



APPENDIX 6

DRAINAGE DRAWINGS

POLLUTION PREVENTION NOTES:

1. SITE MANAGEMENT PROPOSALS ARE INTENDED TO ENSURE PROTECTION AGAINST SURFACE WATER AND GROUNDWATER POLLUTION, SILTATION AND EROSION.

2. SUITABLE DRAINAGE CONTROL MEASURES WILL BE IN PLACE AT ALL TIMES TO PREVENT CONVEYANCE OF SIGNIFICANT VOLUMES OF SILT TO OFF SITE RECEIVING WATERCOURSES.

3. SILTY WATER CAN ARISE FROM DEWATERING EXCAVATIONS, EROSION OF EXPOSED/DISTURBED GROUND, TEMPORARY STOCKPILES, PLANT AND WHEEL WASH, SITE ROADS/TRACKS, AND DISTURBANCE OF EXISTING FIELD DRAINS AND DITCHES.

DISCHARGES

4. WATER CONTAINING SILT WILL NOT BE DISCHARGED OR PUMPED DIRECTLY TO ANY NATURAL WATERCOURSE. ALL DISCHARGES WILL BE MADE OVER OPEN GROUND OR INTO EXISTING FIELD DRAIN WITH SILT TRAP AT A MINIMUM OF 20M FROM NEAREST WATERCOURSE UNLESS OTHERWISE STATED.

5. NO EXCAVATED MATERIAL WILL BE STORED WITHIN ANY SURFACE WATER BUFFER ZONE.

6. PUMPED WATER WILL BE DIRECTED INTO TRACK SIDE DITCHES AND TREATED IN SETTLEMENT PONDS AND VEGETATION SWALES PRIOR TO OVERLAND DISCHARGE.

7. PUMPING OF CLEAN WATER FROM EXCAVATIONS / OR OVER-PUMPING IN DRAINS/DITCHES/STREAMS WILL BE COMPLETED IN A MANNER THAT WILL NOT CAUSE SCOUR OR EROSION AT THE POINT OF RELEASE/DISCHARGE. THIS WILL BE DONE BY REDUCING THE FLOW VELOCITIES OR BY USE OF SUITABLE SPLASH PLATES, AND/OR OTHER SIMILAR DISCHARGE CONTROLS.

8. VEGETATION WILL NOT BE STRIPPED FROM EXISTING DRAINS/DITCHES UNLESS ABSOLUTELY NECESSARY.

EXCAVATIONS

9. WHERE (TEMPORARY) DEEP EXCAVATIONS ARE PROPOSED, CUT-OFF DRAINS WILL BE USED TO REDUCE THE AMOUNT OF SURFACE WATER ENTERING THE EXCAVATION. THIS WILL BE THE CASE AROUND TURBINE BASE EXCAVATIONS.

EXPOSED GROUND & STOCKPILES

10. THE AMOUNT OF TEMPORARY EXPOSED GROUND AND TEMPORARY STOCKPILES OPEN/EXPOSED AT ANY TIME WILL BE MINIMISED.

SITE TRACKS

11. USE OF TRACK SIDE SWALES WITH CHECK DAMS, AND/OR FILTRATION CHECK DAMS WILL REDUCE SILT IN RUNOFF WATER AS REQUIRED.

12. CHECK DAMS TO BE INSPECTED AND CLEANED REGULARLY.

REFUELLING

13. REFUELLING OF MOBILE PLANT WILL BE COMPLETED IN DESIGNATED REFUELLING AREAS ONLY, ON AN IMPERMEABLE SURFACE AND AWAY FROM FIELD DRAINS / DITCHES AND WATERCOURSES/WATERBODIES.

14. SPILL KITS AND DRIP TRAYS WILL BE AVAILABLE ON SITE FOR USE AS REQUIRED.

CONCRETE

15. CONCRETE POURS WILL BE MANAGED AND SUPERVISED TO ENSURE THERE WILL BE NO LEAKAGE/SEEPAGE/DISCHARGE OF CONCRETE OR CONCRETE WATER DURING THE CONSTRUCTION PHASE.

16. CONCRETE WASH WATER, AND WASTE CONCRETE WILL BE MANAGED APPROPRIATELY ON SITE AT A LINED CONCRETE WASH OUT PIT.

IF WATER POLLUTION IS IDENTIFIED THE FOLLOWING STEPS WOULD BE ADHERED TO:

STOP - WORK IN THE IMMEDIATE AREA SHOULD BE STOPPED AND THE SOURCE OF THE POLLUTION IDENTIFIED.

CONTAIN - THE SOURCE OF THE POLLUTION SHOULD BE BUNDED USING A SUITABLE METHOD. NATURAL WATERCOURSES SHOULD BE TEMPORARILY DIVERTED AROUND ANY SOURCE OF POLLUTION.

NOTIFY - THE RELEVANT AUTHORITIES (SITE MANAGER / FISHERIES / NPWS / LOCAL AUTHORITY ETC.) SHOULD BE NOTIFIED IMMEDIATELY TO ENSURE THAT MEASURES CAN BE IMPLEMENTED DOWNSTREAM TO PROTECT FISHERIES AND OTHER SENSITIVE RECEPTORS.

DRAINAGE NOTES:

1. SITE TRACKS AND ROADWAY SURFACING DESIGN AND CONSTRUCTION TO ENGINEER'S SPECIFICATION (I.E. BY OTHERS).

2. SPARE STRAW BALES/SILT FENCING/ OR SIMILAR, WILL BE STORED ON SITE. THE LEVEL OF SILT IN RUNOFF DURING CONSTRUCTION IS TO BE MONITORED VISUALLY AND EXCESSIVE SILT LEVELS IN ANY AREA TO BE TEMPORARILY MANAGED BY PLACING SILT FENCES, STRAW BALES / OR SIMILAR OR ADDITIONAL CHECK DAMS AT THE PROBLEM AREAS. MOBILE SILTBUSTER SYSTEM TO BE AVAILABLE ON-SITE FOR USE AS REQUIRED ALSO.

3. SUDS DRAINAGE SYSTEM TO BE CONSTRUCTED PRIOR TO, OR AT THE SAME TIME AS THE ACCESS TRACKS. INTERIM MEASURES SUCH AS THE PLACEMENT OF STRAW BALES/SILT FENCING/OR SIMILAR APPROVED METHOD OR ADDITIONAL CHECK DAMS AND SILT FENCES TO BE EMPLOYED IN ALL INSTANCES WHERE WORK CARRIED OUT TO CONSTRUCT THE ACCESS TRACKS IS LIKELY TO CAUSE ADVERSE ENVIRONMENTAL EFFECTS THROUGH INCREASED SILT LOADINGS BEING GENERATED DURING THE CONSTRUCTION PHASE.

4. SUITABLE PREVENTION MEASURES WILL BE IN PLACE AT ALL TIMES TO PREVENT THE CONVEYANCE OF SIGNIFICANT VOLUMES OF SILT TO RECEIVING WATERCOURSES. SEE NOTES ON POLLUTION PREVENTION.

5. INTERCEPTOR SWALES / DITCHES WILL BE USED TO COLLECT UPSTREAM SURFACE WATER FLOWS. REGULAR CROSS DRAINS / DISCHARGE TO FIELD DITCHES/DRAINS WILL BE INSTALLED TO TRANSFER / DISCHARGE SURFACE WATER IN INTERCEPTOR DRAINS TO SUITABLE FIELD DRAIN OUTFALL POINTS.

6. DRAINAGE SWALES / DITCHES TO BE EXCAVATED ADJACENT TO THE ACCESS TRACKS. REGULAR CROSS DRAINS TO BE LOCATED ALONG ACCESS TRACKS TO PREVENT EXCESSIVE VOLUMES OF WATER COLLECTING IN THE SWALES / DITCHES. OPTIMUM LOCATIONS OF CROSS DRAINS TO BE AGREED WITH THE ENGINEER ON SITE. SURFACE WATER WILL NOT BE ALLOWED TO DISCHARGE DIRECTLY INTO ANY EXISTING WATERCOURSES.

7. A BUFFER ZONE OF >20M TO ANY EXISTING WATERCOURSE WILL BE REQUIRED WHERE OVER LAND DISCHARGES ARE PROPOSED FROM ACCESS TRACK SWALES / DITCHES. THIS BUFFER WILL NOT BE POSSIBLE AT RIVER/STREAM CROSSINGS, BUT OTHER SUITABLE CONTROLS ARE PROPOSED IN THOSE AREAS (I.E. ADDITIONAL SILT FENCING).

8. BATTERS OF ALL PROPOSED SWALES / DITCHES TO HAVE A SLOPE OF BETWEEN 1 : 1.5 TO 1 : 2 DEPENDING UPON DEPTH OF SWALE/DITCH AND WILL BE LEFT AS CUT TO RE-VEGETATE WITH LOCAL SPECIES.

9. TRACK SIDE SWALES / DITCHES TO BE SHALLOW WITH MODERATE GRADIENTS TO PREVENT SCOURING. IN STEEP AREAS CHECK DAMS WILL BE INSTALLED TO REDUCE FLOW VELOCITIES AND PROVIDE SOURCE CONTROL OF SILT CONTAINMENT. THESE HAVE BEEN DESIGNATED IN CONJUNCTION WITH SETTLEMENT PONDS AND SILT TRAPS, PRIOR TO DISCHARGE.

10. SETTLEMENT PONDS TO BE CONSTRUCTED FOR SILT REMOVAL AT TURBINE BASES AND HARD STAND AREAS. POND SIZES DEPEND ON THE CATCHMENT AREA BEING SERVED. SAMPLE POND SIZES FOR VARIOUS CATCHMENT AREAS SHOWN ON DRAWING D501.

11. STRAW BALES / OR SIMILAR AND SILT FENCES TO BE USED ALSO AROUND SPOIL HEAPS TO MITIGATE SILT RUNOFF. SILT FENCES MAY BE REMOVED WHEN SUITABLE VEGETATION COVER IS ESTABLISHED.

12. SILT FENCES TO BE PROVIDED ALONG THE EDGE OF EXISTING WATERCOURSES WHERE WORKS COMES WITHIN 4.5M OF EDGE OF ANY DITCH / DRAIN / EPHEMERAL CHANNEL.

13. SLOPES OF THE SWALES / DITCHES TO BE VEGETATED OR PROTECTED FROM EROSION UNTIL VEGETATION HAS BEEN ESTABLISHED. STRIPPED VEGETATIVE LAYER ('SOO' OR 'SCRAW') FROM EXCAVATIONS TO BE STORED LOCALLY AND USED TO LINE SLOPES AND BASE OF SWALES / DITCHES OR LONGITUDINAL MOUNDS OF VEGETATION SWALES AT FIELD DRAIN DISCHARGE POINTS.

14. AREAS STRIPPED OF VEGETATION WILL BE KEPT TO A MINIMUM.

15. CLEAN STONE FLOW CONTROL CHECK DAMS TO BE MADE OF LOCALLY WON / GEOLOGICALLY SIMILAR WELL GRADED STONE. AGGREGATE SIZE FOR STONE CHECK DAMS TO BE TYPICALLY 20- 40MM CLEAN STONE. ON SLOPING SECTIONS OF THE ACCESS TRACKS, 40MM CHECK DAMS TO BE PROTECTED FROM WASHING AWAY THROUGH THE PLACEMENT OF 100M STONE ON THE DOWNHILL FACE OF THE CHECK DAM AND BY WRAPPING IN GEOTEXTILE.

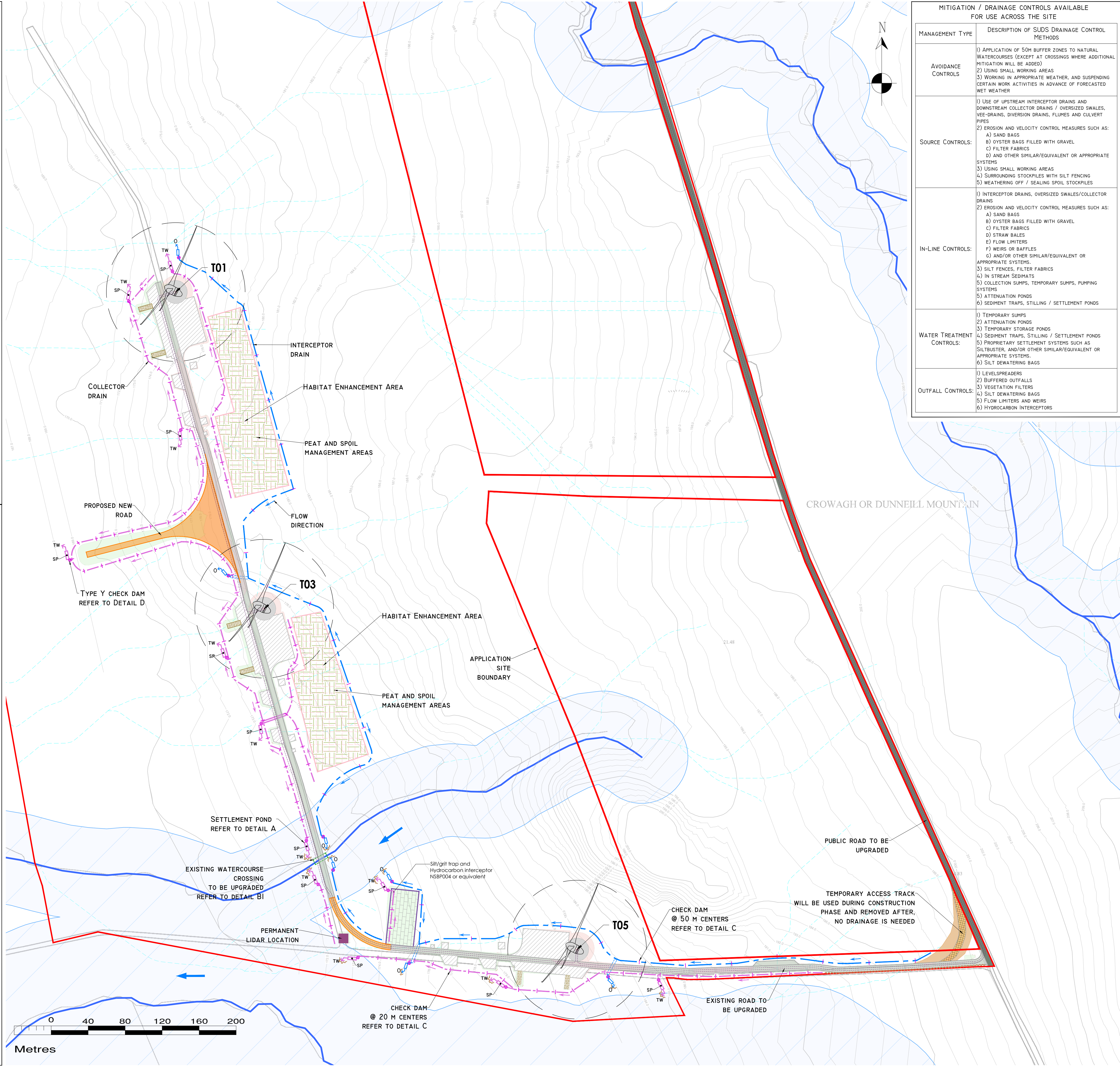
16. BUILD UP OF SILT LEVELS AT CHECK DAMS TO BE REMOVED AND DISPOSED OF APPROPRIATELY. SILT LEVELS AT CHECK DAMS TO BE VISUALLY INSPECTED AS PART OF AN ONGOING DRAINAGE MAINTENANCE PROGRAMME DURING THE CONSTRUCTION PHASE. WHERE CHECK DAMS BECOME CLOGGED WITH SILT OR VEGETATION, STONE CHECK DAM TO BE REMOVED AND REPLACED SUBSEQUENT TO THE REMOVAL OF SILT.

17. SPACING AND FREQUENCY OF CHECK DAMS WILL BE DEPENDENT UPON LONGITUDINAL GRADIENT OF SWALE.

18. LOCATION OF FILTRATION CHECK DAMS (IF REQUIRED) TO BE AGREED ON SITE WITH ENGINEER. SETTLEMENT PONDS TO BE CONSTRUCTED IN A MANNER WHERE THEY MAY BE EASILY INFILLED AT A LATER DATE (POST COMPLETION OF THE TURBINE BASE AND HARDSTAND CONSTRUCTION). ONLY SUITABLE MATERIALS EXCAVATED FROM THE POND TO BE USED TO FORM PART OF THE EMBANKMENT AROUND THE POND.

19. OIL FUEL WILL ONLY BE STORED WITHIN BUNDED CONTAINMENT STRUCTURES.

20. TEMPORARY USE OF SILT BAGS WILL BE USED ON SITE WHERE PUMPING FROM EXCAVATIONS IS REQUIRED.



MITIGATION / DRAINAGE CONTROLS AVAILABLE FOR USE ACROSS THE SITE	
MANAGEMENT TYPE	DESCRIPTION OF SUDS DRAINAGE CONTROL METHODS
AVOIDANCE CONTROLS	1) APPLICATION OF 50M BUFFER ZONES TO NATURAL WATERCOURSES (EXCEPT AT CROSSINGS WHERE ADDITIONAL MITIGATION WILL BE ADDED)
	2) USING SMALL WORKING AREAS
SOURCE CONTROLS:	1) WORKING IN APPROPRIATE WEATHER, AND SUSPENDING CERTAIN WORK ACTIVITIES IN ADVANCE OF FORECASTED WET WEATHER
	2) EROSION AND VELOCITY CONTROL MEASURES SUCH AS: A) SAND BAGS B) OYSTER BAGS FILLED WITH GRAVEL C) FILTER FABRICS D) AND OTHER SIMILAR/EQUIVALENT OR APPROPRIATE SYSTEMS
IN-LINE CONTROLS:	1) INTERCEPTOR DRAINS, OVERSIZED SWALES/COLLECTOR DRAINS
	2) EROSION AND VELOCITY CONTROL MEASURES SUCH AS: A) SAND BAGS B) OYSTER BAGS FILLED WITH GRAVEL C) FILTER FABRICS D) STRAW BALES E) FLOW LIMITERS F) WEIRS OR BAFFLES G) AND/OR OTHER SIMILAR/EQUIVALENT OR APPROPRIATE SYSTEMS.
WATER TREATMENT CONTROLS:	3) SILT FENCES, FILTER FABRICS
	4) IN STREAM SEDIMENTS
OUTFALL CONTROLS:	5) COLLECTION SUMPS, TEMPORARY SUMPS, PUMPING SYSTEMS
	6) ATTENUATION PONDS
OUTFALL CONTROLS:	1) TEMPORARY SUMPS
	2) ATTENUATION PONDS
OUTFALL CONTROLS:	3) TEMPORARY STORAGE PONDS
	4) SEDIMENT TRAPS, STILLING / SETTLEMENT PONDS
OUTFALL CONTROLS:	5) PROPRIETARY SETTLEMENT SYSTEMS SUCH AS SILTBUSTER, AND/OR OTHER SIMILAR/EQUIVALENT OR APPROPRIATE SYSTEMS.
	6) SILT DEWATERING BAGS
OUTFALL CONTROLS:	1) LEVELSPREADERS
	2) BUFFERED OUTFALLS
OUTFALL CONTROLS:	3) VEGETATION FILTERS
	4) SILT DEWATERING BAGS
OUTFALL CONTROLS:	5) FLOW LIMITERS AND WEIRS
	6) HYDROCARBON INTERCEPTORS

DRAWING LEGEND :

- WATERCOURSES
- WATERCOURSES 50M BUFFER
- LAKES
- LAKES 50M BUFFER
- STREAM FLOW DIRECTION
- MAPPED DRAINS
- MAPPED DRAINAGE PATHWAYS >150M LENGTH*
- POTENTIAL DRAINAGE FLOWPATHS ARE MODELLED BASED ON LIDAR DATA AND DO NOT INDICATE THE PRESENCE OF A DRAIN OR WATERCOURSE ORIGINATED BY RECHARGE TO GROUND.
- UPSTREAM INTERCEPTOR DRAIN
- SWALES/DOWNSTREAM COLLECTOR DRAIN
- DIRECTION OF FLOW
- SILT FENCES
- DOUBLE/TRIPLE SILT FENCES
- SETTLEMENT POND - LEVEL SPREADER
- CHECK DAM 'TYPE A'
- CHECK DAM 'TYPE B'
- PROPOSED NEW WATERCOURSE CROSSING
- EXISTING WATERCOURSE CROSSING TO BE UPGRADED
- EXISTING WATERCOURSE CROSSING
- EXISTING DRAINAGE GRIP
- INTERCEPTOR DITCH CULVERT
- COLLECTOR DITCH CULVERT
- OVERLAND FLOW DISCHARGE
- TW TREATED WATER DISCHARGE
- SP SETTLEMENT POND
- VS SEMI-NATURAL VEGETATION SWALE / FILTER BED /SECONDARY SP
- PUMPING SUMP
- APPLICATION SITE BOUNDARY
- EXISTING GROUND SURFACE
- MINOR CONTOUR (1M INTERVAL)
- EXISTING GROUND SURFACE
- MAJOR CONTOUR (5M INTERVAL)
- TURBINE FOUNDATION
- HARDSTAND
- PROPOSED NEW ROADS
- EXISTING ROADS TO BE UPGRADED
- PUBLIC ROADS TO BE UPGRADED
- TEMPORARY ACCESS TRACK
- 33kV UNDERGROUND CABLE ROUTE
- PROPOSED 110kV ONSITE SUBSTATION
- TEMPORARY CONSTRUCTION COMPOUND
- BORROW PIT
- PEAT AND SPOIL MANAGEMENT AREAS
- CUT AREA
- FILL AREA
- HABITAT ENHANCEMENT AREA
- EXISTING WIND FARM FOOTPRINT
- EXISTING TURBINE TO BE REMOVED

KEY PLAN

0 1000M 2000M

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4. ALL DIMENSIONS ARE IN METRES.

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Revisions			

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7. PUMPING OF CLEAN WATER FROM EXCAVATIONS / OR OVER-PUMPING IN DRAINS/DITCHES/STREAMS WILL BE COMPLETED IN A MANNER THAT WILL NOT CAUSE SCOUR OR EROSION AT THE POINT OF RELEASE/DISCHARGE. THIS WILL BE DONE BY REDUCING THE FLOW VELOCITIES OR BY USE OF SUITABLE SPLASH PLATES, AND/OR OTHER SIMILAR DISCHARGE CONTROLS.

