

1.0 General Construction Notes

1.1. Do not scale drawings.

1.2. All dimensions in mm unless noted otherwise.

1.3. This drawing shall apply to sites in the UK only.

1.4. The contractor shall be responsible for confirming dimensions and levels on site prior to the commencement of construction or fabrication.

1.5. The contractor shall be responsible for setting out the project on site.

1.6. The contractor shall be responsible for the stability and integrity of existing structures and ground profiles within and adjacent to the works, from the date of taking possession of the site until practical completion of the works. The contractor shall be responsible for the design, installation and maintenance of all necessary temporary works to comply with this requirement.

1.7. The contractor shall ensure that tolerances are integrated and co-ordinated throughout the works to ensure the efficient implementation of the works.

1.8. Where the existing weatherproof envelope is pierced to implement the works, the contractor shall be responsible for ensuring that ingress of water does not occur during the construction period.

1.9. Deviations between site dimensions, levels or existing details to those shown on the drawings shall be brought to the attention of the Engineer for comment and resolution.

1.10. Preparation, handling and application of the proprietary products shall be all in accordance with the recommendations of the product manufacturer, Health and Safety legislation and the specifications and details of the Engineer. Where contradictions occur between these requirements, reference should be made to the Engineer for resolution.

1.11. Where specific proprietary products are referenced an equal product approved by the Engineer may be substituted, unless noted otherwise.

2.0. Fasteners and Connections – Steel to Steel

2.1. Unless noted otherwise fasteners shall comply with BS EN 15048–1 and the following: Bolts M16 Grade 8.8 to BS EN ISO 4014 and 4017. Nuts Class 10 to BS EN ISO 4032. Washers 300HV to BS EN ISO 7091. The fasteners shall be CE Marked to BS EN 15048–1.

2.2. Fasteners shall be spun galvanised to BS EN ISO 10684.

2.3. All bolts shall be sized in length to give a minimum extension beyond the nut of three threads.

2.4. Where connections are made using dissimilar materials, all connections shall be provided with neoprene, 'top-hat' washers, spring washers or other approved barrier between connector and main material, to minimise the risk of bi-metallic (electrolytic) corrosion.

2.5. Where appropriate, taper washers shall be used in bolted connections.

2.6. Where a connection is subject to vibration or cyclic loading use shall be made of locknuts, lockwashers or spring washers or other approved methods at locations indicated on the drawing by the Engineer to minimise the risk of loosening of the connectors. This requirement shall apply to Antenna support structures (poles, yokes, freestanding platforms, and associated bracing, support brackets and fixings), and Flagpole support brackets and fixings.

3.0. Fasteners and Connections – Steel to Concrete or Masonry

3.1. The preferred method of fixing structural fixings into solid concrete or masonry walls shall be through-bolt fixings unless specified otherwise. Where the through-bolt fixings cannot be achieved resin anchor fixings should be utilised upon consultation with the Engineer.

3.2 All resin anchors into solid concrete shall be Hilti HIT-HY200 resin injection system with HAS-U A4 Stainless Steel anchor components, or equal approved, unless noted otherwise. Installation to be to manufacturers installation instructions.

3.3. All resin anchors into solid and hollow brickwork or other masonry shall be Hilti HIT-HY270 resin injection system with HAS-U A4 Stainless Steel anchor components and sieve sleeve HIT-SC, or equal approved, unless noted otherwise. Installation to be to manufacturers installation instructions.

3.4. Anchor embedment depths shall be as shown on detail drawings.

3.5. Where a connection is made between dissimilar metals, all connections shall be provided with neoprene, 'top-hat' washers/spring washers or other approved barrier between connector and main material, to minimise the risk of bi-metallic (electrolytic) corrosion.

3.6. Where appropriate, taper washers shall be used in bolted connections.

3.7. Where a connection is subject to vibration or cyclic loading use shall be made of locknuts, lockwashers, spring washers or other approved methods, as indicated on the drawing by the Engineer, to minimise the risk of loosening of the connectors.

3.8. Anchors shall be tested in accordance with 'Construction Fixings Association (CFA) Guidance Note or manufacturers recommendations: Procedure for site testing construction fixing', BS 8539, Pull test to be carried out by CFA approved tester and report provided

3.9. Not used.

3.10. The Engineer shall be advised a minimum of 48 hours in advance to afford the opportunity of witnessing the test.

3.11. Anchors shall be tested to the test loads specified on detail drawings.

3.12. All tests shall be documented with location sketches and unique references for each bolt tested, in such a manner that each test location can be identified on site from the documentation.

