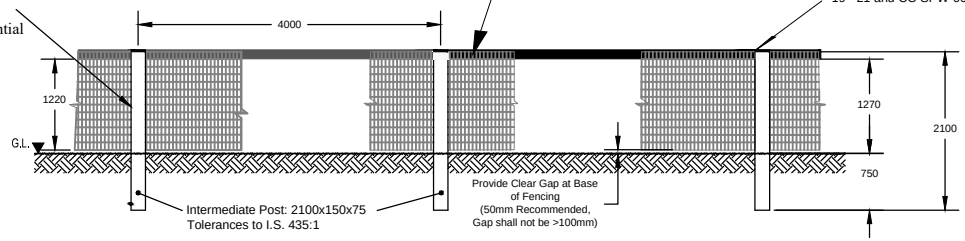
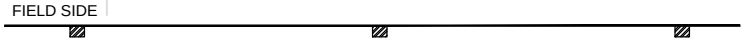
Mesh shall be fixed to intermediate posts using 40mm x 4mm Ø galvanised staples on every second horizontal line wire. Staples to be hammered in diagonally so as to limit potential splitting of posts.

2.5mm Ø, 14-130-5 mesh wire manufactured to IS EN 10223-5 Wire to be Zinc Aluminum Alloy (95% Zinc, 5% Aluminium) Coating Weight 135g/m$^2$
Tensile Strength of Horizontal Wire: Min 1,235MPa
Max. spacing between horizontals to be 150mm.
Vertical Wires at 50mm Spacing with joints as per Detail 1.

120mm wide flexible plastic rail with a minimum of 3 embedded wires (see notes 19 - 21 and CC-SPW-00300).

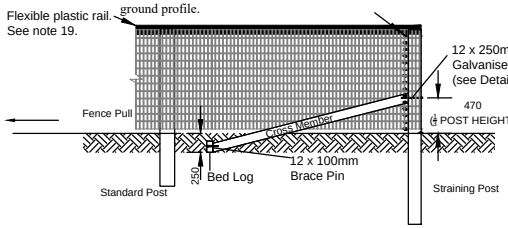



FENCE ELEVATION

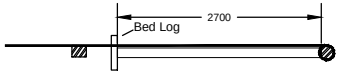



FENCE PLAN

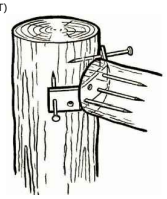
All straining posts to be 2500mm (min) x 170mm (+/- 3mm) 'machined' posts with a regular cylindrical diameter. Irregular, "Cundy Peeled" or "Rough round" type posts will not be acceptable. See Note 10 for fence termination guidance. All straining posts to be installed perpendicular to ground profile.




DETAIL 2 - END POST ASSEMBLY ELEVATION



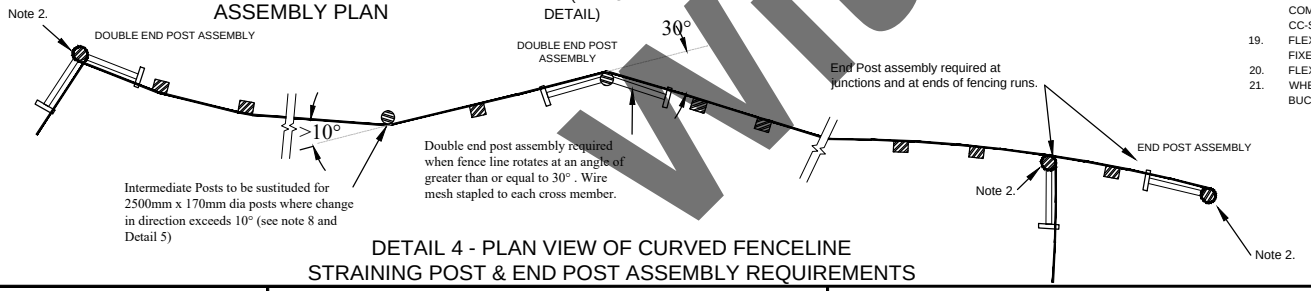

Detail 3 - END POST ASSEMBLY PLAN



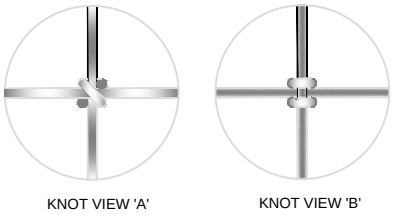
DETAIL 6 - GALVANISED STEEL BRACE PLATE (FIXING DETAIL)

