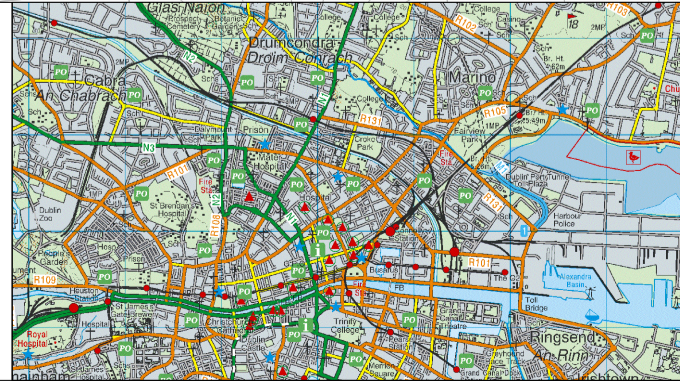


U:\E000451AA - Dublin Bulk Supply Point\8.0 Drawings\DR\CP\1273-RPS-03-PL-SL-D-E-2134 Substation Compound Earthing Layout.dwg



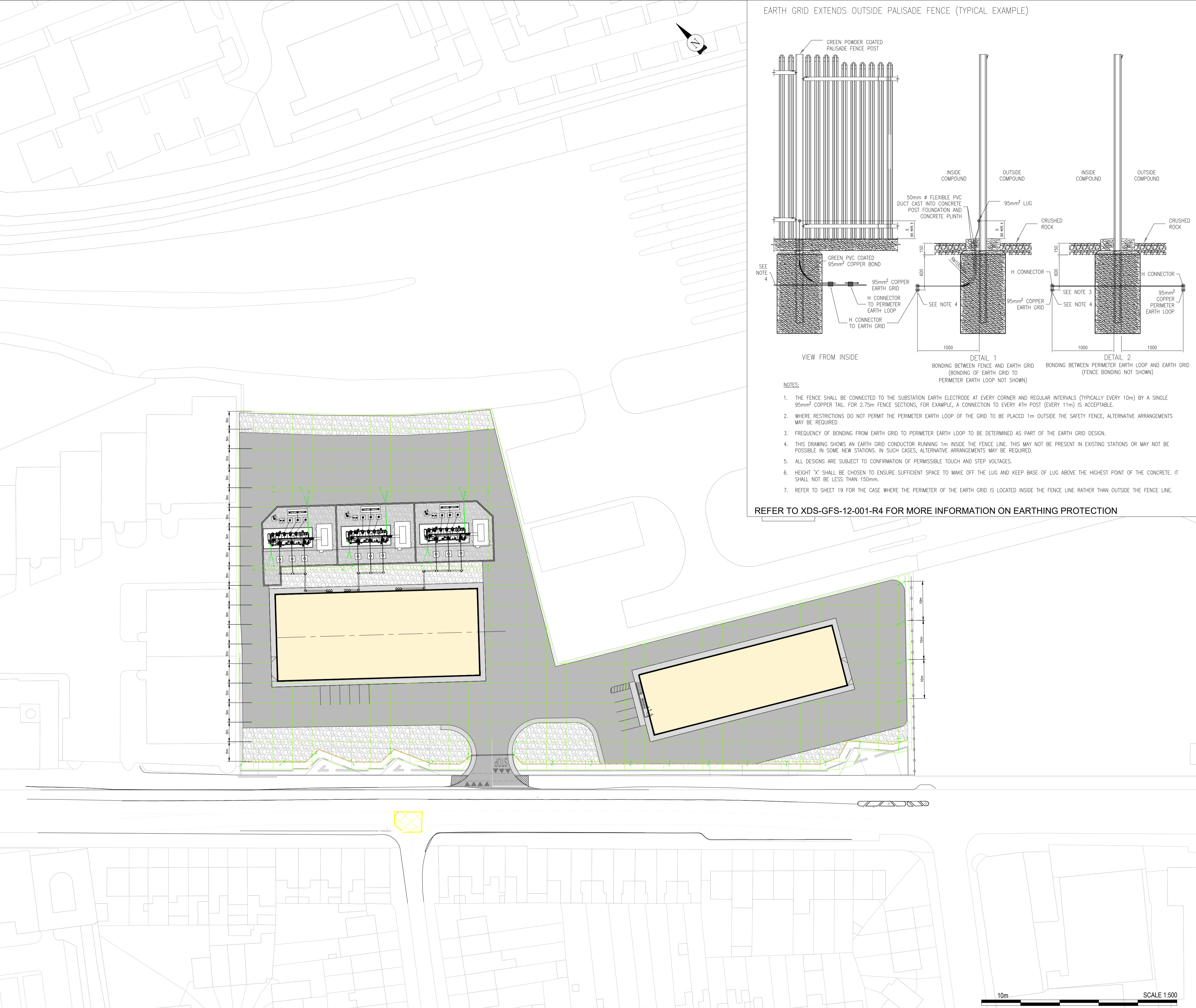
General Notes  
(i) Hard copies, dwf and pdf will form a controlled issue of the drawing. All other formats (dvg etc.) are deemed an uncontrolled issue and any work carried out based on these files is at the recipients own risk. RPS will not accept any responsibility for any errors from the use of these files, either by human error by the recipient, listing of the un-dimensioned measurements, compatibility with the recipients software, and any errors arising when these files are used to aid the recipients drawing production, or setting out on site.  
(ii) DO NOT SCALE, use figured dimensions only.

