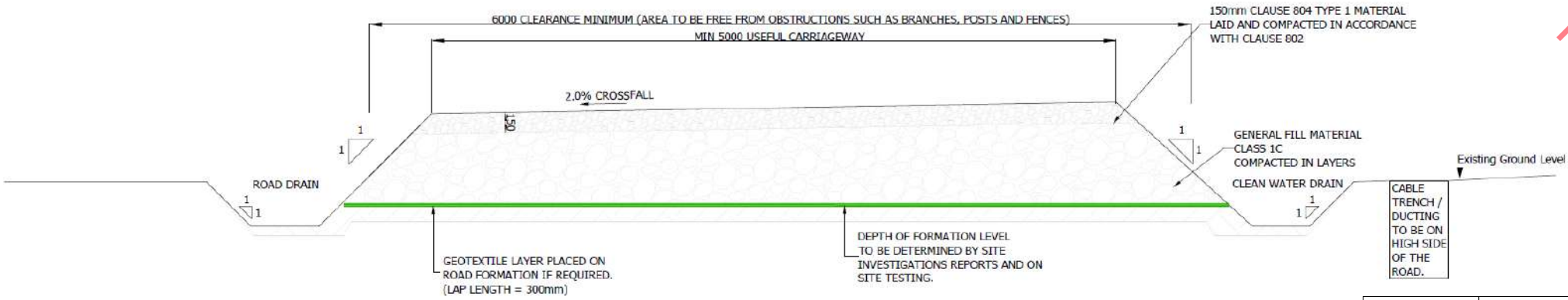
**Title**

Delivery Routes

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<b>Drg. By</b>	AB	<b>Drg No</b>	-
<b>Checked By</b>	AOG	<b>Rev</b>	0
<b>Stage</b>	EIAR	<b>Date</b>	20/03/'23
<b>Scale</b>	1:200,000 (A3)	<b>Figure</b>	2.4



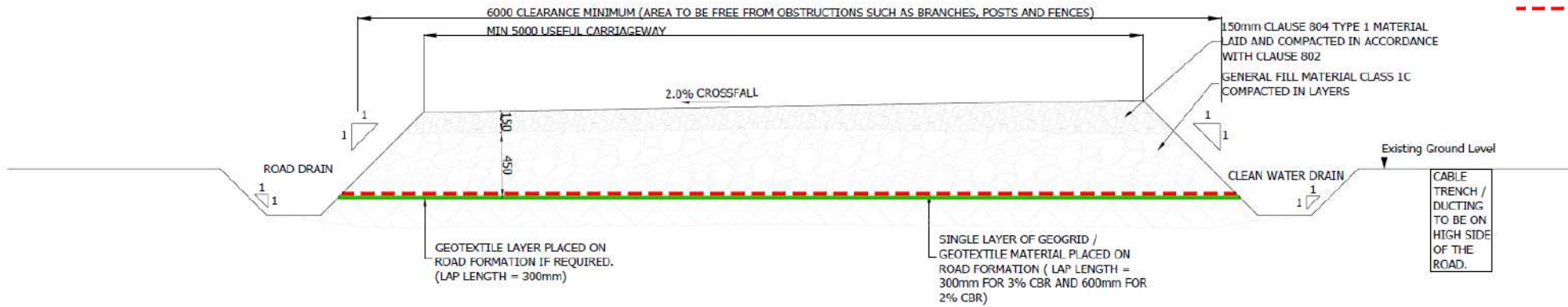


SECTION - NEW SITE ROAD - (CBR > 3%)

SCALE 1:25

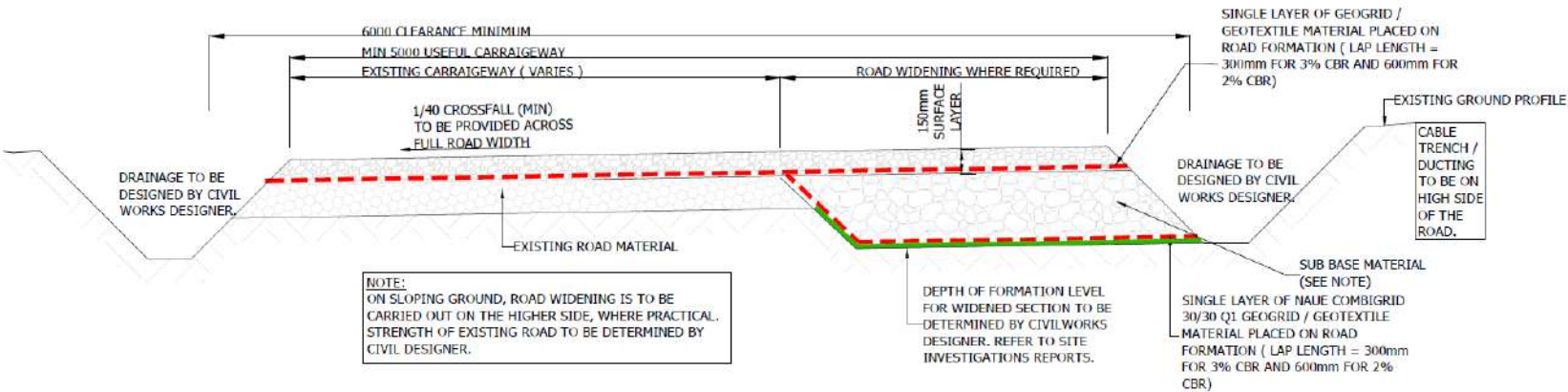
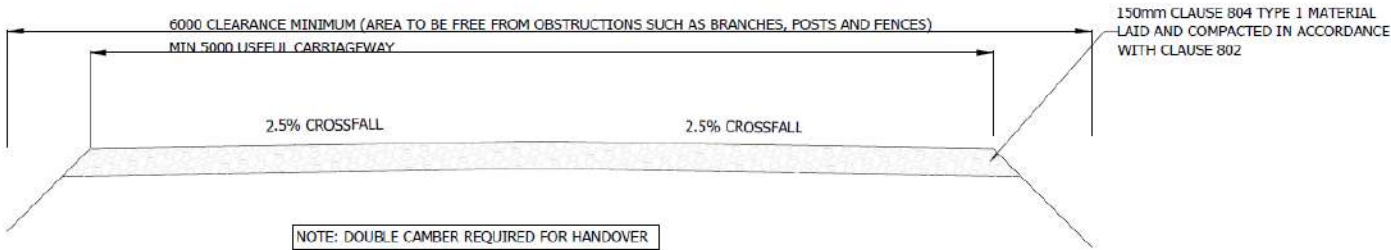
Formation CBR (%)	Thickness of Capping Layer	Thickness of Running Surface
3	450	150
4	350	150

————— GEOTEXTILE LAYER  
- - - - - GEOGRID / GEOTEXTILE LAYER



SECTION - NEW SITE ROAD - (CBR = 2% to 3%)

SCALE 1:25



ROAD WIDENING ON EXISTING SITE ROADS WHERE REQUIRED CONSTRUCTION PHASE

SCALE 1:25

- NOTES:
- 1 FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.
  - 2 ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE.
  - 3 ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES.
  - 4 THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.
  - 5 ROAD WIDTH VARIES AT CURVES AND INTERSECTIONS TO ACCOMMODATE ABNORMAL LOAD VEHICLES
  - 6 CLEAN WATER DRAIN, REFER TO LAYOUT DRAWINGS FOR LOCATION OF CLEAN WATER DRAIN

Rev	Date	By	Comment

Client

Ballykett Green Energy Limited

Client Representative



Project

Proposed Wind Farm  
at Ballykett, Co. Clare.

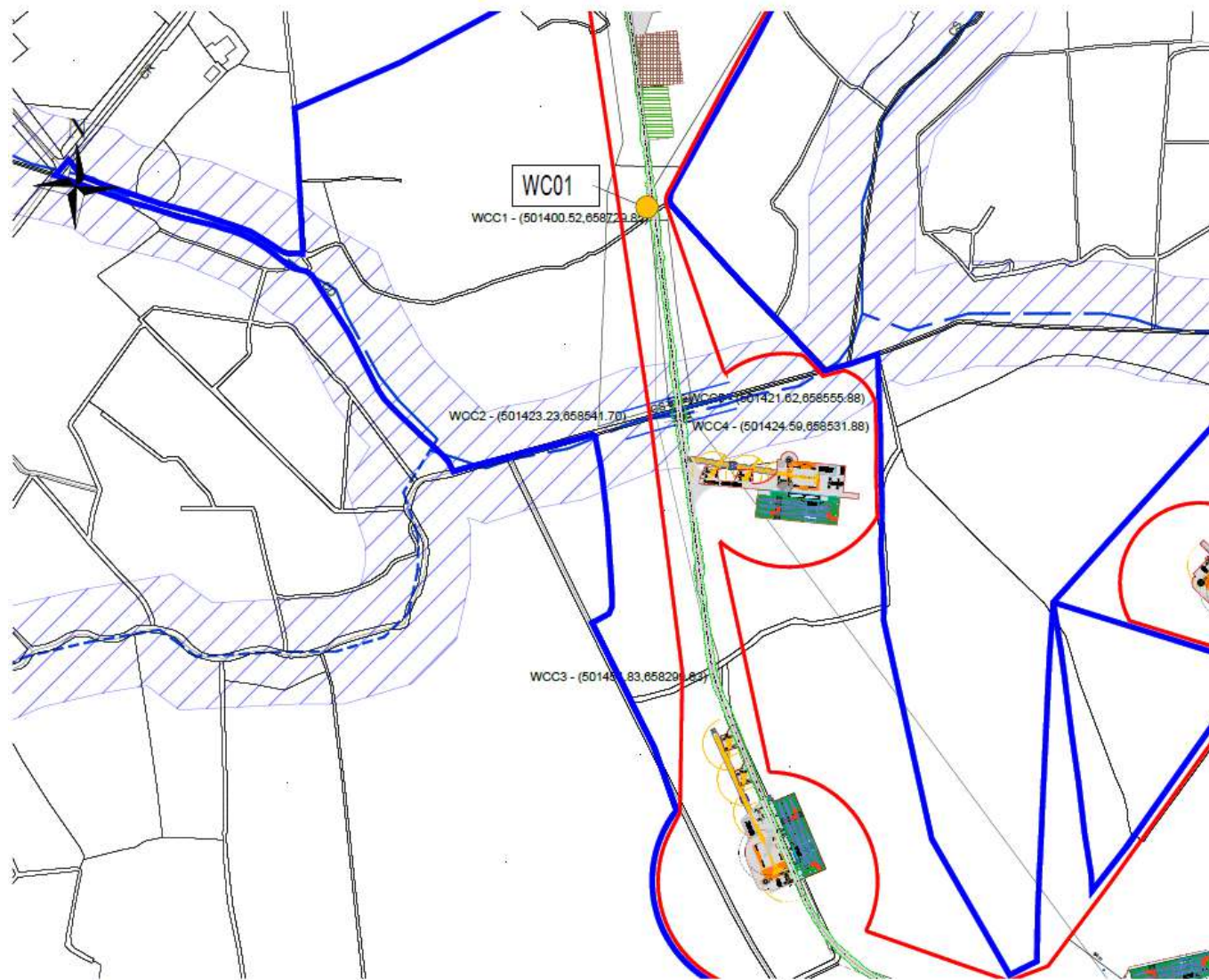
Title

Proposed Access Track  
Construction Detail

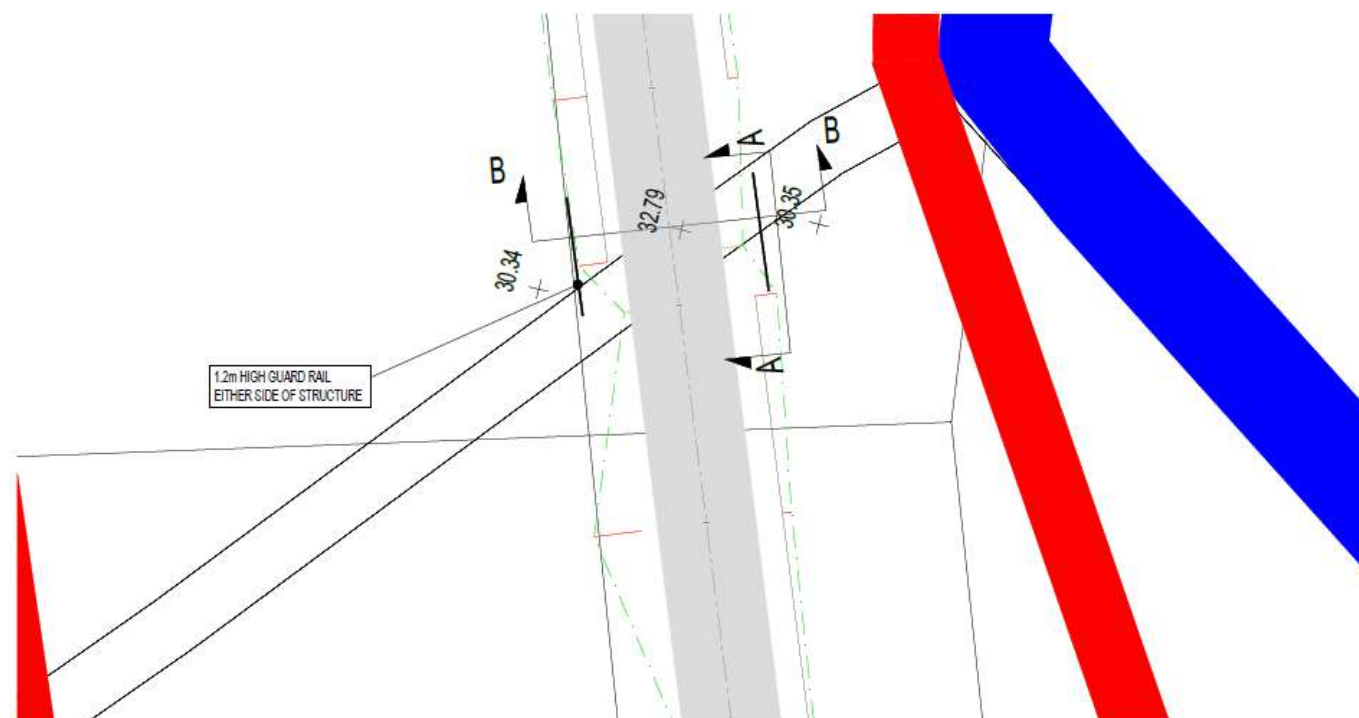
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Drg. By	LB	Drg No	-
Checked By	AOG	Rev	0
Stage	EIAR	Date	24/04/'23
Scale	NTS	Figure	2.5

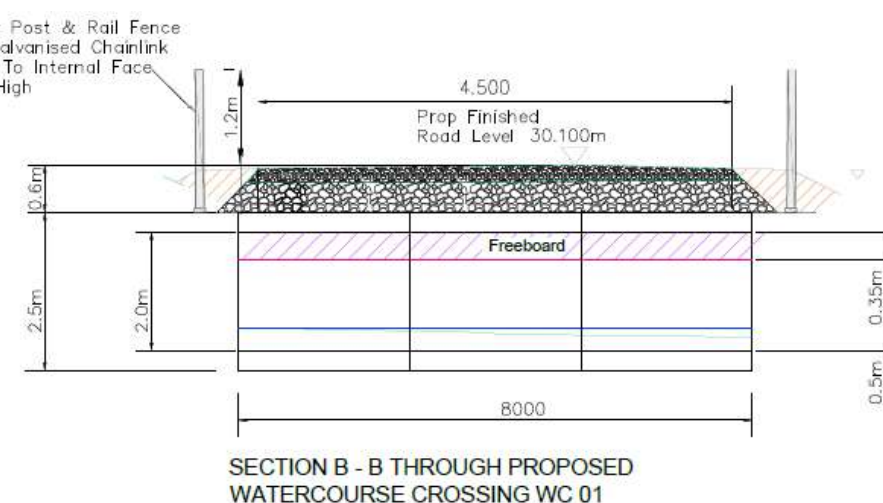
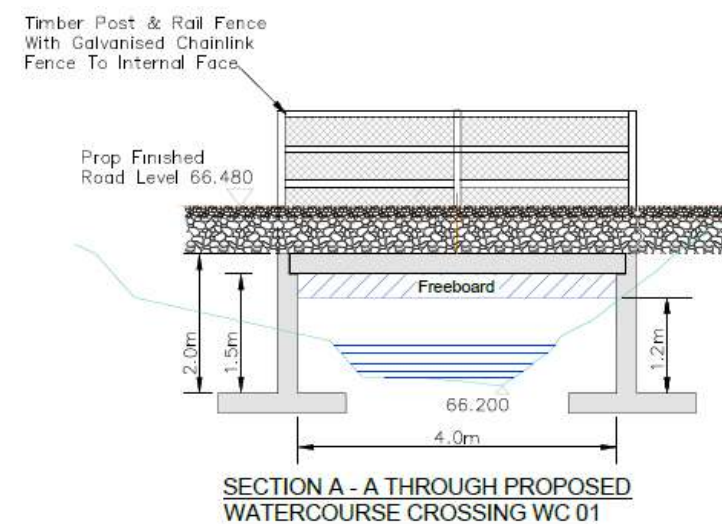




Location Map



Layout Plan



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NOTES:  
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2 ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE.  
3 ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES.  
4 THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.