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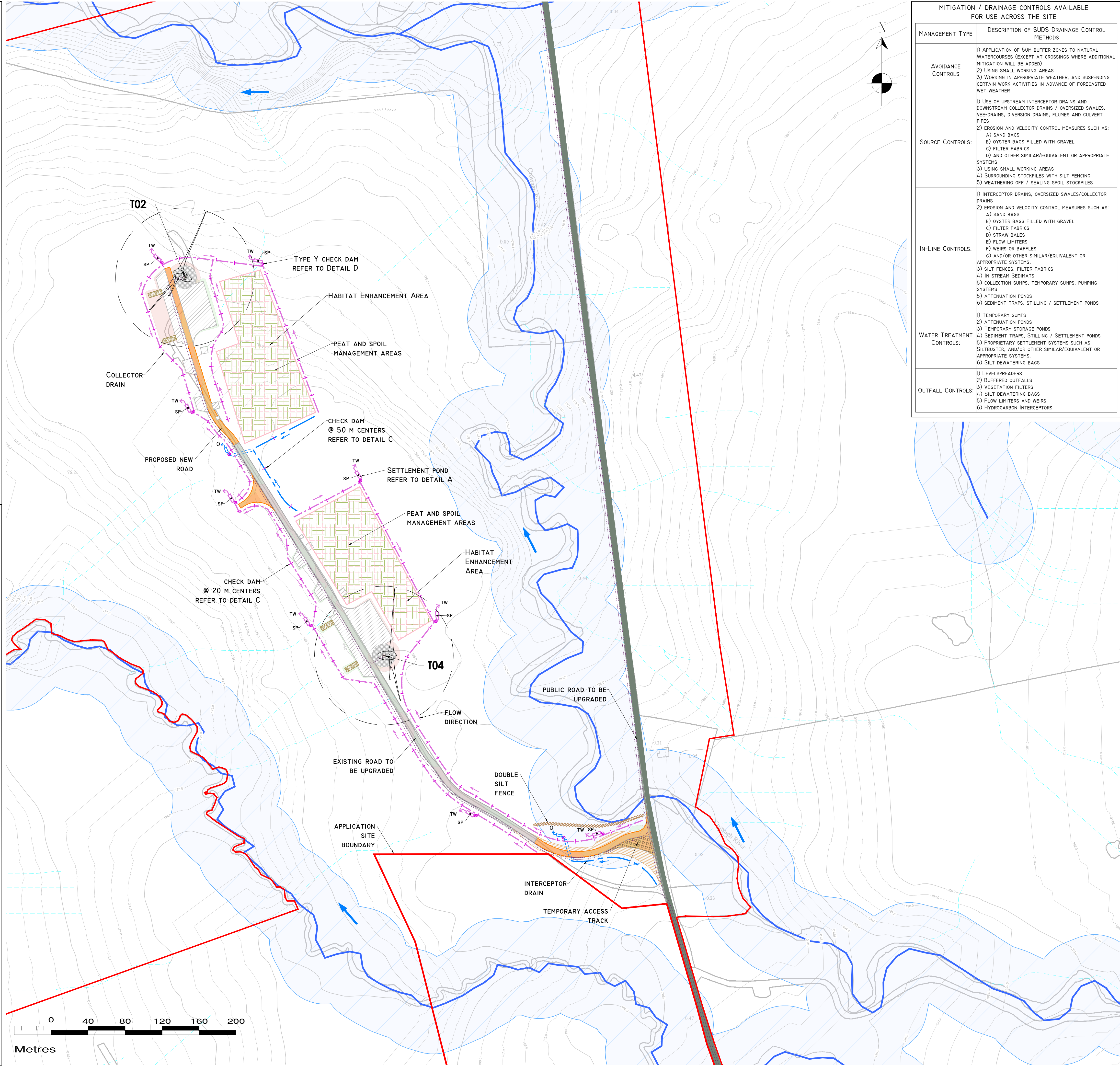
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MITIGATION / DRAINAGE CONTROLS AVAILABLE FOR USE ACROSS THE SITE	
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	2) USING SMALL WORKING AREAS
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	2) EROSION AND VELOCITY CONTROL MEASURES SUCH AS: A) SAND BAGS B) OYSTER BAGS FILLED WITH GRAVEL C) FILTER FABRICS D) AND OTHER SIMILAR/EQUIVALENT OR APPROPRIATE SYSTEMS
IN-LINE CONTROLS	1) USE OF UPSTREAM INTERCEPTOR DRAINS AND DOWNSTREAM COLLECTOR DRAINS / OVERSIZED SWALES, VEE-DRAINS, DIVERSION DRAINS, FLUMES AND CULVERT PIPES
	2) EROSION AND VELOCITY CONTROL MEASURES SUCH AS: A) SAND BAGS B) OYSTER BAGS FILLED WITH GRAVEL C) FILTER FABRICS D) STRAW BALES E) FLOW LIMITERS F) WEIRS OR BAFFLES G) AND/OR OTHER SIMILAR/EQUIVALENT OR APPROPRIATE SYSTEMS
WATER TREATMENT CONTROLS	1) SURROUNDING STOCKPILES WITH SILT FENCING
	2) WEATHERING OFF / SEALING SPOIL STOCKPILES
OUTFALL CONTROLS	1) INTERCEPTOR DRAINS, OVERSIZED SWALES/COLLECTOR DRAINS
	2) SEDIMENT TRAPS, STILLING / SETTLEMENT PONDS

DRAWING LEGEND:

- WATERCOURSES
- WATERCOURSES 50M BUFFER
- LAKES
- LAKES 50M BUFFER
- STREAM FLOW DIRECTION
- MAPPED DRAINS
- MAPPED DRAINAGE PATHWAYS >150M LENGTH*
- POTENTIAL DRAINAGE FLOWPATHS ARE MODELLED BASED ON LIDAR DATA AND DO NOT INDICATE THE PRESENCE OF A DRAIN OR WATERCOURSE INITIATED BY RECLAME TO GROUND

UPSTREAM INTERCEPTOR DRAIN

- SWALES/DOWNSTREAM COLLECTOR DRAIN
- DIRECTION OF FLOW
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- DOUBLE/TRIPLE SILT FENCES
- SETTLEMENT POND - LEVEL SPREADER
- CHECK DAM 'TYPE A'
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PROPOSED NEW WATERCOURSE CROSSING

- EXISTING WATERCOURSE CROSSING TO BE UPGRADED
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- SEMI-NATURAL VEGETATION SWALE / FILTER BED /SECONDARY SP
- PUMPING SUMP

APPLICATION SITE BOUNDARY

- EXISTING GROUND SURFACE
- MINOR CONTOUR (1M INTERVAL)
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- HARDSTAND
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- EXISTING ROADS TO BE UPGRADED
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- 110KV UNDERGROUND CABLE ROUTE
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KEY PLAN

0 1000M 2000M

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Date	Description	Chkd	Signed
Revisions			

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Client: SSE

Job: CRUMHACH WIND FARM, CO. SLIGO

Title: PROPOSED DRAINAGE LAYOUT

Figure No: D102

Drawing No: P1694-0-0726-A1-D102-00B

Sheet Size: A1

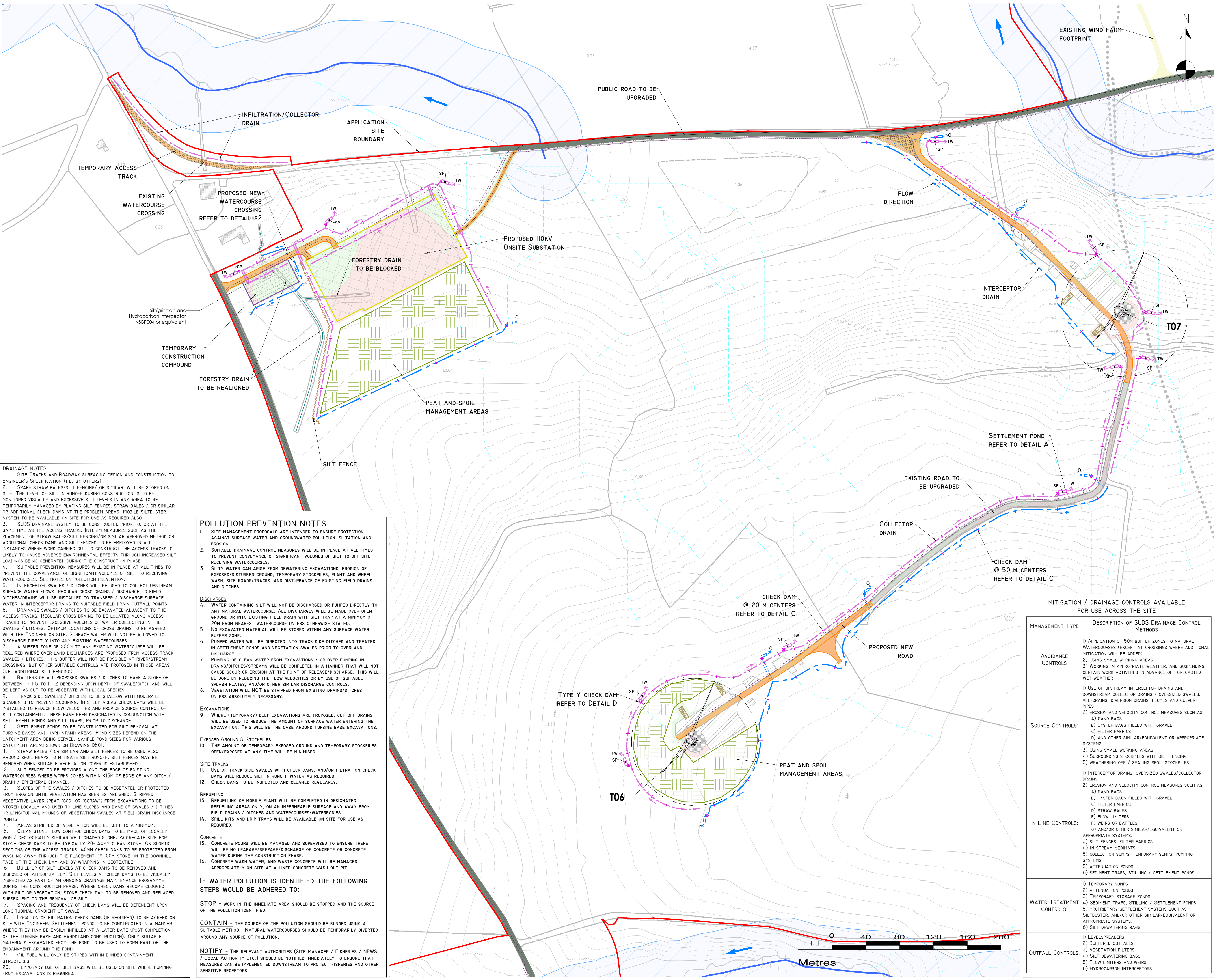
Scale: 1:2,000 (A1)

Date: 24/07/2026

Project No.: P1694-0

Drawn By: GA

Checked By: MG



DRAINAGE NOTES:

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4. SUITABLE PREVENTION MEASURES WILL BE IN PLACE AT ALL TIMES TO PREVENT THE CONVEYANCE OF SIGNIFICANT VOLUMES OF SILT TO RECEIVING WATERCOURSES. SEE NOTES ON POLLUTION PREVENTION.
5. INTERCEPTOR SWALES / DITCHES WILL BE USED TO COLLECT UPSTREAM SURFACE WATER FLOWS. REGULAR CROSS DRAINS / DISCHARGE TO FIELD DITCHES/ DRAINS WILL BE INSTALLED TO TRANSFER / DISCHARGE SURFACE WATER IN INTERCEPTOR DRAINS TO SUITABLE FIELD DRAIN OUTFALL POINTS.
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8. BATTERS OF ALL PROPOSED SWALES / DITCHES TO HAVE A SLOPE OF BETWEEN 1 : 1.5 TO 1 : 2 DEPENDING UPON DEPTH OF SWALE/DITCH AND WILL BE LEFT AS CUT TO RE-VEGETATE WITH LOCAL SPECIES.
9. TRACK SIDE SWALES / DITCHES TO BE SHALLOW WITH MODERATE GRADIENTS TO PREVENT SCOURING. IN STEEP AREAS CHECK DAMS WILL BE INSTALLED TO REDUCE FLOW VELOCITIES AND PROVIDE SOURCE CONTROL OF SILT CONTAINMENT. THESE HAVE BEEN DESIGNATED IN CONJUNCTION WITH SETTLEMENT PONDS AND SILT TRAPS, PRIOR TO DISCHARGE.
10. SETTLEMENT PONDS TO BE CONSTRUCTED FOR SILT REMOVAL AT TURBINE BASES AND HARD STAND AREAS. POND SIZES DEPEND ON THE CATCHMENT AREA BEING SERVED. SAMPLE POND SIZES FOR VARIOUS CATCHMENT AREAS SHOWN ON DRAWING D501.
11. STRAW BALES / OR SIMILAR AND SILT FENCES TO BE USED ALSO AROUND SPOIL HEAPS TO MITIGATE SILT RUNOFF. SILT FENCES MAY BE REMOVED WHEN SUITABLE VEGETATION COVER IS ESTABLISHED.
12. SILT FENCES TO BE PROVIDED ALONG THE EDGE OF EXISTING WATERCOURSES WHERE WORKS COMES WITHIN 15M OF EDGE OF ANY DITCH / DRAIN / EPHEMERAL CHANNEL.
13. SLOPES OF THE SWALES / DITCHES TO BE VEGETATED OR PROTECTED FROM EROSION UNTIL VEGETATION HAS BEEN ESTABLISHED. STRIPPED VEGETATIVE LAYER (PEAT 'SOO' OR 'SCRAW') FROM EXCAVATIONS TO BE STORED LOCALLY AND USED TO LINE SLOPES AND BASE OF SWALES / DITCHES OR LONGITUDINAL MOUNDS OF VEGETATION SWALES AT FIELD DRAIN DISCHARGE POINTS.
14. AREAS STRIPPED OF VEGETATION WILL BE KEPT TO A MINIMUM.
15. CLEAN STONE FLOW CONTROL CHECK DAMS TO BE MADE OF LOCALLY WON / GEOLOGICALLY SIMILAR WELL GRADED STONE. AGGREGATE SIZE FOR STONE CHECK DAMS TO BE TYPICALLY 20-40MM CLEAN STONE. ON SLOPING SECTIONS OF THE ACCESS TRACKS, 40MM CHECK DAMS TO BE PROTECTED FROM WASHING AWAY THROUGH THE PLACEMENT OF 100M STONE ON THE DOWNHILL FACE OF THE CHECK DAM AND BY WRAPPING IN GEOTEXTILE.
16. BUILD UP OF SILT LEVELS AT CHECK DAMS TO BE REMOVED AND DISPOSED OF APPROPRIATELY. SILT LEVELS AT CHECK DAMS TO BE VISUALLY INSPECTED AS PART OF AN ONGOING DRAINAGE MAINTENANCE PROGRAMME DURING THE CONSTRUCTION PHASE. WHERE CHECK DAMS BECOME CLOGGED WITH SILT OR VEGETATION, STONE CHECK DAM TO BE REMOVED AND REPLACED SUBSEQUENT TO THE REMOVAL OF SILT.
17. SPACING AND FREQUENCY OF CHECK DAMS WILL BE DEPENDENT UPON LONGITUDINAL GRADIENT OF SWALE.
18. LOCATION OF FILTRATION CHECK DAMS (IF REQUIRED) TO BE AGREED ON SITE WITH ENGINEER. SETTLEMENT PONDS TO BE CONSTRUCTED IN A MANNER WHERE THEY MAY BE EASILY INFILLED AT A LATER DATE (POST COMPLETION OF THE TURBINE BASE AND HARDSTAND CONSTRUCTION). ONLY SUITABLE MATERIALS EXCAVATED FROM THE POND TO BE USED TO FORM PART OF THE EMBANKMENT AROUND THE POND.
19. OIL FUEL WILL ONLY BE STORED WITHIN BUNDED CONTAINMENT STRUCTURES.
20. TEMPORARY USE OF SILT BAGS WILL BE USED ON SITE WHERE PUMPING FROM EXCAVATIONS IS REQUIRED.

POLLUTION PREVENTION NOTES:

1. SITE MANAGEMENT PROPOSALS ARE INTENDED TO ENSURE PROTECTION AGAINST SURFACE WATER AND GROUNDWATER POLLUTION, SILTATION AND EROSION.
2. SUITABLE DRAINAGE CONTROL MEASURES WILL BE IN PLACE AT ALL TIMES TO PREVENT CONVEYANCE OF SIGNIFICANT VOLUMES OF SILT TO OFF SITE RECEIVING WATERCOURSES.
3. SILTY WATER CAN ARISE FROM DEWATERING EXCAVATIONS, EROSION OF EXPOSED/DISTURBED GROUND, TEMPORARY STOCKPILES, PLANT AND WHEEL WASH, SITE ROADS/TRACKS, AND DISTURBANCE OF EXISTING FIELD DRAINS AND DITCHES.

DISCHARGES

4. WATER CONTAINING SILT WILL NOT BE DISCHARGED OR PUMPED DIRECTLY TO ANY NATURAL WATERCOURSE. ALL DISCHARGES WILL BE MADE OVER OPEN GROUND OR INTO EXISTING FIELD DRAIN WITH SILT TRAP AT A MINIMUM OF 20M FROM NEAREST WATERCOURSE UNLESS OTHERWISE STATED.
5. NO EXCAVATED MATERIAL WILL BE STORED WITHIN ANY SURFACE WATER BUFFER ZONE.
6. PUMPED WATER WILL BE DIRECTED INTO TRACK SIDE DITCHES AND TREATED IN SETTLEMENT PONDS AND VEGETATION SWALES PRIOR TO OVERLAND DISCHARGE.
7. PUMPING OF CLEAN WATER FROM EXCAVATIONS / OR OVER-PUMPING IN DRAINS/DITCHES/STREAMS WILL BE COMPLETED IN A MANNER THAT WILL NOT CAUSE SCOUR OR EROSION AT THE POINT OF RELEASE/DISCHARGE. THIS WILL BE DONE BY REDUCING THE FLOW VELOCITIES OR BY USE OF SUITABLE SPLASH PLATES, AND/OR OTHER SIMILAR DISCHARGE CONTROLS.
8. VEGETATION WILL NOT BE STRIPPED FROM EXISTING DRAINS/DITCHES UNLESS ABSOLUTELY NECESSARY.

EXCAVATIONS

9. WHERE (TEMPORARY) DEEP EXCAVATIONS ARE PROPOSED, CUT-OFF DRAINS WILL BE USED TO REDUCE THE AMOUNT OF SURFACE WATER ENTERING THE EXCAVATION. THIS WILL BE THE CASE AROUND TURBINE BASE EXCAVATIONS.

EXPOSED GROUND & STOCKPILES

10. THE AMOUNT OF TEMPORARY EXPOSED GROUND AND TEMPORARY STOCKPILES OPEN/EXPOSED AT ANY TIME WILL BE MINIMISED.

SITE TRACKS

11. USE OF TRACK SIDE SWALES WITH CHECK DAMS, AND/OR FILTRATION CHECK DAMS WILL REDUCE SILT IN RUNOFF WATER AS REQUIRED.
12. CHECK DAMS TO BE INSPECTED AND CLEANED REGULARLY.

REFUELLING

13. REFUELLING OF MOBILE PLANT WILL BE COMPLETED IN DESIGNATED REFUELLING AREAS ONLY, ON AN IMPERMEABLE SURFACE AND AWAY FROM FIELD DRAINS / DITCHES AND WATERCOURSES/WATERBODIES.
14. SPILL KITS AND DRIP TRAYS WILL BE AVAILABLE ON SITE FOR USE AS REQUIRED.

CONCRETE

15. CONCRETE POURS WILL BE MANAGED AND SUPERVISED TO ENSURE THERE WILL BE NO LEAKAGE/SEEPAGE/DISCHARGE OF CONCRETE OR CONCRETE WATER DURING THE CONSTRUCTION PHASE.
16. CONCRETE WASH WATER, AND WASTE CONCRETE WILL BE MANAGED APPROPRIATELY ON SITE AT A LINED CONCRETE WASH OUT PIT.

IF WATER POLLUTION IS IDENTIFIED THE FOLLOWING STEPS WOULD BE ADHERED TO:

STOP - WORK IN THE IMMEDIATE AREA SHOULD BE STOPPED AND THE SOURCE OF THE POLLUTION IDENTIFIED.

CONTAIN - THE SOURCE OF THE POLLUTION SHOULD BE BUNDED USING A SUITABLE METHOD. NATURAL WATERCOURSES SHOULD BE TEMPORARILY DIVERTED AROUND ANY SOURCE OF POLLUTION.

NOTIFY - THE RELEVANT AUTHORITIES (SITE MANAGER / FISHERIES / NPWS / LOCAL AUTHORITY ETC.) SHOULD BE NOTIFIED IMMEDIATELY TO ENSURE THAT MEASURES CAN BE IMPLEMENTED DOWNSTREAM TO PROTECT FISHERIES AND OTHER SENSITIVE RECEPTORS.

MITIGATION / DRAINAGE CONTROLS AVAILABLE FOR USE ACROSS THE SITE	
MANAGEMENT TYPE	DESCRIPTION OF SUDS DRAINAGE CONTROL METHODS
Avoidance Controls	1) APPLICATION OF 50M BUFFER ZONES TO NATURAL WATERCOURSES (EXCEPT AT CROSSINGS WHERE ADDITIONAL MITIGATION WILL BE ADDED) 2) USING SMALL WORKING AREAS 3) WORKING IN APPROPRIATE WEATHER, AND SUSPENDING CERTAIN WORK ACTIVITIES IN ADVANCE OF FORECASTED WET WEATHER
Source Controls	1) USE OF UPSTREAM INTERCEPTOR DRAINS AND DOWNSTREAM COLLECTOR DRAINS / OVERSIZED SWALES, VEE-DRAINS, DIVERSION DRAINS, FLUMES AND CULVERT PIPES 2) EROSION AND VELOCITY CONTROL MEASURES SUCH AS: A) SAND BAGS B) OYSTER BAGS FILLED WITH GRAVEL C) FILTER FABRICS D) AND OTHER SIMILAR/EQUIVALENT OR APPROPRIATE SYSTEMS 3) USING SMALL WORKING AREAS 4) SURROUNDING STOCKPILES WITH SILT FENCING 5) WEATHERING OFF / SEALING SPOIL STOCKPILES
In-Line Controls	1) INTERCEPTOR DRAINS, OVERSIZED SWALES/COLLECTOR DRAINS 2) EROSION AND VELOCITY CONTROL MEASURES SUCH AS: A) SAND BAGS B) OYSTER BAGS FILLED WITH GRAVEL C) FILTER FABRICS D) STRAW BALES E) FLOW LIMITERS F) WEIRS OR BAFFLES G) AND/OR OTHER SIMILAR/EQUIVALENT OR APPROPRIATE SYSTEMS. 3) SILT FENCES, FILTER FABRICS 4) IN STREAM SEDIMENTS 5) COLLECTION SUMPS, TEMPORARY SUMPS, PUMPING SYSTEMS 6) ATTENUATION PONDS 7) SEDIMENT TRAPS, STILLING / SETTLEMENT PONDS
Water Treatment Controls	1) TEMPORARY SUMPS 2) ATTENUATION PONDS 3) TEMPORARY STORAGE PONDS 4) SEDIMENT TRAPS, STILLING / SETTLEMENT PONDS 5) PROPRIETARY SETTLEMENT SYSTEMS SUCH AS SILTBUSTER, AND/OR OTHER SIMILAR/EQUIVALENT OR APPROPRIATE SYSTEMS. 6) SILT DEWATERING BAGS
Outfall Controls	1) LEVELSPREADERS 2) BUFFERED OUTFALLS 3) VEGETATION FILTERS 4) SILT DEWATERING BAGS 5) FLOW LIMITERS AND WEIRS 6) HYDROCARBON INTERCEPTORS

DRAWING LEGEND :

- WATERCOURSES
- WATERCOURSES 50M BUFFER
- LAKES
- LAKES 50M BUFFER
- STREAM FLOW DIRECTION
- MAPPED DRAINS
- MAPPED DRAINAGE PATHWAYS >150M LENGTH*

* POTENTIAL DRAINAGE FLOWPATHS ARE MODELLED BASED ON LIDAR DATA AND DO NOT INDICATE THE PRESENCE OF A DRAIN OR WATERCOURSE ORIGINATED BY RECHARGE TO GROUND.

