



## BHP CAD Build v9.1 and v8.4– What's New?

06<sup>th</sup> March 2022 – v9.1 for Microstation Connect and v8.4 for v8i

### A) Software & Checks

1. CADconform software – new version 8.1.41 (CE) and 8.00.85 (v8i)
2. Submittal – new version 2.1.0.2
3. BatchDataInfill – updated to reflect new border sheet

### B) Updates to the CAD standard

1. General Changes
  - New border sheet version – BIOA1\_v10 and BIOB1\_v10
  - New signature cell G-A1 SIGNATURE DATA INFILL v6
  - New seed files using the new border sheets and signature cell
  - Configuration file changes to allow for new border sheet

3<sup>rd</sup> June 2021 – v9.0 for Microstation Connect Update 14

### A) Software & Checks

1. CADconform software – new version 8.1.26
2. Submittal – new version 2.0
3. BatchDataInfill – updated to reflect new border sheet

### B) Updates to the CAD standard

2. General Changes
  - Major update to Microstation Connect Update 14
  - New border sheet version – BIOA1\_v9 and BIOB1\_v9
  - New seed files using the new border sheets
  - Configuration file changes to allow for new border sheet

24<sup>th</sup> October 2019 – v8.2 for Microstation v8i

### A) Software & Checks

1. CADconform software – new version 8.0.82
2. Submittal – new version 2.0
3. BatchDataInfill – updated to reflect new border sheet

### B) Updates to the CAD standard

### 3. General Changes

- New border sheet version – BIOA1\_v8 and BIOB1\_v8 – initials in revision columns no longer necessary (see SEP-57)
- New seed files using the new border sheets
- Configuration file changes to allow for new border sheet
- CADconform database updates: updated to allow for new border sheet

### 4. RailSignals workspace – updated cell libraries BHPBIO-MiscCom, BHPBIO-RailSignals and BHPBIO-RailLayouts

28<sup>th</sup> March 2018

#### A) Software & Checks

1. CADconform software\* – new version 8.0.64

#### B) Updates to the CAD standard

### 5. General Changes

- Section and detail symbols given background fills, cell names updated to v3 where applicable
- CADconform database updates: legacy weld symbols hard coded path removed, minor spelling corrections to electrical features

1<sup>st</sup> September 2017

#### A) Software & Checks

1. CADconform software\* – new version is used including speed enhancements
2. Update to the Batch Data Infill tool
3. Ref2Model updated
4. Recommended minimum Microstation version: 08.11.09.714

#### B) Updates to the CAD standard

### 1. General Changes

- 3D elements now allowed on more existing BHP levels
- Signature cell updated – REVISION comments can now fit on 3 lines
- Border sheet – New BHP logo used, plot boundary shape will no longer display as filled when using non-wireframe view display style
- Custom BHP taskbar items added
- New revision triangle added – uses center justified tag, wipeout fill can be turned on or off
- Added Print Style definitions
- Added ISO 27 font symbols to ASCII standard index - Ø, °, ±, ®,<sup>2,3</sup>
- Added “/” symbol in title block font (font007) to allow for “N/A” entries

- Drafting tools now available in Global Conform workspace
- Background colour available under General Hatching to allow for wipeouts
- Added extra scalebar cells
- BHP Project Grids updated
- New cells – G-Superseded Stamp, G-Information Only Stamp, G-Preliminary Note Stamp, extra location plans
- Weld symbols updated for 2.5 and 3.5mm text height
- New BHP macro tools added –
  - Fix underline offset: sets the underline distance on existing text elements so that the underline does not touch the text
  - Set text background: sets a background colour wipeout on text elements. The offset size of the background can be changed
  - Fix symbols: Some symbols from non-BHP fonts (such as the diameter symbol) do not display correctly when conformed, this attempts to remap the symbols
  - A1 to B1 sheet swap: In FixDataFields, this swaps border sheet and signature/title cells between A1 and B1.

## 2. Architectural Workspace

- Extra linestyle, colour and weight ranges added

## 3. Civil Design Workspace

- Extra linestyle, colour and weight ranges added
- Civil Existing workspace is now merged into the Civil Design workspace

## 4. Composite Services Workspace

- Low Volt Unspecified UG and AG(Added LV line type), High Volt Unspecified UG and AG (Added HV line type)
- New levels: CS-COM-Telstra AG, CS-COM-Telstra UG,CS-POW-High Voltage Power AG 220kV,CS-POW-High Voltage power UG 220kV, CS-POW-Consumer Mains AG, CS-POW-Consumer Mains UG. Extra text levels - Building Name - Text Display, Comms - Text Display, Civil - Text Display, Fuel - Text Display, Infra - Text Display, Misc - Text Display, Power - Text Display, Process Water – Text Display, Topo - Text Display

## 5. Electrical Workspace

- Extra linestyle, colour and weight ranges added
- New cell – SCH Neon Indicator

## 5. Geology Workspace

- The Indigenous workspace is now merged into the Geology workspace
- Extra linestyle, colour and weight ranges added

## 6. P&ID Workspace

- Extra linestyle, colour and weight ranges added
- BHPBIO-P&ID.cel amended to include Hydraulic symbols

- New levels and associated linestyles- P-Backwash Recovery Water, P-Backwash Sludge, P-Backwash Water, P-Clarifier Sludge, P-Compressed Air, P-Conditioned Water, P-Dirty Backwash Water, P-Filtered Water, P-Final Treatment Water, P-Piping Cells, P-Instrument Air, P-Permeate, P-Raw Treated Water, P-Sample Analyser Water, P-Softened Water, P-Aluminium Sulphate, P-AntiScalant, P-Calcium Carbonate, P-Chlorine Gas, P-Chlorine Solution, P-Clean In Place, P-Coagulant, P-Ferric Chloride, P-Ferric Sulphate, P-Flocculent , P-Fluorosilicic Acid, P-Hydrochloric Acid, P-Hydrogen Gas, P-Oxygen, P-Sodium Carbonate Solution, P-Sodium Hydroxide, P-Sodium Hypochlorite, P-Sodium Metabisulphite, P-Sulphuric Acid, P-Ion Exchange Resin, P-Granular Activated Carbon, P-Activated Sludge, P-Final Effluent, P-Foul Air, P-Grit, P-Hydrogen Sulphide, P-Methane, P-Mixed Liquor Suspended Solids, P-Primary Effluent, P-Primary Sludge, P-Raw Waste Water, P-Reclaimed Effluent, P>Returns Liquors, P-Secondary Effluent, P-Skimings, P-Solids Treatment Liquor, P-Spray Field Effluent, P-Supernatant, P-Surplus Activated Sludge, P-Raw Water Potable Use Only, P-Sodium Bisulphate, P-Ozone, P-Return Activated Sludge

#### 7. Plant Design-Structural Workspace

- Extra linestyle, colour and weight ranges added
- BHPBIO Lifting Lugs.cel amended to meet standard
- New levels - S-Existing, S-Existing to be Removed, S-Access Envelope, S-Bolts, S-Demolition, S-Future, S-Removal, M-Existing, M-Existing to be Removed, M-Access Envelope, M-Demolition, M-Future, M-Removal, piping levels added as per P&ID list

#### 8. Rail Signals Workspace

- Extra linestyle, colour and weight ranges added

### Contacting BHP

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#### Asset GTS Engineering Standards

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