

PREPARATION OF “WORK AS CONSTRUCTED” (WAC) DRAWINGS

These notes should be read in conjunction with the latest version of Sydney Water’s CAD Standard.

1 General

- 1.1 Work As Constructed (WAC) drawings are intended to reflect the actual details of the work as constructed and highlight amendments or deviations from the latest version of the design drawings as issued for construction.
- 1.2 WAC drawings shall comply with the latest version of Sydney Water’s CAD standard, (as issued with the Contract documents or as available from Sydney Water’s web site).
- 1.3 Line types, layers and colours as well as font sizes, shapes and layers shall be as described in the CAD standard. Relevant CAD files for these elements are provided on Sydney Water’s website and shall be used.
- 1.4 WAC drawings shall not deviate from the layering, font sizes, line types, scales etc that have been used on the original design drawings.
- 1.5 Existing view-port scales shall be retained, unless by doing so results in parts of the drawing (due to WAC changes) not being visible. In such cases, the scale of the detail shall be amended (with changes to text height, dim scale, hatch scale etc being made to the paper-space model detail as appropriate). An amendment triangle shall be placed adjacent to the amended scale note.
- 1.6 Each drawing (whether changed or not) shall be marked “Work As Constructed” and have a dated electronic WAC “block” showing:
 - the date the work was completed;
 - the name of the Contractor’s company;
 - the name of the Contractor’s representative
 - the name of Sydney Water’s representative
 - the Sydney Water contract number.
- 1.7 All text shall be in uppercase. The names of the various personnel shall be provided in the form of a first initial and a full surname. The WAC “block” is available on the standard Sydney Water Drawing Form. Refer to Sydney Water’s CAD standard for details.
- 1.8 The block shall be placed on the drawing fully within the inner boundary of the drawing form.
- 1.9 The WAC block is an editable entity and shall remain intact.
- 1.10 Each drawing shall be marked-up wherever change(s) to the final detail design have been made. The change(s) shall be clearly marked with an

amendment triangle containing the amendment issue letter. Examples of such changes include, but are not be limited to:

- Dimensions, levels, chainages etc
- Coating termination points
- Products, materials or items differing from those originally specified, or used where no product was specified.
- Spacing of fixings, fitments.
- Reinforcement sizes, spacing or arrangements.
- Type, size, spacing, number, location of rock bolts, anchor bolts, personnel safety anchors, etc.

- 1.11 Where a significant alteration to a part of the design has been made, a revision cloud shall be placed around the amended section (Layer: 70; Colour: white, continuous), and an amendment triangle containing the amendment issue letter placed adjacent to the revision cloud.
- 1.12 Where a design detail has not been used in the construction work, two parallel lines shall be placed across the detail with the words "NOT USED" placed between the lines. A revision triangle shall be placed adjacent to the detail.
- 1.13 Changing of text tense is not required; eg, "Existing stepirons to be removed" need not be altered to "Existing step irons removed," provided that the work was undertaken.
- 1.14 No text originally on the design drawing shall be removed from the WAC drawing. A line shall be placed through any redundant text and an amendment triangle, containing the appropriate amendment letter, placed adjacent.
- 1.15 Where a note on the original design drawing indicates a generic product, it shall be amended to indicate the product actually used, eg "CAC protective coating to be applied" shall be altered to read "Parchem XYZ applied". The note shall provide sufficient information to enable a search for the product to be successfully undertaken. No revision triangle is required at such amendments, provided the product is on Sydney Water's list of approved products.
- 1.16 Typically, general notes provided on the drawings do not require amendment. However, notes that require a decision on material or procedure shall be amended to reflect the action taken. An amendment triangle shall be placed next to the amended note.
- 1.17 On completion of all amendments, a "Work As Constructed" note shall be placed in the "Details of Amendment" box, with the appropriate revision letter, initials of person approving the changes and the date on which the changes were approved. Typically the person approving the changes will be the Contractor's Representative (as in the WAC block).
- 1.18 WAC drawings not complying with the above will be rejected.

2 New Drawings Produced for WAC Purposes

- 2.1 The Contractor shall prepare new design drawings for any element that deviates significantly from the original design drawing, or where a new design was required. Such design shall be undertaken by a competent engineer, qualified to undertake the work required.
- 2.2 Any additional drawings prepared by the Contractor shall be presented on the standard Sydney Water drawing form. The title format shall be as per the CAD standard and follow the style used on the design drawings for the project.
- 2.3 The layering, font sizes and shapes, line types, scales etc shall conform to those used on the original design drawings.
- 2.4 A new Sydney Water drawing number shall be used for each new drawing produced. The Contractor shall inform the Sydney Water Project Manager of the number of new numbers required and the Project Manager shall obtain and forward them for the Contractor's use. The new drawing shall be referenced as necessary to any relevant drawings in the set.
- 2.5 The new drawing shall have dates and the names of the Contractor's designer, drafter, verifier and approver, in the form of a first initial and full surname, placed in the appropriate places on the drawing. The drawing shall also be signed off and dated by the Sydney Water Project Manager, with the details placed in the "Accepted" box.
- 2.6 The Contractor shall place their company's logo and contact details on the drawing in the appropriate place.
- 2.7 Each drawing shall be marked "Work As Constructed" and have a dated electronic WAC "block" as described in Clause 1.6 and Clause 1.7 above.
- 2.8 A "Work As Constructed" note shall be placed in the "Details of Amendment" box as described in Clause 1.17 above.
- 2.9 The original design drawing that has been superseded by the new drawing shall have two parallel lines drawn diagonally across the entire drawing (if fully replaced) or across the superseded detail, with the words "SUPERSEDED. REFER DRG XXX/YYY (ie, the new drawing number)" placed between the lines. A revision triangle shall be placed adjacent to the note. The superseded drawing number shall be included in the allocated space within the title block on the new drawing. The superseded drawing shall still form part of the WAC set and treated as detailed in this document.
- 2.10 No new WAC drawing will be accepted unless a Sydney Water drawing number has been placed on the drawing, and the above has been satisfied.
- 2.11 New WAC drawings not complying with the above will be rejected.