**End Assembly Details**

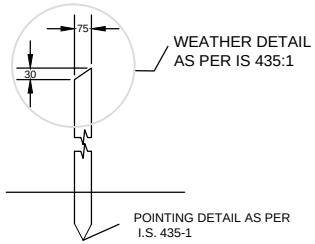
| Item | Quantity | Description |
|---|---|---|
| End Posts / Straining Posts | 1 | 2500mm x 170mm (+/- 3mm) Ø Timber Post |
| Cross Member | 1 | 2700mm x 100mm (+/- 3mm) Ø Timber post |
| Brace Pin | 1 | 12mm x 250mm Galvanised Pin |
| | 1 | 12mm x 100mm Galvanised Pin |
| Galvanised Steel Brace Plate | 1 | 1.8mm min Thick Galvanised Steel Brace Plate |
| | 5 minimum | 100mm x 4mm Galvanised Round Wire Fencing Nails |
| Bed Log | 1 | 150mm x 75mm x 900mm minimum Timber post |
| Gripple T-Clips | 13 | Galvanised Wire Joiners |




DETAIL 4 - PLAN VIEW OF CURVED FENCELINE STRAINING POST & END POST ASSEMBLY REQUIREMENTS



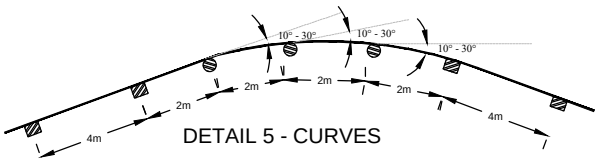

DETAIL 1 - JOINTS




SECTION 1 POINTING DETAIL

NOTES:

