



Record Drawing Submittal Process

Prior to the Final Walk-through/Punch List Walk for construction inspection of public improvements, the Design Engineer must submit a preliminary set of Record Drawings for review. The Record Drawing set must include any field changes and show actual built conditions. This set must be full size (24"x36") blackline sheets. The City of McKinney Inspectors will review this set for accuracy and use it during the walk through.

In order to receive final acceptance, the Design Engineer must submit a final set of Record Drawings including revisions per comments made during the Final Walk-through/Punch List Walk to the City of McKinney Project Expeditor, located on the first floor of the Development Services Building, 221 N. Tennessee, McKinney, Texas 75070. They will distribute to the appropriate parties for final review and approval.

Record Drawings final set must include the following:

- A) One full set blackline copy of Record Drawings
 - Must be 22"x34" or 24"x36" sized sheets. Anything larger or smaller will be rejected.
- B) Digital submittal of record drawings in the form of a CD labeled with 1) the name of the Subdivision or construction project name, and 2) the name of the entity that prepared & submitted data; CD must contain:
 - **ONE CAD drawing** with public infrastructure and plat information within the same drawing in **DWG** format; **Requirements for CAD file have been recently updated; See the next pages for more information**
 - **Separate TIF files** for each individual plan sheet of the record drawings (**DO NOT** combine sheets in one tif file)
 - TIF file resolution should be 200 DPI or best resolution for legibility, with file size not to exceed 3 MB
 - Label each tif file according to the title of the plan sheet, including corresponding sheet numbers, i.e. C1-Paving Plan, C2-Water Plan, C3-Grading Plan, etc.
 - The order of the TIF files should match the same order on the cover page of the record drawings
 - **ONE PDF file** of all plan sheets combined from the record drawings.

Requirements for CAD Submittal of Record Drawings

The following requirements for submittal of CAD data have been prepared for the purpose of incorporating the digital submittal information into the city's Geographic Information System (GIS) base mapping, so that accurate data may become available to emergency responders, construction inspectors, city planners, engineers, and the larger development community.

- **CAD file must contain public utility infrastructure and plat information within a single drawing in DWG format.** Files in DXF, DWF, or DGN format are not acceptable. Drawing must be “stand-alone” without the necessity of attaching Reference or XREF files, or modifying levels and layers.
- The CAD data is not meant to be printed. As such, it should not be all inclusive of the information displayed on the plan sheets. Objects normally set up in the layout tab (“paper space”) for the purposes of plotting plan sheets, such as title blocks, page borders, legends, vicinity maps, and north arrows, should **NOT** be included in the CAD file. Callout detail boxes also should not be included.
- CAD data must be drawn at full scale (1:1), and oriented to true north.
- The data must be tied to city monumentation data, in real world coordinates, and spatially referenced to the city's GIS projected coordinate system: North American Datum 1983 (NAD83), Texas State Plane, North Central FIPS 4202; Units: US Feet.
- All polygons must close without overlaps. All lines must be snapped at their endpoints and free of gaps or dangles. Annotation text that breaks the continuity of lines should be shifted out of the way of the line.
- Public utility infrastructure and plat information must be organized into **separate layers** according to feature type, and drawn as polylines (except for annotation). All layers must be turned on and visible/unfrozen. **IMPORTANT: Layer names should be intuitive and descriptive of the objects on that layer.** Features must be cleanly segregated into their appropriate layer, and not appear on other unrelated layers. Remnants of lines or points used in the development of the drawing but not representative of actual real-world features (trim lines, transit points, etc) should be removed from the drawing. *Existing* infrastructure should be on separate layers from *proposed* infrastructure and should be differentiated as such in layer names (i.e. “EXIST_WATER_MAIN” versus “PROP_WATER_MAIN”). Features that should appear in the drawing on separate layers are listed below. Any additional features not listed are optional and must also be on separate layers with clear, understandable layer names.

Public Infrastructure:

- Fire Hydrants
- Water Mains
- Water Valves
- Water Meters
- Water annotation: pipe sizes, material types

- Sewer Mains
- Manholes
- Cleanouts
- Sewer annotation: pipe sizes, material types

- Storm mains
- Inlets
- Headwalls
- Outfalls
- Other drainage structures (valley gutters, etc)
- Storm annotation: pipe sizes, material types

- Buildings

- Paving: edge of pavement, parking area, striping

Plat Information:

- Subdivision boundary
- Parcel lot lines
- Street centerlines
- ROW lines
- Easements, fire lanes
- Plat annotation: street labels, easement types & sizes