(iii) This drawing is the property of RPS, it is a project confidential classified document. It must not be copied used or its contents divulged without prior written consent. The needs and expectations of client and RPS must be considered when working with this drawing.  
(iv) Information including topographical survey, geotechnical investigation and utility detail used in the design have been provided by others.  
(v) All Levels refer to Ordnance Survey Datum, Malin Head.

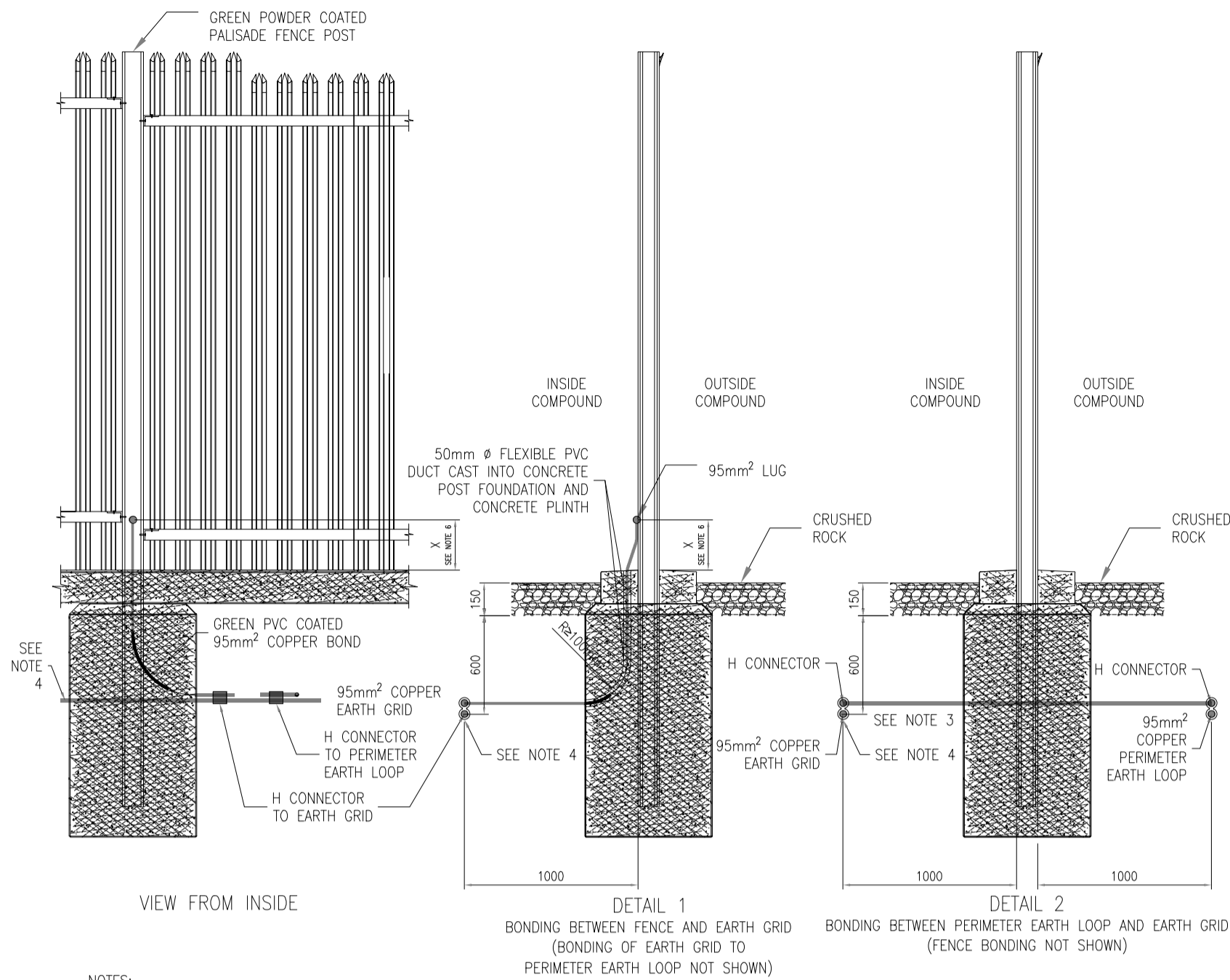
S5	P01	01.08.25	TA AB	PLANNING ISSUE	AB
Rev	Date	Dm Cmk	Amendment / Issue		App



