City of Shoreline

Side Sewer As-Built Plan Requirements

Inside this handout

What is a Side Sewer As-Built Plan?

A side sewer as-built plan is the documentation provided by the permit holder and/or side sewer contractor of the as-constructed side sewer that includes all changes made to the side sewer during construction. The scaled drawing delineates the alignment, depth, and materials used for the as-constructed side sewer on private property and in the right-of-way (ROW) if applicable. An as-built plan is required for new services, additions, alterations, repairs, capping, and temporary side sewer work.

The information drawn on the side sewer as-built plan will be used to update the City's CAD (Computer Aided Design) and GIS (Geographic Information System) mapping programs.

Guidelines for Preparing a Side Sewer As-Built Plan

As-Built Plan Format:

There are two as-built plan formats that are acceptable:

1. **Side Sewer As-Built Template:**
   City staff will provide a map to the permit holder at the time a side sewer permit is issued, and on which the as-built construction is typically drafted by the permit holder (preferred format).
   This template will show the data stored in the City's CAD system including:

- Existing side sewer and mainline infrastructure
- Property lines
- Site address
- Building outlines *(**Note:** this is typically the roof outline, not the building foundation footprint)*

Important Reminders:

- The permit holder is responsible for providing the site inspector with an as-built.
- If the as-built is not available for submittal and approval for the site inspector at the time of the inspection the permit holder will need to reschedule the inspection for a later date when an as-built is completed.
- If the as-built is not completed to City's specifications the site inspector may require a new as-built before the permit will be closed.

- Edge of pavement (within the right-of-way only)
  Note: *it is the responsibility of the permit holder to verify actual locations of all utilities, whether or not noted on the template.*

2. Site Plan:

An architectural site plan or engineering utility plan may be used as the side sewer as-built template. If using the architecture site plan or engineering drawing/utility plan, the following information must be provided, along with the other requirements noted in the handout:

- The drawing must be to scale. Preferred minimum plan size is 11x17 inches. (No partial sheets shall be used for the as-built).
- Existing side sewer and mainline infrastructure must be accurately and clearly transferred from the side sewer as-built template onto the site plan.
- The site plan will not be accepted if the as-built information cannot be read due to the poor quality of the site plan or the site plan contains so much information that it makes reading the data difficult.
- The site plan must include an arrow identifying North.
- Street address and permit number(s) should be included.
- Building footprints and set-backs must be included.

Features to be Documented on the Side Sewer As-Built Plan

The following features must be drawn to scale on the side sewer as-built plan by the permit holder, with the labels indicated:

1. Show the pipe material, diameter, slope (if possible) and the location of all new pipe material installed related to the side sewer construction. Measure off known points such as a building corner or property lines.

   The following abbreviations shall be used for pipe materials:

   ABS Acrylonitrile Butadiene Styrene
   PVC Polyvinyl Chloride
   DIP Ductile Iron Pipe
   HDP High Density Polyethylene
   CIPP Cured-in-Place Pipe (Indicate brand/type: i.e. Insituform®, reinforced scrim)

2. Show and label the depth of the pipe at the pipe connection.

3. Show and label depth of repair.
4. Show and label type of connection fitting (i.e. Fernco®, Banded "stongback" Fernco®).
5. Show and label all structures, such as cleanouts, backflow preventers/check valves, force mains and sewage pumps/wet wells. (Note: For sewage/grinder pumps label the wet well tank size, diameter, depth, and pump size/GPM. Include design pump/ flow rate if available).

Measurements in the ROW (if applicable)

The following information is to be documented on the provided Side Sewer As-Built Template in the upper left hand corner, labeled measurements in the ROW, or on the site plan if that is used as the as-built. See Figure 3 for reference.

1. **New Connections to the Mainline**
   Distance from the Centerline of Downstream Manhole (DS/MH) to Centerline of New Service Connection: This measurement is required for:

- A new core tap
- Or if the measurement does not appear on the provided map

Note: The distance to the closest DS/MH measurement begins at the centerpoint of the nearest DS/MH structure, follows the path of the mainline and ends at the centerpoint of the side sewer connection to the mainline.

2. Side Sewer Intersection with the Property Line

- Side Sewer Intersection with Property Line Depth: This measurement is taken at the actual point the side sewer intersects with the property line and is measured from the approximated finished grade, vertically down to the top of the side sewer pipe.
- Side Sewer Intersection with Property Line Distance: This linear measurement begins at the centerpoint of the nearest DS/MH structure, follows the path of the mainline, and ends at the point along the mainline whereby an imaginary perpendicular (90-degree) projected line would intersect where the actual side sewer crosses the property line.