Rev	Date	By	Comment

**Client**  
Ballykett Green Energy Limited

**Client Representative**  
 **JENNINGS O'DONOVAN**  
CONSULTING ENGINEERS

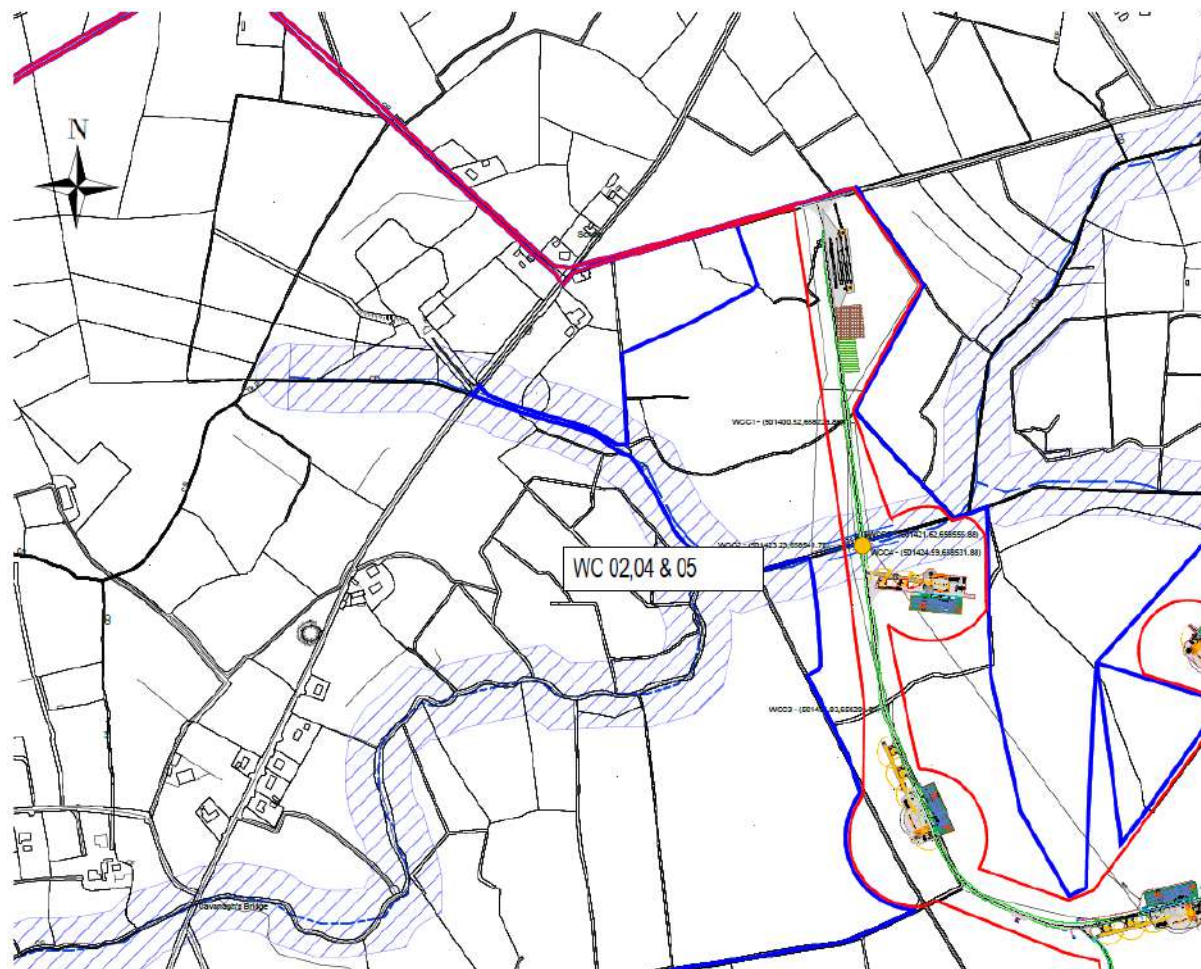
**Project**  
Proposed Wind Farm  
at Ballykett, Co. Clare.

**Title**  
Watercourse Crossing 01

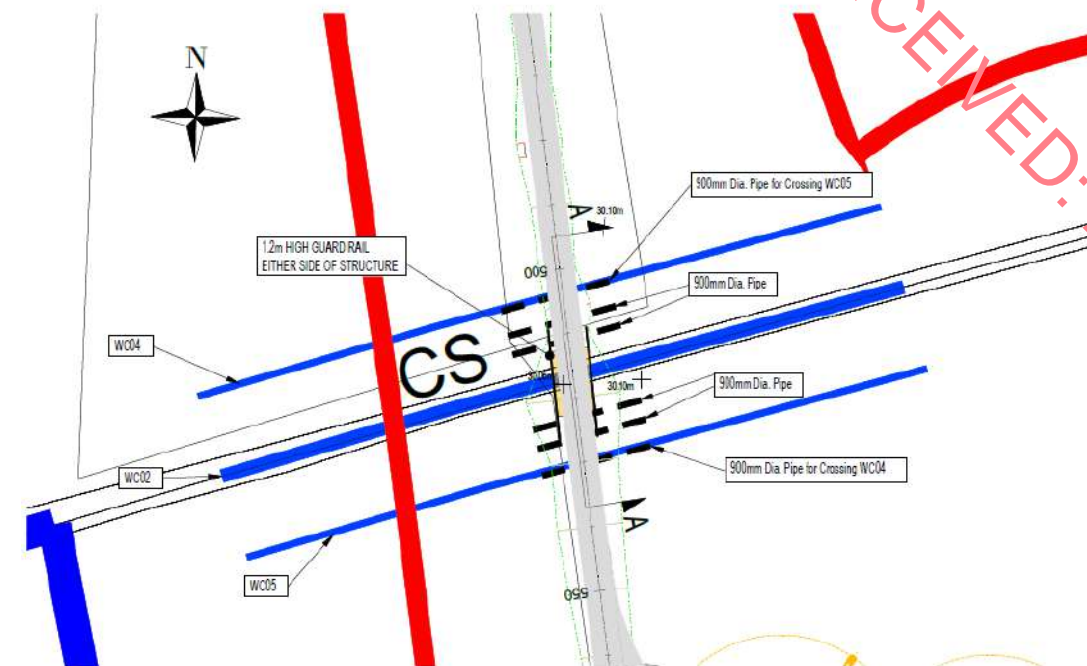
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<b>Drg. By</b>	AB	<b>Drg No</b>	-
<b>Checked By</b>	AOG	<b>Rev</b>	0
<b>Stage</b>	EIAR	<b>Date</b>	16/06/23
<b>Scale</b>	NTS	<b>Figure</b>	2.6(a)





Location Map



Layout Plan

- NOTES:
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Rev	Date	By	Comment

Client

Ballykett Green Energy Limited

Client Representative



Project

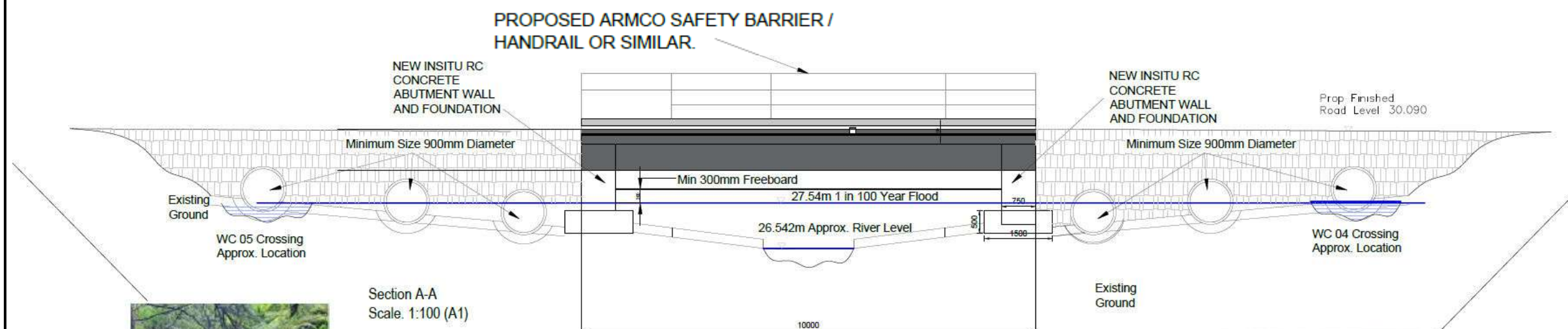
Proposed Wind Farm  
at Ballykett, Co. Clare.

Title

Watercourse Crossing 02, 04, 05

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Drg. By	AB	Drg No	-
Checked By	AOG	Rev	0
Stage	EIAR	Date	16/06/'23
Scale	NTS	Figure	2.6(b)



WC05 Stream Scale. nts

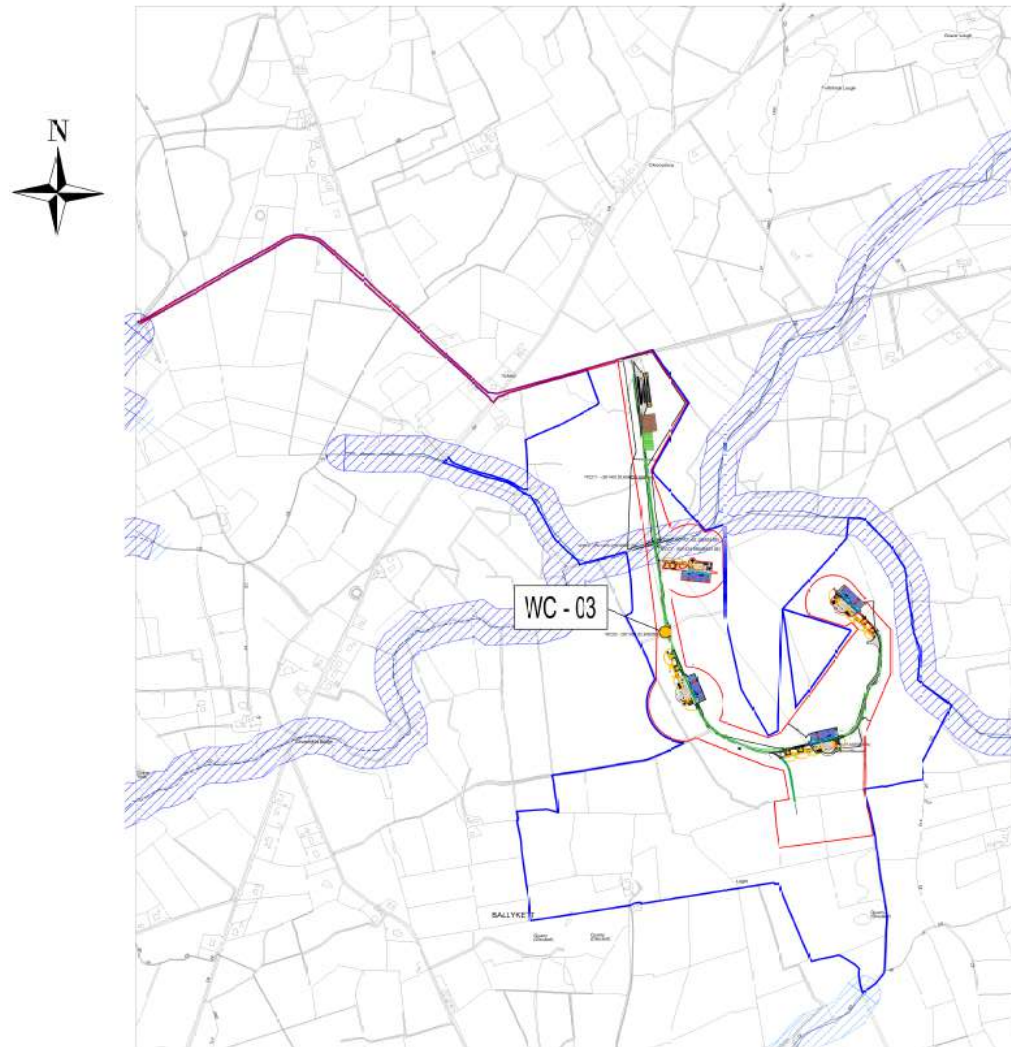


WC02 Stream Scale. nts

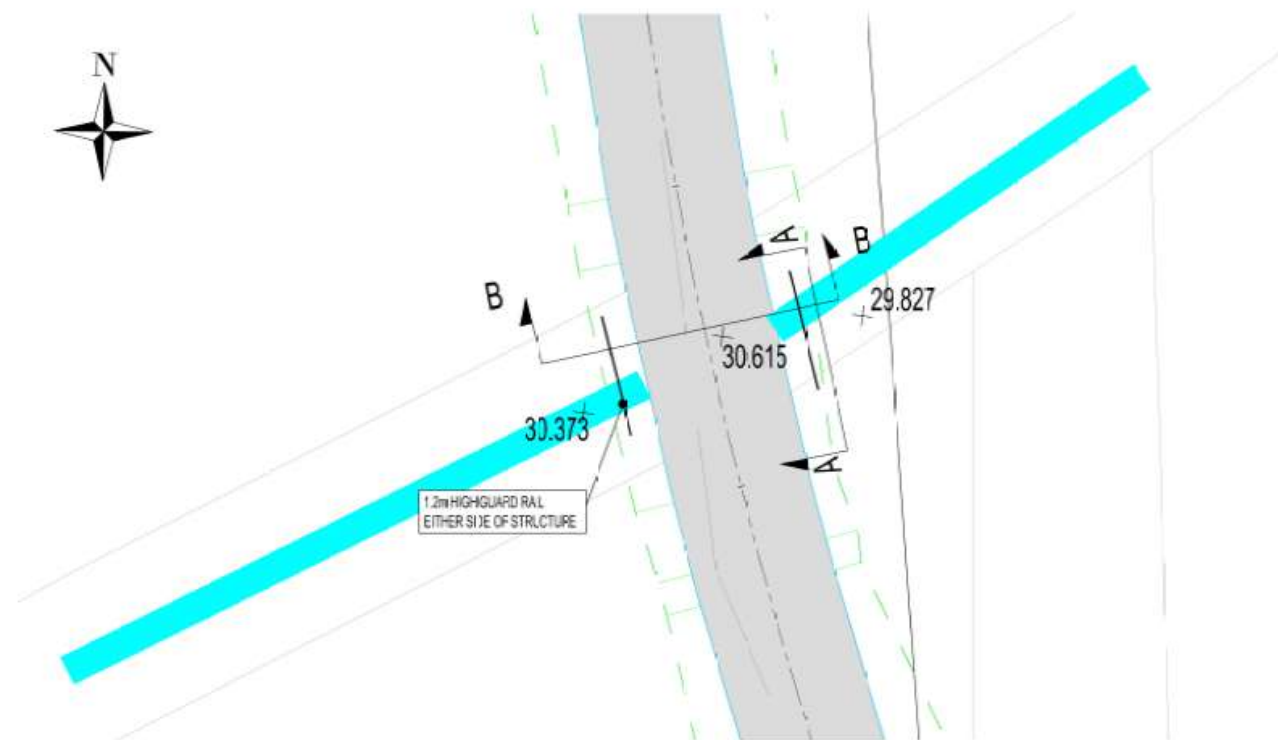


WC04 Stream Scale. nts





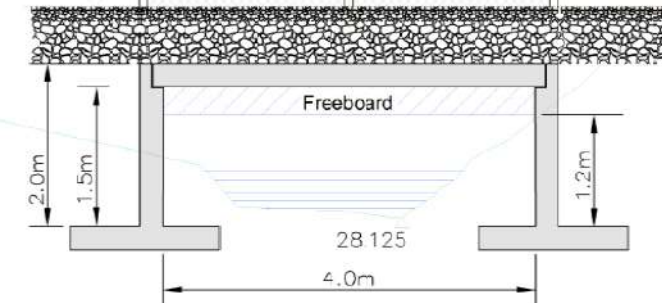
Location Map



Layout Plan

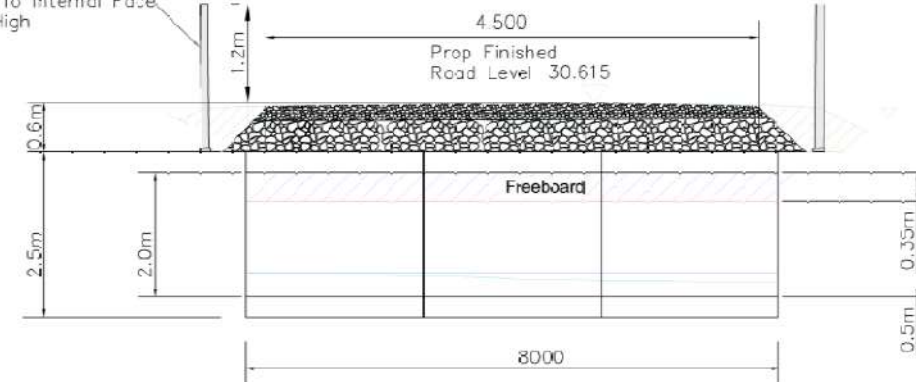
Timber Post & Rail Fence  
With Galvanised Chainlink  
Fence To Internal Face

Prop Finished  
Road Level 30.615



SECTION A - A THROUGH PROPOSED  
WATERCOURSE CROSSING WC 03

Timber Post & Rail Fence  
With Galvanised Chainlink  
Fence To Internal Face  
1.2m High



SECTION B - B THROUGH PROPOSED  
WATERCOURSE CROSSING WC 03

NOTES:  
1 FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.  
2 ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE.  
3 ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES.  
4 THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.