1. FENCES SHALL BE CONSTRUCTED AND ERECTED IN ACCORDANCE WITH CC-SPW-00300 & CC-GSW-00300. ANY LENGTH OF FENCING (INCLUDING BRANCHES OR SPURS) SHALL START AND END WITH A STRAINING POST. ADDITIONAL
2. STRAINING POSTS SHALL BE PROVIDED AT FENCE JUNCTIONS, CORNERS AND WHERE CURVES AND ANGLES EXCEED 10°. STRAINING POSTS ARE TO BE PROVIDED AT MAX 150m SPACING. WHERE A FENCE CROSSES A LANDOWNER BOUNDARY (I.E. CHANGE IN OWNERSHIP AND BOUNDARY) AN ADDITIONAL STRAINING POST SHALL BE LOCATED ON THE BOUNDARY CENTER.
3. WHERE STRAINING AND INTERMEDIATE POSTS ARE TO BE DRIVEN, THEY SHOULD BE POINTED AS PER SECTION 1.
4. STANDARD POST HOLES FALLING IN ROCK TO BE EXCAVATED TO THE DEPTH SHOWN ON THIS DRAWING OR, WITH THE EMPLOYERS REPRESENTATIVES APPROVAL, TO A DEPTH OF 0.5m, AND SHALL BE BACK FILLED WITH MIX ST2 CONCRETE, IN ACCORDANCE WITH IS EN 206-1. WHERE A REDUCED DEPTH OF HOLE IS AGREED, THE TOP OF THE POST SHALL BE SUITABLY CUT AND TREATED IN ACCORDANCE WITH THE RECOMMENDATIONS OF IS 435. END POST HOLES TO BE EXCAVATED TO 1.10m.
5. ALL FENCE POSTS SHALL BE TREATED WITH PRESERVATIVE IN ACCORDANCE WITH ANNEX B OF IS 435:1.
6. WHEN THE GROUND CROSS-FALL ACROSS A SECTION OF FENCE EXCEEDS 1:4, THE PERMANENT FENCE & FENCING POST
7. HEIGHTS SHALL BE INCREASED BY A MINIMUM OF 0.25m. CURVES SHOULD BE AVOIDED WHERE POSSIBLE. WHERE A CURVE CANNOT BE AVOIDED THE WIRE SHOULD ALWAYS BE ON THE OUTSIDE OF THE CURVE WITH THE WIRE PRESSING
8. AGAINST THE POST (REFER FIG 1). WHERE A CURVE CANNOT BE AVOIDED AND THE CHANGE IN DIRECTION MEASURED AT EACH POST WITHIN THE CURVE IS GREATER THAN 10°, THE INTERMEDIATE POSTS SHALL BE REPLACED WITH STRAINING POSTS AND THE SPACING BE REDUCED TO 2M UNTIL THE CHANGE IN DIRECTION MEASURED AT THE POST IS <10°. SEE
9. DETAIL 5. WHERE A CHANGE IN HORIZONTAL DIRECTION OF THE FENCE LINE IS GREATER THAN 30° A DOUBLE END POST ASSEMBLY SHOULD BE INSTALLED E.G. AT FIELD CORNERS. WIRE MESH SHOULD BE TERMINATED AT AN END POST BY
10. WRAPPING THE HORIZONTAL LINE WIRES AROUND THE END POST FIVE TIMES AND SECURING THEM BACK ONTO THEMSELVES. ALTERNATIVELY, GRIPPLE T-CLIPS OR SIMILAR WIRE JOINING DEVICES CAN BE USED FOR THIS PURPOSE. THE WIRE SHOULD NOT BE STAPLED TO THE END POST AS THEY MAY CAUSE ROTATION OF THE STRAINING POST. WIRE
11. MESH SHALL BE SECURED TO THE FIELD SIDE OF POSTS (SEE NOTE 7 FOR EXCEPTION) WITH WIRE STAPLES ON EVERY SECOND WIRE HORIZONTALLY. WIRE STAPLES SHALL BE GALVANISED 40mm x 4mm ROUND, .
12. WHERE 2 SECTIONS OF THE WIRE MESH ARE TO BE JOINED, CRIMPING SLEEVES OR GRIPPLE-TYPE WIRE JOINERS ARE TO BE USED.
13. THE RECOMMENDED TENSION FOR THE WIRE MESH IS 45kg/m PER LINE WIRE. MESH IS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS GUIDELINES AND TENSION CHECKED ON SITE BY AUTHORITIES REP.
14. WHERE THE FENCE IS REQUIRED TO BE MAMMAL RESISTANT, THE DETAIL IN CC-SCD-00324 SHALL BE USED.
15. WHERE THE FENCE IS REQUIRED TO TRAVERSE AN UNEVEN GROUND PROFILE, THE CONTRACTOR SHALL PRE-CLEAR A SMOOTH PATH FOR THE FENCE PRIOR TO ITS INSTALLATION. ADDITIONAL STRAINING POSTS WILL BE REQUIRED AT PEAKS AND TROUGHS IN AREAS OF SHARPLY UNDULATING TERRAIN TO PREVENT ANY SLACKNESS DEVELOPING IN THE FENCE. SUCH ADDITIONAL STRAINING POSTS TO BE FOUNDED IN MIX ST2 CONCRETE, IN ACCORDANCE WITH IS EN 206-1 TO AVOID THE RISK OF BECOMING LOOSE OVER THE LIFE OF THE FENCE. THE FENCE SHALL BE CUT AND RE-TENSIONED AT EACH ADDITIONAL STRAINING POST. AS GUIDANCE, IT IS NOT RECOMMENDED TO EXCEED A 4° CHANGE IN VERTICAL DIRECTION WHERE 4M POST SPACING IS PROVIDED.
16. IN AREAS OF POOR GROUND, INTERMEDIATE POST SPACING SHALL BE REDUCED TO 2m CENTERS AND 2.5m X 0.17m DIAMETER POSTS SHALL BE USED TO PROVIDE ADDITIONAL RIGIDITY TO THE FENCE. WHERE THE PERFORMANCE OF THE FENCE MAY BE COMPROMISED BY POOR GROUND CONDITIONS, THE EXISTING GROUND SHALL BE EXCAVATED AND REINSTATED AS PER CC-SPW-00300.
19. FLEXIBLE RAIL TO BE TO BE CONNECTED TO STRAINING POSTS USING COMBINED GALVANISED TENSIONER AND END BUCKLE FIXED TO STRAINING POSTS WITH 1x HOT DIPPED GALVANISED 100mm x M12 COACH SCREW.
20. FLEXIBLE RAIL TO BE BLACK IN COLOUR UNLESS OTHERWISE STATED.
21. WHERE LENGTHS OF FLEXIBLE RAIL ARE TO BE JOINED, THE CONNECTION IS TO BE MADE WITH A GALVANISED JOINING/SPLICING BUCKLE OR BY JOINING INTERNAL WIRES WITH 3x CRIMPING SLEEVES. REFER TO CC-SPW-0300.




DETAIL 5 - CURVES

Withdrawn

Bonneagar Iompair Éireann
Transport Infrastructure Ireland

ACTIVITY: Construction & Commissioning

PUBLICATION TITLE

# FENCING
# TIMBER POST AND TENSION MESH STUD FENCE

| STREAM | HISTORICAL REFERENCE | DOCUMENTATION SET | PUBLICATION DATE | PUBLICATION NUMBER |
|---|---|---|---|---|
| STANDARD CONSTRUCTION DETAILS (SCD) | RCD/300/21 | STANDARDS | AUGUST 2018 | CC SCD 00321 |