Final As-Built Plan

After all of the information has been collected, transfer your notes or sketched information onto the side sewer as-built plan or site plan. All of the infrastructure is to be drawn to scale.

The scale of the template map will be fixed at 1 in. = 20 ft. or larger scale as appropriate (1 in. = 30 ft. or 1 in. = 40 ft.)
The scale on the drawing or map indicates how many inches on the map equals a given length on the actual property. Thus one inch on the map will be equal to 20 feet on the property (or larger scale as appropriate).

Draw the new or changed infrastructure onto the side sewer template. Please refer to Figures 1, 2 and 3 at the end of this handout for examples.

At the time of the side sewer inspection, the City's site inspector will check to ensure that the as-built plan prepared by the permit holder is accurate, clear, complete and reflects the as-built information of the side sewer construction including any revisions, alterations and/or materials. If not, the permit holder shall correct the drawing. The side sewer as-built plan must be submitted and approved by the site inspector prior to the side sewer permit being finalized.

Sample Side Sewer As-Built Plan

Illustrated samples of side sewer site plans are included on the next three pages.

Figure 1 shows the required elements of a side sewer as-built plan for a side sewer repair.

Figure 2 shows the required elements of a side sewer as-built plan for a side sewer alteration. Building addition footprint has been added.

Figure 3 shown the required elements of a side sewer as-built plan for the new construction of a side sewer. New building footprint has been added.