Rev	Date	By	Comment

**Client**  
Ballykett Green Energy Limited

**Client Representative**  
 **JENNINGS O'DONOVAN**  
CONSULTING ENGINEERS

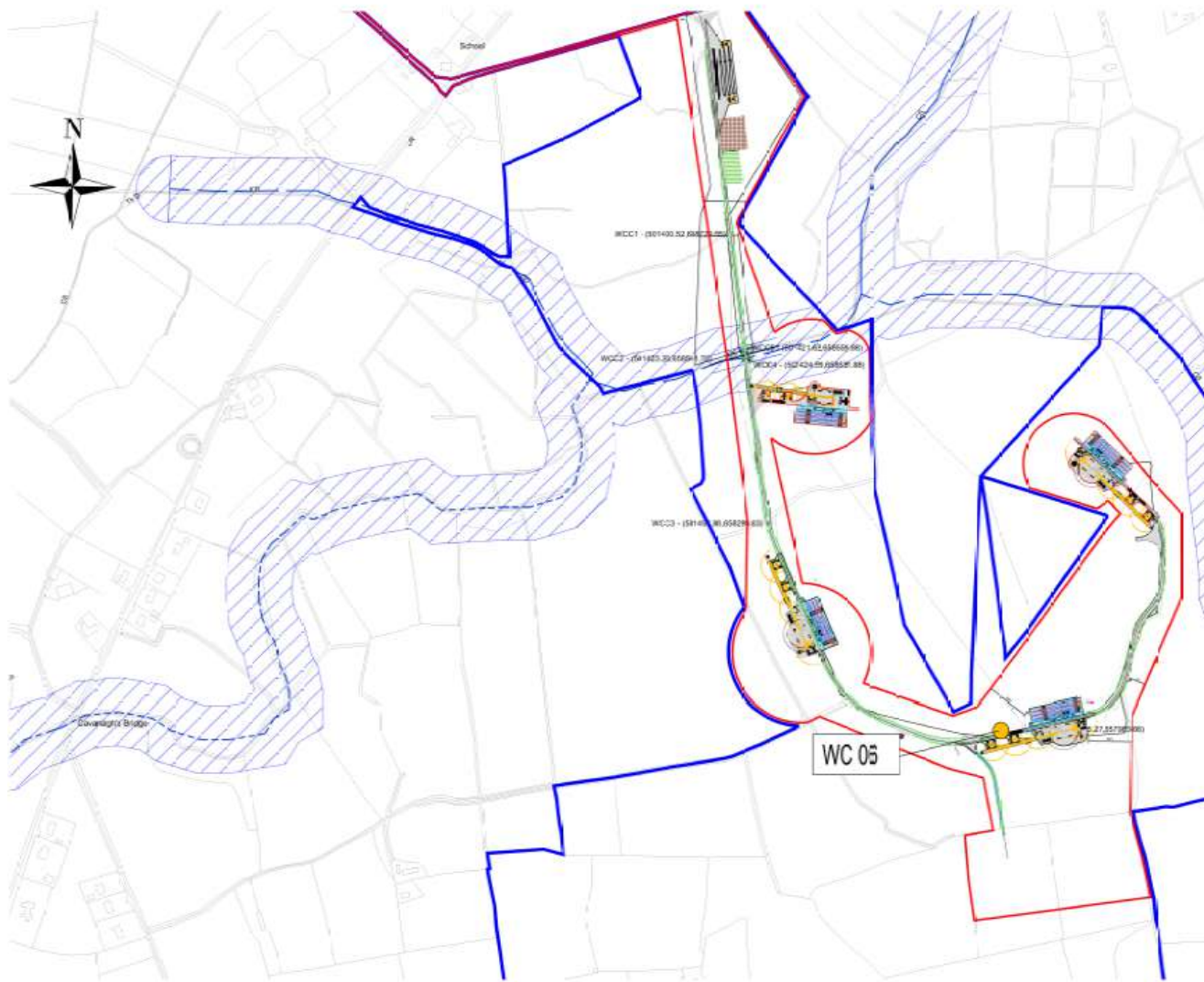
**Project**  
Proposed Wind Farm  
at Ballykett, Co. Clare.

**Title**  
Watercourse Crossing 03

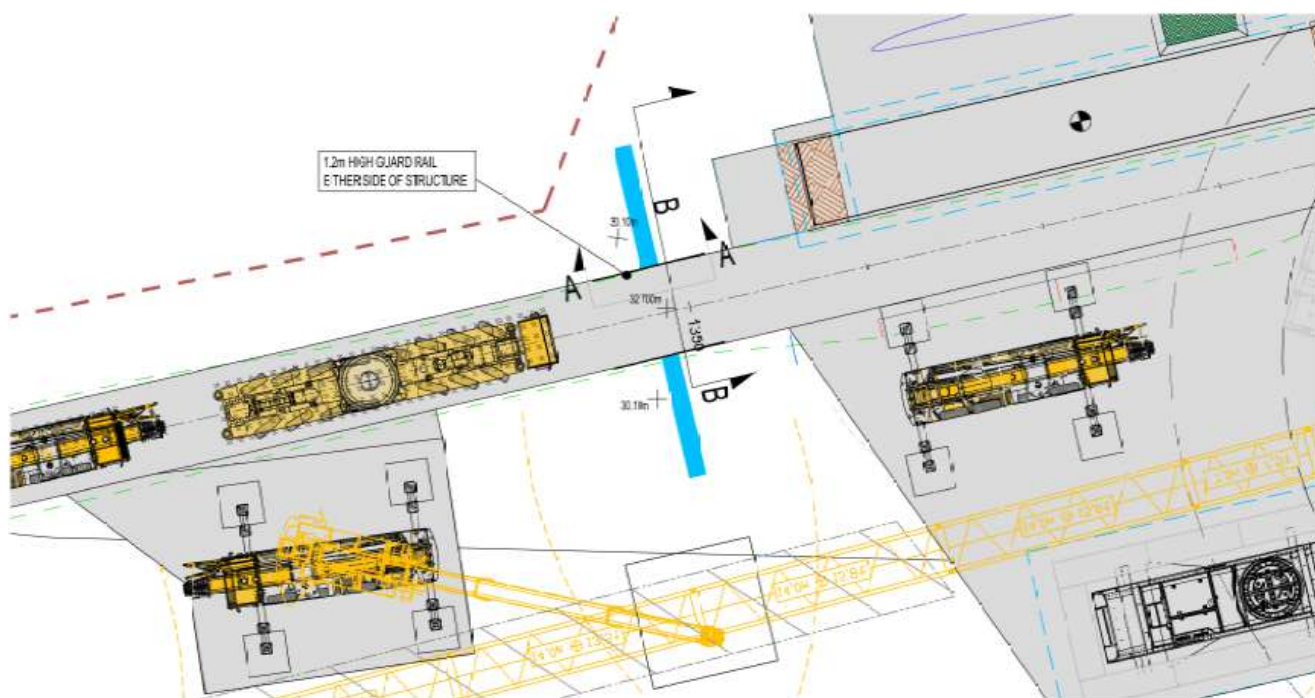
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Checked By	AOG	Rev	0
Stage	EIAR	Date	26/05/'22
Scale	NTS	Figure	2.6(c)

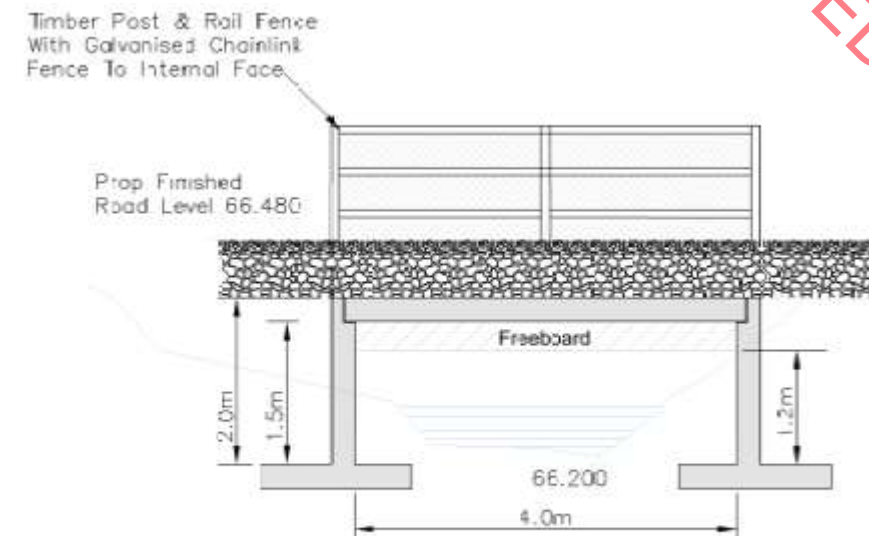




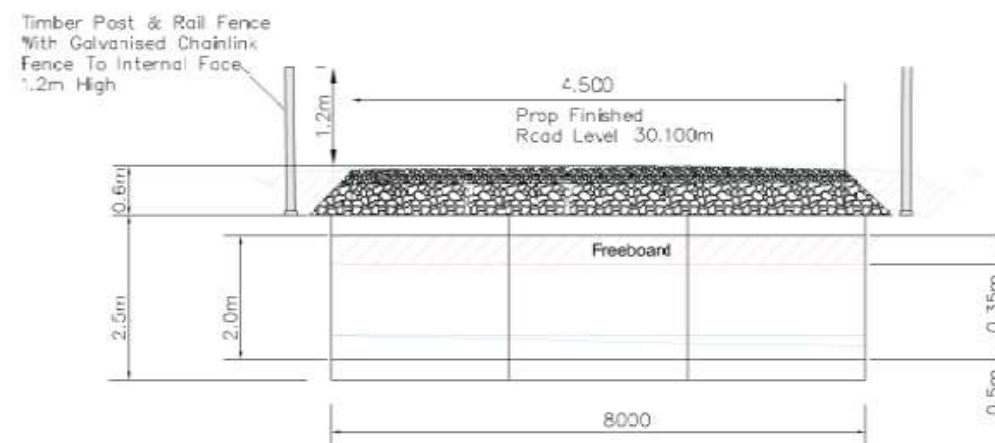
Location Map  
Scale: 1:5000 (A1)



Layout Plan



SECTION A - A THROUGH PROPOSED  
WATERCOURSE CROSSING WC 01



SECTION B - B THROUGH PROPOSED  
WATERCOURSE CROSSING WC 01

NOTES:  
1 FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.  
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Rev	Date	By	Comment
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**Client**  
Ballykett Green Energy Limited

**Client Representative**  
 **JENNINGS O'DONOVAN**  
CONSULTING ENGINEERS

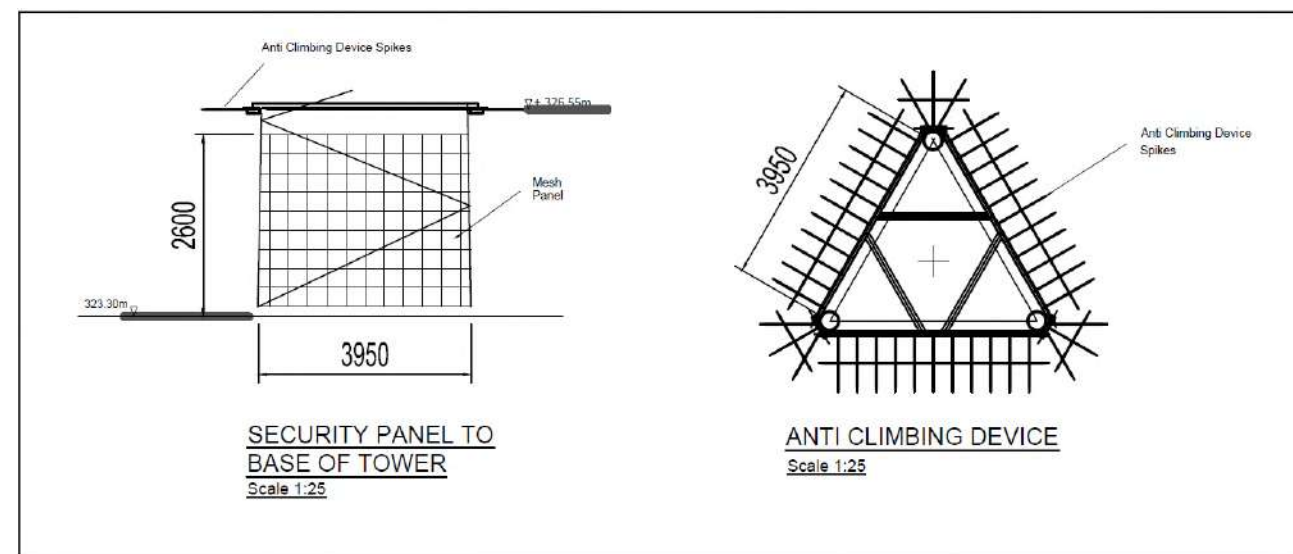
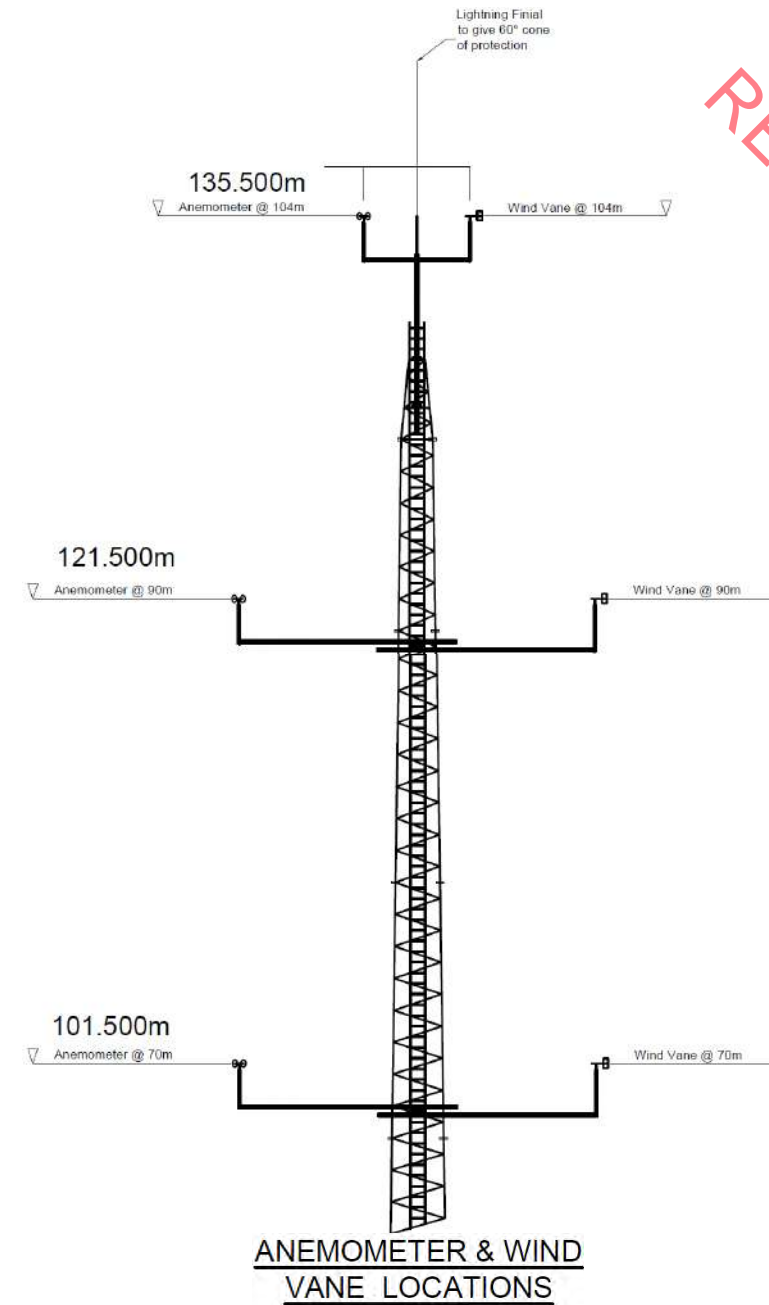
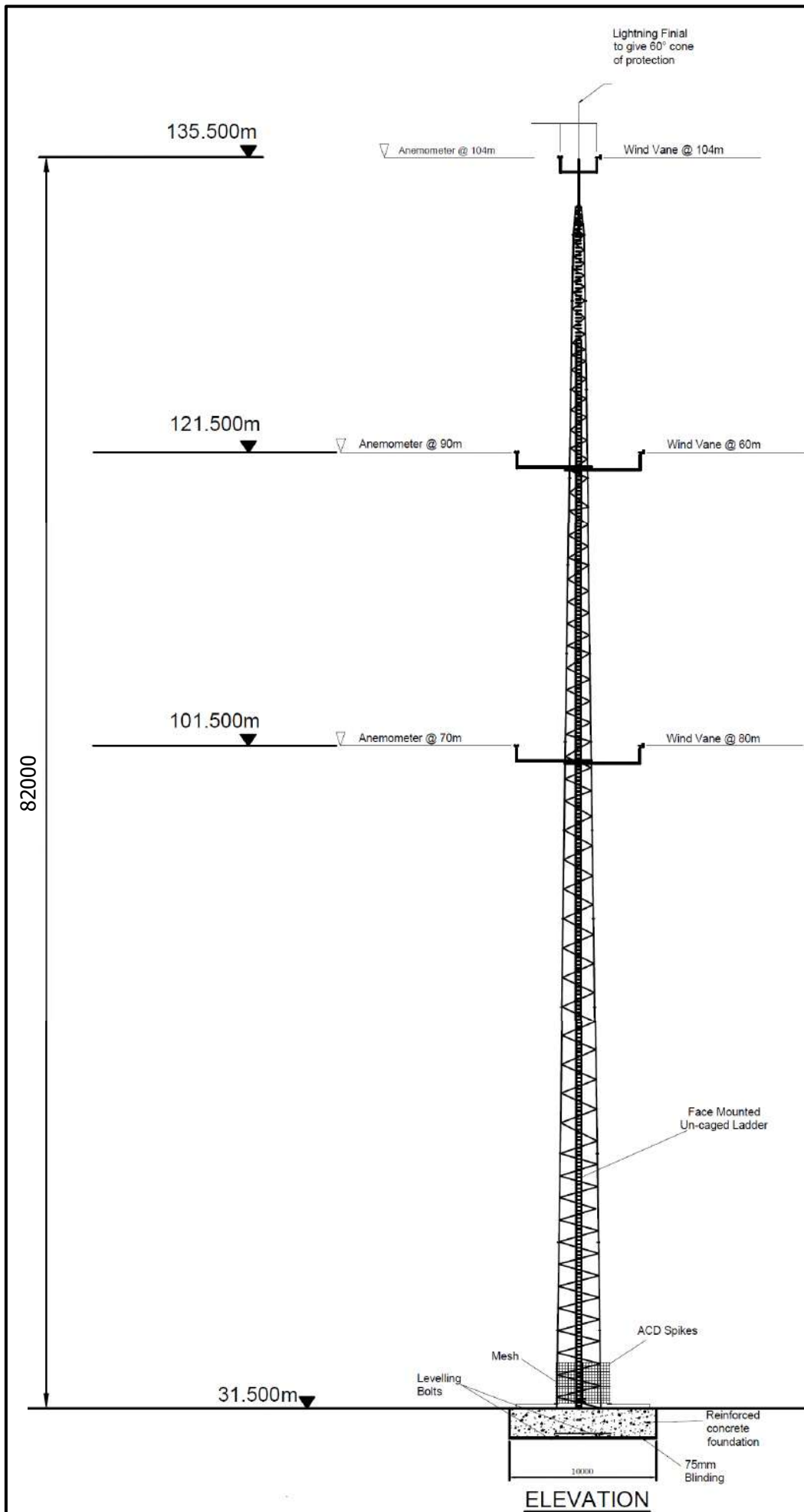
**Project**  
Proposed Wind Farm  
at Ballykett, Co. Clare.

**Title**  
Watercourse Crossing 06

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<b>Checked By</b>	AOG	<b>Rev</b>	0
<b>Stage</b>	EIAR	<b>Date</b>	16/06/'23
<b>Scale</b>	NTS	<b>Figure</b>	2.6(d)





## Legend

RECEIVED: 29/03/2024

Rev	Date	By	Comment

### Client

Ballykett Green Energy Limited

### Client Representative



### Project

Proposed Wind Farm  
at Ballykett, Co. Clare.