- UPSTREAM INTERCEPTOR DRAIN
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- EXISTING WATERCOURSE CROSSING TO BE UPGRADED
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- EXISTING DRAINAGE GRIP
- INTERCEPTOR DITCH CULVERT
- COLLECTOR DITCH CULVERT
- OVERLAND FLOW DISCHARGE
- TREATED WATER DISCHARGE
- TW
- SP
- VS
- SEMI-NATURAL VEGETATION
- SWALE / FILTER BED / SECONDARY SP
- PUMPING SUMP

- APPLICATION SITE BOUNDARY
- EXISTING GROUND SURFACE
- MINOR CONTOUR (1M INTERVAL)
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KEY PLAN

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Revisions

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Client: SSE

Job: CRUMHACH WIND FARM, CO. SLIGO

Title: PROPOSED DRAINAGE LAYOUT

Figure No: D103

Drawing No: P1694-0-0726-A1-D103-00B

Sheet Size: A1 Project No.: P1694-0

Scale: 1:2,000 (A1) Drawn By: GA

Date: 24/07/2026 Checked By: MG

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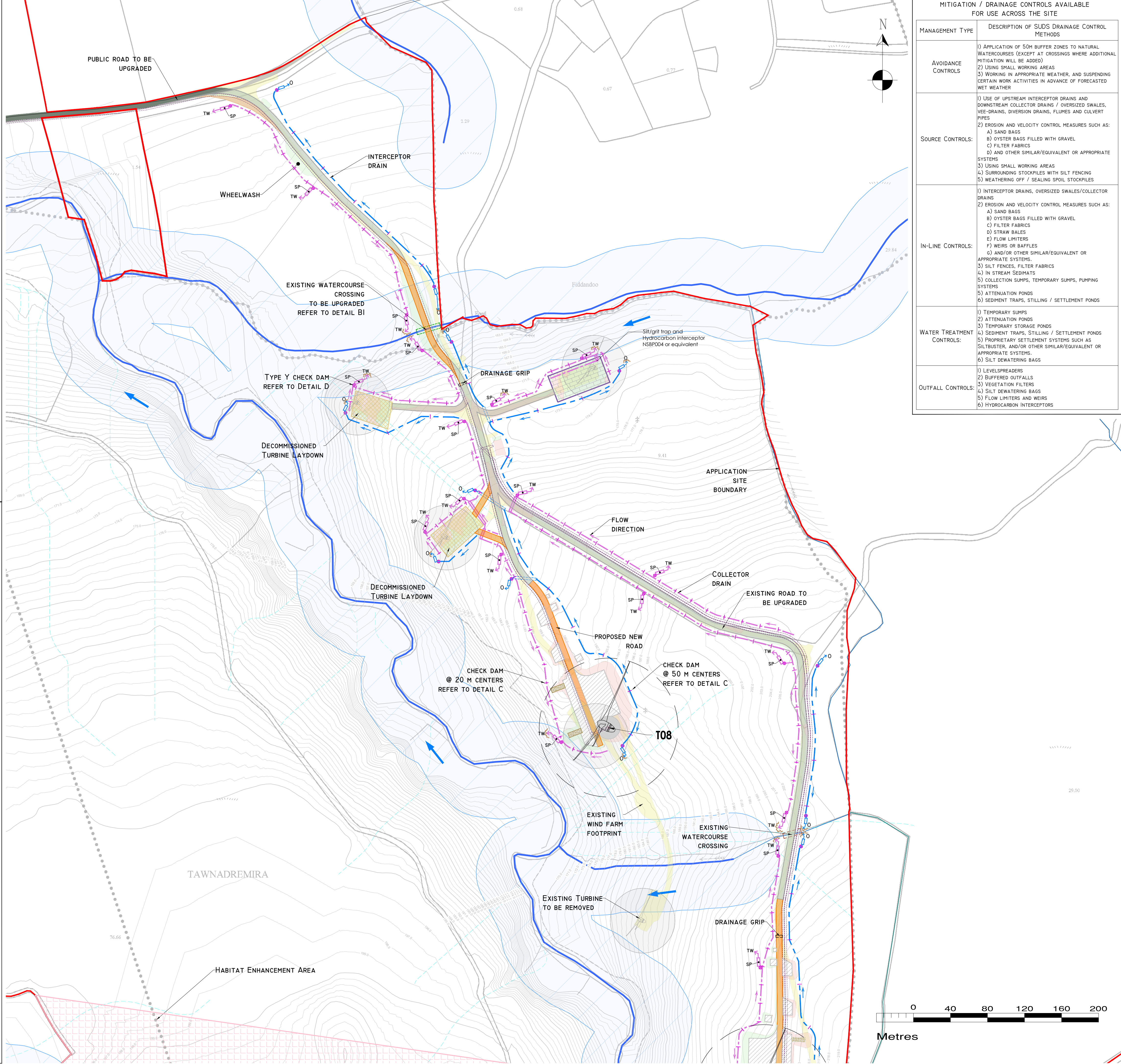
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11. STRAW BALES / OR SIMILAR AND SILT FENCES TO BE USED ALSO AROUND SPILL HEAPS TO MITIGATE SILT RUNOFF. SILT FENCES MAY BE REMOVED WHEN SUITABLE VEGETATION COVER IS ESTABLISHED.
12. SILT FENCES TO BE PROVIDED ALONG THE EDGE OF EXISTING WATERCOURSES WHERE WORKS COMES WITHIN <15M OF EDGE OF ANY DITCH / DRAIN / EPHEMERAL CHANNEL.
13. SLOPES OF THE SWALES / DITCHES TO BE VEGETATED OR PROTECTED FROM EROSION UNTIL VEGETATION HAS BEEN ESTABLISHED. STRIPPED VEGETATIVE LAYER (PEAT 'SOO' OR 'SCRAW') FROM EXCAVATIONS TO BE STORED LOCALLY AND USED TO LINE SLOPES AND BASE OF SWALES / DITCHES OR LONGITUDINAL MOUNDS OF VEGETATION SWALES AT FIELD DRAIN DISCHARGE POINTS.
14. AREAS STRIPPED OF VEGETATION WILL BE KEPT TO A MINIMUM.
15. CLEAN STONE FLOW CONTROL CHECK DAMS TO BE MADE OF LOCALLY WON / GEOLOGICALLY SIMILAR WELL GRADED STONE. AGGREGATE SIZE FOR STONE CHECK DAMS TO BE TYPICALLY 20- 40MM CLEAN STONE. ON SLOPING SECTIONS OF THE ACCESS TRACKS, 40MM CHECK DAMS TO BE PROTECTED FROM WASHING AWAY THROUGH THE PLACEMENT OF 100M STONE ON THE DOWNHILL FACE OF THE CHECK DAM AND BY WRAPPING IN GEOTEXTILE.
16. BUILD UP OF SILT LEVELS AT CHECK DAMS TO BE REMOVED AND DISPOSED OF APPROPRIATELY. SILT LEVELS AT CHECK DAMS TO BE VISUALLY INSPECTED AS PART OF AN ONGOING DRAINAGE MAINTENANCE PROGRAMME DURING THE CONSTRUCTION PHASE. WHERE CHECK DAMS BECOME CLOGGED WITH SILT OR VEGETATION, STONE CHECK DAM TO BE REMOVED AND REPLACED SUBSEQUENT TO THE REMOVAL OF SILT.
17. SPACING AND FREQUENCY OF CHECK DAMS WILL BE DEPENDENT UPON LONGITUDINAL GRADIENT OF SWALE.
18. LOCATION OF FILTRATION CHECK DAMS (IF REQUIRED) TO BE AGREED ON SITE WITH ENGINEER. SETTLEMENT PONDS TO BE CONSTRUCTED IN A MANNER WHERE THEY MAY BE EASILY INFILLED AT A LATER DATE (POST COMPLETION OF THE TURBINE BASE AND HARDSTAND CONSTRUCTION). ONLY SUITABLE MATERIALS EXCAVATED FROM THE POND TO BE USED TO FORM PART OF THE EMBANKMENT AROUND THE POND.
19. OIL FUEL WILL ONLY BE STORED WITHIN BUNDED CONTAINMENT STRUCTURES.
20. TEMPORARY USE OF SILT BAGS WILL BE USED ON SITE WHERE PUMPING FROM EXCAVATIONS IS REQUIRED.



MITIGATION / DRAINAGE CONTROLS AVAILABLE FOR USE ACROSS THE SITE	
MANAGEMENT TYPE	DESCRIPTION OF SUDS DRAINAGE CONTROL METHODS
AVOIDANCE CONTROLS	1) APPLICATION OF 50M BUFFER ZONES TO NATURAL WATERCOURSES (EXCEPT AT CROSSINGS WHERE ADDITIONAL MITIGATION WILL BE ADDED) 2) USING SMALL WORKING AREAS 3) WORKING IN APPROPRIATE WEATHER, AND SUSPENDING CERTAIN WORK IN ACTIVITIES IN ADVANCE OF FORECASTED WET WEATHER
	1) USE OF UPSTREAM INTERCEPTOR DRAINS AND DOWNSTREAM COLLECTOR DRAINS / OVERSIZED SWALES, VEE-DRAINS, DIVERSION DRAINS, FLUMES AND CULVERT PIPES 2) EROSION AND VELOCITY CONTROL MEASURES SUCH AS: A) SAND BAGS B) OYSTER BAGS FILLED WITH GRAVEL C) FILTER FABRICS D) AND OTHER SIMILAR/EQUIVALENT OR APPROPRIATE SYSTEMS 3) USING SMALL WORKING AREAS 4) SURROUNDING STOCKPILES WITH SILT FENCING 5) WEATHERING OFF / SEALING SOIL STOCKPILES
SOURCE CONTROLS	1) INTERCEPTOR DRAINS, OVERSIZED SWALES/COLLECTOR DRAINS 2) EROSION AND VELOCITY CONTROL MEASURES SUCH AS: A) SAND BAGS B) OYSTER BAGS FILLED WITH GRAVEL C) FILTER FABRICS D) STRAW BALES E) FLOW LIMITERS F) WEIRS OR BAFFLES G) AND/OR OTHER SIMILAR/EQUIVALENT OR APPROPRIATE SYSTEMS 3) SILT FENCES, FILTER FABRICS 4) IN STREAM SEDIMENTS 5) COLLECTION SUMPS, TEMPORARY SUMPS, PUMPING SYSTEMS 6) ATTENUATION PONDS 7) SEDIMENT TRAPS, STILLING / SETTLEMENT PONDS
	1) TEMPORARY SUMPS 2) ATTENUATION PONDS 3) TEMPORARY STORAGE PONDS 4) SEDIMENT TRAPS, STILLING / SETTLEMENT PONDS 5) PROPRIETARY SETTLEMENT SYSTEMS SUCH AS SILTBUSTER, AND/OR OTHER SIMILAR/EQUIVALENT OR APPROPRIATE SYSTEMS. 6) SILT DEWATERING BAGS
IN-LINE CONTROLS	1) LEVELSPREADERS 2) BUFFERED OUTFALLS 3) VEGETATION FILTERS 4) SILT DEWATERING BAGS 5) FLOW LIMITERS AND WEIRS 6) HYDROCARBON INTERCEPTORS
	1) LEVELSPREADERS 2) BUFFERED OUTFALLS 3) VEGETATION FILTERS 4) SILT DEWATERING BAGS 5) FLOW LIMITERS AND WEIRS 6) HYDROCARBON INTERCEPTORS
WATER TREATMENT CONTROLS	1) LEVELSPREADERS 2) BUFFERED OUTFALLS 3) VEGETATION FILTERS 4) SILT DEWATERING BAGS 5) FLOW LIMITERS AND WEIRS 6) HYDROCARBON INTERCEPTORS
	1) LEVELSPREADERS 2) BUFFERED OUTFALLS 3) VEGETATION FILTERS 4) SILT DEWATERING BAGS 5) FLOW LIMITERS AND WEIRS 6) HYDROCARBON INTERCEPTORS
OUTFALL CONTROLS	1) LEVELSPREADERS 2) BUFFERED OUTFALLS 3) VEGETATION FILTERS 4) SILT DEWATERING BAGS 5) FLOW LIMITERS AND WEIRS 6) HYDROCARBON INTERCEPTORS
	1) LEVELSPREADERS 2) BUFFERED OUTFALLS 3) VEGETATION FILTERS 4) SILT DEWATERING BAGS 5) FLOW LIMITERS AND WEIRS 6) HYDROCARBON INTERCEPTORS

DRAWING LEGEND :

- WATERCOURSES
- WATERCOURSES 50M BUFFER
- LAKES
- LAKES 50M BUFFER
- STREAM FLOW DIRECTION
- MAPPED DRAINS
- MAPPED DRAINAGE PATHWAYS >150M LENGTH*
- POTENTIAL DRAINAGE FLOWPATHS ARE MODELLED BASED ON LIDAR DATA AND DO NOT INDICATE THE PRESENCE OF A DRAIN OR WATERCOURSE ORIGINATED BY RECHARGE TO GROUND
- UPSTREAM INTERCEPTOR DRAIN
- SWALES/DOWNSTREAM COLLECTOR DRAIN
- DIRECTION OF FLOW
- SILT FENCES
- DOUBLE/TRIPLE SILT FENCES
- SETTLEMENT POND - LEVEL SPREADER
- CHECK DAM 'TYPE A'
- CHECK DAM 'TYPE B'
- PROPOSED NEW WATERCOURSE CROSSING
- EXISTING WATERCOURSE CROSSING TO BE UPGRADED
- EXISTING WATERCOURSE CROSSING
- EXISTING DRAINAGE GRIP
- INTERCEPTOR DITCH CULVERT
- COLLECTOR DITCH CULVERT
- OVERLAND FLOW DISCHARGE
- TREATED WATER DISCHARGE
- SETTLEMENT POND
- SP
- VS
- SEMI-NATURAL VEGETATION
- SWALE / FILTER BED / SECONDARY SP
- PUMPING SUMP
- APPLICATION SITE BOUNDARY
- EXISTING GROUND SURFACE
- MINOR CONTOUR (1M INTERVAL)
- EXISTING GROUND SURFACE
- MAJOR CONTOUR (5M INTERVAL)
- TURBINE FOUNDATION
- HARDSTAND
- PROPOSED NEW ROADS
- EXISTING ROADS TO BE UPGRADED
- PUBLIC ROADS TO BE UPGRADED
- TEMPORARY ACCESS TRACK
- 110KV UNDERGROUND CABLEING
- 33kV UNDERGROUND CABLE ROUTE
- PROPOSED 110KV ONSITE SUBSTATION
- TEMPORARY CONSTRUCTION COMPOUND
- BORROW PIT
- PEAT AND SPOIL MANAGEMENT AREAS
- CUT AREA
- FILL AREA
- HABITAT ENHANCEMENT AREA
- EXISTING WIND FARM FOOTPRINT
- EXISTING TURBINE TO BE REMOVED

KEY PLAN

0 1000M 2000M

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Job: CRUMHACH WIND FARM, CO. SLIGO

Title: PROPOSED DRAINAGE LAYOUT

Figure No: D104

Drawing No: P1694-0-0726-A1-D104-00B

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Date: 24/07/2026

Project No.: P1694-0

Drawn By: GA

Checked By: MG

SITE MANAGEMENT PROPOSALS ARE INTENDED TO ENSURE PROTECTION AGAINST SURFACE WATER AND GROUNDWATER POLLUTION, SILTATION AND EROSION.

2. **SUITLE DRAINAGE CONTROL MEASURES WILL BE IN PLACE AT ALL TIMES TO PREVENT CONVEYANCE OF SIGNIFICANT VOLUMES OF SILT TO OFF SITE RECEIVING WATERCOURSE.**

3. **SILTY WATER CAN ARISE FROM DEWATERING EXCAVATIONS, EROSION OF EXPOSED/DISTURBED GROUND, TEMPORARY STOCKPILES, PLANT AND WHEEL CAUSING SLEDS/ROADS/TRACKS, AND DISTURBANCE OF EXISTING FIELD DRAINS AND DITCHES.**

DISCHARGES

4. **WATER CONTAINING SILT WILL NOT BE DISCHARGED OR PUMPED DIRECTLY TO ANY TURAL WATERCOURSE. ALL DISCHARGES WILL BE MADE OVER OPEN GROUND OR INTO EXISTING FIELD DRAIN WITH SILT TRAP AT A MINIMUM OF 20M FROM NEAREST WATERCOURSE UNLESS OTHERWISE STATED.**

5. **NO EXCAVATED MATERIAL WILL BE STORED WITHIN ANY SURFACE WATER BUFFER ZONE.**

6. **PUMPED WATER WILL BE DIRECTED INTO TRACK SIDE DITCHES AND TREATED IN SETTLEMENT PONDS AND VEGETATION SWALES PRIOR TO OVERLAND DISCHARGE.**

7. **PUMPING OF CLEAN WATER FROM EXCAVATIONS / OR OVER-PUMPING IN DRAINS/DITCHES/STREAMS WILL BE COMPLETED IN A MANNER THAT WILL NOT CAUSE EROSION OR DEBRIS TO ACCUMULATE AT THE POINT OF RELEASE/DISCHARGE. THIS WILL BE DONE BY REDUCING THE FLOW VELOCITIES OR BY USE OF SUITABLE SPLASH PLATES, AND/OR OTHER SIMILAR DISCHARGE CONTROLS.**

8. **VEGETATION WILL NOT BE STRIPPED FROM EXISTING DRAINS/DITCHES UNLESS ABSOLUTELY NECESSARY.**

EXCAVATIONS

9. **WHERE (TEMPORARY) DEEP EXCAVATIONS ARE PROPOSED, CUT-OFF DRAINS WILL BE USED TO REDUCE THE AMOUNT OF SURFACE WATER ENTERING THE EXCAVATION. THIS WILL BE THE CASE AROUND TURBINE BASE EXCAVATIONS.**

EXPOSED GROUND & STOCKPILES

10. **THE AMOUNT OF TEMPORARY EXPOSED GROUND AND TEMPORARY STOCKPILES OPEN/EXPOSED AT ANY TIME WILL BE MINIMISED.**

SITE TRACKS

11. **USE OF TRACK SIDE SWALES WITH CHECK DAMS, AND/OR FILTRATION CHECK DAMS WILL REDUCE SILT IN RUNOFF WATER AS REQUIRED.**

12. **CHECK DAMS TO BE INSPECTED AND CLEANED REGULARLY.**

REFUELING

13. **REFUELLING OF MOBILE PLANT WILL BE COMPLETED IN DESIGNATED REFUELING AREAS ONLY, ON AN IMPERMEABLE SURFACE AND AWAY FROM FIELD DRAINS / DITCHES AND WATERCOURSES/WATERBODIES.**

14. **SPILL KITS AND DRIP TRAYS WILL BE AVAILABLE ON SITE FOR USE AS REQUIRED.**

CONCRETE

15. **CONCRETE POURS WILL BE MANAGED AND SUPERVISED TO ENSURE THERE WILL BE NO LEAKAGE/SEEPAGE/DISCHARGE OF CONCRETE OR CONCRETE WASTE INTO SURFACE WATERCOURSES OR DRAINS.**

16. **CONCRETE WASH WATER, AND WASTE CONCRETE WILL BE MANAGED APPROPRIATELY ON SITE AT A LINED CONCRETE WASH OUT PIT.**

IF WATER POLLUTION IS IDENTIFIED THE FOLLOWING STEPS WOULD BE ADHERED TO:

STOP - WORK IN THE IMMEDIATE AREA SHOULD BE STOPPED AND THE SOURCE OF THE POLLUTION IDENTIFIED.

CONTAIN - THE SOURCE OF THE POLLUTION SHOULD BE BUNDED USING A SUITABLE METHOD. NATURAL WATERCOURSES SHOULD BE TEMPORARILY DIVERTED AROUND ANY SOURCE OF POLLUTION.

NOTIFY - THE RELEVANT AUTHORITIES (SITE MANAGER / FISHERIES / NPWS / LOCAL AUTHORITY ETC.) SHOULD BE NOTIFIED IMMEDIATELY TO ENSURE THAT MEASURES CAN BE IMPLEMENTED DOWNSTREAM TO PROTECT FISHERIES AND OTHER SENSITIVE RESOURCES.

DRAINAGE NOTES:

1. **SITE TRACKS AND ROADWAY SURFACING DESIGN AND CONSTRUCTION TO ENGINEER'S SPECIFICATION (I.E. BY OTHERS).**

2. **CHARGE STRAIN SALES/SILT FENCING/ OR SIMILAR, WILL BE STORED ON SITE. THE LEVEL OF SILT IN RUNOFF DURING CONSTRUCTION IS TO BE MONITORED VISUALLY AND EXCESSIVE SILT LEVELS IN ANY AREA TO BE TEMPORARILY MANAGED BY PLACING SILT FENCES, STRAIN BALES / OR SIMILAR OR ADDITIONAL CHECK DAMS AT THE PROBLEM AREAS. MOBILE SILTSTURTER SYSTEMS ARE AVAILABLE ON-SITE FOR USE AS REQUIRED ALSO.**

3. **SLODS DRAINAGE SYSTEM TO BE CONSTRUCTED PRIOR TO, OR AT THE SAME TIME AS THE ACCESS TRACKS. INTERIM MEASURES SUCH AS THE PLACEMENT OF STRAIN BALES/SILT FENCING/OR SIMILAR APPROVED METHOD OR ADDITIONAL CHECK DAMS AND SILT FENCES TO BE EMPLOYED IN ALL INSTANCES WHERE OVERLAND DISCHARGE OF EXCESSIVE SILT INTO TRACKS IS LIKELY TO CAUSE ADVERSE ENVIRONMENTAL EFFECTS THROUGH INCREASED SILT LOADINGS BEING GENERATED DURING THE CONSTRUCTION PHASE.**

4. **SOURCE PREVENTION MEASURES WILL BE IN PLACE AT ALL TIMES TO PREVENT THE CONVEYANCE OF SIGNIFICANT VOLUMES OF SILT TO RECEIVING WATERCOURSES. SEE NOTES ON POLLUTION PREVENTION.**

5. **INTERCEPTOR SWALES / DITCHES WILL BE USED TO COLLECT UPSTREAM SURFACE WATER FLOWS, REGULAR CROSS DRAINS / DISCHARGE TO FIELD DITCHES/DRAINS WILL BE INSTALLED TO TRANSFER / DISCHARGE SURFACE WATER IN INTERCEPTOR DRAINS TO SUITABLE FIELD DRAIN OUTFALL POINTS.**

6. **DRAINAGE DITCHES / DITCHES TO BE EXCAVATED ADJACENT TO THE ACCESS TRACKS. REGULAR CROSS DRAINS TO BE LOCATED ALONG ACCESS TRACKS TO PREVENT EXCESSIVE VOLUMES OF WATER COLLECTING IN THE SWALES / DITCHES. OPTIMUM LOCATIONS OF CROSS DRAINS TO BE AGREED WITH THE ENGINEER ON SITE. SURFACE WATER WILL NOT BE ALLOWED TO DISCHARGE DIRECTLY INTO EXISTING WATERCOURSES.**

7. **A BUFFER ZONE OF 20M TO ANY EXISTING WATERCOURSE WILL BE REQUIRED WHERE OVER LAND DISCHARGES ARE PROPOSED FROM ACCESS TRACK SWALES / DITCHES. THIS BUFFER WILL NOT BE POSSIBLE AT RIVER/STREAM CROSSINGS, BUT OTHER SUITABLE CONTROLS ARE PROPOSED IN THOSE AREAS (I.E. ADDITIONAL SILT FENCING).**

8. **BATTERED/EROSIONED SWALES / DITCHES TO HAVE A SLOPE OF BETWEEN 1:1.5 TO 1:2 DEPENDING UPON DEPTH OF SWALE/DITCH AND WILL BE LEFT AS CUT TO RE-VEGETATE WITH LOCAL SPECIES.**

9. **TRACK SIDE SWALES / DITCHES TO BE SHALLOW WITH MODERATE GRADIENTS TO PREVENT SCOURING. IN STEEP AREAS CHECK DAMS WILL BE INSTALLED TO REDUCE FLOW VELOCITIES AND PROVIDE SOURCE CONTROL OF SILT CONTAINMENT. THESE HAVING BEEN DESIGNATED IN CONJUNCTION WITH SETTLEMENT PONDS AND SILT TRAPS, PRIOR TO DISCHARGE.**

10. **SETTLEMENT PONDS TO BE CONSTRUCTED FOR SILT REMOVAL AT TURBINE BASES AND HARD STAND AREAS. POND SIZES DEPEND ON THE CATCHMENT AREA AND ARE TO BE DETERMINED BY POND SIZES FOR VARIOUS CATCHMENT AREAS SHOWN ON DRAWING D501.**

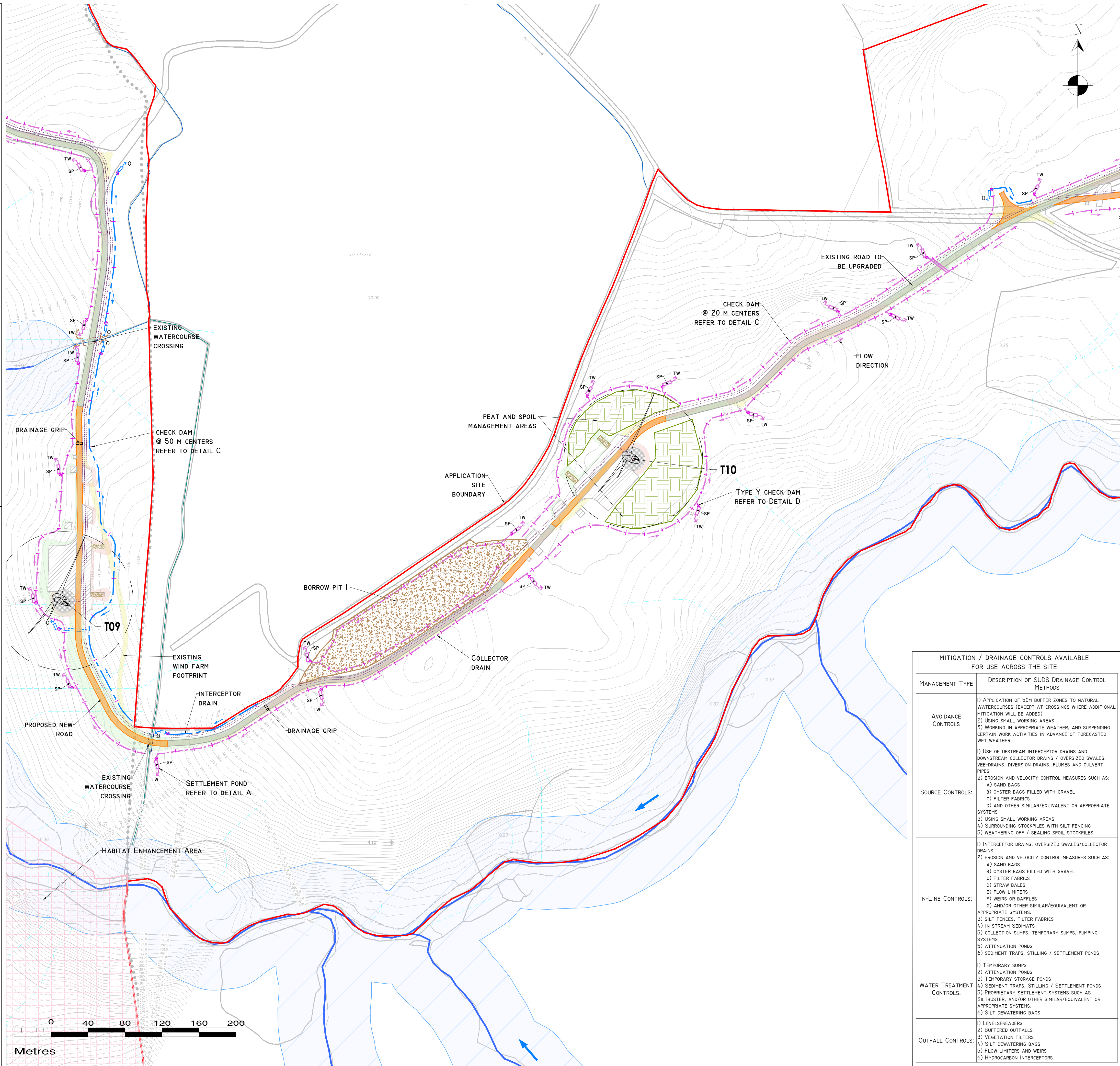
11. **STRAIN BALES / OR SIMILAR AND SILT FENCES TO BE USED ALSO AROUND SPILL HEAPS TO MITIGATE SILT RUNOFF. SILT FENCES MAY BE REMOVED WHEN SUITABLE VEGETATION COVER IS ESTABLISHED.**