3.13. All nuts, bolts and studdings used in connections to porous materials shall be stainless steel.

4.0. Concrete

4.1. Unless noted otherwise all concrete shall be:

Conform to BS EN 206, BS 8500–1, BS 8500–2, BS EN 12350–2
Concrete grade: C28/35
Minimum cement content: 360 kg/m3
Maximum aggregate size: 20mm
Maximum free water/cement ratio: 0.45
Cement type: fffA+SR Portland Cement with 36% GGBS
This mix is suitable for ACEC Class AC–3 and DC Class DC–3.
RCA and RA aggregates not permitted. Consistence Class: S3 (test on site for compliance to BS EN 12350–2 current version)

Nominal concrete cover to reinforcement:
Concrete in the ground (against blinding, against shutters, top): 60mm
Other concrete: 35mm
Concrete cast directly against soil: 75mm

4.2. Unless noted otherwise all reinforcement shall be:

(a) Ribbed reinforcement bars to BS 4449:2005 current version Grade 500.
(b) Plain round reinforcement bars to BS 4482:2005 Grade 250.
(c) Welded steel mesh reinforcement to BS 4483:2005.
(d) Reinforcement scheduling to BS 8666:2020 current version.

CE marking of the above to BS EN 10080:2005.

4.3. All tower holding down bolts and anchorage assemblies, their setting out and any relevant templates shall be supplied by the tower manufacturer.

4.4. The main contractor shall be responsible for setting out, fixing and checking the installation of the tower anchorage assembly in accordance with the details supplied by the tower manufacturer.

4.5. The mix design certificate shall be submitted to the Engineer, for the opportunity to comment, a minimum of 72 hours prior to commencement of casting.

4.6. Concrete cube testing to be carried out in accordance with BS 1881. The results to be forwarded to the Engineer for evaluation. Three 150mm cubes to be made to BS EN 12390–1 current version, one to be tested at age 7 days and two at 28 days. Structures may not be installed until cube test demonstrates that the concrete has achieved the design strength. Cube results to be embedded in the BHOP

4.7. All concrete reinforcement and cast in items shall be positively located in position prior to casting of the concrete.

4.8. Where concrete is to be cast against an existing concrete surface, the existing surface shall be scabbled to remove laitence and other deleterious materials. Scabbling shall expose the aggregate and sound material. A bonding agent is to be applied to the scabbled surface a maximum of two days before casting.

4.9. Concrete in each base shall be cast in a single continuous operation.

4.10. Cover to reinforcement as noted on detail drawing.

4.11. Concrete shall not be cast where the ambient temperature is 2 degrees centigrade and falling or less than 2 degrees on a rising thermometer.

4.12. Finishes where stated shall be :

4.12.1. Formed finish – basic as struck.
4.12.2. Worked finish – brush finish.

5.0. Steelwork

5.1 Unless noted otherwise, structural steel to be:

Open sections / plates BS EN 10025–2–S275JR.
Hot finished hollow sections BS EN 10210–1–S355J2H.
All to be CE marked to BS EN 10025–1 and BS EN 10210–1.

5.2 All welds to be minimum 6mm fillet weld unless noted otherwise. Welds at tube to tube connections to be full penetration butt welds.

5.3 Fasteners: Notes 2.1 and 2.2 shall apply

5.4 All steelwork to be galvanised 85 microns to BS EN ISO 1461, Unless Noted Otherwise.

5.5 Minor site erection damage to galvanised steelwork to be made good with brush applied Galvafruid, unless noted otherwise.

5.6 All steelwork to be CE Marked to BS EN 1090–1:2009 + A1:2011.

5.7 Unless specified otherwise, Steelwork to be fabricated to Execution Class to BS EN 1090–2 as follows:

Execution Class 2 as a minimum.
Execution Class 3 for steelwork as follows:

Antenna and dish support poles; all steelwork directly or indirectly supported from the poles; bracings to the poles; all associated brackets and fixings.
Flagpole support brackets and fixings.

5.8 Comply with National Structural Steelwork Specification – 5th Edition CE Marking Version.

5.9 Grouting materials: Unless noted otherwise, the space between steel base plates and concrete plinths / foundations to be filled with high strength, high flow, non-shrink cementitious grout Fosroc Conbextra GP or equal approved, installed to manufacturers recommendations.

ALL DIMENSIONS ARE IN mm UNLESS NOTED OTHERWISE

N.G.R

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N: 114608

NOTES:

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CONSTRUCTION ISSUE

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17/03/26

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MODIFICATION

BY

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Opt.

IMPULSE LEISURE CENTRE

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Cell ID No

CSID

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VF

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TEF

234680

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79182

Project No.

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TM Cell ID

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N/A

23468024

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Site Address / Contact Details

LAND AT CAR PARK AT RECREATION GROUND

SPIERBRIDGE ROAD

STARRINGTON

WEST SUSSEX

RH20 4BG

Drawing Title:

CONSTRUCTION NOTES

Purpose of issue:

CONSTRUCTION

Dwg Rev:

Drawing Number:

600

1A

Surveyed By:

CA

Original Sheet Size:

A3

Pack Issue:

Drawn:

Date:

Checked:

Date:

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