

## Construction Record Drawing Requirements

The following Construction Record Drawing requirements are intended to provide a minimum guide to the surveyor, engineer of record, and construction supervisors and should be used along with good engineering practices as the type of project and situation warrants. These requirements should complement, but do not supersede any other City construction/ plan requirements.

The City of Mountlake Terrace requires construction record documentation before project closeout and acceptance. Developers, engineers and contractors need to be aware of the following requirements in order to satisfy this documentation requirement. Good on-site records must be maintained to ensure accuracy.

Upon completion of the project, the design plans, approved by the City of Mountlake Terrace, are to be corrected to accurately reflect all as-built conditions. These will be in the form of a 22 inch by 34 inch (22"x34") clean set of project plans, upon which the Contractor shall note additions and deletions of work. The Contractor shall use red colored pencil to mark on the plans for all work not shown on the plans including any revised and green colored pencil for deleting any work from original contract plans. The Contractor shall also indicate all deviations in location and elevation of improvements as shown on the Plans. The as-built plans will be reviewed for accuracy and completeness by the Construction Inspector. If the as-built information is found deficient, it shall be corrected by the Contractor and resubmitted to the City for review and approval.

### **Electronic File Submittal Requirements:**

Upon approval of Construction Record Drawings, the City requires a digital submittal of approved plans in both CAD and PDF formats.

#### AutoCAD 2013 or newer format

- We recommend using the eTransmit tool within AutoCAD to purge, and bind all external reference files. Please only include the site/model information. Title blocks, notes and Engineer/Surveyor Stamps are not needed and should not be included.

#### PDF

- Please combine all sheets into one PDF using the project name as the file name. The PDF should be an exact duplicate of the approved Construction Record Drawings.

Files can be transmitted using the following methods:

FTP (Please coordinate with Thad Newport at [tnewport@ci.mlt.wa.us](mailto:tnewport@ci.mlt.wa.us) or Darryl Greer at [dgreer@ci.mlt.wa.us](mailto:dgreer@ci.mlt.wa.us) for FTP site address and link)

CD/DVD or USB mail to: City of Mountlake Terrace

Attn: Thad Newport or Darryl Greer  
6100 219<sup>th</sup> Street SW, Suite 200  
Mountlake Terrace, WA 98043

Please include contact information (project name, contact name, phone number) with submittal should we have any questions on the AutoCAD file(s).

### **Drawing Requirements:**

#### **Coordinates and Datum:**

- HPGN (HARN) Washington State Plane, North Zone, US Foot for Horizontal Datum
- NAVD 88 for Vertical Datum

### **Features to Include:**

The following features and information shall be shown where applicable (Construction Drawings, Site Plan, Utility Plan, Road Plan and Profiles, etc...).

- North Arrow on all plan sheets
- Sanitary Sewer:
  - Manholes – Locations, types, sizes and rim/invert elevations
  - Sewer Lines – Locations, lengths, slopes, sizes, material and class (abandoned lines should also be shown)
  - Side Sewers – Locations, lengths, slopes, sizes, inverts, material and class (See Side Sewer Permit Application for additional requirements)
  - Public & Private Utility Easements – Locations and widths
  - TV Report – Compare TV reports to side sewer locations (If done)
  - Cleanouts – Locations and sizes
  - Septic Systems – Both those in use or abandoned
- Storm Drainage:
  - Manholes/Catch Basins – Locations, types, sizes and rim/invert elevations
  - Storm Lines – Locations, lengths, slopes, sizes and materials (abandoned lines should also be shown)
  - Public & Private Utility Easements – Locations and widths
  - Water Quality Facilities – (swale length/slope, infiltration galleries, etc.)
  - L.I.D. Drainage Facilities – (pervious pavement locations, rain garden details, etc.)
  - Retention/Detention Systems – Volume of storage provided
    - Storage elevation
    - Overflow elevation and location
    - Discharge control orifice size
    - Roof drain connections
    - Bypass area (Emergency overflow)
    - Stabilization/erosion control

All storm drainage retention/detention systems shall include the following statement:

“The storm drainage \_\_\_\_\_ (retention/detention) system has been constructed in conformance with the approved plans and is functioning as designed.”

- Water:
  - Water Lines – Locations, lengths, sizes, material and class (abandoned lines should also be shown)
  - Water Valves – Locations, sizes and types
  - Fire Hydrants – Locations and types
  - Blow-Offs – Locations and sizes
  - Air & Vacuum Relief Valve – Locations
  - Pressure Reducing Valve – Locations
  - Fittings – tees and crosses
  - Water Main Blocking – Locations
  - Water Meters – Locations and sizes
  - Water Services – Locations, sizes and material
  - Public & Private Utility Easements – Locations and widths
  - Wells – Both those in use or abandoned
  - Detailed Connections – As applicable
  - Fire Sprinkler Connection – Location and size of line
    - Location of detector vault
    - Location of service vault
    - Location of service valve
  
- Public Streets:
  - Center line elevations every 50 feet
  - Center line slopes and vertical curve data
  - Gutter line elevations every 50 feet, if not standard crown
  - Gutter line slopes and curve data, if not standard crown
  - Driveways – Locations, lengths, slopes and pavement type
  - Channelization – Locations and type
  - Signing – Locations, type, M.U.T.C.D. sign designation, size, install date and height to bottom of sign
  - Illumination – Locations, type, height, arm length and foundation type/depth
  - Service Cabinets – Locations and types
  - Junction Boxes – Locations and types
  - Conduits/Wire – Locations, types, sizes and depths
  - Controller Cabinet – Location and type
  - Signalization – Location, type, size, height and foundation depth
  - Right-of-Way – Locations and widths
  - Easements – Locations and widths
  - Gas, Power, Phone and Cable Lines installed or encountered – Locations, sizes and depth
  - Right-of-Way Monuments – Locations (property monuments if a Plat)
  - Vertical Datum benchmark with equation to Mountlake Terrace second order Vertical Datum
  - Right-of-Way Centerline Intersections to two closest intersections