12. **SILT FENCES TO BE PROVIDED ALONG THE EDGE OF EXISTING WATERCOURSES WHERE WORKS COME WITHIN 15M OF EDGE OF ANY DITCH / DRAIN / EPHEMERAL CHANNEL.**

13. **SLOPES OF THE SWALES / DITCHES TO BE VEGETATED OR PROTECTED FROM EROSION UNTIL VEGETATION HAS BEEN ESTABLISHED. STRIPPED VEGETATION LAYERS WILL BE EITHER MULCHED AT A LATER DATE (POST COMPLETION OF THE TURBINE BASE AND HARDSTAND CONSTRUCTION), ONLY SUITABLE MATERIALS EXCAVATED FROM THE POND TO BE USED TO FORM PART OF THE EMBANKMENT AROUND THE POND.**

14. **OIL FUEL WILL ONLY BE STORED WITHIN BUNDLED CONTAINMENT STRUCTURES.**

20. **TEMPORARY USE OF SILT BAGS WILL BE USED ON SITE WHERE PUMPING FROM EXCAVATIONS IS REQUIRED.**



MITIGATION / DRAINAGE CONTROLS AVAILABLE FOR USE ACROSS THE SITE	
MANAGEMENT TYPE	DESCRIPTION OF SUDS DRAINAGE CONTROL METHODS
AVOIDANCE CONTROLS	1) APPLICATION OF 50M BUFFER ZONES TO NATURAL WATERCOURSES (EXCEPT AT CROSSINGS WHERE ADDITIONAL MITIGATION WILL BE ADDED) 2) USING SMALL WORKING AREAS 3) WORKING IN APPROPRIATE WEATHER, AND SUSPENDING CERTAIN WORK ACTIVITIES IN ADVANCE OF FORECASTED WET WEATHER
SOURCE CONTROLS:	1) USE OF UPSTREAM INTERCEPTOR DRAINS AND DOWNSTREAM COLLECTOR DRAINS / OVERSIZED SWALES, VEE-DRAINS, DIVERSION DRAINS, FLUMES AND CULVERT PIPES 2) EROSION AND VELOCITY CONTROL MEASURES SUCH AS: A) SAND BAGS B) OYSTER BAGS FILLED WITH GRAVEL C) FILTER FABRICS D) AND OTHER SIMILAR/EQUIVALENT OR APPROPRIATE SYSTEMS 3) USING SMALL WORKING AREAS 4) SURROUNDING STOCKPILES WITH SILT FENCING 5) WEATHERING OFF / SEALING SPOIL STOCKPILES
IN-LINE CONTROLS:	1) INTERCEPTOR DRAINS, OVERSIZED SWALES/COLLECTOR DRAINS 2) EROSION AND VELOCITY CONTROL MEASURES SUCH AS: A) SAND BAGS B) OYSTER BAGS FILLED WITH GRAVEL C) FILTER FABRICS D) STRAW BALES E) FLOW LIMITERS F) WEIRS OR BAFFLES G) AND/OR OTHER SIMILAR/EQUIVALENT OR APPROPRIATE SYSTEMS. 3) SILT FENCES, FILTER FABRICS 4) IN STREAM SEDIMENTS 5) COLLECTION SUMPS, TEMPORARY SUMPS, PUMPING SYSTEMS 6) SETTLEMENT PONDS 7) SEDIMENT TRAPS, STILLING / SETTLEMENT PONDS
WATER TREATMENT CONTROLS:	1) TEMPORARY SUMPS 2) ATTENUATION PONDS 3) TEMPORARY STORAGE PONDS 4) SEDIMENT TRAPS, STILLING / SETTLEMENT PONDS 5) PROPRIETARY SETTLEMENT SYSTEMS SUCH AS SILTBUSTER, AND/OR OTHER SIMILAR/EQUIVALENT OR APPROPRIATE SYSTEMS. 6) SILT DEWATERING BAGS
OUTFALL CONTROLS:	1) LEVELSPREADERS 2) BUFFERED OUTFALLS 3) VEGETATION FILTERS 4) SILT DEWATERING BAGS 5) FLOW LIMITERS AND WEIRS 6) HYDROCARBON INTERCEPTORS

DRAWING LEGEND:	
WATERCOURSES	
WATERCOURSES 50M BUFFER	
LAKES	
LAKES 50M BUFFER	
STREAM FLOW DIRECTION	
MAAPPED DRAINS	
MAAPPED DRAINAGE PATHWAYS >150M LENGTH**	
* POTENTIAL DRAINAGE FLUPATHS ARE MODELLED BASED ON LGAR DATA AND DO NOT INDICATE THE PRESENCE OF A DRAIN OR WATERCOURSE ORIGINATED BY RECHARGE TO GROUND.	
UPSTREAM INTERCEPTOR DRAIN	
SWALES/DOWNSTREAM COLLECTOR DRAIN	
DIRECTION OF FLOW	
SILT FENCES	
DOUBLE/TRIPLE SILT FENCES	
SETTLEMENT POND - LEVEL SPREADER	
CHECK DAM 'TYPE A'	
CHECK DAM 'TYPE B'	
PROPOSED NEW WATERCOURSE CROSSING	
EXISTING WATERCOURSE CROSSING TO BE UPGRADED	
EXISTING WATERCOURSE CROSSING	
EXISTING DRAINAGE GRIP	
INTERCEPTOR DITCH CULVERT	
COLLECTOR DITCH CULVERT	
OVERLAND FLOW DISCHARGE	
TREATED WATER DISCHARGE	
SETTLEMENT POND	
SPH-NATURAL VEGETATION	
SWALE / FILTER BED / SECONDARY SP	
PUMPING SLUMP	
APPLICATION SITE BOUNDARY	
EXISTING GROUND SURFACE	
MINOR CONTOUR (1M INTERVAL)	
EXISTING GROUND SURFACE	
MAJOR CONTOUR (5M INTERVAL)	
TURBINE FOUNDATION	
HARDSTAND	
PROPOSED NEW ROADS	
EXISTING ROADS TO BE UPGRADED	
PUBLIC ROADS TO BE UPGRADED	
TEMPORARY ACCESS TRACK	
110KV UNDERGROUND CABLING	
33KV UNDERGROUND CABLE ROUTE	
PROPOSED 110KV ONSITE SUBSTATION	
TEMPORARY CONSTRUCTION COMPOUND	
BORROW PIT	
PEAT AND SPOIL MANAGEMENT AREAS	
CUT AREA	
FILL AREA	
HABITAT ENHANCEMENT AREA	
EXISTING WIND FARM FOOTPRINT	
EXISTING TURBINE TO BE REMOVED	

KEY PLAN

0 1000m 2000m

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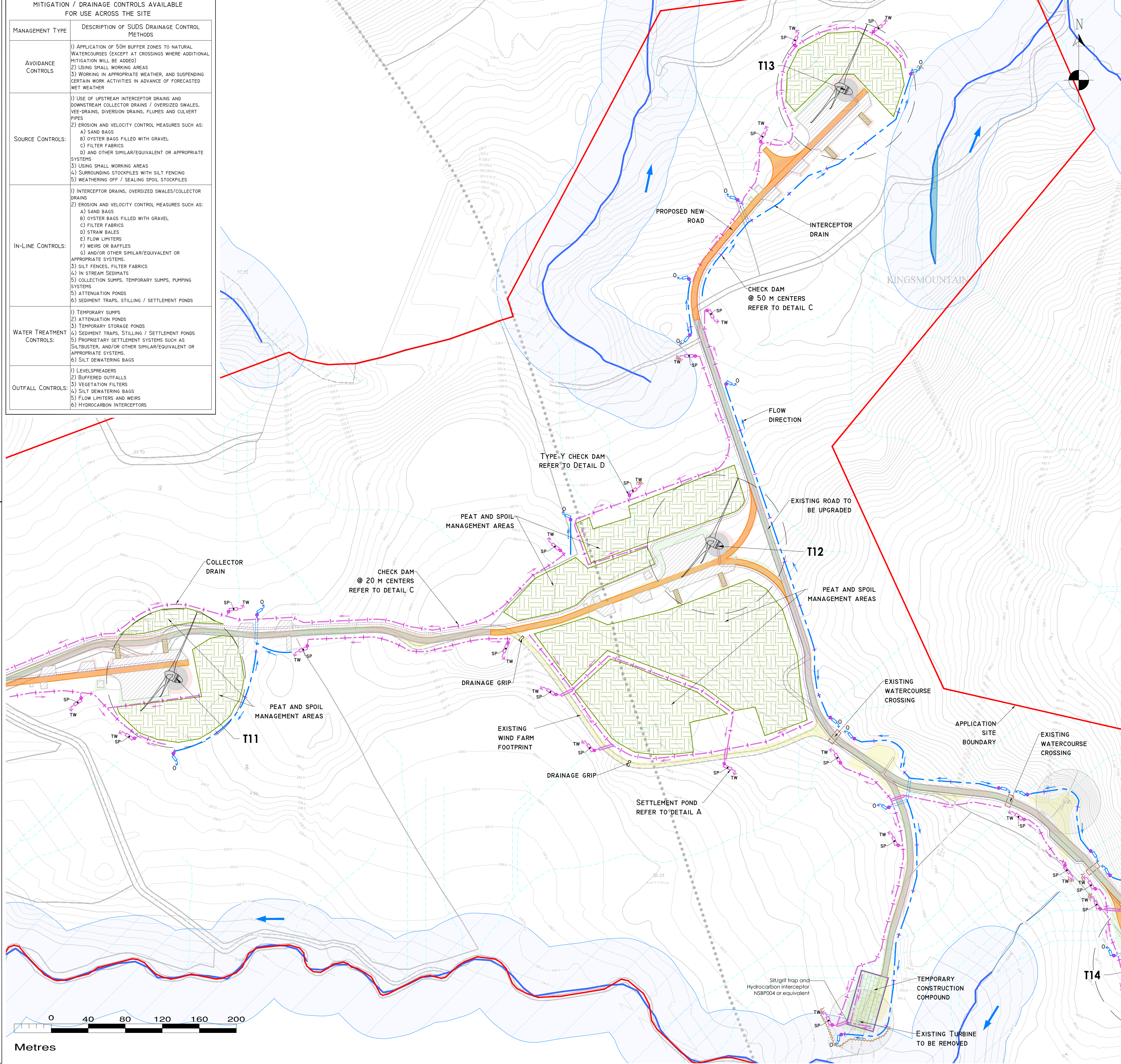
web: www.hydroenvironmental.ie

Client:	SSE
Job:	CRUMHACH WIND FARM, Co. SLIGO
Title:	PROPOSED DRAINAGE LAYOUT
Figure No:	D105
Drawing No: P1694-0-0726-A1-D105-008	
Sheet Size: A1	Project No: P1694-0
Scale: 1:2,000 (A1)	Drawn By: GA
Date: 24/07/2026	Checked By: MG

POLLUTION PREVENTION NOTES:

1. SITE MANAGEMENT PROPOSALS ARE INTENDED TO ENSURE PROTECTION AGAINST SURFACE WATER AND GROUNDWATER POLLUTION, SILTATION AND EROSION.
 2. SUITABLE DRAINAGE CONTROL MEASURES WILL BE IN PLACE AT ALL TIMES TO PREVENT CONVEYANCE OF SIGNIFICANT VOLUMES OF SILT TO OFF SITE RECEIVING WATERCOURSES.
 3. SILTY WATER CAN ARISE FROM DEWATERING EXCAVATIONS, EROSION OF EXPOSED/DISTURBED GROUND, TEMPORARY STOCKPILES, PLANT AND WHEEL WASH, SITE ROADS/TRACKS, AND DISTURBANCE OF EXISTING FIELD DRAINS AND DITCHES.
- DISCHARGES
4. WATER CONTAINING SILT WILL NOT BE DISCHARGED OR PUMPED DIRECTLY TO ANY NATURAL WATERCOURSE. ALL DISCHARGES WILL BE MADE OVER OPEN GROUND OR INTO EXISTING FIELD DRAIN WITH SILT TRAP AT A MINIMUM OF 20M FROM NEAREST WATERCOURSE UNLESS OTHERWISE STATED.
 5. NO EXCAVATED MATERIAL WILL BE STORED WITHIN ANY SURFACE WATER BUFFER ZONE.
 6. PUMPED WATER WILL BE DIRECTED INTO TRACK SIDE DITCHES AND TREATED IN SETTLEMENT PONDS AND VEGETATION SWALES PRIOR TO OVERLAND DISCHARGE.
 7. PUMPING OF CLEAN WATER FROM EXCAVATIONS / OR OVER-PUMPING IN DRAINS/DITCHES/STREAMS WILL BE COMPLETED IN A MANNER THAT WILL NOT CAUSE SCOUR OR EROSION AT THE POINT OF RELEASE/DISCHARGE. THIS WILL BE DONE BY REDUCING THE FLOW VELOCITIES OR BY USE OF SUITABLE SPLASH PLATES, AND/OR OTHER SIMILAR DISCHARGE CONTROLS.
 8. VEGETATION WILL NOT BE STRIPPED FROM EXISTING DRAINS/DITCHES UNLESS ABSOLUTELY NECESSARY.
- EXCAVATIONS
9. WHERE (TEMPORARY) DEEP EXCAVATIONS ARE PROPOSED, CUT-OFF DRAINS WILL BE USED TO REDUCE THE AMOUNT OF SURFACE WATER ENTERING THE EXCAVATION. THIS WILL BE THE CASE AROUND TURBINE BASE EXCAVATIONS.
- EXPOSED GROUND & STOCKPILES
10. THE AMOUNT OF TEMPORARY EXPOSED GROUND AND TEMPORARY STOCKPILES OPEN/EXPOSED AT ANY TIME WILL BE MINIMISED.
- SITE TRACKS
11. USE OF TRACK SIDE SWALES WITH CHECK DAMS, AND/OR FILTRATION CHECK DAMS WILL REDUCE SILT IN RUNOFF WATER AS REQUIRED.
 12. CHECK DAMS TO BE INSPECTED AND CLEANED REGULARLY.
- REFUELLING
13. REFUELLING OF MOBILE PLANT WILL BE COMPLETED IN DESIGNATED REFUELLING AREAS ONLY, ON AN IMPERMEABLE SURFACE AND AWAY FROM FIELD DRAINS / DITCHES AND WATERCOURSES/WATERBODIES.
 14. SPILL KITS AND DRIP TRAYS WILL BE AVAILABLE ON SITE FOR USE AS REQUIRED.
- CONCRETE
15. CONCRETE POURS WILL BE MANAGED AND SUPERVISED TO ENSURE THERE WILL BE NO LEAKAGE/SEEPAGE/DISCHARGE OF CONCRETE OR CONCRETE WATER DURING THE CONSTRUCTION PHASE.
 16. CONCRETE WASH WATER, AND WASTE CONCRETE WILL BE MANAGED APPROPRIATELY ON SITE AT A LINED CONCRETE WASH OUT PIT.
- IF WATER POLLUTION IS IDENTIFIED THE FOLLOWING STEPS WOULD BE ADHERED TO:
- STOP - WORK IN THE IMMEDIATE AREA SHOULD BE STOPPED AND THE SOURCE OF THE POLLUTION IDENTIFIED.
- CONTAIN - THE SOURCE OF THE POLLUTION SHOULD BE BUNDED USING A SUITABLE METHOD. NATURAL WATERCOURSES SHOULD BE TEMPORARILY DIVERTED AROUND ANY SOURCE OF POLLUTION.
- NOTIFY - THE RELEVANT AUTHORITIES (SITE MANAGER / FISHERIES / NPWS / LOCAL AUTHORITY ETC.) SHOULD BE NOTIFIED IMMEDIATELY TO ENSURE THAT MEASURES CAN BE IMPLEMENTED DOWNSTREAM TO PROTECT FISHERIES AND OTHER SENSITIVE RECEPTORS.
- DRAINAGE NOTES:
1. SITE TRACKS AND ROADWAY SURFACING DESIGN AND CONSTRUCTION TO ENGINEER'S SPECIFICATION (I.E. BY OTHERS).
 2. SPARE STRAW BALES/SILT FENCING/ OR SIMILAR, WILL BE STORED ON SITE. THE LEVEL OF SILT IN RUNOFF DURING CONSTRUCTION IS TO BE MONITORED VISUALLY AND EXCESSIVE SILT LEVELS IN ANY AREA TO BE TEMPORARILY MANAGED BY PLACING SILT FENCES, STRAW BALES / OR SIMILAR OR ADDITIONAL CHECK DAMS AT THE PROBLEM AREAS. MOBILE SILTBUSTER SYSTEM TO BE AVAILABLE ON-SITE FOR USE AS REQUIRED ALSO.
 3. SUDS DRAINAGE SYSTEM TO BE CONSTRUCTED PRIOR TO, OR AT THE SAME TIME AS THE ACCESS TRACKS. INTERIM MEASURES SUCH AS THE PLACEMENT OF STRAW BALES/SILT FENCING/OR SIMILAR APPROVED METHOD OR ADDITIONAL CHECK DAMS AND SILT FENCES TO BE EMPLOYED IN ALL INSTANCES WHERE WORK CARRIED OUT TO CONSTRUCT THE ACCESS TRACKS IS LIKELY TO CAUSE ADEQUATE ENVIRONMENTAL EFFECTS THROUGH INCREASED SILT LOADINGS BEING GENERATED DURING THE CONSTRUCTION PHASE.
 4. SUITABLE PREVENTION MEASURES WILL BE IN PLACE AT ALL TIMES TO PREVENT THE CONVEYANCE OF SIGNIFICANT VOLUMES OF SILT TO RECEIVING WATERCOURSES. SEE NOTES ON POLLUTION PREVENTION.
 5. INTERCEPTOR SWALES / DITCHES WILL BE USED TO COLLECT UPSTREAM SURFACE WATER FLOWS. REGULAR CROSS DRAINS / DISCHARGE TO FIELD DITCHES/DRAINS WILL BE INSTALLED TO TRANSFER / DISCHARGE SURFACE WATER IN INTERCEPTOR DRAINS TO SUITABLE FIELD DRAIN OUTFALL POINTS.
 6. DRAINAGE SWALES / DITCHES TO BE EXCAVATED ADJACENT TO THE ACCESS TRACKS. REGULAR CROSS DRAINS TO BE LOCATED ALONG ACCESS TRACKS TO PREVENT EXCESSIVE VOLUMES OF WATER COLLECTING IN THE SWALES / DITCHES. OPTIMUM LOCATIONS OF CROSS DRAINS TO BE AGREED WITH THE ENGINEER ON SITE. SURFACE WATER WILL NOT BE ALLOWED TO DISCHARGE DIRECTLY INTO ANY EXISTING WATERCOURSES.
 7. A BUFFER ZONE OF >20M TO ANY EXISTING WATERCOURSE WILL BE REQUIRED WHERE OVER LAND DISCHARGES ARE PROPOSED FROM ACCESS TRACK SWALES / DITCHES. THIS BUFFER WILL NOT BE POSSIBLE AT RIVER/STREAM CROSSINGS, BUT OTHER SUITABLE CONTROLS ARE PROPOSED IN THOSE AREAS (I.E. ADDITIONAL SILT FENCING).
 8. BATTERS OF ALL PROPOSED SWALES / DITCHES TO HAVE A SLOPE OF BETWEEN 1 : 1.5 TO 1 : 2 DEPENDING UPON DEPTH OF SWALE/DITCH AND WILL BE LEFT AS CUT TO RE-VEGETATE WITH LOCAL SPECIES.
 9. TRACK SIDE SWALES / DITCHES TO BE SHALLOW WITH MODERATE GRADIENTS TO PREVENT SCOURING. IN STEEP AREAS CHECK DAMS WILL BE INSTALLED TO REDUCE FLOW VELOCITIES AND PROVIDE SOURCE CONTROL OF SILT CONTAINMENT. THESE HAVE BEEN DESIGNATED IN CONJUNCTION WITH SETTLEMENT PONDS AND SILT TRAPS, PRIOR TO DISCHARGE.
 10. SETTLEMENT PONDS TO BE CONSTRUCTED FOR SILT REMOVAL AT TURBINE BASES AND HARD STAND AREAS. POND SIZES DEPEND ON THE CATCHMENT AREA BEING SERVED. SAMPLE POND SIZES FOR VARIOUS CATCHMENT AREAS SHOWN ON DRAWING D501.
 11. STRAW BALES / OR SIMILAR AND SILT FENCES TO BE USED ALSO AROUND SPOIL HEAPS TO MITIGATE SILT RUNOFF. SILT FENCES MAY BE REMOVED WHEN SUITABLE VEGETATION COVER IS ESTABLISHED.
 12. SILT FENCES TO BE PROVIDED ALONG THE EDGE OF EXISTING WATERCOURSES WHERE WORKS COMES WITHIN 415M OF EDGE OF ANY DITCH / DRAIN / EPHEMERAL CHANNEL.
 13. SLOPES OF THE SWALES / DITCHES TO BE VEGETATED OR PROTECTED FROM EROSION UNTIL VEGETATION HAS BEEN ESTABLISHED. STRIPPED VEGETATIVE LAYER (PEAT 'SOO' OR 'SCRAW') FROM EXCAVATIONS TO BE STORED LOCALLY AND USED TO LINE SLOPES AND BASE OF SWALES / DITCHES OR LONGITUDINAL MOUNDS OF VEGETATION SWALES AT FIELD DRAIN DISCHARGE POINTS.
 14. AREAS STRIPPED OF VEGETATION WILL BE KEPT AT A MINIMUM.
 15. CLEAN STONE FLOW CONTROL CHECK DAMS TO BE MADE OF LOCALLY WON / GEOLOGICALLY SIMILAR WELL GRADED STONE. AGGREGATE SIZE FOR STONE CHECK DAMS TO BE TYPICALLY 20- 40MM CLEAN STONE. ON SLOPING SECTIONS OF THE ACCESS TRACKS, 40MM CHECK DAMS TO BE PROTECTED FROM WASHING AWAY THROUGH THE PLACEMENT OF 100M STONE ON THE DOWNHILL FACE OF THE CHECK DAM AND BY WRAPPING IN GEOTEXTILE.
 16. BUILD UP OF SILT LEVELS AT CHECK DAMS TO BE REMOVED AND DISPOSED OF APPROPRIATELY. SILT LEVELS AT CHECK DAMS TO BE VISUALLY INSPECTED AS PART OF AN ONGOING DRAINAGE MAINTENANCE PROGRAMME DURING THE CONSTRUCTION PHASE. WHERE CHECK DAMS BECOME CLOGGED WITH SILT OR VEGETATION, STONE CHECK DAM TO BE REMOVED AND REPLACED SUBSEQUENT TO THE REMOVAL OF SILT.
 17. SPACING AND FREQUENCY OF CHECK DAMS WILL BE DEPENDENT UPON LONGITUDINAL GRADIENT OF SWALE.
 18. LOCATION OF FILTRATION CHECK DAMS (IF REQUIRED) TO BE AGREED ON SITE WITH ENGINEER. SETTLEMENT PONDS TO BE CONSTRUCTED IN A MANNER WHERE THEY MAY BE EASILY INFILLED AT A LATER DATE (POST COMPLETION OF THE TURBINE BASE AND HARDSTAND CONSTRUCTION). ONLY SUITABLE MATERIALS EXCAVATED FROM THE POND TO BE USED TO FORM PART OF THE EMBANKMENT AROUND THE POND.
 19. OIL FUEL WILL ONLY BE STORED WITHIN BUNDED CONTAINMENT STRUCTURES.
 20. TEMPORARY USE OF SILT BAGS WILL BE USED ON SITE WHERE PUMPING FROM EXCAVATIONS IS REQUIRED.