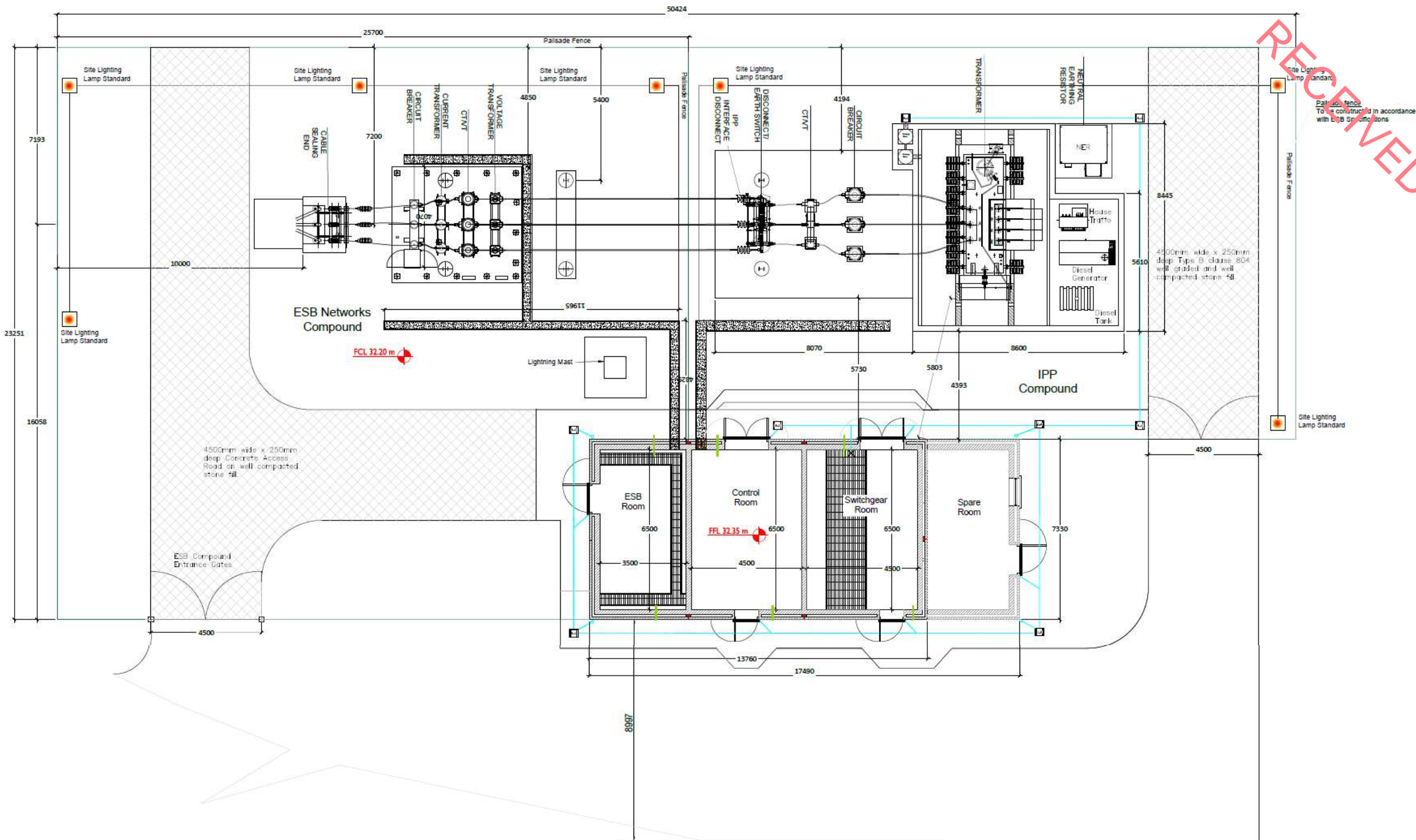
### Title

Met Mast Schematic

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Drg. By	LB	Drg No	-
Checked By	SM	Rev	1
Stage	EIAR	Date	10/01/24
Scale	NTS	Figure	2.7





Proposed Substation Compound Plan  
Scale: 1:100



## Legend

Rev	Date	By	Comment

### Client

Ballykett Green Energy Limited

### Client Representative



### Project

Proposed Wind Farm  
at Ballykett, Co. Clare.

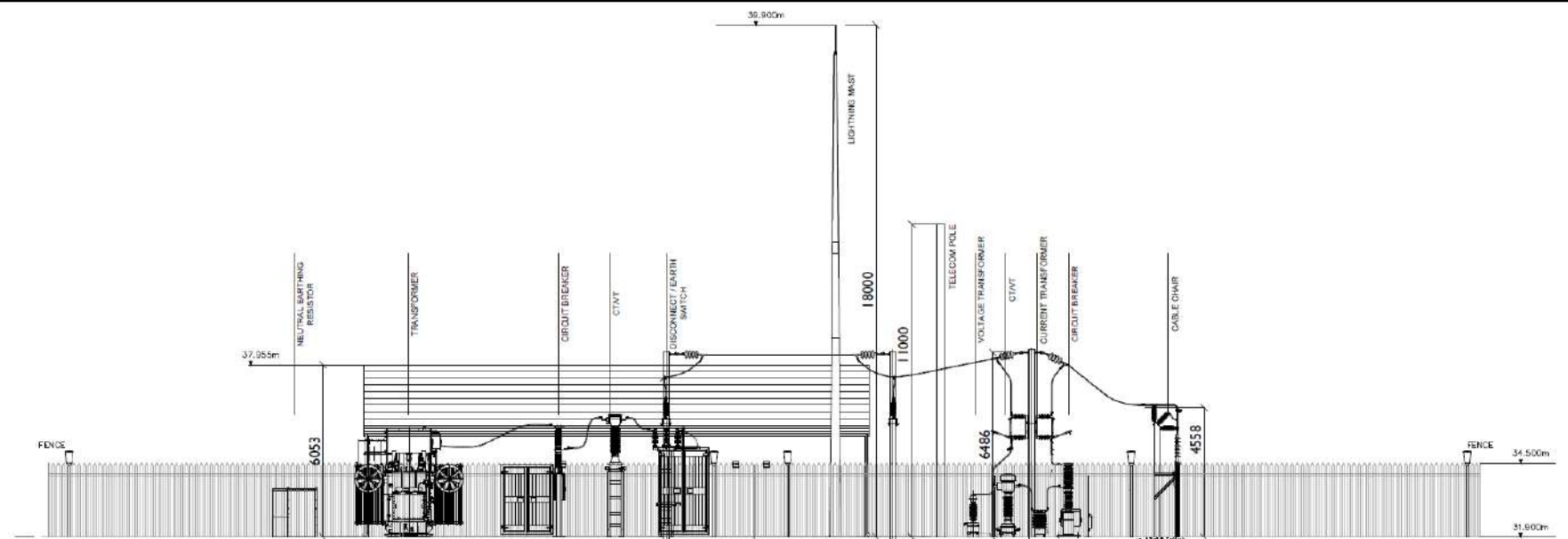
### Title

Substation Compound Plan

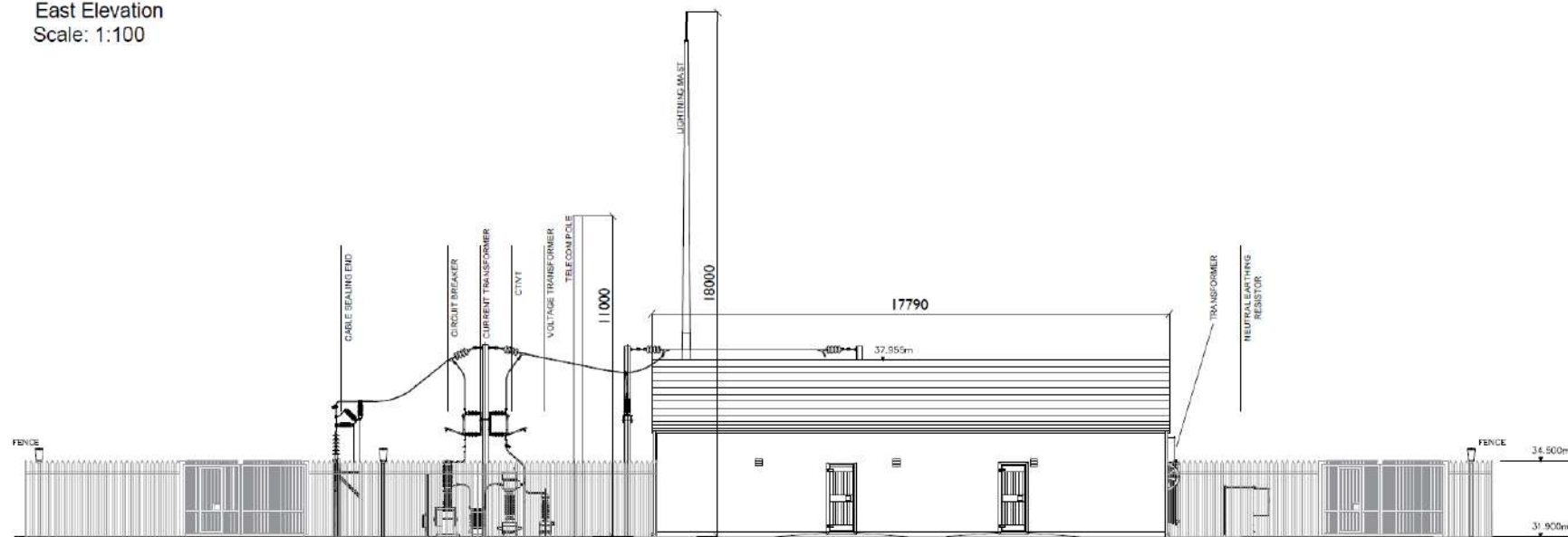
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Drg. By	AB	Drg No	-
Checked By	AOG	Rev	0
Stage	EIAR	Date	29/05/'22
Scale	NTS	Figure	2.8(a)

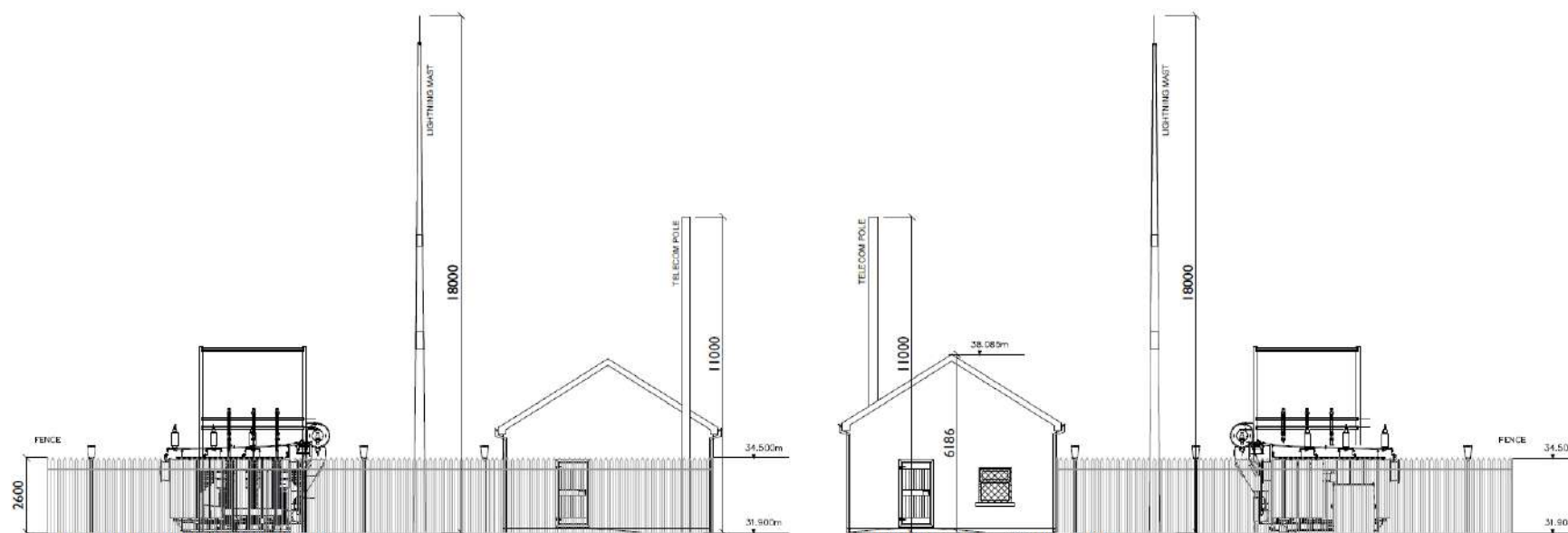




East Elevation  
Scale: 1:100



West Elevation



North Elevation Scale: 1:100

South Elevation Scale: 1:100

## Legend

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### Client

Ballykett Green Energy Limited

### Client Representative



### Project

Proposed Wind Farm  
at Ballykett, Co. Clare.

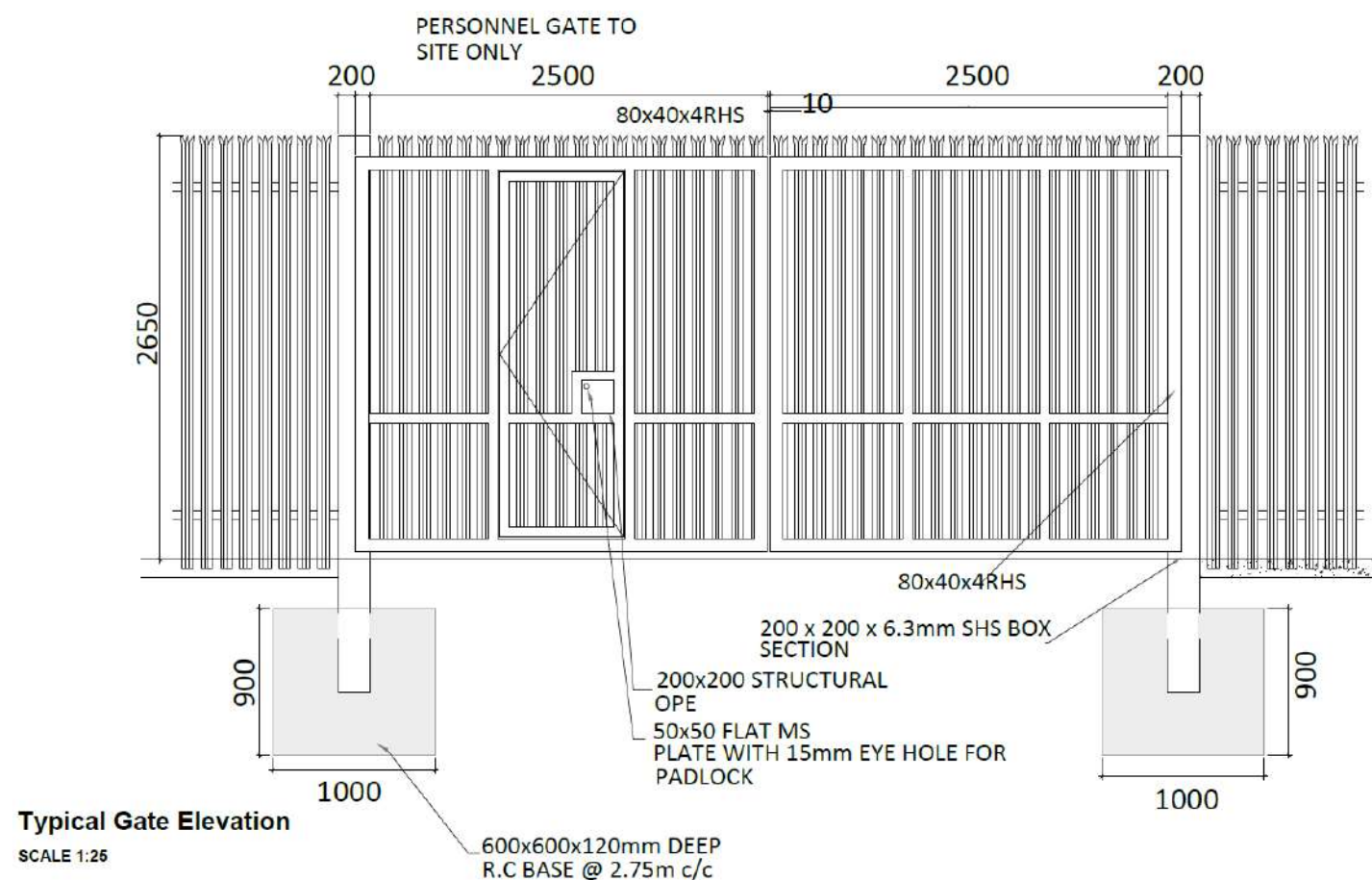
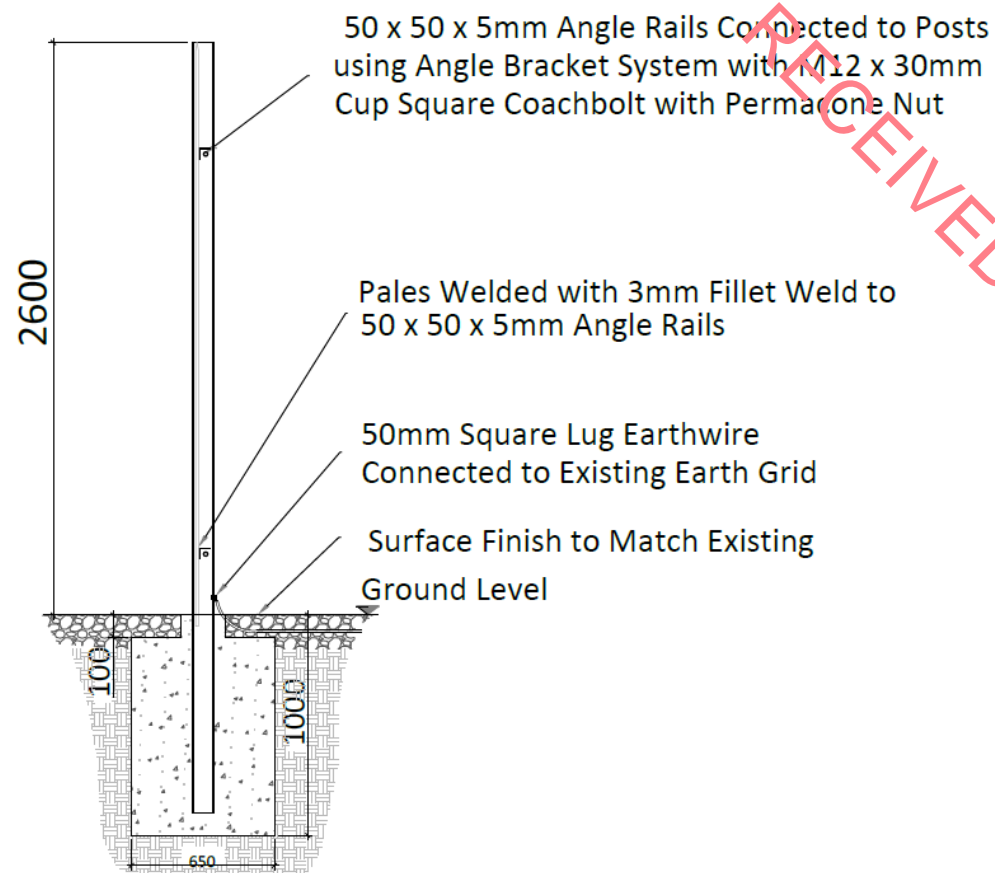
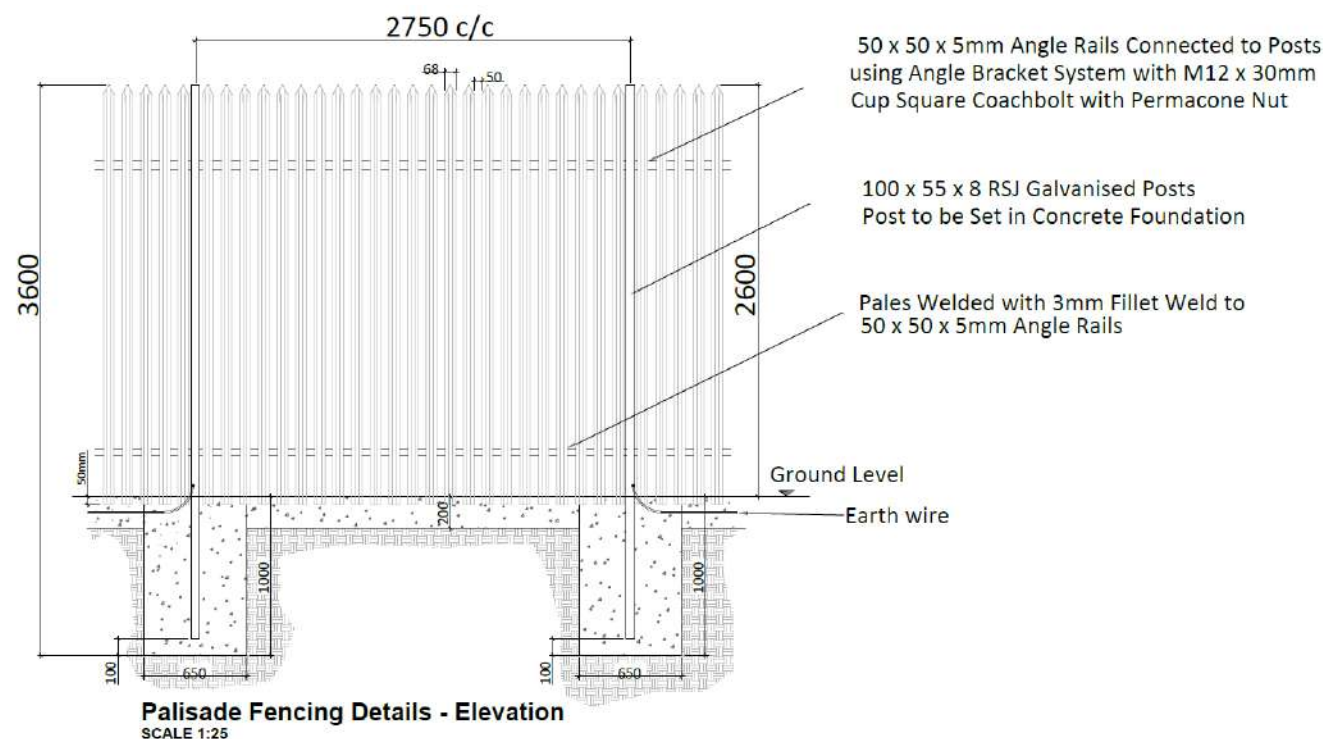
### Title

