

# **TECHNICAL BULLETIN No 47 – GUIDE TO SURVEILLANCE OF PRECAST CONCRETE**

## **AMENDMENT No 1 – July 2004 to TB 47 November 2003**

**The November 2003 edition of TB 47 is amended as follows; the amendments should be inserted in the appropriate place.**

**SUMMARY: This amendment applies to section 3.3, 6.5 & Checklist items 3.1, 3.12 & 8.5**

### **Section 3.3 – Page 4 final paragraph**

Replace text with;

Where specifications nominate 'Hold Points' during the course of a contract, some of these can only be released by the Precast Concrete Surveillance Officer, refer Section 6.5 for details.

### **Section 6.5 – Page 10 all text & Page 11 table**

Replace text and table with:

Hold Points are identified from two sources:

- Those defined in the specification
- Those arising on the job when work does not comply with specifications and a Non-Conformance Report is raised

The Precast Concrete Surveillance Officer has the Superintendent's authority to release the following two Hold Points which are applicable to precast concrete works:

- VicRoads Standard Specification 610 – Structural Concrete, 610.18:

*Concrete shall not be placed until the evidence that the forms, reinforcement, and embedments conforming to the requirements of this specification and the drawings, has been reviewed by the Superintendent.*

- VicRoads Standard Specification 622 – Pre-Tensioning of Concrete Units, 622.06:

*All stressing operations shall take place in the presence of the Contractor's Precast Concrete Surveillance Officer*

Products supplied for inclusion in VicRoads projects have been divided into the following two categories for the purpose of releasing the Hold Points nominated above:

- (a) Prestressed Concrete Products. Examples of products, which may include prestressing, are beams and slabs.
- (b) Non-prestressed Concrete Products. Examples of products, which may not involve prestressing, include precast parapets, fascia panels, culvert units, piles and traffic barriers.

For the purpose of this Technical Bulletin, a product is defined as an individual beam, parapet unit, pile, slab etc.

The Precast Concrete Surveillance Officer shall be present to witness and release all 'Hold Points' nominated in the specification during the manufacture of prestressed concrete products.

During the manufacture of products where no prestressing is involved, the Precast Concrete Surveillance Officer shall be present to witness and release the 'Hold Points' nominated in the specification in accordance with the procedure set out in the table below.

If a Hold Point is not released, the Precast Concrete Surveillance Officer shall:

- Thoroughly document the reason for non-release
- Formally advise the Contractor

<b>Procedure for release of Hold Points during manufacture of non-prestressed concrete products as required by VicRoads Standard Specification 610 – Structural Concrete, Clause 610.18</b>	
<b>Steps</b>	<b>Actions</b>
1	In consultation with the Contractor, document on the Surveillance Schedule the number of Hold Points to be released by the Precast Concrete Surveillance Officer, ensuring the minimum requirements set out in Steps 2 & 3 below are met.
2	The Precast Concrete Surveillance Officer shall be present to witness and release the Hold Points relating to the first 10% of all products manufactured.
3	Following completion of the first 10% of products, the frequency of future surveillance and release of Hold Points is reviewed by the Precast Concrete Surveillance Officer in consultation with the Contractor. The level of future surveillance and release of Hold Points will be determined by the risks associated with the product being manufactured and the standard of workmanship displayed by the Precast Concrete Sub-contractor to date. Notwithstanding this review, the Precast Concrete Surveillance Officer shall be present to witness and release a minimum of 20% of the remaining specified Hold Points.
4	The specified Hold Points not released by the Precast Concrete Surveillance Officer shall be undertaken by the member on the Precast Concrete Sub-contractor's staff who is responsible for quality checking and sign off of Inspection & Test Plans. The Precast Concrete Surveillance Officer shall check to ensure the release of Hold Points by others is appropriately documented.

**Checklist for STRUCTURAL CONCRETE – Page 18 item 3.1**

Remove text from Comments section of table:

***'HOLD POINT'***

**Checklist for STRUCTURAL CONCRETE – Page 20 item 3.12**

Replace text in Comments Section of Table:

***HOLD POINT***

***Concrete shall not be placed until the evidence that the forms, reinforcement, and embedments conforming to the requirements of this specification and the drawings, has been reviewed by the Superintendent.***

*Note that the Precast Concrete Surveillance Officer has the Superintendent's authority to release some Hold Points, refer sections 3.3 & 6.5 for details.*

**Checklist for PRETENTIONING CONCRETE UNITS – Page 26 item 8.5**

Add text to Comments section of table:

***HOLD POINT***

***All stressing operations shall take place in the presence of the Contractor's Precast Concrete Surveillance Officer.***