MITIGATION / DRAINAGE CONTROLS AVAILABLE FOR USE ACROSS THE SITE	
MANAGEMENT TYPE	DESCRIPTION OF SUDS DRAINAGE CONTROL METHODS
Avoidance Controls	
Source Controls:	1) APPLICATION OF 50M BUFFER ZONES TO NATURAL WATERCOURSES (EXCEPT AT CROSSINGS WHERE ADDITIONAL MITIGATION WILL BE ADDED) 2) USING SMALL WORKING AREAS 3) WORKING IN APPROPRIATE WEATHER, AND SUSPENDING CERTAIN WORK ACTIVITIES IN ADVANCE OF FORECASTED WET WEATHER 2) EROSION AND VELOCITY CONTROL MEASURES SUCH AS: A) SAND BAGS B) OYSTER BAGS FILLED WITH GRAVEL C) FILTER FABRICS D) AND OTHER SIMILAR/EQUIVALENT OR APPROPRIATE SYSTEMS 3) USING SMALL WORKING AREAS 4) SURROUNDING STOCKPILES WITH SILT FENCING 5) WEATHERING OFF / SEALING SPOIL STOCKPILES
In-Line Controls:	1) INTERCEPTOR DRAINS, OVERSIZED SWALES/COLLECTOR DRAINS 2) EROSION AND VELOCITY CONTROL MEASURES SUCH AS: A) SAND BAGS B) OYSTER BAGS FILLED WITH GRAVEL C) FILTER FABRICS D) STRAW BALES E) FLOW LIMITERS F) WEIRS OR BAFFLES G) AND/OR OTHER SIMILAR/EQUIVALENT OR APPROPRIATE SYSTEMS. 3) SILT FENCES, FILTER FABRICS 4) IN STREAM SEDIMENTS 5) COLLECTION SUMPS, TEMPORARY SUMPS, PUMPING SYSTEMS 5) ATTENUATION PONDS 6) SEDIMENT TRAPS, STILLING / SETTLEMENT PONDS
Water Treatment Controls:	1) TEMPORARY SUMPS 2) ATTENUATION PONDS 3) TEMPORARY STORAGE PONDS 4) SEDIMENT TRAPS, STILLING / SETTLEMENT PONDS 5) PROPRIETARY SETTLEMENT SYSTEMS SUCH AS SILTBUSTER, AND/OR OTHER SIMILAR/EQUIVALENT OR APPROPRIATE SYSTEMS. 6) SILT DEWATERING BAGS
Outfall Controls:	1) LEVELSPREADERS 2) BUFFERED OUTFALLS 3) VEGETATION FILTERS 4) SILT DEWATERING BAGS 5) FLOW LIMITERS AND WEIRS 6) HYDROCARBON INTERCEPTORS



DRAWING LEGEND :

- WATERCOURSES
- WATERCOURSES 50M BUFFER
- LAKES
- LAKES 50M BUFFER
- STREAM FLOW DIRECTION
- MAPPED DRAINS
- MAPPED DRAINAGE PATHWAYS >150M LENGTH*

* POTENTIAL DRAINAGE FLOWPATHS ARE MODELLED BASED ON LIDAR DATA AND DO NOT INDICATE THE PRESENCE OF A DRAIN OR WATERCOURSE INITIATED BY RECHARGE TO GROUND

- UPSTREAM INTERCEPTOR DRAIN
- SWALES/DOWNSTREAM COLLECTOR DRAIN
- DIRECTION OF FLOW
- SILT FENCES
- DOUBLE/TRIPLE SILT FENCES
- SETTLEMENT POND - LEVEL SPREADER
- CHECK DAM 'TYPE A'
- CHECK DAM 'TYPE B'
- PROPOSED NEW WATERCOURSE CROSSING
- EXISTING WATERCOURSE CROSSING TO BE UPGRADED
- EXISTING DRAINAGE GRIP
- INTERCEPTOR DITCH CULVERT
- COLLECTOR DITCH CULVERT
- OVERLAND FLOW DISCHARGE
- TREATED WATER DISCHARGE
- SETTLEMENT POND
- SEMI-NATURAL VEGETATION
- SWALE / FILTER BED /SECONDARY SP
- PUMPING SUMP

- APPLICATION SITE BOUNDARY
- EXISTING GROUND SURFACE
- MINOR CONTOUR (1M INTERVAL)
- EXISTING GROUND SURFACE
- MAJOR CONTOUR (5M INTERVAL)
- TURBINE FOUNDATION
- HARDSTAND
- PROPOSED NEW ROADS
- EXISTING ROADS TO BE UPGRADED
- PUBLIC ROADS TO BE UPGRADED
- TEMPORARY ACCESS TRACK
- 110KV UNDERGROUND CABLEING
- 33KV UNDERGROUND CABLE ROUTE
- PROPOSED 110KV ONSITE SUBSTATION
- TEMPORARY CONSTRUCTION COMPOUND
- BORROW PIT
- PEAT AND SPOIL MANAGEMENT AREAS
- CUT AREA
- FILL AREA
- HABITAT ENHANCEMENT AREA
- EXISTING WIND FARM FOOTPRINT
- EXISTING TURBINE TO BE REMOVED

KEY PLAN

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Date	Description	Chkd	Signed
Revisions			

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Client: SSE

Job: CRUMHACH WIND FARM, CO. SLIGO

Title: PROPOSED DRAINAGE LAYOUT

Figure No: D106

Drawing No: P1694-0-0726-A1-D106-00B

Sheet Size: A1

Scale: 1:2,000 (A1)

Date: 24/07/2026

Project No.: P1694-0

Drawn By: GA

Checked By: MG

POLLUTION PREVENTION NOTES:

1. SITE MANAGEMENT PROPOSALS ARE INTENDED TO ENSURE PROTECTION AGAINST SURFACE WATER AND GROUNDWATER POLLUTION, SILTATION AND EROSION.
2. SUITABLE DRAINAGE CONTROL MEASURES WILL BE IN PLACE AT ALL TIMES TO PREVENT CONVEYANCE OF SIGNIFICANT VOLUMES OF SILT TO OFF SITE RECEIVING WATERCOURSES.
3. SILTY WATER CAN ARISE FROM DEWATERING EXCAVATIONS, EROSION OF EXPOSED/DISTURBED GROUND, TEMPORARY STOCKPILES, PLANT AND WHEEL WASH, SITE ROADS/TRACKS, AND DISTURBANCE OF EXISTING FIELD DRAINS AND DITCHES.

DISCHARGES

4. WATER CONTAINING SILT WILL NOT BE DISCHARGED OR PUMPED DIRECTLY TO ANY NATURAL WATERCOURSE. ALL DISCHARGES WILL BE MADE OVER OPEN GROUND OR INTO EXISTING FIELD DRAIN WITH SILT TRAP AT A MINIMUM OF 20M FROM NEAREST WATERCOURSE UNLESS OTHERWISE STATED.
5. NO EXCAVATED MATERIAL WILL BE STORED WITHIN ANY SURFACE WATER BUFFER ZONE.
6. PUMPED WATER WILL BE DIRECTED INTO TRACK SIDE DITCHES AND TREATED IN SETTLEMENT PONDS AND VEGETATION SWALES PRIOR TO OVERLAND DISCHARGE.
7. PUMPING OF CLEAN WATER FROM EXCAVATIONS / OR OVER-PUMPING IN DRAINS/DITCHES/STREAMS WILL BE COMPLETED IN A MANNER THAT WILL NOT CAUSE SCOUR OR EROSION AT THE POINT OF RELEASE/DISCHARGE. THIS WILL BE DONE BY REDUCING THE FLOW VELOCITIES OR BY USE OF SUITABLE SPASH PLATES, AND/OR OTHER SIMILAR DISCHARGE CONTROLS.
8. VEGETATION WILL NOT BE STRIPPED FROM EXISTING DRAINS/DITCHES UNLESS ABSOLUTELY NECESSARY.

EXCAVATIONS

9. WHERE (TEMPORARY) DEEP EXCAVATIONS ARE PROPOSED, CUT-OFF DRAINS WILL BE USED TO REDUCE THE AMOUNT OF SURFACE WATER ENTERING THE EXCAVATION. THIS WILL BE THE CASE AROUND TURBINE BASE EXCAVATIONS.

EXPOSED GROUND & STOCKPILES

10. THE AMOUNT OF TEMPORARY EXPOSED GROUND AND TEMPORARY STOCKPILES OPEN/EXPOSED AT ANY TIME WILL BE MINIMISED.

SITE TRACKS

11. USE OF TRACK SIDE SWALES WITH CHECK DAMS, AND/OR FILTRATION CHECK DAMS WILL REDUCE SILT IN RUNOFF WATER AS REQUIRED.
12. CHECK DAMS TO BE INSPECTED AND CLEANED REGULARLY.

REFUELLING

13. REFUELLING OF MOBILE PLANT WILL BE COMPLETED IN DESIGNATED REFUELLING AREAS ONLY, ON AN IMPERMEABLE SURFACE AND AWAY FROM FIELD DRAINS / DITCHES AND WATERCOURSES/WATERBODIES.
14. SPILL KITS AND DRIP TRAYS WILL BE AVAILABLE ON SITE FOR USE AS REQUIRED.

CONCRETE

15. CONCRETE POURS WILL BE MANAGED AND SUPERVISED TO ENSURE THERE WILL BE NO LEAKAGE/SEEPAGE/DISCHARGE OF CONCRETE OR CONCRETE WATER DURING THE CONSTRUCTION PHASE.
16. CONCRETE WASH WATER, AND WASTE CONCRETE WILL BE MANAGED APPROPRIATELY ON SITE AT A LINED CONCRETE WASH OUT PIT.

IF WATER POLLUTION IS IDENTIFIED THE FOLLOWING STEPS WOULD BE ADHERED TO:

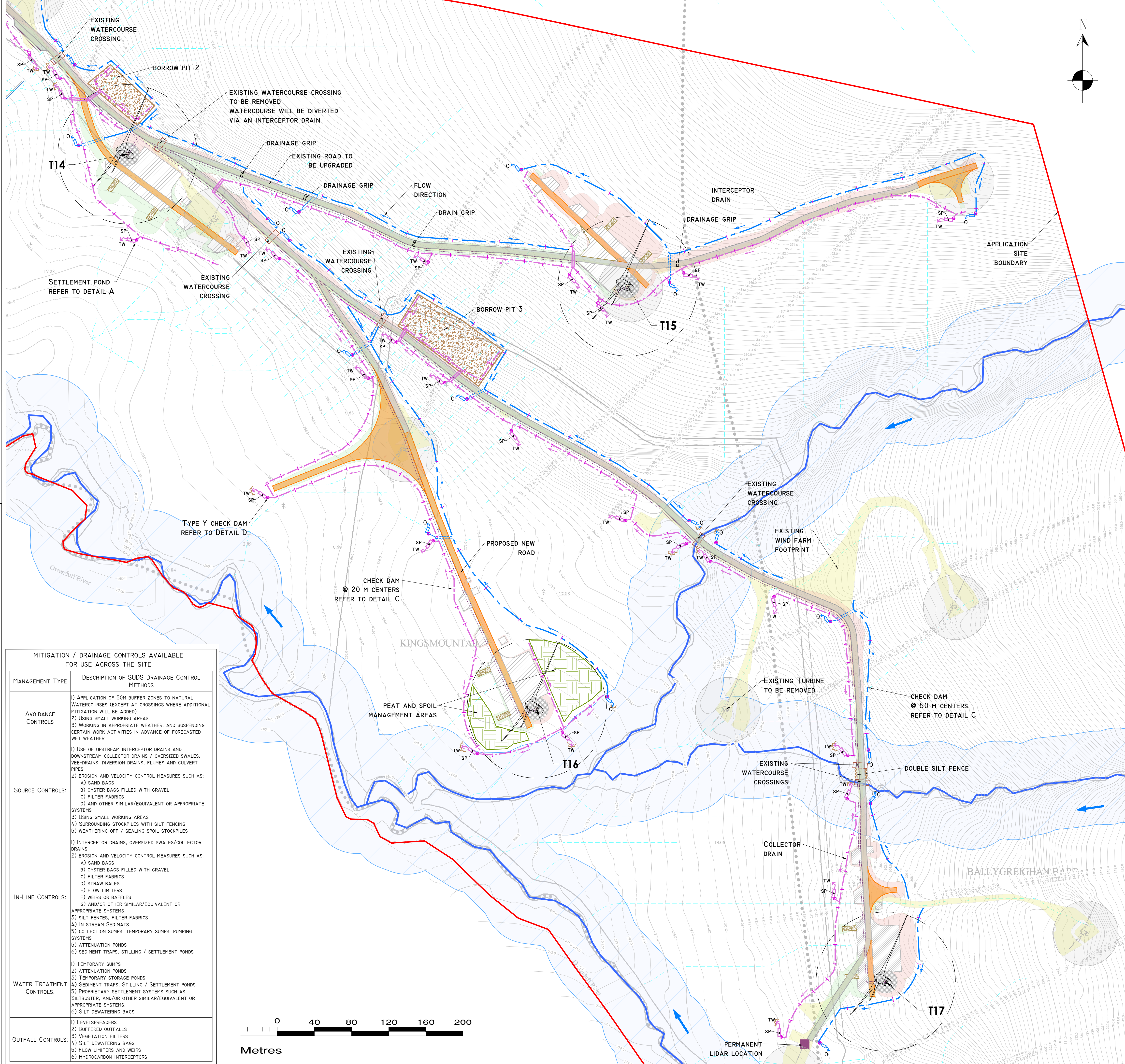
STOP - WORK IN THE IMMEDIATE AREA SHOULD BE STOPPED AND THE SOURCE OF THE POLLUTION IDENTIFIED.

CONTAIN - THE SOURCE OF THE POLLUTION SHOULD BE BUNDED USING A SUITABLE METHOD. NATURAL WATERCOURSES SHOULD BE TEMPORARILY DIVERTED AROUND ANY SOURCE OF POLLUTION.

NOTIFY - THE RELEVANT AUTHORITIES (SITE MANAGER / FISHERIES / NPWS / LOCAL AUTHORITY ETC.) SHOULD BE NOTIFIED IMMEDIATELY TO ENSURE THAT MEASURES CAN BE IMPLEMENTED DOWNSTREAM TO PROTECT FISHERIES AND OTHER SENSITIVE RECEPTORS.

DRAINAGE NOTES:

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3. SUDS DRAINAGE SYSTEM TO BE CONSTRUCTED PRIOR TO, OR AT THE SAME TIME AS THE ACCESS TRACKS. INTERIM MEASURES SUCH AS THE PLACEMENT OF STRAW BALES/SILT FENCING/OR SIMILAR APPROVED METHOD OR ADDITIONAL CHECK DAMS AND SILT FENCES TO BE EMPLOYED IN ALL INSTANCES WHERE WORK CARRIED OUT TO CONSTRUCT THE ACCESS TRACKS IS LIKELY TO CAUSE ADVERSE ENVIRONMENTAL EFFECTS THROUGH INCREASED SILT LOADINGS BEING GENERATED DURING THE CONSTRUCTION PHASE.
4. SUITABLE PREVENTION MEASURES WILL BE IN PLACE AT ALL TIMES TO PREVENT THE CONVEYANCE OF SIGNIFICANT VOLUMES OF SILT TO RECEIVING WATERCOURSES. SEE NOTES ON POLLUTION PREVENTION.
5. INTERCEPTOR SWALES / DITCHES WILL BE USED TO COLLECT UPSTREAM SURFACE WATER FLOWS. REGULAR CROSS DRAINS / DISCHARGE TO FIELD DITCHES/DRAINS WILL BE INSTALLED TO TRANSFER / DISCHARGE SURFACE WATER IN INTERCEPTOR DRAINS TO SUITABLE FIELD DRAIN OUTFALL POINTS.
6. DRAINAGE SWALES / DITCHES TO BE EXCAVATED ADJACENT TO THE ACCESS TRACKS. REGULAR CROSS DRAINS TO BE LOCATED ALONG ACCESS TRACKS TO PREVENT EXCESSIVE VOLUMES OF WATER COLLECTING IN THE SWALES / DITCHES. OPTIMUM LOCATIONS OF CROSS DRAINS TO BE AGREED WITH THE ENGINEER ON SITE. SURFACE WATER WILL NOT BE ALLOWED TO DISCHARGE DIRECTLY INTO ANY EXISTING WATERCOURSES.
7. A BUFFER ZONE OF >20M TO ANY EXISTING WATERCOURSE WILL BE REQUIRED WHERE OVER LAND DISCHARGES ARE PROPOSED FROM ACCESS TRACK SWALES / DITCHES. THIS BUFFER WILL NOT BE POSSIBLE AT RIVER/STREAM CROSSINGS, BUT OTHER SUITABLE CONTROLS ARE PROPOSED IN THOSE AREAS (I.E. ADDITIONAL SILT FENCING).
8. BATTERS OF ALL PROPOSED SWALES / DITCHES TO HAVE A SLOPE OF BETWEEN 1 : 1.5 TO 1 : 2 DEPENDING UPON DEPTH OF SWALE/DITCH AND WILL BE LEFT AS CUT TO RE-VEGETATE WITH LOCAL SPECIES.
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10. SETTLEMENT PONDS TO BE CONSTRUCTED FOR SILT REMOVAL AT TURBINE BASES AND HARD STAND AREAS. POND SIZES DEPEND ON THE CATCHMENT AREA BEING SERVED. SAMPLE POND SIZES FOR VARIOUS CATCHMENT AREAS SHOWN ON DRAWING D501.
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12. SILT FENCES TO BE PROVIDED ALONG THE EDGE OF EXISTING WATERCOURSES WHERE WORKS COMES WITHIN 45M OF EDGE OF ANY DITCH / DRAIN / EPHEMERAL CHANNEL.
13. SLOPES OF THE SWALES / DITCHES TO BE VEGETATED OR PROTECTED FROM EROSION UNTIL VEGETATION HAS BEEN ESTABLISHED. STRIPPED VEGETATIVE LAYER (PEAT 'SOO' OR 'SCRAW') FROM EXCAVATIONS TO BE STORED LOCALLY AND USED TO LINE SLOPES AND BASE OF SWALES / DITCHES OR LONGITUDINAL MOUNDS OF VEGETATION SWALES AT FIELD DRAIN DISCHARGE POINTS.
14. AREAS STRIPPED OF VEGETATION WILL BE KEPT AT A MINIMUM.
15. CLEAN STONE FLOW CONTROL CHECK DAMS TO BE MADE OF LOCALLY WON / GEOLOGICALLY SIMILAR WELL GRADED STONE. AGGREGATE SIZE FOR STONE CHECK DAMS TO BE TYPICALLY 20- 40MM CLEAN STONE. ON SLOPING SECTIONS OF THE ACCESS TRACKS, 40MM CHECK DAMS TO BE PROTECTED FROM WASHING AWAY THROUGH THE PLACEMENT OF 100M STONE ON THE DOWNHILL FACE OF THE CHECK DAM AND BY WRAPPING IN GEOTEXTILE.
16. BUILD UP OF SILT LEVELS AT CHECK DAMS TO BE REMOVED AND DISPOSED OF APPROPRIATELY. SILT LEVELS AT CHECK DAMS TO BE VISUALLY INSPECTED AS PART OF AN ONGOING DRAINAGE MAINTENANCE PROGRAMME DURING THE CONSTRUCTION PHASE. WHERE CHECK DAMS BECOME CLOGGED WITH SILT OR VEGETATION, STONE CHECK DAM TO BE REMOVED AND REPLACED SUBSEQUENT TO THE REMOVAL OF SILT.
17. SPACING AND FREQUENCY OF CHECK DAMS WILL BE DEPENDENT UPON LONGITUDINAL GRADIENT OF SWALE.
18. LOCATION OF FILTRATION CHECK DAMS (IF REQUIRED) TO BE AGREED ON SITE WITH ENGINEER. SETTLEMENT PONDS TO BE CONSTRUCTED IN A MANNER WHERE THEY MAY BE EASILY INFILLED AT A LATER DATE (POST COMPLETION OF THE TURBINE BASE AND HARDSTAND CONSTRUCTION). ONLY SUITABLE MATERIALS EXCAVATED FROM THE POND TO BE USED TO FORM PART OF THE EMBANKMENT AROUND THE POND.
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20. TEMPORARY USE OF SILT BAGS WILL BE USED ON SITE WHERE PUMPING FROM EXCAVATIONS IS REQUIRED.



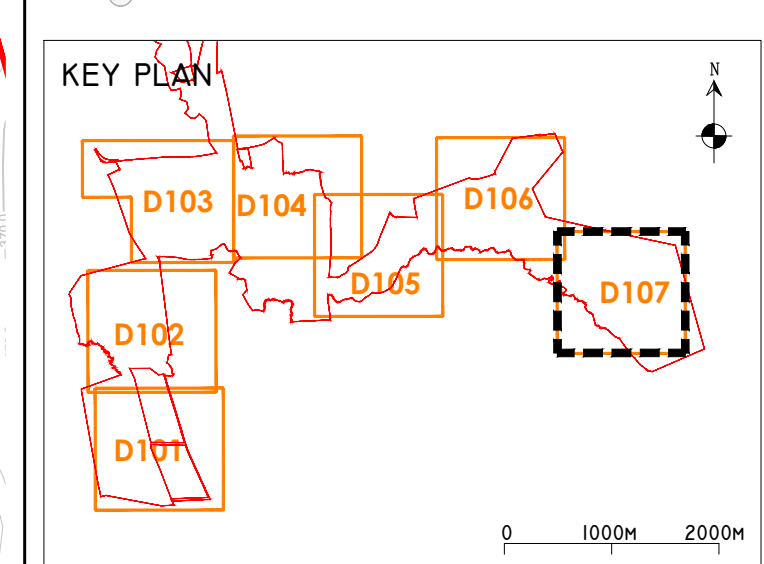
DRAWING LEGEND :

- WATERCOURSES
- WATERCOURSES 50M BUFFER
- LAKES
- LAKES 50M BUFFER
- STREAM FLOW DIRECTION
- MAPPED DRAINS
- MAPPED DRAINAGE PATHWAYS >150M LENGTH*

* POTENTIAL DRAINAGE FLOWPATHS ARE MODELLED BASED ON LIDAR DATA AND DO NOT INDICATE THE PRESENCE OF A DRAIN OR WATERCOURSE OPERATED BY RECHARGE TO GROUND

- UPSTREAM INTERCEPTOR DRAIN
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- OVERLAND FLOW DISCHARGE
- TREATED WATER DISCHARGE
- SETTLEMENT POND
- SP
- VS
- SEMI-NATURAL VEGETATION
- SWALE / FILTER BED /SECONDARY SP
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- MINOR CONTOUR (1M INTERVAL)
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- PROPOSED NEW ROADS
- EXISTING ROADS TO BE UPGRADED
- PUBLIC ROADS TO BE UPGRADED
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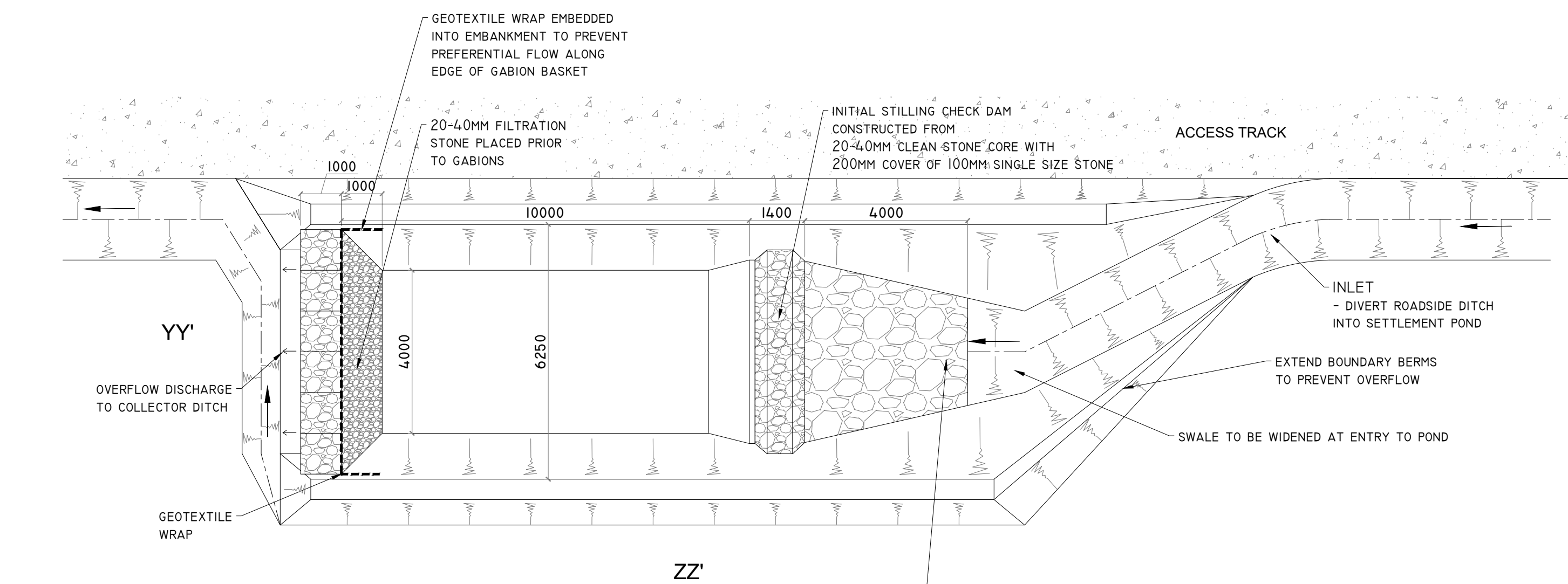
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Date	Description	Chkd	Signed

