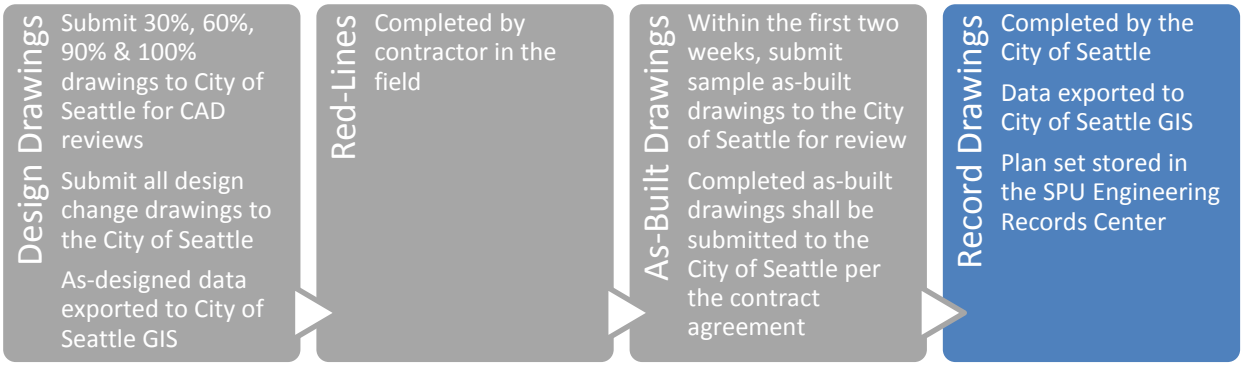
SPU/SDOT Record Drawing Requirements



All Record Drawings are created from As-Built Drawings, uploaded to GIS and archived into the Engineering Records Center and Virtual Vault by City of Seattle staff.

General

- ❑ Design Changes must be incorporated into the CAD files prior to Record Drawings.
- ❑ Record drawings shall be done in AutoCAD or AutoCAD Civil 3D and must conform to the standards as defined in the CAD Manual: Seattle.gov/util/CAD
- ❑ Record drawings will show only deviations to the design without any references to RFIs, FCRs, payment items, DCs, etc. Record drawings shall be accurate, clean, clear and easily readable. In congested areas, additional blow-up details may be required for readability.
- ❑ Civil layers for Record Drawing linework and annotation to be plotted/shown in red have the “CR-” discipline designator (see Section 5: Layers in the CAD Manual) and use colors 32-38 (see Section 8: Plotting/Printing in the CAD Manual).
- ❑ Geo-referenced utility linework shall be drawn and classified in accordance with Section 6 of the CAD Manual to ensure smooth export of linework into GIS.
- ❑ Items not built shall be put on the CR-NBLT layer (lines can be broken) and crossed out with the CR-ANNO layer (not deleted).
- ❑ Annotation shall have the text style name is set to "COS-Record" with the “font name” set to RomanS.shx, the “paper text height” set to 0.00, the “width factor” set to 1.00 and the “oblique angle” set to 20 (see Section 7: Annotation in the CAD Manual). The plotted text height shall be 1/8”.
- ❑ All record drawing sheets shall have the “RECORD DRAWING” stamp block affixed (see Section 2: Support Files in the CAD Manual).
- ❑ Sheet bar codes shall be correct (prior to printing, the “Barcode Modifier” field in the Sheet Set Custom Properties of Sheet Set Manager must be updated to: **-A**).