Substation Plan and  
Compound Layout

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Checked By	AOG	Rev	0
Stage	EIAR	Date	29/05/22
Scale	NTS	Figure	2.8(b)





## Legend

Rev	Date	By	Comment

### Client

Ballykett Green Energy Limited

### Client Representative



### Project

Proposed Wind Farm  
at Ballykett, Co. Clare.

### Title

Proposed Palisade Fencing  
Details

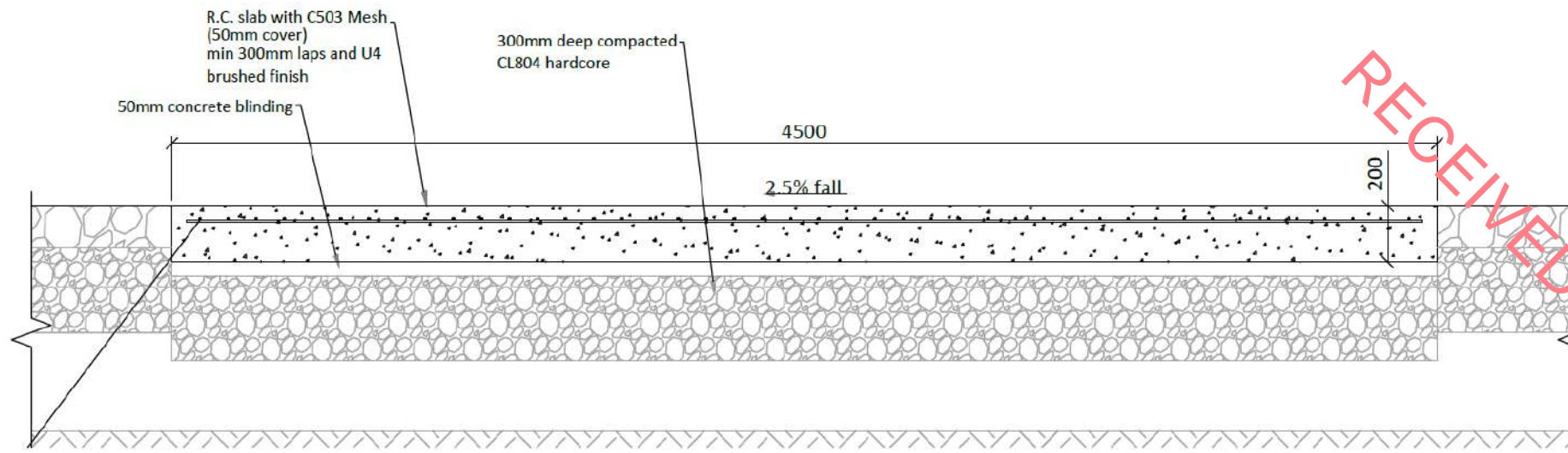
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Drg. By	AB	Drg No	-
Checked By	AOG	Rev	0
Stage	EIAR	Date	29/05/22
Scale	NTS	Figure	2.8(c)

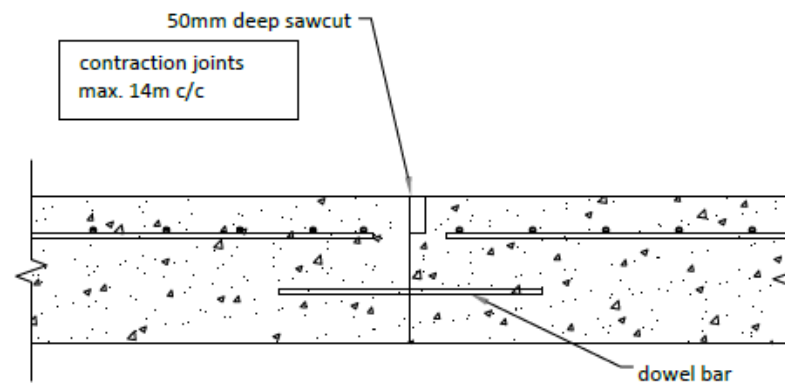


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Legend

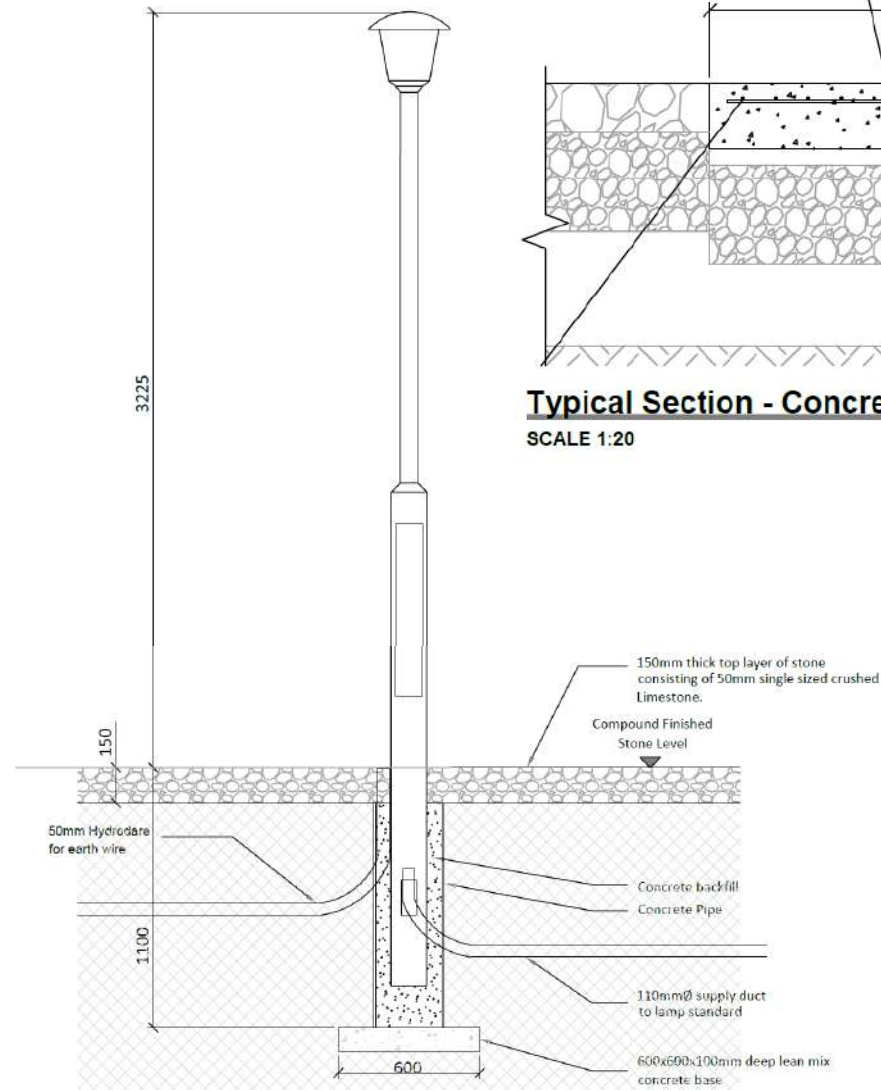


Typical Section - Concrete Access Road  
SCALE 1:20

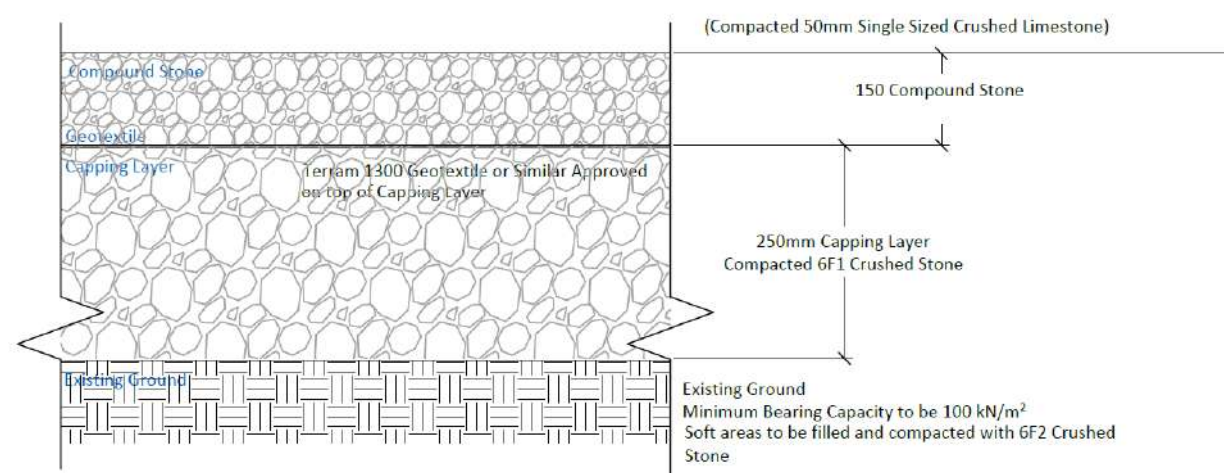


Concrete Access Road Contraction Joint  
SCALE 1:10

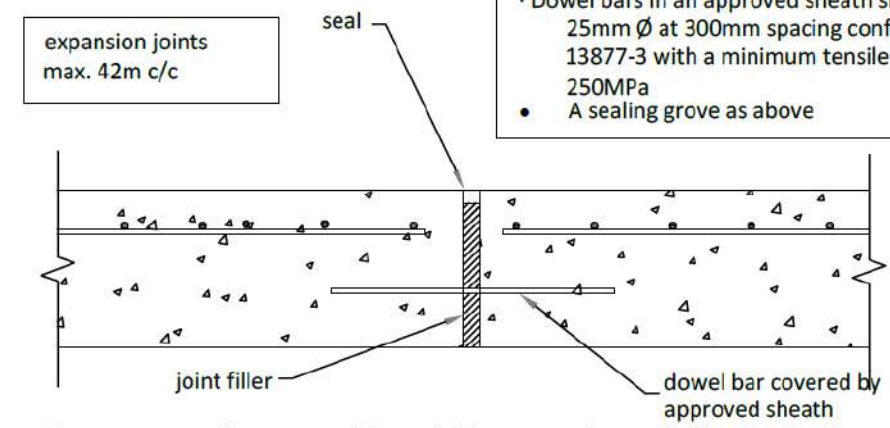
- Contraction joints should comprise of the following:
- A sawn groove joint 10mm wide at least  $\frac{1}{4}$  the slab depth
  - Dowel bars shall be 20mm  $\varnothing$  at 300mm spacing conforming to IS EN 10060 and IS EN 13877-3 with a minimum tensile strength of 250 MPa
  - A sealing groove (seals shall be hot applied sealants Type N1 or Type F1 complying with IS EN 14188-1 and applied in accordance with BS 2499-2)



Lighting Column & Surround Detail  
SCALE 1:20



Typical Compound Detail  
SCALE 1:20



Concrete Access Road Expansion Joint  
SCALE 1:10

- Expansion joints should comprise of the following:
- A joint filler board 25mm thick self expanding cork seal or from another approved compressible material
  - Dowel bars in an approved sheath shall be 25mm  $\varnothing$  at 300mm spacing conforming to IS EN 13877-3 with a minimum tensile strength of 250MPa
  - A sealing groove as above

Rev	Date	By	Comment
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**Client**  
Ballykett Green Energy Limited

**Client Representative**  
 **JENNINGS O'DONOVAN**  
CONSULTING ENGINEERS

**Project**  
Proposed Wind Farm  
at Ballykett, Co. Clare.

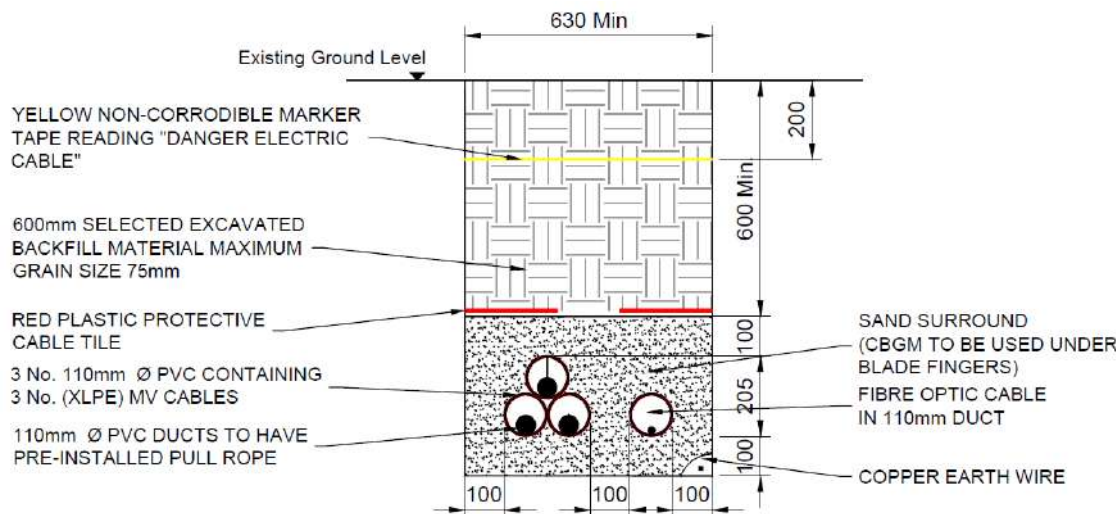
**Title**  
Proposed Substation Compound  
Details

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Drg. By	AB	Drg No	-
Checked By	AOG	Rev	0
Stage	EIAR	Date	29/05/22
Scale	NTS	Figure	2.8(d)