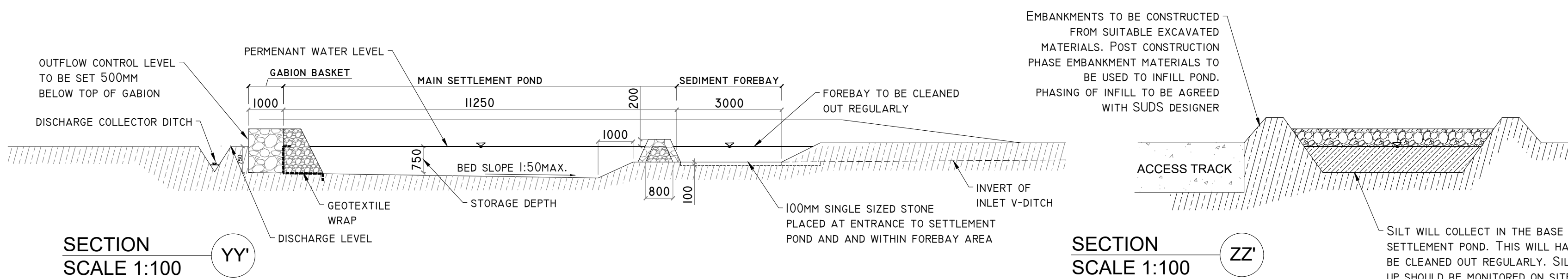
Revisions

Client:	SSE
Job:	CRUMHACH WIND FARM, CO. SLIGO
Title:	PROPOSED DRAINAGE LAYOUT
Figure No:	D107
Drawing No:	P1694-0-0726-A1-D107-00B
Sheet Size: A1	Project No.: P1694-0
Scale: 1:2,000 (A1)	Drawn By: GA
Date: 24/07/2026	Checked By: MG

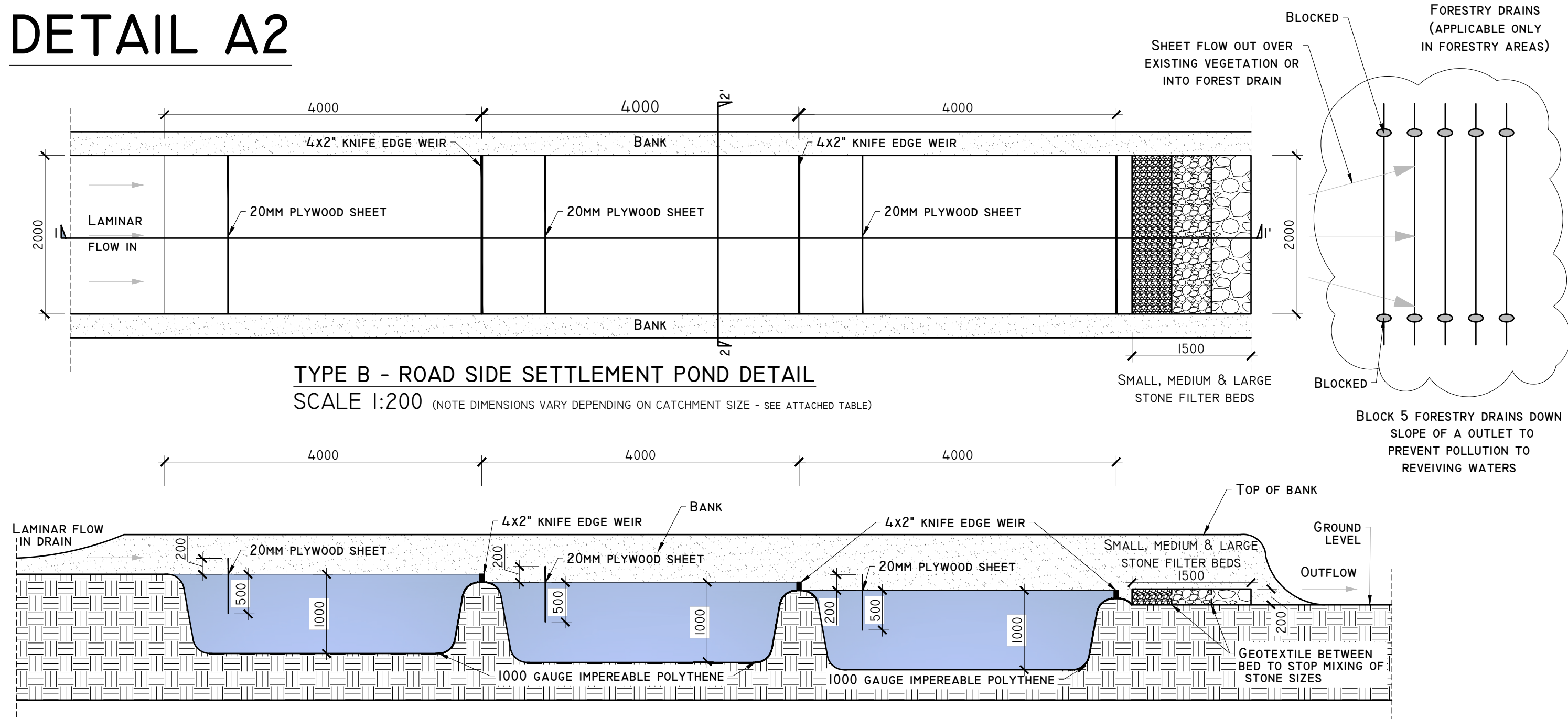
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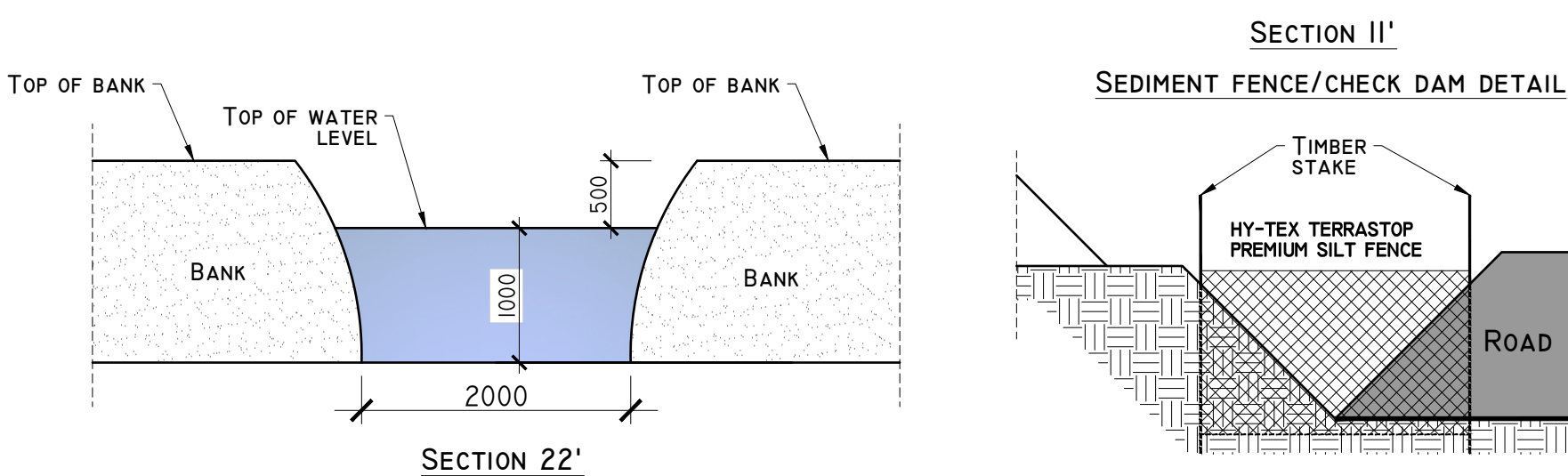
TYPE A - ROAD SIDE SETTLEMENT POND DETAIL
SCALE 1:100 (NOTE DIMENSIONS VARY DEPENDING ON CATCHMENT SIZE - SEE ATTACHED TABLE)



DETAIL A2



TYPE B - ROAD SIDE SETTLEMENT POND DETAIL
SCALE 1:200 (NOTE DIMENSIONS VARY DEPENDING ON CATCHMENT SIZE - SEE ATTACHED TABLE)

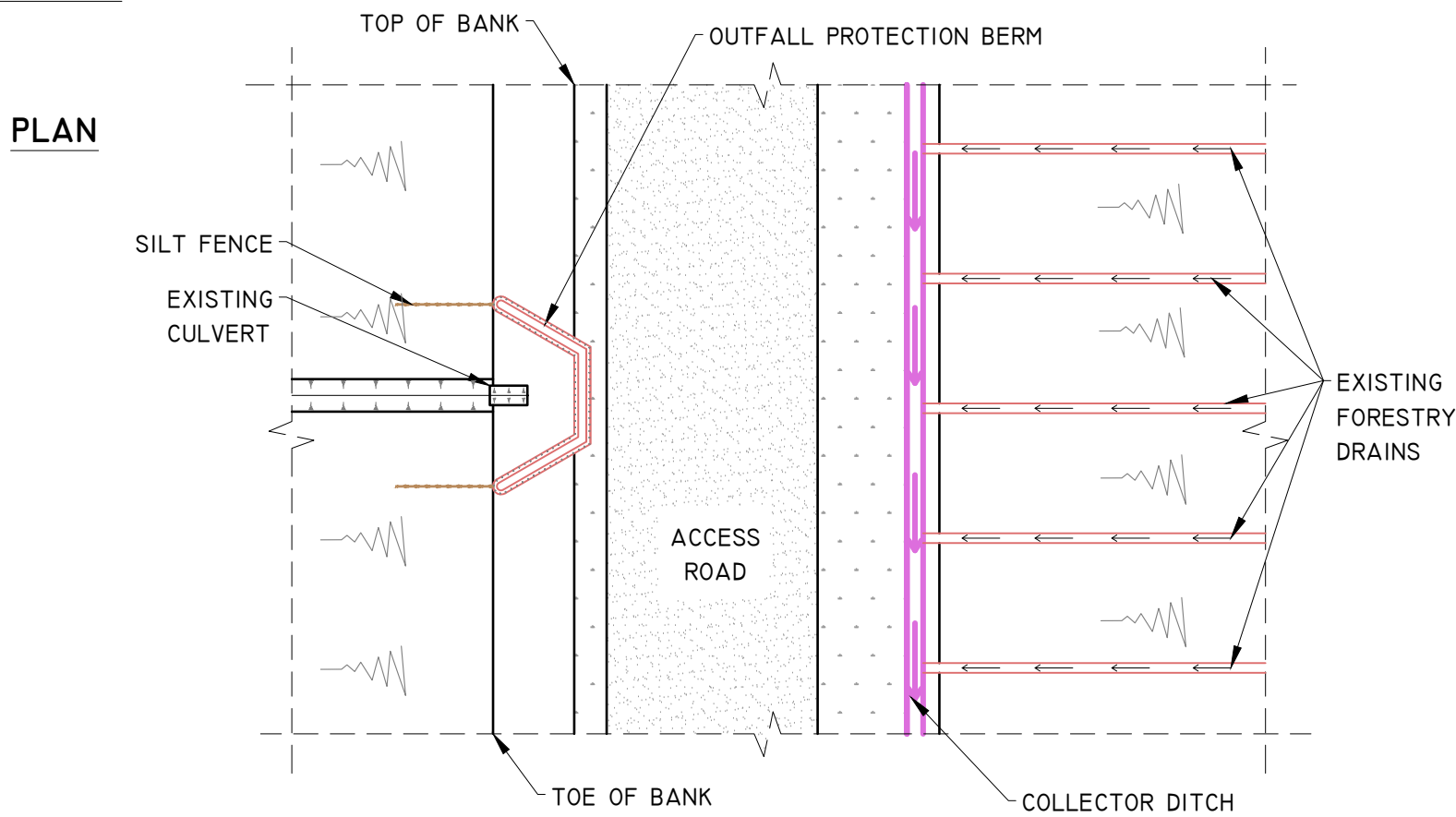


POND SIZE W [m] x L [m] x D [m]				TRACK/HARDSTAND CATCHMENT SIZE (M²)		
Return Period	10 YRS	Storm Duration	500	1000	2000	
6HR RETENTION FOR COARSE SILT	6 HRS		2.8 x 8.6 x 1 m	4.0 x 12.0 x 1 m	5.5 x 17.4 x 1 m	
11HR RETENTION FOR MEDIUM SILT	12 HRS		4.3 x 13.0 x 1 m	6.0 x 18.6 x 1 m	8.5 x 26.3 x 1 m	
24HR RETENTION FOR FINE SILT	24 HRS		7.4 x 22.3 x 1 m	10.5 x 31.5 x 1 m	14.5 x 45.5 x 1 m	

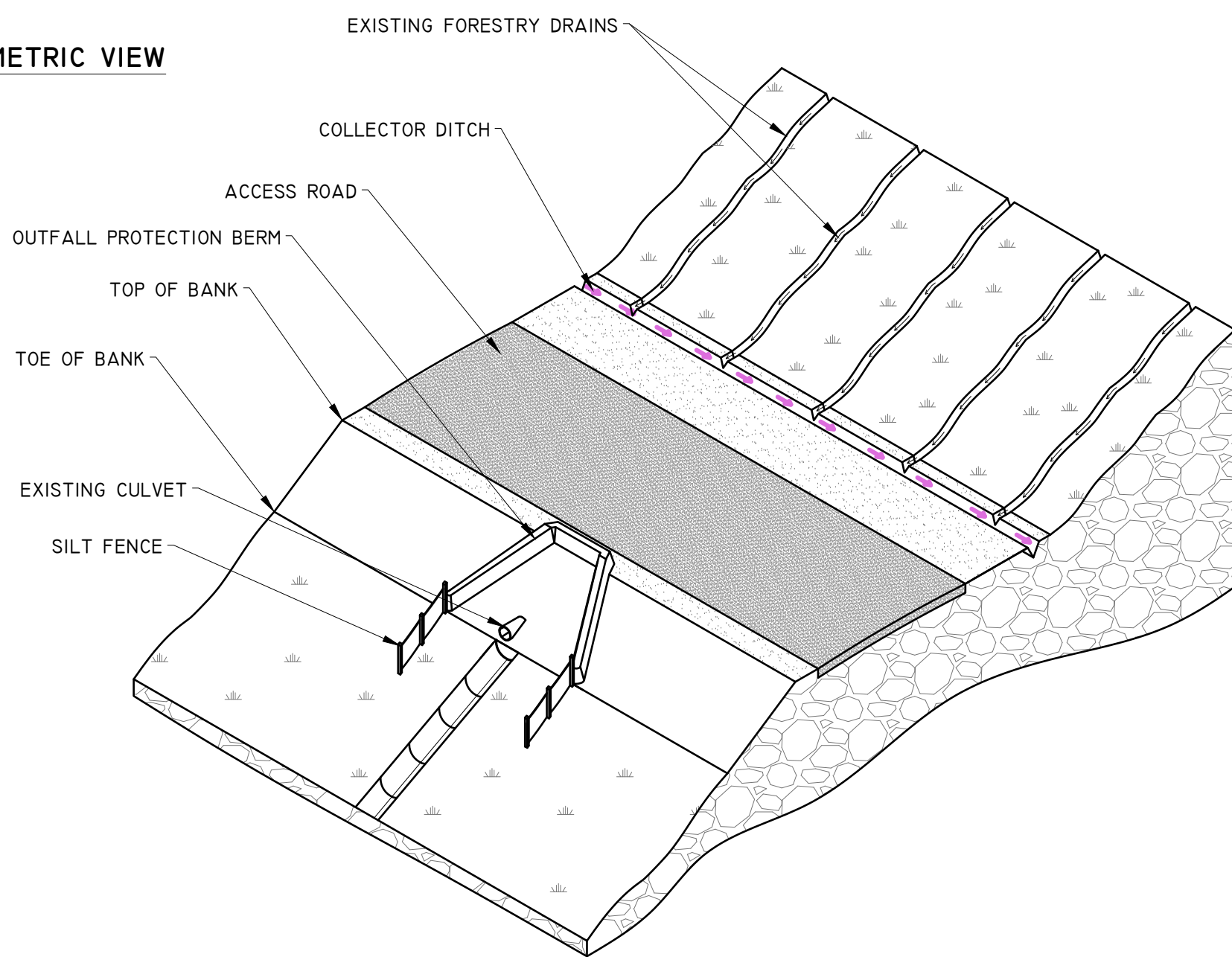
DETAIL A1

DETAIL B

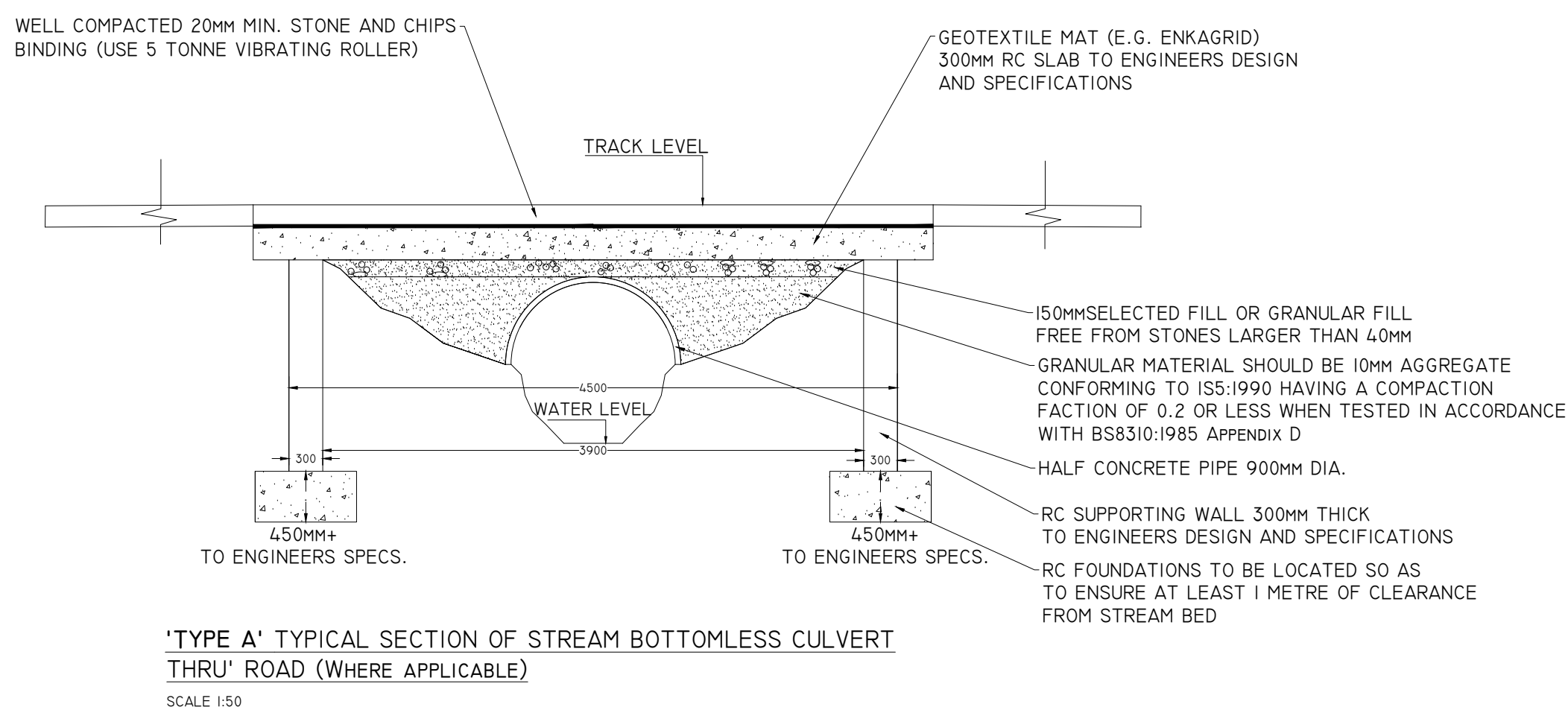
CULVERT - OUTFALL PROTECTION DETAIL
SCHEMATIC - NOT TO SCALE



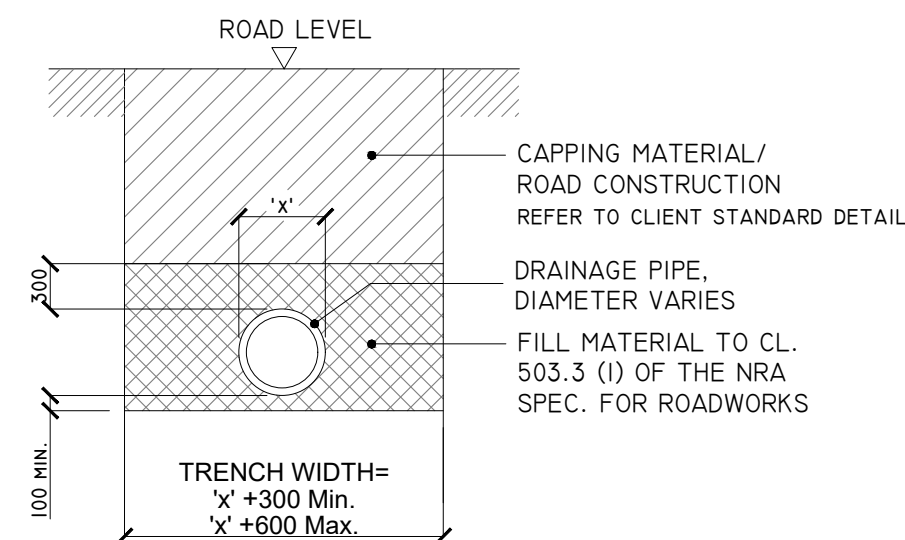
IZOMETRIC VIEW



DETAIL B1



DETAIL B2



'TYPE B' CULVERT - DRAINAGE CROSSING
BENEATH EXCAVATED ROAD

SCALE 1:50

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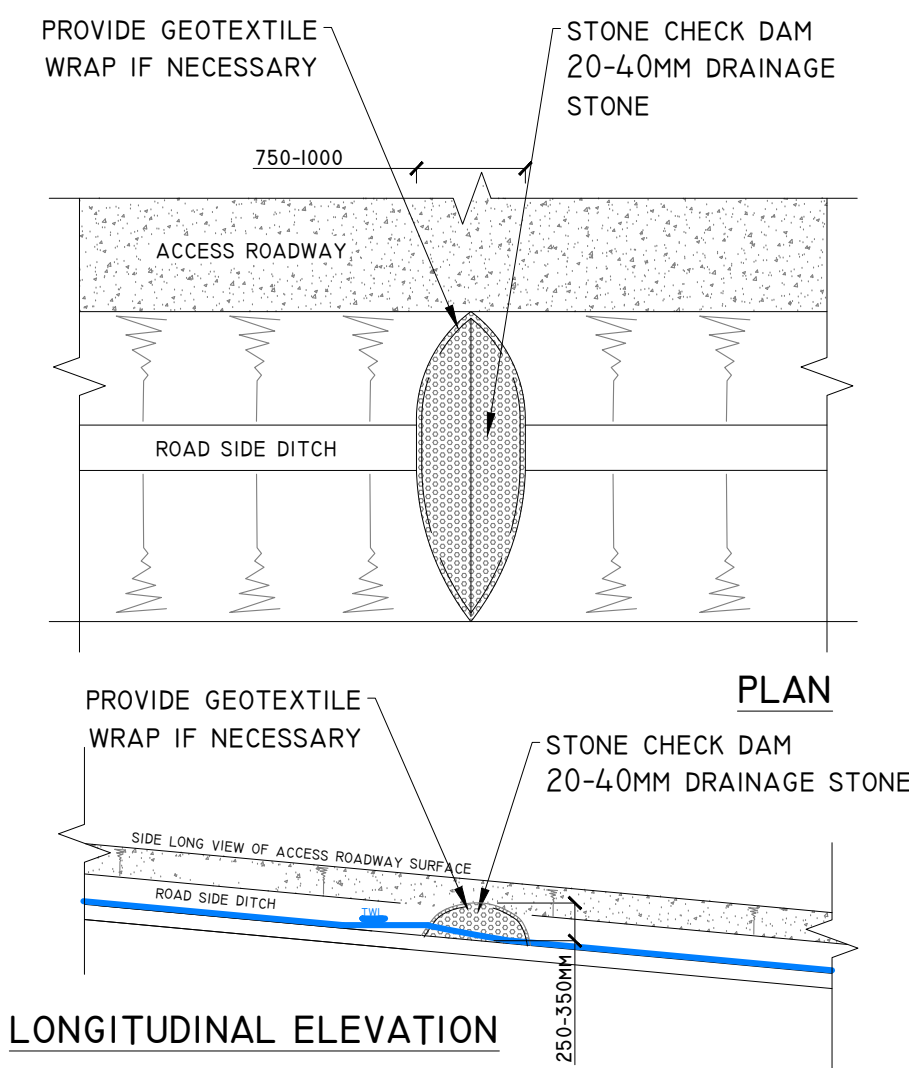
Date	Description	Chkd	Signed
Revisions			

