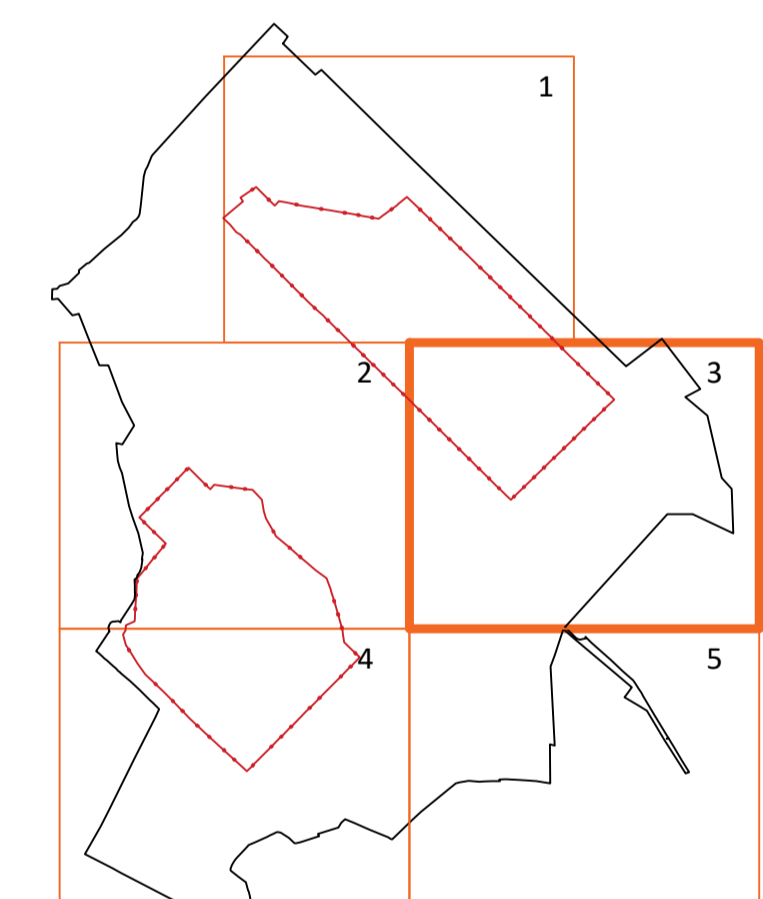


- ### Legend
- PV TABLE
 - EXISTING ACCESS ROAD TO BE UPGRADED
 - NEW ACCESS ROAD
 - BRIDGE OVER DRAIN WITH ACCESS ROAD
 - INVERTER STATION AND CONCRETE PAD
 - INVERTER HARDSTANDING AREA
 - DEER FENCE
 - BRIDGING STRUCTURE OVER DRAIN FOR THE DEER FENCE CROSSING
 - ACCESS GATES
 - SHEEP FENCE (AROUND DRAINS)
 - PEAT STORAGE AREA
 - SUBSTATION AREA
 - TEMPORARY COMPOUND AREA
 - SWITCHBOARD (NORTH SIDE)
 - 80.6m ACCESS TRACK LEVEL
 - EXISTING FIELD DRAIN
 - FIELD DITCH BUFFER 20 M
 - EXTENSION TO EXISTING FIELD DRAIN
 - CLEAN WATER CUT-OFF DRAIN
 - SEDIMENT LADEN DRAIN
 - SETTLEMENT POND
 - CLEAN WATER CUT-OFF DRAIN OFFFALL
 - PROPOSED CULVERT
 - CROSSING CULVERT
 - COLLECTOR DRAIN
 - COLLECTOR DRAIN FLOW PATH
 - CONNECTOR DRAIN
 - FLOW RESTRICTOR
 - OVERFLOW DRAIN
 - OVERFLOW DRAIN FLOW PATH
 - BUND DEWATERING SYSTEM AND OIL SEPARATOR (SEE NOTE 9)



KEY PLAN

- #### Drainage Design Notes
1. ALL DRAINAGE SUBJECT TO MICRO-SITING AND OPTIMISATION ON SITE.
 2. LOCATIONS OF COLLECTOR DRAINS, CHECK DAMS, CULVERTS, SWALES, SETTLEMENT PONDS AND BUFFERED OFFFALLS/LEVEL SPREADERS ARE SHOWN AS INDICATIVE AND MAY BE CHANGED TO SUIT THE REQUIREMENTS OF THE LOCAL TOPOGRAPHY.
 3. DOWN GRADIENT SLOPE BELOW BUFFERED OFFFALL/LEVEL SPREADER ONTO WHICH WATER WILL DISSIPATE TO HAVE A GRADE <6%.
 4. SUPERVISING HYDROLOGIST OR ENVIRONMENTAL CLERK OF WORKS / ENVIRONMENTAL SCIENTIST TO OVERSEE INSTALLATION OF DRAINAGE FEATURES.
 5. ALL DRAINAGE FEATURES SUBJECT TO INSPECTION & MAINTENANCE PLAN.
 6. EROSION PROTECTION TO PREVENT SCOUR TO BE PROVIDED IN DRAINAGE CHANNELS WITH A CHANGE IN DIRECTION <130°, WHERE THE FALL EXCEEDS 1:40 AND AT ALL ROAD CROSSING CULVERT LOCATIONS, OR WHERE OTHERWISE DIRECTED BY THE SITE ENGINEER.
 7. CONSTRUCTION PROCESSES THAT POSE RISK OF ACTIVATION OF SEDIMENT LADEN RUN-OFF TO BE HALTED DURING PERIODS OF EXTREME RAINFALL. NO EXCAVATION TO BE CARRIED OUT IN ADVANCE OF FORECASTED HEAVY RAINFALL.
 8. MINIMISE STOCKPILING OF MATERIAL AND LOCATE ESSENTIAL STOCKPILES OUTSIDE BUFFER ZONES AND AS FAR AWAY AS POSSIBLE FROM WATERCOURSES.
 9. "ENTEXOL SCS001" OR SIMILAR APPROVED OIL SENSITIVE BUND DEWATERING SYSTEM (1 L/S WITH LOW SHEAR VORTEX PUMP WITH OIL SENSITIVE DETECTION. "ENTEXOL SCS002" OR SIMILAR APPROVED INTEGRATED CLASS I FULL RETENTION OIL SEPARATOR WITH INDEPENDENT CERTIFICATION OF COMPLIANCE TO BS EN 858

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| REV | DATE | REVISION DESCRIPTION | DRN | PROD | VER | APP |
| 0 | 13/06/18 | ISSUED FOR PLANNING | TOR | RMG | DC | AD |

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PURPOSE OF ISSUE - PRELIMINARY UNLESS INDICATED
 CLIENT APPROVAL PLANNING TENDER CONSTRUCTION AS-BUILT

CLIENT: **ESB WIND DEVELOPMENT LTD AND BORD NA MONA POWERGEN LTD**

PROJECT: **TIMAHOE NORTH SOLAR PROJECT**

CONTRACT: _____

DRAWING TITLE: **DRAINAGE LAYOUT SHEET 3 OF 5**

PRODUCTION UNIT: **CIVIL & ENVIRONMENTAL ENGINEERING**

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| DRAWN | PRODUCED | VERIFIED | APPROVED | APPROVAL DATE |
| T O'Rourke | R McGowan | D. Cody | A. Downey | 13/06/2018 |
| CLIENT REF | NO. OF SHTS | SIZE | SCALE | |
| | 1 | A1 | 1:2500 | |

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