Scale	1:500 @ A1	Project	CENTRAL DUBLIN SUBSTATION PROJECT
Created on	18/07/2025	Title	SUBSTATION COMPOUND EARTHING LAYOUT
Sheets	1 of 1	Drawing Number	CP1273-RPS-03-PL-SL-D-E-2134
Status	S5	Rev	P01



EARTH GRID EXTENDS OUTSIDE PALISADE FENCE (TYPICAL EXAMPLE)



- NOTES:
- THE FENCE SHALL BE CONNECTED TO THE SUBSTATION EARTH ELECTRODE AT EVERY CORNER AND REGULAR INTERVALS (TYPICALLY EVERY 10m) BY A SINGLE 95mm<sup>2</sup> COPPER TAIL. FOR 2.75m FENCE SECTIONS, FOR EXAMPLE, A CONNECTION TO EVERY 4TH POST (EVERY 11m) IS ACCEPTABLE.
  - WHERE RESTRICTIONS DO NOT PERMIT THE PERIMETER EARTH LOOP OF THE GRID TO BE PLACED 1m OUTSIDE THE SAFETY FENCE, ALTERNATIVE ARRANGEMENTS MAY BE REQUIRED.
  - FREQUENCY OF BONDING FROM EARTH GRID TO PERIMETER EARTH LOOP TO BE DETERMINED AS PART OF THE EARTH GRID DESIGN.
  - THIS DRAWING SHOWS AN EARTH GRID CONDUCTOR RUNNING 1m INSIDE THE FENCE LINE. THIS MAY NOT BE PRESENT IN EXISTING STATIONS OR MAY NOT BE POSSIBLE IN SOME NEW STATIONS. IN SUCH CASES, ALTERNATIVE ARRANGEMENTS MAY BE REQUIRED.
  - ALL DESIGNS ARE SUBJECT TO CONFIRMATION OF PERMISSIBLE TOUCH AND STEP VOLTAGES.
  - HEIGHT 'X' SHALL BE CHOSEN TO ENSURE SUFFICIENT SPACE TO MAKE OFF THE LUG AND KEEP BASE OF LUG ABOVE THE HIGHEST POINT OF THE CONCRETE. IT SHALL NOT BE LESS THAN 150mm.
  - REFER TO SHEET 19 FOR THE CASE WHERE THE PERIMETER OF THE EARTH GRID IS LOCATED INSIDE THE FENCE LINE RATHER THAN OUTSIDE THE FENCE LINE.

REFER TO XDS-GFS-12-001-R4 FOR MORE INFORMATION ON EARTHING PROTECTION

LEGEND:

- PROPOSED FENCELINE
- PROPOSED BUILDING
- PROPOSED ASPHALT ROAD
- PROPOSED CONCRETE FOOTPATH
- PROPOSED GRAVEL AREA
- 95 mm<sup>2</sup> COPPER TAIL
- 95 mm<sup>2</sup> COPPER EARTH GRID
- CONNECTOR

TYPES OF EARTHING CONNECTIONS

EARTHING DETAILS

TYPE 1  
H FORM COMPRESSION  
FOR 95 – 95mm<sup>2</sup> Cu

TYPE 2  
COMPRESSION LUG M12  
FOR SINGLE 95mm<sup>2</sup> Cu

TYPE 3  
COMPRESSION LUG M12  
FOR DOUBLE 95mm<sup>2</sup> Cu

TYPE 4  
CROSBY CLAMP  
REBAR / HF SCREEN EARTHING

DETAIL 1  
ELECTRODE DEPTH  
NOTE: ALL DIMENSIONS IN mm

DETAIL 2  
SPLICE DETAIL

DETAIL 3  
CROSS CONNECTION

DETAIL 4  
EARTHING OF EQUIPMENT / STRUCTURE  
(DOUBLE DIRECT CONNECTION TYPE)

DETAIL 5  
GENERIC DOUBLE LOOPED CONNECTION TYPE

DETAIL 6  
GENERIC DOUBLE "DIRECT" CONNECTION TYPE

DETAIL 7  
GENERIC SINGLE CONNECTION TYPE