Figure 1: Sample Side Sewer As-Built Plan for Repair

① Connect to 3” Cast Iron, SCH 35 PVC, Banded Fernco, 4.0’ Depth

② Connect to 4” Concrete, SCH 35 PVC, Banded Fernco, 4.5’ Depth

③ Surface Clean Out, SCH 35 PVC

All new pipe SCH 35 PVC installed at existing 3% slope

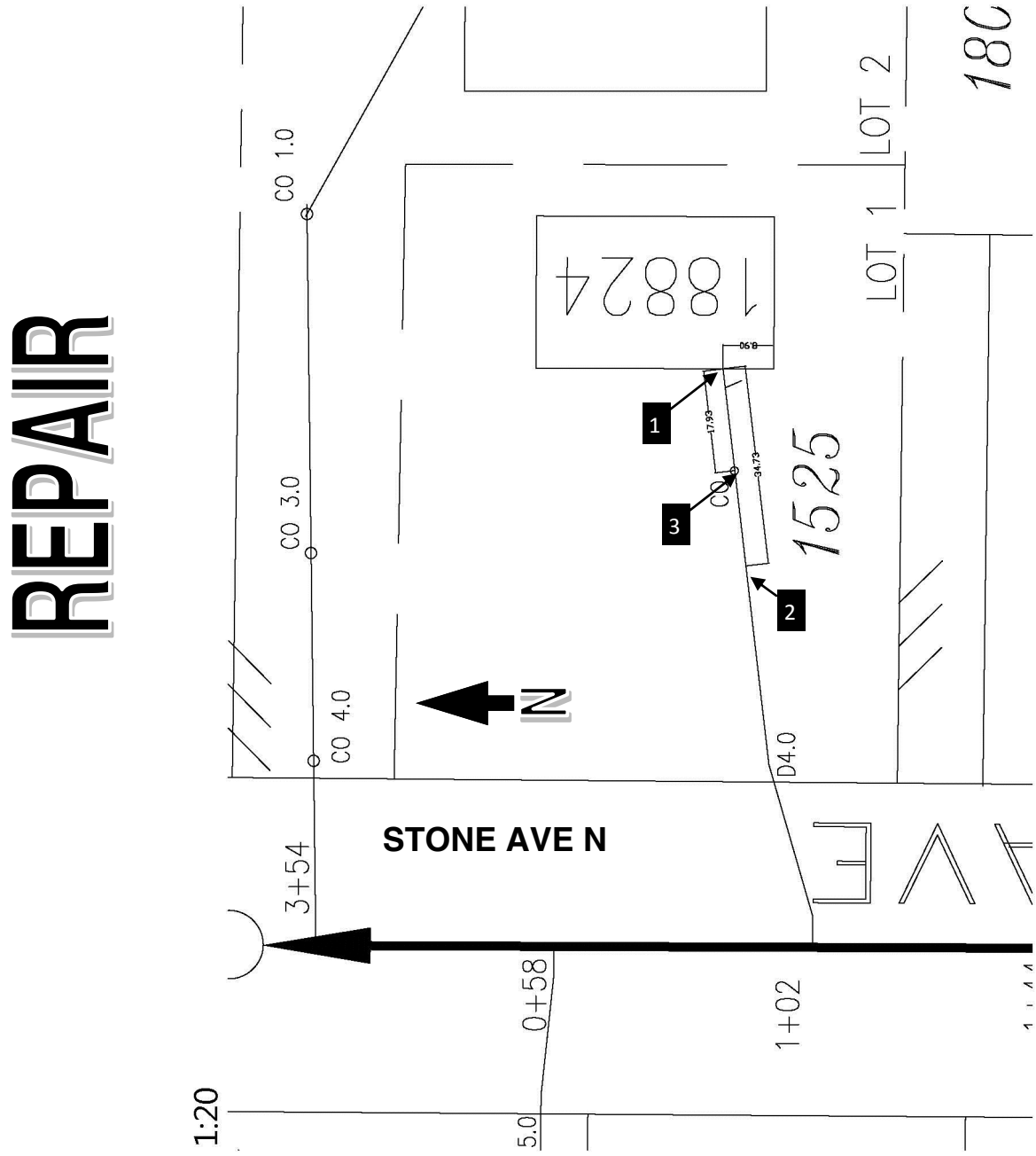

Figure 2: Sample Side Sewer As-Built Plan for Alteration/Addition

① Connect to 4” ABS, SCH 35 PVC, Banded Fernco, Surface Cleanout, 3.0’ Depth

② Connect to Existing 4” Concrete, SCH 35 PVC Wye, Banded Fernco, 4.0’ Depth

③ Surface Cleanout, SCH 35 PVC

④ Surface Cleanout, SCH 35 PVC (2.0’ from foundation)

All new pipe SCH 35 PVC installed at 2% slope

ALTERATION

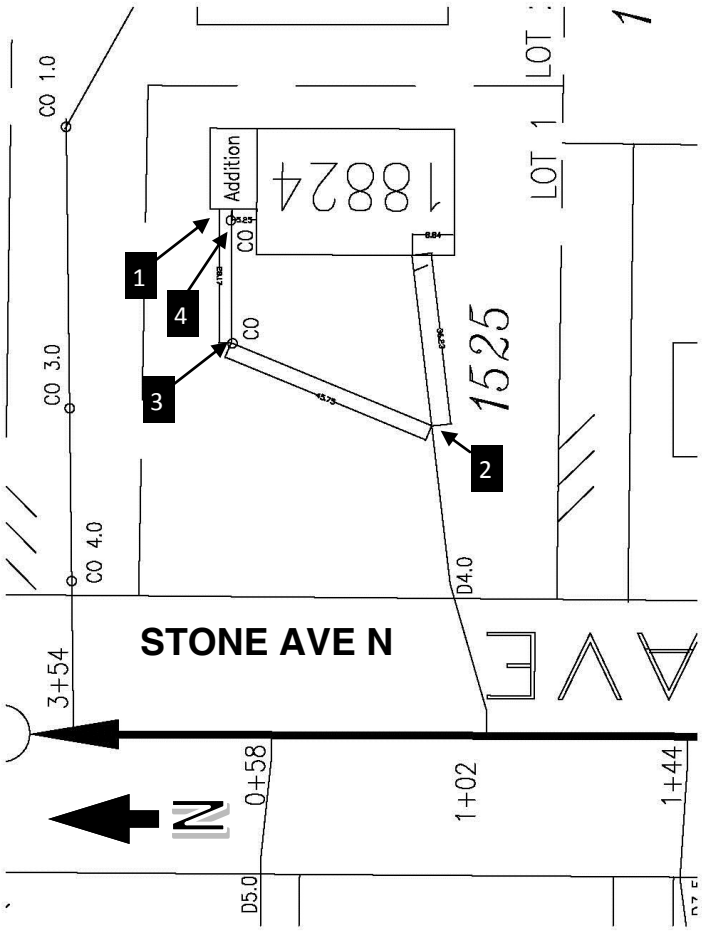

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Figure 3: Sample Side Sewer As-Built Plan for New Construction