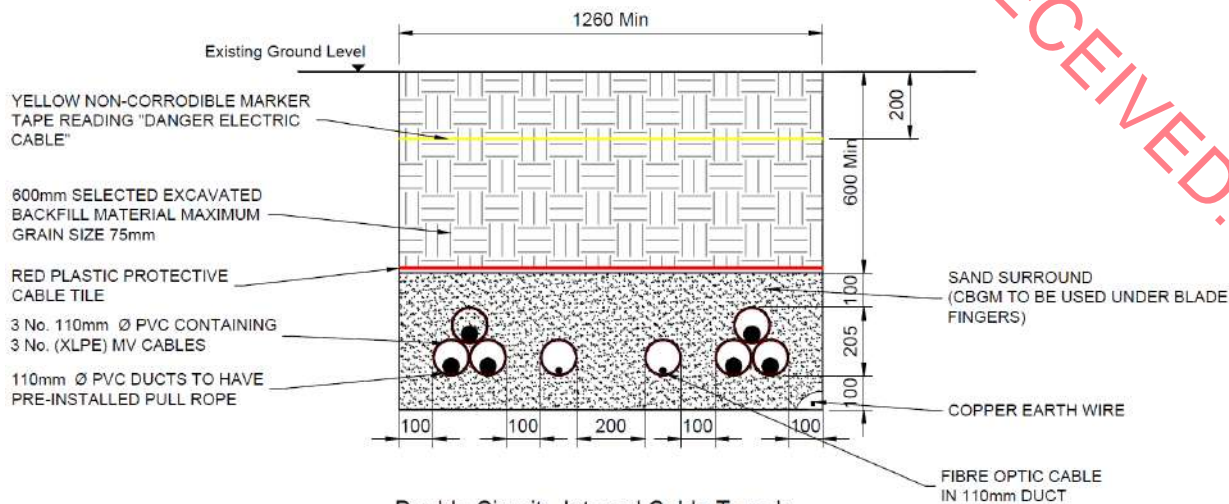


Legend



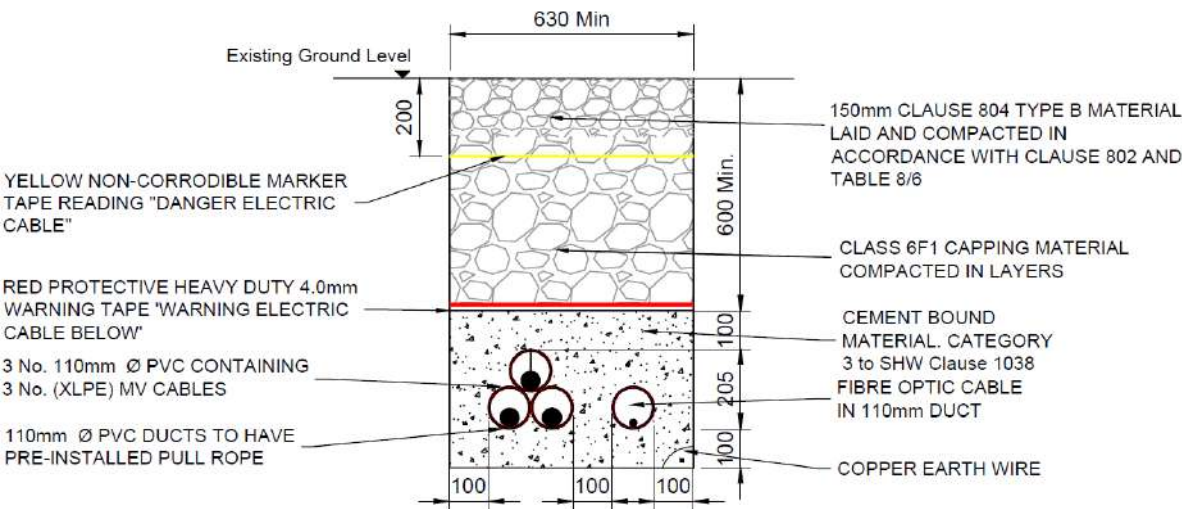
Single Circuit - Internal Cable Trench  
In Open Ground

Scale 1:20



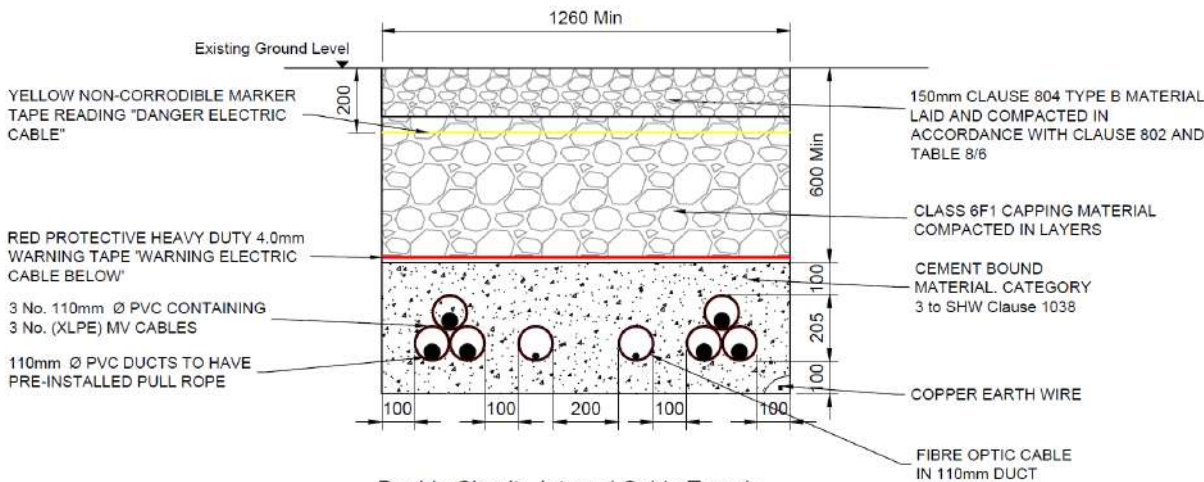
Double Circuit - Internal Cable Trench  
In Open Ground

Scale 1:20



Single Circuit - Internal Cable Trench  
In Access Road

Scale 1:20



Double Circuit - Internal Cable Trench  
In Access Road

Scale 1:20

Client

Ballykett Green Energy Limited

Client Representative



Project

Proposed Wind Farm  
at Ballykett, Co. Clare.

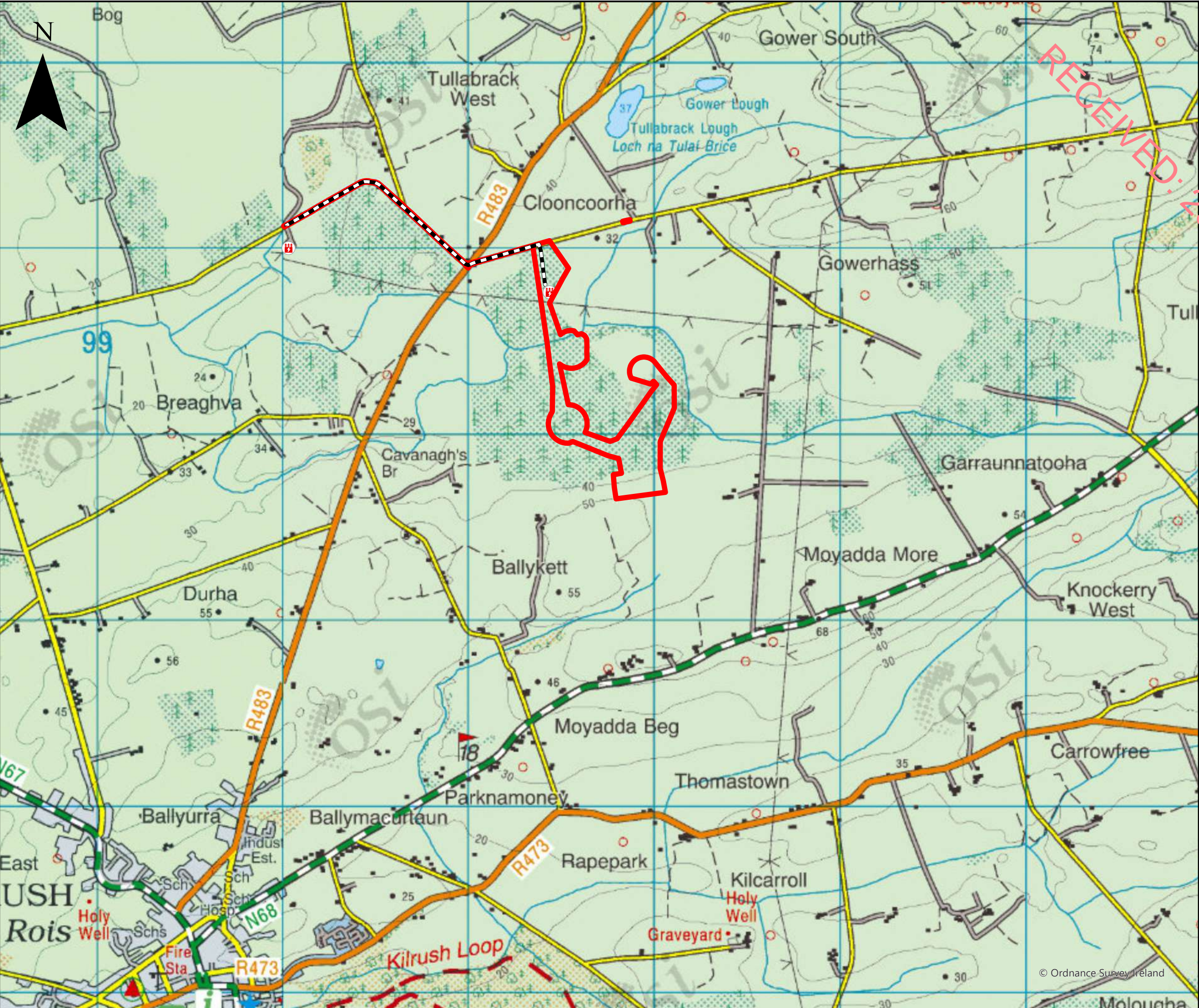
Title

Internal Cable Trench Details

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Drg. By	AB	Drg No	-
Checked By	AOG	Rev	0
Stage	EIAR	Date	29/05/'22
Scale	NTS	Figure	2.9





Legend

- Substation
- Redline Boundary
- Grid Route to Tullabrack Substation

1	Nov23	POD	Red Line Update
Rev	Date	By	Comment

Client  
Ballykett Green Energy Limited

Client Representative



JENNINGS O'DONOVAN  
CONSULTING ENGINEERS

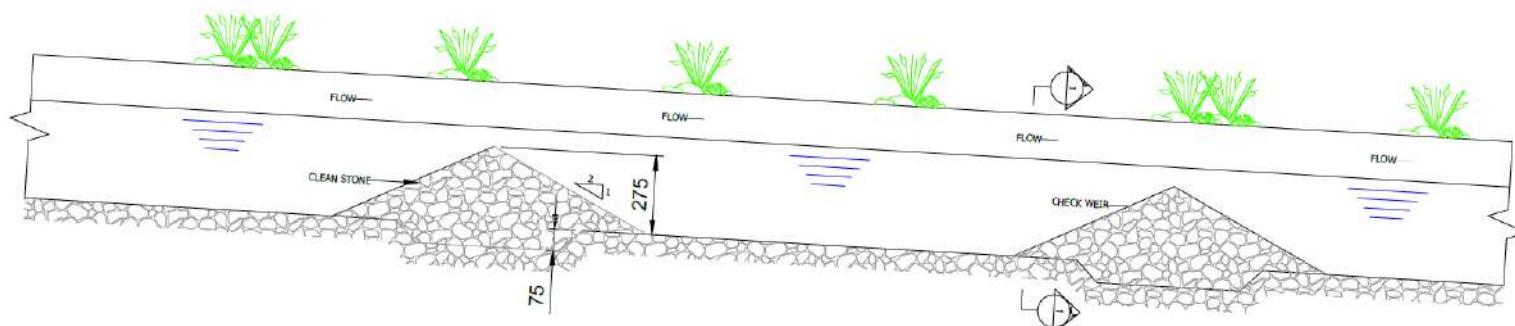
Project  
Proposed Wind Farm  
at Ballykett, Co. Clare.

Title  
Proposed Grid Connection  
Route

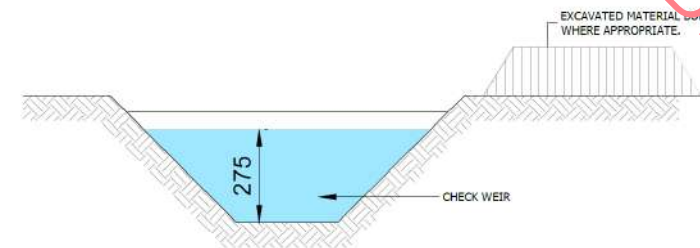
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Drg. By	AB	Drg No	-
Checked By	AOG	Rev	0
Stage	EIAR	Date	19/06/'23
Scale	1:20,000 (A3)	Figure	2.10

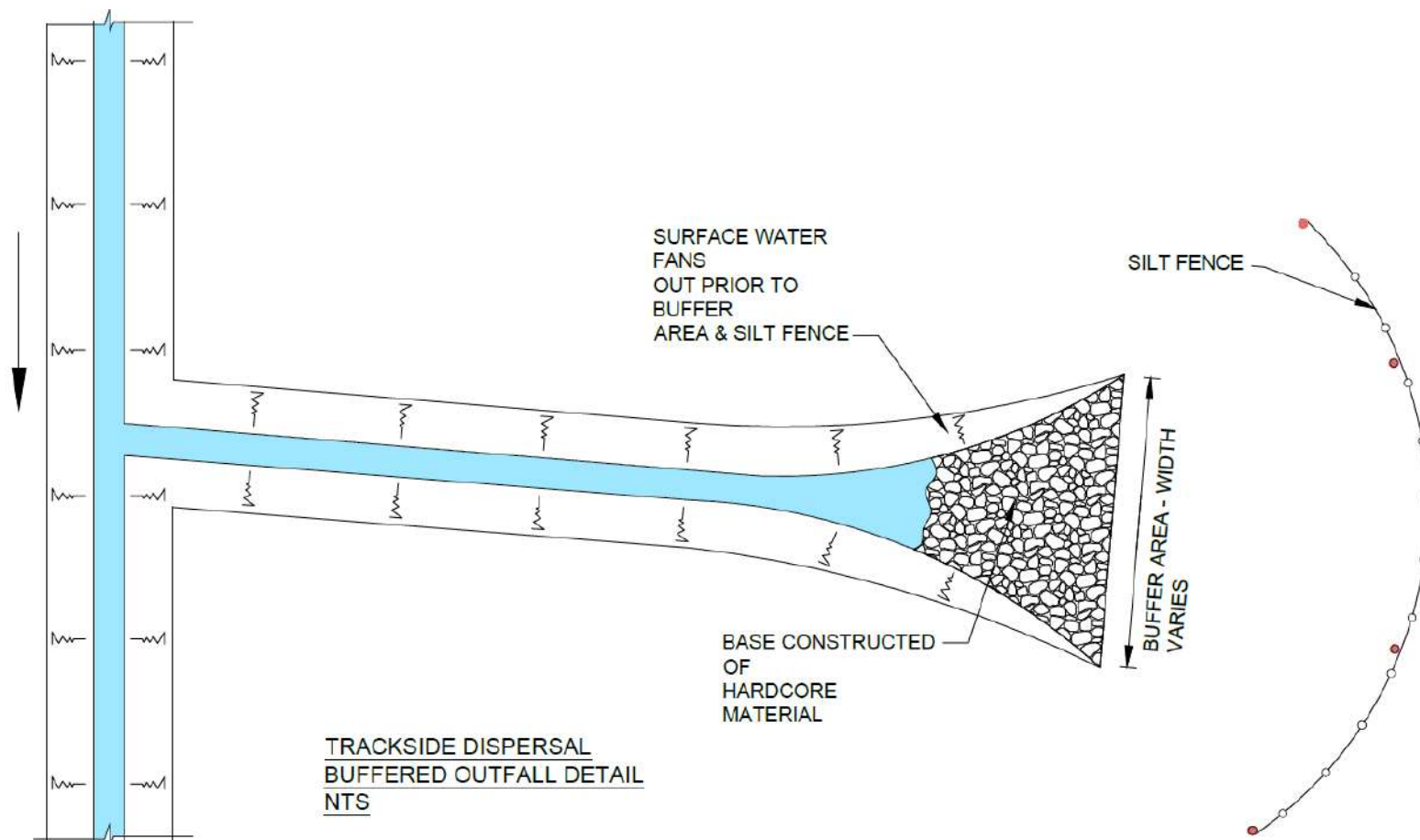




TYPICAL LONGITUDINAL SECTION THROUGH DRAINAGE WITH CHECK WEIRS  
SCALE 1:25



SECTION 1-1  
SCALE 1:25



**DRAINAGE NOTES**

**1. GENERAL:**  
DRAINAGE BUFFER ZONE WIDTHS SHALL BE A MINIMUM OF 50m.

**2. CONSTRUCTION AND MAINTENANCE**

- ROADSIDE DRAIN SHOULD NOT INTERCEPT LARGE VOLUMES OF WATER FROM THE GROUND ABOVE.
- ROADSIDE DRAINS LIKELY TO CARRY HIGH SEDIMENT LOADS AND MUST DISCHARGE INTO A BUFFER OF ADEQUATE WIDTH.
- DRAINS ON THE UPPER SIDE OF THE ROAD MAY NEED CULVERTS TO THE LOWER SIDE.
- PROPER MAINTENANCE PROVISIONS MUST BE PUT IN PLACE SO AS TO ENSURE THE PROPER FUNCTIONING OF THE DRAINAGE SYSTEM INCLUDING REGULAR INSPECTIONS, CLEANING AND REPAIRS WHERE NECESSARY.