Submittals

Send the drawings and PDFs to **SPU_CADsupport@Seattle.gov**

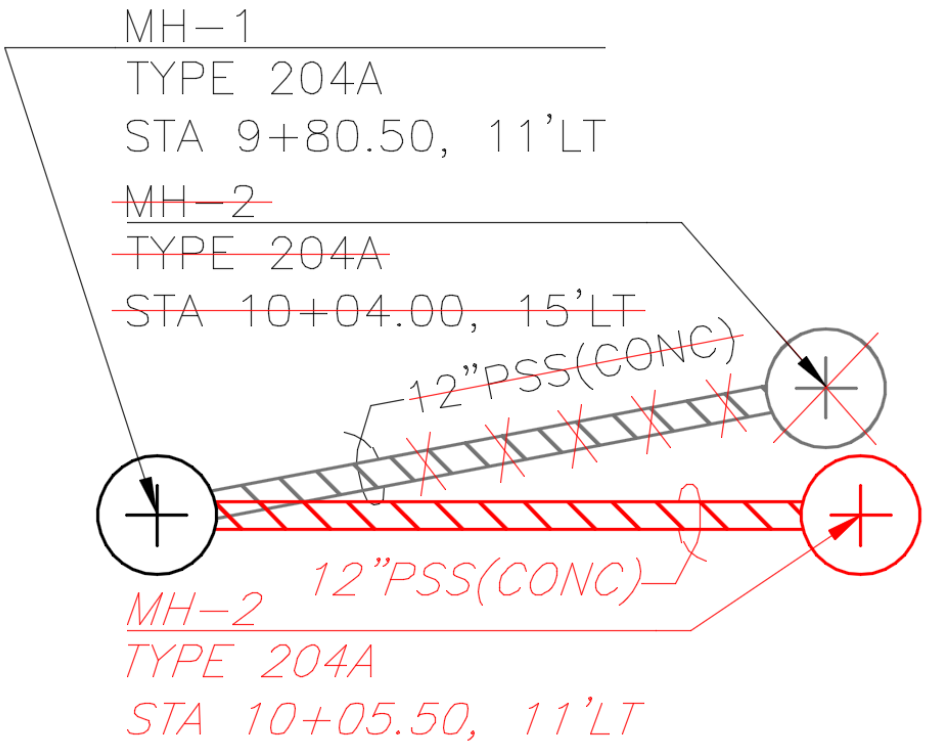
- ❑ AutoCAD .DWG files, the Sheet Set Manager .DST file, image files, Excel spreadsheets and LandXML files (see Section 9: Electronic Transmittals in the CAD Manual) created according to the SPU/SDoT Inter-departmental CAD drafting standards for archival.
- ❑ 22”x34” PDFs of the plan set sheets* created with AutoCAD using COS_CADD_Standard.ctb (for best quality use “DWG To PDF.pc3” – see Section 8: Plotting/Printing in the CAD Manual) for storage in the Engineering Records Center Virtual Vault. A standalone PDF must be created for each Record Drawing plan sheet (set PUBLISHCOLLATE to 0) using this naming convention: **[VPI]-A[Sheet #]** (e.g. 777-123-A1).

*the original, stamped and signed Design Drawings must be in the SPU Records Vault collection before Record Drawing PDFs will be accepted.

Frequently Asked Questions

Q. What should be shown in red on Record Drawings?

A. Anything/everything that changed in the field (as-built information taken from field measurements; not built per plan) should be shown in red, including linework and annotation. Also use the Record Drawing annotation layer(s) to cross out text changes and linework that was not built (linework that was not built in the designed location is shown color 145 and crossed out in red).



Q. Are design changes shown in red?

A. No. Design changes are not as-built information and should be shown in black just like the rest of the design. Design changes are clouded with revision clouds but those clouds are removed prior to creating Record Drawings.

Q. Is it ok to show revision clouds on Record Drawings?

A. No. Revision clouds are used for design changes only.

Q. Why are classified georeferenced 2D utility linework required for Record Drawings?

A. Seattle Public Utilities exports CAD data to GIS when Record Drawings are complete and the GIS system only accepts lines, points and polygons. In order for 2D utility linework to be exported into our GIS system, "Object Data Tables" need to be added to each 2D utility pipe ("Polylines" and "Multilines") and structure ("Blocks" or "Closed Polylines"). This process is called "Object Classification". See Section 6 in the CAD Manual for more information.

Q. What is the file-naming convention for Record Drawing CAD files?

A. Every project has a Project Tracking Number (PTN) that is used for file-naming.

Replace [PTN] with the Project Tracking Number for these types of file names:

Sheet Sets:	[PTN]_[project_name].dst
Title block sheets* (Section 3 of CAD Manual):	# [DWG].dwg
XREF drawings** (Section 3 of CAD Manual):	[PTN]_X-[XXXX]-[optional_description].dwg

*replace [DWG] with drawing number as defined in Section 3 of the CAD Manual.
**replace [XXXX] with a major layer field defined in Section 5 of the CAD Manual.