

## DOCUMENTARY SUBMISSION BEFORE AND DURING CONSTRUCTION

### 1. Requirements

1.1 The submission of these documents aims to ensure that security protective measures such as structural hardening have been incorporated into the construction phase. The Competent Person (Blast) will work closely with the RP and QPs to ensure that protective systems are implemented as spelt out in the approved Security Plan (ASP).

1.2 The CP must verify that the method statements, shop drawings, materials and workmanship specifications submitted by the vendor/contractor are in accordance with the specifications of the construction tender as awarded. If the contractor proposes any deviation from the security measures as spelt out within the ASP, the CP shall advise the RP whether the deviation is acceptable. If the deviation results in major changes, details must be captured in the Physical Hardening Plans<sup>1</sup> or Physical Hardening Record Plans<sup>2</sup> respectively. Please see below for the full set of documents required.

#### **Before Construction**

Documents	Details required to be submitted by CP (Blast)
Physical Hardening Plans Submission	<p>The following documents shall be submitted not less than 1 month prior to the start of the construction:</p> <ol style="list-style-type: none"> <li>1. Structural Details<sup>3</sup>: structural layouts, structural sections, columns schedule, beams schedule, walls schedule, slabs table, connection details and etc;</li> <li>2. Non-Structural Details<sup>3</sup>: blast door, blast valve, glazing, louvers, windows, non-structural walls, roller shutters and etc;</li> <li>3. Technical specifications of all commercial products used;</li> <li>4. Site inspection schedule (in Gantt Chart format) indicating all key milestones for inspections on related structural hardening elements.</li> </ol>
Site Inspection Schedule	

<sup>1</sup> The physical hardening plans are detailed drawings that could be produced before and during construction and these drawings may not be the "finalised" version as there may be changes to be incorporated. However, they shall clearly show all the approved physical hardening measures details as accurately as possible for ease of implementation.

<sup>2</sup> The physical hardening records plans are similar to "as-built" that are produced after construction completes. They shall clearly show all the physical hardening measures and other major/minor details that had been approved throughout the SBD process, before and during construction. These drawings are the "finalised" version with little or no significant changes.

<sup>3</sup> All Structural and Non-Structural Details shall clearly indicate (by clouding) all approved amendments; and these amendments shall tally with what were recommended by CP Blast and agreed by RP for implementation.

## During Construction

Documents	Details required to be submitted by CP (Blast)
Site Inspection Reports	<p>The following documents shall be submitted during construction:</p> <ol style="list-style-type: none"><li data-bbox="459 376 1399 472">1. CP (Blast) and/or CP (Blast) appointed person(s), e.g. RE/RTO are to be present during all key inspections dates as stated in the site inspection schedule. CPS may be present for the inspection;</li><li data-bbox="459 510 1399 636">2. After the site inspection, site inspection reports (<i>with appropriate site photos</i>) that detail the proper implementation of the structural hardening measures must be submitted to CPS. These reports must be endorsed by CP (Blast).</li></ol>