**3. DRAINS:**

- DRAINS SHALL BE DESIGNED AND CONSTRUCTED TO MITIGATE CHANNEL EROSION, E.G. BY INSTALLATION OF PERFORATED PIPE WITH DRAINAGE STONE SURROUND.
- DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SYSTEM OF STILLING PONDS AND BUFFERED OUTFALLS.
- DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL BE CONVEYED THROUGH A BUFFERED OUTFALL WITHIN AN UNDISTURBED STABILISED AREA AT NON-EROSIVE VELOCITIES.
- ALL OBSTRUCTIONS WITHIN A DRAINAGE CHANNEL SHALL BE REMOVED AND DISPOSED OF, SO AS NOT TO INTERFERE WITH THE PROPER FUNCTION OF THE DRAINAGE SYSTEM.
- CHECK DAMS SHALL BE CONSTRUCTED USING WELL GRADED 150mm DOWN ANGULAR GRAVEL PLACED OVER A GEO-TEXTILE LAYER. SEE DETAIL 1.
- THE SPACING OF CHECK DAMS SHALL BE SUCH THAT THE PEAK OF THE DOWNSTREAM DAM IS NO LOWER THAN THE FOOT OF THE UPSTREAM DAM.
- THE USE OF STRAW BALES WITHIN THE DRAINAGE SYSTEM SHOULD BE CONSIDERED ON A TEMPORARY BASIS DURING CONSTRUCTION AND MAINTENANCE WORK.
- STRAW BALES SHOULD, HOWEVER, ONLY BE USED TO INTERCEPT SEDIMENT-LADEN RUNOFF FROM ALL DRAINAGE AREAS OF DISTURBED SOIL.
- BALES SHOULD BE ANCHORED IN PLACE BY THE USE OF TIMBER STAKES OR RE-BARS DRIVEN THROUGH THE BALES. WHERE BALES ARE TO BE PLACED IN POSITION ADJACENT TO OTHER BALES (EG WITHIN A STILLING POND), THE FIRST STAKE IN EACH BALE SHOULD BE DRIVEN TOWARDS THE PREVIOUSLY LAID BALE AT AN ANGLE. THIS HAS THE EFFECT OF FORCING THE TWO BALES TOGETHER.
- BALES SHALL BE REPLACED AS REQUIRED.
- BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS.

**4. OUTFALLS:**

- ALL DRAINAGE CHANNELS SHALL FAN/TAPER OUT BEFORE ENTERING THE BUFFER ZONE.
- PRIOR TO ENTERING THE TAPERED ZONE, THE BASE OF THE DRAINAGE CHANNELS TO BE CONSTRUCTED OF A HARDCORE MATERIAL TO AID THE SETTLEMENT OF SUSPENDED SOLIDS.
- NON-DEVELOPMENT RUN-OFF SHALL BE RETURNED TO A SURFACE FLOW CONDITION E.G. BY USE OF LEVEL SPREADERS.

**5. STILLING PONDS:**

- ANY SEDIMENT TRAPS/STILLING PONDS SHALL BE LOCATED OUTSIDE OF BUFFER ZONES AND HAVE NO DIRECT OUTFLOW INTO WATERCOURSES.
- STILLING PONDS SHOULD BE SIZED TO ACCOMMODATE PEAK FLOWS CORRESPONDING TO A 1 IN 100 YEAR STORM EVENT FOR THEIR RESPECTIVE CATCHMENT AREAS.
- MAINTENANCE WORKS INCLUDING THE REMOVAL OF SETTLED MATERIALS SHOULD ONLY BE CARRIED OUT IN DRY CONDITIONS.
- CARE SHOULD BE TAKEN WHEN REMOVING SETTLED MATERIALS SUCH THAT THE PONDS ARE NOT OVER DEEPEINED.
- IN THE DESIGN OF STILLING PONDS, CONSIDERATION SHOULD BE GIVEN TO IMPLEMENTING MEASURES SUCH THAT THERE IS NO POSSIBILITY TO DIRECT FLOW THROUGH THE POND E.G. OFFSET INLETS AND OUTLETS FROM THE CENTRE AXIS ETC.

Rev	Date	By	Comment
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**Client**

Ballykett Green Energy Limited

**Client Representative**

 **JENNINGS O'DONOVAN**  
CONSULTING ENGINEERS

**Project**

Proposed Wind Farm  
at Ballykett, Co. Clare.

**Title**

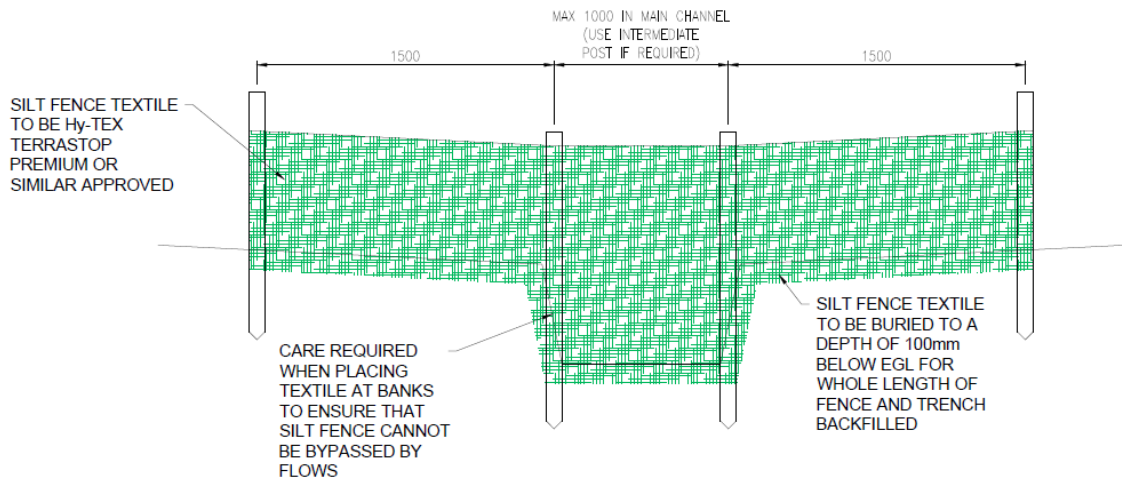
Drainage System Details

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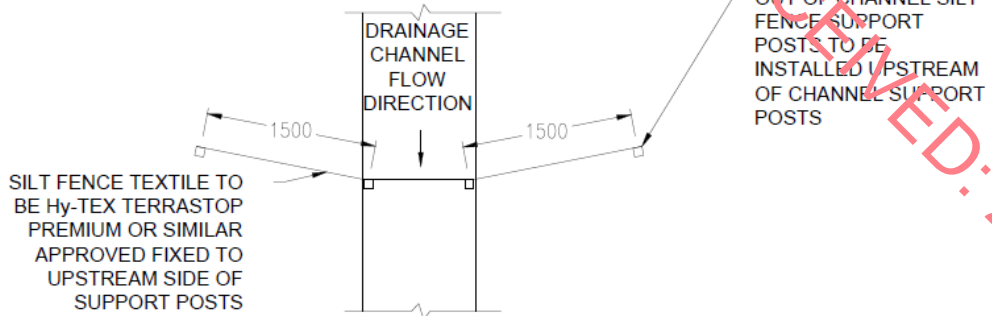
Drg. By	LB	Drg No	-
Checked By	AOG	Rev	0
Stage	EIAR	Date	29/05/'23
Scale	NTS	Figure	2.11 (a)



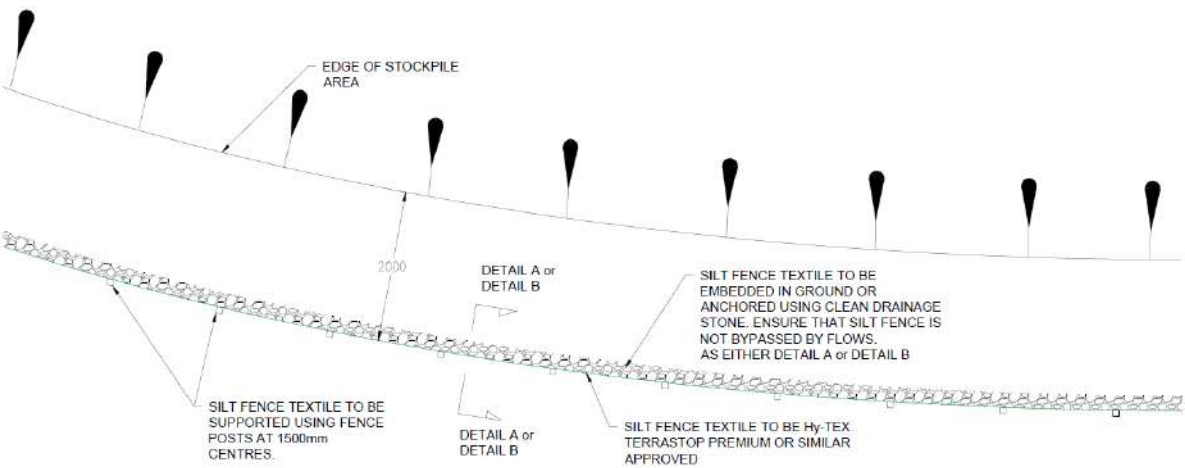
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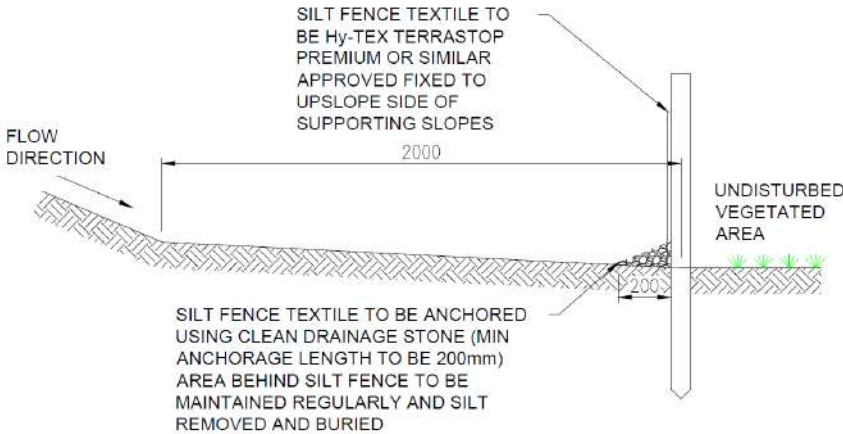
TYPICAL ELEVATION ON SILT FENCE AT DRAINAGE CHANNEL  
SCALE 1:50



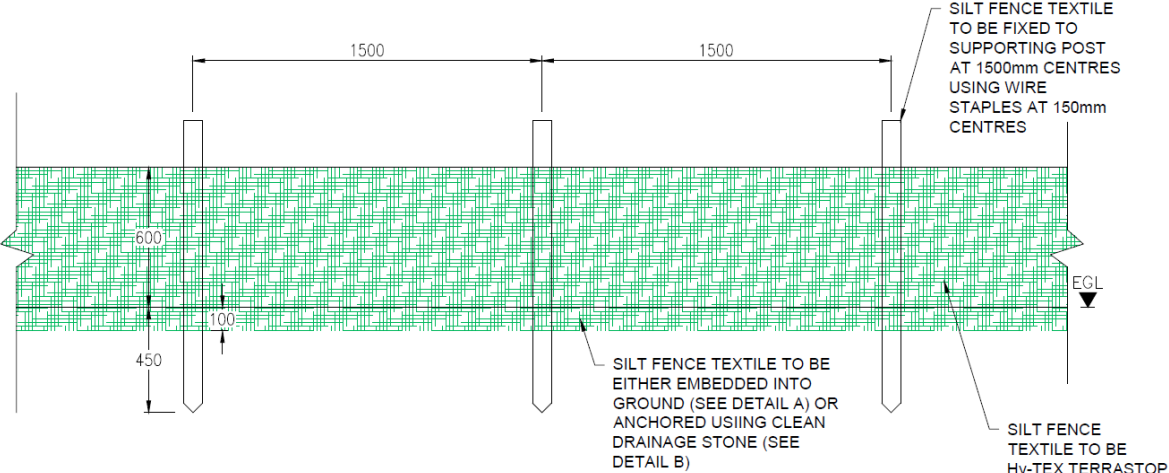
TYPICAL PLAN ON SILT FENCE AT DRAINAGE CHANNEL  
SCALE 1:100



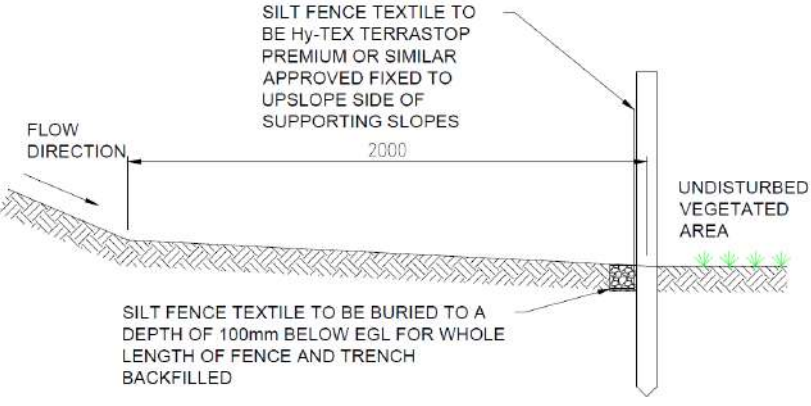
TYPICAL PLAN ON SILT FENCE AT STOCKPILE AREAS  
SCALE 1:100



DETAIL A  
SCALE 1:50



TYPICAL ELEVATION ON SILT FENCE AT STOCKPILE AREAS  
SCALE 1:50



DETAIL B  
SCALE 1:50

**DRAINAGE NOTES**  
**1. GENERAL:**  
DRAINAGE BUFFER ZONE WIDTHS SHALL BE A MINIMUM OF 50m.  
**2. CONSTRUCTION AND MAINTENANCE**  
ROADSIDE DRAIN SHOULD NOT INTERCEPT LARGE VOLUMES OF WATER FROM THE GROUND ABOVE.  
ROADSIDE DRAINS LIKELY TO CARRY HIGH SEDIMENT LOADS AND MUST DISCHARGE INTO A BUFFER OF ADEQUATE WIDTH.  
DRAINS ON THE UPPER SIDE OF THE ROAD MAY NEED CULVERTS TO THE LOWER SIDE.  
PROPER MAINTENANCE PROVISIONS MUST BE PUT IN PLACE SO AS TO ENSURE THE PROPER FUNCTIONING OF THE DRAINAGE SYSTEM INCLUDING REGULAR INSPECTIONS, CLEANING AND REPAIRS WHERE NECESSARY.  
**3. DRAINS:**  
DRAINS SHALL BE DESIGNED AND CONSTRUCTED TO MITIGATE CHANNEL EROSION, E.G. BY INSTALLATION OF PERFORATED PIPE WITH DRAINAGE STONE SURROUND. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SYSTEM OF STILLING PONDS AND BUFFERED OUTFALLS.  
DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL BE CONVEYED THROUGH A BUFFERED OUTFALL WITHIN AN UNDISTURBED STABILISED AREA AT NON-EROSIVE VELOCITIES.  
ALL OBSTRUCTIONS WITHIN A DRAINAGE CHANNEL SHALL BE REMOVED AND DISPOSED OF, SO AS NOT TO INTERFERE WITH THE PROPER FUNCTION OF THE DRAINAGE SYSTEM.  
CHECK DAMS SHALL BE CONSTRUCTED USING WELL GRADED 150mm DOWN ANGULAR GRAVEL PLACED OVER A GEO-TEXTILE LAYER. SEE DETAIL 1.  
THE SPACING OF CHECK DAMS SHALL BE SUCH THAT THE PEAK OF THE DOWNSTREAM DAM IS LOWER THAN THE FOOT OF THE UPSTREAM DAM.  
THE USE OF STRAW BALES WITHIN THE DRAINAGE SYSTEM SHOULD BE CONSIDERED ON A TEMPORARY BASIS DURING CONSTRUCTION AND MAINTENANCE WORK.  
STRAW BALES SHOULD, HOWEVER, ONLY BE USED TO INTERCEPT SEDIMENT-LADEN RUNOFF FROM ALL DRAINAGE AREAS OF DISTURBED SOIL.  
BALES SHOULD BE ANCHORED IN PLACE BY THE USE OF TIMBER STAKES OR RE-BARS DRIVEN THROUGH THE BALE WHERE BALES ARE TO BE PLACED IN POSITION ADJACENT TO OTHER BALES (E.G. WITHIN A STILLING POND). THE FIRST STAKE IN EACH BALE SHOULD BE DRIVEN TOWARDS THE PREVIOUSLY LAID BALE AT AN ANGLE. THIS HAS THE EFFECT OF FORCING THE TWO BALES TOGETHER.  
BALES SHALL BE REPLACED AS REQUIRED.  
BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS.  
**4. OUTFALLS:**  
ALL DRAINAGE CHANNELS SHALL FAN/TAPER OUT BEFORE ENTERING THE BUFFER ZONE. PRIOR TO ENTERING THE TAPERED ZONE, THE BASE OF THE DRAINAGE CHANNELS TO BE CONSTRUCTED OF A HARDWARE MATERIAL TO AID THE SETTLEMENT OF SUSPENDED SOLIDS.  
NON-DEVELOPMENT RUN-OFF SHALL BE RETURNED TO A SURFACE FLOW CONDITION E.G. BY USE OF LEVEL SPREADERS.  
**5. STILLING PONDS:**  
ANY SEDIMENT TRAPS/STILLING PONDS SHALL BE LOCATED OUTSIDE OF BUFFER ZONES AND HAVE NO DIRECT OUTFLOW INTO WATERCOURSES.  
STILLING PONDS SHOULD BE SIZED TO ACCOMMODATE PEAK FLOWS CORRESPONDING TO A 1 IN 100 YEAR STORM EVENT FOR THEIR RESPECTIVE CATCHMENT AREAS.  
MAINTENANCE WORKS INCLUDING THE REMOVAL OF SETTLED MATERIALS SHOULD ONLY BE CARRIED OUT IN DRY CONDITIONS CARE SHOULD BE TAKEN WHEN REMOVING SETTLED MATERIALS SUCH THAT THE PONDS ARE NOT OVER DEEPEDED.  
IN THE DESIGN OF STILLING PONDS, CONSIDERATION SHOULD BE GIVEN TO IMPLEMENTING MEASURES SUCH THAT THERE IS NO POSSIBILITY TO DIRECT FLOW THROUGH THE POND E.G. OFFSET INLETS AND OUTLETS FROM THE CENTRE AXIS ETC.