A. Downstream Manhole

B. NE Building Corner

① Connect to 4" ABS, 9' South of Corner B, SCH 35 PVC, Banded Fernco, 3.0' Deep

② 65' Linear Feet of SCH 35 PVC , 3% Slope, 4.0' Deep

③ Surface Cleanout, SCH 35 PVC, 10' South of Corner B, 2' from Foundation

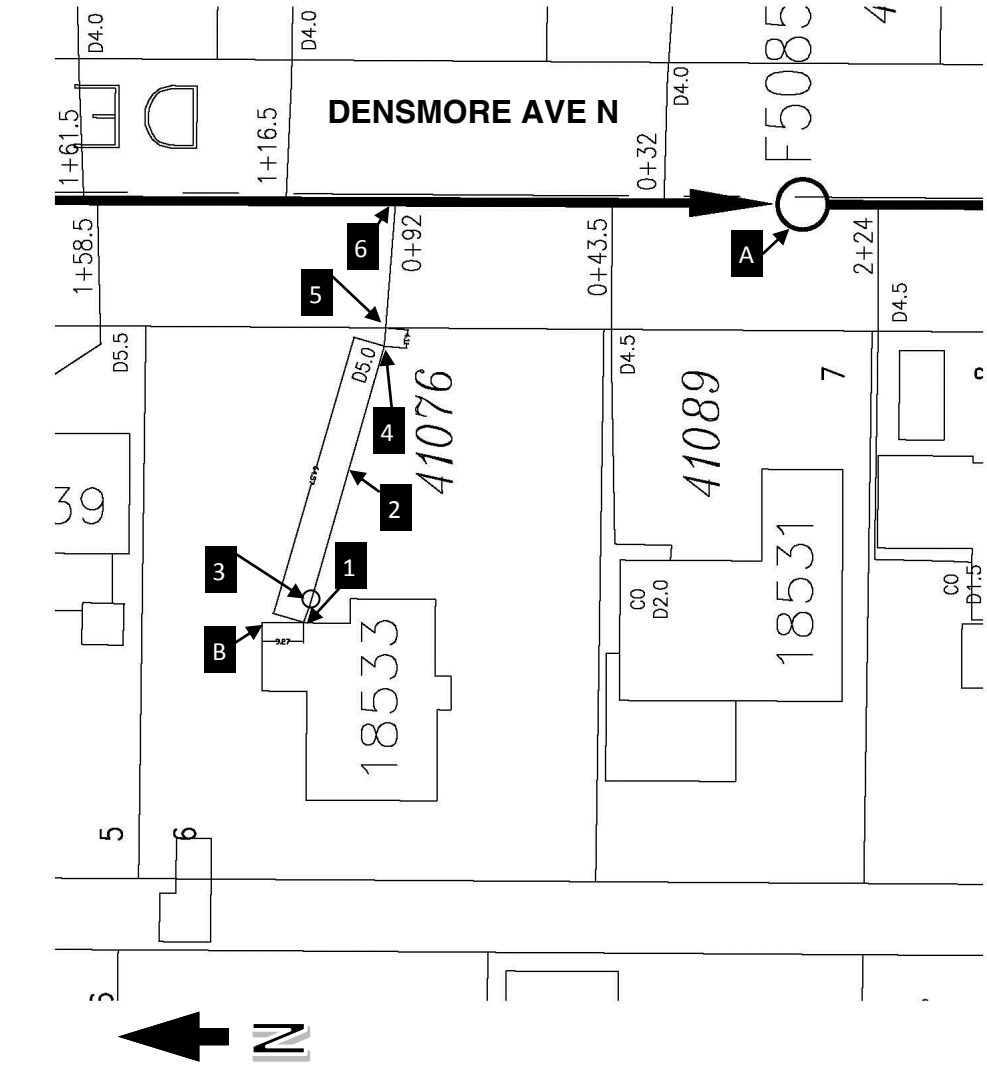
④ 4x6 Reducer, Connection to 6" Stub, 14' South of Corner B, SCH 35 PVC, 5.0' Deep

⑤ Depth at Property Line 5.5' feet, 93.5' North From Center of DS/MH

⑥ Connect New Tee on Main, 6" Romac® Saddle, 92' North from Center of DS/MH, 10' Deep

All new pipe SCH 35 PVC installed at 3% slope

New Construction



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