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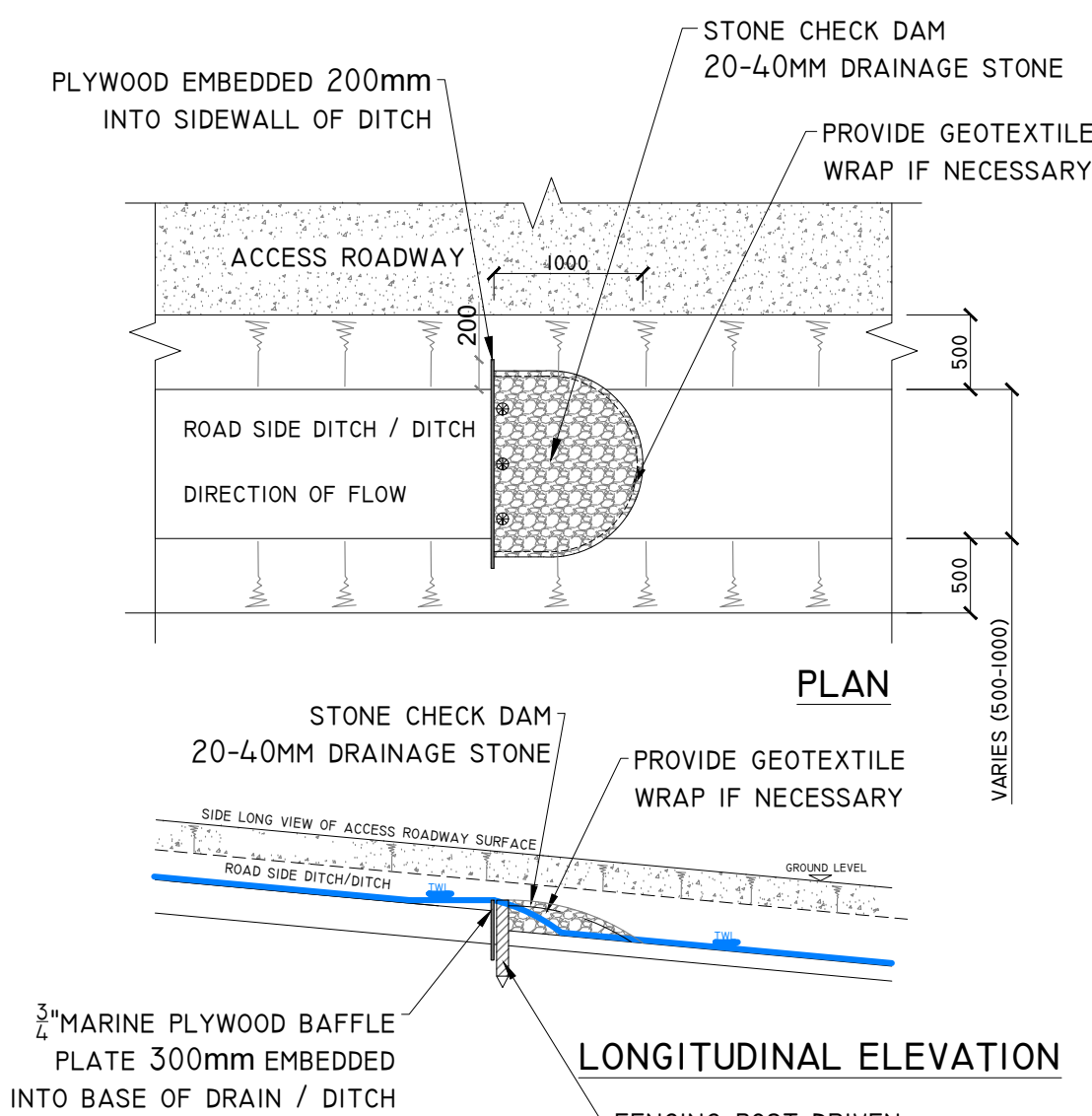
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Job:	CRUMHACH WIND FARM, Co. SLIGO
Title:	DRAINAGE DETAILS I
Figure No:	D501
Drawing No:	P1694-0-0726-A1-D501-00B
Sheet Size:	A1
Scale:	as shown (A1)
Date:	24/07/2026
Project No.:	P1694-0
Drawn By:	GA
Checked By:	MG

DETAIL C

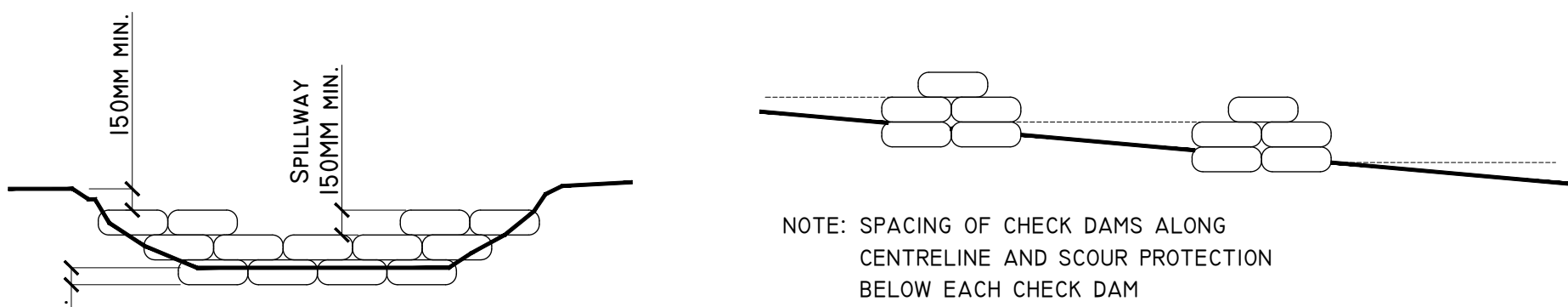


TYPE X - CHECK DAM DETAIL
SCALE 1:50

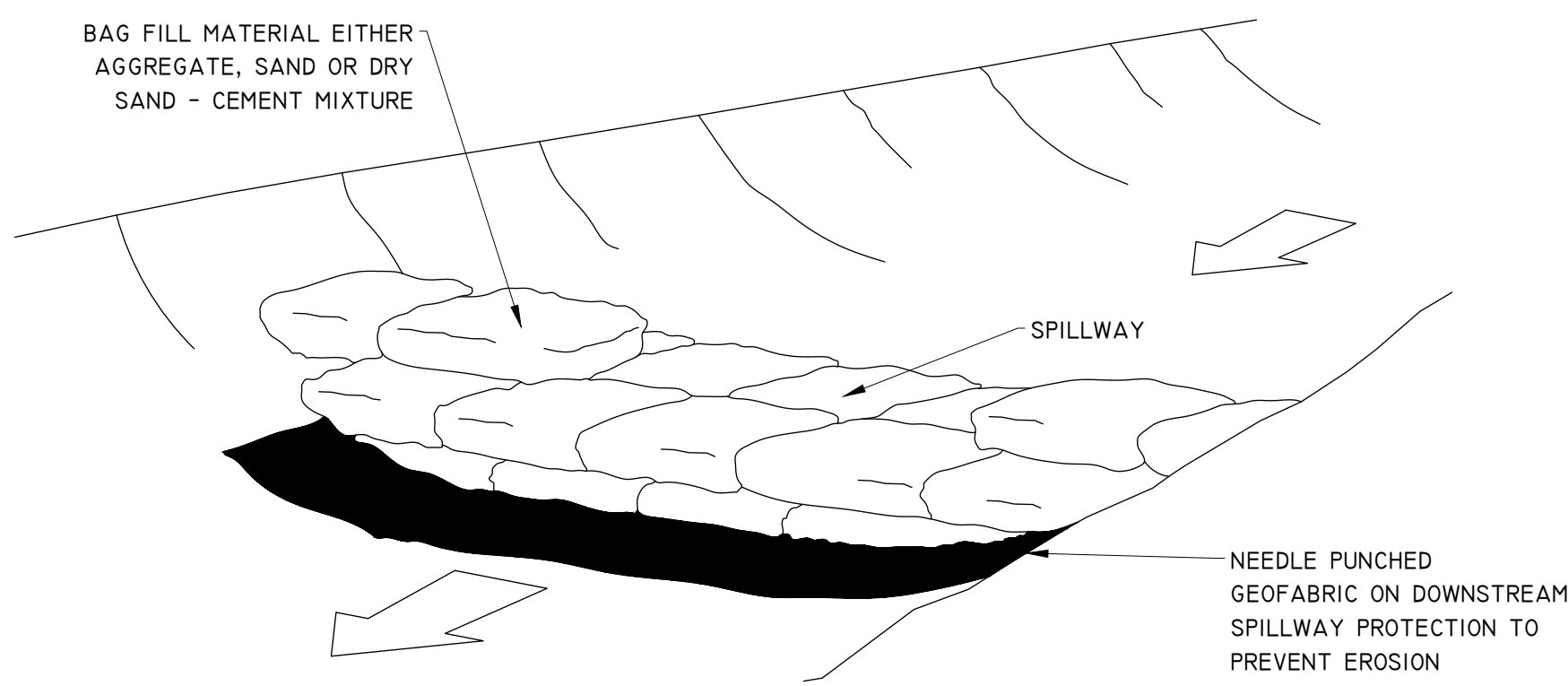
DETAIL D



TYPE Y - CHECK DAM DETAIL
SCALE 1:100

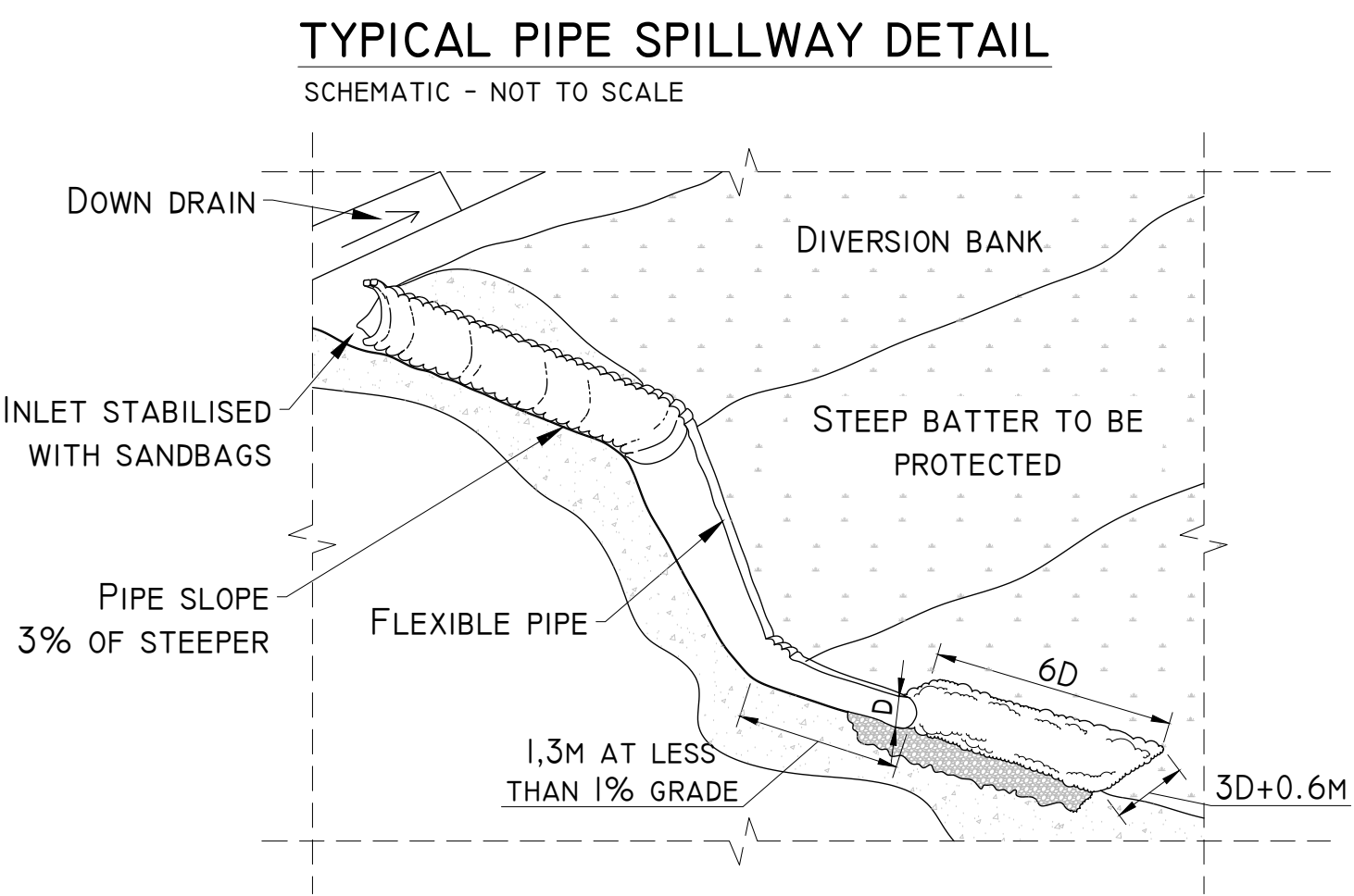


DETAIL CI



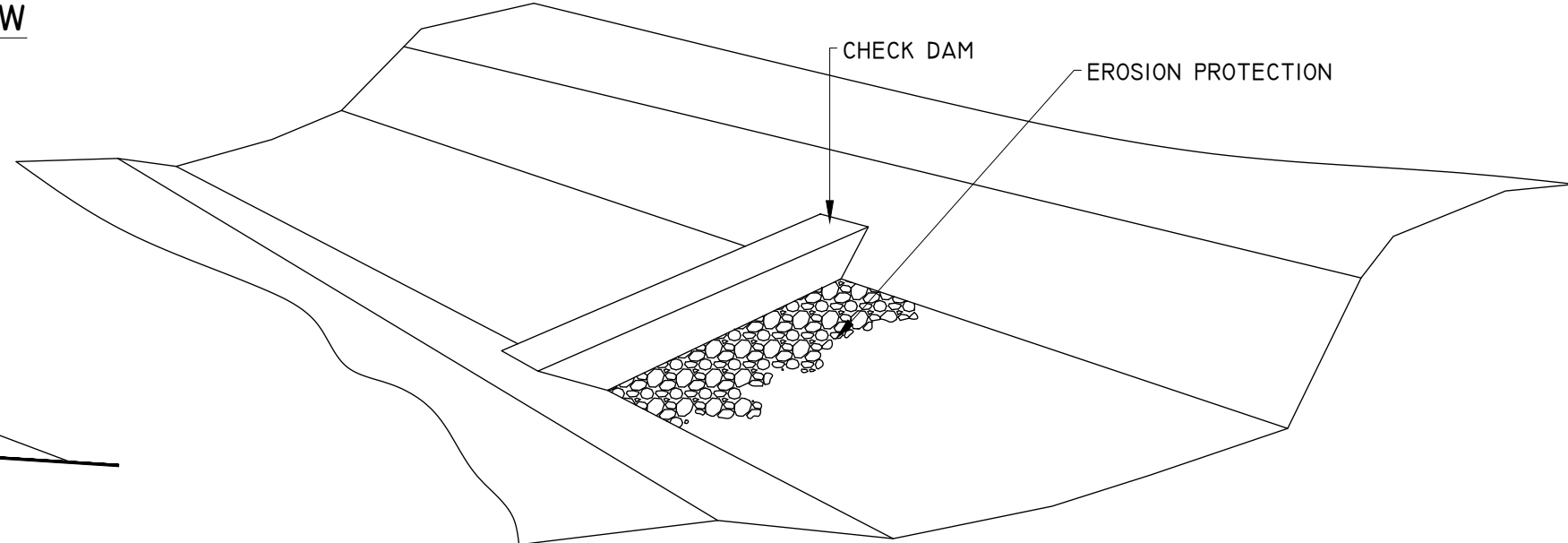
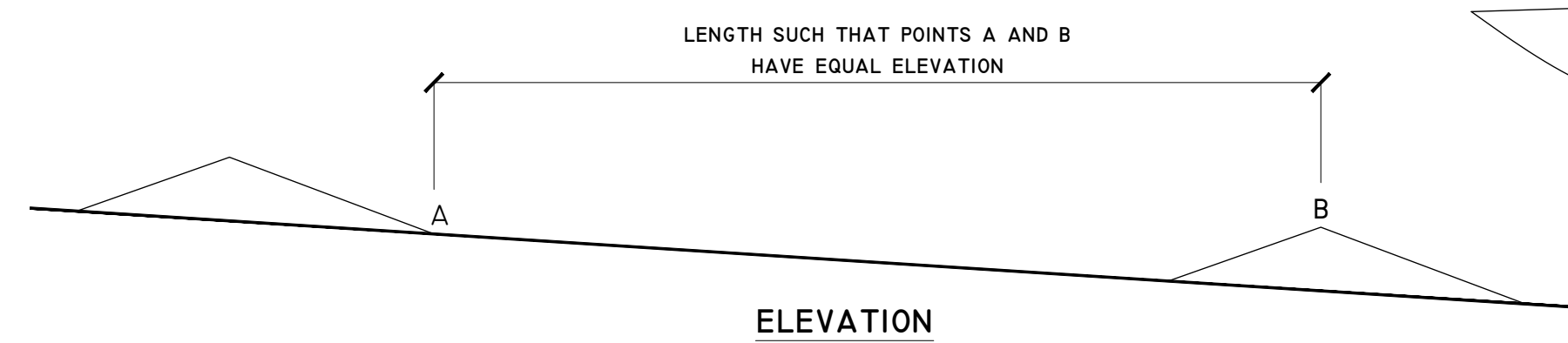
TEMPORARY CHECK DAM / SETTLEMENT POND OVERFLOW
SAND FILLED BAG CONSTRUCTION
SCHEMATIC - NOT TO SCALE