Rev	Date	By	Comment
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**Client**  
  
Ballykett Green Energy Limited

**Client Representative**  
 **JENNINGS O'DONOVAN**  
CONSULTING ENGINEERS

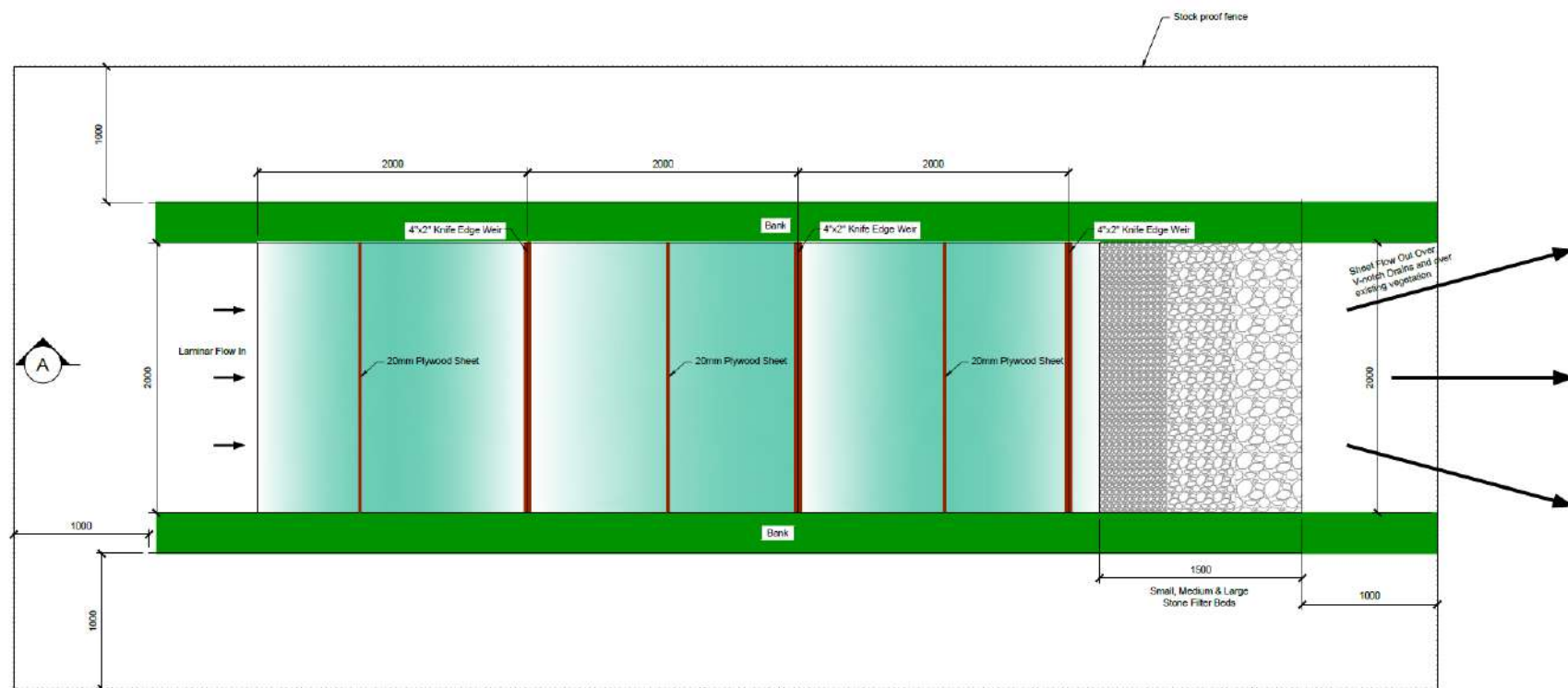
**Project**  
  
Proposed Wind Farm  
at Ballykett, Co. Clare.

**Title**  
  
Drainage System Details

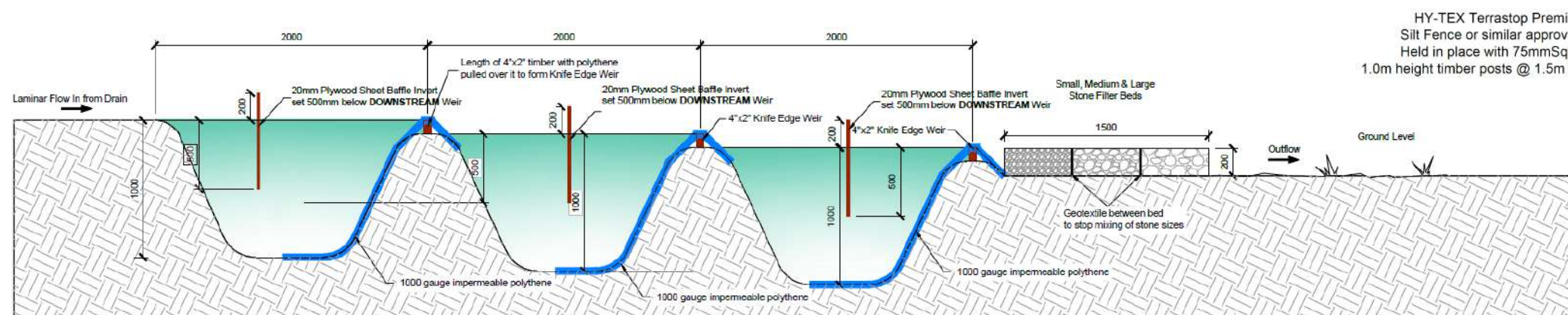
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Stage	EIAR	Date	29/05/'23
Scale	NTS	Figure	2.11 (b)

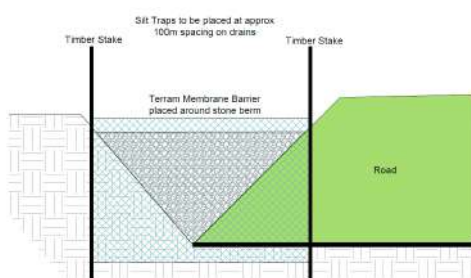




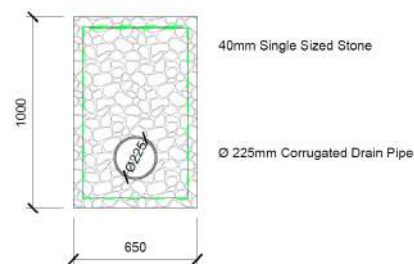
PLAN VIEW OF SETTLEMENT PONDS (WITH DISCHARGE TO DRAINS WHERE APPLICABLE)  
SCALE: 1:50



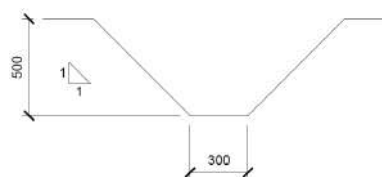
SECTION  
SCALE: 1:50



SEDIMENT FENCE DETAIL  
SCALE: 1:20



PERMANENT PERIPHERAL LAND DRAIN  
SCALE: NTS



TEMPORARY "V" DITCH DRAIN PROFILE  
SCALE: NTS



COMPLETED SETTLEMENT POND SYSTEM  
SCALE: NTS

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## Client

Ballykett Green Energy Limited

## Client Representative



## Project

Proposed Wind Farm  
at Ballykett, Co. Clare.

## Title

Drainage System Details

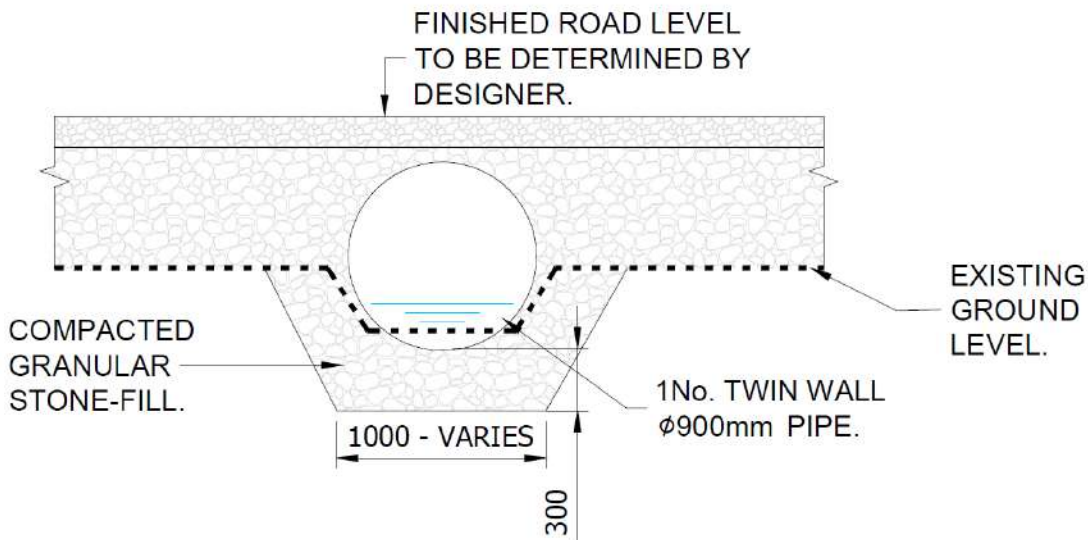
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Stage	EIAR	Date	29/05/'23
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Legend



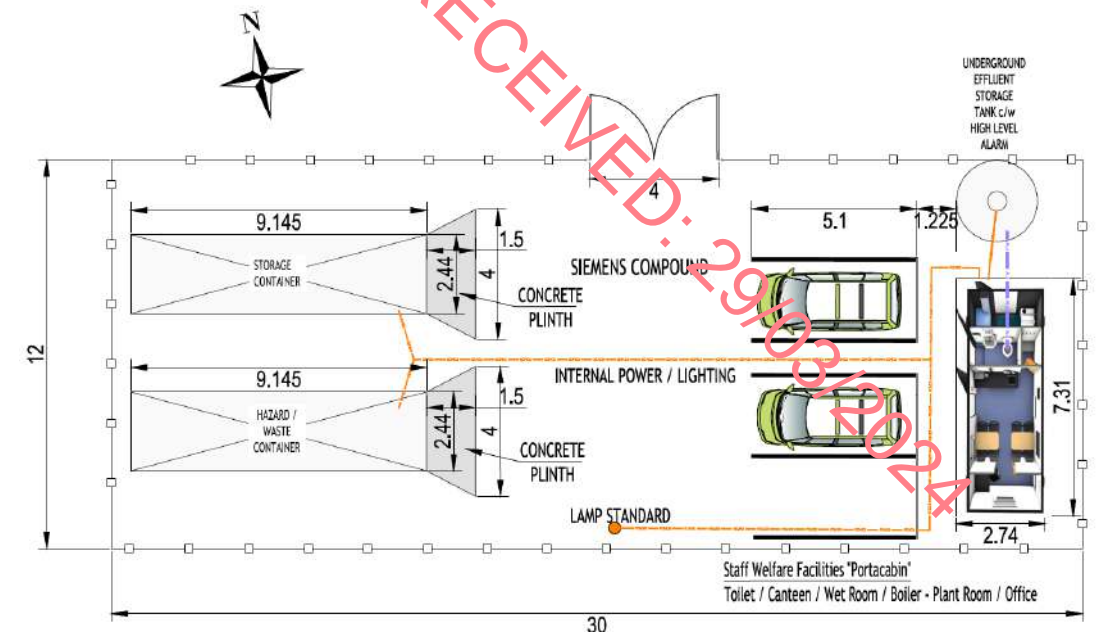
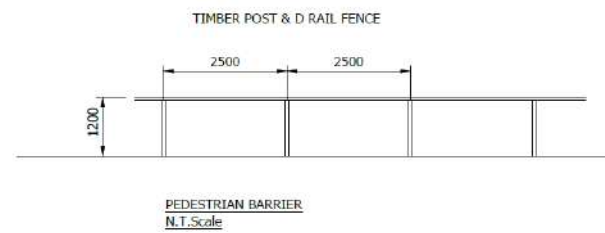
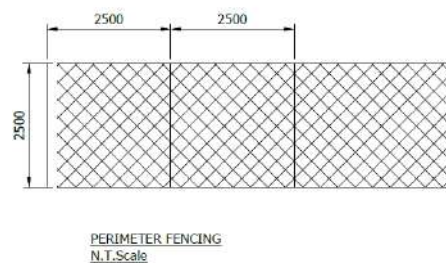
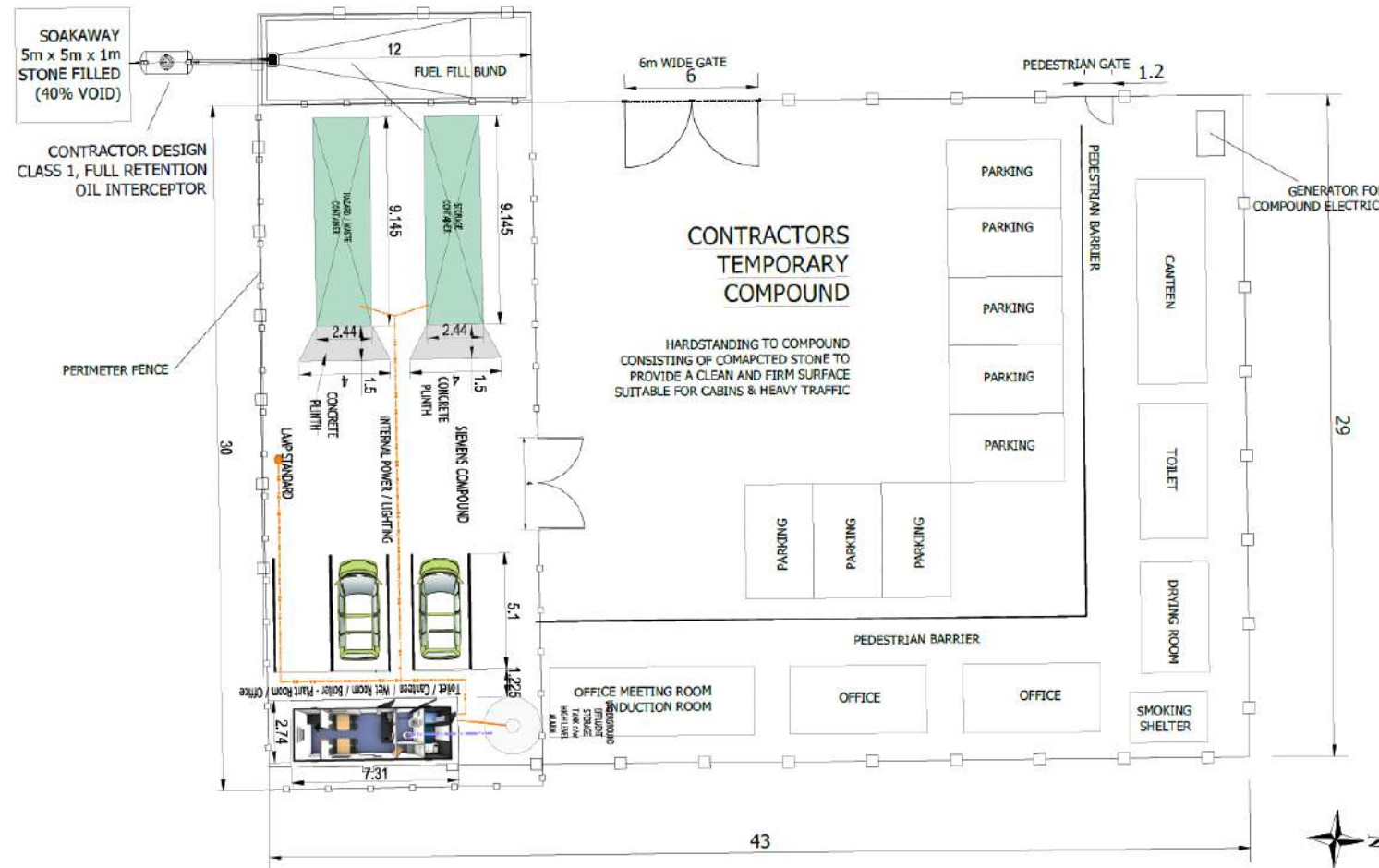
TYPE 1 CULVERT FOR WATER CROSSING 04 & 05

SCALE 1:50

- NOTE:
- CULVERTS ARE TO BE OF ADEQUATE SIZE TO CARRY PEAK FLOWS CORRESPONDING TO A 1 IN 100 YEAR STORM EVENT, WITH A MINIMUM DIAMETER OF 900mm. THEY SHOULD BE INSTALLED TO CONFORM WHEREVER POSSIBLE TO THE NATURAL SLOPE AND ALIGNMENT OF THE STREAM OR DRAINAGE LINE. CULVERTS GREATER THAN 1m DIAMETER SHOULD BE BURIED TO A MINIMUM DEPTH OF 300mm BELOW THE STREAMBED AND THE ORIGINAL BED MATERIAL PLACED IN THE BOTTOM OF THE CULVERT.
1. FORMATION LEVEL TO BE DETERMINED BY THE CIVIL WORKS DESIGNER. REFER TO SITE INVESTIGATIONS REPORT.
  2. SUB BASE MATERIAL TO CONFORM TO THE FOLLOWING:  
  
IMPORTED MATERIAL  
TO CONFORM TO TYPE 6F1 IN ACCORDANCE WITH TABLE 6/2 OF THE NRA SPECIFICATION FOR ROAD WORKS.  
  
SITE WON MATERIAL  
ROCK WON IN EXCAVATION OF TURBINES MUST BE CRUSHED AND GRADED ON SITE. THE MAXIMUM SIZE OF AGGREGATE TO BE 125mm. THE AGGREGATE GRADING TO BE AGREED WITH THE ENGINEER.
  3. SURFACE LAYER TO BE CLAUSE 804. THIS LAYER MAY BE APPLIED IMMEDIATELY BEFORE TURBINE DELIVERY.

Rev	Date	By	Comment
<b>Client</b>			
Ballykett Green Energy Limited			
<b>Client Representative</b>			
			
<b>Project</b>			
Proposed Wind Farm at Ballykett, Co. Clare.			
<b>Title</b>			
Drainage System Details			
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Drg. By	AB	Drg No	-
Checked By	AOG	Rev	0
Stage	EIAR	Date	29/05/'22
Scale	NTS	Figure	2.13





Notes:  
 1 Figured Dimensions only to be taken from this drawing.  
 2 All drawings to be checked by the contractor on site.  
 3 Engineer to be informed of any discrepancies before any work commences  
 4 This drawing to be read in conjunction with all other relevant drawings and specifications

Rev	Date	By	Comment
<b>Client</b>			
Ballykett Green Energy Limited			
<b>Client Representative</b>			
			
<b>Project</b>			
Proposed Wind Farm at Ballykett, Co. Clare.			
<b>Title</b>			
Temporary Construction Compound			
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<b>Drg. By</b>	AB	<b>Drg No</b>	-
<b>Checked By</b>	AOG	<b>Rev</b>	0
<b>Stage</b>	EIAR	<b>Date</b>	29/05/'22
<b>Scale</b>	NTS	<b>Figure</b>	2.14