DETAIL E

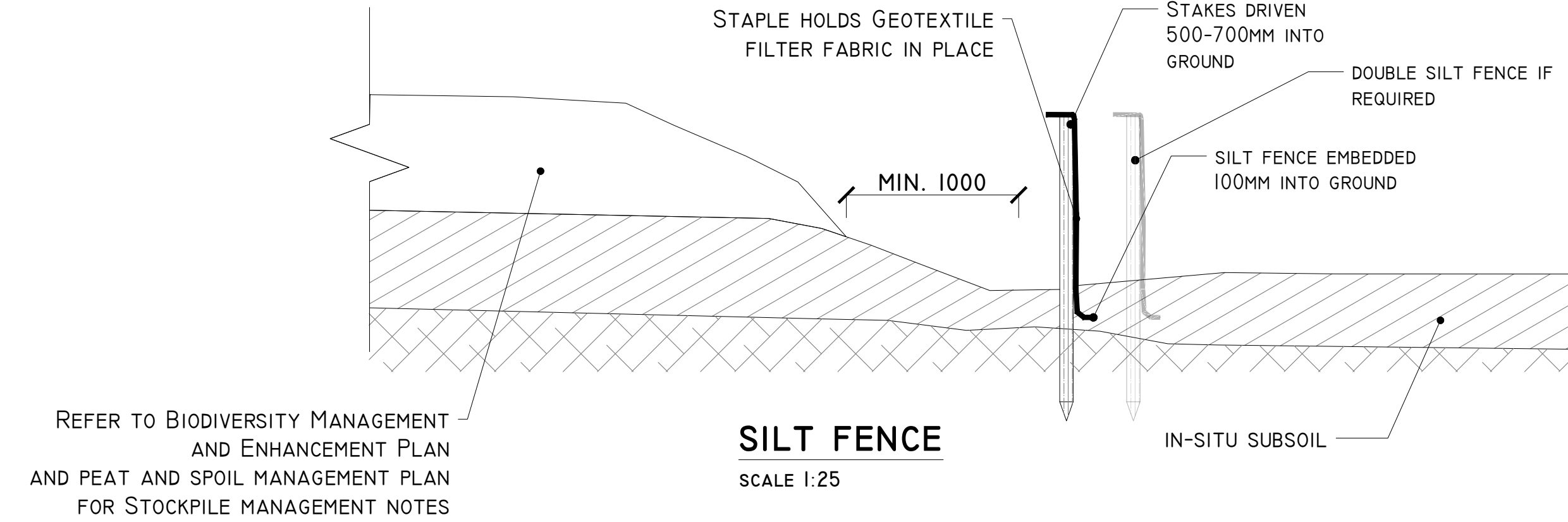


DETAIL C2

TEMPORARY CHECK DAM / SETTLEMENT POND OVERFLOW
SCHEMATIC - NOT TO SCALE

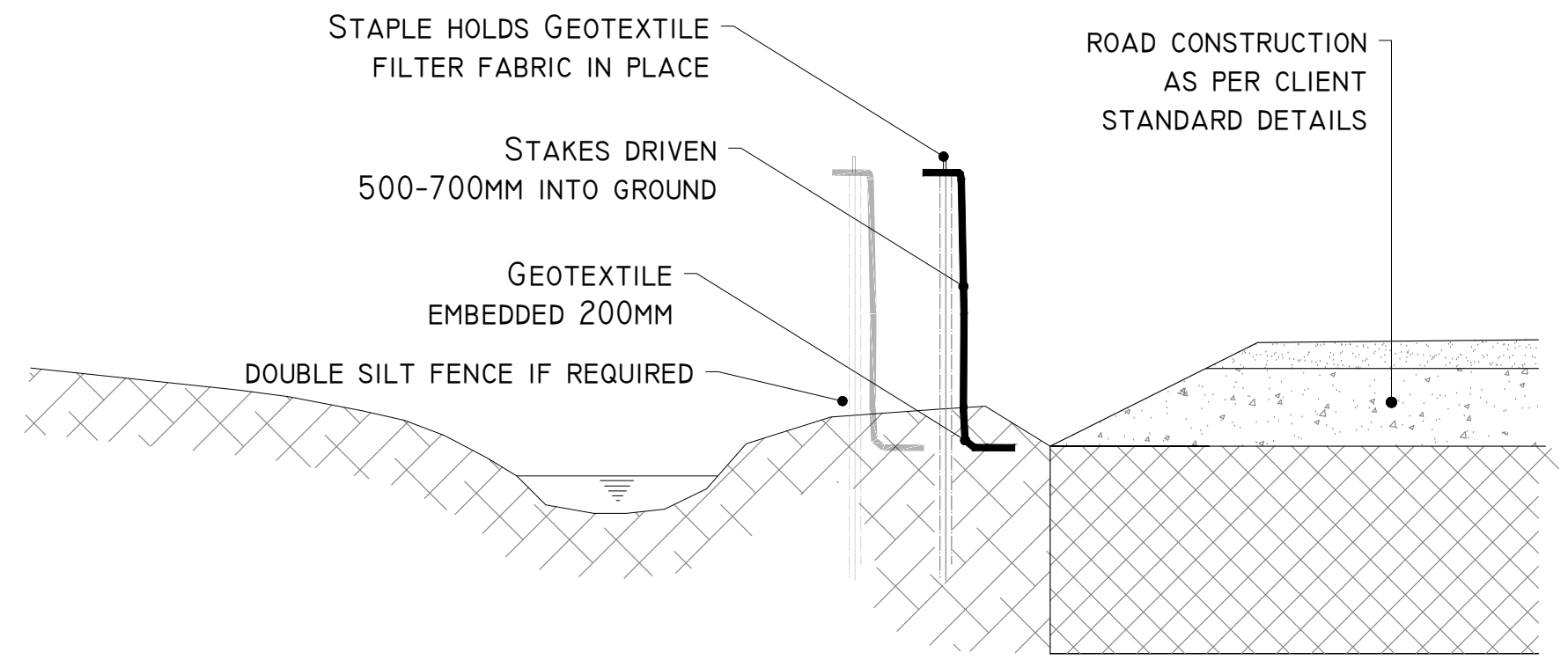


DETAIL F-I



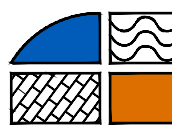
SILT FENCE
SCALE 1:25

DETAIL F-II

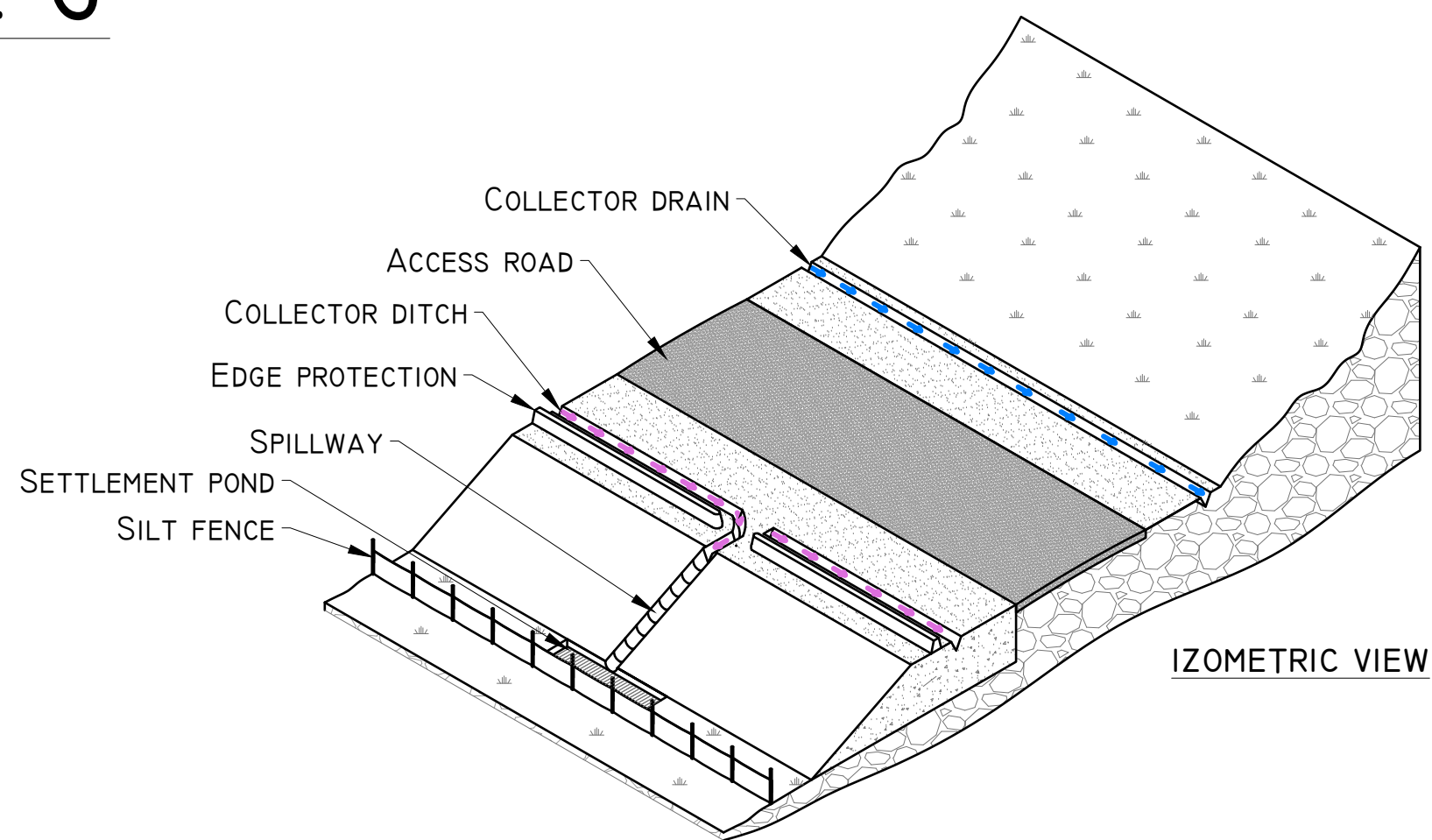
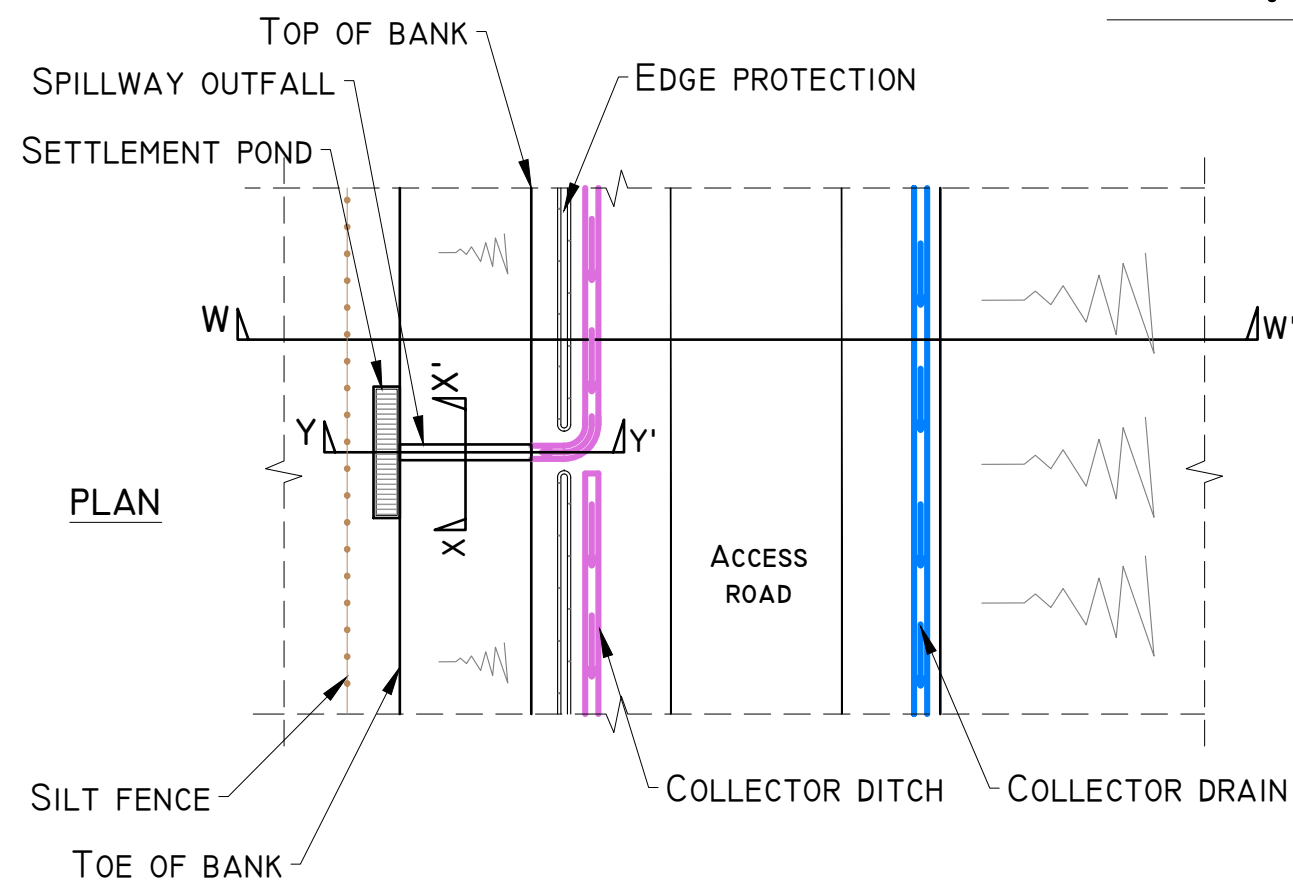


SILT FENCE FOR WATERCOURSE PROTECTION
SCALE 1:25

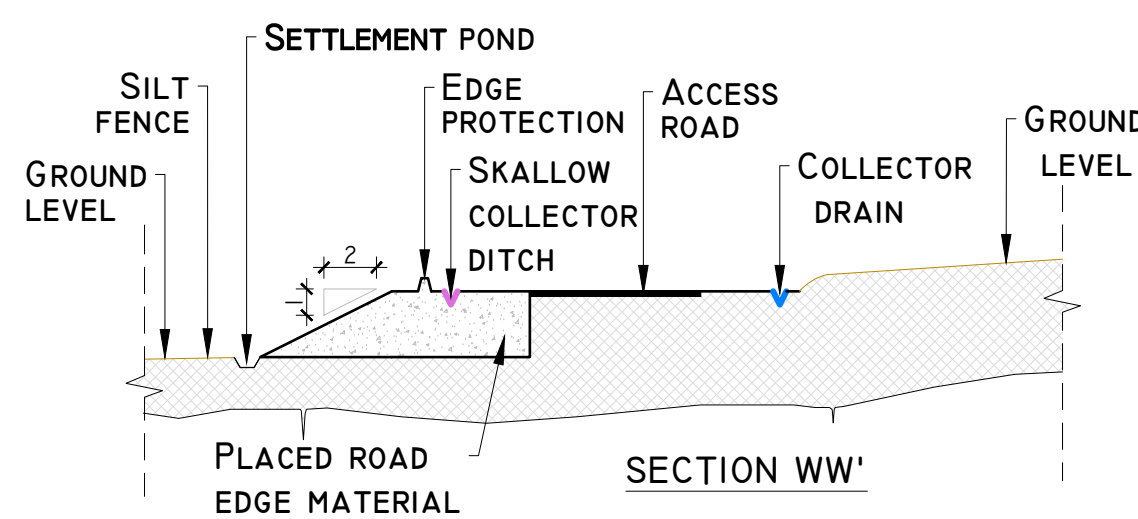
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Revisions			
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Client:		SSE	
Job:		CRUMHACH WIND FARM, Co. SLIGO	
Title:		DRAINAGE DETAILS 2	
Figure No:		D502	
Drawing No: P1694-0-0726-A1-D502-00B			
Sheet Size: A1		Project No.: P1694-0	
Scale: as shown (A1)		Drawn By: GA	
Date: 24/07/2026		Checked By: MG	

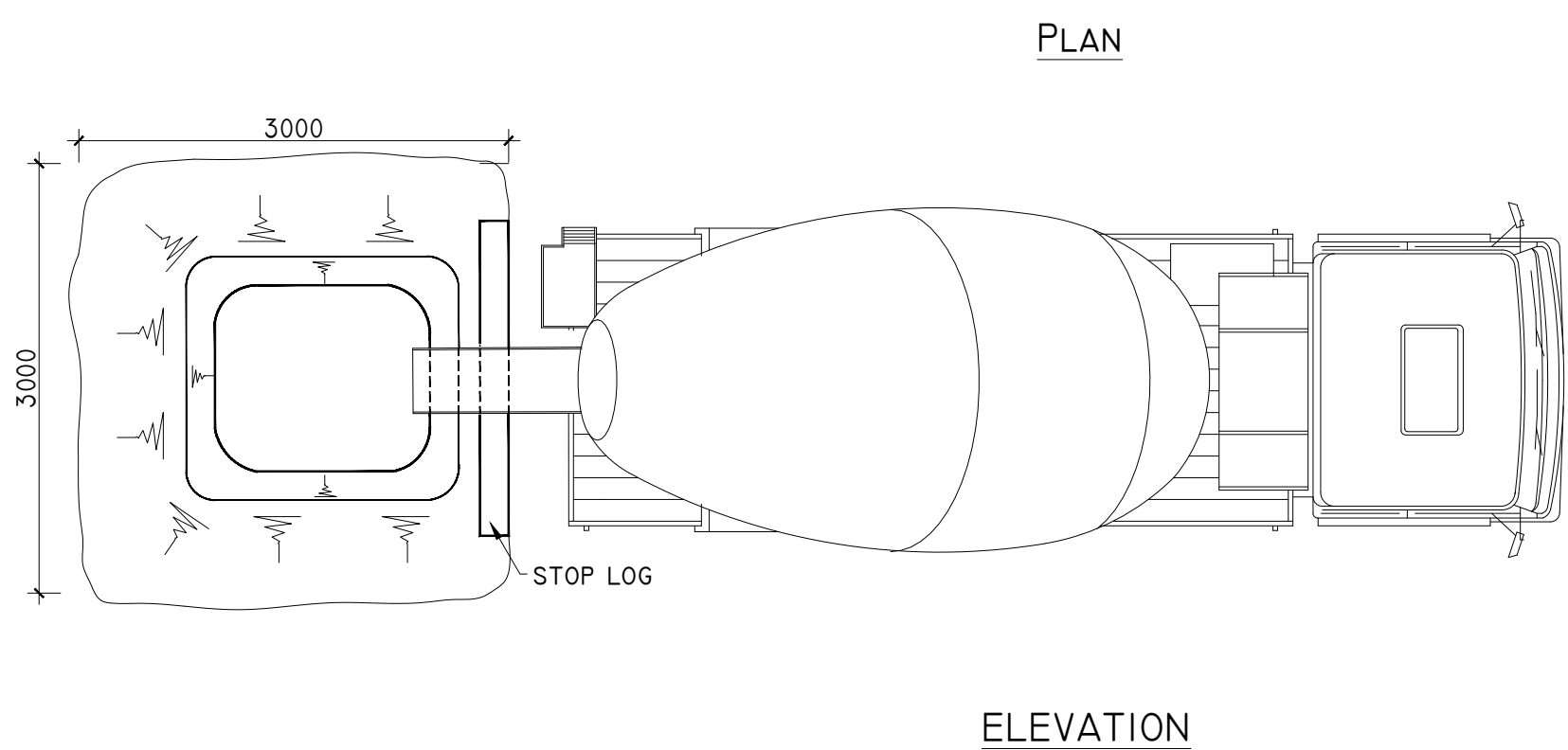
DETAIL G



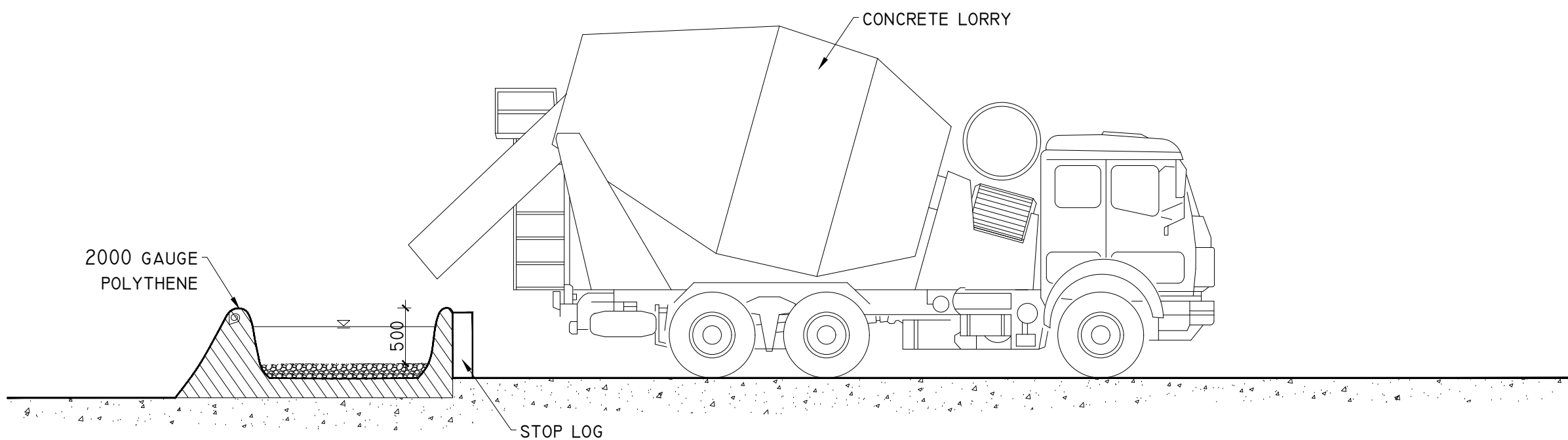
SPILLWAY OUTFALL PLAN
SCHEMATIC - NOT TO SCALE



TEMPORARY CONCRETE WASH OUT PIT
SCALE 1:50

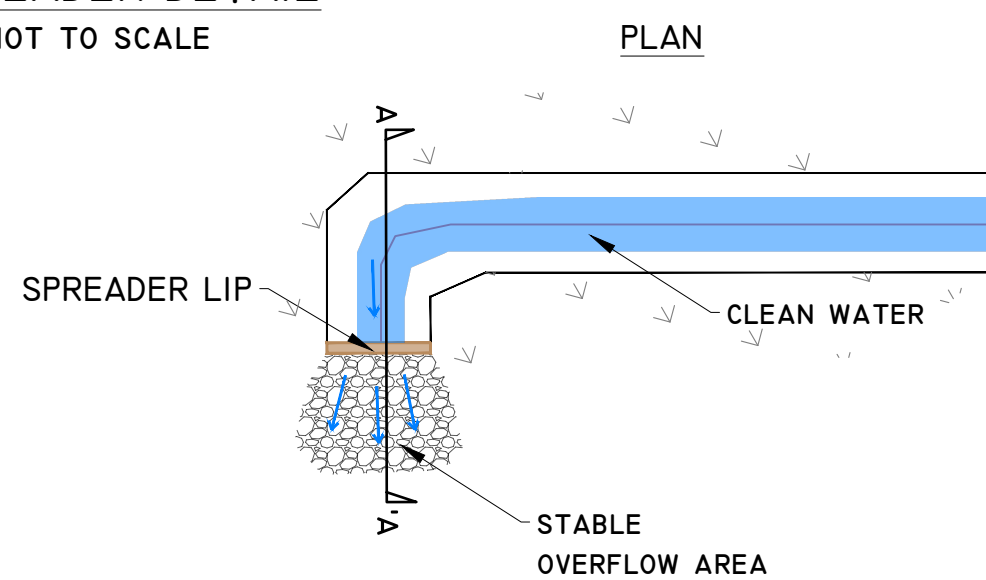
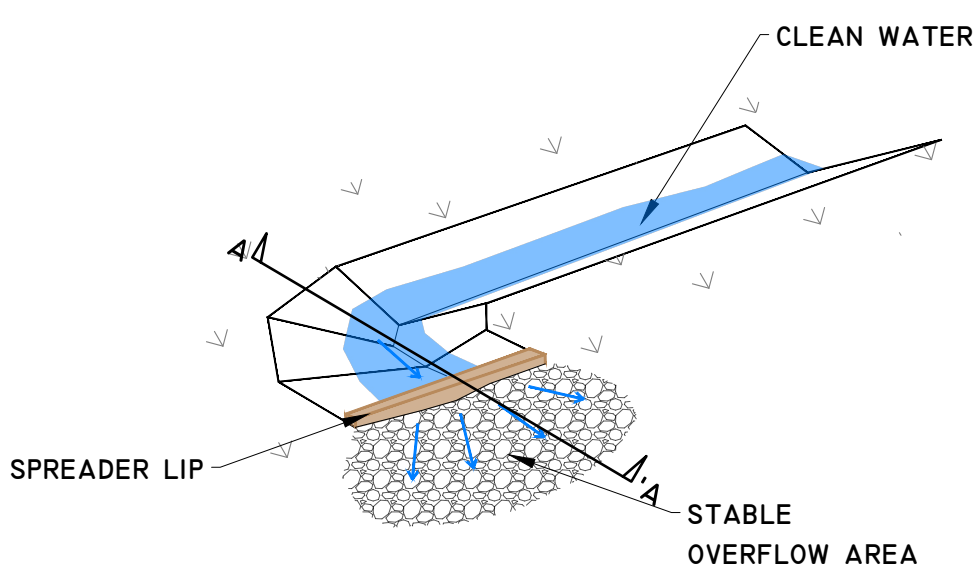


DETAIL H



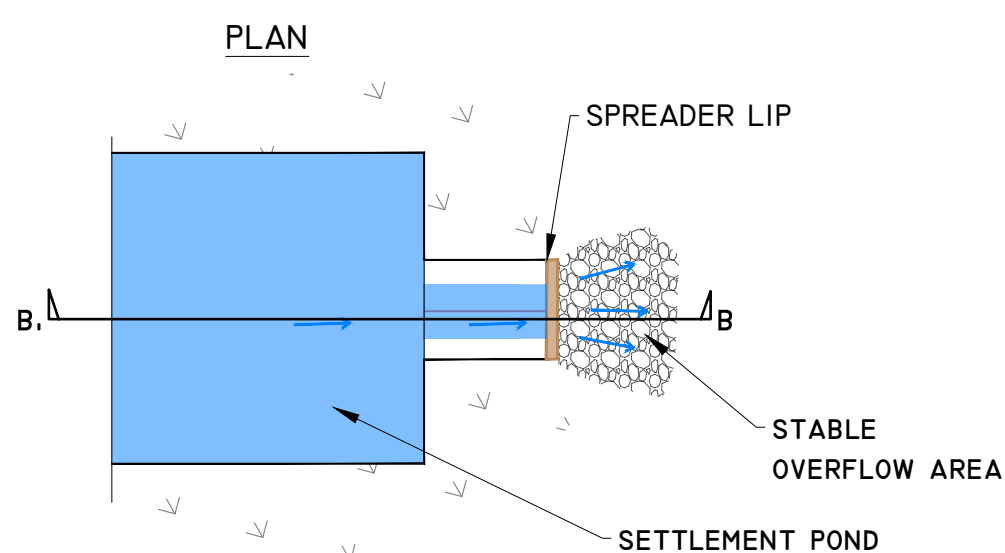
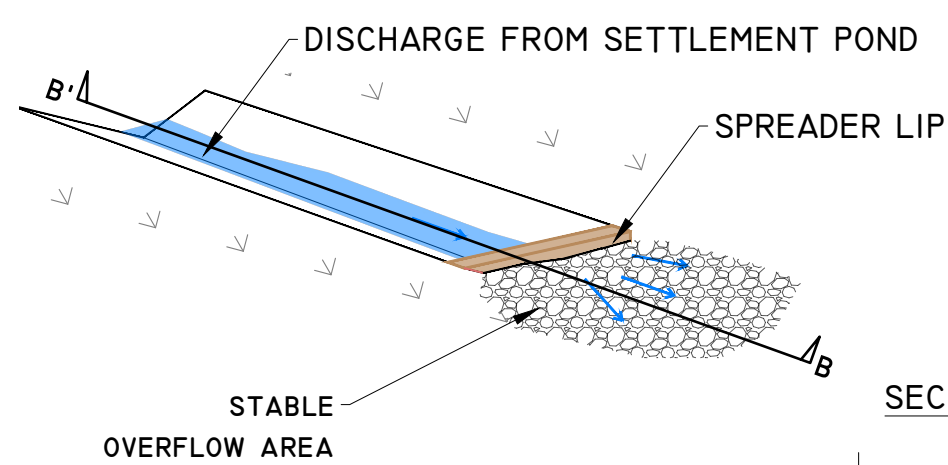
DETAIL J-1

LEVEL SPREADER DETAIL
SCHEMATIC - NOT TO SCALE

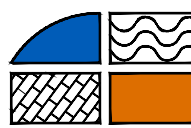


DETAIL J-2

LEVEL SPREADER DETAIL
SCHEMATIC - NOT TO SCALE



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Client:		SSE	
Job:		CRUMHACH WIND FARM, Co. SLIGO	
Title:		DRAINAGE DETAILS 3	
Figure No:		D503	
Drawing No: P1694-0-0726-A1-D503-00B			
Sheet Size: A1		Project No.: P1694-0	
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Date: 24/07/2026		Checked By: MG	